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„How Intangible Assets in International Franchising
Influence the Choice between Single-Unit and Multi-Unit
Franchising”

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*To my parents, my sister Laura and my boyfriend Thomas, who have shown support and
patience at all times.*

II. Abstract

The prevalence of international franchising has increased tremendously over the last decades, which is mostly attributable to market saturation in domestic markets, its economic impact on the economy and growth opportunities abroad. This thesis examines the influence of intangible assets in international franchising. More specifically, investigations focus on the choice between Single-Unit Franchising and Multi-Unit Franchising for foreign market entry. Overall, it attempts to link the choice of governance mode to the Resource-Based View and the Organizational Capabilities Theory. Based on these theoretical approaches, it examines the effect of system-specific assets, local market assets and financial assets on modal choice on an international level. This integrative framework forms the basis for an international survey conducted in Europe and North-America including 168 responses from German, Austrian, Italian, French, British, Dutch and US-American franchise companies that operate on an international level. As a certain research deficit on existing empirical literature is perceptible in this field, this thesis aims at bringing theoretical academic suggestions in accordance with empirical results.

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1. Introduction

This master thesis deals with the choice of governance modes in the field of franchising. Specifically, it attempts to relate the choice of governance mode to the Resource-Based View and the Organizational Capabilities Theory while concentrating on the franchisor's and franchisee's system-specific, local and financial assets.

Over the last decades MUF has appeared to become the prevailing mode for expansion. For that reason, the focus of this thesis will be on the choice between Single-Unit Franchising and Multi-Unit Franchising.

Due to the lack of data in this field, the aim of this thesis is the contribution of empirical findings from international franchise firms in Europe and the United States by examining the impact of the franchisor's system-specific assets, the franchisee's local market assets and financial assets on ownership choice.

1.1. Overview and organization of the thesis

This master thesis is organized as follows: First, the reader will be presented relevant information on the field of franchising. In this sense, information on the historical background of franchising as well as its worldwide development will be provided. Subsequently, attention will be drawn to international franchising and its expansion over the last decades.

Second, a brief introduction to market entry modes will be given in the following section. In particular, this chapter will focus on the different governance modes in the field of franchising. Accordingly, the four different governance modes will be discussed with the intention to present a decent overview to the reader. As the main objective of this thesis is concerned with the investigation on the selection of either Single-Unit or Multi-Unit Franchising in respect to the franchisor's and franchisee's intangible assets, empirical findings from the prevailing literature will be discussed correspondingly.

Afterwards, the following section will focus on the theoretical background. The concepts underlying this thesis, Resource-Based View and Organizational Capabilities Theory, will be related to the scope of franchising. Concurrently, the independent variables (franchisor's and franchisee's intangible assets) will be examined. Based on the findings from the contemporary literature, the hypotheses which the empirical study is based on will be conducted eventually.

The last section of this thesis relates to the empirical study that has been conducted. In this chapter, the reader will be given detailed information on the overall procedure of the foregone study as well as its findings. In addition to testing the hypotheses, the results will be analyzed in detail and possible explanations for the outcome will be given. In a final discussion, these findings will be related to the initial assumptions and propositions of the theoretical part and a conclusion will be drawn from that.

Theoretical Background

2. Introduction to Franchising

The origins of the term ‘franchise’ relate back to the French language and the word ‘franche’ which signifies ‘free’ or ‘exempt’¹. More precisely, franchising can be described as “a contractual agreement between two legally independent firms in which one firm, the franchisee, pays the other firm, the franchisor, for the right to sell the franchisor’s product and/or the right to use its trademarks and business format in a given location for a specified period of time” in today’s world (Blair & Lafontaine, 2005, p. 3f). Simultaneously, franchising is also considered a classic principal-agent relation with the franchisor in the position of the principal and the franchisee representing the agent (Garg, Rasheed, & Priem, 2005).

Within the field of franchising, a general differentiation between the categories ‘traditional franchising’ and ‘business-format franchising’ is essential. Traditional franchising is commonly concerned with the franchising of a product or a trade name. Thus, the franchisee acts as a distributor or retailer for the manufactured products of the franchisor. Typically, gasoline stations, car dealerships or soft-drink bottlers are popular representatives of this format (Lafontaine & Shaw, 1998). The latter category is concerned with business relationships in which the franchisor authorizes an already established business under a brand name to the franchisee in return for fees and royalties (Norton, 2004). This relationship is based on the condition that the “trademarked set of procedures, designs, management approaches, and services” are represented in accordance with the franchisor’s specifications (Fladmoe-Lindquist & Jacque, 1995, p. 1239). Examples for business-format franchising include, among others, accounting services, automobile rentals, cleaning systems, fast food, food retailing, hotels/motels and real estate (Norton, 2004). Today, business-format franchising is considered to be the most prevalent type to focus on within franchising research (Lafontaine & Shaw, 1998).

As a popular mode of business expansion, the history of franchising dates back to the middle-ages. King John of England was said to be the first to have a relationship similar to franchising with tax collectors (Hoffman & Preble, 1991). In Germany, the first forms of franchising came up with beer breweries who granted exclusive distribution rights for beer to beer halls in the 18th century. However, traditional franchising as it is known today began to

¹ American Heritage Online Dictionary of the English Language 2015
<https://www.ahdictionary.com/>
retrieved on 16th November 2015

enjoy popularity with Isaac Singer's attempt to sell his sewing machines within a franchise system in the 1850s (Hackett, 1976).

While traditional franchising, commonly referred to as 'product trade name franchising', is known since the establishment of automobile and truck dealerships (e.g. Ford) and gasoline service stations (e.g. Shell), business format franchising in the U.S. started to experience enormous growth in the 1930s when the first restaurant chains such as Kentucky Fried Chicken started to expand via franchising as well as in the 1950s with the launch of McDonald's, Dunkin Donuts and Burger King (Dant, Grünhagen, & Windsperger, 2011). Over the last decades, the evolution of franchising has been tremendous. At the beginning of the 1990s, US retail trade already consisted to one-third of sales in the franchising business. Correspondingly, franchises in Europe involved about one-tenth of all retail sales (Hoffman & Preble, 1991).

With regard to the situation today, franchising has experienced further growth. According to a study from Dant, Grünhagen, & Windsperger (2011), franchise businesses in the U.S. account for about 40.90% of all sales in the retailing sector. This percentage refers to about 3000 franchise systems with 901,093 outlets being franchised (Dant, Grünhagen, & Windsperger, 2011). Due to its popularity, franchising has already taken over major shares in U.S. industries. According to Combs and Ketchen (2003) these include *restaurants* (46.00%), *specialty food retailing* (55.00%), *lodging* (39.00%), *printing and copying* (71.00%), and *tax preparation* (67.00%) (Combs & Ketchen, 2003).

Simultaneously, Dant, Grünhagen, & Windsperger (2011) found that about 52.80% of the Australian retail trade involves franchises. While 1025 franchise systems have been established, about 69,000 outlets are being franchised. Interestingly enough, with about 2600 franchise systems and 200,000 outlets, franchising seems to become quite popular in China too, although these numbers refer to a percentage of only 3.00% in the retailing sector. Considering franchising in Europe, established franchise systems in Germany make up for about 32.00% of all sales in the retailing sector. This percentage refers to about 980 franchise systems with 65,500 outlets being franchised (Dant, Grünhagen, & Windsperger, 2011).

As possible reasons for the increased use of franchising, multiple arguments can be attributed: In times of scarce resources, franchise operations allow the franchisor not only to attain necessary capital for expansion, but also give the possibility to further enlarge the system by enabling the realization of economies of scale and, therefore, leading to a competitive advantage (Shane, 1996). Moreover, franchising is used as a tool to counteract

agency problems in terms of motivation. Being a *residual claimant* on the return of the outlets, as the outlet manager, the franchisee is obliged to act in the best interest of the franchisor. Thus, further monitoring can be neglected to a certain extent (Norton, 1988). Besides, entering a franchise relationship enables the franchisee to attain the rights to distribute proven products and services at a relatively low cost while being supported by the franchisor in terms of location search, facilities design, purchasing, advertising and marketing activities, and operating practices (Hoffman & Preble, 1991).

2.1. International Franchising

Due to market saturation in domestic markets and growth opportunities abroad, the prevalence of international franchising has increased tremendously over the last decades (Preble, 1995). With the highest number of franchise systems and outlets and their economic impact on the economy, it is the U.S. who are considered to be the greatest force in international franchise operations (Dant, Grünhagen, & Windsperger, 2011).

Basically, international franchising refers to “a foreign market entry mode that involves a relationship between the entrant (the franchisor) and a host country entity, in which the former transfers, under contract, a business package (or format), which it has developed and owns, to the latter. This host country entity can be either a franchisee, a sub-franchisor, or it can be an entity in which the franchisor has made an equity investment” (Burton & Cross, 1995, p. 36). Thus, international franchising continues to entail almost the same form as domestic franchising with the exception of extending the domestic concepts and making them accessible for partners in culturally different markets (Allix-Desfautaux, 1998 in Duniach-Smith, 2004). Furthermore, it is a popular mechanism to be used when aiming at fast global expansion whilst being able to defeat common obstacles of internationalization (e.g. cultural distance, language barriers as well as legal and employment problems) (Abell, 1990 in Alon et al. , 2012).

With regard to the existing empirical literature on international franchising, a certain research deficit is perceptible, primarily owing to constraints in data access (Lafontaine & Oxley, 2004). In spite of this, Jell-Ojobor & Windsperger (2014) suggest to group prior empirical studies into five diverse streams of literature: One can differentiate between studies that have turned the spotlight on (1) the driving forces for franchise internationalization in contrast to domestic operations, (2) the influence of host country conditions on international franchising, (3) the cross-border franchisor-franchisee relationship, (4) the propensity towards

international franchising, as well as (5) the choice of governance modes in the field of international franchising (Jell-Ojobor & Windsperger, 2014).

