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EL EFECTO DEL GOBIERNO CORPORATIVO, DE LOS
IMPUESTOS Y DE LA ESTRUCTURA DE PROPIEDAD EN LAS
DECISIONES DE DIVIDENDOS Y DE DEUDA: TRES ENSAYOS SOBRE
EL ESCENARIO BRASILEÑO.

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**VNiVERSiDAD
D SALAMANCA**

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OWNERSHIP STRUCTURE ON DIVIDENDS AND LEVERAGE: THREE
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HACEN CONSTAR

Que la presente tesis doctoral, que lleva por título “**The effect of corporate governance, taxes and ownership structure on dividends and leverage: Three essays on the Brazilian evidence**” y que presenta D. Victor Hugo Braz Bezerra ha sido realizada bajo mi dirección en el Departamento de Administración y Economía de la Empresa de la Universidad de Salamanca y que cumple todos los requisitos necesarios para proceder a su defensa pública.

Y para que así conste y surta los efectos oportunos, se expide el presente certificado en la ciudad de Salamanca a 06 de mayo de 2019.

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*Soñar el sueño imposible,
Luchar con el enemigo invencible,
Abrazar el pesar insoportable,
Correr hacia donde no se atreven los valientes..
Enderezar el mal irreparable,
Amar pura y castamente en la distancia,
¡Intentar cuando tus brazos están cansados,
alcanzar la estrella inalcanzable!
Esta es mi búsqueda, perseguir esa estrella, no
importa con qué desesperanza, no importa a qué
distancia...*

Don Quijote de la Mancha

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Capítulo 1:

Introducción

Como es ampliamente aceptado, la teoría financiera tradicional propone que el objetivo principal de la empresa debe ser maximizar la riqueza de sus accionistas, lo cual, en la práctica, significa maximizar el precio de mercado de los títulos que poseen. Este objetivo ha generado una abundante literatura y una amplia controversia sobre los efectos de las decisiones financieras en el valor de las empresas. Lejos de la situación de mercados perfectos analizada por Merton Miller y Franco Modigliani en sus seminales trabajos de 1958 y 1961, las investigaciones de las últimas décadas han demostrado la relevancia de las fricciones en los mercados de capitales tales como, los costes de transacción, los costes de agencia, los costes de quiebra o el pago de impuestos.

En este contexto, no son pocos los estudios que han demostrado las consecuencias fiscales de las políticas financieras de la empresa. Desde esta perspectiva, la teoría estática del *trade-off* establece que el valor de la empresa alcanzará su culmen cuando se compensen los efectos contrapuestos de dos fuerzas: la deducibilidad fiscal del pago de intereses y el aumento en los costes de quiebra anejo a un aumento del nivel de deuda. Del mismo modo, también los dividendos se ven afectados por las leyes tributarias de los países, dado el diferente tratamiento fiscal de la distribución de beneficios en comparación con su retención.

Dentro de las imperfecciones de los mercados financieros merece una mención especial el enfoque de la teoría de la agencia, según el cual los dividendos y la deuda pueden ser instrumentos eficaces para reducir los conflictos entre los distintos partícipes de la empresa. Específicamente, el reparto de dividendos o el incremento de su deuda atenúan la posibilidad de comportamiento oportunista de los directivos, al reducir los recursos bajo su control y susceptibles de ser usados discrecionalmente en busca de sus intereses y no para maximizar la riqueza de los inversores.

Precisamente el enfoque de agencia permite incorporar las asimetrías informativas entre *insiders* y *outsiders*, lo que dota a las decisiones de dividendos y de estructura de capital de una

nueva función. Así, estas políticas financieras se convierten en señales que transmiten información fiable sobre las oportunidades de inversión rentables al alcance de la empresa. Una característica de la investigación reciente en finanzas de empresa y en gobierno corporativo es la dimensión internacional que han tomado esos estudios, abordando variados entornos institucionales y legales. En este sentido, es sobradamente conocido el enfoque jurídico de las finanzas (*Law & Finance*) propuesto por La Porta et al. (1999; 1997; 1998; 2000), según el cual cabe distinguir dos tipos de ordenamientos jurídicos: los países cuyos sistemas legales provienen de la tradición anglosajona o de *ley común* tienden a ofrecer una protección más adecuada a los inversores que los países cuyas leyes nacen en el contexto de la *ley civil* o continental.

Llevado este planteamiento al ámbito de la política de dividendos, hay dos hipótesis que explican la relación entre la estructura legal de los países y la distribución de beneficios de las empresas. La primera afirma que un sistema legal que ofrezca una protección adecuada a los inversores fomenta el reparto de dividendos como forma de retribución de esos accionistas (*the outcome hypothesis*). La explicación alternativa plantea que una deficiente protección legal conduce a las empresas a distribuir ratios de dividendos más elevados como una forma de sustituir las carencias del entorno (*the substitute hypothesis*). Ambas hipótesis han recibido considerable apoyo empírico en distintos lugares y momentos.

Combinando los distintos planteamientos teóricos anteriormente esbozados, cabe preguntarse si la incidencia de los impuestos en las decisiones financieras puede venir modelada por el nivel de protección de que gozan los accionistas. En otras palabras, surge la cuestión sobre las relaciones entre la información transmitida por las decisiones financieras en situaciones de escasa protección legal y el efecto de los impuestos sobre dichas decisiones. Todo ello pone de manifiesto la conveniencia de analizar conjuntamente los mecanismos de gobierno corporativo y los impuestos al investigar las políticas financieras.

En paralelo a esas investigaciones, existe otra línea de trabajo que ha estudiado la interacción entre el entorno institucional y la estructura financiera de la empresa, mostrando cómo la calidad de las prácticas de gobierno corporativo influye en la relación entre impuestos y decisiones de endeudamiento. De acuerdo con esta visión, las posibles transferencias de recursos entre accionistas y acreedores se traducen en variaciones de los flujos sometidos a gravamen. Y, dado que el entorno institucional modifica la posibilidad de tales transferencias, se establece una concatenación entre los tres elementos (impuestos, entorno legal y política financiera) que aconseja su estudio conjunto. Partiendo de los fundamentos teóricos anteriormente esbozados, la presente tesis doctoral trata de realizar un análisis de la política de dividendos y de la estructura de capital de las empresas brasileñas. De alguna manera, por paradójico que parezca, una tesis doctoral es el resultado del trabajo individual del doctorando y de la impronta que en él dejan sus directores, profesores y compañeros en el Programa de Doctorado. Por consiguiente, no debe extrañar que la presente tesis doctoral se inscriba en un campo de las finanzas corporativas roturado por profesores del Programa de Doctorado Interuniversitario en Investigación en Economía de la Empresa. Al escribir estas páginas es inevitable evocar anteriores tesis doctorales como la de los profesores Valentín Azofra Palenzuela sobre los factores explicativos de la estructura de capital de las empresas españolas, Alberto de Miguel Hidalgo sobre la interrelación de las decisiones de inversión, financiación y dividendos, Juan Antonio Rodríguez Sanz sobre la estructura de propiedad o Chabela de la Torre e Ignacio Requejo sobre la influencia de la estructura de propiedad en la estrategia financiera de la empresa. Se entiende así la elección del tema de investigación, con el cual he tratado de beneficiarme del conocimiento de quienes me han precedido y, al mismo tiempo, dar un paso adelante en la senda del conocimiento.

La elección de Brasil no es caprichosa sino que este país constituye un caso único para el estudio conjunto de los efectos impositivos e institucionales sobre las decisiones

empresariales ya que, a pesar de ofrecer una protección legal relativamente escasa a los accionistas minoritarios y adolecer de ciertas carencias en términos de gobierno corporativo, en los últimos años ha realizado un considerable esfuerzo para mejorar la calidad de su entorno institucional al mismo tiempo que ha implementado notables cambios en su ordenamiento fiscal. Ambas actuaciones tienen mutuas implicaciones y constituyen una oportunidad única para avanzar en nuestro conocimiento sobre el tema.

Así, la Bolsa de Valores del Estado de Sao Paulo (B3), la Bolsa de Valores oficial de Brasil, creó en el año 2000 el denominado *Novo Mercado* (NM) a fin de compensar la deficiente protección de los accionistas minoritarios. Las empresas que voluntariamente deseaban adherirse están obligadas a adoptar prácticas de gobierno corporativo más estrictas que las exigidas por la legislación nacional. Este proceso está basado en la idea de “convergencia funcional” planteada por Coffee (1999), según la cual, en los países con carencias institucionales, han de ser los mercados de capitales quienes tomen la iniciativa en la adopción de medidas de mejora del gobierno corporativo dadas las dificultades de reforma de la legislación nacional.

Con el objetivo de conceder a las empresas cierto margen de tiempo para mejorar gradualmente su funcionamiento hasta que se encontraran en condiciones de cumplir las exigencias del NM, la B3 también creó los mecanismos de seguimiento denominados Nivel 1 y Nivel 2, que no son sino categorías intermediarias de adopción de prácticas de gobierno corporativo más estrictas que las requeridas por la legislación brasileña y, a la vez, menos exigentes que las del NM.

De esta forma, el mercado brasileño constituye un entorno único para el estudio de los efectos del gobierno corporativo en las decisiones financieras de las empresas al reunir compañías que, a pesar de estar sujetas al mismo marco institucional, están expuestas a exigencias distintas de gobierno corporativo. Por consiguiente, la presente tesis doctoral evita

que los resultados y conclusiones se encuentren sesgados por las diferencias institucionales y culturales entre países. Asimismo, el caso brasileño permite valorar hasta qué punto una reforma llevada a cabo en un mercado bursátil -y que no contó con el apoyo de cambios legislativos nacionales-, puede llegar a sustituir o enmendar las deficiencias institucionales del conjunto del país.

Otro aspecto institucional en el que profundizamos en esta tesis doctoral está relacionado con la influencia de la legislación tributaria brasileña en las decisiones financieras de las empresas. En concreto, Brasil es el único país emergente que ha implementado un sistema de *Allowance for Corporate Equity* (ACE), llamado de “intereses sobre el capital propio (en inglés, *interest on equity* - IOE)”, cuya finalidad es reducir el sesgo fiscal de la deuda (en inglés, *debt tax bias*), o sea, la discriminación impositiva generada por la diferencia en el tratamiento fiscal dado al uso de la deuda y del capital propio, al permitir a las empresas deducir una tasa referencial de intereses (*a notional interest rate*) por el uso de los recursos propios y no solamente por el uso de la deuda.

Una característica peculiar del IOE, es que las empresas sólo pueden disfrutar de deducciones fiscales cuando distribuyen parte de sus recursos propios a los accionistas. Así, el IOE constituye una clara alternativa al *payout* y, a pesar de presentar características y funciones bastante similares a los dividendos -como, por ejemplo, su utilidad para reducir los conflictos de agencia, para señalar oportunidades de inversión, para atraer accionistas que valoran la sensación de seguridad, y para ofrecer liquidez- su tratamiento fiscal presenta grandes diferencias, puesto que, al considerarse un gasto financiero, puede ser deducido en el balance de la empresa antes del cálculo de los impuestos, generando de esta manera una deducción fiscal. En cambio, en el caso de los dividendos, la base imponible viene determinada por el beneficio neto ajustado, sin que la empresa pueda obtener deducciones fiscales por la distribución de dividendos.

El tratamiento fiscal de las rentas personales también es diferente para los dividendos y para el IOE. Mientras que los accionistas se encuentran exentos de impuestos cuando reciben dividendos, no sucede lo mismo cuando la retribución procede de IOE, estando sujetos a una imposición cuyo gravamen varía de acuerdo con el tipo de accionista beneficiario. Por lo tanto, las ventajas fiscales derivadas del uso de IOE dependen no solo de la estructura de capital de la empresa sino también de su estructura de propiedad. Ese rasgo abre la puerta a plantearnos si la importancia de las consideraciones fiscales en la política de *payout* puede hallarse condicionada por la identidad de los accionistas de la empresa. Del mismo modo, la existencia del IOE permite a las empresas disponer de un *escudo* fiscal alternativo a la deuda, con menores costes de quiebra y que también conserva las características no fiscales de la deuda, como, por ejemplo, su efecto señalizador o su capacidad para mitigar los conflictos de agencia.

En función del marco descrito anteriormente, el objetivo principal de esta tesis doctoral es analizar -utilizando la idiosincrasia del marco institucional brasileño-, la influencia del gobierno corporativo, de los impuestos y de la estructura de propiedad en las decisiones de distribución de ca y de estructura de capital de las empresas. Ese objetivo general se concreta en dos objetivos más específicos:

1- Analizar si y cómo la incorporación al NM afecta a la política de dividendos y a la estructura de capital de las empresas brasileñas.

2- Partiendo de la relevancia de los impuestos en las decisiones de *payout* y de estructura de capital de las empresas, analizar el papel moderador de la estructura de propiedad en dicha relación.

