UNIVERSIDAD DE MURCIA

DEPARTAMENTO DE ORGANIZACIÓN
DE EMPRESAS Y FINANZAS

Effectiveness of Human Resource Practices in Family Firms: Empirical Evidences from Spain

Efectividad de las Prácticas de Recursos Humanos en la Empresa Familiar: Evidencias Empíricas en España

D. Antonio José Carrasco Hernández

2014

UNIVERSIDAD DE MURCIA

DEPARTAMENTO DE ORGANIZACIÓN DE EMPRESAS Y FINANZAS

Effectiveness of human resource practices in family firms: Empirical evidences from Spain

Efectividad de las prácticas de recursos humanos en la empresa familiar: Evidencias empíricas en España

Antonio José Carrasco Hernández

2014

UNIVERSIDAD DE MURCIA

DEPARTAMENTO DE ORGANIZACIÓN DE EMPRESAS Y FINANZAS

Effectiveness of human resource practices in family firms: Empirical evidences from Spain

Efectividad de las prácticas de recursos humanos en la empresa familiar: Evidencias empíricas en España

Presentada por:
D. ANTONIO JOSE CARRASCO HERNANDEZ

Dirigida por:
Dr. D. GREGORIO SANCHEZ MARIN

2014

AGRADECIMIENTOS

En primer lugar, mostrar mi eterna gratitud al Dr. D. Gregorio Sánchez Marín por su ayuda para la culminación y desarrollo de este trabajo de investigación. Nuestra relación ha sido más que profesional, después de tanto tiempo se ha convertido en fraternal, yo el hermano pequeño que en ocasiones hace caso y en otras desobedece como rebelde. Lo cierto es que existen millones de cosas que me encantaría decirle, para realzar su gran papel como director, profesional y su gran humanidad. Ha sido un magnífico maestro, me ha dedicado su tiempo, a cualquier hora y en cualquier momento, con sus acertadas orientaciones ha alentado mi curiosidad por buscar respuestas a los interrogantes que muchas veces nos plantea la investigación.

Me encantaría mostrar mis agradecimientos al Dr. D. Ramón Sabater Sánchez por ser un gran tutor en la obtención de mi diploma de estudios avanzados (DEA), y por iniciarme en el tema investigado de la empresa familiar. Siempre se ha portado como una gran persona, compañero y amigo. Su contagiosa ilusión por el tema investigado me hizo interesarme por la empresa familiar.

Agradecer al Dr. Juan Monreal Martínez su apoyo para la realización de la tesis doctoral, su capacidad emprendedora condujo a la constitución de la primera cátedra de empresa familiar en la Región de Murcia a la que me invitó, junto con otros 21 compañeros de la UMU y la UPCT, constituyendo una gran familia. Gracias a su apoyo y al impulso de la cátedra se han podido obtener recursos con los que se ha podido realizar esta tesis. Su entusiasmo por la empresa familiar ha sido crucial para la investigación de la empresa familiar en la Universidad de Murcia.

Agradecer al Dr. Ángel Meroño Cerdán su apoyo incondicional que ha sido determinante para poder completar la tesis doctoral, agradecerle toda su ayuda, así como su lucha por lograr que la cátedra mare-nostrum de empresa familiar siga sobreviviendo en estos tiempos difíciles y actuales, así como por contar conmigo en todo dentro de la cátedra. Con su apoyo y ayuda he podido obtener recursos con los que desarrollar y enriquecer esta tesis doctoral.

Mi agradecimiento a todos los compañeros del departamento, del decanato, de la facultad y de la cátedra de empresa familiar, pues con sus ánimos, consejos y apoyo continuo me han ayudado a finalizar la tesis doctoral. Su pregunta casi diaria del avance de la tesis, al final ha dado sus frutos. Mi gratitud eterna por ello. Con todos ellos he pasado largas horas de trabajo, son muchas las cosas que he aprendido de ellos y fructíferas y amenas nuestras conversaciones, que espero que se prolonguen en el futuro. Realmente, me siento un privilegiado por haber tenido la oportunidad de colaborar con un grupo de trabajo tan brillante y humano.

Mi gratitud, especialmente, por sus gestos y predisposición durante los momentos de la tesis doctoral a los compañeros del departamento Antonio Aragón Sánchez, Samuel Baixauli Soler, Isabel Barba Aragón, Arielle Beyaert, José García Solanes, Pedro Juan Garcia Teruel, Daniel Jimenez Jimenez, Micaela Martinez Costa, Pedro Martínez Solano, Alicia Rubio Bañon y Raquel Sanz Valle, a los compañeros del decanato Domingo Antonio Manzanares Martinez, María de las Mercedes Sánchez Ruiz y a Pilar Ortiz García, a los compañeros de la facultad Marcos Anton Renart, Maximo Camacho Alonso, Elena Delgado Ballester, Miguel Hernandez Espallardo, Longinos Marin Rives, Jorge Martinez Perez, Ildefonso Mendez Martinez, Salvador Ruiz de Maya e Israel Sancho Portero, a los de la cátedra Antonio Durendez Gomez-Guillamon y Angel Olaz Capitan. Siempre he aprendido mucho con sus conversaciones, formales o más distendidas, y agradecido sus consejos para la tesis.

Agradecerle también a la dirección del departamento actual, y a las anteriores su total disponibilidad para cualquier asunto o problema a tratar y a resolver, en especial a Marisa Isabel Martínez Serna. También agradecer a la Fundación CajaMurcia, actual banco Mare-Nostrum, y a la Asociación Murciana de la Empresa Familiar (AMEFMUR), su apoyo y ayuda al estudio de la empresa familiar en la Catedra, y su colaboración con el desarrollo de la tesis doctoral.

En el plano personal, a mis padres y mis hermanas por apoyarme siempre en mi trabajo, por su paciencia infinita y por estar ahí cuando los he necesitado.

INDEX

INDEX

Summary in Spanish (Resumen en Español)...1

Introduction 8

Chapter 1. The Determinants of Employee Compensation in Family Firms... 15

1.1. Introduction 16

1.2. Theoretical framework. Employee Compensation in Family Firms From the Agency Perspective 19

1.2.1. Pay Level 23

1.2.2. Pay Mix..25

1.2.3. Temporal Orientation of Incentives 26

1.3. Methodology and Research Design 27

1.3.1. Population and Sample...27

1.3.2. Variables and Scales 28

1.4. Data Analysis and Results.. 33

1.5. Discussion and Conclusions.. 37

1.6. References ... 40

Chapter 2. CEO Compensation Monitoring and Firm Performance: The effects of Family Involvement ... 46

2.1. Introduction ... 47

2.2. Theoretical framework and hypotheses. ... 50

2.2.1. CEO Compensation Monitoring and Firm Performance ... 50

2.2.2. The moderating role of Family Involvement ... 53

2.3. Methodology and Research Design ... 57

2.3.1. Population and Sample ... 57

2.3.2. Measures and psychometric properties of the scales ... 59

2.4. Results ... 63

2.4.1. Descriptive results ... 63

2.4.2. Structural models results ... 66

2.5. Discussion and conclusions ... 71

2.6. References ... 75

Chapter 3. Effects of Human Resource Practices on Firm Performance: The mediating role of Family Involvement ... 85

3.1. Introduction ... 86

3.2. Theoretical framework and research hypotheses ... 88

3.2.1. Formalization of human resource practices and firm performance.............*88*

3.2.2. The formalization of human resource practices in family firms.....................*90*

3.2.3. Interrelationships between the formalization of HR practices and firm performance in family firms.....................*94*

3.3. Methodology and Research Design..................... 98

3.3.1. Sample and data collection.....................*98*

3.3.2. Measures and psychometric properties of the scales.....................*99*

3.4. Results.....................104

3.4.1. Descriptive results.....................*104*

3.4.2. Structural models results.....................*107*

3.4.3. Test for mediating effect.....................*111*

3.5. Discussion and Conclusions.....................112

3.6. References.....................116

Conclusions..................... 129

INDEX OF TABLES AND FIGURES

Chapter 1.

Table 1.1. Cluster Analysis 30

Table 1.2. Correlations and Descriptive Statistics 32

Table 1.3. General Linear Model: Analysis of Variance 33

Table 1.4. Hierarchical Multiple Regression Analysis 34

Chapter 2.

Table 2.1. Confirmatory factor analysis of the measurement scales 62

Table 2.2. Descriptive analysis, discriminant validity of the measurement scales 63

Table 2.3. Means, standard deviations and correlations 64

Table 2.4. ANOVA. Results for low CEO monitoring firms and high CEO monitoring firms, family firms and non-family firms 65

Table 2.5. Results of the SEM models 67

Figure 2.1. CEO monitoring and firm performance relationships 69

Figure 2.2. CEO monitoring, family involvement and firm performance relationships....70

Chapter 3.

Table 3.1. Confirmatory factor analysis of the measurement scales 102

Table 3.2. Descriptive analysis, discriminant validity of the measurement scales 103

Table 3.3. Second-order of the construct formalization of HR practices 104

Table 3.4. Means, standard deviations and correlations 105

Table 3.5. ANOVA. Results for family firms and non-family firms, family owned-managed firms and family owned with external managers 106

Table 3.6. Results of the SEM models.... 108

Figure 3.1. Family ownership, HR practices formalization and firm performance relationships 109

Figure 3.2. Family ownership, HR practices formalization and firm performance relationships 110

SUMMARY IN SPANISH (RESUMEN EN ESPAÑOL)

Resumen de la tesis doctoral

La relevancia de la empresa familiar para la economía y sociedad es ya una realidad indiscutible y así lo revelan cualquiera de los indicadores económicos y sociales al uso. Según datos del Instituto de la Empresa Familiar, en España se estima que hay 2,9 millones de empresas familiares, lo que representa un 85% del total de empresas, que generan un 70% del empleo privado, ocupando a casi 14 millones de personas. Estas empresas tienen una facturación equivalente al 70% del Producto Interior Bruto y representan el 59% de las exportaciones españolas.

El activo familia puede suponer para la empresa incorporar al negocio valores fundamentales como confianza, lealtad y compromiso, que pueden constituirse en elementos de estabilidad y cohesión para la organización empresarial. No obstante, esto no quiere decir que no puedan sobrevenir al espacio empresarial problemas y dificultades provenientes precisamente del ámbito familiar. Sólo si se pone en juego todo el potencial existente, el que se deriva de la condición familiar y el que corresponde a la organización empresarial, buscando la alineación de intereses, valores y objetivos de la familia y del negocio, se podrá alcanzar la excelencia empresarial.

Considerando la relevancia de la empresa familiar en la economía y en la sociedad, la investigación en dicha disciplina, que es relativamente joven, se ha desarrollado rápidamente en los últimos años, especialmente desde el comienzo del siglo XXI, gracias sobre todo al desarrollo de marcos teóricos más sólidos y adaptados a la realidad de la empresa familiar.

La literatura sobre empresa familiar se viene centrando mayoritariamente en identificar los factores determinantes de la masiva presencia de empresas familiares en el entorno económico actual. En este sentido, uno de los tópicos más

desarrollados tiene que ver con el análisis de los roles, relaciones e impactos que determinados individuos clave tienen en la empresa familiar, tales como el fundador, la generación de familiares, los shareholders o propietarios, los stakeholders o grupos de interés, y los directivos familiares, entre otros. Sin embargo, el interés por estudiar a la propia organización familiar en sí ha resultado insuficiente.

El análisis y estudio de los aspectos organizativos de la empresa familiar, en combinación con los elementos y mecanismos de gobierno y gestión de la misma, puede contribuir a identificar (y mejorar) determinados puntos que tradicionalmente han sido débiles en la ámbito de la empresa familiar. Concretamente, una de las principales áreas de interés en la investigación en la empresa familiar, y que constituye el centro de atención en esta tesis doctoral, se encuentra en la gestión del capital humano. En la empresa familiar la gestión de recursos humanos se percibe a priori como una tarea compleja, en un escenario en el que las relaciones entre propietarios, directivos, empleados y familia no están claramente delimitadas en términos de autoridad y responsabilidades. La influencia de la familia en las estructuras de gestión del capital humano crea un marco idiosincrásico, que hace diferente a la empresa familiar con respecto a la no familiar, y que puede presentar implicaciones tanto positivas como negativas en términos de desempeño organizativo, dependiendo de las preferencias que la empresa familiar muestre en relación con los intereses económicos del negocio o el bienestar de la familia.

Con esta tesis doctoral se pretende, por tanto, contribuir a esta línea de investigación mediante el análisis de la efectividad de la gestión del capital humanos en la empresa familiar, examinando los efectos en términos de resultados del diseño –más o menos formalizado- y orientación –más o menos económica- de las principales prácticas de recursos humanos (selección, formación y retribución, consideradas tanto de forma individual como conjunta) en el contexto de la mayor

o menor coincidencia de intereses de propiedad y dirección y los potenciales problemas asociados al predominio de la dimensión familiar y/o empresarial.

Las perspectivas teóricas de la agencia y de la preservación de la riqueza socioemocional constituyen el marco en el que se fundamentan las relaciones entre prácticas de recursos humanos y eficiencia organizativa. Para analizar el efecto del diseño y orientación de las prácticas de recursos humanos en la empresa familiar desde estas perspectivas teóricas se han llevado a cabo tres ensayos empíricos utilizando distintas muestras de empresas españolas, agrupados a lo largo de los tres capítulos en los que se compone esta tesis doctoral.

En el primer capítulo, se pretende caracterizar el diseño de la retribución de los empleados no directivos considerando distintos niveles de implicación familiar. El marco teórico de agencia fundamenta las razones por las que las empresas, dependiendo de su nivel de implicación familiar, pueden optar por un tipo de diseño retributivo u otro que responda a la alineación de intereses empleados y empresa. El estudio se ha realizado sobre una muestra amplia y representativa de 554 empresas españolas, que incluye empresas de propiedad y dirección familiar, empresas de propiedad familiar no dirigidas por la familia (empresas familiares con dirección externa o profesionalizada) y empresas no familiares.

Los resultados obtenidos se pueden sintetizar en: (1) que los niveles retributivos totales disminuyen a medida que aumenta el grado de participación familiar en la empresa; (2) que la mayor proporción de retribución variable es para los empleados de las empresas familiares de dirección externa en comparación con los de empresas de propiedad y dirección familiar y los de empresas no familiares, que reciben similares combinaciones fijo-variable; y (3) que los incentivos se orientan más al corto plazo conforme aumenta el grado de participación familiar en la empresa.

Por lo tanto, las evidencias muestran la validez de los argumentos que apoyan el que los costes de agencia en la empresa familiar son menores, pese a ser más

numerosos que en la empresa no familiar. Es, por tanto, razonable pensar que en las empresas familiares se necesite retribuir menos a los empleados (nivel retributivo), utilizando una menor proporción de incentivos orientados al largo plazo, en busca de un mejor alineamiento de los intereses entre empresa familiar y empleados.

En el segundo capítulo, se aborda el diseño de la retribución directiva, concretado en este caso en la figura del director general o CEO y, específicamente, en términos de la supervisión retributiva a la que éste se ve sometido. Sobre la base de los marcos teóricos de la agencia y de la preservación de la riqueza socioemocional, se examina la relación entre supervisión retributiva del CEO y resultados de la empresa desde diferentes grados de implicación familiar. Se pretende conocer si el rigor de las prácticas de supervisión retributiva con las que vigilar las acciones del CEO influye positiva o negativamente en los resultados de la empresa y hasta qué punto esta relación viene moderada por la implicación de la familia en el negocio. Este estudio se ha realizado sobre una muestra de 400 grandes empresas españolas, compuesta por empresas familiares –con distintos niveles de control en términos de propiedad y dirección- y no familiares.

Los resultados obtenidos evidencian una relación asintótica entre supervisión retributiva y resultados y un efecto moderador significativa de la implicación familiar. En concreto, la mejora de resultados empresariales es mayor cuando se incrementa la supervisión retributiva sobre el CEO en contexto de baja de supervisión que cuando el CEO ya se encuentra en contextos de alta supervisión. En este sentido, la presencia de la familia en la empresa hace que los mecanismos de supervisión sobre el CEO sean más laxos en relación con la empresa no familiar. Los resultados muestran que el nivel de supervisión aplicado sobre el CEO es significativamente menor en las empresas familiares, y que no aumenta hasta que la familia pierde el control en la propiedad de la empresa.

Por lo tanto, se puede concluir que es la pérdida de poder de la familia en la empresa, procedente de la propiedad, la que determina el grado de supervisión

retributiva sobre el CEO. La existencia de objetivos no económicos en las decisiones adoptadas dentro de los órganos de gobierno de la empresa familiar puede explicar la mayor permisividad y confianza y, por tanto, menor supervisión retributiva sobre el CEO en la empresa familiar. No obstante, y como consecuencia de lo anterior, la mejora de la supervisión retributiva sobre el CEO conduce a mayores incrementos en los resultados empresariales a las empresas familiares que en las empresas no familiares. Formalizar, por tanto, la gestión y los mecanismos de supervisión sobre las decisiones y procesos de determinación de la retribución del CEO ofrecen grandes ventajas para las empresas familiares.

En el tercer capítulo, se determina desde un enfoque más holístico la efectividad de las prácticas de recursos humanos y el efecto de la empresa familiar en su formalización nos conduce al capítulo tercero. A partir de las perspectivas de agencia y de preservación de la riqueza socioemocional se discute la relación entre el grado de formalización de las prácticas de recursos humanos –que incluyen selección, formación y retribución-, la implicación de la familia en el negocio y los resultados de la empresa, investigando sobre el efecto mediador del carácter familiar en la efectividad de las prácticas de recursos humanos. Partiendo de una muestra de 500 empresas, se analiza si la mayor rigurosidad y formalización de las prácticas de recursos humanos se asocia significativamente con las empresas de mayor o menor implicación familiar y si dicha asociación tiene efectos en los resultados empresariales.

Los resultados muestran que la formalización de las prácticas de recursos humanos favorece la mejora de los resultados empresariales en cualquier circunstancia y que dicha mejora es mayor cuando la implicación familiar disminuye. En concreto, los resultados muestran una relación inversa entre la formalización de las prácticas de recursos humanos y la implicación de la familia en la dirección del negocio (no así, en cambio, en la propiedad, donde no existe una relación significativa).

De estos resultados se puede deducir que la empresa familiar puede seguir conservando su esencia de familiar, preservando un accionariado familiar, sin que ello sea un obstáculo para la gestión eficiente de su capital humano. Es más bien el grado de profesionalidad de la dirección el que puede favorecer la implantación de sistemas de selección rigurosos y objetivos, de políticas de formación orientadas al desarrollo de capacidades y de estructuras retributivas vinculadas al rendimiento individual y colectivo que creen efectos sinérgicos positivos en el conjunto de empleados que conduzcan a la mejora de los resultados de la empresa familiar.

Finalmente, esta tesis doctoral finaliza con una discusión de las principales implicaciones que se extraen de las evidencias obtenidas a lo largo de los tres ensayos realizados. Globalmente, estos hallazgos sugieren que el diseño e implantación de prácticas de recursos humanos formales y rigurosas es una alternativa deseable y necesaria para la supervivencia y competitividad de la empresa familiar; para ello se requiere de gestores –familiares o no familiares- debidamente capacitados. Dichas prácticas pueden contribuir a paliar y limitar los problemas específicos de altruismo asimétrico que surgen en las empresas familiares (nepotismo, inequidad, etc.), pero sin contrarrestar las ventajas derivadas de la implicación de los miembros de la familia que caracteriza a este tipo de empresas.

INTRODUCTION

Introduction

The importance of family businesses to the economy and society is an undeniable fact that shows up in any economic and social indicator one chooses to use. According to the Instituto de Empresa Familiar [Institute for Family Firms] in Spain is estimated that 2.9 million of firms are family businesses, representing 85% of all firms, and generating 70% of private employment, amounting to nearly 14 million people. These companies have a combined turnover equivalent to 70% of GDP and account for 59% of total Spanish exports.

There is a fundamental fact which explains this importance: the family has always been the bedrock of the economic and social system, regardless of the form it has taken over time and how it has been managed. The visibility of the family in generating productive economies has been unquestionable, although it is true that the forms of organizational management, whether simple or complex, have given the family a greater or lesser role in the ownership and management of the companies.

The activity of the family can support companies as they incorporate core values such as trust, loyalty and commitment, which can become elements of stability and cohesion in the business organization. However, this does not mean it cannot happen that difficulties arising in the family spill over into the busienss. Only if the firm draws upon the full potential, that which is derived from the family as well as that of the corresponding business, seeking an alignment of interests, values and goals of the family and the business, is it possible to attain firm excellence.

Therefore, the family nature of the firm, properly managed and aligned with the business, can be configured as an active generator of valuable competitive advantage in order to maximize returns. The family involvement in the firm can

produce behaviors that are difficult to imitate, because of reciprocal economic and non-economic value created by the combination of family and business system. For example, the family values related to the culture of the organization, the historical connection of assets linked to the family owners, or the reputation of the firm and family.

Considering the importance of the family firm in the economy and society, research in the discipline, which is relatively young, has developed rapidly in recent years, and especially since the beginning of the century, thanks mainly to the development of stronger theoretical frameworks that are more suited to the reality of family firms.

The literature on family firms has focused mainly on identifying the determinants of the overwhelming importance of family businesses in the current economic environment. In this sense, one of the most developed topics deals with the analysis of the roles, relationships and impact of certain key individuals in the family firm, such as the members of the founding generation, the shareholders or owners, the stakeholders or interest groups, the CEO or the family managers, among others. However, the study of the organization of the family itself has proved itself insufficient. The issues of family firms cannot be determined only from the perspective of the family and of the relations among its members. Topics such as innovation, financial policy, human capital management, and inter-organizational relationships, among others, are still under-researched, and should therefore be incorporated into the context of family interactions in the governance and management of the family firm.

Thus, the analysis and study of the organizational aspects of family firms, combined with their elements and mechanisms of governance and management, can help identify (and improve) certain points that have traditionally been weak in the field of family firm, such as managing their limited financial, human and material resources, the control of individual and family conflicts, the organizational growth and/or internationalization of the family business, the

preservation of family wealth and capital in the company, and the generational transition in the succession of management and ownership.

Specifically, one of the main areas of research interest in the family firm, and which is the focus of this thesis, is the management of human resources. In the family firm, human resource management is perceived *a priori* to be a complex task, in a scenario in which the relationships between owners, managers, employees and family are not clearly defined in terms of authority and responsibilities. The influence of the family in the management structures of human capital creates an idiosyncratic framework that makes the family firm different from the non-family firm, and that can have either positive or negative implications in terms of organizational performance, depending on the preferences that the family firm adopts in relation to the economic interests of business and family welfare.

This thesis, therefore, seeks to contribute to this area of research by analyzing the effectiveness of the human resource management practices in family firms, examining the effects in terms firm performance of the design –more or less formalized– and orientation –more or less economic– of the main human resource practices (selection, training and compensation, considered both separately and in combination) in the context of the degree of alignment of the interests of owners and managers and the potential problems associated with dominance of either family and / or business values. The theoretical perspectives of agency theory and socio-emotional wealth preservation (SEW) constitute the framework within which the relationship between human resource practices and organizational performance are examined.

The SEW perspective suggests that the main preferences of family firms in attracting, retaining, developing and motivating their human capital is governed most strongly by social and emotional principles related to the family. From this view, family firms do not always seek to maximize economic efficiency, if it means compromising objectives such as reputation, continuity and influence of the family in the business. The result is the recruitment, development and motivation of

employees who are engaged and involved with the family values of the firm, contributing to the preservation and enhancement of non-economic returns to the family, while minimizing possible threats to the survival of the business.

In terms of agency theory, the degree of formalization of human resource practices in family firms can be explained by the existence of family relationships, which in principle can decrease the differences between the interests of principals and agents encouraging commitment and altruism among people working in the family firm. Altruistic behaviors create a self-reinforcing system of incentives that encourages members of the company to be more careful and disinterested, including fostering a sense of collective ownership, which promotes involvement in the firm, and increases cooperation, making it unnecessary to have stricter and formalized human resource management practices. However, these informal practices may also promote a misinterpretation of –asymmetric– altruism, with deviant practices, nepotism and inequality that adversely affect the effectiveness and performance of the firm.

To analyze the effect of design and orientation of human resource practices in the family firm from these theoretical perspectives, three empirical studies have been conducted using different samples of Spanish companies, which were specifically intended to answer the following questions:

> *1 - What factors characterize the design of compensation practices when there are different degrees of family involvement? Does the agency theory correctly describe the compensation of non-executive employees in family firms?*
>
> *2 - What influence does the family, or the degree of family involvement, have in the design of the CEO compensation monitoring mechanisms? How effective are more or less stringent systems for monitoring CEO compensation?*

3 - Does family involvement affect the degree of formalization of human resource practices? What degree of formalization of human resource practices leads to better firm performance?

These three questions are addressed in the three chapters of this thesis, each of which corresponds to an empirical study.

The first question is answered in the first chapter. This chapter aims to describe the design of the compensation of non-executive employees, considering different levels of family involvement. The theoretical framework of agency theory explains why companies, depending on their level of family involvement, can opt for one type of design for their compensation packages or another, in an effort to bring about an alignment of the interests of the company and the employees. The study was conducted on a large and representative sample of 554 Spanish companies, including family-owned managed firms, family-owned and externally managed firms and non-family firms.

The second question addressed in this thesis, in the second chapter, relates also to the issue of the design of the compensation policy, but in this particular case focusing on the figure of the CEO and, specifically, in terms of the compensation monitoring exerted on the CEO. Based on the theoretical frameworks of agency theory and SEW, the relationship between CEO compensation monitoring and firm performance, considering different degrees of family involvement, is examined. The question is whether the rigor of compensation practices, together with monitoring the actions of the CEO, has a positive or a negative influence on firm performance, and how this relationship is moderated by family involvement in the firm. This study was conducted with a sample of 400 large Spanish companies, including family firms –with different distributions of family control in terms of ownership and management– and non-family firms.

In order to answer the third question, it is necessary to develop a more holistic approach to analyze the effectiveness of human resource management practices on family firms. This forms the substance of the third chapter. From the perspectives of agency theory and SEW, the relationship between the degree of formalization of human resources practices –which include selection, training and compensation-, family involvement and firm performance are discussed, examining the mediating effect of family involvement. Based on a sample of 500 firms, the study examines whether the increased rigor and formalization of selection, training and compensation practices is significantly associated with different levels of family involvement and whether this simoultaneusly association has an effect on firm performance.

This thesis concludes with a summary of the key findings from the three empirical studies. The final section sets out the major findings from this research, and on that basis, an attempt is made to characterize and explain the reasons that lead Spanish family firms to set different goals, and to implement different levels of formality, in their human resource management frameworks. Also, information on the consequences of different designs of human resource practices, in terms of effectiveness and firm performance, is provided, identifying the conditions under which family involvement in the company has more or less positive effects. This is to say, the conclusions suggest which family conditions lead firms to implement the necessary human resource practices successfully, and to achieve the expected firm performance, without losing the family identity of the firm.