3. Introduction to entry modes and governance modes in the field of International Franchising

3.1. Overview of entry modes in general

As the internationalization of firms has become an important topic in the last few decades, so have the different modes to enter markets outside the domestic boundaries. Already Wind and Perlmutter (1977) categorized market entry modes as a *frontier issue* in the field of international marketing. Similarly, Terpstra & Sarathy (1994, p. 370f) describe “the importance of the choice of method of entry into foreign markets [as] one of the most critical decisions in international marketing”. Most certainly this is due to the fact that entry mode choice highly dominates the degree to which contributions to foreign marketing campaigns can be made, the extent to which the firm has a saying in marketing decisions as well as its success rate in the foreign market. (Erramilli & Rao, 1993)

Although the first investigations on international market entry mode relate back to the 1970s, theory-based contributions (e.g. Anderson & Gatignon, 1986; Hennart, 1988) have only appeared about 20 years later. Ever since, researchers did not find a common denominator regarding the classification of modes. Unsurprisingly, the list of entry mode structures appears to be incomplete. (Brouthers & Hennart, 2007)

In this sense, Anderson and Gatignon (1986) suggest to group 17 different entry modes according to their level of control. While the highest level of control is provided by modes for entrants that have dominant equity interests (wholly-owned subsidiary and majority shareholder), moderate levels of controls are covered by modes whose entrants have balanced interests (e.g. plurality shareholders) or who prefer not to split equity (e.g. Licensing, Franchising etc.). In case of diffused interests, the authors suggest to choose minority equity positions or non-exclusive and non-restrictive contracts that offer a low level of control to the entrant. (Anderson & Gatignon, 1986)

On the other side, based on the suggestions by Kumar & Subramaniam (1997), about 15 years later, Pan and Tse (2000) advise to cluster all entry modes into equity-based and non-equity-based modes. Within this hierarchical perspective, non-equity modes can be separated into

export (direct export and indirect export) and contractual agreements (Licensing, Franchising, R&D contracts and alliances) while equity modes can be split into equity joint ventures (minority equity joint venture, 50% share equity joint venture and majority equity joint venture), as well as wholly-owned subsidiary (Greenfield and Acquisition). According to this view, a firm's entry mode choice is based on a hierarchical perspective. (Pan & Tse, 2000)

As regards the motivation behind entry mode choices, explanations can be made according to three different theoretical research streams: While some researchers (e.g. Johanson & Vahlne, 1990) suggest gradual involvement (including low resource commitment) during the initial foreign market entry, others (e.g. Anderson & Gatignon, 1986) indicate that the choice of entry mode depends on the balance between control and cost of resource commitment. Besides, a third research stream (e.g. Dunning, 1988) proposes that the consideration of ownership-specific, location-specific, as well as internalization factors play an important role when choosing a respective market entry mode (Duniach-Smith, 2004).

3.2. Overview of governance modes in the field of Franchising

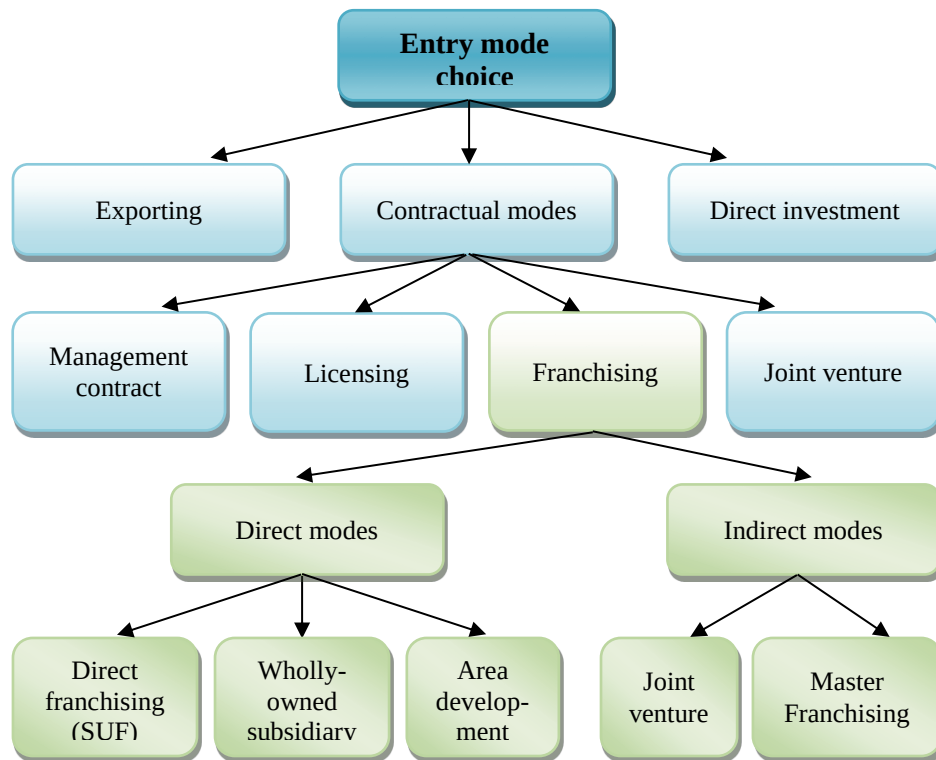
As this thesis is concerned with the choice of governance modes in international franchising, the focus of the following section will be on franchising as a contractual alternative to enter markets. In order to provide a better overview on the concept, Figure 1 illustrates the position of franchising itself among the different entry modes and shows the classification of the different entry modes in international franchising.²

As already mentioned earlier, franchising belongs to the contractual forms of market entry. Representing an option to licensing, management contracts and joint ventures the concept of franchising offers a range of four different contractual market entry opportunities to choose from. While direct franchising, wholly-owned subsidiary franchising and area development provide a direct relationship between the franchisor and the franchisee of the host country, joint venture franchising and master franchising seek to enter the market indirectly via the intervention of a third party (see Figure 1, Duniach-Smith, 2004). Unsurprisingly, these modes have certain advantages and drawbacks for the entrant, above all, they vary immensely from each other. For that reason, the choice of the right entry mode is crucial as it has a large impact on the success of the business in the foreign country (Terpstra & Sarathy, 1994).

² Note that henceforth, the terms 'market entry mode' and 'governance mode' will be used interchangeably.

Also, the chosen modes are related to the amount of involvement that has been put into the establishment of the business as well as to the level of control the franchisor has in his foreign franchise system (Anderson & Gatignon, 1986).

Figure 1: International Franchising Entry Mode Choices³



Comment: Exposure according to Duniach-Smith (2004)

In the following sections of this thesis, the four different prevailing governance modes in international franchising will be elaborated on. Therefore, investigations on the characteristic differences between Direct Franchising (Single-Unit Franchising), Franchising via Wholly-Owned Subsidiary, Joint Venture Franchising, Area Development Franchising and Master Franchising will be made. During the course of this chapter, emphasis within this chapter will be placed on the differences between Single-Unit Franchising and Multi-Unit Franchising since these two governance forms provide the basis for deducing the hypotheses for this thesis. Furthermore, it needs to be noted that the classifications of governance modes in this chapter are mainly based on Konigsberg's (2008) findings in "International Franchising". His work appears to be the primary source in terms of governance modes explanation within the international franchising literature.

Something that is highly obvious and already Konigsberg (2008; 87) argued about, is the fact that franchisors and their franchise systems cannot be compared to each other or treated in the

³ Based on Duniach-Smith, 2014

same way. The respective governance mode needs to be consistent with the franchisor's needs and the resources and capabilities available abroad (Konigsberg, 2008, p. 87).

3.2.1. International expansion via a wholly-owned subsidiary

A wholly-owned subsidiary (WOS) belongs to the direct entry modes in international franchising due to its direct relationship between the franchisor of the host country and the franchisees of the foreign country (Duniach-Smith, 2004).

Within a WOS franchise system, a subsidiary that is fully controlled and owned by the franchisor of the home country is established in the foreign country. This way, the franchisor is given the opportunity to be in direct contact with national franchisees from the host country while forgoing the involvement of a third party. However, setting up a WOS with the intention of entering a foreign market, may be the right governance mode for a franchisor that possesses the relevant financial and human resources to develop and operate such a system. Speaking for the relevance of the set up of a WOS, this governance mode usually adds up if the franchisor seeks full control and ownership maintenance of trademarks of the franchise system. Additionally, the franchisor wants to profit from diverging country-specific advantages which cannot be gathered by means of direct franchising from the home country. These benefits may include personnel related considerations such as better access to market-specific information including customs, laws, values etc. In addition, a residential franchisor can attain trustworthier relationships with franchisees, suppliers and other immediate stakeholders. Parallel to that, the establishment of a WOS franchise system in a foreign country may also be related to high risks, financial costs for its establishment, as well as personnel costs due to the necessity of having experienced personnel from the home country coming to the host country to establish the system and offer trainings for newly acquired staff. Of course, this can possibly cause negligence of the original franchise system in the home country. Although market-specific knowledge can be acquired by foreign personnel, the franchisor's senior management, which is in charge of the main operations in the franchise system may lack knowledge in this matter (Konigsberg, 2008, p. 91ff).

3.2.2. Joint Venture Franchising

Speaking of joint ventures in general, they can be described as “an association of two or more persons based on contract who combined their money, property, knowledge, skills, experience, time and other resources [...] agreeing to share the profits and the losses of having some degree of control over the venture” (Williston, 1952, p. 544f).

In the field of international franchising, Joint Venture Franchising (JVF) may be applied under the same circumstances as Master Franchising (MF). However, in contrast to MF, the establishment of a JVF seems more appropriate when lacking essential financial resources to build the system in the foreign country (Konigsberg, 2008, p. 105ff).

With the goal of establishing a franchise system in a foreign country, the franchisor typically enters a joint venture agreement with a national party from the foreign country and creates a legal entity - the joint venture entity - for this purpose (Konigsberg, 2008, p. 237f). Besides this shareholder agreement with the foreign party, the franchisor also needs to decide which of the two agreement types (development agreement and master franchise agreement) to enter with the JVE in order to set up the franchise system in the foreign country: The aim of a development agreement between the franchisor and the joint venture entity is to enable the JVE to act as the developer that profits from the sole permission to develop and possess all franchise outlets in the foreign country itself. Equally, a master franchise agreement enables the JVE not only to be in the operating position of a developer who has the sole permission to develop and possess all franchise outlets in the foreign country but also to enter further sub-franchise agreements as sub-franchisor with sub-franchisees in the host country. More precisely, the JVE is entitled to arrange contracts with sub-franchisees instead of simply entering franchise agreements with the primary franchisor from the home country. The latter will usually be applied with the JVE's increasing experience in the management of its franchise outlets (Konigsberg, 2008, pp. 237f, 252).