Esta secuencia de objetivos vertebrará la estructura de la tesis doctoral. Así, tras esta introducción, en el capítulo 2 nos planteamos el efecto de la incorporación al NM sobre las decisiones de financiación y de dividendos. En este capítulo se describen las características del ambiente institucional brasileño y la reforma emprendida por la B3 para mejorar la protección

de los inversores a través de la creación de diferentes niveles de mercado. A continuación verificamos si y de qué forma la incorporación al NM y a los niveles intermedios afecta a las decisiones de dividendos y de financiación empresarial, ambos como mecanismos empleados por las empresas para mitigar sus conflictos de agencia.

A continuación, incorporamos las diferencias de tributación entre los dividendos y los intereses sobre el capital propio para estudiar el efecto moderador de la estructura de propiedad. Ese análisis se realiza en el capítulo 3, en el que detallamos las consecuencias fiscales del uso de dividendos y de IOE para empresas y accionistas y, posteriormente, verificamos si y cómo la identidad de los accionistas dominantes afecta a la relación entre impuestos y las decisiones de *payout*. Un estudio semejante se acomete en el capítulo 4, en el que se extiende el efecto del IOE a la estructura de capital. En dicho capítulo, exponemos las semejanzas entre la deuda y el IOE y también las diferencias en su tratamiento fiscal, las cuales dependen de la estructura de propiedad empresarial. Posteriormente, en ese capítulo analizamos el efecto de los impuestos en las decisiones de financiación incorporando el papel moderador de la identidad de los accionistas en esta relación.

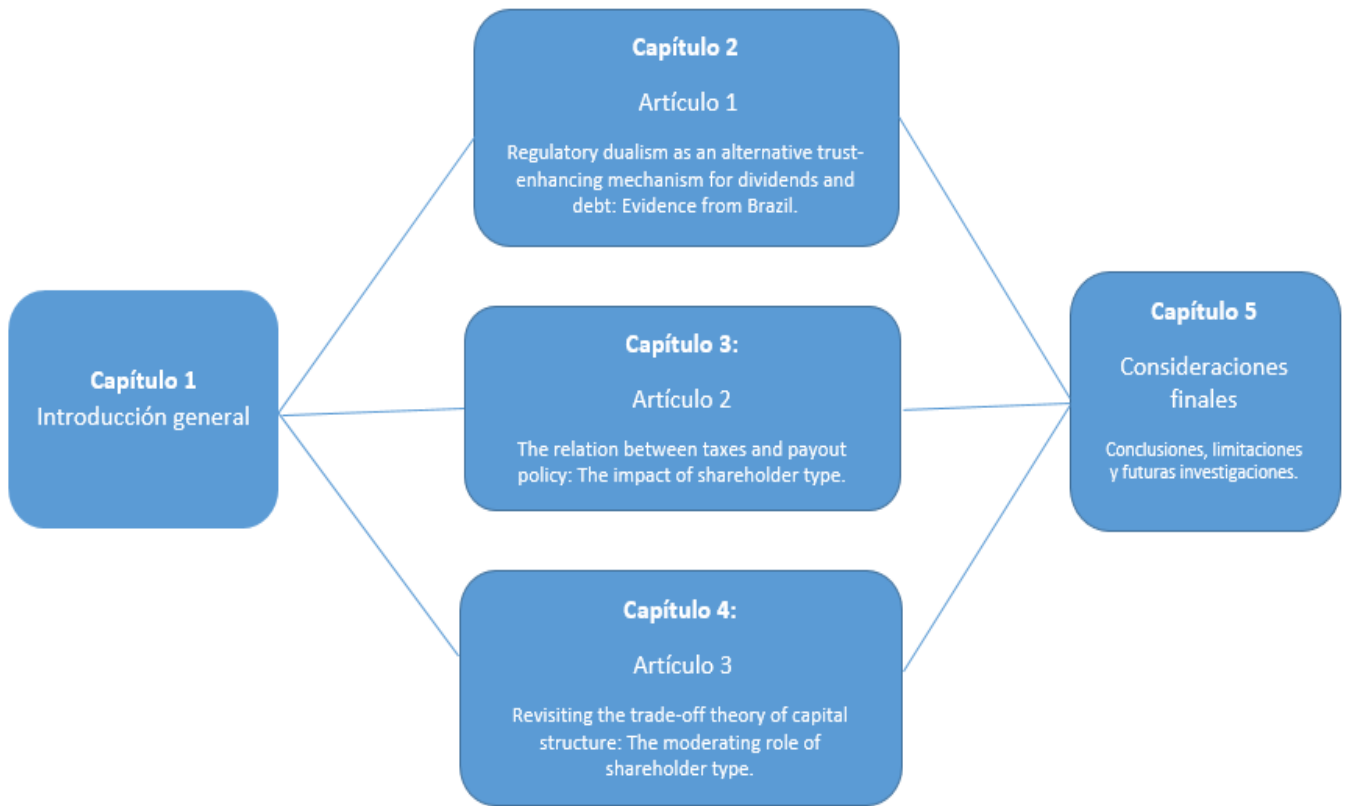
Se cierra esta tesis doctoral con un capítulo que contiene las principales conclusiones, se discuten los resultados desde una perspectiva crítica y se sugieren futuras líneas de trabajo. Para facilitar la visión de conjunto de nuestra investigación, en la Figura 1 proponemos un esquema simplificado.

A modo de adelanto de nuestros resultados, encontramos que las empresas brasileñas voluntariamente incorporadas al NM distribuyen menos dividendos y se hallan menos endeudadas que las que operan en los demás segmentos de B3. Eso sugiere que el NM cumple una importante función y puede constituir un elemento que sustituye a otros mecanismos tendentes a mejorar la confianza entre empresas y accionistas, a saber, los dividendos y la deuda.

Los resultados también indican que la incidencia de los impuestos en las decisiones de *payout* y de estructura de capital depende de la estructura de propiedad de las empresas. Hemos detectado que en las empresas con presencia predominante de accionistas individuales (o familiares) o con estructuras piramidales en su cadena de propietarios, los impuestos parecen ser un factor determinante de las decisiones de financiación o dividendos. Por el contrario, en empresas poseídas por accionistas institucionales, las consideraciones fiscales resultan irrelevantes de cara a la formulación de la política financiera.

Dado lo anterior, nuestra tesis defiende que reformas realizadas en los mercados de capitales se erigen como un mecanismo alternativo a las deficiencias legales necesarias para mejorar las prácticas de buen gobierno y las tomas de decisiones empresariales. También defendemos que la importancia de los impuestos en las decisiones corporativas se ve afectada por la estructura de propiedad. Lo cual indica que, la efectividad de los esfuerzos emprendidos para reducir el sesgo fiscal de la deuda se ve condicionada por la estructura accionaria empresarial.

Fig.1: Estructura de la tesis doctoral.



Chapter 1:
General Introduction

The traditional financial theory proposes that the main objective of a company should be to maximize the wealth of its shareholders, which, in practice, means maximizing the market price of the securities they hold. This objective has generated an abundant literature and a wide controversy about the effects of financial decisions on the value of companies. In this sense, far from the situation of perfect markets analysed by Merton Miller and Franco Modigliani in their seminal works of 1958 and 1961, research in recent decades has shown the relevance of frictions in capital markets such as transaction costs, agency costs, bankruptcy costs or the taxes on the value of firms. In this context, there are many studies that have shown the tax consequences of the company's financial policies. From this perspective, the static trade-off theory establishes that the value of a company will reach its peak when the opposing effects of two forces are balanced: the tax deductibility of interest payments and the increase in bankruptcy costs associated with an increase of the level of debt. Likewise, dividends are also affected by the tax laws of the countries, given the different tax treatment of the distribution of cash compared to its retention.

Within the imperfections of the financial markets, deserves special mention the agency theory approach, according to which dividends and debt can be effective instruments to reduce conflicts between the different stakeholders of the company. More specifically, the distribution of dividends or the increase of firm debt are believed to mitigate the possibility of opportunistic behaviour into the firms as dividends and debt reduce the resources under managers' control and are susceptible to be used in search of their interests and not to maximize the wealth of the investors.

Precisely, the agency approach allows to incorporate informational asymmetries between insiders and outsiders, which endows the decisions of dividends and capital structure of a new function. Thus, these financial policies become signals that convey reliable information about the profitable investment opportunities available to the company. A feature

of recent research in business finance and corporate governance is the international dimension that these studies have taken, addressing various institutional and legal environments. In this sense, the Law & Finance approach proposed by La Porta et al. (1999, 1997, 1998, 2000), according to which, two types of legal systems can be distinguished: countries whose legal systems come from the Anglo-Saxon or common law tradition tend to offer more adequate protection to investors than countries whose laws they are born in the context of civil or continental law.

Taking this approach to the field of dividend policy, there are two hypotheses that explain the relationship between the legal structure of countries and the distribution of profits of companies. The first states that a legal system that offers adequate protection to investors boosts the distribution of dividends as a form of compensation for those shareholders (the outcome hypothesis). The alternative explanation raises that poor legal protection leads companies to distribute higher dividend ratios as a way to make up for the shortcomings of the environment (the substitute hypothesis). Both hypotheses have received considerable empirical support in different places and times.

Combining the different theoretical approaches outlined above, it is worth asking whether the incidence of taxes on financial decisions can be modelled by the level of protection enjoyed by shareholders. In other words, the question arises about the relationships between the information transmitted by financial decisions in situations of low legal protection and the effect of taxes on such decisions. All this highlights the convenience of jointly analysing the mechanisms of corporate governance and taxes when investigating financial policies.

In parallel with these investigations, there is another line of research that has studied the interaction between the institutional environment and the financial structure of the company, showing how the quality of corporate governance practices influences the relationship between taxes and indebtedness decisions. According to this view, the possible transfers of resources

between shareholders and creditors are translated into variations in the flows subject to tax. And, given that the institutional environment modifies the possibility of such transfers, a concatenation is established between the three elements (taxes, legal environment and financial policy) that advise their joint study. Starting from the theoretical foundations previously outlined, this doctoral thesis seeks to perform an analysis of the dividend policy and the capital structure of Brazilian companies. Somehow, paradoxical as it may seem, a doctoral thesis is the result of the doctoral student's individual work and the imprint that his directors, professors and colleagues leave on the Doctorate Program. Therefore, it is not surprising that this doctoral thesis is inscribed in a field of corporate finance broken by professors of the Interuniversity Doctorate Program in Research in Business Economics. When writing these pages, it is inevitable to evoke previous doctoral theses such as that of professors Valentín Azofra Palenzuela on the explanatory factors of the capital structure of Spanish companies, Alberto de Miguel Hidalgo on the interrelation of investment decisions, financing and dividends, Juan Antonio Rodríguez Sanz on the ownership structure or Chabela de la Torre and Ignacio Requejo on the influence of the ownership structure on the company's financial strategy. This means the choice of research topic, with which I have tried to benefit from the knowledge of those who preceded me and, at the same time, take a step forward in the path of knowledge.

The choice of Brazil is not capricious but this country is a unique case for the joint study of the tax and institutional effects on corporate decisions since, despite offering relatively little legal protection to minority shareholders and suffering from certain shortcomings in terms of corporate governance, in recent years it has made a considerable effort to improve the quality of its institutional environment while at the same time implementing significant changes in its fiscal order. Both actions have mutual implications and constitute a unique opportunity to advance our knowledge on the subject.

Thus, in order to compensate for the deficient protection of minority shareholders the Stock Exchange of the State of Sao Paulo (B3), which is the official Stock Exchange of Brazil, created in 2000 the so-called Novo Mercado (NM). Companies voluntarily joining it are obliged to adopt corporate governance practices that are stricter than those required by national legislation. This process is based on the idea of "functional convergence" proposed by Coffee (1999), according to which, in countries with institutional deficiencies, due to the difficulties of reforming national legislation, it must be the capital markets that take the initiative in adopting government improvement measures. Aiming at granting companies a certain margin of time to gradually improve their operation until they were able to meet the requirements of the NM, the B3 launched the Level 1 and Level 2, which are intermediary categories with stricter requirements of corporate governance than those required by Brazilian legislation and, at the same time, less demanding than those of the NM.

In this way, the Brazilian setting constitutes a unique environment for studying the effects of corporate governance on the financial decisions of companies by bringing together companies that, despite being subject to the same institutional framework, are exposed to different requirements of corporate governance. Therefore, the present doctoral thesis prevents the results and conclusions from being biased by institutional and cultural differences between countries. Likewise, the Brazilian case allows us to assess the extent to which a market-level reform that did not have the support of national legislative changes, can replace or amend the institutional deficiencies of the country as a whole.