CHAPTER 1. THE DETERMINANTS OF EMPLOYEE COMPENSATION IN FAMILY FIRMS

Chapter 1. The Determinants of Employee Compensation in Family Firms

1.1. Introduction

Many works have chosen agency theory as their theoretical framework in order to characterize the compensation processes in businesses (Gomez-Mejia, Larraza, & Makri, 2003). The agency perspective has greatly increased our understanding of executive compensation, but has been less applied to explain compensation at the lower levels in firms. Little is known about the determinants of employee compensation contracts from an agency perspective (Werner, Tosi, & Gomez-Mejia, 2005). This is somewhat surprising considering that the study of employment compensation has major practical implications. Employee compensation costs often exceed 80% of total operating expenses (Gomez-Mejia & Balkin, 2006), and these costs offer a more realistic image of firms' costs than executive compensation costs.

The analysis is of even greater interest in family businesses, where lower levels of management hierarchy exist (Galve & Salas, 2003; Van Steel & Stunnenberg, 2006), and the compensation costs at the operational level are consequently even higher. Surprisingly, however, employee salaries have not been examined in family businesses within an agency framework (Van der Merwe, 2009), and this in spite of the existence of general theoretical models in both the theory of incentives (Laffont & Martimort, 2002) and contract theory (Bolton & Dewatripont, 2005), and new research developed in family business suggests that family involvement creates idiosyncratic agency situations, such as asymmetric altruism and nepotism, between family members and can generate deviant behavior, negatively affecting the performance of the company, and influencing employee compensation decision (Chrisman, Sharma & Taggar, 2007; Chua, Chrisman & Bergiel, 2009; Cruz, Gomez-Mejia & Becerra, 2010; Cruz, Firfiray & Gomez-Mejia, 2011; Gomez-Mejia *et al.*, 2003; Schulze, Lubatkin, Dino & Buchholtz, 2001).

Only a small number of general empirical studies have dealt with employee compensation contracts. We might mention the work of Werner *et al.* (2005), who investigate how the ownership structure is related to the firm's overall compensation strategy. They find significant differences in the compensation practices that apply to all employees by function of the ownership structure. Elsewhere, Rayton (2003) reports that profit-sharing plans align the objectives of employees with those of the firm.

The agency arguments to explain variations in employee salaries are based, as Baker, Jensen, and Murphy (1988) and Werner and Tosi (1995) suggest, on the idea that incentives fixed at the top of firm hierarchies might spawn a cascade effect that grows in magnitude as one moves toward the lower levels. This view is founded on the organizational idea put forward by Alchian and Demsetz (1972), for whom a firm is in essence an organization set up to deal with a moral-hazard-in-teams problem (i.e., a multilateral contract set up to mitigate incentive problems arising in situations involving multiple agents).

Thus, this is an agency problem with several levels, and at each level there are different agency relations: owners and CEO; CEO and senior managers; senior managers and supervisors; supervisors and employees. At low levels, the owners cannot directly observe their employees' behavior, and designing contracts that align the interests of the parties is more difficult (Bolton & Dewatripont, 2005). It is precisely in these contracts with scenarios of multiple agents that salary becomes an important element in mitigating agency problems (Holmström, 1979).

The aim here, therefore, is to explain how the salary of the last agents (the employees) is established, according to the characteristics of the first agency relation between CEO and owners and following the arguments of the cascade effect. This article seeks to contribute to covering this gap in the research by analyzing the process and the determining factors that influence the design of employee salaries in family businesses. The work specifically describes how

employee salaries vary according to the degree of family ownership and family involvement in the management.

This study offers several contributions to the literature on employee compensation. First, it sheds light on the employee compensation process in family firms, whether they are family owned and managed or professionally managed. Second, the study extends the literature on agency theory to consider employee compensation, showing that employee compensation changes by function of the firms analyzed. Third, the work sheds light on the principal-multi-agent problems and the internal monitoring process, two aspects discussed by agency scholars (Alchian & Demsetz, 1972).

Ownership concentration and management composition not only influence risk sharing for the firm and the CEO, and agency problems derived from this relationship, but they also influence risk sharing and agency problems for the rest of the agents in the entire organization. Lastly, this study has major practical implications, since employee compensation represents a more realistic image of firms' costs.

To this end, data were collected from 554 firms in Spain, a country in which the number of family businesses is similar to that of other developed economies (Ricart *et al.*, 1999), although there are distinguishing characteristics (Gallo, Tàpies, & Cappuyns, 2004; Galve & Salas, 2003; Ricart *et al.*, 1999), including family members' greater commitment to the business, less professionalized management, higher ownership concentration, greater control by the family, more internal conflicts, and smaller size. All these aspects may contribute to the spread of agency arguments to other contexts. The article is structured as follows. The next section examines the design of employee compensation in family owned and managed firms compared to professionally managed family and nonfamily firms, from the agency perspective. The methodology is described next, with results in the following section. The final section presents and discusses the conclusions.

1.2. Theoretical framework. Employee Compensation in Family Firms From the Agency Perspective

Agency theory provides a highly flexible framework for studying a variety of important economic phenomena (Karra, Tracey, & Phillips, 2006). At the core of this theory is the potential conflict between the principal and the agent, due to divergent interests under the conditions of asymmetric information and in the absence of complete contracts (Chrisman, Chua, & Litz, 2004; Jensen & Meckling, 1976). In this case, it is difficult for the principal to monitor the agent's actions and to ensure that the agent acts appropriately in all circumstances (Alchian & Demsetz, 1972).

Agency conflicts may appear, and there are two main kinds of conflict: adverse selection and moral hazard (shirking, free riding, and the consumption of perks)—for more information about these problems, see Chrisman, Chua, and Litz (2004). Moreover, Schulze *et al.* (2001) affirm that a third agency problem may appear in family firms: asymmetric altruism (which can manifest itself as a problem of self-control due to free riding, biased parental perception of a child's performance, difficulty in enforcing a contract, and generosity in terms of perquisite consumption). To mitigate the agency problems, principals have to incur an agency cost, and compensation design can help them control and reduce agency problems and co-align the preferences between the parties (Fama & Jensen, 1983).

Different types of compensation contracts are set according to the possible related interest groups. Owners are unable to directly observe the behavior of employees at the base of the firm or fix their contracts so as to align the interests of both parties (Bolton & Dewatripont, 2004). Thus, a natural limit would appear to be the employer's diminishing ability to monitor a larger group of employees effectively (Bolton & Dewatripont, 2004). Nevertheless, Calvo and Wellisz (1978) have shown that in that case, the agency problem may be solved by supervisors acting as principals: a firm will still be able to grow infinitely large if the employer sets up an

efficient internal hierarchy composed of supervisors who monitor other supervisors who monitor workers.

Within this agency context, in which various levels made up of many agents exist, the compensation contracts fixed at each level are important, since they can be used to align the interests of all the agents and hence reduce possible agency risks. In the case of multiple agents, these may act uncooperatively and seek their own benefits (a worker wants to rely on the other workers to do the work), or they may act cooperatively with other agents for their mutual benefit to the detriment of the principal (Bolton & Dewatripont, 2004). Thus, the principal must monitor or reward the agents to make sure that they all work, and that no agency problems exist.

Although the agency arguments outlined above are valid and applicable in general terms, the suitable compensation design for employees may vary according to the type of firm: (1) family owned and managed (with ownership and management highly concentrated within the family, which wishes to remain firmly associated with the business in the future); (2) professionally managed family (where management is in the hands of nonfamily professionals); and (3) nonfamily (widespread ownership and managed by non-owners). It is also important to consider that the interests and risks of the players in the contracts vary according to their role.

Given these two factors—type of firm and type of staff—several types of principals and agents who have influence in the compensation structure are distinguishable. In the first place, there are the owners (principals), whose interest is in firm performance as a reward for their investment. This risk/reward is conditioned by the level of ownership concentration and by the number of owners. High ownership concentration makes it easier to align the interests of the owners in family businesses (family owned and managed or professionally managed) than in nonfamily ones (Vilaseca, 2002). Nevertheless, in terms of risk, the owners of family businesses assume the most. Thus, among the members of the family,

owners of professionalized family businesses will bear the highest risk, since their investment is relatively undiversified, they have a high share of the ownership, and they have less control because the firm is under professional management (Anderson, Mansi, & Reeb, 2002; Schulze *et al.*, 2001). In contrast, in nonfamily businesses, the total risk borne by each owner is lower because there is more possibility for diversification of the investment.

With regard to the CEO, who is an agent of the owners while at the same time adopting the role of principal in relation to the senior managers or employees, the fundamental risk assumed is that of being fired for inefficiency (Van den Berghe & Carchon, 2003). To reduce this risk, CEOs undertake actions that benefit and protect their position, and these will depend on whether they are owners and, if so, on the amount of ownership held (Baumol, 1959). When CEOs hold significant ownership, they will assume high risks. A mistake will not lead to them being fired, but the value of their assets in the company will fall. These assets are often a large part of the CEO's personal fortune—69% according to Forbes Wealthiest American Index (2002). Thus, the likelihood of being fired in a family owned and managed firm is very low and is referred to as asymmetric altruism by Schulze *et al.* (2001). Agency problems are also considered to be fewer in this type of firm.

On the other hand, when the CEO is not an owner, two situations can arise. (1) The ownership of the firm is spread out among a large number of owners (nonfamily firm), a situation that CEOs can use to protect their personal investment by taking decisions that do not necessarily maximize the shareholders' objective function (Van den Berghe & Carchon, 2003), thus assuming less risk. Agency problems in this instance are high. (2) The ownership is highly concentrated (professionalized family firm), a situation in which the CEOs' degree of discretional capacity for working in their own interest is lower, although it is higher than in the case of a family owned and managed business. The risk assumed is medium.

In short, when the CEO designated by the family is considered trustworthy, traits that are valued include loyalty, commitment and effort in promoting the long-term

value of the company, regardless of his or her actual capacities (Verbeke and Kano, 2012). In this context of strong family involvement in the business, the perceived risk to the business of opportunism on the part of the CEO who is a family member, is lower, understanding and consideration of the welfare of the CEO and the family that owns the business (Cruz *et al.*, 2010). However, if the family influence in the business decreases as a result reduced property rights, the family may see their power to appoint a CEO from the family reduced, and this can bring in independent managerial talent in the person of a CEO who is unrelated to the family. This external CEO hired into the family business is considered bound in the short term to the company, potentially disloyal (with strong personal interests) and only moderately committed (Verbeke and Kano, 2012).

Finally, we have the employees. Different levels exist within the firm with different employee-agents at each. At the top end, there is the CEO, who adopts the role of principal with respect to the employees lower down the hierarchy in order to ensure that they pursue the owners' interests. These employees act as agents with respect to the CEO, but at the same time they are principals for the employees at the level immediately below them, a pattern that is repeated down the hierarchy (Calvo & Wellisz, 1978).

However, in general, the relations within families are largely characterized by altruism, loyalty, and trust in family firms (Chami, 2001; Pollak, 1985). As Gulbrandsen (2005) says "receiving trust, that is, the experience of being trusted, in itself stimulates trust giving, even to strangers". It may be expected that family owners characterized by mutual trust also will extend trust to their employees (Gulbrandsen, 2005) when family involvement increases. Such extension of trust may have consequences for the management of the firm.

The risks assumed by agents at all levels (except the family members) are personal ones—that of being fired. They may be aware that it is difficult to ascertain individual behaviors when there is a large number of employees (Alchian & Demsetz, 1972; Bolton & Dewatripont, 2005), and especially in situations where

there is cooperative action or there is an implicit or explicit agreement to hide information on performance from the principal (Holmström & Milgrom, 1990; Itoh, 1991; Macho Stadler & Pérez, 1991).

In situations where there is a risk of moral hazard, the compensation design becomes a necessary tool to correct such behaviors and align interests. Nevertheless, the compensation design may vary according to the type of firm in question, since the objectives of the principal will be different from those at lower levels of the organization (Werner *et al.*, 2005), as has been seen above. Below, arguments are laid out to characterize the three fundamental compensation dimensions—level, mix, and incentive orientation—at the level of this group of employees.

1.2.1. Pay Level

Few studies relate employee pay levels to the ownership structure, and those that do focus on executives (Core, Holthausen, & Larcker, 1999; Ramaswamy, Veliyath, & Gomes, 2000), showing that managers' pay level decreases as the CEO's level of ownership increases. Concerning the rest of the employees, the same conclusions have been reached (Werner *et al.*, 2005).

In the family owned and managed firm, there are two fundamental reasons to justify this position. (1) The CEO is simultaneously one of the main shareholders and, due to this position of power and to the fact that the CEO forms part of the organization, it is easier to control the employees. Thus, aligning the interests of owners and employees is, a priori, simpler, as is correcting certain individual agency problems (moral hazard) or collective ones (collusion). (2) CEOs will set themselves a low pay level (compared to the CEOs of other firms), and may prefer to leave more money (which would otherwise be taken as salary bonus) in the firm, where it will enhance firm and shareholder value, thereby accruing benefit

(Gomez-Mejia, Nuñez-Nickel, & Gutierrez, 2001). Considering that organizations generally attempt to maintain appropriate differentials between levels and establish these differentials not in absolute pay terms but as ratios (Simon, 1957), the expectation is for a lower pay level among employees.

In the nonfamily business the CEO is not an owner and the ownership concentration is low, a situation that will influence the CEO's decisions, which will be directed toward personal gain, greater security and status within the firm, and a higher salary (Baumol, 1959). One suitable strategy here is to increase the size of the organization, which will have repercussions for the pay level of the employees.

Werner *et al.* (2005) put forward three reasons why this should be: (1) linking compensation increases to firm growth involves lower risk sharing for employees, which decreases the possibility of workers' dissatisfaction and hence management can avoid potential employee backlash. (2) if CEOs wish to pursue an aggressive growth strategy, it seems logical that average employee pay should go up in tandem in order to secure sufficient employees to sustain such an expansion. As the number of vacancies increases such a compensation strategy will: (a) attract better applicants, and (b) reduce voluntary turnover because workers may face higher opportunity cost if they change jobs. (3) the lack of human capital would put a limit to rapid growth. In the professionally managed family firm, the CEO is not the owner and ownership is concentrated among a few owners. This reduces CEOs' degree of discretionary capacity, and CEOs will perceive that their decisions and actions are under closer control by the owners.

Thus, in this case, an intermediate pay level for employees may be expected, lower than in nonfamily business but higher than in firms that are family owned and managed.

Hypothesis 1. The employee pay level is the lowest in family owned and managed firms, is higher in professionally managed family firms, and is the highest in nonfamily firms.

1.2.2. Pay Mix

Taking into account the above arguments, owners seek to avoid actions that will unilaterally benefit agents (e.g., moral hazard, collusion), and look for situations that will benefit all parties (Werner *et al.*, 2005). In this sense, variable pay helps align the interests of the parties, since this technique involves the agents in the company's risk (Baker *et al.*, 1988). Furthermore, in some situations, such as lower firm levels where monitoring agents' effort is more difficult, principals must rely more heavily on variable pay to align interests (Jensen & Murphy, 1990). The problem lies in how to monitor the variable pay at each level, since it is linked to different objectives that are controlled by different mechanisms (Baker *et al.*, 1988). Agency models, like that of Holmström (1979), have failed in this assumption.

On the other hand, and regardless of how CEOs' objectives are measured, they are rewarded with a greater variable proportion (linking the variable pay to the achievement of specific goals, which usually depend on the fulfillment of goals by other employees), so the CEOs will understand that their pay does not depend exclusively on themselves, but also on the performances of other agents. In such a situation, CEOs will seek to shift the risk toward those agents by linking their compensation to achieving the goals for that level (Rayton, 2003; Werner *et al.*, 2005; Werner & Tosi, 1995). A positive relation is thus produced between the risk assumed by the CEO and that assumed by the rest of the agents at lower levels. Using the arguments developed for the pay level, since the CEOs bear a higher risk in salary because a greater portion is variable, they will set goals that are more correlated at all levels so that the levels of risk assumed, and the adjusted pay variable, will be similar at the lower levels in the firm.

Thus, by considering the risk borne by the owners, which is relatively higher in professional family businesses, followed by that of family owned and managed firms and nonfamily ones, the second hypothesis is as follows.

Hypothesis 2. The variable pay proportion of the employees is the lowest in nonfamily firms, is higher in family owned and managed firms, and is the highest in professionally managed family firms.

1.2.3. Temporal Orientation of Incentives

Finally, conflicts of interest in the agency relationships can be mitigated when the links between contractual parts are repeated over time (Vilaseca, 2002). So, in long-term agency relationships, the principal has better information with which to monitor the agents' conflicts. Thus, companies with greater agency risks prefer to use long-term incentives, whereas in businesses where the agency risk is smaller, the best option is to use short-term incentives, since they are a better motivating mechanism (Bloom & Milkovich, 1998; Gomez-Mejia & Balkin, 2006), and they are more tangible, clear, and certain for the employees (Werner & Tosi, 1995). Moreover, family businesses reject certain long-term incentives, like stock options (Schulze *et al.*, 2001).

Given the above agency arguments, the firms that have the highest agency problems are the nonfamily ones, followed by the professionalized family firms and those that are family owned and managed. The final hypothesis is as follows.

Hypothesis 3. The incentives that family owned and managed firms offer to their employees are in the shortest term, in professionally managed family firms they are in the medium term, and in nonfamily firms they are in the longest term.

1.3. Methodology and Research Design

1.3.1. Population and Sample

The sample was drawn from the Amadeus database and single informants from among Spanish organizations were used. Spain is a member of the European Union and is the fifth largest economy in Europe (OECD, 2005). We selected companies with more than 15 employees, as is done in other research on family firms (Mahérault, 2000), rejecting smaller firms because they generally lack a defined compensation system (Gomez-Mejia & Balkin, 2006). The sample consisted of 836 firms. The technique for collecting the information was a face-to-face interview with the CEO. This survey was based on a structured questionnaire with closed questions. Five-hundred-fifty-four valid questionnaires were obtained, which represents a response rate of 66.3% of the total sample. This implies that the sample firms are highly representative of the target population. Using information provided by the Spanish Office of National Statistics in its central directory of companies, the distribution of companies by size, industry, and legal form in the sample is similar to that for Spain as a whole, including revenue and employment generated by industry.

All Spanish manufacturing and services industries are represented. The majority of the sample (70.58%) is distributed across six sectors, including: manufacture of food products, beverages, and tobacco industry (9.39%); textile industry, clothing, and leather goods (6.68%); metallurgy and manufacture of metal and nonmetal products (11.55%); commerce, accommodation, and catering (28.52%); transport, storage, and communications (7.40%); and real estate, rental activities, and business services (7.04%). The rest of the sample (29.42%) is comprised of other industries. This implies a sampling error of 3.27% for a confidence level of 95.5%, assuming simple random sampling.

Additionally, we verified that the data collected are representative of the final sample regarding the industry distribution of the firms: a significant correlation of

0.835 (p = 0.01) between the number of firms in the initial population and the number of firms in the final sample is obtained. Moreover, a variance analysis shows that there are no significant differences in size between the firms in the population and the firms in the final sample (F = 0.332; p = 0.564).

1.3.2. Variables and Scales

1.3.2.1. Dependent variables.

To examine compensation-system orientation, three variables were employed (Barkema & Gomez-Mejia, 1998; Gomez-Mejia, 1992): *Pay Level*, *Pay Mix*, and *Temporal Orientation of Incentives*. Each variable was measured by using a 5-point semantic differential scale. They have two bipolar adjectives at each end, where 1 implies complete agreement with the adjective on the left and 5 implies complete agreement with the adjective on the right. Other studies have used these adjectives (see Gomez-Mejia, 1992).

Compensation is measured without making any distinction between employees' groups. The first variable measures the *Pay Level*, that is, the organization's employee pay levels with respect to competitors. Specifically, 1 means that the firm pays much less than other firms in the market, and 5 that the firm pays much more. The second variable measures the pay mix by a scale measuring the fixed-variable proportion given to the employees in the firm. Specifically, 1 means that the firm rewards employees only with fixed pay and 5 only with variable pay. The last variable measures temporal orientation of incentives on a scale where 1 means only short-term incentives and 5 only long-term incentives.

1.3.2.2. Independent variables.

To verify how the type of firm influences the compensation variables, respondents need to be classified as family firms or nonfamily firms, as in other studies (Chua, Chrisman, & Chang, 2004). Although there is much disagreement about what constitutes a family business (for a list and conceptualization, see Chua, Chrisman, & Sharma, 1999 and Litz, 1995), scholars seem to agree that "firms that are owned and managed by family members and seek to ensure transgenerational involvement through family succession are unquestionably family firms" (Chua, Chrisman, & Sharma, 1999).

We therefore used the components of *ownership*, *management*, and *family succession* to determine the extent of family involvement in a business. These constructs were measured, respectively, by means of a continuous variable with values ranging from 0% to 100% according to the proportion of capital owned by the family; by means of a continuous variable ranging from 0% to 100%, according to the percentage of top managerial positions held by the family (constructed as top family managers/total top managers); and by a dichotomous variable with value 1 when the family intends to continue the business, 0 otherwise.

Chrisman, Chua, and Steier (2002) have shown that firms can be clustered successfully using these three components. Thus, after applying a K means cluster analysis, three firm clusters were distinguished: (1) family owned and managed firms; (2) professionally managed family firms; and (3) nonfamily firms. As Table 1.1 shows, the groups of firms are homogeneous and statistically significant. This analysis was completed with a descriptive analysis for each group of firms.

First, there are nonfamily firms (28.9% of the sample). All the firms in this group are characterized by presenting less than 50% of family ownership, less than 50% of top managerial positions held by family members, and by the fact that they do not intend to continue running the family business in the future.

Second are the family owned and managed firms (representing 47.7% of the firms). All the firms in this group are characterized by a majority proportion of family ownership (more than 50%) and management (more than 50%), and by a clear intention to continue the business.

Finally, there are professionally managed family firms (representing 23.5% of the firms). All the firms in this group are characterized by a majority of family ownership (more than 50%), but not in the top management (less than 50%), and by a clear continuity intention.

Based on the cluster results, we created a variable called *Firm Type*, coded as 1 when the firm is professionally managed family, 2 when the firm is nonfamily, and 3 when the firm is family owned and managed.

Table 1.1. Cluster Analysis

	Family Owned and Managed Firm	Professionally Managed Family Firm	Nonfamily
Ownership	97	87	2
Management involvement	97	30	7
Generational transfer	1	1	0
N	264	130	160
%	47.7	23.5	28.9

Source: Own elaboration

1.3.2.3. Control variables.

Four variables were used for the analyses. All of these have been used in previous compensation studies (see Gomez-Mejia *et al.*, 2003), as well as in family business studies in which family firms are characterized and significantly differ from other businesses (see Gallo *et al.*, 2004; Galve & Salas, 2003). These variables *are Firm Size, Industry, Firm Age*, and *CEO Education Level*.

With regard to *Firm Size*, the theoretical and empirical literature (Bayo-Moriones & Merino-Diaz de Cerio, 2001) has shown that compensation is significantly related to firm size. Furthermore, family and nonfamily firms have significantly different sizes. This has been coded as a logarithm of the sales, as in other compensation studies (Deckop, 1988).

Second, a large number of compensation studies include *Industry* as a control variable (Kostiuk, 1990). They find that compensation systems and the family / non-family firm distribution are significantly different between industries (Galve & Salas, 2003). This was measured, as in other studies (Gomez-Mejia *et al.*, 2003), using a dummy variable that differentiates between services (1) and manufacturing firms (0).

Third, *Firm Age* is used as control variable. Recent literature (Troske, 1999) suggests that older firms pay higher wages, even after other relevant firm characteristics are held constant. Age is operationalized as the logarithm of the number of years since the founding of the firm (Brown & Medoff, 2003).

Lastly, the literature (Gallo et al., 2004; Galve & Salas, 2003) states that *CEO Education Level* is significantly different in family and nonfamily firms. This variable is included since it is considered to be a factor that explains managers' capacity to run the firm (Wiersema & Bantel, 1992). The variable explains the business practices employed in the firms, and was coded as a dichotomous variable (Spicer, Dunfee, & Bailey, 2004), with value 1 when the CEO has university studies, and 0 otherwise.

Table 1.2. Correlations and Descriptive Statistics

	Means	SD	1	2	3	4	5	6	7	8	9	10
1. Industry	0,43	0,50										
2. CEO education level	0,36	0,48	0,06									
3. Firm size	8,27	1,24	0,15***	0,22***								
4. Firm age	2,88	0,67	-0,10**	0,13***	0,14***							
5. Firm type	2,24	0,81	0,05	-0,14***	-0,10**	0,02						
6. Pay level	3,37	0,59	0,04	0,01	0,09**	0,13***	-0,14***					
7. Pay mix	2,55	1,42	0,04	0,03	0,06	0,08**	-0,09**	0,15***				
8. Temporal orientation of incentives	1,94	0,99	0,10**	0,08*	0,01	0,01	-0,13***	0,11***	0,04			
9. Family owned and management firms	0,48	0,50	0,02	-0,20***	-0,15***	0,07	0,90***	-0,15***	-0,04	-0,16***		
10. Professionally managed family firms	0,23	0,42	-0,08*	0,03	0,01	0,04	-0,85***	0,10**	0,12***	0,07	-0,53***	
11. Non-family firms	0,29	0,45	0,06	0,19***	0,16***	-0,11***	-0,19***	0,07*	-0,07*	0,12***	-0,61***	-0,35***

* p<0.1; ** p<0.05; *** p<0.01

1.4. Data Analysis and Results

Table 1.2 shows descriptive statistics and correlations among the measures. There are significant correlations between compensation variables and firm type, as would be expected considering the relationships hypothesized. Although there are quite significant correlations between variables, they are not excessively high, a fact indicating that there are no problems of multicollinearity— subsequently corroborated by indices of tolerance. There are only high correlations among the firm variables, which is reasonable.

Table 1.3. General Linear Model: Analysis of Variance

	MANCOVA		ANCOVA F Value		
	Wilks	F Value	Pay Level	Pay Mix	Temporal Orientation of Incentives
1. Industry	0.98	2.98**	1.85	1.89	6.38**
2. CEO education level	0.99	1.12	2.33	0.21	0.44
3. Firm size	0.99	1.19	0.26	1.46	1.81
4. Firm age	0.98	4.17***	10.68***	3.20*	0.42
5. Firm type	0.94	5.22***	6.05***	5.59***	5.28***

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Multivariate analysis of variance with the use of covariates (MANCOVA) was applied. We used the three compensation variables as multiple dependent measures, and firm type, which contains three categories of firms, as an independent variable. Table 1.3 shows the multivariate analysis of covariance results (MANCOVA), as well as the univariate analyses of covariance results (ANCOVA). High F values of MANCOVA regarding firm type indicate that variations between firms are significantly related to the design of compensation dimensions.