As regards the motivational factors for the agreement of a JVE, the franchisor seeks to control and shape the development of the foreign franchise system to a certain extent. From the position of the national joint venture partner who acts as the JVE, his rationale behind this obviously includes the shared risk of the franchise development with the primary franchisor, while the joint venture partner will be liable mainly for the development and implementation of the franchise system (Konigsberg, 2008, pp. 250, 238). Speaking for the relevance of JVF, its application is suitable under various different circumstances. Since the entry of particular markets can sometimes occur to be an obstacle, the establishment of a JVF with a local

partner may be the only obtainable possibility to enter such countries. Furthermore, JVF is considered to be an appropriate entry mode when a franchisor seeks to preserve shares while keeping risks low. Another substantial argument that is indicative for the market entry via joint venture, is the competitive advantage the franchisor can gain due to the access of the partner's resources and capabilities (such as human and financial resources or explicit know-how) in the host country (Konigsberg, 2008, p. 105f).

Arriving at the benefits and drawbacks of establishing an international franchise system via joint venture, this entry mode provides obstacles and benefits for both the franchisor and the franchisee. In this respect, one should note that the gain of one venture party may mean the loss of the other venture party and vice versa. Obviously, benefits may arise from when the cultural distance between the home country and the host country is at a low level and languages, laws, customs and beliefs are shared to a certain extent (Konigsberg, 2008, p. 106f).

As has already been mentioned before, franchisors typically prefer market entry via JVF in order to keep risks low. Being part of a venture with national residents may also help to profit from governmental grants or tax concession. Unlike in a master franchise agreement, JVF enables the franchisor to maintain a certain degree of control within the franchise process while also benefiting from the joint venture's profits. Also, the search for a partner who will take on the responsibility for the franchise system in the foreign country does not appear to be as challenging through a JVF as within other entry modes. This seems intuitive since the risk is shared between both partners (Konigsberg, 2008, p. 106f).

Naturally, JVF also undergoes certain downsides: The exit of one of the shareholders may be one of them. Usually, conflicts arise if one party plans on selling or purchasing one's shares of the JVE. Hence, at least one party might expect to suffer a disadvantage (Konigsberg, 2008, pp. 107, 243).

Furthermore, diverse motivational factors of the joint venture partners can cause hindrances during the franchise process. Whereas a JVF gives the franchisor the opportunity to access financial as well as human resources, the national partner profits from the ability to establish a franchise system at a shared risk (Konigsberg, 2008, pp. 107, 246). What is more, the fact that the equal separation of control and shares between the joint venture partners of an international franchise system can result in a 'standstill' of the business if no common ground can be established (Konigsberg, 2008, pp. 107, 240). Inevitably, sharp divisions over the distribution of earnings may initiate drawbacks and sow dissension (Konigsberg, 2008, p. 107).

3.2.3. Single-Unit Franchising

Within a Single-Unit Franchise (SUF), a direct relationship without the intervention of a third party between the franchisor and his franchisees in the host country exists. However, comparing it to other direct franchise modes such as area development, SUF differs in a way as each foreign franchisee is supposed to operate and possess only one single unit in the host country (Jindal, 2011, p. 551). In the field of international franchising, the application of SUF may seem appropriate for the franchisor under various circumstances. SUF enables the franchisor also to expand abroad with only a limited number of franchise outlets in mind. However, with the growth of the system, the set-up of a branch office or WOS in the foreign country so as to be able to service the different franchisees might be advisable, according to Konigsberg (2008, p. 87f). Also, if the franchise system's degree of complexity is rather low and therefore effective coordination of all franchisees is possible from the home country, SUF may appear suitable. Furthermore, in situations of geographical proximity and low cultural distance (e.g. languages, customs, tastes and laws) between the home and the foreign country, the application of SUF may be appropriate. SUF might also be chosen in cases where the establishment of a WOS is not feasible due to legal reasons or its set-up is simply not desired by the franchisor. Besides, the prevention of tax collection in the foreign country can be a major reason for a franchisor to opt for SUF. (Konigsberg, 2008, p. 88)

As regards the advantages of choosing SUF for international expansion, the franchisor will most certainly benefit from the financial perspective. Market entry via SUF bears relatively low risks as well as low costs (Baena, 2013). In addition, the franchisor is not forced to deal with foreign legal standards or foreign fiscal issues. Most importantly, in contrast to JVF or MUF (e.g. master franchising), the franchisor still maintains full control of the system and all related trademarks and is involved in all promotional activities. Also, in terms of returns, SUF seems to be the most profitable form of franchising. In contrast to JVF and MUF, all franchise system royalties and fees are paid directly to the franchisor and do not have to be shared with any other partners. SUF is also more cost-efficient than the establishment of a WOS or branch office in the foreign country as the franchisor can make use of the offices and training centers for the in-house personnel in the home country. (Konigsberg, 2008, p. 89)

Concerning the drawbacks of SUF, in contrast to JVF and MUF, the franchisor and his in-house personnel may lack in local knowledge on the geographically and culturally distant countries. In the case of system failure, the franchisor bears all risks of the business. Initially, this type of franchising may be associated with higher costs than JVE and MUF as the

franchisor does not have any local support for setting up the franchise system abroad. Contrary to the establishment of a WOS or branch office in the foreign country, a single-unit franchisor might have difficulties with the expansion of the franchise system to the foreign country as potential franchisees may favor business relationships with resident franchisors. Similarly, the provision of training and assistance to the franchisees in the host country is more complicated with SUF. This appears to be an even greater problem with partners from culturally distant countries. In contrast to a WOS or branch office in the foreign country, the single-unit franchisor is not able to control the use of the franchise system to the same extent. Furthermore, in case of dissolution of the agreement, a single-unit franchisor, in comparison to WOS and branch offices, has lower chances to be able to take over the already established franchise outlet himself (Konigsberg, 2008, p. 90f).

3.2.4. Multi-Unit Franchising

Moving towards a practical investigation, this section continues with the explanation of the dependent variable of the empirical part of this thesis. While the focus of the previous section was Single-Unit Franchising, this section will now turn to Multi-Unit Franchising.

Multi-Unit Franchising (MUF), as an entry mode, refers to the development of a foreign franchise system where foreign franchisees are granted to possess and operate more than one outlet in the foreign country. Basically, this implies that the main difference between SUF and MUF occurs to be the number of outlets owned by a franchisee (Kaufmann & Dant, 1996). Researchers have classified this mode into three different forms: Master Franchising, Area Development, as well as Area Representative. At this point it also needs to be noted that there is no consent among researchers whether to regard Master Franchising as a type of Multi-Unit Franchising. However, leading contributors such as Kaufmann & Dant (1996) suggest the inclusion of Master-Franchising when speaking of MUF. Simultaneously, also Weaven & Frazer (2003), Jindal (2011), Bodey et al. (2011) and Garg & Rasheed (2006) support this view. For the sake of this thesis, Master Franchising will henceforth be considered an element of MUF.

3.2.4.1. Master Franchising

Master franchising (MF), which is also commonly defined as sub-franchising (Kaufmann & Dant, 1996), is already popular for being the most ubiquitous mode to enter foreign markets (Alon I. , 2000). Likewise, it also occurs to be one of the most widespread franchise forms in the service industry (Ryans, Lotz, & Krampf, 1999). In general, MF can be defined as a

“contractual agreement between the franchisor and an independently owned-sub-franchisor to develop a specified number of franchises in a given country in exchange for the exclusive right to use the business format for a specified amount of time” (Alon I. , 2000, p. 3). Thus, it enables the franchisor to establish his system in a specific geographic area via a foreign sub-franchisor. As quid pro quo for the exclusive rights necessary to establish the system, the franchisee (sub-franchisor) is obliged to pay parts of his royalty payments to the franchisor (Justis & Judd, 1986). Due to the intervention of an intermediary in the relationship between the original franchisor and its franchisees in the foreign country, MF is considered to be an indirect mode of entry (Duniach-Smith, 2004). Although being considered as a unique mode among other alternatives of entry, common characteristics can be found with exporting (Alon, 2006). According to Alon (2006), both exporting companies and franchisors have to deal with very low risk while obtaining little control.

As the sub-franchisor (master franchisee) acts as an independent entity, he is primarily in charge of the development, management and sale of the franchise system in the foreign country. Furthermore, this includes the recruiting process of future franchisees, the training of the franchisees, the adjustment of the franchise system to the local market conditions, the execution of relevant market research, the invention of a marketing strategy, as well as the supervision and monitoring of the ongoing processes of the franchise outlets within the specified territory (Justis & Judd, 1986; Konigsberg, 2008, p. 98).

With regard to the revenues that can be obtained via a MF agreement, the franchisor does not only obtain an initial territory fee from the sub-franchisor (master franchisee) in exchange for the granting of exclusive rights of the franchise system, he also shares part of the royalties and a smaller fraction of the franchise fee paid by the franchisee (Justis & Judd, 1986). According to Bodey, Weaven and Grace (2011) the main reason for sub-franchising is to make sure that fast development and growth of the franchise system is guaranteed and can be used in order to gain a competitive advantage over local players.

In the field of international franchising, the application of MF as an entry mode is plausible under various circumstances: MF is often applied when the franchisor lacks the required financial resources to establish a WOS or branch office in the foreign country as well as the relevant local market knowledge needed for the set up of a franchise unit. Furthermore, in situations of high geographical and cultural distance (e.g. languages, customs, tastes and laws) between the home and the foreign country, it seems crucial to get involved with a sub-franchisor in order to be able to set-up a business. Thus, MF appears to be a beneficial mode

for international expansion when the franchisor and his in-house personnel are simply not able to train and provide assistance to the franchisees in the foreign market as a result of communication problems, lack of local knowledge and on-site presence (Konigsberg, 2008, p. 98f).

Like all other governance modes, MF comprises certain benefits and drawbacks. In contrast to direct forms of franchising, for the franchisor, entering into a MF agreement means that his financial burden is lower and additionally, the number of required human resources is reduced. Besides, as the sub-franchisor is in charge of the development and sales, takes the majority of the risks and raises the main share of the financial resources, the franchisor's financial coverage seems to be containable if the business goes bankrupt (Konigsberg, 2008, p. 100). Also, this implies little involvement in all activities that need to be carried out by the sub-franchisor but are executed on the franchisor's behalf. Another positive aspect of this widespread governance form in international franchising can be attributed due to its rapid 'go-to market strategy' (Alon, 2006). Equally relevant seems to be the advantage of cooperating with a national partner (sub-franchisor) who has knowledge in terms of national laws, cultural habits and customs, languages and customary business practices.(Konigsberg, 2008, p. 100)

Regarding the drawbacks of MF, entering an agreement with the sub-franchisor implies relatively high loss of control of the system. As the sub-franchisor is solely responsible for the supervision of the sub-franchisee's actions, the franchisor lacks the opportunity to intervene in case of system abuse. In this case, dissolution of the franchise agreement with the sub-franchisor, and therefore also with the sub-franchisee, would remain the only alternative. Since the dissolution of the franchise system is hard to enforce, the franchisor has no other chances than to remain in an unbeneficial relationship with the sub-franchisor. In contrast to direct franchising, the financial returns of the franchisor are also lower as he needs to split them with the sub-franchisor. Moreover, in the event of bankruptcy of the sub-franchisor, this has a bearing on all units operated by the sub-franchisor (Konigsberg, 2008, p. 100ff).