Another institutional aspect in which we deepen in this doctoral thesis is related to the influence of the Brazilian tax legislation in the financial decisions of companies. Specifically, Brazil is the only emerging country that has implemented a system of Allowance for Corporate Equity (ACE), called "interest on equity (IOE)", whose purpose is to allow companies to deduct a notional interest rate for the use of own resources and not only for the use of the debt.

A peculiar feature of the IOE is that companies can only enjoy tax deductions by its use when they distribute part of their equity to shareholders. Thus, the IOE is a clear alternative to payout and, in spite of presenting features and functions quite similar to dividends, such as its usefulness to reduce agency conflicts, to signal investment opportunities, to attract shareholders who value the feeling of security, and to provide shareholders liquidity, its tax treatment presents great differences, since, when considered a financial expense, it can be deducted in the balance of the company before the calculation of taxes, thus generating a tax deduction. On the other hand, in the case of dividends, the tax base is determined by the adjusted net profit, without the company being able to obtain tax deductions for the distribution of dividends.

The tax treatment of personal income is also different for dividends and for IOE. While shareholders are tax exempt when they receive dividends, they are taxed on incomes from IOE and this tax varies according to the type of beneficiary shareholder. Therefore, the tax advantages derived from the use of IOE depend not only on the capital structure of the company but also on its ownership structure. This feature opens the door to consider whether the importance of fiscal considerations in the payout policy may be conditioned by the identity of the company's shareholders. In the same way, the existence of the IOE allows companies to have an alternative non-debt tax shield, with lower bankruptcy costs and that also retains the non-fiscal characteristics of the debt, such as, its signalling effect or its capacity to mitigate agency conflicts.

Based on the framework described above, the main objective of this doctoral thesis is to analyse, using the idiosyncrasies of the Brazilian institutional framework, the influence of corporate governance, taxes and the ownership structure on dividends and capital structure decisions of companies. This general objective is specified in two more specific objectives:

- 1- To analyze if and how the adoption of the NM affects the dividend policy and the capital structure of Brazilian companies.

2- Based on the relevance of taxes in payout decisions and the capital structure of companies, to analyze the moderating role of the ownership structure in said relationship.

This sequence of objectives structures this doctoral thesis. Thus, after this introduction, in Chapter 2 we consider the effect of the incorporation into the NM on financing and dividend decisions. This chapter describes the characteristics of the Brazilian institutional environment and the reform undertaken by B3 to improve the protection of investors through the creation of different market levels. Then, we verify if and how the incorporation to the NM and the intermediate levels affects the decisions of dividends and corporate financing, both as mechanisms used by companies to mitigate their agency conflicts.

Next, we incorporate the differences in taxation between dividends and IOE to verify the moderating effect of firms' ownership structure. This analysis is carried out in Chapter 3, in which we detail the tax consequences of the use of dividends and IOE for companies and shareholders and, subsequently, we verify whether and how the identity of the dominant shareholders affects the relationship between taxes and payout decisions. A similar study is undertaken in Chapter 4, in which the effect of the IOE on the capital structure is extended. In this chapter, we expose the similarities between leverage and the IOE and also the differences in their tax treatment, which depend on the ownership structure of firms. Subsequently, in this chapter we analyze the effect of taxes on financing decisions, incorporating the moderating role of the identity of the shareholders in this relationship.

This doctoral thesis is closed with a chapter that contains the main conclusions, the results are discussed from a critical perspective and future lines of research are suggested. To facilitate the overview of our research, in Figure 1 we propose a simplified scheme.

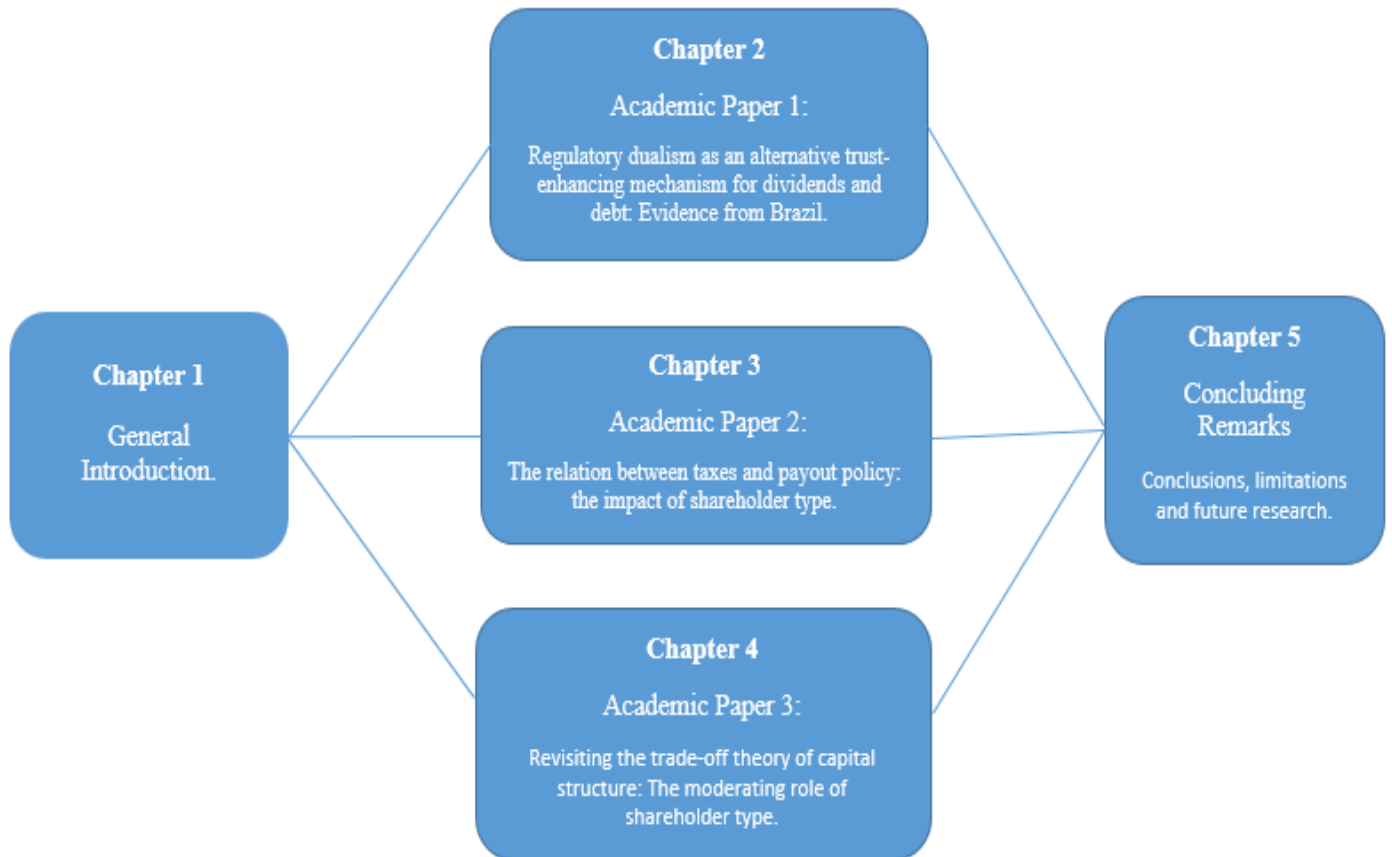
By way of advancement of our results, we find that Brazilian companies voluntarily incorporated into the NM distribute less dividends and are less leveraged than their counterparts

operating in the other segments of B3. This suggests that the NM plays an important role and can be an element that replaces other mechanisms aimed at improving trust between companies and shareholders, namely, dividends and debt.

The results also indicate that the incidence of taxes on payout and capital structure decisions depends on the ownership structure of the companies. We have detected that in companies with a predominant presence of individual (or family) shareholders or with pyramidal structures in their chain of owners, taxes seem to be a determining factor in financing or payout decisions. Contrariwise, in companies owned by institutional shareholders, fiscal considerations appear to be irrelevant in the formulation of financial policy.

Given the above, this doctoral thesis posits that reforms undertaken in the capital markets stand as an alternative mechanism to overcome the legal deficiencies that prevent countries from improving the quality of the corporate governance. We also conclude that the importance of taxes in corporate decisions is affected by the ownership structure. This indicates that the effectiveness of the efforts undertaken to reduce the debt tax bias is conditioned by the corporate shareholding structure.

Fig.1: Doctoral Thesis Structure:



CHAPTER 2:
**REGULATORY DUALISM AS AN ALTERNATIVE
TRUST-ENHANCING MECHANISM FOR DIVIDENDS
AND DEBT: EVIDENCE FROM BRAZIL.**

1. Introduction

Previous finance literature emphasizes the importance of dividends and corporate debt to alleviate conflicts between controlling and minority shareholders (Jensen and Meckling, 1976; Rozeff, 1982; Jensen, 1986). From this perspective, distributing more dividends or increasing leverage in companies reduces the free cash flow that might otherwise be used for purposes detrimental to minority shareholder interests. In this sense, La Porta et al. (1997, 1998) add that a country's legal origin is of major importance vis-à-vis minority shareholder protection. These authors also find that common law countries evidence a higher distribution of dividends and attribute these results to the better protection provided by these countries to minority shareholders (La Porta et al. 2000). Later studies, however, have found mixed evidence on these issues (Chae et al. 2009; Boțoc and Pirtea, 2014; John et al. 2015; Athari et al. 2016), suggesting that the effects of the institutional setting on firms' financial policies may be affected by questions other than their static legal origin.

The present study focuses on Brazil, a French civil law country with many problems related to minority shareholder protection. Previous literature describes Brazil as a country with traditionally high levels of private control benefits and both weak legislation and firm-level governance (Black et al. 2012), high ownership concentration (Gorga, 2009), and inherent problems of information asymmetry (Moreiras et al. 2012). Nevertheless, in recent years, the Brazilian securities market has undergone many reforms in an effort to make it more attractive to investors. Most importantly, BM&FBovespa, the main Brazilian stock exchange, launched a voluntary reform programme comprising three segments with varying corporate governance requirements: Nível 1 (Level 1; N1), Nível 2 (Level 2; N2) and the Novo Mercado (New Market; NM).

This voluntary reform is based on functional convergence (or regulatory dualism), namely, the notion that improvements in minority shareholder protection in countries displaying weak corporate governance must occur at the securities market level due to the difficulties associated with reforming laws in these countries (Coffee, 1999). However, the literature presents contrasting views on the effectiveness of functional convergence. Johnson and Shleifer (2000), for instance, point out that the lack of strong laws, an efficient judicial system, or a fair regulator reduce the possibility of enforcing contracts or laws and, thus, that investor protection remains low.

In this context, the first research question we address is: i) how does inclusion in the NM impact on firms' financial policies? Previous literature has documented that in addition to dividends and leverage, corporate governance mechanisms impact on many firms' policies and characteristics such as their cash holdings (Dittmar et al. 2003; Dyck and Zingales, 2004; Pinkowitz et al. 2006; Kusnadi and Wei, 2011; Durán et al. 2016), investment (Gugler, 2003; Honoré et al. 2015; McCahery et al. 2016), performance (Achim et al. 2016) and firm value (Fan and Yu, 2016). Therefore, we contend that if the NM strengthened minority shareholder protection, then it should affect other financial characteristics of Brazilian listed firms.

After examining the effect of the NM on firms' general characteristics, the second issue we address is ii) do Brazilian listed firms use the NM as a substitute for dividends and debt as trust-generating mechanisms? We conjecture that, if the NM were effective in improving minority shareholder protection, in line with previous literature, then it might also affect firms' dividends and leverage policies. Thus, our second step is to investigate whether the NM has an outcome or a substitution effect on dividend policies and whether it affects the use of leverage by Brazilian listed firms.

Results reveal a number of differences between NM-listed firms and their non-NM counterparts. Evidence also shows a negative effect of presence in the NM on both dividends

and leverage. We also find that enlistment in the N1 or N2 has a negative influence on dividend distributions but that this effect is weaker than enlistment in the NM. Therefore, besides confirming the substitutional effect of BM&FBovespa corporate governance segments, it suggests that the more stringent the requirements of corporate governance practices, the fewer dividends shareholders require from firms. Moreover, N1 and N2 enlistment does not appear to affect firms' leverage, suggesting that only the most stringent corporate governance practices, such as those required by the NM, influence firms' capital structure decisions.

This study contributes to corporate governance literature in several ways. First, we show that companies in Brazil use corporate governance as a commitment device to express their intent to take care of minority shareholders. Second, using the Brazilian background, we show that market-level reforms do indeed promote meaningful changes in company policies and help to improve minority shareholder protection. Third, we provide evidence that a country's institutional framework can evolve over time, thereby challenging the view that minority shareholder protection is the result of a static legal origin, which is unable to change over the years.