Table 1.4. Hierarchical Multiple Regression Analysis

	Models								
	Pay level			**Pay mix**			**Temporal orientation of incentives**		
	1	2	3	4	5	6	7	8	9
1. Industry	0.48	0.06	0.06	0.05	0.06	0.06	0.10**	0.11***	0.11***
2. CEO Education Level	-0.20	-0.05	-0.05	0.01	0.01	0.01	0.08	0.05	0.05
3. Firm Size	0.07	0.05	0.05	0.04	0.04	0.04	-0.02	-0.05	-0.05
4. Firm Age	0.13***	0.14***	0.14***	0.08*	0.07***	0.07*	0.01	0.03	0.03
5. Family owned and managed firms			-0.18***			-0.13***			-0.15***
6. Family professional managed firms		0.14***			0.11**			0.13***	
7. Non-family firms		0.15***	-0.02		-0.04	-0.16**		0.16***	0.02
R^2	0.03	0.05	0.05	0.01	0.03	0.03	0.02	0.04	0.04
F	3.48***	4.77***	4.77***	1.62	2.66***	2.66***	2.40***	4.01***	4.01***
ΔR^2		0.03***	0.03***		0.02***	0.02***		0.03***	0.03***

*** p<0.01; ** p<0.05; * p<0.1

The univariate effects for the firm type are also significant regarding every compensation dimension (pay level F value = 6.05, $p < 0.01$; pay mix F value = 5.59, $p < 0.01$; temporal orientation of incentives F value = 5.28, $p < 0.01$). These results suggest that the relations between firm type and compensation design are significant. However, additional analyses are needed to test the hypotheses formulated. Thus, we carried out a hierarchical multiple regression analysis. Table 1.4 shows the results. Three regressions were run, representing pay level, pay mix, and temporal orientation of incentives, which operate as dependent variables. The independent variables are, on the one hand, the firm type variables introduced as dummy variables—family owned and managed firms, professionally managed family firms, and nonfamily firms—and on the other, the four control variables previously mentioned.

Each of the three regressions run has three models: the first, only with control variables— Models 1, 4, and 7; the second and third, adding a dichotomous variable representing firm types— models 2, 5 and 8 with family owned and managed firms as reference variable, and Models 3, 6, and 9, with professionally managed family firms as reference variable. The last six models analyze whether the linkages between firm variables and each compensation dimension are significant and not explained by other variables.

As can be seen, the addition of the respective firm variables significantly increases the R^2 of the model in all cases (Models 2 and 3: $\Delta R^2 = 0.025$, F = 7.211, $p < 0.01$; Models 5 and 6: $\Delta R^2 = 0.017$, F = 4.687, $p < 0.01$; Models 8 and 9: $\Delta R^2 = 0.025$, F = 7.114, $p < 0.01$). The R^2s are similar to those of other studies on employees' salaries (Werner *et al.*, 2005), and these results corroborate the above MANCOVA results.

Hypothesis 1 predicted that employee pay level in family owned and managed firms is the lowest, in professionally managed family firms it is higher, and in nonfamily firms it is the highest. The results indicate that compared to family owned and managed firms, in nonfamily firms (Model 2: $\lambda = 0.15$, $p < 0.01$) and

professionally managed family firms (Model 2: $\lambda = 0.14$, $p < 0.01$), employees receive a significantly higher level of pay. Taking as reference the variable professionally managed family firm (Model 3), family owned and managed firms offer employees a significantly lower level of pay ($\lambda = -0.18$, $p < 0.01$); no differences were found with respect to nonfamily firms ($\lambda = -0.02$, $p > 0.1$). Thus, taking into account the above-mentioned results, we partially accept Hypothesis 1 (since there is no significant difference between nonfamily firms and professionally managed family firms).

Hypothesis 2 predicted that the variable pay proportion of employees in nonfamily firms is the lowest, in the family owned and managed firms it is higher, and in professionally managed family firms it is the highest. The regression results show that compared to family owned and managed firms (Model 5), the proportion of variable pay in the pay mix in professionally managed family firms is higher ($\lambda = 0.11$, $p < 0.05$), but that there are no differences between family owned and managed firms and nonfamily firms ($\lambda = -0.04$, ns). Using professionally managed family firms as a comparative variable, we obtained, on the one hand, that the variable pay is lower in family owned and managed firms ($\lambda = -0.13$, $p < 0.01$) and, on the other, that nonfamily firms use the lowest proportion of variable pay in the pay mix ($\lambda = -0.16$, $p < 0.01$). Thus, we partially accept Hypothesis 2 (since nonfamily firms and family owned and managed firms do not differ significantly).

Finally, Hypothesis 3 predicted that in family owned and managed firms the incentives offered to the employees are in the shortest term, in professionally managed family firms they are in the medium term, and in nonfamily firms they are in the longest term. The regression analyses indicate, with regard to family owned and managed firms (Model 8), that the incentives tend to be longer term in nonfamily firms ($\lambda = 0.16$, $p < 0.01$) and in professionally managed family firms ($\lambda = 0.13$, $p < 0.01$). When professionally managed family firms are the reference (Model 9), family owned and managed firms are again oriented over a shorter period of time ($\lambda = -0.15$, $p < 0.01$), but there are no differences between nonfamily

firms and professionally managed family firms (λ = 0.02, ns). Thus, we partially accept Hypothesis 3 (since nonfamily firms and professionally managed family firms do not differ significantly).

1.5. Discussion and Conclusions

This study has aimed to characterize employee compensation in family owned and managed firms compared to that in nonfamily firms and professionally managed family firms. The general results show that employee compensation differs between firms. This is an important finding because to understand employee compensation designs it is necessary to understand the role of ownership concentration and management composition in the firm, since the compensation components are explicitly defined according to risk sharing and to the interest of the owners, CEO, and employees.

Specifically, the current results indicate that the pay level is lower in family owned and managed firms than in both nonfamily and professionally managed family firms. Moreover, there are no differences in employee pay levels between professionally managed family firms and nonfamily firms. Regarding the pay mix, employees in professionally managed family firms receive the highest proportion of variable pay in their compensation packages compared to family owned and managed firms and nonfamily firms, where the fixed pay has more weight in the pay mix. In this respect, employee pay mix is similar in family owned and managed firms and in nonfamily firms. Third, considering the temporal orientation of incentives, those mainly oriented toward the short term are more common in family owned and managed firms compared to professionally managed family firms and nonfamily firms, where incentives are designed over a longer term. Additionally, this study shows that the temporal orientation of incentives is established in a similar way in family owned and managed firms and in non-family firms. These findings partially confirm our hypotheses. Some unexpected results

were also found. We had predicted, based on agency arguments, that pay mix would be more oriented to variable pay in family owned and managed firms than in non-family firms. However, no differences were found. The main explanation for this could lie in the characteristics of Spanish firms, which are mostly small and medium sized (OECD, 2005) and, consequently, the family and nonfamily owners take on similar total risks. Thus, the total risks expected for the family owner-managers are very similar to the risks assumed by the owners in non- family firms. In spite of the fact that these latter owners have a minor participation in the ownership of their business, their investment risk is not as diversified as we expected. Specifically, a substantial amount of their wealth is invested in these companies and, in addition, they assume greater agency risks.

On the other hand, the small size and lower professionalization of Spanish family owned and managed firms explain their lower pay levels. Nevertheless, the results obtained in relation to pay level and temporal orientation of incentives seem to be similar to the findings of the family firm literature (Combs *et al.*, 2010; Cruz *et al.*, 2010 y 2011; Gómez-Mejia *et al.*, 2003; Ramaswamy *et al.*, 2000; Van der Merwe, 2009). Moreover, we have also corroborated Werner *et al.*'s (2005) findings, whereby the pay level and pay composition at lower levels in the organization share some similar characteristics to the compensation systems designed for managers.

Nevertheless, our findings suggest that the influence of corporate governance and ownership on the determinants and consequences of employee compensation deserves more attention in future research (Werner *et al.*, 2005). We have also applied agency theory arguments to explain employee compensation and to understand how the principal-agent model, extended to a new scenario formed by multiagents (employees), may serve to explain the compensation at this lower level. Likewise, agency theory has helped us explain how ownership concentration and management composition not only influence risk sharing for the firm and the CEO, and agency problems derived from this relationship, but also influence risk

sharing and agency problems for the rest of the agents in the entire organization. Hence the internal monitoring process discussed by agency scholars (Alchian & Demsetz, 1972) is a valid explanation of the agency relationship at lower levels in the firm.

The results of this study have major practical implications, given that employee compensation costs often exceed 80% of total operating expenses (Gomez-Mejia & Balkin, 2006), and represent a more realistic image than those associated with CEO compensation costs, the primary concern of most compensation research.

Another interesting aspect derived from the hypotheses concerns the characteristics of professionally managed family firms. These firms offer their employees compensation levels and temporal orientation of incentives similar to those offered by nonfamily firms. This is because once the ownership and control are separate, the utility functions between managers and owners differ and agency risks appear in both firms. Thus, non owner-managers may seek their own advantages in both types of firm (Baumol, 1959). These results indicate that professionally managed family firms tend to behave as nonfamily firms in terms of compensation management, a consequence of having professional managers who are engaged to implement rational and qualified management principles.

At a more general level, our results largely fit with what is to be expected in the theoretical framework. This article shows that the design of compensation for employees in family firms depends on the degree of ownership concentration in the business, on the total risks assumed by the shareholders, and on the agency risk. Spanish family firms use a different compensation system from nonfamily firms.

Additionally, we have verified that the agency framework can be applied to other contexts where the labor framework and the characteristics of the family business are significantly different from North American ones. The compensation design for employees in Spanish family companies, which are distributed in the market in a

similar way to family firms in other studies (Chua, Chrisman, & Chang, 2004), but with different characteristics —family members' greater commitment, lower professionalization of management, higher ownership concentration, more internal conflict, and smaller firm size (Gallo *et al.*, 2004; Galve & Salas, 2003)—can be explained from an agency model with multiple principals and agents and using the internal monitoring process discussed by agency scholars.

This article has several limitations. The first potential limitation concerns the use of cross-sectional data. Other potential problems may arise from the fact that the data and scales are not ad hoc for this study. Future research should reduce potential bias by using other scales. Finally, the effects of compensation system design on family firm performance are not known. An interesting new line of research for the future would be to identify the links between compensation and firm performance.

1.6. References

Alchian, A., & Demsetz., H. (1972). Production, information costs, and economic organization. *American Economic Review*, 62, 777–795.

Anderson, R., Mansi, S., & Reeb, D. (2002). Founding family ownership and the agency cost of debt. *Journal of Financial Economics*, 68, 263–285.

Baker, G., Jensen, M., & Murphy, K. (1988). Compensation and incentives: Practice vs. theory. *Journal of Finance*, 18(3), 593–616.

Barkema, H., & Gomez-Mejia, L. (1998). Managerial compensation & firm performance: A general framework. *Academy of Management Journal*, 41(2), 135–145.

Baumol, W. J. (1959). *Business behavior, value and growth*. New York: Macmillan.

Bayo-Moriones, J. A., & Merino-Diaz de Cerio, J. (2001). Size and HRM in the Spanish manufacturing industry. *Employee Relations*, 23(2), 188–206.

Bloom, M., & Milkovich, G. (1998). Relationships among risk, incentive pay, and organizational performance. *Academy of Management Journal*, 41(3), 283–297.

Bolton, P., & Dewatripont, M. (2005). *Contract theory*. Cambridge: MIT Press.

Brown, C., & Medoff, J. L. (2003). Firm age and wages. *Journal of Labor Economics*, 21(3), 677–697.

Calvo, G., & Wellisz, S. (1978). Supervision, loss of control and the optimal size of the firm. *Journal of Political Economy*, 86, 943–952.

Chami, R. (2001). *What is different about family businesses?*. International Monetary Fund.

Chrisman, J. J., Sharma, P., & Taggar, S. (2007). Family influences on firms: An introduction. *Journal of Business Research*, *60*(10), 1005-1011.

Chrisman, J., Chua, J., & Litz, R. (2004). Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence. *Entrepreneurship Theory and Practice*, 28(4), 335–354.

Chrisman, J., Chua, J., & Steier, L. (2002). The influence of national culture and family involvement on entrepreneurial perceptions and performance at the state level. *Entrepreneurship Theory and Practice*, 26(4), 113–130.

Chua, J. H., Chrisman, J. J., & Bergiel, E. B. (2009). An agency theoretic analysis of the professionalized family firm. *Entrepreneurship Theory and Practice*, *33*(2), 355-372.

Chua, J. H., Chrisman, J. J., & Chang, E. (2004). Are family firms born or made? An exploratory investigation. *Family Business Review*, 17(1), 37–54.

Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, 23(4), 19–39.

Combs, J. G., Penney, C. R., Crook, T. R., & Short, J. C. (2010). The impact of family representation on CEO compensation. *Entrepreneurship Theory and Practice*, *34*(6), 1125-1144.

Core, J., Holthausen, R., & Larcker, D. (1999). Corporate governance, CEO compensation and firm performance. *Journal of Financial Economics*, 51(3), 371–406.

Cruz, C. C., Gómez-Mejia, L. R., & Becerra, M. (2010). Perceptions of benevolence and the design of agency contracts: CEO-TMT relationships in family firms. *Academy of Management Journal*, *53*(1), 69-89.

Cruz, C., Firfiray, S., & Gomez-Mejia, L. R. (2011). Socioemotional wealth and human resource management (HRM) in family-controlled firms. *Research in Personnel and Human Resources Management*, *30*, 159-217.

Deckop, J. R. (1988). Determinants of CEO compensation. *Industrial and Labor Relations Review*, 21, 215–226.

Fama, E. F., & Jensen, M. L. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26, 301–325.

Forbes Wealthiest American Index. (2002). Retrieved June 23, 2007, from www.forbes.com

Gallo, M., Tàpies, J., & Cappuyns, K. (2004). Comparison of family and nonfamily business. *Family Business Review*, 17(4), 303–318.

Galve, C., & Salas, V. (2003). *La empresa familiar en España*. Bilbao: Fundación BBVA.

Gomez-Mejia, L. R. (1992). Structure and process of diversification, compensation strategy, and firm performance. *Strategic of Management Journal*, 13(5), 381–397.

Gomez-Mejia, L. R., & Balkin, D. B. (2006). *Compensation, organizational strategy, and firm performance*. Cincinnati, OH: South-Western Publishing.

Gomez-Mejia, L. R., Larraza, M., & Makri. M. (2003). The determinants of CEO compensation in family- controlled public corporations. *Academy of Management Journal*, 46, 226–237.

Gomez-Mejia, L. R., Nuñez-Nickel, M., & Gutierrez, I. (2001). The role of family ties in agency contracts. *Academy of Management Journal*, 44(1), 81–95.

Gulbrandsen, T. (2005). Flexibility in Norwegian Family-Owned Enterprises. *Family Business Review*, *18*(1), 57-76.

Holmström, B. (1979). Moral hazard & observability. *Bell Journal Economics*, 10, 74–91.

Holmström, B., & Milgrom, P. (1990). Regulating trade among agents. *Journal of Institutional and Theoretical Economics*, 146(1), 85–105.

Itoh, H. (1991). Incentives to help in multi-agent situations. *Econometrica*, 59, 611–636.

Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360.

Jensen, M., & Murphy, K. J. (1990). Performance pay and top-management incentives*. Journal of Political Economy*, 98, 225–264.

Karra, N., Tracey, P., & Phillips, N. (2006). Altruism and agency in the family firm. *Entrepreneurship Theory and Practice*, 30(6), 861–877.

Kostiouk, P. (1990). Compensating differential for shift Work. *Journal of Political Economy*, 98, 1054–1075.

Laffont, J., & Martimort, D. (2002). *The theory of incentives. The principal-agent model*. Princeton, NJ: Princeton University Press.

Litz, R. (1995). Family business: Toward definitional clarity. *Family Business Review*, 8, 71–81.

Macho Stadler, I., & Pérez, C. (1991). Double risque moral et délegation. *Recherches Économiques de Louvain*, 57, 277–296.

Mahérault, L. (2000). The influence of going public on investment policy: An empirical study of French family-owned businesses. *Family Business Review*, 13(1), 71–79.

OECD. (2005). *OECD economic surveys of Spain*. Spain: Mundi-Prensa Libros, S.A.

Pollak, J. (1985). *A transaction costs approach to families and households, Journal of Economic Literature*, *23*, 581-608.

Ramaswamy, K., Veliyath, R., & Gomes, L. (2000). A study of the determinants of CEO compensation in India. *Management International Review*, 40(2), 167–191.

Rayton, B. (2003). Firm performance and compensation: Performance elasticities of average employee compen- sation. *Journal of Corporate Finance*, 9, 333–352.

Ricart, J., Aívarez, J., & Gallo, M. (1999). Governance mechanisms for effective leadership: The case of Spain. *Corporate Governance*, 7, 266–287.

Schulze, W., Lubatkin, M., Dino, R., & Buchholtz, A. (2001). Agency relationships in family firms: Theory and evidence*.* *Organization Science*, 12(2), 99–116.

Simon, H. A. (1957). The compensation of executives. *Sociometry*, 20, 32–35.

Spicer, A., Dunfee, T. W., & Bailey, W. J. (2004). Does national context matter in ethical decision making? *Academy of Management Journal*, 47(4), 610–620.

Troske, K. (1999). Evidence on the employer size-wage premium from worker-establishment matched data. *Review of Economics and Statistics*, 81(1), 15–26.

Van den Berghe, L., & Carchon, S. (2003). Agency relations within the family business system: An exploratory approach. *Corporate Governance*, 11(3), 155–285.

Van der Merwe, S. P. (2009). Determinants of family employee work performance and compensation in family businesses. *South African Journal of Business Management*, *40*(1), 51-63.

Van Steel, A., & Stunnenberg, V. (2006). Linking business ownership and perceived administrative complexity. *Journal of Small Business and Enterprise Development*, 13, 7–23.

Verbeke, A., & Kano, L. (2012). The Transaction Cost Economics Theory of the Family Firm: Family-Based Human Asset Specificity and the Bifurcation Bias. *Entrepreneurship Theory and Practice*, *36*(6), 1183-1205.

Vilaseca, A. (2002). Conflict of interests and objectives between nonemployed shareholders and top management team. *Family Business Review*, 15(5), 299– 320.

Werner, S., & Tosi, H. (1995). Other people's money: Effects of ownership on compensation strategy and managerial pay. *Academy of Management Journal*, 38, 1672–1691.

Werner, S., Tosi, H., & Gomez-Mejia, L. R. (2005). Organizational governance and employee pay: How ownership structure affects the firm's compensation strategy. *Strategic Management Journal*, 26, 377–384.

Wiersema, M. F., & Bantel, K. A. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal*, 35(1), 91–121.

CHAPTER 2. CEO COMPENSATION MONITORING AND FIRM PERFORMANCE: THE EFFECTS OF FAMILY INVOLVEMENT

Chapter 2. CEO Compensation Monitoring and Firm Performance: The effects of Family Involvement

2.1. Introduction

Agency theory was originally based on a contractual relationship that occurs between a company where the ownership is extremely diluted among many property owners (principals) and a senior management team (agents). In this circumstance there is a physical and emotional distance between the parties (Berle and Means, 1932; Jensen and Meckling, 1976), and as a consequence there arise divergent interests which can give rise to opportunism on the part of management, which can have a negative impact on the company outcomes. Although there is ample evidence of opportunism on the part of people in leadership positions, especially when the ownership is spread among many small shareholders, this does not necessarily occur in situations in which the parties (principal-agent) are highly interdependent (Dalton et al., 2007).

For example, many studies argue that family businesses are immune to agency conflicts (Chrisman et al., 2004, 2007; Chua et al., 2009; Gomez-Mejia et al., 2003, 2007; Lubatkin et al., 2005; Schulze et al., 2001). A priori, one might assume that the overlapping ownership and management, and economic and personal relationships in the family business are intertwined in some owner-managers who have aligned their economic and social interests with those of the family in the business, which facilitates the effective control CEO behavior and generates positive results (Pollak , 1985; Cruz et al., 2010; Gomez-Mejia et al., 2007). However, other research suggests that family involvement creates idiosyncratic agency situations, such as asymmetric altruism and nepotism, between family members and can generate deviant behavior, negatively affecting the performance of the company and the effectiveness of CEO monitoring (Chrisman et al., 2007; Chua et al., 2009; Gomez-Mejia et al., 2003; Schulze et al., 2001).

In this context, opportunism on the part of managers is possible, and given that the behavior of the CEO is not visible (Finkelstein and Hambrick, 1996), as much in family companies as in non-family companies, mechanisms have been developed to enable the owners to supervise, control and in some cases limit the actions of the CEO in order to ensure that they serve the purposes of the company (Fama, 1980). Although the control mechanisms are costly, they are necessary to curb the opportunism of the CEO, and are mainly imposed through contracts in which the economic incentives given to the CEO are linked to the business results achieved (Eisenhardt, 1989; Fama and Jensen, 1983).

The majority of the literature on agency theory has focused on the arrangement of contractual devices that are related to the design of compensation policies and incentives. The rewards or punishments link the success or failure of company to the success or failure of the CEO by means of performance related pay linked to the outcomes that are achieved by the company (Combs et al., 2010; Cruz et al., 2010; Gomez-Mejia et al., 2003, 2007; Wu, 2013). However, there is no clear evidence that performance related pay contributes to the results of the company as a consequence of the improved alignment between the economic interests of the CEO and those of the owners (Devers et al., 2007; Jensen and Murphy, 1990; Murphy, 2013; Tosi et al., 2000; Wiseman and Gomez-Mejia, 1998).

Nor have conclusive results been obtained in the field of family businesses. For example, Combs et al. (2010) found that, in comparison with CEOs who are not members of the family, CEOs who are family members sacrifice salary level when the family is highly involved in the business, and that when the family power decreases and family protection is weakened, the compensation of the family CEO increases. In contrast with this result, Cruz et al. (2010) found that the proportion of compensation that was performance related was not affected by family status. However, when the variable compensation is linked to the performance of the firm, non-family managers are tied into the business goals more closely, while there is a decoupling in the case of managers who are family members.

The lack of clear evidence suggests the need to adopt a more internal and procedural approach to the analysis of the effectiveness of monitoring and its influence on the outcomes for the company. Tosi and Gomez-Mejia (1989, 1994) indicate that the process of establishing the CEO's incentive structure, implemented by those responsible for the pay policies (ultimately the board of directors) can reveal the effectiveness and intensity of CEO monitoring. This process can be adequately evaluated by asking knowledgeable people (owners or their representatives on the board of directors, management committee or compensation committee) about what is being controlled in terms of compensation and how it is being evaluated. The internal process of aligning incentives, being a set of rules and procedures, reflects the effectiveness of monitoring, since the tasks of management are not "programmable" (Tosi and Gomez-Mejia, 1994).

In the context of the family business, these mechanisms for supervising the actions of the CEO by means of aligning rewards with outcomes are going to be shaped to a significant extent by the presence and degree of family involvement in the company and in the organs of governance that determine pay policies. While the preservation and generation of socio-emotional wealth may have positive effects for the whole family business and generate a strong alignment of interests between the CEO and the business, it can also lead to a set of nebulous practices that are supposed to legitimize the CEO and the board of directors, encouraging the elimination of controls to prevent fraud and promoting selfish interests on the part of family members to the detriment of economic performance and the interests of other stakeholders in the company (Kidwell and Kidwell, 2010; Kellermanns et al., 2012). It is certainly the case that the involvement of the family can have an effect, either positive or negative, on the intensity and effectiveness of the monitoring exercise over the CEO.

Thus, considering the lack of consistent evidence regarding the effectiveness of CEO monitoring and the implications in terms of results in the context of family

firms, and taking into account the limitations of the contractual mechanisms of governance – especially in relation to the mechanisms for setting the pay of the CEO – the present study is part of the drive that is needed to increase knowledge concerning the mechanisms of monitoring of CEOs in the context where there is some degree of family involvement in the ownership and management of the business, as seen from the perspective of agency theory (Chrisman et al, 2004; Schulze et al, 2001; Westhead and Howorth, 2006). The empirical evidence used in this study consists of a sample of 400 large Spanish companies, with varying degrees of family involvement, measured in terms of the concentration of ownership concentration in the hands of the family and family involvement in the management of the business.

This paper is structured as follows. First, the theoretical aspects that lead to the formulation of hypotheses are developed. Then the sample is described, together with the methodology, measurement of variables and statistical analysis. Finally, the results and discussion of the main findings of the study are presented.

2.2. Theoretical framework and hypotheses.

2.2.1. CEO Compensation Monitoring and Firm Performance

Agency theory, the firm is defined as a system of contracts, explicit and implicit, between members or subjects involved. The owner or owners are defined as the principal, and hire the agent or agents (the CEO and management team of the company) to perform services on their behalf. To perform such services, the agent needs to be delegated authority and freedom to make decisions for the company (Jensen and Meckling, 1976). In the presence of bounded rationality (Simon, 1961), all contracts between principal and agent are necessarily incomplete, which creates problems, especially for contracts with agents, such as the CEO, who play strategic roles within the company (Verbeke and Kano, 2010). In this way,

delegating power to the CEO increases the risks and control issues in the company (Dalton et al., 2007), given that, according to the classical principles of agency theory (Werner and Tosi, 1995): (1) the two parties, principal and agent, have divergent interests that they seek to maximize, so opportunistic behavior and conflict of interest may arise, (2) the agent may have private information that the principal cannot obtain without incurring costs, so there are information asymmetries, and (3) the agent is averse to taking risks.

Although the specific manifestation of agency problems and how to deal with them may vary depending on the context – whether there is damaging selfish or altruistic behavior – in general terms there are universal problems that arise whenever there is a situation where authority is delegated (Gómez-Mejia et al., 2011). The same is true of the control systems to address these problems. Monitoring the CEO, whether using processes of direct monitoring of their behavior by contractual means based on the design of the pay policy, involves collecting information about their efforts and external factors, uncontrolled and random, which can affect outcomes (Jensen and Meckling, 1976; McGuire, 1988), with the objective of limiting information asymmetries, reducing the potential for the CEO to be opportunistic, and aligning individual and organizational interests.

However, most of the literature that has tried to relate the alignment of reward systems with the results of the company from the perspective of contractual mechanisms (mainly related to the design of the compensation of the CEO) have found mixed results, and have not provided direct confirmation of the assumptions of agency theory. The main review studies (Devers et al, 2007; Jensen and Murphy, 1990; Murphy, 2013; Tosi et al, 2000; Wiseman and Gomez-Mejia, 1998) have found that the link between pay and firm performance is weakest for CEOs and senior executives, positions where it is assumed that incentives linked to business performance should play an important supervisory role. Similarly, in the context of family businesses, although CEO opportunism is expected to decline because family ties exist between the owners and the CEO, Cruz et al. (2010) find an almost

complete decoupling of performance-based compensation in the case of family firms where the CEO is a family member. In the same way, Wu (2013) finds excessive CEO compensation is more related to the percentage of family members on the board than to the results of the company, which also suggests the existence of certain inefficiencies in the contractual mechanisms for monitoring the CEO.