3.2.4.2. Area Development Franchising

Area Development Franchising (ADF), on the other hand, refers to a contractual agreement between the franchisor and the foreign franchisee, which allows the franchisee to establish and operate the franchise system for a specified period of time in a specific geographic area(Grünhagen & Mittelstaedt, 2005). This geographic region usually either presents the entire foreign country or a designated area of it (Konigsberg, 2008, p. 127).

ADF differs from the previous (sub-franchising) in a way that within the agreement, the area developer is not only permitted to establish and own multiple units, but also to operate them (Grünhagen & Mittelstaedt, 2005). On the other side, the sub-franchisor is entitled to sell the franchise within a designated area to sub-franchisees (Alon, 2000, p. 120). Similar to WOS and SUF, ADF can be defined as a direct entry mode due to the existence of a direct relationship between the franchisor and the franchisee without the intervention of a third party like in MF (Duniach-Smith, 2004, p. 251).

Generally, the application of ADFs is advisable if these agreements can either be entered directly or via the franchisor's WOS in the foreign country. Typically, this decision is tied to the franchisor's decision on how many foreign contractual agreements are targeted in total. From an economic point of view, the establishment of a WOS in the foreign country would not add up to the costs with only one development agreement and therefore would only prove advantageous by granting many area development agreements to foreign franchisees. Besides, ADF seems sensible if the franchisor's main objective is the establishment of close relationships with only a small number of franchisees operating multiple units (Königsberg, 2008, p. 94).

Like all other entry modes, ADF entails certain benefits and drawbacks. Being in a direct relationship enables the franchisor to maintain direct control over the franchise system and the marketing of the brand in the foreign country. Due to the limitation of the number of different franchisees, the franchisor might take advantage of only choosing to enter an agreement with 'sophisticated' franchisees that raise the necessary amount of monetary and human resources to properly operate the franchise system in the foreign country. In this sense, the franchisee will be able to take the sole responsibility for all activities involved in the development of the system. The exclusive allocation of franchise rights also favors the franchisor's expenditures for developers' training and system administration. Equally relevant for opting to franchise via area development is the initial development fee paid by the franchisee in exchange for the granted rights of the franchise system. Parallel to that, having only a limited number of franchisees with more or many outlets, the failure of a franchisee could cause the breakdown of all related units. Similarly, in the event of a rebellious developer who is in charge of many units, individual franchisees seem to be preferable. Unlike in MF, the developer is not in the position of a sub-franchisor that sells units to further franchisees. Instead, all outlets are in his position, leading to a high demand for substantial financial and personnel resources at the outset. According to Königsberg, this raise of resources could even turn out to be more difficult in countries where the developers need to cover considerably extensive areas with

their outlet units. Needless to say, the direct relationship between the franchisor and the franchisee can also cause legal issues in the foreign country. When entering agreements with different developers, this also implies that the franchisor needs to make high efforts in keeping the uniformity (e.g. advertising, choice of suppliers) of the system nationwide (Konigsberg, 2008, p. 95ff).

3.2.4.3. *Area Representative Franchising (Incremental or Sequential Franchising)*

Area Representative Franchising, which actually refers to Incremental or Sequential MUF, is a form of franchising which gives proven franchisees the opportunity to extend their current unit(s) and open additional units (Kaufmann, 1992; Weaven & Frazer, 2003). In contrast to ADF, this form of MUF is generally considered to be more common in practice (Blair & Lafontaine, 2005, p. 50). The terms ‘incremental’ or ‘sequential’ franchising relate mostly to the fact that successful SUFs are able to gradually acquire the right to operate additional outlets and turn the system into a multi-unit chain. (Jindal, 2011, p. 551). Obviously, this implies that the prospect of ARF can be described as an “incentive mechanism” for “high-performing franchisees” Blair and Lafontaine (2005, p.50).

3.3. Single-Unit Franchising versus Multi-Unit Franchising: findings from the research literature

This section sheds light on the preferences between SUF and MUF according to the literature. Although for the longest time, franchising was considered to be successful only in the hands of one franchisee who was authorized to own and operate only one outlet at a time (Single-unit franchising) (Blair & Lafontaine, 2005), empirical studies have shown that the allocation of multiple-units (Multi-unit franchising) is the norm in many countries (Grünhagen & Mittelstaedt, 2005). According to the International Franchise Association Educational Foundation (IFAEF) the impact of multi-unit franchising is massive across different industries. MUF controls 52.60% of all franchise operations in these sectors (IFAEF, 2002). Also Kaufmann & Dant (1996) confirm this trend in their study on multi-unit franchising and its impact on growth in the fast-food industry: They found out that 88.00% of all 152 fast-food chains were operated by multi-unit owners. Accordingly, Kalnins & Lafontaine (2004) observe that 84.00% of the restaurants owned by seven large chains in Texas were operated by multi-unit owners. Kaufmann & Lafontaine (1994) report that this phenomenon was also

common among restaurant chains all over the world, such as McDonald's. More than half of new restaurant units were granted to existing partners in the 1980s.

Different empirical studies have focused on the analysis of the differences between Single-unit franchising and Multi-unit franchising and tried to give explanations for the application of the respective ownership modes in different industries. According to Zeller, Achabal, & Brown (1980), the application of a MUF-strategy can have auspicious arguments for the franchisor. As the handling of several single-unit franchisees in each market causes higher management problems, the coordination of one franchisee in each market is said to have a mitigating effect on this. Besides, conflicts in terms of future objectives will be reduced to a certain extent with only one franchisee in each market. (Zeller, Achabal, & Brown, 1980)

Bradach (1995) focuses on the comparison between SUF and MUF in terms of unit addition, system-wide adaptation, uniformity and local responsiveness. While SUF was on the inside track regarding the handling of local responsiveness, MUF succeeded in terms of unit addition and system-wide adaptation. Still, neither SUF nor MUF were able to outperform in dealing with uniformity. Garg, Rasheed, & Priem (2005) base their empirical study on this view and observed that MUF is favored over SUF when high growth is considered to be of foremost importance. Going one step further, if a higher emphasis is placed on uniformity, the probability is higher that ADF will be used. On the contrary, if local responsiveness is more significant to the franchisor, the franchisor will have a higher tendency to choose incremental franchising. In their study on fast-food chains, Kaufmann & Dant (1996) relate the choice between MUF and SUF to agency problems such as adverse selection and moral hazard. They find that the tendency of adverse selection is higher with MUF as the outlet managers that were hired by the owners of the multi-chain do not take the risk of the business and are therefore enticed to misrepresent their talent. Similarly, the fact that outlet managers do not function as residual claimants increases their inducement of shirking. Thus, the existence of moral hazards appears to occur more frequently with MUF and therefore SUF is largely preferred to handle these agency problems. Conversely, MUF implied higher system growth rates due to its ability of realizing synergies across their multiple units. Kalnins & Lafontaine (2004) investigate the influential aspects on the choice between MUF and SUF. Findings show that geographic closeness is a key factor. Franchisees, already operating (a) geographically proximate unit(s), have higher chances of being granted an additional unit. Thus, MUF is more likely than SUF in respect to geographical proximity (Kalnins & Lafontaine, 2004).

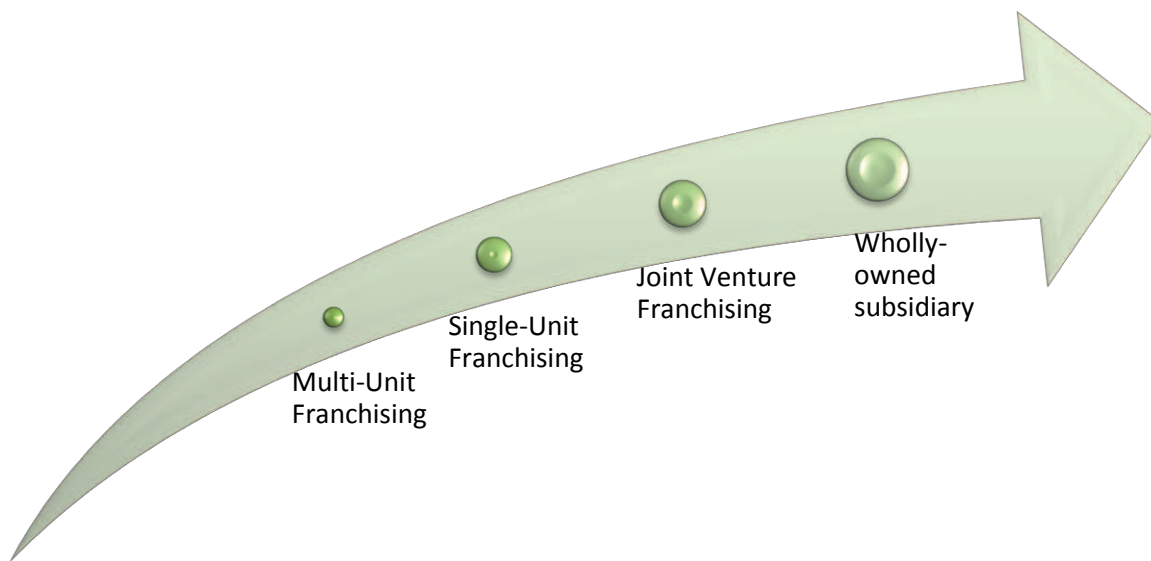
Bercovitz (2003, 2004) discusses the impact of agency-theoretical problems on the modal choices extensively. She (Bercovitz) contends that dangled multi-unit expansion opportunities for franchisees can alleviate free riding and shirking behavior. Additionally, she found out that multi-unit franchising also eases the levels of system termination rates and system litigation rates. In their study on the impact of unit addition on the choice of organizational forms Sánchez, Suárez, & Vázquez (2010) discover that agency problems such as free-riding and shirking will be decreased by MUF with the proviso of geographical proximity of the units. These results confirm the findings of Kalnins & Lafontaine (2004). Furthermore, the authors found empirical support for the network size and the intensity of the MUF application. They state that agency problems which rise proportionally to the size of the network can be diminished with the use of MUF (Kalnins & Lafontaine, 2004).