Finally, our investigation of the NM in Brazil, an emerging market, contributes to other emerging countries that display similar institutional features by providing evidence of the effectiveness of a mechanism aimed at enhancing corporate governance and developing market shares, and thus improving investor confidence. Since most prior literature uses US and Euro-zone data, relatively little is known about dividend and leverage policies in emerging markets. Therefore, we add to the existing literature by providing empirical evidence for an emerging market.

The remainder of the paper is organized as follows. Section II describes the characteristics of Brazil's institutional framework and the Bovespa's corporate governance lines of shares. This section also discusses the previous literature on dividend and leverage in

order to identify the relation between them, and proposes the influence of the Brazilian context on such topics. Section III introduces the data and the specific empirical models used to test our hypothesis. Section IV presents the descriptive analysis and the results of the explanatory analysis. Finally, Section V provides our main conclusions.

2. Literature Review and Hypothesis

2.1 Brazilian Institutional Framework

Previous literature describes Brazil as having a low level of shareholder protection and a low level of development in its financial market in which companies face financial constraints when seeking to access external capital (Crisóstomo et al. 2014a). Aldrighi and Oliveira (2007) find a very high concentration of vote and cash flow rights in the hands of controlling shareholders and a predominant presence of family-controlled firms. Moreover, the so-called Olson Problem¹ is rife in Brazil, where the overwhelming majority of listed firms are controlled by powerful blockholders opposed to creating conditions designed to improve minority shareholder protection and thus the development of the capital market (Gilson et al. 2011).

However, Brazil has undertaken major structural reforms over the last couple of decades. Changes in legislation have bolstered external shareholder protection, and privatization of public companies commenced at the end of the last century, thus aiding the modernization of key sectors of the economy. In addition, a series of reforms known as the

¹ Gilson et al. (2011) define the Olson problem as resistance led by established groups who, having achieved a position of financial success, often coupled with political influence under the existing regime, resist any reform aimed at improving minority shareholder protection since they believe it will jeopardise their position.

Plano Real (Real Plan)² created macroeconomic changes that led to a reduction in inflation, which, together with internal modifications in the main Brazilian stock market (BM&FBovespa), attracted new investors and helped it to develop.

These adjustments, however, did not remove all the obstacles that inhibit the full development of Brazil's stock market. Problems such as high interest rates and barriers related to minority shareholder protection persisted as did firms' limited access to external capital, thus keeping Brazilian companies heavily dependent on banks. In order to ensure the rights of minority shareholders and reduce information asymmetry in the market, the Sao Paulo Stock Exchange³ used its power of self-regulation⁴ to launch the NM in 2000. It exemplifies one case of regulatory dualism that aims to reduce the Olson Problem by allowing pre-listed firms to manage their business according to pre-existing legislation and allows for the existence of a parallel regime involving more rigorous standards of corporate governance, which is available to firms (pre-listing or new-listing companies) who wish to make use of it (Gilson et al. 2011).

Companies voluntarily subscribing to the NM must adopt more stringent corporate governance practices following the important principles of effective market functioning. Bovespa also launched N1 and N2, intermediary segments that impose less demanding corporate governance requirements than the NM. The aim of N1 and N2 is to provide firms with time to gradually improve their corporate governance practices until they reach the required conditions of the NM (De Paula, 2006).

² The *Plano Real* (Real Plan) is a series of measures aimed at stabilising domestic currency in nominal terms. It was enacted in 1994 and included the introduction of a new currency followed by a series of contracting fiscal and monetary policies.

³ In 2008, the Sao Paulo Stock Exchange (Bovespa Holding S.A.) and the Brazilian Mercantile and Futures Exchange (BM&F S.A.) merged. The new entity was called Nova Bolsa. Its name subsequently changed to BM&FBovespa.

⁴ Law 6,385 (1976), §4º, Art. 21, endows the Sao Paulo Stock Exchange with the power of self-regulation. Therefore, the requirements of its corporate governance levels are not just recommendations (soft law), since non-compliance with these requirements can result in transgressors being punished by the arbitral chamber.

Table 1 shows the main differences between these lines of shares. In sum, according to Brazilian law (Law 10,303 [2001]), listed companies must keep at least 50% of their shares with voting rights. The NM requires firms to issue only ordinary shares. Whereas the law provides no definition of a minimum free float for listed companies, the NM requires companies to keep at least 25% of free float. The NM also imposes more conditions on representation and independence in the board of directors. Specifically, Brazilian law requires companies to keep at least three directors and does not require any of these to be independent. The NM requires the presence of at least five permanent board members, at least 20% of whom must be independent directors. Companies in the NM must also guarantee a tag-along⁵ of 100% in transfer control, compared to the Brazilian law requirement of 80%. In addition, by adopting the IFRS and US GAAP, the NM requires additional transparency measures. The NM also created the arbitration chamber, an entity with the power to arbitrate in issues concerning claims made by minority shareholders. Nível 1, Nível 2, and Novo Mercado all require firms to conduct at least one annual meeting between analysts and shareholders, to provide the company's annual calendar, to disclose contracts signed between the company and related parties, and to disclose transactions made by controlling shareholders.

Donaggio (2012) notes that the aim of BM&FBovespa's voluntary reforms is to attract foreign capital in order to boost the growth of the Brazilian stock market. To achieve this, BM&FBovespa sought to reduce the perception of risk for investors by implementing good corporate governance rules. The requirement to issue only ordinary shares in the NM points to the fair treatment awarded to minority shareholders, following the principle of one share - one vote. The 100% tag-along requirement is intended to reduce the disparity of rights between majority and minority shareholders since, at the time the NM was created, Brazilian legislation

⁵Tag-along is a mechanism which ensures that if the majority shareholder sells his/her stake, minority shareholders have the right to sell their shares under the same conditions as applied to controlling shareholders.

allowed two-thirds of issuances to be preferred shares. A minimum free float requirement of 25% is intended to improve market liquidity. The arbitral chamber uses experts in order to expedite decisions concerning conflicts in corporate matters.

Table 1: BM&FBovespa Corporate Governance Levels

Item	Traditional Market	Nível 1 (Level 1)	Nível 2 (Level 2)	Novo Mercado
% of voting rights	Voting and non-voting shares are allowed	Voting and non-voting shares are allowed	Voting and non-voting shares are allowed	Only voting right shares
Minimum free float	No rule	Minimum of 25% of outstanding shares	Minimum of 25% of outstanding shares	Minimum of 25% of outstanding shares
Board of Directors	At least three members	At least three members	At least three members	At least, five effective members and at least 20% obligatory independent directors.
Disclosure standards	ITRs, DFPs and IANs	More requirements for ITRs, DFPs and IANs	IFRS or US GAAP	IFRS or US GAAP
Tag Along	80%	80%	100% for ordinary shares and 80% for preferred shares	100%
Arbitration chamber	Optional	Optional	Required	Required

Notes: This table presents the main differences between the levels of corporate governance launched by BM&FBovespa. The traditional market represents the requirements for companies that choose not to list themselves in any corporate governance level. Brazilian legislation requires ITRs (quarterly reports), DFPs (standardized financial statements), and IANs (annual reports) for public companies. In Nível 1, these reports must inform of any contracts signed between companies and related parties as well as transactions made by controlling shareholders. IFRS is the International Financial Reporting Standard and US GAAP is Generally Accepted Accounting Principles adopted by the U.S. Securities and Exchange Commission. Tag-along rights allow minority shareholders to sell shares under conditions similar to any controlling shareholder deals. The arbitration chamber is a mechanism designed to resolve conflicts between minority shareholders and companies or controlling shareholders quickly and confidentially through specialized arbitrators. Companies in the Nível 2 and Novo Mercado are obligated to adopt the arbitration chamber, whereas traditional market and Nível 1 companies have the option either to adopt it or to resolve their conflicts through the ordinary justice system.

Previous results have evidenced that BM&FBovespa's voluntary reform succeeded in improving both the trading volume and liquidity of NM-listed firms (De-Carvalho and Pennacchi, 2012). Using an index that takes accounts of important elements of corporate governance (board structure, board procedure, related party transactions, ownership structure,

shareholder rights and disclosure), Black et al. (2014) find that the NM enhanced the level of corporate governance in Brazil, which was reflected in positive investor reaction to these governance changes. Finally, Gilson et al. (2011) note that the NM contributed to the upsurge in truly widespread ownership as well as to changing the ownership structure of firms by decreasing the wedge between voting and cash flow rights.

2.2 Dividends and the Novo Mercado

Many prior studies have examined the effect of corporate governance on dividend decisions. For example, La Porta et al. (2000) posit two alternative hypotheses for the relation between dividend policy and shareholder rights. The first hypothesis states that the presence of an effective legal system allows shareholders to obtain higher levels of dividends; in other words, dividends are an outcome of effective legal protection for shareholders (the outcome hypothesis). The second hypothesis states that an ineffective legal system can lead companies to distribute more meaningful dividend ratios as a way of substituting for weak investor protection (the substitution hypothesis). These authors find that firms operating in countries which offer better legal protection for shareholders distribute higher dividend payouts compared to their counterparts in countries with poorer legal protection for minority shareholders, thus confirming the outcome hypothesis.

Many other studies support the outcome hypothesis through the adoption of country-level or firm-level corporate governance practices in payout policies. For instance, Djankov et al. (2008) construct an index to measure the legal protection of minority shareholders against expropriation in 72 countries. They confirm that common law countries - due to the quality of transparency in negotiations and the emphasis on ex-ante litigation - provide stronger protection against expropriation compared to civil law based countries. Farinha (2003) finds a link between dividend policy and firms' compliance with the Cadbury Code of Best Practices. Said author argues that better-governed firms use dividend policies more extensively and that legal

environment and dividend policy complement each other. Francis et al. (2011) also find a positive relation between an internal governance index, adoption of antitakeover laws, and dividend distribution.

Furthermore, many articles confirm the substitution hypothesis in environments other than the United Kingdom and the United States (O'Connor, 2006; Chae et al., 2009; Lam et al. 2012; John et al. 2015; Athari et al. 2016). Fatemi and Bildik (2012) find that firms in civil law countries distribute more dividends than those in countries with higher shareholder protection. Boțoc and Pirtea (2014) confirm that firms in countries offering low investor protection distribute higher dividends regardless of firm risk. They attributed the extended use of dividends to firms' desire to develop a good reputation. Finally, Mitton (2004) finds that dividends and corporate governance have a strong negative relation in civil law countries.

Previous research shows that governance practices such as those required by the NM affect dividend policy. For instance, using a Russian sample, Liljeblom and Maury (2016), find that adopting US GAAP standards is negatively related to dividend payments. Using a Spanish sample, Díaz et al. (2008) find that ownership concentration and the proportion of voting and cash flow rights are related to dividend payments. In addition, prior studies find that the composition of the board of directors affects dividends (Urzúa-I., 2009; Setia-Atmaja et al., 2009). Brockman and Unlu (2009) find that the substitution model is related to poor disclosure environments; that is, in countries with higher information asymmetry, firms pay higher dividends.

In the Brazilian context, we expect differences in corporate governance between the NM and its non-NM counterparts to have an impact on the level of payout distributions of BM&FBovespa' listed firms. Two scenarios are possible: companies may either distribute more dividends as a result of their complying with NM corporate governance requirements, or there

may be a reduction in dividend payment trends due to the trust being generated between companies and minority shareholders. Our first hypothesis thus reads as follows:

H1a: The NM has a positive effect on the payout of firms.

H1b: The NM has a negative effect on the payout of firms.

2.3 Leverage policy and the NM

In their pioneering study of the agency theory, Jensen and Meckling (1976) argue that leverage works as a disciplinary mechanism by forcing managers to have fixed obligations. In addition, Jensen (1986) argues that leverage forces companies to reduce cash flow that might otherwise be used to finance negative net present value projects. Agrawal and Knoebet (1996) underscore the importance of lenders for monitoring companies' activities since the performance of borrowers affects lender capital.

However, some previous literature has linked the effectiveness of leverage to the quality of governance practices. Clearly, if capital market institutions prove ineffective at preventing opportunistic behaviour, external blockholders can control more resources without diluting their control stake and can thus expropriate more easily via leverage. Ineffective corporate governance can therefore create an environment which is favourable to expropriation through related-party transactions and pyramidal structures (Faccio, 2001; Setia-Atmaja et al. 2009, Ruiz-Mallorquí and Santana-Martín, 2011).

Conversely, if capital market institutions are effective, two scenarios are possible. Higher levels of leverage can reduce agency conflicts between controlling and minority shareholders. That is, leverage can act as a disciplinary mechanism for managers. Likewise, higher standards of corporate governance can lead credit providers to reduce both collateral requirements (An et al. 2016) and also debt interests in loans as they can access information to assess borrowers' ability to repay debt, which, in turn can reduce the cost of debt (Chen and

Zhu, 2013; Lee et al. 2015). From this perspective, when there is good corporate governance, companies could prefer to maintain higher levels of debt in order to signal their intention not to expropriate investor wealth.