Thus, the key aspect to consider is not so much whether rewards are contractually related to the results of the company as the process of controlling the CEO by those who are responsible for determining those rewards. In this sense, Tosi and Gomez-Mejia (1994) argue that the relationship between intensity of supervision of the actions of the CEO and company performance is asymptotic rather than linear, which could explain the lack of clearer evidence of these relationships when only variables connected with compensation are taken into account. The asymptotic relationship means that in certain circumstances, a close monitoring of the CEO can lead to a reduction of business results. Two reasons may explain why more stringent monitoring practices lead to poorer results.

First, at low levels of monitoring, increase control over the CEO should produced improved business results (when the results depend on the actions of the agent), because it will prevent overly selfish or altruistic behaviors on the part of the CEO and avoid practices the pursuit of interests other than strictly business (Holmstrom 1979; Shavell, 1979). As monitoring increases, the CEO's interests are aligned with those of the owners, achieving performance levels that approach the upper limits that can reasonably be achieved in the company. Once the CEO has done everything possible, increased monitoring will not lead to further significant improvements in outcomes. Second, very high levels of monitoring may limit the decisions of CEO, which may offset the potential benefits of additional control (Baysinger and Hoskisson, 1990; Dalton, 2005). Too much risk sharing can cause the agent to become risk averse, and business results may be adversely affected (Bebchuk and Fried, 2004; Walsh and Seward, 1990).

So, considering the above arguments, it is expected that the relationship between firm performance and the level of CEO monitoring is positive, but asymptotic rather than linear, where a point is reached where additional monitoring does not increase results for the company.

H1: There is an asymptotic relationship between CEO compensation monitoring and firm performance.

2.2.2. The moderating role of Family Involvement

The CEOs of family businesses are linked to the business by a system that is different from other companies, and contracts are often characterized by emotional and personal / family bonding elements rather than economic or rational criteria (Verbeke and Kano, 2010). This recruitment system is based on confidence in the CEO and his or her actions in the context of altruism. In the case of family businesses, this benevolent altruism is based on the preferences of the CEO, in making commitments, then based on good faith and this, in turn, acts as a mechanism for relaxing the CEO monitoring. Altruism thus creates a self reinforcing incentive that encourages the members of the company to be more careful and disinterested, including fostering a sense of collective ownership and encouraging involvement in the business, increasing communication and cooperation and emphasizing a long-term orientation (Eddleston and Kellermanns, 2007; Zahra, 2003; Casillas et al., 2013).

Family involvement in the company strengthens the role of the board as a tool to improve family control of the business, both through ownership and through involvement in management (Arosa et al., 2010a; Daily and Dollinger, 1992; Muskataillo et al., 2002; Sharma et al., 1996), which is to say by the appointment of people as board members or as members of the senior management team according to their links to the family or attachment to it (Le Breton-Miller et al.,

2004; Memili et al., 2011; Lee et al., 2003). The family can use the board as a vehicle to legitimize the right to appoint, supervise and retain appointment the CEO and internal and external directors and implement strategic decisions that contribute to the preservation of the socio-emotional wealth of the family in the business (Jones et al, 2008; Area and Gomez-Mejia , 2011).

When the CEO designated by the family is considered trustworthy, traits that are valued include loyalty, commitment and effort in promoting the long-term value of the company, regardless of his or her actual capacities (Verbeke and Kano, 2012). In this context of strong family involvement in the business, the perceived risk to the business of opportunism on the part of the CEO who is a family member, making it more likely that the company will employ laxer monitoring mechanisms, based on the support, understanding and consideration of the welfare of the CEO and the family that owns the business.

However, if the family influence in the business decreases as a result reduced property rights, the family may see their power to appoint a CEO from the family reduced, and this can bring in independent managerial talent in the person of a CEO who is unrelated to the family. This external CEO hired into the family business is considered bound in the short term to the company, potentially disloyal (with strong personal interests) and only moderately committed. In this case, Wu (2013) points out that mechanisms of narrow and rigorous supervision over the CEO become more important to avoid unexpected deviations (in this case motivated by the selfishness of the CEO). Doubting the altruistic behavior and good faith of the external CEO, the family perceives greater risk of losing their socio-emotional wealth, and will therefore use more thorough checks on the CEO, by means of economic incentives, to ensure competent and responsible behavior (Wu, 2013).

Cruz et al. (2010) also contend that the emotional ties between principal and agent in family businesses reduce the perception of opportunism and risk tolerance of the principal. When the agent and the principal belong to the same family, the

result is an agency agreement that prioritizes the welfare of the agent – mechanisms or fare rather than mechanisms of monitoring and control – to regulate this relationship. The family CEO and the company seem to share an emotional alignment when it comes to fixing economic incentives that transcends rationality. However, the perception of the family is that the opportunism of the CEO increases if he or she does not belong to the family, a situation which is more likely if ownership is not concentrated in the hands of the family. In this case, the external CEO faces a increased risk (salary linked to the results of the company) with decreasing family involvement in the direction or management of the company. Thus we propose the following hypothesis:

H2: There is a negative relationship between the CEO compensation monitoring and the degree of family involvement in the business.

In the light of the preceding arguments, we move on to examine the implications of family involvement in relation to the relationship between CEO monitoring and the results of the company. Here it is important to consider the concept of altruism, which arises in the context where the family has majority control of the company (Gomez-Mejia et al., 2001, 2005), which encourages the practice of hiring for emotional rather than rational reasons and may decouple compensation of the CEO from the business risk, as a result of the tendency of the owners to give the CEO the benefit of the doubt even if he or she does not meet their expectations or is not very competent (Chrisman et al., 2004, 2007, 2009; Corbetta and Salvato, 2004; Lubatkin et al, 2005).

In this situation, on the one hand, the family business may place greater emphasis on external factors that are beyond the control of the CEO, and not attribute blame to the negligence of the CEO when the performance of the company declines. And on the other hand, the family may implement lax supervision and control structures (accountability) for the CEO, especially when the latter has been

appointed by the family. In this regard, some studies have confirmed that boards with high representation of the family, as will be the case in boards where the family owns a majority share of the company, are less effective than those with a majority of external directors who are not family members (Dalton et al., 2007) and argue for the positive effect of the external directors in producing value for the family business (Anderson and Reeb, 2004; Voordeckers et al., 2007).

Moreover, if, in addition, the family firm CEO belongs to the family, the risk of asymmetric altruism makes it even more difficult to carry out accurate and objective assessments (Chua et al., 2009). The attitude of permissiveness that family members have toward the CEO who is a family member – the perception on the part of the family that the CEO will make every effort to safeguard the interests of the company and the socioemotional wealth and welfare of the family (Cruz et al., 2010) – generates processes of supervision that are lax and subjective, which may trigger behavior that is even further from the optimal required to produce positive results for the company. In this regard, Combs et al. (2010) and Wu (2013) find that incentives for external CEOs are more closely linked to the risk and performance of the company than those of CEOs who are members of the family, which means that the incentive-based monitoring is less closely coupled with the results of the company. This arrangement means that greater benevolence is evident in the monitoring of the family CEO, which may result in lower efficiency (Cruz et al., 2010).

Therefore, the lower level of CEO monitoring in companies controlled by the family means that increases in monitoring lead to greater improvements in business outcomes. In family businesses, as there is a lower level of monitoring in general, reaching the upper limit of monitoring has greater potential for improving results. This capability is even greater in those family firms that have a CEO belonging to the family. In contrast, non-family firms have the highest level of CEO monitoring, implying that an increase in monitoring of the CEO is unlikely to produce a large increase in performance of the company, and that from an initial level of

supervision that is higher than that in family businesses, reaching the upper limit of surveillance will have less potential for improving the results of the company (Tosi and Gomez-Mejia, 1994). Considering the above arguments, we expect that:

H3: The relationship between the CEO compensation monitoring and firm performance is stronger when there is more family involvement in the business.

2.3. Methodology and Research Design

2.3.1. Population and Sample

For this study, data were collected from family and non-family Spanish companies. The initial population was selected from the OSIRIS database (Van Dyck Bureau of Electronic Publishing), and consisted of 1,031 large family and non-family businesses from service and manufacturing industry[1] and with more than 250

[1] Firms in our sample belong to 26 industries, identified from the divisions of the NACE Rev. 2 classification (NACE Rev. 2, 2008): (a) Manufacture of food products, beverages and tobacco products (Groups 10 to 12), (b) Manufacture of textiles, apparel, leather and related products (Groups 13 to 15), (c) Manufacture of wood and paper products, and printing (Groups 16 to 18), (d) Manufacture of coke, and refined petroleum products (Group 19), (e) Manufacture of chemicals and chemical products (Group 20), (f) Manufacture of pharmaceuticals, medicinal chemical and botanical products (Group 21), (g) Manufacture of basic metals and fabricated metal products, except machinery and equipment (Groups 24 & 25), (h) Manufacture of computer, electronic and optical products (Group 26), (i) Manufacture of electrical equipment (Group 27), (j) Manufacture of machinery and equipment n.e.c. (Group 28), (k) Manufacture of transport equipment (Groups 29 & 30), (l) Other manufacturing, and repair and installation of machinery and equipment (Groups 31 to 33), (m) Electricity, gas, steam and air-conditioning supply (Group 35), (n) Water supply, sewerage, waste management and remediation (Groups 36 to 39), (o) Construction (Groups 41 to 43), (p) Wholesale and retail trade, repair of motor vehicles and motorcycles (Groups 45 to 47), (q) Transportation and storage (Groups 49 to 53), (r) Accommodation and food service activities (Groups 55 & 56), (s) Publishing, audiovisual and broadcasting activities (Groups 58 to 60), (t) Telecommunications (Group 61), (u) IT and other information services (Groups 62 & 63), (v) Financial and insurance activities (Groups 64 to 66), (w) Legal, accounting, management, architecture, engineering,

employees, more than 50 million euros in turnover and 43 million euros of total net assets. A telephone questionnaire was administered to these companies between May and June 2010 by the market research company IMAES.

Information was obtained from 400 companies, representing a response rate of 38.79%. The response rate of 49% is relatively high and similar to other studies of this type (Arosa et al., 2010b), and produces a sampling error of 3.9% (95.5% confidence level p = q = 0.5). Smaller firms were excluded, on the grounds that neither the governing bodies nor the mechanisms of control over the CEO are as formalized as in large companies. The person interviewed was the director of human resources of the company.

Although the sample selection was totally random, we tested for non-response bias, following the recommendations of Armstrong and Overton (1977). We split the sample into firms that responded in the first wave (70 % of the sample) and firms that responded in the second wave (the companies that took longer to respond, 30% of the sample). No significant differences in the study variables between early and late responses were found, suggesting that response bias is not a problem (Kanuk and Berenson, 1975; Oppenheim, 1992). It was also unlikely, since the data had been collected from two sources (the OSIRIS database and an interview), that there would be common method bias. However, in spite of that, we nevertheless used confirmatory factor analysis (CFA) as a more sophisticated test for common method bias. A poor fit of the measurement model to a single factor model suggests that common method variance does not pose a serious threat ($\chi2$ = 3564.82 with 152 degrees of freedom (NFI = 0.7; NNFI = 0.7; CFI = 0.7; RMSEA = 0.25).

---

technical testing and analysis activities (Groups 69 to 71), (x) Scientific research and development (Group 72), (y) Other professional, scientific and technical activities (Groups 73 to 75), (z) Others (Rest of groups).

2.3.2. Measures and psychometric properties of the scales

CEO monitoring. The scale for measuring the extent of control over the CEO exercised through compensation, originally developed by and applied in the studies of Tosi and Gomez-Mejia (1989, 1994), is a single construct consisting of 16 items, each of which is measured using a Likert scale of 5 points. The items are measured, as in the original scale, using two questions (see Table 2.1). The first question seeks to evaluate the importance of different factors and policies in the calculation of the compensation of the CEO, while the second question evaluates the level of CEO compensation monitoring and the extent to which their rewards are aligned with the goals of the business. Taken together, the two questions assess how the process of CEO compensation operates, what characteristics of risk are associated with the pay of the CEO, and the influence exerted by various stakeholders in developing the CEO's compensation package. The purpose of developing a scale to measure the level of CEO monitoring is based on the idea that there are certain risks and control problems that arise in the business because it is necessary to delegate power to the CEO (Dalton et al. , 2007), as well as all agency problems that emerge as a result of such problems (Werner and Tosi , 1995). Tosi and Gomez- Mejia (1994) attempt to address this question by developing a scale that reflects the level of supervision and the extent to which compensation is effective in producing an alignment of interests, at the same time as recognizing that there are monitoring costs associated with these measures (Zajac and Westphal, 1994).

Firm performance. Quantitative indicators of performance are widely used in the business literature because of the growing availability of information about enterprises. To assess firm performance, indicators have been used that include return on assets (ROA), return on equity (ROE) and return on sales (ROS), measured for each of the returns as the average value for the previous three years (2010 to 2012) using information from the OSIRIS database for those years. ROA, ROE and ROS are well understood and common measures used in several studies

on the effects of HR practices on firm performance (e.g. Alessandri et al., 2012; Zattoni et al., 2012). We have chosen a period of 3 years to have a consistent measure of firm performance in order to reduce the effects of the economic cycle, as well as to check if the family nature of the firm affects the performance of the company.

Family involvement. The willingness and ability of the board to oversee the CEO depends on the degree of involvement and influence of the family in the business. The literature identifies two relevant dimensions for the analysis of the influence of family in relation to monitoring the CEO and business performance (Corbetta and Salvato, 2004; Lubatkin et al, 2005): (1) family ownership, measured by the extent to which ownership is concentrated in the family, as indicated by the percentage of shares held by the family, which makes it possible to compare a wide range of companies, from those in which there is very little or no family influence, to those in which there is a strong influence from the family in the business (Gomez -Mejia et al., 2003). This measure represents the voting rights of the family, and gives a very clear indication of the ability of the family to control the board of directors. This measure has distinct advantages over other measures, such as the percentage of directors who are members of the family, as it is not affected by legislative constraints on the presence of family members on the board (Wu, 2013). And (2) family involvement in management, which has been measured with a dichotomous variable depending on whether the CEO belongs to the family or not. This measure has been chosen rather than other measures, such as the proportion of managers who are family members, because the CEO is directly involved in decisions of the board, whereas other managers are not necessarily directly involved (Combs et al., 2010). This variable makes it possible to compare, in family businesses, companies where there are varying degrees of family influence as a result of a greater or lesser commitment of the owning family to the day-to-day management of the business (Westhead and Howorth, 2006; Sciascia and Mazzola, 2008).

Control variables. To capture other factors that are related to both the adoption of CEO monitoring practices and firm performance, we have included two control variables: firm size, and industry. Tosi et al. (2000) consider firm size to be one of the most important aspects of the context when predicting CEO compensation, so it is essential to include it in a study of the determination of CEO compensation monitoring. Also, most of the literature in the management field recognizes the size of the firm as one of the major variables that determines the decisions in family firms (Miller et al., 2000; Wasserman, 2006). It has been measured as the natural logarithm of the average number of employees during the year 2011 (extracted from the OSIRIS database). The industry in which a business operates is an important indicator when comparing manufacturing and services firms and some studies have used this variable to analyze the determinants of CEO compensation (Gomez-Mejia et al., 2003) or CEO compensation monitoring and firm performance (Tosi and Gomez-Mejía, 1994). Based on NACE Rev. 2 codes (NACE Rev. 2, 2008), the present study uses a dichotomous variable where 1 indicates that the firm is involved in manufacturing and 0 indicates that it is in the services industry, as in other studies of CEO monitoring (Tosi and Gomez-Mejia, 1994). More precise measures of the industry in which the businesses are engaged have not been used, because tests with more specific measures suggest that there would be no significant change to the results if finer discrimination of the activities of the firms was included in the analysis.

To test the psychometric properties of the scales used, we conducted a confirmatory factor analysis (CFA) using EQS v.6.2 (Table 2.1). The indicators are within the parameters recommended in the literature (Anderson and Gerbing, 1988; Fornell and Larcker, 1981), and the statistical model fits are satisfactory ($\chi2(151)=482.24$, NFI=0.96, NNFI=0.96, CFI=0.97, IFI=0.97, RMSEA=0.07). The NFI, NNFI and CFI statistics are higher than 0.9 and RMSEA is less than 0.08, as recommended in the literature (Hoyle and Panter, 1995).

Table 2.1. Confirmatory factor analysis of the measurement scales

Items	Factor loadings	ρ_c	A.V.E
Firm performance		0.88	0.72
Return on assets (ROA)	0.784		
Return on equity (ROE)	0.906		
Return on sales (ROS)	0.850		
CEO Monitoring		0.98	0.86
The following items are important in terms of CEO pay policies/practices			
Overall business strategies	0.840		
Organization's ability to pay	0.900		
Use of quantitative performance measures such as earnings per share	0.853		
Use of qualitative performance measures (e.g., executive charisma)[a]	0.946		
Wishes of executive[a]	0.925		
Provision of "golden parachutes"[a]	0.949		
Linking interest of executives with those of shareholders	0.873		
Making executive responsible for firm performance, even if it may reflect economic, political, social, and environmental forces	0.877		
The following statements regarding CEO pay policies/practices			
Minimizing taxes is actually a more important objective in developing CEO pay policies than motivational concerns[b]	0.948		
In reality, there is very little monitoring of CEO compensation[a]	0.962		
Engaging in "creative accounting" to justify higher CEO pay[a]	0.943		
Most members of the compensation committee are appointed by the CEO[a]	0.937		
It is in the interest of hired compensation consultants to recommend a high compensation package for the CEO[a]	0.961		
In reality, the CEO faces limited outside constraints in setting his/her pay level[a]	0.980		
Merger/acquisition activities are used to justify higher CEO pay[a]	0.965		
All things considered, the CEO pay policies/priorities in the firm truly give shareholders "their money's worth"	0.954		

(a): Item was reverse-coded. After we made coding changes so that 5 represents high monitoring and 1, low monitoring

The composite reliability (ρ_c) was calculated using the method recommended by Bagozzi and Yi (1988), and all constructs have a composite reliability above the cut-off of 0.70, as suggested by Straub (1989). All factor loadings are significant, which demonstrates the convergent validity of the data (Bagozzi and Yi, 1988). To assess the convergent validity we used the average variance extracted (AVE). All constructs have an AVE above the value of 0.5 recommended by Fornell and Larcker (1981). To assess the discriminant validity, it is recommended to use the average variance extracted (AVE) (Barclay et al., 1995). To this end we compared the square root of AVE (diagonal of Table 2.2) with the correlations between constructs (off-diagonal elements of Table 2.2). As can be seen, the square root of the AVE for all constructs is greater than the correlation between them, suggesting that each construct relates more strongly with its own measures than with others. The correlation analysis revealed a strong association between CEO compensation monitoring and firm performance.

Table 2.2. Descriptive analysis, discriminant validity of the measurement scales

	Means	**Standard deviation**	**1**	**2**
1. Firm performance	3.10	10.87	0.938	
2. CEO monitoring	3.00	0.71	0.105**	0.994

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

2.4. Results

2.4.1. Descriptive results

Table 2.3 shows the means, standard deviations and correlations between variables of the estimated structural equation model (see Figures 2.1 and 2.2). Significant correlations between the main variables are observed.

Table 2.3. Means, standard deviations and correlations

	Mean	SD	1	2	3	4	5	6	7	8
1. Firm size	5.46	1.19	1							
2. Industry	0.67	0.47	-0.04	1						
3. Family ownership (FO)	36.49	45.81	-0.18***	0.05	1					
4. Family management (FM)	0.24	0.43	-0.18***	0.12**	0.70***	1				
5. CEO monitoring	3.01	0.71	0.10**	-0.03	-0.23***	-0.32***	1			
6. Ln CEO monitoring (LCM)[a]	1.06	0.26	0.12**	-0.02	-0.24***	-0.35***	0.98***	1		
7. Firm performance	3.10	10.87	0,04	-0,03	-0,18***	0,07	0,11**	0,08	1	
8. LCM x FO	-4.25	12.76	0,13**	-0,06	-0,17***	-0,18**	0,40***	0,31***	0,09*	1
9. LCM x FM	-0.03	0.13	0,03	-0,16***	-0,09	-0,20**	0,22***	0,19***	0,11**	0,53***

* p<0.1; **p<0.05; ***p<0.01

Note: (a) it is the logarithmic form of CEO compensation monitoring

Table 2.4. ANOVA. Results for low CEO monitoring firms and high CEO monitoring firms, family firms and non-family firms.

	CEO Monitoring			Family Firm		
	Low	High	F	Non Family	Family	F
1. Firm size	5.47	5.45	0.03	5.63	5.23	10.64***
2. Industry	0.68	0.67	0.01	0.65	0.70	0.82
3. Family ownership (FO)	46.12	27.00	16.95***	0.00	88.95	3968.74***
4. Family management (FM)	0.30	0.18	8.44***	0.00	0.58	304.30***
5. CEO Monitoring	2.42	3.59	815.74***	3.20	2.73	44.40***
6. Firm Performance	2.08	4.10	3.22**	4.87	0.54	14.82***

* p<0.1; **p<0.05; ***p<0.01

In order to analyze the relationship between variables, an analysis of variance was performed, the results of which are shown in Table 2.4. In firms with low CEO monitoring (those below the median of CEO monitoring), family ownership is more concentrated and firm performance is lower than in firms with high CEO monitoring (those above the median of CEO monitoring). We used the same criteria for classification in the study of Tosi and Gomez-Mejia (1994). Furthermore, family firms (those where 50% or more of the voting rights belong to the family) are, on average, smaller and firm performance are poorer than for non-family firms (those with 50% or less of family ownership). To classify family firms we used the same criteria in the study of Jacquemin and Guellinck (1980) and Lauterbach and Vaninsky (1999).

2.4.2. Structural models results

The relationship between family involvement, CEO monitoring and firm performance was tested with structural equation models. Two groups of models were constructed, the first group examining the effects of CEO monitoring on firm performance (see Figure 2.1 and Table 2.5), and the second group examining the relationships between family involvement, CEO monitoring and firm performance (see Figure 2.2 and Table 2.5). The proposed structural equation models, estimated as recommended by Byrne (2013), show adjustment measures within the parameters recommended in the literature, reaching an adequate goodness of fit (see Table 2.5, Figure 2.1 and Figure 2.2). Only Model 3 exhibited worse adjustment.

Models 1, 2 and 3 are designed to test if there is an asymptotic relationship between CEO monitoring and firm performance. CEO monitoring has a positive and significant influence on firm performance (Model 1: $\lambda=0.15$, $P<0.01$). To facilitate the interpretation of the relationship between CEO monitoring and firm performance, and decide whether it is asymptotic, we divided the firms into two

Table 2.5. Results of the SEM models

	Hypothesis 1			Hypothesis 2	Hypothesis 3				
	Dependent variables								
	Firm performance			Ln CEO monitoring	Firm performance	Ln CEO monitoring	Firm performance	Ln CEO monitoring	Firm performance
	Figure 1			Figure 2					
	Model 1	Model 2	Model 3	Model 4		Model 5		Model 6	
Sample	All firms	Low CEO monitoring	High CEO monitoring	All firms		Family Firms		Non-family firms	
Independent variables									
1. Firm size	0.01 (0.10)	0.08 (1.33)	0.04 (0.56)	-	0.04 (0.84)	-	0.01 (0.20)	-	0.04 (0.59)
2. Industry	-0.04 (0.66)	-0.01 (0.12)	-0.04 (0.55)	-	-0.02 (0.36)	-	-0.04 (0.51)	-	-0.04 (0.61)
3. Family ownership (FO)	-0.12** (2.48)	-0.10 (1.30)	-0.06 (0.91)	-0.35*** (6.23)	-0.12** (2.13)	-0.03 (0.31)	0.05 (0.93)	-	-
4. Family management (FM)	-	-	-	-	-	0.02 (0.21)	0.22 (0.78)	-	-
5. CEO monitoring	-	0.21** (2.40)	-0.06 (0.91)	-	-	-	-	-	-
6. Ln CEO monitoring (LCM)	0.15*** (2.99)	-	-	-	0.17*** (3.03)	-	0.26*** (2.75)	-	0.01 (0.06)
7. LCM x FO	-	-	-	-	0.13*** (2.76)	-	0.22** (2.38)	-	-
8. LCM x FM	-	-	-	-	-	-	0.05 (0.47)	-	-
Chow Test	-	3.83**		-		2.08**			

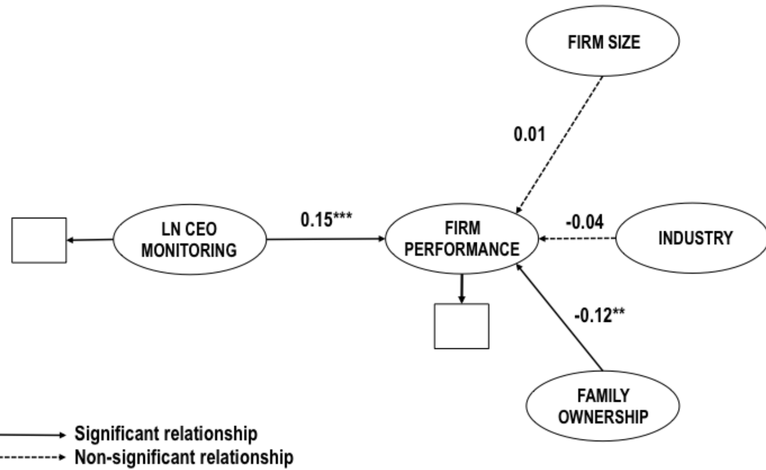
* p<0.1; **p<0.05; ***p<0.01
Note: Goodness of fit of the models in figures 1 and 2

groups, a low monitoring sub-group and a high monitoring sub-group, using the median monitoring score as the cut-off, as in other similar studies (Tosi and Gomez-Mejia, 1994). In view of the parameters (see Table 2.5 and Figure 2.1), more intense monitoring of CEO pay processes is positively and significantly related to firm performance (Model 2: $\lambda=0.21$, $P<0.05$), but the effects of monitoring on firm performance are not significant at higher levels of monitoring (Model 3: $\lambda=-0.06$, $P>0.1$), supporting Hypothesis 1. Results of Chow tests (Chow, 1960) indicate that the coefficients are significantly different for Models 2 and 3 (Table 2.5: 3.83, $p<0.05$).

The path coefficient from family ownership to CEO monitoring (see Table 2.5 and Figure 2.2) is negative and significant (Model 4: $\lambda=-0.35$, $P>0.1$), which means that the CEO monitoring by means of their compensation decreases as the concentration of ownership in the hands of the family increases. This means that when the family control over the company increases, they have greater confidence in the CEO – even significantly influencing their appointment – and oversight mechanisms are considered less necessary and therefore are more lax. In addition, we have estimated a model that only includes companies where the family owns the majority share (Jacqueming and Ghellinck, 1980; Lauterbach and Vaninsky, 1999) – those where the proportion of ownership in the hands of the family is more than 50% – (Model 5 : $\lambda = -0.03$, $P > 0.1$), showing that in these cases the family does not exercise strict monitoring over the CEO. This supports previous evidence but also provides additional robustness to the finding. This model also has includes the influence of the family in management, by comparing those cases where the CEO is a member of the family with those where the CEO is an external figure. Thus , the path coefficient from family management to CEO monitoring is not significant (Model 5 : $\lambda = 0.05$, $P > 0.1$), indicating that the condition of family / external CEO does not significantly influence the monitoring intensity. Therefore, Hypothesis 2 is partly supported in terms of the family ownership concentration, but not for the presence of the family in the management of the company.