While the majority of these studies has focused on the side of the franchisor, some researchers contribute to the recent literature with investigations of the franchisee's side.

According to Grünhagen & Mittelstaedt (2002), the most convincing factors for a franchisee to choose MUF over SUF might not only include the higher involvement in the franchisor's decision making process as a result of being multi-chain owner, but also the possibility to realize synergies across units. In the same way, Weaven & Frazer (2006) address the driving aspects for single-unit franchisees and multi-unit franchisees to opt for the respective mode. In their study they focus on franchisees from the fast-food industry (McDonald's) and come to the conclusion that multi-unit franchisees accentuate more on the significance of "the business concept and vision, ongoing training and support, the professionalism of the governance structure, the potential for expansion [and] levels of decision making involvement" (Weaven & Frazer, 2006, p. 238).

In order to conclude this chapter, Figure 2 relates all four governance modes of international franchising to their respective level of control. While MUF offers the franchisor the lowest level of control, the establishment of a WOS enables the franchisor to retain full supervision of the franchise system and its trademarks. Simultaneously, not only control increases from MUF, SUF, JV to WOS but also the degree of ownership. While within MUF, the franchisor has to split his returns with a sub-franchisor, WOS qualifies for full ownership of all shares.

Figure 2: Control levels among governance modes



Comment: Exposure based on Jell-Ojobor & Windsperger (2014)

4. Theoretical background: Resource-Based View, Organizational Capabilities Theory and Property Rights Theory

In this part of the thesis, different theoretical concepts will be considered in order to explain their influence on the choice of governance modes in international franchising.

As the main emphasis of this thesis is to gain a deeper insight into the impact and importance of specific assets on the choice of governance modes in international franchising, the following section will deal with the theoretical concepts of the Resource-Based View and the Organizational Capabilities Theory. In a further step, the Property Rights Theory will be discussed in order to explain the intangibility of assets. These theoretical concepts will provide the basis for the deduction of the hypotheses at a later point of this thesis.

4.1. Resource-Based View and Organizational Capabilities Theory

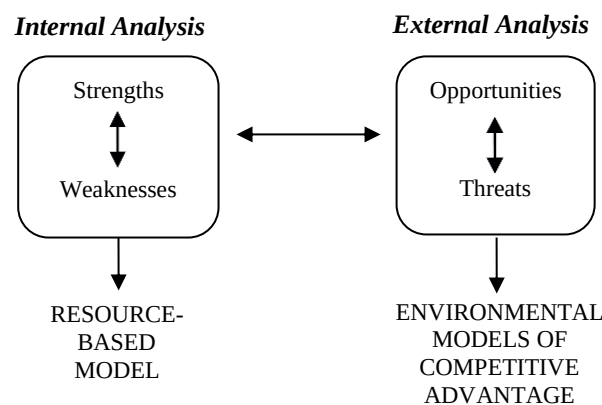
The choice of governance modes in international franchising can be explained by different theoretical concepts and theories. While Transaction Cost Theory (TCT) and Agency Theory (AT) focus on the minimization of costs during a transfer of resources (Anderson & Gatignon, 1986; Buckley & Casson, 1996; Meyer, Wright, & Pruthi, 2009), Resource-Based View and Organizational Capabilities Theory are concerned with the creation of the highest value for the firm (Zajac & Olsen, 1993). While for the longest time, most theories in the franchise literature have focused on concepts such as Williamson's (1975) TCT or the AT, nowadays both the RBV as well as the OCT seem to be more prevalent theories to turn to when trying to explain the choice of governance modes (Madhok, 1997).

4.1.1. Resource-Based View

The Resource-Based View (RBV) is commonly known through the contributions of different researchers (e.g. Barney, 1991; Wernerfelt, 1984; Rumelt, 1984) who try to rationalize a firm's international market entry decisions (Peteraf, 1993; Meyer, Wright, & Pruthi, 2009). Originally, this stream relates back to Penrose (1959) who considered a firm's resources to be an indicator for its growth. Generally, the RBV is concerned with the generation of economic rents and by this means with a sustainable competitive advantage through the exploitation and exploration of a firm's unique resources (Kim & Mahoney, 2007; Tsang, 2000; Barney, 1991). According to Makadok (2001), the effective selection of a firm's resources seems to have a significant impact on a firm's rent-creation. As the gain of a competitive advantage

occurs to be the main notion within this theoretical approach, Figure 3, illustrates the factors which influence a firm's competitive advantage. Thus, a competitive advantage can be acquired by the implementation of a strategy that aims at an effective exploitation of the inner strengths via acting in response to exterior opportunities of the firm's environment. Simultaneously, internal threats as well as external weaknesses need to be eliminated and offset (Barney, 1991).

Figure 3: The relationship between traditional "strengths-weaknesses-opportunities-threats" analysis, the resource based model, and models of industry attractiveness.



Comment: Exposure according to Barney (1991, p. 100)

According to Barney ⁴ (1991, p. 101) resources consist of “all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness”. This implies that resources are the prior force for gaining competitive advantage. Besides, *brand names, in-house knowledge of technology, employment of skilled personnel, trade contracts, machinery, efficient procedures, capital* among others can be defined as resources (Wernerfelt, 1984).

Furthermore, a categorization of these resources into different groups is suggested by several authors (Barney, 1991; Grant, 1991; Amit & Schoemaker, 1993). Therefore, one can differentiate between financial or physical, human capital, and organizational resources. While financial or physical resources are all those which involve the plant, equipment and geographic site of the firm as well as raw material; human capital resources obviously involve the employees' experience, training, intelligence, judgment and relationships within the organization. As far as organizational resources are concerned, they consist of controlling and

⁴ Following (Daft, 1983)

coordination systems, a formal reporting structure, as well as informal planning and relations within the firm's micro- and macro environment (Barney, 1991).

In order to obtain and maintain a sustainable competitive advantage, Barney (1991) suggests that four conditions need to be met: The firm's resources need to be *valuable*, *rare*, *imperfectly imitable* and not *substitutable*. If all of these four attributes can be fulfilled, the firm's resources can be defined as *strategic resources* (Black & Boal, 1994; Chi, 1994 in (Combs et al., 2011)) and can thus represent the key to sustainable competitive advantage (Barney, 1991).

With the intention to be regarded as valuable, the firm's resources need to have a tremendous effect on its efficiency and success. Only then, the value of these resources can be taken into consideration as a source of sustainable competitive advantage. However, in order to provide a sustained competitive advantage it is not sufficient for a firm's resource to be of high value, also the rarity of the resource contributes to that to a large extent. In this sense, holding a valuable resource does not score points if this resource is also available to a substantial number of competing firms who are able to exploit it themselves and secure a competitive advantage. In other words, a resource's value and rarity speak for the first-mover advantage of a firm (Barney, 1991).

Besides being rare and of high value, the fact of being imperfectly imitable for competitors occurs to be a necessity when seeking sustainable competitive advantage in the industry. To put it differently, a firm can be granted sustainable competitive advantage if its competitors do not have the possibility to acquire the same resources. If the imitation of a resource is not feasible, firms will try to find a way that enables them to obtain a competitive advantage through the substitution of the necessary resource. In addition to that, the assumptions that resources are heterogeneous and imperfectly mobile also contribute to a large extent to the firm's competitive advantage (Barney, 1991). Thus, due to the heterogeneity of a firm's resources, the opportunity of competing in a market with diverse resources arises (Peteraf, 1993). While on the other hand, homogenous resources would mean that every single firm within an industry is able to exploit its resources in the same way. Consequently, no firm can be better off and the generation of a sustained competitive advantage is unfeasible (Barney, 1991). This notion is also reinforced by Penrose (1959) who stated that "it is the heterogeneity, and not the homogeneity, of the productive services available or potentially available from its resources that gives each firm its unique character" (Penrose, 1959, p. 67).

Imperfect mobility is the case if it is not possible to either trade the resources or if these resources are more beneficial to their regular user than to any other one (Peteraf, 1993).

4.1.2. Organizational Capabilities Theory

Obviously, the concepts of RBV and OCT are closely related to each other as a relationship between a firm's resources and its capabilities exists. Together, both make up a firm's bundle (Erramilli, Agarwal, & Dev, 2002). Grant (1991) argues that "resources are the source of a firm's capabilities, capabilities are the main source of its competitive advantage" (Grant, 1991, p. 119). This implies a strong connection between the two means. Furthermore, Williamson (1991) considers that a grouping or linkage as well as an individual contemplation of the two approaches are possible. Also Tsang (2000) argues that OCT is either a sub-concept of the RBV or strongly connected to it.

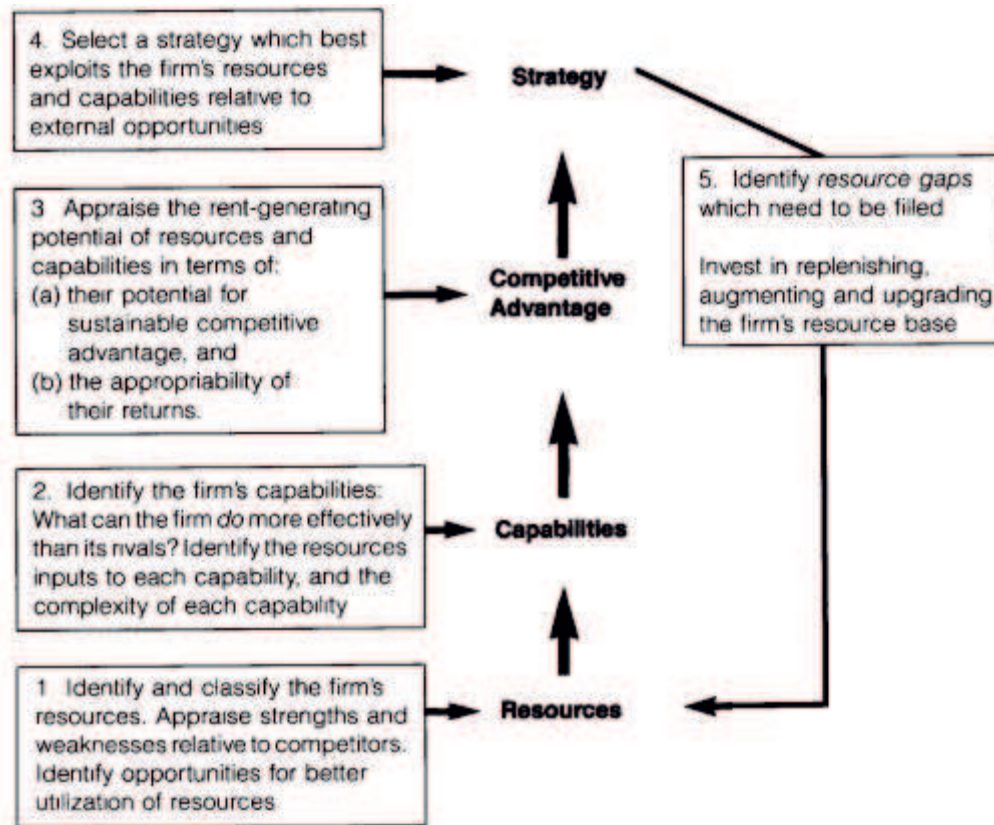
Generally, an organization's capabilities are considered as "a firm's capacity to deploy *Resources*, usually in combination with, using organizational processes, to effect a desired end (Amit & Schoemaker, 1993, p. 35). In this respect, the effective deployment of a firm's resources is then associated with a significant positive impact on a firm's rent creation (Makadok, 2001). Evidently, both the RBV and the OCT are mainly concerned with the firm's rent-creation.