Alternatively, previous literature has found that better corporate governance facilitates firms' access to external capital, which positively affects the development of financial markets and firms' growth due to a reduction in financial constraints (Claessens and Yurtoglu, 2013). In turn, less financially constrained firms use less debt because they enjoy greater access to other sources of external capital (Kaplan and Zingales, 1997; Whited and Wu, 2006; Francis et al. 2013; Florackis et al. 2015). Consequently, if corporate governance reduces information asymmetry, both shareholders and managers would prefer lower debt levels because corporate governance replaces the disciplinary function of debt and allows less leveraged companies the freedom to handle greater cash holdings.

Hence, we posit that, in the Brazilian context, listing in the NM raises two alternative hypotheses. In one scenario, the NM increases the debt levels of firms because it inhibits expropriation by controlling shareholders through debt. In the other, the NM facilitates trust and thus reduces participating firms' use of debt due to increased access to external capital as well as insider preference for remaining free from the obligations of debt. Therefore, we state our second hypothesis as follows:

H2a: NM has a positive effect on a firm's financial leverage.

H2b: NM has a negative effect on a firm's financial leverage.

3. Empirical design

3.1 Sample

Our sample comprises listed Brazilian companies included in the Worldscope Thomson database for 2001 to 2012. This period covers the first 12 years of the NM and the years before

Brazil's current macroeconomic crisis, indicating that macroeconomic issues will not overly affect our results as in the crisis period. We drop firms with missing values in debt, total assets, and cash dividends. In addition, we omit financial firms due to their differences in corporate structure compared to the rest of the sample.

Table 2: Detailed description of the Sample according to the BM&FBovespa's Levels.

Item	Traditional Market	Nível 1 (Level 1)	Nível 2 (Level 2)	Novo Mercado	TOTAL
2001	92	07	01	00	100
2002	94	08	04	02	108
2003	86	13	03	02	104
2004	87	15	06	06	114
2005	76	16	06	10	108
2006	71	17	06	15	109
2007	77	18	05	34	134
2008	77	15	06	35	133
2009	75	17	06	43	141
2010	78	12	05	47	142
2011	68	16	06	50	140
2012	105	10	05	22	142
TOTAL	986	164	59	266	1,475

Notes: This table presents the number of firms listed in each year of our sample period for each segment of the BM&FBovespa.

After applying these conditions, our data is presented as an unbalanced panel consisting of 266 companies and 1,475 firm-year observations. The 12-year sample period includes many cases of delists, mergers, and acquisitions. Selecting only firms with the same number of observations would reduce the sample to an unacceptable size. Table 2 details the distribution of the sample according to each BM&FBovespa segment for each year of our sample period.

3.2 Variables and models

We use two measures for the dependent variables in all of the models performed. For dividends (DIV1), we use the payout ratio, measured as total cash dividends over total assets (Kusnadi and Wei, 2011; Pindado et al. 2012; Lozano and Caltabiano, 2015) and total cash dividends over total equity (DIV2) as an alternative measure. Leverage (LEV1) is measured as

total debt over total assets (Lopez-Gracia and Sogorb-Mira, 2008; Hernandez-Cánovas, 2016) and also as LEV2, measured as long term debt over total assets (Pindado et al. 2017). Cash holding (CASH) is measured as the sum of cash and short term investments over total assets. SIZE is the natural logarithm of total assets (Kusnadi and Wei, 2011; Lozano and Caltabiano, 2015).

For investment opportunities (IO), we use the market to book ratio (Öztekin & Flannery, 2012). We use ROA as a measure of profitability. This is measured by earnings before interest and taxes (EBIT) over total assets (Pindado et al. 2008). The non-debt tax shield (NDTS) variable is measured by the difference between interest payable less interest paid over total assets (Ramirez et al. 2012). The effective tax rate (ETR) is the ratio of income tax over earnings before taxes (Lopez-Gracia and Sogorb-Mira, 2008). Investments (INV) is measured by capital expenditures over total assets. TANG represents tangible assets and is measured as tangible fixed assets over total assets.

As regards the models used, we include dummy variables in each of them to test the effect of companies joining the BM&FBovespa levels of corporate governance on the dependent variables. Thus, NM is a dummy variable that equals 1 if the firm is listed in the NM, and zero otherwise⁶, and N1N2 is a dummy variable that equals 1 if the firm is listed in N1 or N2, and zero otherwise. Thus, in order to test our first hypothesis, in which the central issue is to explore the effect of inclusion in the NM on dividend distribution, we obtain our baseline model as detailed in Equation (1):

$$\text{DIV}_{it} = \beta_0 + \beta_1 \text{NM}_{it} + \beta_2 \text{N1N2}_{it} + \beta_3 \text{LEV}_{it} + \beta_4 \text{ROA}_{it} + \beta_5 \text{IO}_{it} + \beta_6 \text{CASH}_{it} + \beta_7 \text{SIZE}_{it} + \beta_8 \text{INV}_{it} + \mathbf{d}_t + \boldsymbol{\eta}_i + \mathbf{I}_i + \boldsymbol{\vartheta}_{it}. \quad (1)$$

⁶ It is important to note that this variable can change over time. For instance, if a company was not listed in the NM in the period 2001 to 2006, NM would take the value zero. However, if the same company migrated to the NM in 2007, NM would be 1 after said year.

The regressions can be affected by time-varying macroeconomic effects, since the macroeconomic set is not constant over time. We control this effect by using a time dummy variable, d_t . We also include in the models the variable I_i , that represents the impact of the industry effect on our dependent variable because dividends and debt are strongly related to a company's specific business area. In order to define it, we follow the Standard Industrial Classification (SIC)⁷ code. Finally, other factors not included in the mentioned variables are captured by random disturbance, ϑ_{it} .

In order to test Hypothesis 2, in which we examine the effect of the NM on leverage policy, we define a firm's leverage as a function of its most widely accepted determinants:

$$\begin{aligned} LEV_{it} = & \beta_0 + \beta_1 NM_{it} + \beta_2 N1N2_{it} + \beta_3 DIV_{it} + \beta_4 ROA_{it} + \beta_5 IO_{it} + \beta_6 TANG_{it} + \beta_7 SIZE_{it} \\ & + \beta_8 INV_{it} + \beta_9 NDTs_{it} + \beta_{10} ETR_{it} + d_t + \eta_i + I_i + \vartheta_{it}. \end{aligned} \quad (2)$$

The equations are first estimated with the OLS panel data estimator. We acknowledge that adopting the stringent practices of corporate governance required by the NM might not be a random event, since we noted that NM firms may evidence *ex ante* differences that make them more prone to enlist in the NM. Its observed effect on dividends and leverage may thus result from selection bias. We address this endogeneity risk by using the propensity score matching (PSM) method, which produces a control group that is as similar as possible to the treatment group based on firms' characteristics.

⁷ The SIC code classifies companies according to the following categories: Agriculture, Forest and Fishing; Mining; Construction; Manufacturing; Transportation, Communications, Electric, Gas and Sanitary Services; Wholesale Trade; Retail Trade; Finance, Insurance and Real Estate; Services; Public Administration; and Non-classifiable.

Following previous studies in finance (Boubakri et al. 2012; Kim et al. 2017), we select the optimal match based on the nearest neighbour technique (with replacement and common support). To determine the propensity score, we use the same set of variables described in section III.B. In sum, for our tests, the matching firm to each NM company should be in the same industry group, have the same sample years and the same nearest neighbour propensity score. Finally, our propensity score matched sample has 530 observations for the dividend models and 514 observations for the leverage models, equally distributed between NM and non-NM firms for both models.

4. Results

4.1 Descriptive Analysis

Table 3: Summary statistics for the variables used in the models.

Variable	Obs.	Mean	Standard deviation	Min.	Max.
DIV1	1,475	0.033	0.055	0.00	0.800
DIV2	1,475	0.075	0.134	-0.640	1.654
LEV1	1,475	0.288	0.189	0.00	1.428
LEV2	1,475	0.177	0.152	0.00	1.411
IO	1,475	0.947	0.928	0.023	8.611
SIZE	1,475	6.800	1.645	1.021	11.757
CASH	1,471	0.130	0.120	0.00	0.744
ROA	1,475	0.107	0.142	-2.387	1.258
INV	1,475	0.060	0.060	0.00	0.670
ETR	1,475	0.282	0.384	-0.497	4.982
TANG	1,429	0.514	0.222	0.053	1.000
NDTS	1,475	43.243	87.242	-0.045	597.960

Notes: this table provides the number of observations, means, standard deviations, and the values in first, second and third quartiles for all the variables used in the models.

Table 3 provides summary statistics for the variables used in the models. The mean values for the two variables of dividends are 0.033, 0.075. These values are higher than those found in studies that used Euro-zone or United Kingdom samples (Henry, 2011; Lozano and Caltabiano, 2015), and which are environments that apply greater minority shareholder

protection compared to Brazil. This suggests that firms in Brazil rely heavily on dividends as a trust-enhancing mechanism.

The mean values of the leverage variables (0.288 and 0.177) are lower than the leverage values of studies carried out in developed countries (Henry, 2011; Renneboog and Trojanowski, 2011; Jacob and Michaely, 2017). This might imply either that Brazilian companies rely less on debt as an agency mitigating device or that Brazilian firms face higher financial constraints when accessing the debentures market.

Table 4: *t*-tests

Variable	# Non-NM obs. (1)	# NM obs. (2)	Non-NM (3)	NM (4)	differences (3)-(4)
DIV1	1,209	266	0.033	0.032	0.001
DIV2	1,209	266	0.076	0.070	0.006
LEV1	1,209	266	0.285	0.301	-0.016
LEV2	1,209	266	0.172	0.198	-0.026***
IO	1,209	266	0.796	1.623	-0.833***
SIZE	1,209	266	6.752	7.015	-0.263***
CASH	1,205	266	0.120	0.172	-0.052***
ROA	1,209	266	0.108	0.100	0.008
INV	1,209	266	0.057	0.070	-0.013***
TANG	1,165	264	0.537	0.416	0.120***
ETR	1,209	266	0.276	0.308	-0.032
NDTS	1,209	266	44.806	36.142	8.664*

Notes: this table provides the *t*-test for the variables used in the models. Columns 2 and 3 show the observations for non-NM and NM firms, respectively. Columns 4 and 5 show the means of each variable for non-NM and NM firms. Column 6 shows the differences of the means (column 4 – column 5) as well as the significance of such differences. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 4 presents a preliminary analysis of the differences between non-NM firms and NM firms based on a test of difference of means for the variables used in the models. It shows that NM-firms keep higher cash holdings, suggesting there is confidence that insiders will not use internal funds for private-benefit projects. NM-firms also present less collateral (TANG), indicating they have fewer safeguards to offer investors and creditors. Thus, they adopt the NM as a trust-enhancing tool that helps them finance their projects and disgorge fewer dividends.

Firms listed in the NM are larger, have more growth opportunities and display a higher rate of investment. These results reveal that joining the NM affects companies' internal policies. However, as NM firms differ from their non-NM counterparts in many aspects for which a univariate analysis does not control, we cannot conclude whether or not differences in the ratios analysed are due to differences in other firm-level characteristics.

4.2 Baseline Results

After detailing the descriptive statistics, we conducted multivariate analysis to test the hypothesis set out. As seen in Table 5, the empirical evidence confirms that, *ceteris paribus*, presence in the NM has a negative relationship with dividend distribution. This negative relationship confirms Hypothesis 1b, which predicts that an improvement in corporate governance in Brazil should have a negative effect on payout distributions. These results are consistent with the substitute model proposed by La Porta et al. (2000) and are in line with prior research that reports a substitutional use of dividends to make up for weak corporate governance (Mitton, 2004; Fatemi and Bildik, 2012; Boțoc and Pirtea, 2014). These findings suggest that adopting certain corporate governance practices such as those required by the NM has a negative effect on payout distributions (Brockman and Unlu, 2009; Setia-Atmaja et al. 2009; Liljeblom and Maury, 2016).

The results also reveal a negative effect of the presence in N1 and N2 on dividends. This result suggests that enlistment in the intermediary lines of corporate governance is also used by firms as an alternative trust-enhancing mechanism to dividends. The N1N2 coefficients are, however, smaller than those for the NM. Therefore, besides confirming the substitutional effect of NM enlistment on dividends, these results suggest that the more stringent the corporate governance requirements which firms adopt, the fewer dividends shareholders require from firms.

Table 5: Estimations results with Pooled OLS and PSM method.