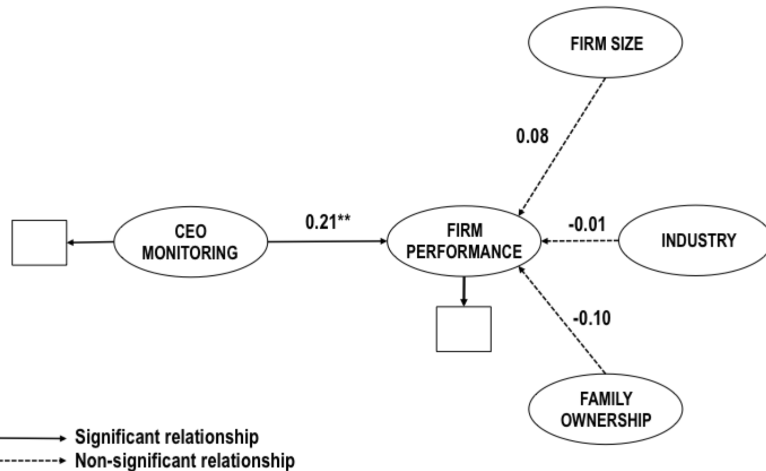
Figure 2.1. CEO monitoring and firm performance relationships

Model 1



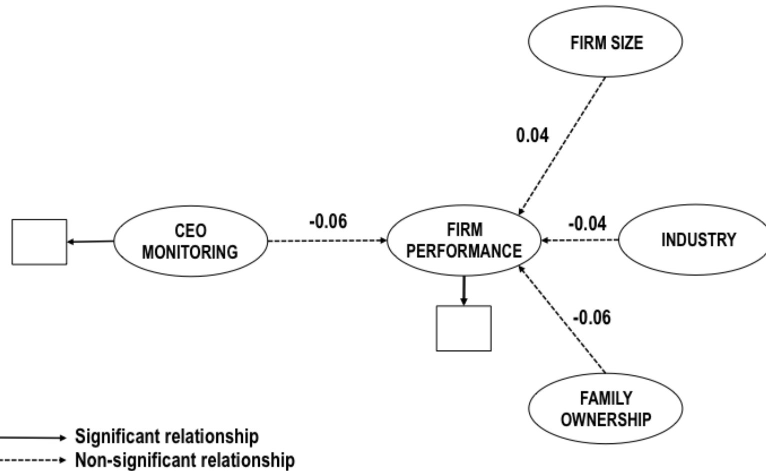
Note: χ2 (202)=511.19 (p=0.000), NFI=0.93, NNFI=0.95, CFI=0.96, IFI=0.96, RMSEA=0,06

Model 2



Note: χ2 (202)=449.37 (p=0.000), NFI=0.90, NNFI=0.93, CFI=0.94, IFI=0.94, RMSEA=0,08

Model 3

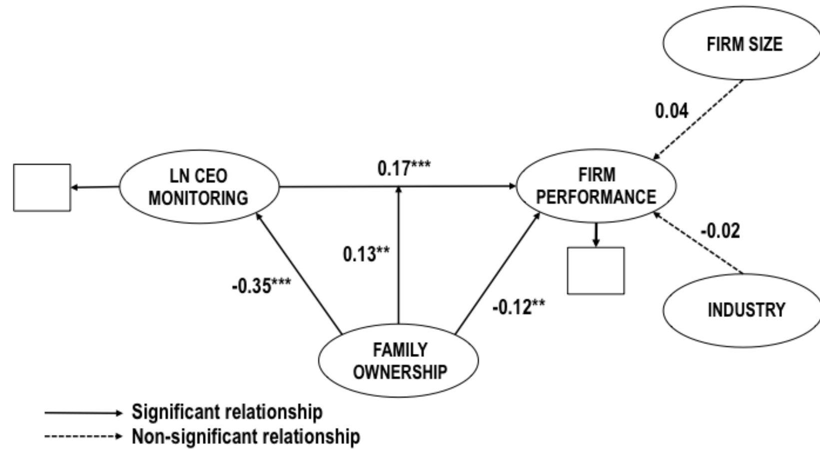


Note: χ2 (202)=745.21 (p=0.000), NFI=0.80, NNFI=0.81, CFI=0.83, IFI=0.84, RMSEA=0,12

* p<0.1; **p<0.05; ***p<0.01

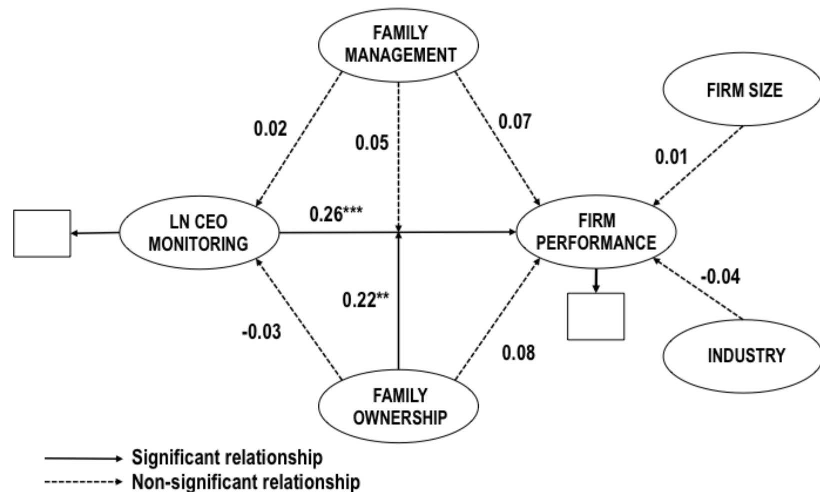
Figure 2.2. CEO monitoring, family involvement and firm performance relationships

Model 4



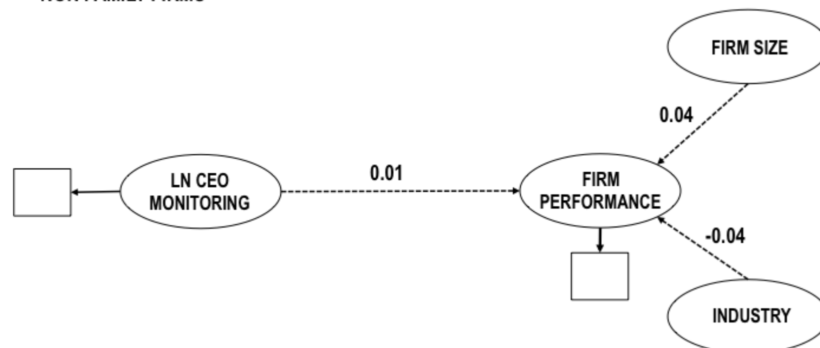
Note: χ2 (222)=536.37 (p=0.000), NFI=0.92, NNFI=0.95, CFI=0.95, IFI=0.95, RMSEA=0,06

Model 5



Note: χ2 (257)=677.24 (p=0.000), NFI=0.88, NNFI=0.90, CFI=0.91, IFI=0.91, RMSEA=0,09

Model 6



Note: χ2 (185)=453.99 (p=0.000), NFI=0.89, NNFI=0.92, CFI=0.93, IFI=0.93, RMSEA=0,08

* p<0.1; **p<0.05; ***p<0.01

Furthermore, the results for Models 4 and 5 (Model 4: λ = 0.13, P <0.01; Model 5: λ = 0.22, P <0.05) also indicate that the relationship between monitoring the CEO

and the performance of the company is stronger as the level of concentration of family ownership in the company increases. To help interpret if the relationship between CEO monitoring and firm performance is moderated by family involvement, we have separated the firms in family firms and non-family. CEO monitoring is more strongly and significantly related to performance in family firms (Model 5: $\lambda=0.21$, $P<0.05$) than in non-family firms (Model 6: $\lambda=0.01$, $P>0.1$) when ownership it is considered. Results of Chow tests (Chow, 1960) indicate that the coefficients are significantly different for the two types of firms (Table 2.5: 2.08, $p<0.05$). However, the moderating effect of family management in this relationship is not significant. Thus, Hypothesis 3 is partially supported, because the moderating relationship exists only when family ownership is considered, but not when family involvement in management is introduced. This implies that the lower level of supervision of the CEO in companies controlled by a family means that increases in monitoring lead to improvement in the performance of the company, but only when family involvement is measured in terms of ownership. It seems that the family role in supervising the company management is associated more with ownership, which may make sense from the point of view of voting rights.

2.5. Discussion and conclusions

This study, conceived in the framework of agency theory in family businesses, and following the line of discussion about the effects of family involvement in the governing bodies of companies, contributes to the explanation of the mechanisms of monitoring the compensation of CEOs and their effects on firm performance, taking into account the level of family involvement in the company. For this we have used a sample of 400 large Spanish companies to test three key hypotheses about the relationship between monitoring the CEO, family involvement and firm performance.

An important contribution of this work is that it explores a path that has previously been ignored, in that it provides empirical evidence about the CEO monitoring and its relationship with firm performance in relation to the level of involvement of family members in a family business. Whereas contracts – mainly through pay and incentives – can be a mechanism for principals to limit opportunism CEO (Devers et al, 2007; Jensen and Murphy, 1990; Murphy, 2013; Tosi et al, 2000; Wiseman and Gomez -Mejia, 1998), they have been found to produce inconsistent results and are poorly understood, as a result of which many companies have opted for direct monitoring mechanisms. Thus, following the approach of Tosi and Gomez-Mejia (1989, 1994), the analysis has been developed of the internal processes of decision making by the governance mechanisms (board of directors, pay committee) on the policy relating to incentives and the way to use those incentives to produce an alignment of the motivation of the CEO and the aims of the business. The process of establishing the CEO's incentive structure has emerged as a suitable way interrogate variations in the effectiveness and intensity of the supervision of the CEO based on different levels of family involvement in ownership and / or management of the company.

In examining the relationship between the intensity of monitoring the CEO and company performance, our results show an asymptotic and nonlinear relationship, similar to that found by Tosi and Gomez-Mejia (1994). At low levels of monitoring, increased supervision of the CEO produces an improvement in business results (when the results depend on the actions of the agents) by preventing excessively selfish or altruistic behaviors on the part of the CEO, and discouraging practices that pursue interests other than strictly business ends (Bebchuk and Fried, 2004, Holmstrom 1979). However, as level of CEO monitoring increases, a level of firm performance is attained which approaches the upper limit that can reasonably be achieved by a company imposing strict monitoring. Once that upper limit is reached, increased CEO monitoring does not lead to improved outcomes, either because close supervision limits the discretion of the CEO or because the CEO becomes more risk averse as a result of the close alignment of personal and

company incentives. In either both case, the CEO is discouraged from selecting the optimal (and possibly risky) decisions by the owners, limiting the improvement of business results (Dalton, 2005; Shavell, 1979).

Regarding the role of family involvement, our results show that the intensity of supervision of the CEO decreases with increasing concentration of family ownership in the company. This result is evident until the family has majority control of the company, at which point supervision is again looser, since the majority control of the family ensures the preservation of family socio-emotional wealth, and they give priority to affective decisions regarding CEO monitoring. These results, therefore, provide general support for the idea that family involvement generates asymmetrical altruism (Chrisman et al., 2004, 2007; Chua et al, 2009; Lubatkin et al., 2005; Schulze et al., 2001), which maintains the affective affiliation CEO in the family business, which decouples CEO compensation monitoring from business risk, because of the tendency of the owners to be generous with the CEO, even if he or she does not meet the expectations or is not very competent.

In addition, our results show that family involvement in management, in the person of CEO, does not lead to changes in supervisory decisions. It is therefore the possession of voting rights, and not family presence in the corporation that determines control over supervisory decisions in relation to the CEO. This result supports the idea that boards of directors are not independent, their members being appointed to represent the groups with greatest voting power. That is, even if the presence of family members on the board is limited and / or the CEO is not a member of the family, family owners are reluctant to cede control of the board of directors (Daily and Dollinger, 1992; Sharma et al., 1996) and voting rights are the main legal mechanism to safeguard the interests of the family in the business.

In the end, the results indicate that the strength of the relationship between the monitoring of the CEO and the results of the company increases as the family involvement in the business increases – when family involvement is measured by

the extent of concentration of ownership. The lower level of supervision of CEOs in companies controlled by the owning family means that moderate increases in monitoring lead to greater improvement in company results. In companies with high family involvement, as there is a lower level of CEO monitoring, and while the level of supervision is increased to an upper limit, there is a greater capacity for this to have a positive impact on results. In contrast, companies where there is a low involvement of family – either family controlled firms with little involvement, or non-family firms – higher levels of initial monitoring of the CEO mean that there is less scope to improve company results by increasing monitoring.

In short, this study finds that family involvement in the business has a clear differentiating effect on the implementation of mechanisms for monitoring the CEO. Schulze et al. (2001) note that family relationships and business create common bonds and mutual expectations grounded in psychological aspects other than contractual factors, based on emotions, feelings and values (trust, altruism, loyalty, etc.) that permeate the functioning of the company. Thus, it is evident that the intensity of the supervision of the CEO by the governing bodies of family businesses is more lax, especially when the family owns a majority share in the company, and has therefore secured control of the company by dint of ownership.

These results suggest that there may be a need to maintain adequate surveillance and effective CEO monitoring in family businesses, even in the absence of obvious agency problems (Verbeke and Kano, 2012). Strict control over the actions of the CEO can be a wise precaution to avoid potential problems of opportunism or misunderstood altruism. Even considering the possible dichotomy of economic and non-economic objectives in family businesses in comparison with non-family businesses, the maintenance of an effective and efficient system of supervision over the CEO can produce benefits for the company and hence for the owning family.

Finally, this work is not without its limitations, which may themselves constitute future lines of research. First, it would be desirable to include in this discussion the

explicit measurement of representative socio-emotional aspects of family goals, analyzing their effect on the supervision of the CEO and all-round (both economic and non-economic) results of the family business, as suggested by various studies based on the theoretical framework of the preservation of socio-emotional wealth (Gomez-Mejia et al., 2007; Berrone et al., 2010; Cruz et al., 2011). Second, the measures of firm performance used rely entirely on financial indicators. This information could be supplemented with other measures of non-economic outcomes, such as reputation, trust and family cohesion. Third, measures of ownership structure and board membership could be extended by introducing in the model other aspects, such as ownership concentration in the hands of the CEO, the type of majority owner (family, individuals, institutions, other companies) and the distribution of shares between major shareholders, the proportion of independent external directors, and whether the offices of CEO and Chairman are occupied by the same individual, among others. Finally, we used a classic and simple measure of family business, which, although widely adopted and employed in the literature, could be supplemented with aspects of culture and family values , as the F-PEC scale (Astrachan et al., 2002), which would make it possible to have a more comprehensive view of the relationship between family and business .

2.6. References

Alessandri, T., Tong, T.W., Reuer, J. (2012). Firm heterogeneity in growth option value: the role of managerial incentives. *Strategic Management Journal*, 33, 1557-1566.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, *103*(3), 411-423.

Anderson, R. C., & Reeb, D. M. (2004). Board composition: Balancing family influence in S&P 500 firms. *Administrative Science Quarterly*, *49*(2), 209-237.

Armstrong, J.S., & Overton, T.S. (1977). Estimating Nonresponse Bias in Mail Survey. *Journal of Marketing Research*, 14, 396-402.

Arosa, B., Iturralde, T., & Maseda, A. (2010a). Outsiders on the board of directors and firm performance: Evidence from Spanish non-listed family firms. *Journal of Family Business Strategy*, *1*(4), 236-245.

Arosa, B., Iturralde, T., & Maseda, A. (2010b). Ownership structure and firm performance in non-listed firms: Evidence from Spain. *Journal of Family Business Strategy*, *1*(2), 88-96.

Astrachan, J.; Klein, S.; Smyrnios, K. (2002) The F-PEC Scale of Family Influence: A proposal for solving the business definition problem. *Family Business Review*, vol. 15, 45-58.

Bagozzi, R.P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16, 74-94.

Barclay, D., Higgins, C., & Thompson R. (1995). The partial least squares (PLS) approach to causal modelling: Personal computer adoption and use as an illustration. *Technology Studies*, 2, 285-309.

Baysinger, B., & Hoskisson, R. E. (1990). The composition of boards of directors and strategic control: Effects on corporate strategy. *Academy of Management Review*, *15*(1), 72-87.

Bebchuk, L. A., & Fried, J. M. (2003). Executive Compensation as an Agency Problem. *Journal of Economic Perspectives*, 17, 71-92.

Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: McMillan.

Berrone, P., Cruz, C., Gomez-Mejia, L.R., & Larraza, M. (2010). Socio-emotional wealth and corporate responses to institutional pressures: Do family controlled firms pollute less? *Administrative Science Quarterly*, 55, 82–113.

Breton-Miller, I. L., Miller, D., & Steier, L. P. (2004). Toward an integrative model of effective FOB succession. *Entrepreneurship Theory and Practice*, *28*(4), 305-328.

Byrne, B. M. (2013). *Structural equation modeling with EQS: Basic concepts, applications, and programming*. New Jersey: Lawrence Erlbaum.

Casillas, J. C., Barbero Navarro, J. L., & Moreno Menéndez, A. M. (2013). Reestructuración y tipo de propiedad en empresas en crisis. Diferencias entre empresas familiar y no familiares. *Revista de Empresa Familiar*, *3*(1), 7-20.

Chow, G. C. (1960). Tests of equality between sets of coefficients in two linear regressions. *Econometrica: Journal of the Econometric Society*, 591-605.

Chrisman, J. J., Chua, J. H., & Kellermanns, F. (2009). Priorities, resource stocks, and performance in family and nonfamily firms. *Entrepreneurship Theory and Practice*, *33*(3), 739-760.

Chrisman, J., Sharma, P., & Taggar, S. (2007). Family influences on firms: An introduction. *Journal of Business Research on Family Business Studies*, *60*(10), 1005–1011.

Chrisman, J.J., Chua, J.H., & Litz, R. (2004). Comparing the agency costs of family and nonfamily-owned firms: Conceptual issues and exploratory evidence. *Entrepreneurship Theory and Practice*, 28, 335–354.

Chua, J.H., Chrisman, J.J., & Bergiel, E.B. (2009). An agency theoretic analysis of the professionalized family-owned firm. *Entrepreneurship Theory and Practice*, 33, 355–372.

Combs, J. G., Penney, C. R., Crook, T. R., & Short, J. C. (2010). The impact of family representation on CEO compensation. *Entrepreneurship Theory and Practice*, *34*(6), 1125-1144.

Corbetta, G., & Salvato, C. (2004). Self-Serving or Self-Actualizing? Models of Man and Agency Costs in Different Types of Family Firms: A Commentary on

"Comparing the Agency Costs of Family and Non-family Firms: Conceptual Issues and Exploratory Evidence". *Entrepreneurship Theory and Practice*, *28*(4), 355-362.

Cruz, C. C., Gómez-Mejia, L. R., & Becerra, M. (2010). Perceptions of benevolence and the design of agency contracts: CEO-TMT relationships in family firms. *Academy of Management Journal*, *53*(1), 69-89.

Cruz, C., Firfiray, S., & Gomez-Mejia, L.R. (2011). Socioemotional wealth and human resource management (HRM) in family-controlled firms. En Joshi, A., Liao, H., & Martocchio, J.J. (Eds.): *Research in Personnel and Human Resources Management*, 30, pp. 159-217. Emerald Group Publishing, Bingley.

Daily, C. M., & Dollinger, M. J. (1992). An empirical examination of ownership structure in family and professionally managed firms. *Family business review*, *5*(2), 117-136.

Dalton, D. R. (2005). Going private" and "going dark;" board compensation, and the downside of independence. *Directors & Boards*, *2*(10), 4-6.

Dalton, D.R., Hitt, M.A., Certo, S.T., & Dalton, C.M. (2007): The Fundamental Agency Problem and Its Mitigation, *The Academy of Management Annals*, 1(1), 1-64.

Devers, C. E., Cannella, A. A., Reilly, G. P., & Yoder, M. E. (2007). Executive compensation: A multidisciplinary review of recent developments. *Journal of Management*, *33*(6), 1016-1072.

Eddleston, K. A., & Kellermanns, F. W. (2007). Destructive and productive family relationships: A stewardship theory perspective. *Journal of Business Venturing*, *22*(4), 545-565.

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review, 14*, 57–74.

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, *88*, 288–307.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics, 26*, 301–325.

Finkelstein, S., & Hambrick, D. C. (1996). *Strategic leadership: Top executives and their effects on organizations*. St. Paul, MN: West Publishing.

Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-50.

Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *The academy of management annals*, *5*(1), 653-707.

Gomez-Mejia, L. R., Nunez-Nickel, M., & Gutierrez, I. (2001). The role of family ties in agency contracts. *Academy of management Journal*, *44*(1), 81-95.

Gomez-Mejia, L.R., Haynes, K., Nuñez-Nickel, M., Jacobson, K.J.L., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52, 106-137.

Gomez-Mejia, L.R., Larraza-Kintana, M., & Makri, M. (2003). The determinants of executive compensation in family-controlled public corporations. *Academy of Management Journal*, 46, 226-237.

Gomez-Mejia, L.R., Larraza-Kintana, M., & Makri, M. (2003). The determinants of executive compensation in family-controlled public corporations. *Academy of Management Journal*, 46, 226-237.

Gomez-Mejia, L., Wiseman, R. M., & Dykes, B. J. (2005). Agency problems in diverse contexts: A global perspective. *Journal of Management Studies*, *42*(7), 1507-1517.

Hölmstrom, B. (1979). Moral hazard and observability. *The Bell Journal of Economics*, 74-91.

Hoyle, R.H., & Panter, A.T. (1995). Writing about Structural Equation Modeling. *Structural.* In R.H. Hoyle, Structural equation modeling: concepts, issues, and applications. Newbury Park, CA. Sage.

Jacquemin, A., & de Ghellinck, E. (1980). Familial control, size and performance in the largest French firms. *European Economic Review*, *13*(1), 81-91.

Jensen, M. C., & Meckling, W. F. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics, 3*, 305–360.

Jensen, M. C., & Murphy, K. (1990). Performance pay and top-management incentives. *Journal of Political Economy, 98*, 225–264.

Jones, C. D., Makri, M., & Gomez-Mejia, L. R. (2008). Affiliate directors and perceived risk bearing in publicly traded, family-controlled firms: The case of diversification. *Entrepreneurship Theory and Practice*, *32*(6), 1007-1026.

Kanuk, L., Berenson, C. (1975). Mail survey and response rates: a literature review. *Journal of Marketing Research*, 12, 440-53.

Kellermanns, F. W., Eddleston, K. A., & Zellweger, T. M. (2012). Extending the socioemotional wealth perspective: A look at the dark side. *Entrepreneurship Theory and Practice*, *36*(6), 1175-1182.

Kellermanns, F. W., Eddleston, K. A., & Zellweger, T. M. (2012). Extending the socioemotional wealth perspective: A look at the dark side. *Entrepreneurship Theory and Practice*, *36*(6), 1175-1182.

Kidwell, L.A. & Kidwell, R.E. (2010). *Fraud in the family: How family firm characteristics can shape illegal behavior*. Paper presented at the Annual Meeting of the American Accounting Association, San Francisco, CA.

Lauterbach, B., & Vaninsky, A. (1999). Ownership structure and firm performance: evidence from Israel. *Journal of Management and Governance*, *3*(2), 189-201.

Lee, K. S., Lim, G. H., & Lim, W. S. (2003). Family business succession: Appropriation risk and choice of successor. *Academy of Management Review*, *28*(4), 657-666.

Lubatkin, M., Schulze, W., Ling, Y., & Dino, R. (2005). The effects of parental altruism on the governance of family-managed firms. *Journal of Organizational Behavior*, *26,* 313–330.

McGuire, J. B. (1988). Agency theory and organizational analysis. *Managerial Finance*, *14*(4), 6-9.

Memili, E., Chrisman, J. J., & Chua, J. H. (2011). Transaction costs and outsourcing decisions in small-and medium-sized family firms. *Family Business Review*, *24*(1), 47-61.

Miller, N.J., Winter, M., Fitzgerald, M. A., & Paul, J. (2000). Family microenterprises: Strategies for coping with overlapping family and business demands. *Journal of Developmental Entrepreneurship*, 5(2), 87-113.

Murphy, K.J. (2013). Executive compensation: Where we are, and how we got there". En G. Constantinides, M. Harris, R. Stulz (eds.): Handbook of the economics of finance, Vol. 2A. Elsevier Science North Holland: New York.

Mustakallio, M., Autio, E., & Zahra, S. A. (2002). Relational and contractual governance in family firms: Effects on strategic decision making. *Family Business Review*, *15*(3), 205-222.

NACE Rev. 2. Statistical classification of economic activities in the European Community (2008). Luxembourg: Office for Official Publications of the European Communities [date accessed: December 15, 2013]. Available from Internet: <http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-07-015/EN/KS-RA-07-015-EN.PDF>.

Oppenheim, A.N. (1992) Questionnaire design, interviewing and attitude measurement. London: Pinter Publishers.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903

Pollak, R. A. (1985). A transaction cost approach to families and households. *Journal of Economic Litera- ture*, *23*, 581–608.

Schulze, W.S., Lubatkin, M.H., Dino, R.N., & Buchholtz, A.K. (2001). Agency relationships in family firms: theory and evidence. *Organizational Science*, vol. 12, 99-116.

Sciascia, S., & Mazzola, P. (2008). Family involvement in ownership and management: Exploring nonlinear effects on performance. *Family Business Review*, *21*(4), 331-345.

Sharma, P., Chrisman, J.J., & Chua, J.H. (1996). *A review and annotated bibliography of family business studies*. Boston, MA: Kluwer Academic.

Shavell, S. (1979). Risk sharing and incentives in the principal and agent relationship. *The Bell Journal of Economics*, 55-73.

Simon, H. (1961). *Administrative behavior* (2nd ed.). New York: Macmillan.

Straub, D. (1989). Validating instruments in MIS research. *MIS Quarterly*, 13(2) 147–169.

Tosi Jr, H. L., & Gomez-Mejia, L. R. (1989). The decoupling of CEO pay and performance: An agency theory perspective. *Administrative Science Quarterly*, 169-189.

Tosi, H. L., & Gomez-Mejia, L. R. (1994). CEO compensation monitoring and firm performance. *Academy of Management Journal*, *37*(4), 1002-1016.

Tosi, H. L., Werner, S., Katz, J. P., & Gomez-Mejia, L. R. (2000). How much does performance matter? A meta-analysis of CEO pay studies. *Journal of Management, 26*, 301–339.