Furthermore, a firm's capabilities are even more important as they are specific to the firm, meaning that these tangible, intangible or information-based processes are attached to the firm while providing primarily value to the firm itself (Amit & Schoemaker, 1993). This implies that the transferability of a firm's specific capabilities is quite challenging. Thus, the reallocation of the capabilities to another firm cannot bring value without being in the possession of the firm's skills and knowledge in terms of efficient use and potential development opportunities (Teece, Pisano, & Shuen, 1997; Makadok, 2001). Besides, capabilities are mainly concerned with the improvement and development of the resources' productivity (Amit & Schoemaker, 1993). Accordingly, Makadok (2001, p. 389) argues that "capability-building only creates economic profit if a firm is successful at acquiring other resources on which the capability [...] can exert its productivity-enhancing influence."

As already stated above, the Organizational Capabilities Theory is closely related to the concept of the RBV. In the current literature it is sometimes even considered to be a perspective of the RBV (e.g. Fladmoe-Lindquist, 1996) or is used interchangeably to it (e.g.

Erramilli, Agarwal, & Dev, 2002). For the sake of this thesis, the concept of capabilities will not be regarded as a single concept; instead it will be connected to the RBV.

Figure 4: Resource-based approach to strategy analysis



Comment: (Grant, 1991)

With regard to the generation of a firm's competitive advantage, a firm's resources and capabilities are considered to be the main source to achieve it. Figure 4 shows that the first step of this value creation process is concerned with the identification and classification of the firm's acquired resources. At this stage, the use of a SWOT-analysis is recommended. In the subsequent phase it is crucial to identify the firm's capabilities as they affect the productivity of the resources. While the third stage is concerned with the appraisal of the economic-value generation, based on the analyses during the first two phases, the fourth phase of the model is related to the choice of the best strategy which improves the efficiency and effectiveness of the firm's resources and capabilities. Last but not least, the analysis of the whole model entails alterations and further improvement of the model in case of the occurrence of resource gaps (Grant, 1991).

4.2. Deduction of hypotheses according to RBV and OCT

As the previous section of this thesis was concerned with the theoretical approach of the RBV and OCT, these concepts of the firm's resources and capabilities will now be related to the field of franchising.

When speaking of a firm's intangible resources and capabilities (henceforth intangible assets) one can differ between the franchisor's and the franchisee's intangible assets. (Windsperger, 2001)

4.2.1. System-specific assets of the franchisor

Generally speaking, intangible or intellectual assets can be grouped into intellectual property (assets) and knowledge assets. Intellectual property (assets) refer to an organization's patents, trademarks, copyrights etc. and are therefore concerned with the organization's property rights. On the other side, knowledge assets, including know-how of people related to the organization are not connected to the organization's property rights as the acquisition of an organization cannot simultaneously grant the possession of the organization's knowledge assets (Hall, 1992). As already stated in the previous section, an organization's resources and capabilities are very much related to its ability of creating value. According to Aaker (1989), the management of assets and skills within an organization represents a substantial force, if not the foundation, which the gain of sustainable competitive advantage is built upon.

In the franchising literature, a franchisor's intangible assets (system-specific know-how and brand name management) have repeatedly been defined as its System-Specific Assets (SSA) (e.g. Windsperger, 2001, 2002, 2003a, 2003b, 2004a, 2004b; Hussain & Windsperger, 2010, 2011, 2013; Hussain, Moritz, & Windsperger, 2012; Jell-Ojobor & Windsperger, 2014). These system-specific assets usually include competences in terms of location choice, store layout, development and acquisition of goods and services, and marketing activities (Kacker, 1988).

The RBV and the OCT enable the franchisor to make entry mode choices according to the exploration and exploitation potential of a firm's resources and capabilities (Meyer, Wright, & Pruthi, 2009; March, 1991). On the one hand, exploration capabilities can be identified in terms of experimentation and innovation (March, 1991). In this sense, Hussain & Windsperger (2015) note that the exploration of experimentation and innovation capabilities is usually more efficient under MUF. In contrast to a firm's exploration capabilities, Hussain

& Windsperger (2010) state that within a franchise business its exploitation capabilities can be identified in terms of monitoring, knowledge transfer and human resource management.

As regards the benefits of MUF over SUF in terms of monitoring, Bradach (1997) finds that franchisees with multiple units are expected to outperform in contrast to single-unit franchisees due to the replication of management-, payment-, as well as workplace-evaluation-systems. As multi-unit franchise systems function as mini-chains, franchisees of the respective mini-chain can be entrusted with control execution activities of their individual operated units. Due to the possession of these higher monitoring capabilities, the franchisor can be relieved in terms of controlling power (Bradach, 1997).

Speaking of a franchisee's knowledge transfer capabilities, Darr et al. (1995) consider the transfer of information and experience within a mini-chain to be more efficient compared to SUF. Frequent communication, meetings, as well as social contact between the teams of the mini-chain's different outlet stores mainly contribute to a higher degree of internal knowledge and learning transfer than realizable with SUF (Darr, Argote, & Eppler, 1995). As far as an organization's exploitation capabilities in terms of Human Resource Management (HRM) can be defined, Weaven & Herington (2007) found that the HRM practices could be kept to a minimum within MUF. This is due to the fact that training practices were only needed to a low extent, mostly attributable to the sequential expansion of the multi-outlets. Consequently, in terms of HRM, MUF is also considered to be preferable. Also, as regards the brand name management of a franchise company, MUF has the ability to keep uniformity among the mini-chain (Garg, Rasheed, & Priem, 2005).

Correspondingly, Hussain & Windsperger support this view in various publications (e.g. 2010, 2011, 2013, 2015). Based on the theoretical concepts of the RBV and the OCT in chapter 4 as well as the findings in the literature, following proposition will be concluded:

H1.1. : The more important the franchisor's system specific assets for value creation, the more likely the franchisor will use MUF over SUF.

4.2.2. Local Market Assets of the Franchisee

While the previous section covered the side of the franchisor, this one is concerned with the intangible assets (capabilities and resources) of the franchisee.

In the franchising literature, a franchisee's intangible assets have repeatedly been defined as Local Market Assets (LMA) (e.g. Windsperger, 2001, 2002, 2003a, 2003b, 2004a, 2004b; Hussain & Windsperger, 2010, 2011, 2013; Hussain, Moritz, & Windsperger, 2012; Jell-

Ojobor & Windsperger, 2014). Based on the view of March (1991), these capabilities can also be grouped into exploration (invention of new know-how) and exploitation capabilities (improvement of existing know-how).

In order for a franchisor to be able to expand, knowledge about the local standards in the host country is of foremost importance and therefore needs to be gained. This economic prerequisite is usually granted with the help of the local franchisee due to his awareness of local needs, preferences, and specific cultural habits. Subsequently, the right adjustments for this very market can be made (Jell-Ojobor & Windsperger, 2014). Generally, the local-market assets involve the franchisee's local know-how and capabilities in terms of marketing, personnel management, seller-buyer relations, monitoring of quality standards, and innovation of goods and services (Windsperger & Dant, 2006).

As regards the impact of the franchisee's local market assets on the choice between MUF and SUF, the current literature reveals differing findings. Although there have been some arguments against the application of MUF to enter a foreign market, Kalnins & Lafontaine (2004) provide several arguments in their study on multi-unit ownership in the fast-food industry that support the benefits of MUF. The authors claim that franchisors may profit from the multi-unit franchisee's particular knowledge about the management of outlets in specific areas. Also, as finding high-quality franchisees seems to be a franchisor's main target, proven multi-unit franchisees who possess the desirable specific knowledge may fulfill these requirements. In addition, Kalnins & Lafontaine (2004) claim that any motivational problems can be eliminated with the prospect of granting additional units to the multi-unit franchisees.

This also implies that the franchisor can take advantage of the franchisee's expertise, skills and experience of outlets in alike regions (Darr, Argote, & Epple, 1995). In their study on different ownership strategies in the Spanish franchise sector, Gómez, González, & Vázquez (2010) find support for the findings of Kalnins & Lafontaine (2004) and suggest that problems of shirking and free-riding can be eliminated to a large extent when MUF is applied. This means that due to the promise of granting additional units, multi-unit franchisees are more motivated to put in higher efforts into the local adaptation and the meeting of local requirements. Kalnins & Mayer (2004) also state that the local experience and knowledge within a mini-chain induces higher performance and therefore decreases the risk of failure.

Although the suggestions of Kalnins & Lafontaine (2004), Kalnins & Mayer (2004), Darr et al. (1995) and Gómez et al. (2010) seem to be reasonable to a certain extent, the findings of authors that display contradictory views will be taken into consideration. However, according

to the research of Bradach (1995) and Hussain et al. (2010), SUF occurs to be the better alternative to choose when the adaption to local conditions is essential. According to Hussain & Windsperger (2010), single-unit franchisees are better at obtaining and deploying local market knowledge than hired managers working for the outlets of a MUF:

Bradach (1995) argues that one of the decisive arguments for choosing SUF over MUF occurs due to the fact that single-unit franchisees, who have been part of the local society for a longer period of time, are expected to have better knowledge about potential buyer's tastes, preferences and needs. As regards MUF, the outlet-managers of the mini-chain, who are only hired by the owners of the chain, have the tendency to move or rotate between outlets on a frequent basis and therefore lack the local knowledge and experience that will be needed for the successful installation and maintenance of the business (Bradach, 1995).