	Total Cash dividends/Total Assets		Total Cash dividends/Total Equity	
	Pooled OLS	Propensity Score Matching	Pooled OLS	Propensity Score Matching
	(1)	(2)	(3)	(4)
NM_{jt}	-0.0190*** (0.00343)	-0.0176*** (0.00383)	-0.0507*** (0.00885)	-0.0413*** (0.00988)
N1N2_{jt}	-0.00694** (0.00342)	0.00227 (0.0200)	-0.0281*** (0.00881)	-0.00858 (0.0516)
SIZE_{it}	0.00134* (0.000784)	0.00370** (0.00145)	0.00500** (0.00202)	0.0102*** (0.00375)
IO_{it}	0.0207*** (0.00142)	0.0198*** (0.00161)	0.0447*** (0.00365)	0.0373*** (0.00416)
LEV1_{it}	-0.0319*** (0.00632)	-0.0455*** (0.0110)	0.0419** (0.0163)	0.0197 (0.0285)
CASH_{it}	-0.0130 (0.0101)	-0.0526*** (0.0163)	0.0126 (0.0261)	-0.103** (0.0422)
INV_{it}	-0.0293 (0.0193)	-0.0346 (0.0259)	-0.0719 (0.0497)	-0.0595 (0.0667)
ROA_{it}	0.152*** (0.00858)	0.0784*** (0.0112)	0.362*** (0.0221)	0.212*** (0.0289)
Constant	-0.000977 (0.0140)	0.00916 (0.0222)	-0.0491 (0.0360)	0.000302 (0.0572)
Observations	1,471	530	1,471	530
R²	0.430	0.694	0.363	0.596

Notes: This table reports the results of regressions for the responsiveness of the treatment variable (NM) and the control variables on the dividend payouts. Columns (1) – (3) employ Pooled OLS method and Columns (2) – (4) employ the propensity score matching (PSM) method. Robust standard errors are in parentheses. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.

As regards the control variables, bigger firms are positive related to dividends. The relation between dividends and investment opportunities is also significant and positive. This result is in line with previous findings in Brazil and confirms the signalling function of dividends about future growth opportunities (Lozano and Catalbiano, 2015).

The relation between dividends and leverage is negative, confirming that both governance mechanisms substitute for each other. The relation between the second measure of dividends (total cash dividends over total equity) and leverage, however, is positive. This relation is not surprising given that total assets accounts for firms' liabilities while total equity does not. It suggests that a firm's liabilities have a negative effect on the relation between

dividends and leverage. As expected, profitability have a positive effect on current dividends (Brav et al. 2005).

The results of the leverage model, reported in Table 6, show a negative relation between NM listing and corporate leverage for the two measures used for the dependent variable. This finding confirms Hypothesis 2b, which states that the NM should reduce companies' financial leverage. Given the capital and ownership structure of Brazilian firms, this may have at least three implications. First, from an agency theory perspective, debt can be used as a disciplinary mechanism by forcing companies to reduce the free cash flow available for managers (Jensen, 1986). NM might therefore reduce companies' use of leverage to mitigate agency conflicts. The NM thus works as a substitutive monitoring device to leverage.

Second, the improvement in corporate governance provided by the NM may inhibit possible opportunistic behaviours. Therefore, listing in the NM reduces the use of debt by preventing shareholders from expropriating through related-party transactions. Third, in line with Claessens and Yurtoglu (2013), NM might also facilitate firms' access to external capital, reducing firms' financial constraints and, consequently, the cost of equity (Zhu, 2014). In turn, the NM leads companies to rely less on debt because it replaces the latter's disciplinary function and gives firms freedom to handle larger cash holdings.

In contrast, the N1N2 variable does not appear to have a significant effect on leverage. It suggests that, since both N1 and N2 require companies to adopt less stringent corporate governance practices compared to the NM, enlistment in these segments does not prove to be effective at either reducing shareholder perception of agency risks or vis-à-vis mitigating the level of financial constraints that firms face. These results indicate that the substitutional effect of corporate governance on debt depends on how strict corporate governance practices are.

Table 6: Estimations results with Pooled OLS and Propensity Score Matching method.

	Total Debt/Total Assets		Long Term Debt/Total Assets	
	Pooled OLS	Propensity Score Matching	Pooled OLS	Propensity Score Matching
	(1)	(2)	(3)	(4)
NM_{jt}	-0.0321** (0.0144)	-0.0320* (0.0174)	-0.00475 (0.0112)	-0.0251* (0.0141)
N1N2_{jt}	-0.00165 (0.0143)	0.0394 (0.0713)	7.26e-05 (0.0111)	-0.0407 (0.0578)
DIV_{it}	-0.526*** (0.110)	-0.426 (0.289)	-0.209** (0.0852)	-0.672*** (0.234)
ROA_{it}	-0.211*** (0.0394)	-0.818*** (0.0762)	-0.0668** (0.0305)	-0.235*** (0.0618)
IO_{it}	0.0449*** (0.00616)	0.0353*** (0.00935)	0.0266*** (0.00477)	0.0188** (0.00757)
TANG_{it}	0.0755*** (0.0236)	0.152*** (0.0428)	0.102*** (0.0183)	0.193*** (0.0347)
SIZE_{it}	0.0357*** (0.00365)	0.0421*** (0.00712)	0.0415*** (0.00283)	0.0409*** (0.00577)
INV_{it}	0.0787 (0.0817)	0.113 (0.117)	0.173*** (0.0633)	0.137 (0.0946)
NDTS_{it}	-0.000208*** (6.40e-05)	-8.25e-05 (0.000140)	-0.000190*** (4.96e-05)	-0.000160 (0.000114)
ETR_{it}	-0.0151 (0.0121)	-0.00593 (0.0163)	0.00459 (0.00934)	0.0299** (0.0132)
Constant	0.109* (0.0594)	-0.00826 (0.0985)	-0.0976** (0.0460)	-0.186** (0.0798)
Observations	1,429	514	1,429	514
R²	0.188	0.474	0.257	0.328

Notes: This table reports the results of regressions for the responsiveness of the treatment variable (NM) and the control variables on leverage decisions. Columns (1) – (3) employ Pooled OLS method and Columns (2) – (4) employ the propensity score matching (PSM) method. Robust standard errors are in parentheses. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.

As regards the control variables for the leverage models, dividends and the dependent variable appear to have a negative relationship. ROA also has a negative effect on leverage, suggesting that more profitable firms generate more internal resources to finance their activities and, consequently, rely less on debt. Firms with higher investment opportunities have a higher leverage because they need to finance their projects. In addition, firms with higher collateral evidence more guarantees to creditors, justifying the positive relation between tangibility and leverage. This is also why size and leverage have a positive relationship. As expected, firms that can achieve tax savings through alternative tax shields (NDTS) rely less on debt. Finally, results show that companies who are expected to present higher tax burdens (ETR) have a positive

influence on indebtedness. This result is not surprising, since the interests on debt allow firms to reach tax savings.

4.3 Robustness Checks

We also estimate all the models using an instrumental variable method. According to Ogaki (1993), the most appropriate method is the generalized method of moments (GMM) since it encompasses all other instrumental variable methods as special cases. Specifically, we use the system GMM proposed by Blundell and Bond (1998) as the most reliable method. Furthermore, previous literature supports the use of system GMM to address the dynamics of dividends and leverage (Henry, 2011; Pindado et al. 2012; Keasey et al. 2015). The system GMM uses the lagged values of the independent variables as instruments, which are highly correlated to the variables they instrument. Therefore, this method is well suited to solving the endogeneity problem.

Following Blundell and Bond (1998), we use each right-hand side variable in the models as instruments, lagged one to four times for equations in differences (except for lagged dividends, whose instruments are lagged two to five times) and just once in the level equations and only one instrument, t , for equations in levels. We also controlled for dynamic effects by including a lag of the dependent variables in the models.

We also perform some tests to check potential misspecifications of the models. First, we used the Hansen test of overidentifying restrictions to test the absence of correlation between the instruments and the error term. The results support the validity of the instruments in all the models used. Second, following Arellano and Bond (1991), we use the m_2 statistic to test the lack of second-order serial correlation in the first difference residual. Results show there are no such problems in the models used.

Table 7: Robustness checks with System GMM method.

	Robustness checks			
	Total Cash dividend/ Total Assets	Total Cash dividends/ Total Equity	Total Debt/ Total Assets	Long Term Debt/ Total Assets
	(1)	(2)	(3)	(4)
NM	-0.0135*** (0.00364)	-0.0304*** (0.00755)	-0.0277** (0.0122)	-0.0284** (0.0110)
N1N2	-0.00749* (0.00408)	-0.0298*** (0.00940)	-0.0268 (0.0180)	-0.0168 (0.0167)
DIV_{i,t-1}	0.432*** (0.0241)	0.467*** (0.0142)		
LEV_{i,t-1}			0.732*** (0.0272)	0.717*** (0.0273)
SIZE_{it}	0.000762 (0.00105)	0.00624** (0.00315)	0.0117** (0.00531)	0.0464*** (0.00566)
IO_{it}	0.0217*** (0.00201)	0.0399*** (0.00355)	0.00460 (0.00383)	0.00456 (0.00310)
DIV_{it}			-0.185 (0.121)	-0.0656 (0.0894)
LEV_{it}	-0.00552 (0.00730)	0.0337 (0.0286)		
CASH_{it}	0.0314*** (0.00940)	0.109*** (0.0320)		
INV_{it}	0.0338*** (0.0125)	0.0973*** (0.0320)	0.179*** (0.0607)	0.177*** (0.0526)
ROA_{it}	0.0350*** (0.00895)	0.0747*** (0.0222)	-0.264*** (0.0393)	-0.147*** (0.0138)
TANG_{it}			-0.0704** (0.0287)	0.0176 (0.0234)
NDTS_{it}			-5.15e-05 (3.53e-05)	-0.00021*** (3.73e-05)
ETR_{it}			-0.0257*** (0.00486)	0.00995* (0.00560)
Constant	-0.00963 (0.00667)	-0.0532*** (0.0170)	0.103*** (0.0392)	-0.232*** (0.0358)
M₂	1.23 (0.218)	0.89 (0.376)	0.72 (0.474)	-1.23 (0.219)
Hansen	61.88 (0.274)	51.11 (0.624)	53.02 (0.835)	70.11 (0.310)
Observations	934	934	912	912
Firms	129	129	129	129

Notes: This table reports the results of regressions for the responsiveness of the treatment variable (NM) and the control variables on dividend payouts [Columns (1)-(2)] and leverage decisions [Columns (3)-(4)]. M_2 is a serial correlation test of second order using residuals in first differences, asymptotically distributed as $N(0,1)$ under the null hypothesis of no serial correlation. The Hansen test is a test of overidentifying restrictions asymptotically distributed as X^2 under the null hypothesis of no correlation between the instruments and the error term. Standard errors are in parentheses for the intercept and all variables. ***, **, and * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.

Finally, we retain firms with at least five consecutive years of valid data because this condition is necessary to test for the absence of second-order correlation for the system GMM

methodology. Consequently, the sample used for the GMM models comprises 129 companies and 1,063 firm-year observations. Results confirm our finding with OLS and PSM methods for the interest variable and the explanatory variables for both the dividend and the leverage model.

5. Conclusions

This research explores the effects of a market-level reform led by the BM&FBovespa that introduced segments with stricter corporate governance requirements aimed at reducing the traditional problems inherent in Brazilian law concerning minority shareholder protection. To do so, we first verify whether the NM – the segment enforcing more stringent corporate governance practices – impacts on firms' financial characteristics. Previous studies have reported that improving corporate governance affects a number of firm-related issues. We thus contend that, if the NM were to strengthen protection of minority shareholders in firms, it should be reflected in their internal functioning.

As a second step, we investigate whether the NM has an outcome or a substitution effect on dividend policies, and whether it affects the use of leverage by Brazilian listed firms. We conjecture that, were the NM to prove effective in improving minority shareholder protection, then it might impact on firms' dividend and leverage policies. We find that NM firms pay out fewer dividends than non-NM firms. These results suggest that companies use the NM as a trust-generating mechanism that mitigates concerns about minority shareholder wealth expropriation in Brazilian listed firms. Consequently, the NM reduces shareholders' demands for dividends.

Moreover, our findings reveal that NM firms are less leveraged than their non-NM counterparts. It suggests the NM plays a monitoring role that reduces firms' use of debt as a disciplinary mechanism or/and reduces the use of debt by controlling shareholders to expropriate minority shareholders through related party transactions. Likewise, it is possible

that voluntary enlistment facilitates firms' access to external capital, thus reducing firms' use of debt.

We also check to see whether firms' enlistment in N1 or N2, which are intermediary corporate governance segments of BM&FBovespa with less rigorous corporate governance requirements, affects firms' dividend and leverage decisions. Results show that firms joining the N1 or N2 reduce the use of dividends albeit in a less evident way than NM listing does. It suggests that the more stringent corporate governance practice requirements are, the fewer dividends shareholders require from firms. N1 and N2 enlistment, however, does not significantly affect firms' capital structure policy. We, therefore, contend that these segments are not sufficiently effective to replace the agency function of leverage or to mitigate firms' financial constraints when accessing external equity.