Verbeke, A., & Kano, L. (2010). Transaction cost economics (TCE) and the family firm. *Entrepreneurship Theory and Practice*, *34*(6), 1173-1182.

Verbeke, A., & Kano, L. (2012). The Transaction Cost Economics Theory of the Family Firm: Family-Based Human Asset Specificity and the Bifurcation Bias. *Entrepreneurship Theory and Practice*, *36*(6), 1183-1205.

Voordeckers, W., Van Gils, A., & Van den Heuvel, J. (2007). Board Composition in Small and Medium-Sized Family Firms*. *Journal of Small Business Management*, *45*(1), 137-156.

Walsh, J. P., & Seward, J. K. (1990). On the efficiency of internal and external corporate control mechanisms. *Academy of Management Review*, *15*(3), 421-458.

Wasserman, N. (2006). Stewards, agents, and the founder discount: executive compensation in new ventures. *Academy of Management Journal*, 49, 960-976.

Werner, S., & Tosi, H. L. (1995). Other people's money: The effects of ownership on compensation strategy and managerial pay. *Academy of Management Journal*, *38*(6), 1672-1691.

Westhead, P., & Howorth, C. (2006). Ownership and management issues associated with family firm performance and company objectives. *Family Business Review*, *19*(4), 301-316.

Westhead, P., & Howorth, C. (2006). Ownership and management issues associated with familiy firm performance and company objectives. *Familiy Business Review*, 19, 4, 301-316.

Wiseman, R. M., & Gomez-Mejia, L. R. (1998). A behavioral agency model of managerial risk taking. *Academy of management Review*, *23*(1), 133-153.

Wu, C. H. (2013). Family ties, board compensation and firm performance. *Journal of Multinational Financial Management*, 23, 255-271

Zahra, S. A. (2003). International expansion of US manufacturing family businesses: The effect of ownership and involvement. *Journal of Business Venturing*, *18*(4), 495-512.

Zajac, E. J., & Westphal, J. D. (1995). Accounting for the explanations of CEO compensation: Substance and symbolism. *Administrative Science Quarterly*, 283-308.

Zattoni, A., Gnan, L., & Huse, M. (In press). Does Family Involvement Influence Firm Performance? Exploring the Mediating Effects of Board Processes and Tasks. *Journal of Management*, available online 30 October 2012.

Zona, F., & Gomez-Mejia, L. (2011). *Board processes and service performance in family and non-family firms* (Unpublished paper). Bocconi University, Milan.

Chapter 3. Effects of Human Resource Practices on Firm Performance: The mediating role of Family Involvement

Chapter 3. Effects of Human Resource Practices on Firm Performance: The mediating role of Family Involvement

3.1. Introduction

Human resource management in family firms is a complex task, in a scenario in which the relationships between owners, managers, employees and family are not clearly defined in terms of authority and responsibilities (Leon-Guerrero et al., 1998, Reid et al., 2000). The influence of family structures in the framework for managing human capital creates idiosyncrasies, which makes family firms different from those where family ownership is not involved (Astrachan and Kolenko, 1994; Chrisman et al., 2005; Cruz et al., 2011), with possible positive and negative implications in terms of firm performance, depending on the extent to which family firms are run in the economic interests of the business or for the welfare of the family (Schulze et al., 2001, Gomez-Mejia et al., 2007; Eddleston and Kellermans, 2007).

A review of the literature reveals a differentiation in the design of human resource practices (hereinafter, HR practices) between family and non-family firms in terms of the emphasis on economic and/or non-economic criteria. For example, Reid and Adams (2001) and De Kok et al. (2006), examining a set of HR practices – selection, training, career development, evaluation and compensation – find that family firms apply these in less formalized ways than in non-family firms, avoiding complex business criteria. The findings of other studies that have focused on specific HR practices are also consistent with this view. Family firms often use selection criteria based on the fit with the culture and values of the organization (Gersick et al., 1997; Dyer and Montersen, 2006), placing more emphasis on informal training activities for employees and adopting a longer term perspective (Kotey and Folker, 2007, Harris and Reid, 2008) and focusing on more static and traditional modes of compensation, supporting internal fairness as a criterion for the reward and motivation of employees (Anderson and Reeb, 2003; Carrasco and Sanchez, 2007).

These findings suggest that, in principle, the formalization of HR practices is adapted to the idiosyncrasies of family firms. In non-family firms, the purpose of the formalization of HR practices is to optimize the economic utility function, whereas family firms may seek a balance between economic and non-economic performance in operations (Schulze et al., 2001; Gomez-Mejia et al., 2007). In the case of family firms, this equilibrium is driven by the level of involvement of the family in the business which, other things being equal, is related with the emotional engagement of the employees who try to contribute to the survival and preservation of the family business (Berrone et al., 2010, Gomez-Mejia et al., 2011), provoking a high alignment of interests and an altruism that might subsequently contribute to organizational efficiency. However, in terms of agency, a misunderstood altruism can produce inadequate or informal control of business and HR practices in family firms, implying a potential inability to attract, train and compensate employees, affecting individual and organizational performance.

It is not clear whether the degree of formalization of HR practices in the family firm are more or less oriented toward economic objectives or non-economic objectives (e.g. continuity and preservation of family interests in the company) and how that affects the maintenance and management of efficient human capital that can contribute to firm performance. Furthermore, there are other reasons for having doubts about these relationships. First, the level of involvement of the family in the business may vary significantly depending on the two main dimensions representing family: ownership and management. Indeed, there is a substantial literature that links the behavior of the family firm to the degree of family ownership and/or family managers involved in the business (Westhead and Howorth, 2006; Sciascia and Mazzola, 2008). Second, not all studies have shown the relationship in the same way. For example, Tsao et al. (2009) and Miller et al. (2008) find that family firms implement certain economically efficient HR practices to a greater extent than non-family firms. These authors found that training practices adopted by family firms have greater economic impact and develop more specific skills on the part of employees. And third, with few

exceptions (Reid and Adams, 2001; De Kok et al., 2006), most studies have examined HR practices in family firms in isolation, without developing an integrated view of the firm, in which policies are inter-connected and the outcomes are often contingent and highly contextualized.

Therefore, this work is a response to the need for further research to help increase knowledge regarding the differences and interrelationships between key HR practices in the context of the degree of coincidence of ownership and management interests and potential problems associated with the prevalence of family and/or business objectives. Specifically, from an agency and socioemotional wealth perspective and using a sample of 500 Spanish companies with diverse degrees of family involvement, our aim is to explain whether the effects of the formalization of HR practices – considering the most relevant three relevant practices as selection, training and compensation (Gnan and Sognini, 2013) – on firm performance are influenced by family involvement in the business, both in the ownership and the management aspects.

The paper is structured as follows. First, the theoretical aspects are set out, leading to the formulation of hypotheses. Then the methodology is described, to show how the empirical variables are measured and the statistical analyses performed. Finally the results are presented and discussed.

3.2. Theoretical framework and research hypotheses

3.2.1. Formalization of human resource practices and firm performance

HR management is defined as the process of attracting, developing, and maintaining a workforce that supports and helps advance the mission, the objectives, and the strategies of the organization (Gomez-Mejia et al., 2012). Some scholars have paid attentions to examine the determinants of the adoption of HR

practices (Tannenbaum and Dupuree-Bruno, 1994). With them, it becomes possible to identify, develop, evaluate and reward work behaviors that are consistent with company goals (Martell and Carroll, 1995). That is why the literature has tried to identify the HR practices that promote a firm's output (Summer et al, 1990; Rumelt et al., 1994), such as productivity and efficiency (MacDuffie, 1995; Youndt et al., 1996; Ichniowski et al., 1997), and financial performance (Delery and Doty, 1996; Pfeffer, 1998; Mendelson and Pillai, 1999; Collins and Clark, 2003).

An organization's HR can be viewed either as a collection of multiple, discrete practices with no explicit or discernible link between them or as a more strategic approach that views HR as an integrated and coherent bundle of mutually reinforcing practices (Cruz et al., 2011). One question in HR research is whether or not there is a single set of policies or practices, either separately or in combination with others, associated with improved organizational performance (De Kok et al., 2006), that is, the combination of practices in a bundle, rather than individual practices, shapes the pattern of interactions between and among managers and employees (Wu and Chaturvedi, 2009; Toh et al., 2008; Lepak et al., 2006).

The literature has tried to identify HR practices that promote organizational performance, and must be formalized. The most relevant practices include personnel selection, training and compensation. To the extent that HR practices are formalized and adjusted to the specific characteristics of the company and its agents, the company-employee adjustment will be higher, and thus the risk of agency problems is reduced. Companies require employees with specific knowledge depending on the specific objectives to be achieved and tasks to execute. Therefore, with the formalization of rigorous selection processes that facilitate the selection of the best candidates (Olian and Rynes, 1984, Raghuram and Arvey, 1994), to reduce the adverse consequences of poor selection and ensure that there are ways to adjust the position of the employee (Edwards, 1991; O'Reilly et al., 1991) and/or the organization (Kristof, 1996).

The formalization of training, through the formalization of expected utilities, must lead to employees acquiring the knowledge and skills required by the company (Laursen and Foss, 2003, Mark and Akhtar, 2003). Because there is a large universe of agents, both inside and outside of the training function, whose efforts affect the success and/or failure of the training, evidence indicates that the formalization of training actions and expected results guarantees that training efforts produce improved employee and company performance (Pischke, 2001; Sheridan and Williams, 2011). Formalized training contributes to reduce risk related with expected behaviors and outputs increasing alignment of interest between firm and employees (Azevedo and Akdere, 2011).

In the same way, the formalization of compensation practices, although it does not guarantee the development of knowledge and skills of employees, clearly contribute to reducing agency risks in the business, involving and engaging employees and organization (Wright and Boswell, 2002). Compensation practices help to direct the efforts of employees towards achieving the goals of the organization, which will support organizational performance. Based on these arguments, we expected that the formalization of HR practices will assure a more rigorous and defined knowledge, skills and attitudes of employees that contribute to the alignment of interests and the achievement of the specific firm's objectives and performance (Nishii et al., 2008; Subramony et al., 2008; Jones et al., 2010; Crook et al., 2011).

H1. There is a positive relationship between the formalization of HR practices and firm performance.

3.2.2. The formalization of human resource practices in family firms

Literature provides evidence that studies comparing family and non-family firms find that family firms invest less in implementing formal HR practices (Gnan and

Sognini, 2013). Comparing HR practices, Reid and Adams (2001) revealed that firms without family involvement are more likely to have a personnel or a HR department/manager. Consequently, in family firms, HR managers are generally less involved in the processes of strategy formulation than other managerial department heads (Gnan and Sognini, 2013). According to agency theory, family involvement implies a smaller tension in adopting formal HR practices for aligning agents' behaviors (Kotey and Sheridan, 2004). The few empirical studies that have analyzed several HR practices recognize, in this sense, a different orientation in family and non-family firms. Only Reid and Adams (2001) and De Kok et al. (2006) have undertaken a comprehensive analysis, and they found that in family firms the practices of selection, training, development, evaluation and compensation are applied less formally. Family firms place more emphasis on spontaneous and improvised management, at the cost of the use of specific selection criteria, planning of training or compensation systems designed on merit.

In terms of agency theory (Jensen and Meckling, 1976; Fama and Jensen, 1983), this lack of formality in the HR practices of family firms can be explained by the existence of kinship relationships, which reduces the differences of interest between principal and agent and encourages commitment and selflessness on the part of persons working in the family firm (Schulze et al., 2001, Chua et al., 2009). These kinship relationships in the business will be higher if family members are more involved in the business, either in terms of ownership or management of the company. Altruistic behavior creates a self-reinforcing system of incentives that encourages members of the company – owners, managers, and employees – to be more careful and less partisan, including promoting collective ownership, which strengthens involvement in the business, increases communication and cooperation, and emphasizes a long-term orientation (Zahra, 2003; Eddleston and Kellermanns, 2007). Strong commitment to the business influences the design of HR practices on the basis of simplicity, making it possible to dispense with complex mechanisms of selection, training, appraisal and reward of employees (Gomez-Mejia et al., 2001; Chrisman et al., 2004).

Studies comparing individual HR practices between family and non-family firms are more common and produce similar results. Thus, with regard to selection practices, some studies (Gersick et al., 1997, Aldrich and Langton, 1998) have shown that family firms do not base seelction on clear and strict criteria, instead using friends and relatives to provide personal references. Family firms thus tend to rely more heavily on close social networks during the recruitment process, while applying selection processes only to a small set of candidates – who are usually family – and who share the values and culture of the family company (Dyer and Montersen, 2006). They reject complex processes of recruitment and selection criteria which aim to assess the match between the employee and the specific requirements of the job, processes that are more widely used in non-family firms. Family ties ensure a supply of reliable employees prepared to work for long hours and resolve the problems of trust and delegation (Ram and Holliday, 1993). Thus when family involvement in the firm increases, employees are more committed to the business and have a more long-term orientation (Rosenblatt et al., 1985; Berrone et al., 2010), limiting moral hazard among family members and reducing differences in objectives and information asymmetries (Lubatkin et al., 2007).

Researchers have also examined whether family firms provide more training than non-family firms, and the degree of planning involved in any training. Kotey and Foler (2007) find that family firms, whatever their size, put more emphasis on informal training activities for their employees, and only in the case of non-family firms does training grow in complexity, formalization and development orientation as the size of firms increases. Family firms are distinctive, however, in their use of informal mentoring to promote employee development. In this connection, Fiegener et al. (1996) and Harris and Reid (2008) confirm that CEOs tend to convey their strategic vision of the business to their successor by means of close and informal relationships in conjunction with a long period of mentoring. In the case of non-family firms, these relationships are based on career planning and the aspirations of employees, supported by education and experience relevant to the post and formal and objective promotion decisions. Family firms perceive the

development of the managerial competences of subordinates as a threat for their power (Kotey and Folker, 2007), sometimes ignoring the benefit of training in terms of firm performance. They tend to avoid investment in training managers, emphasizing only technical skills rather than managerial skills (Gnan and Sognini, 2013). They consider that agency problems are minor when family involvement increases, and that training actions are less necessary because family ties ensure a supply of reliable employees and managers.

The family dimension also has an important influence on the design of compensation systems. For example, Carrasco-Hernandez and Sanchez-Marin (2007) show that the pay level of employees of family firms is lower than in non-family firms, while the use of incentives is much more common in non-family firms. Family firms tend to put more emphasis on seniority as a criterion to guide promotions and set pay levels, giving more weight to non-monetary rewards than performance related components of compensation, especially when such incentives involve ownership through share distribution schemes (Anderson and Reeb, 2003; Gomez-Mejia et al., 2001, 2003). Rewarding employees based on their seniority rewards them for their loyalty to the company and the family and not necessarily for specific deeds or achievements that are linked to individual and/or group incentives associated with employee performance (Davis and Harveston, 2001). As with selection and training practices, there is less risk of agency problems because of the family involvement in the firm, and, therefore, there is less need to formalize compensation practices.

Overall, theory and empirical evidence shows that HR practices in family firms are less formalized than those in non-family firms as a consequence of the presence and involvement of the family in the business. In this sense, Gomez-Mejia et al. (2007) associate this approach with the idea of preserving family wealth, on the basis of which they argue that the main priority of a family firm is the attraction, retention, motivation and development of human capital, which is best advanced by applying social and emotional principles that are related to the family. From

this perspective, family firms do not always seek to maximize economic efficiency, if it means jeopardizing the reputation objectives, continuity and family influence in the business (Chua et al., 2009, Miller et al., 2008). These goals result in the search for, development and motivation of employees engaged in and involved with the values of the family that owns the company, contributing to the preservation and improvement of non-economic benefits for the family, while preventing possible risks to the survival of the business (Berrone et al., 2010; Cruz et al., 2011). However, when the management of the company demands it, or when the economic objectives are given greater weight, even the family firm may feel the need to formalize business practices and create an HR department, if one does not exist, or to engage an external HR manager if nobody in the family is qualified to occupy that position. We therefore expect:

H2. There is a positive relationship between the incorporation of external managers and the formalization of HR practices. This formalization: (a) is higher when family ownership decreases, and (b) lower when the presence of family in the management is higher.

3.2.3. Interrelationships between the formalization of HR practices and firm performance in family firms

The logic behind the HR literature is that the formalization of HR practices can contribute to improving the firm's performance where the company ensures that the employee has the knowledge and skills required and has the motivation to apply them appropriately (Nishii et al., 2008, Jones et al., 2010). Recent research has provided empirical evidence that there is a positive and synergistic relationship between the formalization of HR practices and firm performance when employees are able to obtain, develop and apply knowledge and skills consistent with the specific motivation of the company (Subramony et al., 2008; Crook et al., 2011). Here, two parallel lines of research have complementary

arguments concerning the formalization of HR and the potential consequences for firm performance in the light of the possible alignment of individual interests and shared risks.

A first group of researchers argues that the use of formal HR practices is less necessary when family involvement increases in the firm. In the context of family firms, and from the perspective of agency theory (Daily and Dollinger, 1992; Schulze et al., 2001; Chrisman et al., 2004) it is conceivable that employees should "self-align" their interests with those of the company, increasing their participation and involvement in the business, and avoiding the emergence of conflicts that might subsequently cause organizational inefficiencies. Family ties ensure a supply of reliable employees prepared to work for long hours and resolve the problems of trust and delegation (Ram and Holliday, 1993). Close social networks for recruitment and reliance on the existence of kinship in the selection processes in the family firm reduces differences between the interests of principal and agent and encourages the commitment of people in the family firm (Chrisman et al., 2004). The family firm provides employees with a strong involvement in the business and a long-term orientation (Rosenblatt et al., 1985; Berrone et al., 2010), limiting moral hazard among family members and reducing differences in objectives and information asymmetries (Lubatkin et al., 2007). These positive effects also influence other HR practices by simplifying the management of the business and making the introduction of formalized mechanisms for training, monitoring and rewarding employees less necessary (DeAngelo and DeAngelo, 1985; Leung, 2003).

Altruistic behavior is relevant in explaining the positive effects of informal HR practices on performance. Altruistic employees, who are selected for their proximity to the culture and values of the family firm, less educated and informally compensated, can positively affect the relationship between the formalization of HR management practices and firm performance by creating a self-reinforcing system of incentives that encourages members of the company to be more careful

and disinterested in the development and application of their knowledge and skills (Van den Berghe and Carchon, 2003). It also enhances the sense of collective ownership and cooperation, which promotes involvement in the family firm and reduces information asymmetries (Eddleston and Kellermanns, 2007). Irrespective of HR practices, candidates are more likely to increase the alignment of interests, contributing to the preservation and improvement of the non-economic benefits in the family firm (Berrone et al., 2010; Cruz et al., 2011).

In contrast with this view, a second group of researchers has identified an increase in agency conflicts in family firms, deriving from the inclusion of non-economic factors in the utility function that the family attempts to maximize, misunderstood altruism (known as asymmetric altruism) among family members and lack of self-control among the decision makers (Arosa et al., 2010; McConaughy, 2000; Schulze et al., 2001). These potential problems directly affect the design and implementation of HR practices. From this perspective, family firms suffer greater adverse selection (which occurs when the selected candidate is not the best or most appropriate) caused, first, by the mass of potential candidates with less knowledge and skills that the company family tends to attract because they offer worse economic compensation and labor conditions than those offered by non-family firms (Schulze et al., 2003) and, second, by concessions in favor of the compatibility of candidates with the culture and values of the family firm, at the expense of the knowledge and skills of the employee (Jorissen et al., 2005, Chua et al., 2009).

From this perspective it is considered the altruism in the family firm is asymmetric, and is a factor that negatively affects the efficiency of HR practices in terms of firm performance. This misunderstood altruism arises as a result of the tight control family members exert over business issues (Schulze et al., 2003), the potential inability to attract the best employees from outside the family (Gomez-Mejia et al. 2001) and the placement of family members in positions for which they are not adequately trained (Burkart et al., 2003) and compensated (Gnan and Sognini,

2013). The result is lower firm performance in terms of profits levels to the extent that the formalization of HR practices is lower (Bowen and Ostroff, 2004; Azevedo and Akdere, 2011).

The above arguments allow us to state that, although there is some empirical evidence to suggest that altruism in a family firm can reduce conflict and positively influence the impact of HR practices on firm performance (Gomez-Mejia et al., 2001, Chrisman et al., 2004), there are also serious negative consequences (asymmetric altruism) that can affect the efficiency of HR practices (Schulze et al., 2001, 2003, Chua et al., 2009). If we consider that, from the economic point of view, family involvement in the business means that HR practices are conditioned by agency problems, it is expected that, on the one hand, there will be a mediating effect of family involvement on the influence of the formalization of HR management practices on firm performance and, on the other, that even though the formalization of HR management practices may help preserve the socio-emotional wealth of the family (non-economic objectives) in the case of the family firm, the employment of more external managers will have a positive mediating impact on the influence that the formalization of HR practices have on "economic" firm performance. That is to say that, in addition to the direct effect that the formalization of HR practices has on the performance of the firm, there is also an indirect effect produced by the engagement of external manager in the company. Those arguments lead us to formulate the following hypothesis:

H3. There is a positive mediating effect of employing external managers on the influence that the formalization of HR management practices has on firm performance. This influence is: (a) higher when family ownership decreases, and (b) higher when the presence of family in the management is lower.

3.3. Methodology and Research Design

3.3.1. Sample and data collection

To test the hypotheses empirically, data were collected on Spanish family and non-family companies. The initial population, selected from the database OSIRIS (Van Dyck Bureau of Electronic Publishing), consists of a total of 5,113 family and non-family firms operating in manufacturing sectors[2] and with between 25 and 249 employees. A stratified sample was designed considering size and family nature. We conducted a telephone survey of this population during the first quarter of 2011, obtaining information for 500 companies, representing a response rate of 9.78% which is similar to other studies of this type and a sample error of 4.74% (95.5% confidence level p=q=0.5). In the final sample, 200 companies fall into the category of small (25 to 49 employees) and 300 into the category of medium-sized (50 to 249 employees). The smaller companies were then excluded, because of their lack of formalization and for not having a clearly defined set of HR practices. Similarly, large companies were ruled out, because large differences in resources compared with small and medium enterprises could distort the analysis of HR practices. Finally, it should be noted that the survey was conducted with the HR

[2] Firms in our sample belong to 15 industries, identified from the divisions of the NACE Rev. 2 classification (NACE Rev. 2, 2008): (a) Manufacture of food products, beverages and tobacco products (Divisions 10 to 12), (b) Manufacture of textiles, apparel, leather and related products (Divisions 13 to 15), (c) Manufacture of wood and paper products, and printing (Divisions 16 to 18), (d) Manufacture of coke, and refined petroleum products (Division 19), (e) Manufacture of chemicals and chemical products (Division 20), (f) Manufacture of pharmaceuticals, medicinal chemical and botanical products (Division 21), (g) Manufacture of rubber and plastics products, and other non-metallic mineral products (Divisions 22 + 23), (h) Manufacture of basic metals and fabricated metal products, except machinery and equipment (Divisions 24 + 25), (i) Manufacture of computer, electronic and optical products (Division 26), (j) Manufacture of electrical equipment (Division 27), (k) Manufacture of machinery and equipment n.e.c. (Division 28), (l) Manufacture of transport equipment (Divisions 29 + 30), (m) Other manufacturing, and repair and installation of machinery and equipment (Divisions 31 to 33), (n) Electricity, gas, steam and air-conditioning supply (Division 35), (o) Water supply, sewerage, waste management and remediation (Divisions 36 to 39).

director or, in his or her absence, the CEO of the company, because their position guarantees a thorough knowledge of personnel policies, which this study addresses.

Although the sample selection was totally random, a non-response test was made to check for bias. Following the reasoning of Armstrong and Overton (1977), the last to reply are more similar to those who do not reply than the first to reply. No significant differences were found in the study variables between the first and last responders, suggesting that response bias is not a problem (Kanuk and Berenson, 1975; Oppenheim, 1992).

Common method variance is a potentially serious bias threat in behavioral research. To avoid this in the study we used data from two sources, the OSIRIS database, and from the survey. Furthermore, as suggested by Podsakoff et al. (2003) some researchers have used confirmatory factor analysis (CFA) as a more sophisticated test. A worse fit for the one-factor model would suggest that common method variance does not pose a serious threat. The one factor model yielded a $\chi 2$ =1480.94 with 54 degrees of freedom (NFI=0,538; NNFI=0,444; CFI=0.545; RMSEA=0.230). The fit is not good [3] and considerably worse for the unidimensional model than for the measurement model, suggesting that common method bias is not a serious threat in the study.

3.3.2. Measures and psychometric properties of the scales

Formalization of HR practices. A scale was created consisting of nine items – derived from a combination of the scales proposed by Chen and Huang (2009) and Thang and Quang (2005) – which measure three important HR practices: selection (three items), training (three items) and compensation (three items). For each of

[3] The NFI, NNFI and CFI statistics should be higher than 0.9 and RMSEA should be less than 0.08, as recommended in the literature (Hoyle and Panter, 1995).

the defined items, a five-point Likert scale was used to measure the orientation of the company on each of the practices, on a spectrum that ranges from “criteria linked to the needs of the family” (value 1) to “more formalized and linked to business criteria” (value 5) (Carlson et al., 2006). Table 3.1 shows the specific formulation of each of the items making up the scale.

Firm performance. Quantitative indicators of performance are widely used in the business literature because of the growing availability of information about enterprises. To assess firm performance, indicators have been used that include return on assets (ROA), return on equity (ROE) and return on sales (ROS), measured for each of the returns as the average value for the last six years (2007 to 2012) using information from the OSIRIS database for those years. ROA, ROE and ROS are well understood and common measures used in several studies on the effects of HR practices on firm performance (e.g. Alessandri et al., 2012; Zattoni et al., 2012). We have chosen a period range of 6 years to have a consistent measure of firm performance in order to reduce the effects of the economic cycle, as well as to check if the family nature of the firm affects the performance of the company.

Family involvement. The involvement of the family in the company is measured on two levels; first, through the proportion of firm’s ownership in the hands of the family and, second, considering only firms self-classifying as family ones, through the proportion of family executives in the management of the company. The criterion for considering a company as family firm was self-classification, based on whether the family owns enough to control the company, as several previous studies have done (Westhead and Cowling, 1998; Sonfield and Lussier, 2004). We found that 56.4% of the companies are family firms (N=282) while 43.6% are non-family ones (N=218). The level of family involvement in management relates exclusively to those firms that self-classify as family-owned firms, taking into account that it is family management rather than ownership which usually determines the involvement of family in the firm (Astrachan et al., 2002, Westhead and Howorth, 2006; Sciascia and Mazzola, 2008).