A further argument for the choice of SUF over MUF is provided by their higher orientation and motivation towards consumers (Bradach, 1995). This is why Garg, Rasheed, & Priem(2005) state that being a residual claimant entails to put in greater efforts in the successful adjustment and establishment of the local outlet in order to gain a competitive advantage and be granted the possibility to acquire additional business units. Managers of the mini-chains, on the other side, favor the implementation of standard routines developed for the whole chain as their contracts are not based on incentives. This not only implies that local requirements cannot be met efficiently, but that shirking is more popular with outlet managers of the mini-chains (Garg, Rasheed, & Priem, 2005). Hussain & Windsperger (2013) too support this view, as they state that the assignment of operational decision rights to the employees of the these outlets could have a negative impact on the franchise business by causing further agency problems.

Based on the theoretical concepts of the RBV and the OCT in chapter 4 as well as the findings in the literature (Bradach, 1995; Hussain & Windsperger, 2010, 2013; Garg, Rasheed, & Priem, 2005,) following proposition will be concluded:

H2.1. : The more important the franchisee's local market assets for value creation, the more likely the franchisor will use SUF over MUF.

4.2.3. Financial Assets

While the previous section was concerned with the local market assets of the franchisee, this section discusses the financial assets of the franchisee in the local market. As the establishment of a foreign business is often a challenge in terms of obtaining the

relevant financial resources, franchising is considered to be a good opportunity to overcome the lack in capital (Gonzalez-Diaz & Solis-Rodriguez, 2012). Furthermore, the franchisor is given the possibility to acquire the capital needed for the growth of the business while remaining its sole owner (Kaufmann & Dant, 1996).

With regard to the choice between MUF and SUF, multi-unit chains are said to be the better alternative to choose in terms of capital acquisition (Kaufmann & Dant, 1996; Hussain & Windsperger, 2010). According to Hussain & Windsperger (2010), being part of a chain enhances the ability of multi-unit franchisees to finance the extension of the business. This is consistent with the view of Wilbur (2011) who states that multi-unit franchisees have better opportunities regarding investment.

Hussain & Windsperger (2013) argue that a multi-unit franchisee's investment opportunities may be closely related to the previous financial success within the multi-chain leading to better access to capital of external investing parties. In their empirical study, Hussain & Windsperger (2010) discovered a positive relationship between the demand of financial resources and the tendency to choose MUF. Kaufmann & Dant (1996) also provide scientific proof for the positive relationship between the tendency toward MUF and the expansion of the franchise business.

Based on the theoretical concepts in chapter 4 as well as the findings in the literature, following proposition will be concluded:

H3.1. : The higher the financial resources required in order to apply the franchise concept in the host country, the more likely the franchisor will use MUF over SUF.

4.3. Deduction of hypotheses according to the Property Rights

Theory and Interaction analysis

This section of the thesis is concerned with an extension of the hypotheses conducted in the previous section. Based on the Property Rights Theory (PRT), the following chapter attempts to investigate the moderator effect of the intangibility of assets. Initially, a very brief overview of the Property Rights Theory will be given before turning to the concept of intangibility of the three intangible assets (system-specific assets, local market assets and financial assets) that have already been mentioned in section 4.2. In a further step, the propositions of the previous chapter will be extended by an interaction analysis.

4.3.1. Property Rights Theory and the intangibility of assets

With regard to the theoretical concepts of the previous section, a relationship between the PRT and the RBV can be identified due to outlined property rights that have a positive effect on the value of an organization's resources. As this effect increases even more, also the resources' property rights turn out to be more defined and specific (Libecap, 1989).

Generally, property rights indicate that the “decision maker has the right to (1) decide about the use of the firm's resources, (2) keep the residual (total revenue minus contractual costs), and (3) capitalize any wealth gains of the firm by selling his rights” (Frech III, 1976, p. 143). In addition to that, the property rights theory states that the allocation of a firm's ownership rights is defined by the contractibility of its assets (Hart & Moore, 1990).

In the context of international franchising, this contractibility explains the degree to which a transfer and codification of the intangible assets within the franchising network is possible. Thus, the more intangible the franchisor's or franchisee's assets are, the higher is the non-contractibility of these assets, meaning that the transfer and codification of these assets cannot be done without difficulty. As regards the allocation of ownership rights between the franchisor and the franchisee, this decision is grounded in the relative importance of their intangible assets. Accordingly, if the franchisor's intangible assets are considered to be more valuable in terms of residual income generation, the majority of the ownership rights should be devolved to himself. As a result, the fraction of outlets owned by the company itself should rise correspondingly. On the contrary, if the franchisee's intangible assets are considered to be of greater value for the creation of residual income, the franchisee should be granted a

relatively higher share of ownership rights. Consequently, there should be a higher number of franchised outlets (Windsperger & Dant, 2006).

4.3.2. Interaction analysis of the intangibility of assets

This chapter attempts to investigate the interaction effect of the intangibility of assets. In this sense, asset intangibility acts as an interaction term and intensifies the variables based on RBV and OCT on the choice between MUF and SUF, meaning that the more intangible an asset is, the stronger the effect is; compared to its normal state as declared in section 4.2 in which one mode will be chosen over the other. Hence, the interaction analysis is concerned with investigating whether a higher intangibility of assets has a stronger influence on the choice between MUF and SUF. According to Jell-Ojobor & Windsperger (2014), they have been among the first to investigate the impact of intangibility of assets in terms of governance mode choice.

4.3.3. System-specific Assets

As already mentioned in section 4.2.1, system-specific assets usually refer to competences in terms of location choice, store layout, development and acquisition of goods and services, as well as marketing activities (Kacker, 1988). The transfer and codification of these intangible assets usually cannot be done without difficulty due to its tacitness (Nelson & Winter, 1982). Therefore, the more intangible a franchisor's SSA are (due to difficulties in transfer and codification), the more challenging it is to contract them while even further leading to a higher degree of non-contractability (Windsperger & Dant, 2006). In this respect, Yin & Shanley (2010) suggest to choose MUF over SUF as the uniform systems and processes within a multi-unit chain have an increasing impact on the franchisor's ability to execute control.

Hussain & Windsperger (2013) also support the view of choosing MUF when a franchisor's SSA are non-contractible and add that the impact of contractual relations could also have an influence on the franchisor's level of control and therefore on his choice of a suitable entry mode. Since the grant of additional units to the same franchisee involves fewer contractual expenses, MUF will be preferred over SUF. Furthermore, Hussain & Windsperger (2010) conclude that high non-contractability of the SSA leads to the situation that the SSA have a higher effect on the choice for MUF while a higher amount of knowledge transfer capabilities is needed.

Based on the theoretical concepts in section 4.3.1 as well as the findings in the literature, following proposition is concluded:

H1.2. : The intangibility of system-specific assets positively moderates the impact of system-specific assets on the franchisor's tendency to use MUF over SUF.

4.3.4. Local Market Assets

As already mentioned in section 4.2.2, local-market assets usually involve the franchisee's local know-how and capabilities in terms of marketing, personnel management, seller-buyer relations, quality control, as well as innovation of goods and services (Windsperger & Dant, 2006).

According to Hussain & Windsperger (2013), when a franchisee's LMA are non-contractible, SUF is considered to be the more effective mode. This is because the entrepreneurial orientation of local franchisees regarding motivation and profit maximization influences the success of the outlet and therefore has an effect on the choice between MUF and SUF. The choosing of SUF is advisable due to the fact that multi-unit chain owners may have to deal with motivational problems of their outlet operators who hold certain operational decision rights but never made any investments. Hence, in case of high intangibility of LMA, a local single-unit franchisee should be even more motivated and think profit-oriented (Hussain & Windsperger, 2013) in order to obtain and make use of the required local market know-how (Hussain & Windsperger, 2010). Furthermore, Hussain & Windsperger (2010) conclude that high non-contractability of the LMA leads to the situation that the LMA have a higher effect on the choice of SUF, whereas the local partner's specific local knowledge is needed to a greater extent for the creation of residual income.

Based on the theoretical concepts in section 4.3.1 as well as the findings in the literature, following proposition is concluded:

H2.2. : The intangibility of local market assets positively moderates the impact of local market assets on the franchisor's tendency to use SUF over MUF.

4.3.5. Financial Assets

As already mentioned in section 4.2.3, financial assets refer to the monetary resources of the franchisee in the local market. Usually, when a franchisor aims at expanding its system but lacks the relevant capital needed, franchising seems to be the appropriate mode for its attainment (Gonzalez-Diaz & Solis-Rodriguez, 2012). This is due to the fact that the acquisition of capital from external parties such as financial institutions turns out to be much harder. Almost certainly, the franchisor will not be able to convince them of the lucrativeness to invest in the franchise concept as the external parties usually lack relevant information about the local market and cannot estimate the risks. (Caves & Murphy, 1976) Consequently, franchising seems to be the better alternative for capital acquisition as local franchisees are in the possession of relevant local market knowledge to evaluate the profitability of the franchise system. This implies that financial assets are related to the contractability of local market assets. Therefore, if the local market assets are determined by a low degree of contractability, meaning that it is difficult for external parties to acquire knowledge and evaluate risks, the more important will be the franchisee's financial assets for the expansion of the system (Windsperger & Dant, 2006). This view is also supported by Hussain and Windsperger (2013) who find empirical evidence in their study. They also claim that the more intangible the local market assets are, the higher the effect of the financial assets for the franchisor's choice to use MUF is. This is mostly due to the fact that multi-unit franchisees, compared to single-unit franchisees, might have better opportunities regarding investment due to previous financial success within the multi-chain leading to better access to capital of external investing parties (Hussain & Windsperger, 2013).

Based on the theoretical concepts in section 4.3.1 as well as the findings in the literature, following proposition is concluded:

H3.2. : The intangibility of local market assets positively moderates the impact of financial assets on the franchisor's tendency to use MUF over SUF.

Table 1: Summary of Hypotheses

I.	System-specific Assets
H1.1	The more important the franchisor's system specific assets for value creation, the more likely the franchisor will use MUF over SUF.
H1.2	The intangibility of system-specific assets positively moderates the impact of system-specific assets on the franchisor's tendency to use MUF over SUF.
II.	Local Market Assets
H2.1	The more important the franchisee's local market assets for value creation, the more likely the franchisor will use SUF over MUF.
H2.2	The intangibility of local market assets positively moderates the impact of local market assets on the franchisor's tendency to use SUF over MUF.
III.	Financial Assets
H3.1	The higher the financial resources required in order to apply the franchise concept in the host country, the more likely the franchisor will use MUF over SUF.
H3.2	The intangibility of local market assets positively moderates the impact of financial assets on the franchisor's tendency to use MUF over SUF.