This research provides new insights into the corporate governance area by showing that functional convergence can work as an effective mechanism to make up for poor country-level investor protection. In other words, changes in regulations at the securities market level can improve corporate governance in these countries. The results also provide evidence that a country's institutional environment can evolve over time, thus reducing the impact of legal origin as the main determinant of the quality of minority shareholder protection.

An additional insight concerns the institutional setting. Specifically, we add to the scant literature on corporate governance and finance in emerging markets by providing evidence for a setting other than the more developed countries. We contribute to this line of research by analysing how voluntary reform in an emerging market affects firm specific decisions such as dividend distributions and leverage levels.

Our findings prove useful to practitioners and policy makers alike. Our results indicate that investors can benefit from enlisting a firm in the NM since adherence to stricter corporate

governance guidelines leads to a reduction in information asymmetries between a firm's controllers and minority shareholders. For policy makers, our results indicate that efforts to improve corporate governance in securities markets can boost investor participation and reduce the difficulty in accessing external capital.

6. References

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CAPÍTULO 3:
CONCLUSIONES GENERALES

1. Conclusiones

En esta tesis doctoral hemos analizado la influencia del gobierno corporativo, del marco fiscal y de la estructura de propiedad empresarial en las decisiones de distribución de beneficios y de estructura de capital de las empresas. Para alcanzar este objetivo, utilizamos el marco institucional brasileño pues presenta dos características específicas que le hacen un entorno ideal para este estudio: la existencia de distintos segmentos en la Bolsa de Valores de Brasil y el denominado interés sobre los fondos propios.

Por lo que se refiere a la primera de ellas, la Bolsa de Sao Paulo (B3) está formada por cuatro segmentos con distintos niveles de exigencia de gobierno corporativo. El segmento con unos requisitos más estrictos es el denominado Nuevo Mercado (NM), al que le siguen los Niveles 1 y 2. La creación de estos segmentos está inspirada en el concepto de convergencia funcional, según el cual, en los países con carencias institucionales, han de ser los mercados de capitales quienes tomen la iniciativa en la adopción de medidas de mejora del gobierno corporativo dadas las dificultades de reforma a las que se enfrenta la legislación nacional. Finalmente, las empresas que deciden no incorporarse a las prácticas más exigentes de gobierno corporativo están incluidas en la categoría del mercado tradicional que sigue prácticas de gobierno establecidas por la legislación nacional, las cuales tienen menos nivel de exigencia que las restantes líneas de gobierno corporativo.

La segunda característica específica, es la existencia de un sistema de Allowance for Corporate Equity (ACE), titulado el interés sobre los fondos propios (en inglés, *interest on equity* IOE), lo cual es una herramienta que permite a las empresas deducir fiscalmente una tasa referencial de intereses por el empleo de los recursos propios. Por tanto, a pesar de ser un mecanismo de reparto del beneficio empresarial con características parecidas a los dividendos, presenta un tratamiento fiscal notablemente distinto. Dada la deducibilidad de los intereses por el uso del capital propio, el IOE constituye un escudo fiscal alternativo a la deuda, lo cual tiene implicaciones en las decisiones de estructura de capital de las empresas y también en el uso de otros escudos fiscales alternativos (EFAD).

La presente tesis se puede estructurar en dos partes distintas, con las cuales tratamos de abordar dos objetivos. El primero es analizar si y cómo la incorporación a los segmentos alternativos de gobierno corporativo de la Bolsa de Brasil afecta a las políticas de dividendos y de estructura de capital de las empresas cotizadas. Para alcanzar este propósito, en el primer trabajo, titulado “Dualismo regulatorio como un mecanismo alternativo a los dividendos y la deuda para la creación de confianza: la evidencia brasileña”, examinamos el efecto de los distintos segmentos de gobierno corporativo en las características internas de las empresas. Posteriormente, estudiamos si la incorporación al NM o a los segmentos intermedios de la Bolsa tiene un efecto complementario o

sustitutivo en las decisiones de reparto de dividendos y si esa incorporación afecta a las decisiones de financiación de las empresas.

El segundo objetivo consiste en analizar si la estructura de propiedad empresarial tiene un papel moderador en la relación entre impuestos y las políticas de *payout* y de estructura de capital de las empresas. Para alcanzar este objetivo, exponemos en el segundo trabajo, titulado “La Relación entre Impuestos y Política de *Payout*: el Impacto del Tipo de Accionista”, las consecuencias fiscales del uso de dividendos y de IOE relacionándolas con la identidad dominante entre los accionistas de las empresas. Posteriormente, en el tercer trabajo, denominado “Revisando la Teoría del *Trade-off* de Estructura de Capital: el Papel Moderador de la Estructura de Propiedad de la Empresa”, presentado en el capítulo 4, detallamos algunas características comunes entre la deuda y el IOE, y analizamos sus diferencias con otros escudos fiscales.

Las conclusiones generales pueden resumirse en tres grandes bloques. En primer lugar, nuestros resultados sugieren que los accionistas aceptan la idea de que la presencia de las empresas en el NM reduce la posibilidad de que los directivos y accionistas mayoritarios desvíen los recursos empresariales para finalidades que no coinciden con la maximización de la riqueza empresarial. Como consecuencia, los accionistas exigen menos dividendos de las empresas, que pueden usar la tesorería disponible para financiar sus oportunidades de inversión. Por ello, concluimos que el dualismo regulatorio

en Brasil es una medida efectiva para generar confianza entre las empresas cotizadas en Bolsa y sus accionistas, y que sirve como un sustituto de los dividendos para reducir los costes de agencia entre accionistas controladores y accionistas minoritarios.

En segundo lugar, los resultados revelan que las empresas del NM se encuentran menos endeudadas que sus homólogas de otros segmentos, pudiéndose explicar ese hecho por dos posibles razones: por un lado, es posible que las empresas usen el NM para transmitir su compromiso con todos los accionistas, de modo que el NM funcione como un mecanismo alternativo a la deuda para disciplinar el comportamiento de los directivos y accionistas controladores. También es posible que la reducción del apalancamiento empresarial se deba a que el NM esté cumpliendo su objetivo de mejorar la reputación de las empresas y que aumente el interés de los inversores, disminuyendo la necesidad de las empresas de recurrir a la deuda para financiar sus actividades y oportunidades de inversión, al hacer la emisión de capital más atractiva o factible que la emisión de deuda o que el crédito bancario.

También examinamos el efecto de la incorporación a los niveles intermedios de la Bolsa en las decisiones de dividendos y de estructura de capital. Los resultados demuestran que la inclusión en esos segmentos tiene un impacto negativo en la distribución de beneficios, pero ese impacto es menos acusado que el generado por la incorporación al NM. Esto sugiere que, cuanto

más exigentes sean las prácticas de gobierno adoptadas por las empresas, mayor será la confianza establecida entre las empresas y los accionistas minoritarios, lo cual llevará los inversores a exigir menos dividendos de las empresas y permitir la utilización de los fondos generados por la empresa para la financiación de las oportunidades de crecimiento. Además, encontramos que la incorporación a los niveles intermedios de la Bolsa no afecta a las decisiones de estructura de capital de las empresas. Consecuentemente, entendemos que dichos niveles no imponen requisitos suficientemente exigentes para reemplazar la capacidad de la deuda de mitigar los conflictos de agencia o para aliviar las restricciones financieras de las empresas.

En tercer lugar, nuestros resultados indican que la importancia de los impuestos sobre las decisiones corporativas se ve significativamente influida por la identidad dominante entre los accionistas de las empresas. Concretamente, encontramos que la presencia de accionistas individuales y de estructuras piramidales de propiedad no solamente aumenta la propensión de las empresas a elegir el canal de *payout* que produce más beneficios fiscales globales, sino que también lleva las empresas a distribuir mayores flujos de caja por el canal de *payout* fiscalmente más ventajoso. Por otro lado, nuestros resultados sugieren los accionistas institucionales no explotan totalmente las ventajas fiscales ya que, a pesar de que la presencia dominante de ese tipo de accionistas lleva a las empresas a obtener mayores ahorros fiscales a través del

uso de IOE que de dividendos, no encontramos relación significativa entre la presencia de accionistas institucionales y el uso de IOE.

En esta misma línea, encontramos que la presencia de accionistas individuales lleva las empresas a reducir el uso de deuda cuando emplean el IOE, mientras que los accionistas institucionales no influyen en esta relación. También examinamos si el uso de IOE lleva las empresas a aprovechar menos otros escudos fiscales cuando los accionistas dominantes son aquellos que más pueden explotar la ventaja fiscal del IOE frente a los EFAD. Una vez más, los resultados indican que las empresas con accionistas individuales que usan IOE emplean en menor medida los escudos fiscales. Sin embargo, ese resultado -que es coherente con la teoría- no tiene su continuación cuando se estudian los accionistas institucionales.

Otro punto que hemos examinado es si el grado de concentración de propiedad puede modelar las anteriores relaciones. Nuestros resultados apuntan que la concentración accionarial de los inversores individuales y de las estructuras piramidales de propiedad tiene un efecto positivo en la eficacia y en la eficiencia de la relación entre impuestos y política de *payout*. Además, encontramos que una mayor presencia de accionistas individuales conduce a las empresas que usan IOE a reducir el uso de otros EFAD.

En resumen, concluimos que una reforma en las prácticas de gobierno corporativo por parte de las autoridades de mercado puede generar confianza

entre empresas e inversores, atenuando la necesidad de la estructura de capital y los dividendos como mecanismos para reducir los problemas de agencia. Asimismo, constatamos que la importancia de los impuestos en las decisiones corporativas se ve afectada por la estructura de propiedad y, por lo tanto, la introducción de un mecanismo de ACE puede ser efectiva para reducir las distorsiones generadas por la diferencia en el tratamiento fiscal entre deuda y capital propio aunque ello depende de la estructura accionaria de las empresas

2. Contribuciones

En esta tesis doctoral hemos hecho uso de las características idiosincrásicas del marco institucional brasileño para ampliar el conocimiento sobre dos decisiones estratégicas de las empresas, la política de dividendos y de estructura de capital, proporcionando una perspectiva diferente y nuevos argumentos. Dichas características permiten el estudio de los efectos de los mecanismos de gobierno corporativo y de los impuestos en las decisiones de la empresa. El hecho de que en Brasil existieran, en un mismo mercado de capitales, segmentos paralelos con diferentes exigencias de gobierno corporativo o de que las empresas puedan elegir canales de distribución de beneficios con características semejantes, pero con implicaciones tributarias

distintas, constituye una oportunidad para validar y contrastar los resultados de investigaciones anteriores.

Esta tesis contribuye a la literatura especializada al mostrar que los esfuerzos llevados a cabo en los mercados bursátiles para avanzar en la protección de los accionistas minoritarios pueden mejorar el ambiente institucional del país, lo cual desafía la visión predominante en el enfoque *Law and Finance*, según el cual la protección de los inversores es fruto de un origen legal estático y difícilmente mutable a lo largo del tiempo. El hecho de habernos centrado en un país emergente, caracterizado por ofrecer una débil protección de los accionistas minoritarios, también puede proporcionar orientación a otros países con características institucionales semejantes, al mostrar la eficacia de una reforma impulsada por el regulador del mercado para mejorar la protección de los accionistas y reforzar la confianza de los inversores.

Asimismo, esta tesis profundiza en el estudio de la alternativa introducida en Brasil para corregir la discriminación fiscal entre la deuda y los recursos propios. Concretamente, investigamos si el ACE brasileño es capaz de minorar los problemas derivados del uso excesivo de la deuda, que podrían exacerbar la vulnerabilidad de las empresas en periodos de crisis económica (Portal and Laureano, 2016), las estrategias de reducción de impuestos a través de empresas del mismo grupo de negocios (De Mooij and Devereux, 2010), o

de asignación ineficiente de inversiones al seleccionar los proyectos únicamente por su beneficio fiscal (Fatica et al. 2012).

En contraposición a muchos estudios anteriores, que han abordado los efectos fiscales de las decisiones de dividendos y de estructura de capital bajo la perspectiva de la empresa o de los accionistas de forma separada, una contribución de nuestro trabajo es la consideración de los impuestos desde la doble perspectiva conjunta de empresas y accionistas. Es importante indicar que ya Portal y Laureano (2016) habían investigado el efecto del IOE en la reducción del sesgo fiscal de la deuda, encontrando que el uso del IOE tiene un efecto directo positivo en el endeudamiento. Sin embargo, esos autores no consideran el efecto moderador del tipo de accionista en esta relación. Nuestro análisis muestra que la eficacia del IOE para reducir el sesgo fiscal de la deuda depende de la identidad de los accionistas. Ello pone de manifiesto las diferentes motivaciones de los grupos de accionistas y su efecto mediador en la influencia de los impuestos en las decisiones corporativas.