Control variables. To capture other forces that are related to both the adoption of HR practices and firm performance, we have included three control variables: firm size, firm age and the technological intensity of the industry in which the firm operates. Firm size. Most of the literature in the management field recognizes the size of the firm as one of the most important variables that determines the decisions in family firms (Casillas et al., 2010, 2013; Miller et al., 2000; Wasserman, 2006), including those related to HR management (Leon-Guerrero et al., 1998, Reid et al., 2000). It has been measured as the natural logarithm of the average number of employees during the year 2011 (extracted from the OSIRIS database). Firm age also has been used in several studies linking HR practices and firm performance (Delaney and Huselid, 1996) and in several family firms studies (Casillas et al., 2010, 2013). It has been measured as the years since the founding of the firm (information collected from the questionnaire). Industry technological intensity is an important indicator that allows comparison between manufacturing firms and some studies have shown its influence on both HR decisions and firm performance (Lepak et al., 2003). It has been measured using the classification proposed by the OECD Directorate for Science, Technology and Industry (ISIC REV. 3 Technology Intensity Definition, 2011), which classifies firms from low-technology industries to high-technology industries (extracted from OSIRIS database).

To test the psychometric properties of the scales used, we conducted a confirmatory factor analysis (CFA) using EQS v.6.3 (Table 3.1). The indicators are within the parameters recommended by the literature (Podsakoff et al, 2003; Hoyle and Panter, 1995; Anderson and Gerbing, 1988; Fornell and Larcker, 1981), so the statistical model fits are satisfactory ($\chi 2(48)$=146,958, NFI=0,954, NNFI=0,957, CFI = 0.968, RMSEA=0.064). The NFI, NNFI and CFI statistics are higher than 0.9 and RMSEA is less than 0.08, as recommended in the literature (Hoyle and Panter, 1995).

Table 3.1. Confirmatory factor analysis of the measurement scales

Items	Factor loadings	ρ_c	A.V.E
Firm performance		0.877	0.728
Return on assets (ROA)	0.986		
Return on equity (ROE)	0.701		
Return on sales (ROS)	0.848		
Selection		0.815	0.595
The rigorous selection process	0.781		
The selection of employees based on skills required for the position	0.787		
The selection of potential employees as the business development	0.746		
Training		0.890	0.731
The existence of a comprehensive training policy	0.813		
The availability of training for employees	0.926		
The easy access of the new recruits to training activities	0.821		
Compensation		0.771	0.529
The close relationship between employee performance and compensation received	0.717		
The individual incentive pay -bonus(es)-	0.726		
The group incentive pay (profit sharing)	0.687		

The composite reliability was calculated according to Bagozzi and Yi (1988), and all constructs have a composite reliability over the cutoff of 0.70, as suggested by Straub (1989). All factor loadings were significant, which demonstrates the convergent validity of our data (Bagozzi and Yi, 1988). To assess the convergent validity we used the average variance extracted (AVE). All constructs have an AVE above the value of 0.5 recommended by Fornell and Larcker (1981). To assess the discriminant validity (Barclay et al., 1995), it is recommended to use the average variance extracted (AVE) (Fornell and Larcker, 1981). To this end we compare the square root of AVE (diagonal of Table 3.2) with the correlations between

constructs (off-diagonal elements of Table 3.2). As can be seen, the square root of the AVE for all constructs is greater than the correlation between them, suggesting that each construct relates more strongly with its own measures than with others. The correlation analysis revealed a strong association between selection, training and compensation, while there was a weaker relationship with the firm performance.

Table 3.2. Descriptive analysis, discriminant validity of the measurement scales

	Means	**Standard deviation**	**1**	**2**	**3**	**4**
1. Firm performance	6.80	20.29	0.85			
2. Selection	9.22	1.96	0.13***	0.77		
3. Training	9.77	2.62	0.19***	0.56**	0.86	
4. Compensation	6.52	2.22	0.13***	0.43**	0.48**	0.73

* p<0.1; **p<0.05; ***p<0.01

Table 3.3 shows the estimation of the second-order construct formalization of HR practices. The paths from the second-order construct to the three first-order factors are significant and of high magnitude, greater than the suggested cutoff of 0.7. We estimated this model using EQS 6.3. The results suggested a good fit of the second-order specification for our measure of formalization of HR practices ($\chi 2$ (23) = 80,41, NFI=0,953, NNFI=0,946 and CFI = 0.966, RMSEA = 0.071). The NFI, NNFI and CFI statistics are higher than 0.9 and RMSEA is less than 0.08, as recommended in the literature (Hoyle and Panter, 1995). Marsh and Hocevar (1985) suggest that the efficacy of the second-order model be assessed by the target coefficient (T ratio) with an upper bound of 1. Our model has a very high T ratio of 0.97, indicating that the higher order factor accounts for a very large portion of the covariation among the first-order factors implying that the relationship among first-order constructs is sufficiently captured by the second-order construct (Steward and Segars 2002).

Table 3.3. Second-order of the construct formalization of HR practices

Items	Factor loadings	Composite reliability
Selection	0.776	0.811
Training	0.815	
Compensation	0.709	

3.4. Results

3.4.1. Descriptive results

Table 3.4 shows the means, standard deviations and correlations between variables of the estimated structural equation model (see Figures 3.1 and 3.2). Significant correlations between the main variables are observed.

In order to analyze the relationship between variables, an analysis of variance was performed, the results of which are shown in Table 3.5. There are no differences in the variable measuring firm performance in relation to either the family ownership or family management. Non-family firms are larger, on average, in terms of number of employees. Also, family firms that employ external managers (those with 50% or more of non-family managers) are, on average, larger than family owned-managed firms (those with 50% or more of family managers). Regarding HR practices, the only significant differences are found in relation to compensation practices where family firms score higher. Concerning differences between types of family firms, those with external management score significantly lower than family managed firms on the three HR practices. Therefore, the data show that the largest differences occur between family firms based on the level of family involvement in management.

Table 3.4. Means, standard deviations and correlations

	Mean	Standard deviation	N	1	2	3	4	5	6
1. Size	4.14	0.71	500	1					
2. Age	28.10	15.54	500	-0.10*	1				
3. Industry technological intensity	1.77	0.79	500	0.01	-0.07	1			
4. Firm Performance	6.80	20.29	500	0.11***	-0.08	0.13***	1		
5. Formalization of HR practices	19.74	4.27	500	0.14***	-0.07	0.06	0.19***	1	
6. Family Ownership (FO)	55.01	44.86	500	-0.22***	0.01	0.02	0.04	0.03	1
7. Family Management (FM)	49.21	40.08	282	-0.25***	0.06	0.03	-0.16***	-0.17***	0.30***

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

Table 3.5. ANOVA. Results for family firms and non-family firms, family owned-managed firms and family owned with external managers

	Family firm			Family managed firm		
	No (N=218)	Yes (N=282)	F	External managers (N=137)	Family managers (N=145)	F
1.Firm Size	93.00	72.00	12.18***	85.00	59.00	10.60***
2. Firm Age	28.00	28.00	0.08	27.00	29.00	2.27
3. Selection	9.21	9.24	0.03	9.46	8.92	5.28**
4. Training	9.73	9.80	0.09	10.04	9.36	4.42**
5. Compensation	6.23	6.74	6.58**	6.98	6.36	5.44**
6. Formalization of HR practices	19.49	19.93	1.32	20.47	19.06	7.18***
7. Firm performance	6.14	7.31	0.41	11.32	4.42	7.64***
8. Industry technological intensity	1.77	1.76	0.01	1.79	1.76	0.16

* p<0.1; **p<0.05; ***p<0.01

3.4.2. Structural models results

Four structural equation models have been estimated. Model 1 includes the effect of the formalization of HR practices on firm performance. Model 2 adds the mediating effect of family firm on this relationship. Models 1 and 2 are estimated for all companies in the survey considering family ownership whereas Model 3 and Model 4 are estimated only for family-owned firms. Model 3 measures the effects of the formalization of HR practices on firm performance and Model 4 adds the mediating effect of family management on this relationship. The proposed structural equation models, estimated as recommended by Byrne (2006), show adjustment measures within the parameters recommended by the literature, reaching an adequate goodness of fit (see Table 3.6, Figure 3.1 and Figure 3.2). In view of the parameters, Hypothesis 1 has been confirmed; formalization of HR practices have a positive and significant influence on firm performance (Model 1: λ=0.16, $P<0.01$; Model 2: λ=0.15, $P < 0.01$; Model 3: λ=0.19, $P < 0.01$; Model 4: λ=0.15, $P<0.01$), indicating that HR practices contribute to improving the economic performance of a company if the employee has the knowledge and skills required and has the motivation to apply them appropriately (Nishii et al., 2008, Jones et al., 2010).

Hypothesis 2a is not supported since the path coefficient from formalization of HR practices to family ownership is not significant (Model 2: λ=0.03, $P>0.1$). HR practices are not found to be less formalized in family firms when ownership is the measure involvement of the family. However, Hypothesis 2b is supported since the path coefficient from formalization of HR practices to family management is negative and significant (Model 4: λ=-0.25, $P<0.01$), which means that family involvement is more powerful and differentiates between family firms when we consider the extent of the presence of the family in the management of the company.

Table 3.6. Results of the SEM models

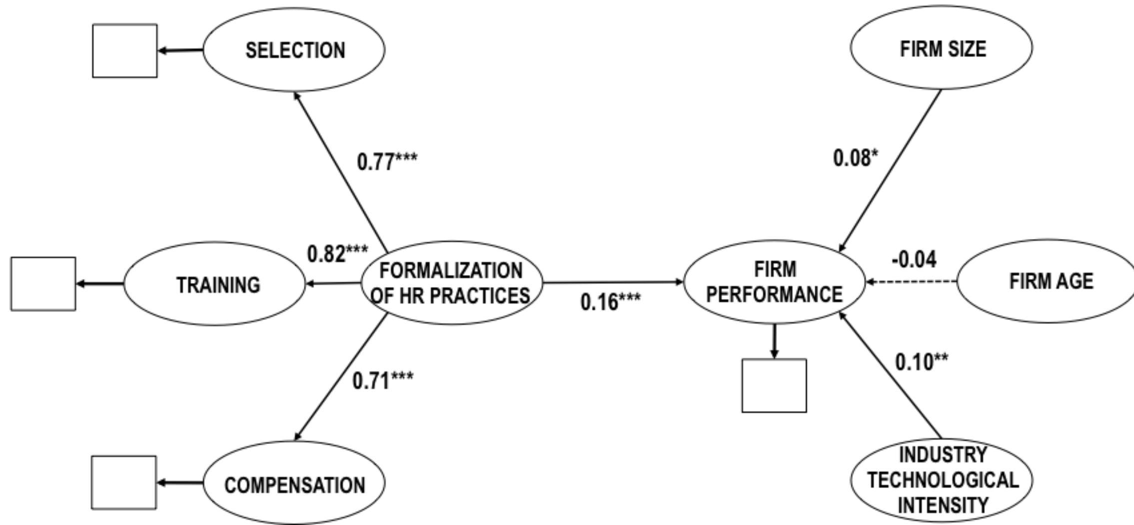
	Structural Model Estimates	Standardized Estimated	t	Significance
Family ownership models				
Model 1				
H_1	Path between Formalization of HR Practices and Firm performance	0.16	3.51	***
Model 2				
H_1	Path between Formalization of HR Practices and Firm performance	0.15	446.72	***
H_{2A}	Path between Formalization of HR Practices and Family Ownership	0.03	0.48	n.s.
	Path between Family Ownership and Firm performance	0.07	1.52	n.s.
Family management models				
Model 3				
H_1	Path between Formalization of HR Practices and Firm performance	0.19	2.52	***
Model 4				
H_1	Path between Formalization of HR Practices and Firm performance	0.15	2.07	**
H_{2B}	Path between Formalization of HR Practices and Family Management	-0.25	3.86	***
	Path between Family Management and Firm performance	-0.14	2.18	**

* $p<0.1$; **$p<0.05$; ***$p<0.01$

Note: Model 1: $\chi2$ (79)=161.18 (p=0.000), NFI=0.95, NNFI=0.96, CFI=0.97, RMSEA=0.05; Model 2: $\chi2$ (92)=202.58 (p=0.000), NFI=0.93, NNFI=0.95, CFI=0.96, RMSEA=0.05; Model 3: $\chi2$ (79)=123.28 (p=0.000), NFI=0.93, NNFI=0.97, CFI=0.97, RMSEA=0.05; Model 4: $\chi2$ (92)=138.89 (p=0.000), NFI=0.93, NNFI=0.97, CFI=0.97, RMSEA=0,05

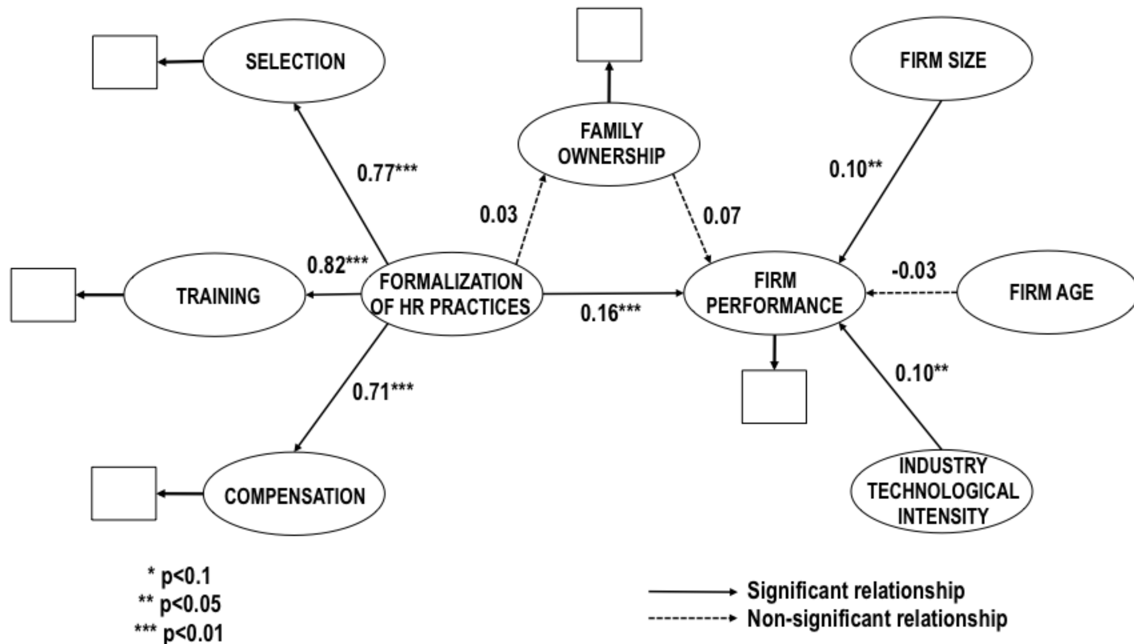
Figure 3.1. Family ownership, HR practices formalization and firm performance relationships

Model 1



Note: χ2 (79)=161.18 (p=0.000). NFI=0.95. NNFI=0.96. CFI=0.97. RMSEA=0.05

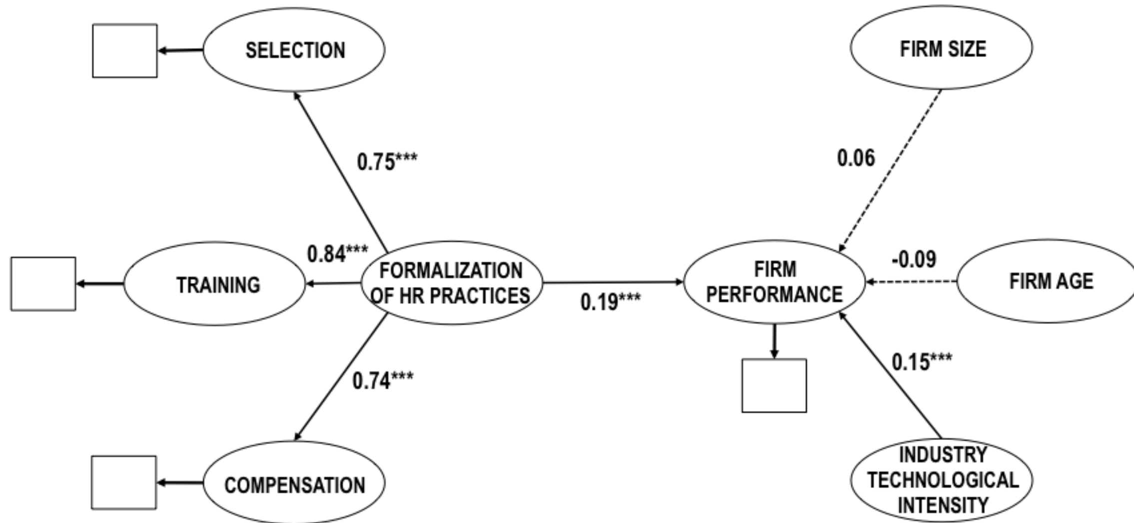
Model 2



Note: χ2 (92)=202.58 (p=0.000). NFI=0.93. NNFI=0.95. CFI=0.96. RMSEA=0.05

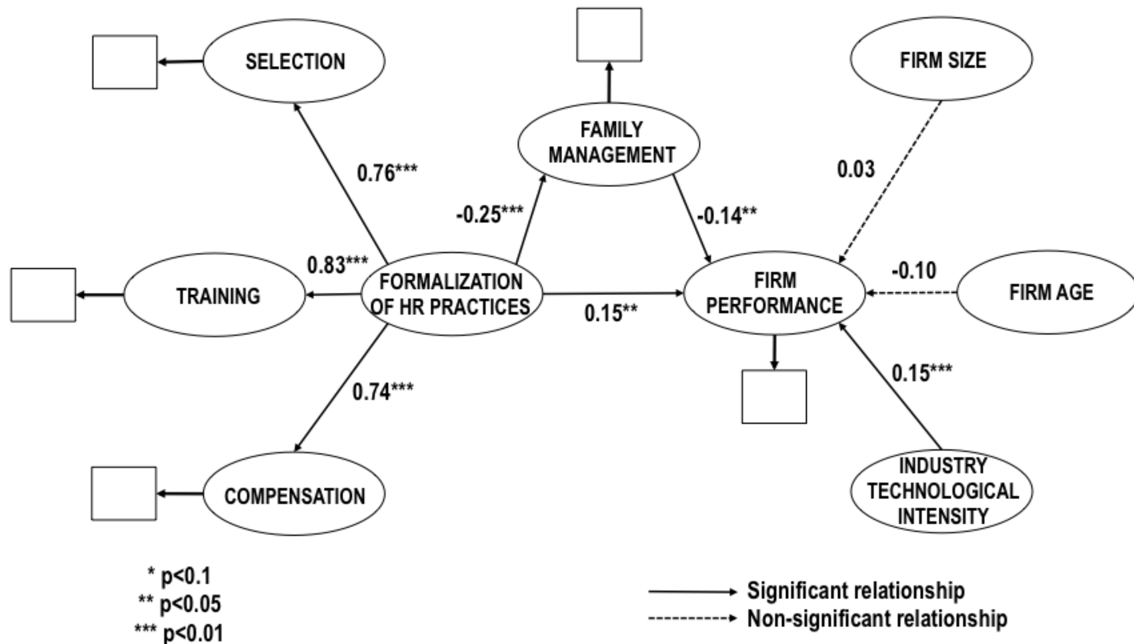
Figure 3.2. Family ownership, HR practices formalization and firm performance relationships

Model 3



Note: χ2 (79)=161.18 (p=0.000). NFI=0.95. NNFI=0.96. CFI=0.97. RMSEA=0.05

Model 4



Note: χ2 (92)=206.94 (p=0.000). NFI=0.93. NNFI=0.95. CFI=0.96. RMSEA=0.05

3.4.3. Test for mediating effect

Four conditions are necessary for the presence of a mediation effect (Baron and Kenny, 1986). First, the independent and dependent variable(s) must be correlated. Second, the independent and mediator variable(s) must be correlated. Third, the mediator and dependent variable(s) must be correlated. Fourth, the effect of the independent variables on the outcome variable must change when controlling for the mediating variables. As seen in Figure 3.1, these conditions are not met because, although the independent variable (formalization of HR practices) and dependent variable (firm performance) are correlated (Model 1: $\lambda=0.16$, $P<0.01$; Model 2: $\lambda=0.16$, $P < 0.01$), the independent and mediator variable (family ownership) are not correlated (Model 2: $\lambda=0.03$, $P>0.1$), and neither are the mediator (family ownership) and dependent variables (Model 2: $\lambda=0.07$, $P>0.1$).

In Figure 3.2, these conditions are satisfied, as the independent variable (formalization of HR practices) and dependent variable (firm performance) are correlated (Model 3: $\lambda=0.19$, $P < 0.01$; Model 4: $\lambda=0.15$, $P<0.01$), the independent and mediator variable (family management) are correlated (Model 4: $\lambda=-0.25$, $P<0.01$), the mediator (family management) and dependent variables are correlated (Model 4: $\lambda=-0.14$, $P<0.05$), and the effect of the independent variables on the dependent variable changes when controlling for the mediating variables from Model 3 ($\lambda=0.19$, $P<0.01$) to Model 4 ($\lambda=0.15$, $P<0.01$).

To further probe the nature of the mediation, we used the Sobel test (Sobel, 1982; Baron and Kenny, 1986; Preacher and Kelley, 2011). As there is a significant indirect effect if the Sobel test z-value is significant (<1.96), and the effect ratio is greater than 0.8, the mediation relationship is full (Zattoni et al., 2012). Thus, we can confirm the negative mediation of family management in the HR practices and firm performance relationships and, therefore, considering all these results, Hypothesis 3a is not supporting while Hypothesis 3b is supporting.

3.5. Discussion and Conclusions

HR practices in family firms are idiosyncratic, taking different directions depending on the complexity of the relationships between owners, managers and employees of the organization in the context of the family. The preferences of the owning family in relation to the economic interests of the business or the welfare of the family can determine the efficiency of the structures of HR management (Miller et al., 2008; Cruz et al., 2011). The few empirical studies that analyze HR practices more comprehensively recognize these aspects (Reid and Adams, 2001, De Kok et al., 2006), indicating clear differences of formalization of selection, training, development, evaluation and pay practices in family and non-family firms. Generally, family firms opt for more spontaneous and informal and improvised criteria in the design and implementation of HR practices, while non-family firms are guided by more formal and planned practices in the management of their employees.

Research in this line, however, has been scarce, fragmented and inconclusive, with various studies providing contradictory results due to the diversity of theoretical frameworks, and various definitions of family business, levels of HR practices and firm outcomes (Cruz et al., 2011, Gomez-Mejia et al., 2011). Therefore, the present study was designed to help clarify the differences in the orientation of HR practices in family firms, examining the differences both in terms of ownership – mainly the differentiation between family firm vs. non-family firms – and management – mainly the comparison between externally family managed firms and family owned-managed firms – while considering the interactive effects between HR practices and their impact on firm performance. Using the theoretical framework provided by agency theory and socioemotional wealth (Chrisman et al., 2004; Gomez-Mejia et al., 2007; Chua et al., 2009), which provides an adequate analysis of economic and social factors that determine the degree of formalization and efficiency of HR practices, the study examined a large sample of 500 Spanish

industrial companies, making comparisons of different levels of family ownership and/or management.

After running several structural equation models, a number of interesting and relevant conclusions were reached. First, and contrary to expectations, no differences were found between the formalization of HR practices in terms of ownership. Instead, it was found that the formalization of HR practices is significantly different between family firms where family involvement is assessed in terms of family involvement in the management. Family owned-managed firms adopt HR practices that are less formalized and linked to family needs than family firms that employ external managers, which are characterized by a higher level of formalization and application of business principles in HR management. In the family owned-managed firm, practices are chosen based on selection criteria similar to the culture and values of the family (Dyer and Montersen, 2006), more casual and specific training is employed, based on spontaneous relations (Kotey and Foler, 2007), and compensation is fixed to reward seniority rather than performance as a reward for loyalty (Davis and Harverston, 2001).

These results are consistent with recent research indicating no significant differences in the behavior of family firms compared with non-family firms in terms of ownership (Van Essen et al., 2011; Sacristan-Navarro et al., 2011). Where nuances of management do appear is in relation to the management dimension, some authors have suggested that family firms should be defined in terms of their management structure (Westhead and Cowling, 1998; Sonfield and Lussier, 2004). That is why businesses that are family owned and managed, as opposed to those with external management, when seeking practices to optimize efficiency or economic performance, seek to attract, retain and develop those workers who are engaged and involved with the values and culture of the family firm. In terms of agency, this lack of formalization of HR is explained by the high alignment of principal-agent interests and the altruism of people linked to the family business (Schulze et al., 2001, Chua et al., 2009). In the combination of family and business

there is already a strong involvement in the business, rendering unnecessary additional control mechanisms and HR development (Gomez-Mejia et al., 2001; Chrisman et al., 2004), which explains the low level of formalization of practices.

Our results also demonstrate the relationships between HR practices and their synergistic effects (Subramony et al., 2008; Crook et al., 2011) in a formalized system of HR practices, and confirm the more or less positive relationship in terms of firm performance, depending on the degree of formalization of HR practices. In the present case, differences were found in terms of both ownership and management structure, so that the effect of HR practices on firm performance is much less in family firms compared with non-family firms, and also in family owned-managed firms compared with externally family managed firms. In that way, a negative mediating effect of the family involvement in management on the influence of the formalization of HR management practices have on firm performance has been found. This evidence further supports the theoretical arguments, from which it is deduced that HR practices are critical to achieving proper alignment of interests among members of the family firm, increasing their identification and involvement in the business, while avoiding conflicts and imbalances that cause organizational inefficiencies (Schulze, 2001; Chua et al., 2009). While this approach may have positive effects for the family firm in non-economic terms, such as reputation and continuity, these do not outweigh, at least as found in the sample for this study, the negative effects introduced by altruism, adverse selection, and the negative influence on the other training and compensation practices (McConaughy, 2000; Jorissen et al., 2005). This negative effect is stronger in family owned-managed firms, which are more likely to use looser selection practices based on family values, which may incur adverse effects in firm performance, both directly, and indirectly through training and compensation practices (Burkart et al., 2003; Azevedo and Akdere, 2011).

In short, this study finds that family involvement in the business, and the consequent introduction of non-economic objectives, has a clear effect in

differentiating HR management of the family firm with respect to any other organization. Schulze et al. (2001) note that family relationships and business create common bonds and mutual expectations grounded in psychological aspects other than contractual, based on emotions, feelings and values (trust, altruism and loyalty) that permeate the operation of HR management. In this sense, our study confirms that the influence of family in orientation and efficiency of HR practices stems from the management rather than ownership, as some studies suggest. It is family involvement in management and not the ownership structure that best explains the results orientation of the firm (Westhead and Howorth, 2006; Sciascia and Mazzola, 2008). Furthermore, it was found that, in the tension between economic and non-economic objectives in the family firm, HR practices that are more formal and business criteria that are more rigidly applied will increase performance and therefore economic efficiency, producing results for the company. This guidance is followed mostly by family firms that employ external managers, but in family owned-managed firms there is more emphasis on objectives related to family wealth and outcomes that go beyond the merely economic.