3. Limitaciones y futuras investigaciones

A pesar del esfuerzo realizado, es indudable que nuestra tesis doctoral presenta algunas limitaciones que abren sendas vías para futuros trabajos. Una primera reflexión debe centrarse en el resultado de que la incorporación al NM tiene un efecto negativo en el endeudamiento de las empresas. Atribuimos este

resultado a dos posibles razones: el efecto sustitutivo del NM como mecanismo disciplinario o la menor incidencia de las restricciones financieras en las empresas que cotizan en ese segmento. Sin embargo, hemos de reconocer que no hemos medido directamente el efecto del NM sobre las restricciones financieras y tampoco hemos verificado si las empresas, al incorporarse al NM, sustituyen deuda por recursos propios. Investigaciones futuras podrían centrarse en contrastar ambos comportamientos. Esta comprobación puede ser realizada, por ejemplo, a través de un análisis de eventos en el que se examinaría el comportamiento de las acciones y de la estructura de capital de las empresas en el periodo anterior y posterior al registro en el NM. Existen igualmente antecedentes del estudio de las restricciones financieras en el mercado brasileño, por lo que los nuevos estudios podrían utilizar un método análogo, aplicándolo a los nuevos segmentos de la Bolsa.

Partiendo de la idea de que la adopción del NM *per se* representa un compromiso de las empresas con los patrones más estrictos de gobierno corporativo, futuros trabajos podrían ahondar en el efecto sobre otro tipo de prácticas de transparencia como la adopción de estándares contables internacionales en la publicación de sus estados financieros. Además, sería conveniente analizar el efecto de los nuevos segmentos en los consejos de administración de las empresas, puesto que el NM impone que las empresas mantengan por lo menos un 20% de consejeros independientes en los consejos

de administración. También resulta interesante examinar la efectividad del tribunal de arbitraje del NM como moderador de la relación entre las empresas y sus accionistas minoritarios. En los últimos años varias empresas registradas en el NM se han visto implicadas en procesos de corrupción que han dañado la riqueza empresarial (por ejemplo, los casos del grupo JBS y del grupo EBX). Futuras investigaciones podrían estudiar si el tribunal de arbitraje ha cumplido adecuadamente su papel de proteger los intereses de los accionistas minoritarios.

Otra línea de trabajo sería incorporar el efecto de la heterogeneidad en la estructura de propiedad. Como apuntan Serrasqueiro et al. (2016), el efecto de los impuestos no solo depende del tipo de inversor (por ejemplo, familias o particulares), sino también de la edad y el tamaño de las empresas familiares. De hecho, esos autores encuentran que las empresas familiares con más edad se acercan más a los principios de la teoría del *trade-off* que las empresas familiares más jóvenes. Otra línea de trabajo sería profundizar en la naturaleza de los inversores institucionales, distinguiendo los denominados “sensibles a la presión” de los “resistentes a la presión”. Futuros trabajos podrían analizar el efecto de esa heterogeneidad en la relación entre impuestos y decisiones financieras de las empresas.

CHAPTER 3: FINAL REMARKS

1. Conclusions

In this doctoral thesis, we analysed the influence of corporate governance, the fiscal framework and the ownership structure on the payout and capital structure decisions of companies. To achieve this objective, we use the Brazilian institutional framework as it presents two specific characteristics that make it an ideal environment for this study: the existence of different segments in the Brazilian Stock Exchange and the existence of the so-called interest on equity.

Regarding the first characteristic mentioned above, the Sao Paulo Stock Exchange launched years ago segments with different levels of corporate governance requirements. The segment with more stringent requirements is the so-called New Market (NM), which is followed by Levels 1 and 2. The creation of these segments is inspired by the concept of functional convergence, according to which, in countries with institutional shortcomings, it must be the capital markets that take the initiative in adopting measures to improve corporate governance given the difficulties of reform faced by national legislation.

The second specific feature is the existence in Brazil of Allowance for Corporate Equity system, namely, the Interest on Equity IOE, which is a tool that allows companies to deduct a notional interest rate for the use of equity. Despite being a mechanism of payout with characteristics similar to dividends, it presents a remarkable different tax treatment. Given the deductibility of interest for the use of equity, the IOE is also a tax shield alternative to debt, which has implications for the decisions on both payout and capital structure policies of the Brazilian firms.

This doctoral thesis is structured in two different sections in which we try to address two objectives. The first one is to analyse whether and how the incorporation of

firms into the alternative corporate governance segments affects the dividend and capital structure policies of listed companies. To achieve this purpose, in the first paper, titled "Regulatory Dualism as an Alternative Trust-Enhancing Mechanism for Dividends and Debt: Evidence from Brazil", we examined the effect of the different segments of corporate governance on the internal characteristics of the companies. Subsequently, we study whether the incorporation to either the NM or the intermediate segments has an outcome or substitute effect in the dividend distribution decisions and if that incorporation affects the financing decisions of the companies.

The second objective is to analyse whether the ownership structure has a moderating role in the relationship between taxes and payout and capital structure policies of companies. To achieve this objective, we expose in the second work, entitled "The Relationship between Taxes and Payout Policy: The Impact of Shareholder Types", the tax consequences of the use of dividends and IOE relating them to the identity of firms' shareholders. Later, in the third paper, entitled "Reviewing the Trade-off Theory of Capital Structure: The Moderating Role of the Company's Ownership Structure", presented in chapter 4, we detail some common characteristics between the debt and the IOE. We then analyse the differences between IOE and other existing non-debt tax shields (NDTS).

The general conclusions of this dissertation can be summarized in three blocks. First, our results suggest that shareholders accept the idea that the presence of companies in the NM reduces the possibility that managers and majority shareholders divert corporate resources for purposes that do not coincide with the maximization of corporate wealth. As a result, shareholders demand less dividends from NM companies, which can use the available cash to finance their investment opportunities. Therefore, we conclude that the regulatory dualism in Brazil is an effective measure to generate confidence among

listed companies and their shareholders, and that it serves as a substitute for dividends to reduce agency costs between controlling and minority shareholders.

Secondly, the results reveal that NM companies are less indebted than their non-NM counterparts, and this fact can be explained for two possible reasons: on the one hand, companies may use the NM to convey their commitment to all the shareholders, so that the NM functions as an alternative mechanism to the debt to discipline the behaviour of the controlling directors and shareholders. It is also possible that the reduction in corporate leverage is due to the NM meeting its objective of improving the reputation of companies and increasing the interest of investors, reducing the need for companies to rely on debt to finance their activities by making the issuance of capital more attractive or feasible than debt issuances or bank credit.

Third, our results indicate that the importance of taxes on corporate decisions is significantly influenced by the dominant identity of firms' shareholders. Specifically, we find that the presence of individual shareholders and pyramid structures of ownership not only increases the propensity of companies to choose the payout channel that produces greater global tax benefits, but also leads companies to distribute higher cash flows through the most advantageous payout channel. On the other hand, our results suggest institutional shareholders do not fully exploit the tax advantages since, despite the dominant presence of this type of shareholders allows companies to obtain greater tax savings through IOE, we did not find a significant relationship between the presence of institutional shareholders and the use of IOE.

In this same line, we find that the presence of individual shareholders makes companies reduce the use of debt when they use IOE, while the presence of institutional shareholders does not influence this relationship. We also examine whether the use of IOE leads companies to rely less on other non-debt tax shields when the dominant

shareholders are those that have incentives to exploit IOE over other NDTs. Once again, the results indicate that companies with individual shareholders that use IOE employ tax shields to a lesser extent. However, this result, which is consistent with the theory, is not confirmed when studying the institutional shareholders.

Another issue that we have verified is whether the degree of ownership concentration can model the previous relationships. Our results suggest that the concentration of individual investors and pyramidal structures of ownership has a positive effect on the effectiveness and efficiency of the relationship between taxes and payout policy. In addition, we found that a greater presence of individual shareholders leads companies that use IOE to reduce the use of other NDTs.

In summary, we conclude that a reform in corporate governance practices by market authorities can work as a trust-generating device between companies and investors, mitigating the need for dividends and leverage as mechanisms to reduce agency problems. Moreover, we conclude that different types of shareholders have different implications for the relation between taxes and financial decisions. Therefore, the effectiveness of an ACE system to reduce the debt tax bias depends on firms' ownership structure.

2. Contributions

In this doctoral thesis we have used the idiosyncratic characteristics of the Brazilian institutional framework to broaden knowledge about two strategic decisions of companies, namely, dividend policy and capital structure, providing a different perspective and new arguments. These characteristics allow the study of the effects of corporate governance mechanisms and taxes on corporate decisions. The fact that in Brazil there are parallel segments in the same capital market with different corporate

governance requirements or that companies could choose channels to disgorge cash to shareholders with similar characteristics but with different tax implications, constitutes an opportunity to validate and contrast the results of previous investigations.

This work contributes to the specialized literature by showing that the efforts carried out in the stock markets to advance in the protection of minority shareholders can improve the institutional environment of the country, which challenges the predominant vision in the Law & Finance approach, according to which the protection of investors is the result of a static legal origin and difficult to change over time. The fact that we focused on an emerging country, characterized by offering weak protection to minority shareholders, can also provide guidance to other countries with similar institutional characteristics, by showing the effectiveness of a reform promoted by the market regulator to improve protection of shareholders and strengthen investor confidence.

Also, this thesis deepens in the study of the alternative introduced in Brazil to correct the distortions generated by the fiscal discrimination between debt and equity. Specifically, we investigate if the Brazilian Allowance for Corporate Equity system is able to reduce the problems derived from the excessive use of debt, which could exacerbate the vulnerability of companies in periods of economic crisis (Portal and Laureano, 2016), tax reduction strategies through of companies of the same business group (De Mooij and Devereux, 2010), or of inefficient allocation of investments when selecting projects solely for their fiscal benefit (Fatica et al., 2012).

In contrast to many previous studies, which have addressed the fiscal effects of payout and capital structure decisions from the perspective of companies or shareholders separately, a contribution of our work is the consideration of taxes from the joint perspective of companies and shareholders. It is important to note that Portal and Laureano (2016) had already investigated the effect of IOE in reducing the fiscal bias of

the debt, finding that the use of IOE has a direct positive effect on indebtedness. However, these authors do not consider the moderating effect of the shareholder type in this relationship. Our analysis shows that the effectiveness of IOE in reducing the fiscal bias of the debt depends upon the identity of the shareholders. This highlights the different motivations of the groups of shareholders and their moderating effect on the influence of taxes on corporate decisions.

4. Limitations and Future Research

Despite the efforts made to use robust analyses methods and consistent results, it is undoubted that our doctoral thesis has some limitations that open paths for future work. A first reflection should focus on the result that the incorporation into the NM has a negative effect on the indebtedness of the companies. We attribute this finding to two possible reasons: the substitution effect of the NM as a disciplinary mechanism or the lower incidence of financial restrictions on the companies that are listed in that segment. However, we must recognize that we have not directly measured the effect of the NM on financial restrictions and we have not verified whether companies, when joining the NM, substitute debt for own resources. Future research could focus on contrasting both behaviours. This verification can be carried out, for example, through an analysis of events in which the behaviour of the shares and the capital structure of the companies in the period before and after registration in the NM would be examined. There are also antecedents of the study of financial restrictions in the Brazilian market, so that the new studies could use a similar method, applying it to the new segments of the Stock Exchange.

Based on the idea that the adoption of the NM per se represents a commitment of companies with the strictest corporate governance standards, future work could deepen the effect on other types of transparency practices such as the adoption of international

accounting standards in the publication of their financial statements. In addition, it would be convenient to analyse the effect of the new segments on the boards of directors of the companies, since the NM requires that companies maintain at least 20% of independent directors on the boards of directors. It is also interesting to examine the effectiveness of the NM arbitration chamber as moderator of the relationship between companies and their minority shareholders. In recent years several NM companies have been involved in corruption processes that have damaged business wealth (for example, the cases of the JBS group and the EBX group). Future investigations could study whether the arbitration chamber has adequately fulfilled its role of protecting the interests of minority shareholders.

Future research could also incorporate the effect of heterogeneity in the ownership structure. As pointed out by Serrasqueiro et al. (2016), the effect of taxes depends not only on the type of investor (for example, families or individuals), but also on the age and size of family businesses. In fact, these authors find that older family businesses are closer to the principles of trade-off theory than younger family businesses. Another line of work would be to deepen the nature of institutional investors, distinguishing the so-called "pressure sensitive" from the "pressure resistant". Future work could analyse the effect of this heterogeneity on the relationship between taxes and financial decisions of companies.