Finally, this study has some limitations, of which we are aware and which, in turn, may provide fruitful lines for future research. First, it would be desirable to include the explicit measurement of socio-emotional aspects representing family values in this discussion, analyzing their effect on HR practices and overall performance, in economic and non-economic terms, of the family firm. Various studies have suggested such an approach, based on the recent theoretical framework of socio-emotional wealth preservation in the company (Gomez-Mejia et al., 2007; Berrone et al., 2010; Cruz et al., 2011). Second, the firm performance measures used are based solely on financial performance. This information would be more complete if it was combined with other non-economic outcomes, such as reputation, representing the non-economic objectives of the family firm. Finally, the present study used a classic and simple measure to identify family firms, which, although accepted and used in the literature, could be enriched by including, not only ownership and management, but also aspects of culture and family values, as

exemplified in the F-PEC scale (Astrachan et al. 2002), which would make it possible to have a more global perspective on the relationship between family and business at the level of HR management.

3.6. References

Aldrich, H., & Langton, N. (1998). *Human resource management practices and organizational life cycles. Frontier of entrepreneurship research*. Babson Park, MA: Babson College Center for Entrepreneurial Studies.

Alessandri, T., Tong, T.W., Reuer, J. (2012). Firm heterogeneity in growth option value: the role of managerial incentives. *Strategic Management Journal*, 33, 1557-1566.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411-423.

Anderson, R.C., & Reeb, D.M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *Journal of Finance*, 58, 1301–1328.

Arosa, B., Iturralde, T., & Maseda, A. (2010). Ownership structure and firm performance in non-listed firms: Evidence from Spain. *Journal of Family Business Strategy*, *1*(2), 88-96.

Armstrong, J.S., & Overton, T.S. (1977). Estimating Nonresponse Bias in Mail Survey. *Journal of Marketing Research*, 14, 396-402.

Astrachan, J., & Kolenko, T. (1994). A neglected factor explaining family business success: human resource practices. *Family Business Review*, 7, 251-262.

Astrachan, J.; Klein, S.; Smyrnios, K. (2002) The F-PEC Scale of Family Influence: A

proposal for solving the business definition problem. *Family Business Review*, vol. 15, 45-58.

Azevedo, R.E., & Akdere, M. (2011). Examining agency theory in training & development: Understanding self-interest behaviors in the organization. *Human Resource Development Review*, 10, 399-416.

Bagozzi, R.P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16, 74-94.

Barclay, D., Higgins, C., & Thompson R. (1995). The partial least squares (PLS) approach to causal modelling: Personal computer adoption and use as an illustration. *Technology Studies*, 2, 285-309.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51: 1173-1182.

Berrone, P., Cruz, C., Gomez-Mejia, L.R., & Larraza, M. (2010). Socio-emotional wealth and corporate responses to institutional pressures: Do family controlled firms pollute less? *Administrative Science Quarterly*, 55, 82–113.

Bowen, D.E., & Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of "strength" of the HRM system. *Academy of Management Review*, 29, 203–221.

Burkart, M., Panunzi, F., & Shleifer, A. (2003). Family-owned firms. *Journal of Finance*, 58, 2167–2201.

Carlson, D.S., Kacmar, M.K., Wayne, J.H., & Grzywacz, J.G. (2006). Measuring the positive side of the work-family interface: development and validation of a work-family enrichment scale. *Journal of Vocational Behavior*, 68, pp. 131-164.

Carrasco-Hernandez, A.J., & Sanchez-Marin, G. (2007). The determinants of employee compensation in family firms: empirical evidence. *Family Business Review*, 20, 215-228.

Casillas, J. C., Barbero Navarro, J. L., & Moreno Menéndez, A. M. (2013). Reestructuración y tipo de propiedad en empresas en crisis. Diferencias entre empresas familiar y no familiares. *Revista de Empresa Familiar*, *3*(1), 7-20.

Casillas, J. C., Moreno, A. M., & Barbero, J. L. (2010). A configurational approach of the relationship between entrepreneurial orientation and growth of family firms. *Family Business Review*, *23*(1), 27-44.

Chen, C.J., & Huang, J.W. (2009). Strategic human resource practices and innovation performance: The mediating role of knowledge management capacity. *Journal of Business Research*, 62, 104-114.

Chrisman, J.J., Chua, J.H., & Litz, R. (2004). Comparing the agency costs of family and nonfamily-owned firms: Conceptual issues and exploratory evidence. *Entrepreneurship Theory and Practice*, 28, 335–354.

Chrisman, J.J., Chua, J.H., & Sharma, P. (2005). Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship Theory and Practice*, 29, 555–575.

Chua, J.H., Chrisman, J.J., & Bergiel, E.B. (2009). An agency theoretic analysis of the professionalized family-owned firm. *Entrepreneurship Theory and Practice*, 33, 355–372.

Collins CJ, Clark KD. Strategic human resource practices, top management team social networks, and firm performance: the role of human resource in creating organizational competitive advantage. *Academy of Management Journal*, 46(6): 740–751.

Crook, T.R., Todd, S.Y., Combs, J.G., Woehr, D.J., & Ketchen, D.J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96, 443-456.

Cruz, C., Firfiray, S., & Gomez-Mejia, L.R. (2011). Socioemotional wealth and human resource management (HRM) in family-controlled firms. En Joshi, A., Liao, H., & Martocchio, J.J. (Eds.): *Research in Personnel and Human Resources Management*, 30, pp. 159-217. Emerald Group Publishing, Bingley.

Daily, C.M., & Dollinger, M.J. (1992). An empirical examination of ownership structure in family and professionally managed firms. *Family Business Review*, 5, 117–136.

Davis, P.S., & Harveston, P.D. (2001). The phenomenon of substantive conflict in the family firm: A cross-generational study. *Journal of Small Business Management*, 39, 14-30.

De Kok, J., Uhlaner, L., & Thurik, A. (2006). Professional HRM practices in family owned-managed enterprises. *Journal of Small Business Management*, 44, 441-460.

DeAngelo, H., & DeAngelo, L. (1985). Managerial ownership of voting rights: A study of public corporations with dual classes of common stock. *Journal of Financial Economics*, 14, 33–69.

Delaney, J. T., & Huselid, M.A. 1996. The impact of human resource management practices on performance in for-profit and nonprofit organizations. *Academy of Management Journal*, 39, 949-969.

Delery JE, Doty DH. (1996). Modes of theorizing in strategic human resource management: tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39(4):802–835.

Dyer, W.G., Jr., & Mortensen, S.P. (2006). Entrepreneurship and family business in a hostile environment: The case of Lithuania. *Family Business Review*, 18, 247–

258.

Eddleston, K.A., & Kellermanns, F.W. (2007). Destructive and productive family relationships: A stewardship theory perspective. *Journal of Business Venturing*, 22, 545–565.

Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In: C. L. R. I. T. Cooper (Ed.), *International review of industrial and organizational psychology*, 6, 283–357.

Fama, E., & Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26, 301–325.

Fiegener, M.K., Brown, B.M., Prince, R.A., & File, K.M. (1996). Passing on strategic vision. *Journal of Small Business Management*, 34, 15–26.

Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-50.

Gersick, K.E., Davis, J.A., Hampton, M., & Lansberg, I. (1997). *Generation to generation: life cycles of the family business*. Harvard Business School Press, Boston.

Gnan, L., & Sognini, L. (2013). An overview of the field HRM practices in family small and medium-sized enterprises: the formality and informality dimensions. Paper presented at the International Family Enterprise Research Academy (IFERA) conference, St. Gallen, Switzerland.

Gomez-Mejia, L. R., Balkin, D. B., & Cardy, R. L. (2012). *Managing human resources*. New York: Pearson-Prentice Hall.

Gomez-Mejia, L.R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals*, 5, 653-707.

Gomez-Mejia, L.R., Haynes, K., Nuñez-Nickel, M., Jacobson, K.J.L., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52, 106-137.

Gomez-Mejia, L.R., Larraza-Kintana, M., & Makri, M. (2003). The determinants of executive compensation in family-controlled public corporations. *Academy of Management Journal*, 46, 226-237.

Gomez-Mejia, L.R., Nuñez-Nickel, M., & Gutierrez, I. (2001). The role of family ties in agency contracts. *Academy of Management Journal*, 44, 81-95.

Harris, R., & Reid, R. (2008): Barriers to growth in family-owned smaller businesses. En Barret, R., & Mayson, S. (Eds.): *International handbook of HRM entrepreneurship*, pp. 260-284. Dewuard Elgar, Cheltenham.

Hoyle, R.H., & Panter, A.T. (1995). Writing about Structural Equation Modeling, in *Structural Equation Modeling*, Concepts, Issues and Applications, ed. R.H. Hoyle, Thousand Oaks, CA: Sage, pp. 158–171.

Ichniowski C, Shaw K, Prennushi G. (1997). The effects of human resource management practices on productivity: a study of steel finishing lines. *American Economy Review*, 87(3): 291–313.

ISIC Rev. 3 Technology Intensity Definition -OECD, online document- (2011). Directorate for Science, Technology and Industry. Economic Analysis and Statistics Division. [date accessed: December 15, 2013]. Available from Internet: <www.oecd.org/dataoecd/43/41/48350231.pdf>.

Jensen, M.C., & Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360.

Jones, D.C., Kalmi, P., & Kauhanen, A. (2010). How does employee involvement stack up? The effects of human resource management policies on performance in a retail firm. *Industrial Relations*, 49, 1, 1–21.

Jorissen, A., Laveren, E., Martens, R., & Reheul, A. (2005). Real versus sample-based differences in comparative family business research. *Family Business Review*, 18, 229–246.

Kanuk, L., Berenson, C. (1975). Mail survey and response rates: a literature review. *Journal of Marketing Research*, 12, 440-53.

Kotey, B., & Folker, C. (2007). Employee training in SMEs: effect of size and firm type-family and nonfamily. *Journal of Small Business Management*, 45, 214-238.

Kotey, B., & Sheridan, A. (2004). Changing HRM practices with firm growth. *Journal of Small Business and Enterprise Development,* 11(4), 474-485.

Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49, 1–49.

Laursen, K., & Foss, N.J. (2003). New human resource management practices, complementarities and the impact on innovation performance, *Cambridge Journal of Economics*, 27, 243-63.

Leon-Guerrero, A., McCann III, E., & Haley, J. (1998). A study of practice utilization in family businesses. *Family Business Review*, 11, 107-120.

Lepak, D. P., Liao, H., Chung, Y., & Harden, E. E. (2006). A conceptual review of human resource management systems in strategic human resource management. *Research in Personnel and Human Resource Management*, 25, 217–271.

Lepak, D.P., Takeuchi, R., & Snell, S.A. (2003). Employment Flexibility and Firm Performance: Examining the Interaction Effects of Employment Mode,

Environmental Dynamism, and Technological Intensity, *Journal of Management*, 29, 681-703.

Leung, A. (2003). Different ties for different needs: Recruitment practices of entrepreneurial firms at different developmental phases. *Human Resource Management*, 42, 303–320.

Lubatkin, M.H., Durand, R., & Ling, Y. (2007). The missing lens in family-owned firm governance theory: A self-other typology of parental altruism. *Journal of Business Research*, 60, 1022–1029.

MacDuffie JP. (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *Ind Labor Relat Rev,* 48(2):197–221.

Mark, S.K.M., & Akhtar, S. (2003). Human resource management practices, strategic orientations, and company performance: A correlation study of publicly listed companies, *Journal of American Academy of Business*, 2, 510-15.

Marsh, H.W.,& Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- and higher order factor models and their invariance across groups. *Psychological Bulletin*, 97, 362-582.

Martell, K.D., & Carroll, S.J.J. (1995). The role of HRM in supporting innovation strategies: Recommendations on how R&D managers should be treated from an HRM perspective, *R&D management*, vol. 25, n. 1, págs. 91-104.

McConaughy, D.L. (2000). Family CEOs vs. Nonfamily CEOs in the family-controlled firm: an examination of the level and sensitivity of pay to performance. *Family Business Review*, 13, 121-131.

Mendelson H, Pillai RR. Information age organizations, dynamics, and performance. *Journal of Economic Behavior & Organization*, 38:253–81.

Miller, D., Le Breton-Miller, I., & Scholnick, B. (2008). Stewardship vs. stagnation: An empirical comparison of small family and non-family businesses. *Journal*

of Management Studies, 45: 51-78.

Miller, N.J., Winter, M., Fitzgerald, M. A., & Paul, J. (2000). Family microenterprises: Strategies for coping with overlapping family and business demands. *Journal of Developmental Entrepreneurship*, 5(2), 87-113.

NACE Rev. 2. Statistical classification of economic activities in the European Community (2008). Luxembourg: Office for Official Publications of the European Communities [date accessed: December 15, 2013]. Available from Internet: <http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-07-015/EN/KS-RA-07-015-EN.PDF>.

Nishii, L.H., & Lepak, D.P., & Schneider, B. (2008). Employee attributions of the ‘‘why’’ of HR practices: Their effects on employee attitudes and behaviors, and customer satisfaction. *Personnel Psychology*, 61, 503–545.

O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison to assessing person–organization fit. *Academy of Management Journal*, 34, 487–516.

Olian, J. D., & Rynes, S. L. (1984). Organizational staffing: Integrating practice with strategy. *Industrial Relations*, 23, 170–184.

Oppenheim, A.N. (1992) Questionnaire design, interviewing and attitude measurement. London: Pinter Publishers.

Pfeffer J. (1998). Seven practices of successful organizations. *California Management Review*, 40(2): 96–123.

Pischke, J.-S. (2001). Continuous training in Germany. *Journal of Population Economics*, 14, 523-548.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903

Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, 16: 93-115.

Raghuram, S., and Arvey, R.D. (1994), Business Strategy Links with Staffing and Training Practices, *Human Resource Planning*, 17, 3, 55–73.

Ram, M., & Holliday, R. (1993). Relative merits: family culture and kinship in small firms. *Sociology*, 27(4), 629-648.

Reid, R., & Adams, J. (2001). Human Resource Management: A survey of practices within family and non-family firms. *Journal of European Industrial Training*, 6, 310-320.

Reid, R., Morrow, T., Kelly, B., Adams, J., & McCartan, P. (2000). Human resource management practices in SMEs: A comparative analysis of family and non-family-owned firms. *Irish Business and Administration Research*, 21, 157-181.

Rosenblatt, P.C., De Mik, L., Anderson, R.M., & Johnson, P.A. (1985). *The family in business*. Jossey-Bass, San Francisco.

Rumelt, R. P., Schendel, D. E., & Teece, D. J. (1994). *Fundamental issues in strategy: A research agenda for the 1990s*. Boston, MA: Harvard Business School Press.

Sacristan-Navarro, M., Gomez-Anson, S., & Cabeza-Garcia, L. (2011). Family ownership and control, the presence of other large shareholders, and firm performance: further evidence. *Family Business Review*, 24, 71-93.

Schulze, W.S., Lubatkin, M.H., & Dino, R.N. (2003). Exploring the agency consequences of ownership dispersion among the directors of private family-owned firms. *Academy of Management Journal*, 46, 174–194.

Schulze, W.S., Lubatkin, M.H., Dino, R.N., & Buchholtz, A.K. (2001). Agency relationships in family firms: theory and evidence. *Organizational Science*, vol. 12, 99-116.

Sciascia, S., & Mazzola, P. (2008). Family involvement in ownership and management: Exploring nonlinear effects on performance. *Family Business Review*, 21, 331-345.

Sheridan, S., & Williams, A. (2011). Employee training key to dodging business risks and protecting consumer rights when utilizing new technology. *Employee Relations Law Journal*, 36(4), 81-85.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological methodology*: 290-312. Washington, DC: American Sociological Association.

Sonfield, M.C., & Lussier, R.N. (2004). First-, second-, and third-generation family firms: A comparison. *Family Business Review*, 17, 189-202.

Straub, D. (1989). Validating instruments in MIS research. *MIS Quarterly*, 13(2) 147–169.

Subramony, M., Krause, N., Norton, J., & Burns, G.N. (2008). The relationship between human resource investments and organizacional performance: A firm-level examination of equilibrium theory. *Journal of Applied Psychology*, 93, 778–788.

Summer, C., Bettis, R., Duhaime, I., Grant, J., Hambrick, D., Snow, C., & Zeithaml, C. (1990). Doctoral education in the field of business policy and strategy. *Journal of Management*, 16, 361–398.

Tannenbaum SI, Dupuree-Bruno LM. (1994). The relationships between organizational and environmental factors and the use of innovative human resource practices. *Group Organ Manage*,19(2):171–202.

Thang, L.C., & Quang, T. (2005): Antecedents and consequences of dimensions of human resource management practices in Vietnam. *International Journal of Human Resource Management*, 16, 1830-1846.

Toh, S.,Morgeson, F. P.,&Campion, M. A. (2008). Human resource configurations: Investigating fit with the organizational context. *Journal of Applied Psychology*, 93, 864–882.

Tsao, C.-W., Chen, S.-J., Lin, C.-S., & Hyde, W. (2009). Founding-family ownership and firm performance: The role of high-performance work systems. *Family Business Review*, 22, 319-332.

Van den Berghe, L.A.A., & Carchon, S. (2003). Agency relations within the family business system: An exploratory approach. *Corporate Governance: An International Review*, 11, 171–179.

Van Essen, M., Carney, M., Gedajlovic, E., Heugens, P., & Van Oosterhout, J.H. (2011). How do family firms differ? A meta-analysis. *Academy of Management Journal*, 54, 437-460.

Wasserman, N. (2006). Stewards, agents, and the founder discount: executive compensation in new ventures. *Academy of Management Journal*, 49, 960-976.

Westhead, P., & Cowling, M. (1998). Family firm research: The need for a methodological rethink. *Entrepreneurship Theory and Practice*, 23, 31-56.

Westhead, P., & Howorth, C. (2006). Ownership and management issues associated with familiy firm performance and company objectives. *Familiy Business Review*, 19, 4, 301-316.

Wright, P. M., & Boswell, W. R. (2002). Desegregating HRM: A review and synthesis of micro and macro human resource management research. *Journal of Management*, 28, 247–276.

Wu, P., & Chaturvedi, S. (2009). The role of procedural justice and power distance in the relationship between high performance work systems and employee attitudes: A multilevel perspective. *Journal of Management*, 35, 1228–1247.

Youndt MA, Snell SA, Dean JW, Lepak DP. (1996). Human resource management,

manufacturing strategy, and firm performance. *Academy of Management Journal*, 39(4): 836–66.

Zahra, S.A. (2003). International expansion of U.S. manufacturing family businesses: The effect of ownership and involvement. *Journal of Business Venturing*, 19, 495–512.

Zattoni, A., Gnan, L., & Huse, M. (In press). Does Family Involvement Influence Firm Performance? Exploring the Mediating Effects of Board Processes and Tasks. *Journal of Management*, available online 30 October 2012.

CONCLUSIONS

Conclusions

Family firm studies continue to seek ways to describe how family firms differ from other forms of organization. Researchers have tried to identify the characteristics that are specific to family firms, examining whether there are differences that are actually the result of family involvement. In the search for an adequate explanation for this phenomenon, various theoretical perspectives and empirical approaches have been applied, using research traditions ranging from sociology and psychology to economics and management.

Considering these approaches, this thesis has sought to contribute to a better understanding of the context of family businesses, providing an analysis that takes into account certain relationships between family issues and business elements in the management of human capital. The analysis has drilled down into the features that are more intangible – internal and behavioral– which characterize this type of organization, in order to understand how the peculiarities which the family introduces into the governance and management of the company –in addition to the relationships and links between family members and/or the company– determine the effectiveness of human resource management practices in terms of their contribution to firm performance.

Conceived as three empirical studies and supported by the frameworks of agency theory and the SEW perspective, this thesis is divided into three major chapters that describe the testing of several hypotheses regarding the effects of family involvement on human resource practices and firm performance. The first study was devoted to the analysis of determinants of the design of compensation packages for non-executive employees in family different types firms. The second study focuses on the analysis of the effectiveness CEO compensation monitoring systems under several degrees of family involvemente. And, finally, the third study

provided a comprehensive analysis of the degree of formalization of key human resource practices for non-executive employees and their effectiveness depending on the family involvement in the firm.

More specific conclusions derived from each of these three investigations are discussed in detail below.

Conclusions of the first study

The first study examined the main determinants of the compensation of employees of family firms, with particular emphasis on extending the analysis of agency theory to non-executive employees. The overall results show that the arguments of agency theory are valid and explain differences in pay, both in level and in the way pay is calculated, among employees of family-owned and managed firms, family-owned and external managed firms, and non-family firms.

Specifically, it was been found that: (1) the total compensation levels decrease with increasing family involvement in the company; (2) the highest proportion of variable compensation is found in the pay structure of employees of family-owned and external managed firms, while the ratio of variable compensation to fixed compensation is similar, and lower, in family-owned and managed firms and in non-family firms; and (3) the incentives are more oriented to the short-term as the degree of family involvement in the company increases.

Therefore, the assumptions of agency theory, regarding that agency costs in the family firms are lower, although possibly more numerous, than in non-family firms, are confirmed. It is, therefore, reasonable to assume that non-family firms, suffering from greater problems of agency (understood in terms of cost) are required to pay employees more using a higher proportion of incentives that are oriented to the long term, in order to secure a better alignment of interests between owners and non-executive employees.

Conclusions of the second study

The second study examined the effectiveness, in terms of performance, of monitoring mechanisms that are linked to setting the compensation of the CEO in the family firm, analyzing the moderating role of family involvement. There is evidence of an asymptotic relationship between CEO compensation monitoring and firm performance and a significant moderating effect of family involvement.

Specifically, improved firm performance is achieved when CEO compensation monitoring increases in a context where other CEO supervision mechanisms are reduced. This effect on firm performance is lower when there are other effective mechanisms for monitoring the CEO. In this sense, the involvement of the family in the firm makes mechanisms for monitoring the CEO compensation more lax than they are in non-family firms. The results show that the level of supervision applied to the CEO is significantly lower in family firms, and does not increase until the family loses control over the ownership of the company.

Therefore, one can conclude that it is the loss of the family power through the ownership that determines the intensity of CEO compensation monitoring. The fact that family firms may take non-economic objectives into account when making their decisions may explain why they feel less need for supervision and have more confidence, so that there is a lower level of supervision attached CEO compensation. However, as a result of the above, increasing the level of control exercised through the CEO compensation package leads to better firm performance in family-firms than in non-family firms. Thus, formalizing the decisions and processes related to determining the compensation of the CEO can provide considerable advantages for family firms.

Conclusions of the third study

The third study focuses on an examination of the effectiveness of formalization of human resource practices (selection, training and compensation) for non-

executive employees in family firms, taking into account a possible mediating effect of family involvement. The results show that the formalization of human resource practices help to improve firm performance in all circumstances and that this improvement increases as family involvement decreases.

Specifically, the results show an inverse relationship between the formalization of human resource practices and family involvement in the management of firm. This relationship is not found, however, if the involvement of the family is measured by the proportion of ownership that the family holds. Hence, it is possible to deduce that a firm may retain its family status, preserving family ownership, without this being an obstacle to the effective management of its employees. Rather it is the degree of professionalism of the management that helps the effectiveness of human resource practices.

If the family is unable to promote the implementation of rigorous and objectives selection processes, training policies aimed at developing professional skills and pay structures linked to individual and collective performance, problems of asymmetric altruism may appear. These problems can result in mistaken efforts to preserve the socio-emotional wealth of the family, leading to economic declines, and, ultimately to poor firm performance.

General implications, limitations and future research

In summary, the empirical evidence produced in the course of this thesis makes it possible to conclude that the implementation of formal mechanisms for managing human resources can help to limit the agency problems in family firms, favoring the achievement of economic objectives, and thereby improving the performance of the company. These findings suggest that the implementation of more stringent human resource practices is a necessary step for family firms. Such practices (rigorous and objectives selection processes, training policies aimed at developing professional skills and pay structures linked to individual and collective performance) may alleviate and limit the specific problems arising from

asymmetric altruism in family firms, without diminishing the benefits of positive altruism that results from the involvement of family in the company.

The enhancement of formal and rigorous human resource management practices requires a favorable attitude of the family firm's management and governance in order to get a proper adoption and implementation. For example, for CEO compensation monitoring, the decision rests with the owners who, through the board of directors, try to design an adequate pay-for-performance CEO compensation system. In the case of human resource practices at the employee level, it is the top management team who, through a rational and economically-view design of selection, training and compensation practices must put a positive value on them, producing the expected effectiveness.

Finally, this thesis has also made some contributions to the literature on family firms in terms of the theoretical frameworks used and the units of analysis adopted. Particularly significant in this regard is the fact that a combination of the theoretical frameworks of agency theory and SEW perspective produce a better characterization and explanation of the relationship between the effectiveness of human resource practices, family involvement and firm performance. In addition, this thesis has not only taken into account the circumstances of the top management team of family firms –the area of concern for most of the published studies to date– but it has also included the consideration of human resource practices and their impact on the non-executive employees of the family firm.

However, it should be noted that this work is affected by several limitations which, in turn, constitute areas of possible future research.

First, from a theoretical perspective, although the relationship between human resource practices and firm performance has been successfully studied on the basis of agency and SEW theories, there are other possible theories which might complement these methods, among which are stewardship theory or the theory of familiness. Future studies could pay more attention to the emotional aspects of

family businesses and to the less economic or rational elements similar to those which have been examined in this thesis.

Second, this work has not developed specific indicators for measuring certain basic theoretical concepts that are basic foundations of these relationships, such as altruism, asymmetric altruism and socio-emotional wealth. Future research should consider direct measures of these concepts in order to obtain a more precise theoretical explanation, complemented by appropriate empirical evidence.

Third, the study was conducted using independent samples of Spanish companies, with different conceptual measures, which can give rise to some inconsistencies in the comparison of results. By integrating and unifying a broader and more comprehensive study, the future investigations should be extended beyond the Spanish sample to consider family firms in a variety of contexts, and develop a still better explanation of the relationship between human resource practices and performance.

Fourth, the adopted models include a relatively small number of variables if one considers that the concepts to be explained are firm effectiveness and performance. In this regard, future research should seek to build more complex and integrated models, in which important new variables can be integrated, both in relation to the family –such as, for example, ownership structure, board of directors characteristics, preponderance of family and non-family members among the employees, etc – and in relation to the business – such as, for example, the type of industry the firm is engaged in, the strategic typology, the organizational structure, the innovativeness process, etc.

Finally, because the studies reported in this thesis have not been conducted *ad hoc*, some of the variable measures may be considered, to some extent, synthetic. In the future, efforts should be made to develop more precise and comprehensive measures for the design of human resource practices, including those of related to the developing of measures related to the socio-emotional wealth in order to

better characterize the relationship between management of human resources and firm performance in a non-economic and broader sense.

In short, the line of study followed in this thesis is relatively new and promising, with important implications for the internal organization of family firms. The results presented here entail an important contribution to the analysis of human resource practices in the Spanish family firms, contributing to the idea of formalizing such practices is necessary to increase their effectiveness. However, it will be essential in future to continue moving forward with additional work, and to improve and refine this knowledge with new, more specific contributions, following the line that has been pioneered in this thesis.