Empirical Study

5. Empirical Study

This part of the thesis is concerned with the description of the empirical study. Information on the data collection and sample will be given as well as the survey instrument will be introduced. Additionally, all relevant measures (independent variables, dependent variables and control variables) will be discussed.

5.1. Data collection and sample

The data for this empirical analysis was collected in the course of a survey designed and conducted by the Department of Management at the University of Vienna. The aim of this survey was the investigation of the choice of governance mode among international franchise companies. More specifically, our subject of interest was the investigation/analysis of choice-of-mode behavior between Europe and the U.S.A. Therefore, our target group included franchising companies from the U.S., the U.K., the Netherlands, Germany, Austria, Spain, France and Italy. The selection criterion was that these franchise companies pursued international operations. Data collection started in December 2014 via an electronic survey. Due to the low response rate, the survey was re-launched in February 2015 and accompanied by telephonic contacts with the target respondents. In order to achieve a more satisfactory response rate, the survey was transmitted per post to all selected companies in Europe that had not responded until the beginning of April. Finally, data collection was closed at the beginning of June. In total, 2719 franchise companies in Europe and the U.S. were contacted on the basis of contact details provided by previous surveys or the International Franchise Association. Although a response rate of 20-30% was yielded, the cleared data only provides a sample of 162 European and U.S. franchise companies.

5.2. Survey instrument

The empirical investigations of governance mode choices of international franchise systems have been supported by quantitative research. In particular, the survey has been conducted based on an electronic questionnaire, which has been developed by the Department of Management at the University of Vienna under the patronage of Prof. Dr. Windsperger and Dr. Jell-Ojobor and was sent to international franchise companies electronically and via mail. In total, the survey covers 120 questions, consisting of open, single-choice, and multiple-choice questions. As regards the single-choice questions, answers could be given using a 7-point Likert-type scale. More precisely, the questionnaire addresses different subjects

concerning the franchisor's dominant mode choices, those in particular markets, industry of operations and type of business, age and size of the national and international franchise system, franchise contract terms, strategy and decision rights, performance of the franchise company, environmental uncertainty in the host country, behavioral uncertainty, franchisor and franchisee's commitment of resources, the franchisor's level of control, the franchisor and franchisee's intangible assets, as well as the franchise relationship between the partners. On average, it takes 15 to 20 minutes for the respondent to complete the questionnaire. For a detailed insight into the questionnaire, please refer to the appendix.⁵

5.3. Measurement

This section will focus on the description of all relevant variables included in the empirical analysis. Thus, the dependent variable (SUF versus MUF), the independent variables (SSA, LMA, FA, IA_SSA, IA_LMA) as well as the control variables (age and system size) will briefly be discussed. At the end of this chapter, the measures of all variables will be summarized in an overview.

5.3.1. Dependent Variable

The dependent variable is concerned with the franchisor's decision between market entry via SUF or MUF. Thus, this indicator is based on the choice between operating only one outlet (SUF) and being responsible for more than one outlet at the same time (MUF). This variable is based on the question about the franchisor's dominant mode choice which is measured as a categorical variable in the questionnaire. For the sake of this thesis, the options 'JVF' and 'WOS' have been excluded and this variable was converted into a binary variable. While the value 0 is related to SUF, 1 refers to MUF in SPSS. The SPSS-term itself is labeled as 'DOM_reduced' in the output.

5.3.2. Independent Variable⁶

System-Specific Assets (SSA)

As already discussed in section 4.2.1, system-specific assets are defined as a franchisor's intangible assets which refer to the exploration and exploitation potential of a firm's resources and capabilities (Meyer, Wright, & Pruthi, 2009; March, 1991). As indicated by Hussain & Windsperger (2015) exploration of experimentation and innovation capabilities and

⁵ See Appendix, 10.6

⁶ Please note that within the empirical part of this thesis, the term 'independent variable(s)' and 'predictor(s)' will be used interchangeably.

exploitation of knowledge transfer, monitoring and HRM capabilities is usually more efficient under MUF. With respect to the underlying survey, three of the variables from the questionnaire have been selected to build a representative factor⁷ for the regression analysis. These items include customer competences (e.g. marketing, advertising, promotion and pricing), management competences (e.g. operating policies and procedures and HR management) as well as organizational capabilities (e.g. cultural management and information management). Respondents were asked to rate the importance of these items for the competitive advantage of the franchise network based on a 7-point Likert-type scale, whereas 1 refers to being ‘unimportant’ and 7 to being ‘very important’. In SPSS the term ‘SSA’ will be used to determine the degree of importance of the franchisor’s system-specific assets.

Local Market Assets (LMA)

In section 4.2.2, local market assets have already been defined as the franchisee’s local know-how and capabilities in terms of marketing, personnel management, seller-buyer relations, quality control, as well as innovation of goods and services (Windsperger & Dant, 2006).

With respect to different researchers (e.g. Bradach, 1995; Hussain & Windsperger, 2010, 2013; Garg, Rasheed, & Priem, 2005) SUF is said to succeed, among others, in terms of local adaption, deployment of local market knowledge and customer orientation and motivation.

As regards the underlying survey, of all local market assets related variables, two representative factors⁸ have been built to run the regression analysis. Based on the suggestions of Windsperger & Dant (2006) the respective variables have been grouped into local market exploitation assets and local market exploration assets to prevent problems of multicollinearity between the different variables. Labelled as LMEXPLOIT in SPSS, this factor refers to the items administrative know-how and human capital resources and management know-how (recruitment). Conversely, the term LMEXPLORE will be used to explain the variables innovation know-how and marketing know-how regarding their degree of importance for economic rent creation. Similar to the SSA’s method of measurement, respondents were also asked to rate the importance of these items for the competitive advantage of the franchise network based on a 7-point Likert-type scale. In this case, 1 refers to being ‘unimportant’ while 7 is considered ‘very important’.

⁷ Detailed information on the selection of items for the factor analysis will be provided in section 5.7.1.

⁸ Detailed information on the selection of items for the factor analysis will be provided in section 5.7.2

Financial Assets (FA)

Relating to section 4.2.3, financial assets refer to the local franchisee's financial capital and resources. According to several authors (e.g. Kaufmann & Dant, 1996; Hussain & Windsperger, 2010, Wilbur (2011)), MUF is said to be the better alternative for capital acquisition as it provides better investment opportunities based on previous financial success and reputation. Concerning the underlying survey, financial assets are based on one single variable –financial capital– from the questionnaire and refer to the term ‘FA’ in SPSS. Equally to the procedures above, respondents were asked to rate the importance of financial capital for the competitive advantage of the franchise network based on a 7-point Likert-type scale where 1 refers to being ‘unimportant’ and 7 to being ‘very important’.

Intangibility of Assets (IA_SSA and IA_LMA)

As already mentioned in section 4.3.2, intangibility of assets acts as an interaction term and attempts to intensify the outcome of the variables SSA, LMA and FA. In order to be able to run the regression analysis, different items related to the intangibility of assets have been selected from the questionnaire to build two different factors⁹. The first factor, labeled as IA_SSA in SPSS, refers to the intangibility of system-specific assets and includes items that relate to the know-how transfer between headquarters and foreign partners in terms of writing a manual describing the service delivery processes, documenting critical parts of the franchise business format and understanding how to deliver the franchise products/services by studying blueprints. For the investigation of the intangibility of local market assets and financial assets, a second factor, labeled as IA_LMA, has been built. This factor includes items that refer to the acquisition of the local market knowledge needed to operate the franchise network in the foreign countries and the transfer of the foreign partners’ market know-how to the headquarters.

⁹ Detailed information on the selection of items for the factor analysis will be provided in section 5.7.3

5.3.3. Control Variables

In context of this empirical analysis, two different control variables that might enhance the impact on the choice towards MUF, will be used.

Age of the system

Based on previous success and the associated reputation of multiple-unit outlets, researchers (e.g. Weaven & Herington, 2007; Weaven & Frazer, 2007) observe a positive relationship between the maturity (age) of the system and the choice of MUF. As regards the underlying survey, system age has been computed as the difference between the year 2015 and the answer to the question in which year the internationalization of the franchise system started. The result refers to term AGE_Int in SPSS and is measured on a scale.

System size

Since different researchers find scientific proof for a positive correlation between the franchise's system size and the tendency towards the choice of MUF (e.g. Gómez et al. , 2010; Weaven & Herington, 2007), this measure will be used as one of two control variables in the regression analysis of this thesis. System size, which is labeled as SYS_SIZE_Total in SPSS, represents the sum of the number of company-owned outlets in the home country, franchise outlets in the home country, company-owned outlets abroad and the number of franchise outlets abroad. All of these items from the questionnaire were measured on a scale.

Table 2: Overview of variables

Variable	SPSS term	Items¹⁰	Measure	Type of variable	Hypothesis
Dominant mode choice (Single-Unit Franchising versus Multi-Unit Franchising)	DOM_reduced	-	nominal	dependent	All
System-Specific Assets	SSA	E101_01 E101_02 E101_03	Factor (scale)	independent	H1.1
Local Market Assets	LMEXPLOIT	E105_07 E105_08	Factor (scale)	independent	H2.1
	LMEXPLOR	E105_12 E105_05	Factor (scale)		
Financial Assets	FA_standardized	E105_10	standardized	independent	H3.1
Intangibility of System-specific Assets	IA_SSA	E104_01 E104_02 E104_03	Factor (scale)	independent	H1.2
Intangibility of Local Market Assets	IA_LMA	E104_06 E104_07	Factor (scale)	independent	H2.2 H3.2
Age of international franchise system	AGE_Int	A210_05	scale	control	All
Total size of the franchise system	SYS_SIZE_Total	A114_01 A114_02 A210_01 A210_02	scale	control	All

¹⁰ See Appendix for overview of respective items, 10.7

5.4. Methodology

After the details of all relevant variables related to the survey have been provided in section 5.3, this chapter is concerned with the description of the procedure of the empirical analysis itself.

The analysis of the survey was carried out using the statistical analysis program 'IBM SPSS Statistics'¹¹. The approach taken towards the analysis are mostly based on the scientific information for statistical analysis by Andy Fields (2009) and G. David Garson (2014).

Initially, an analysis of the respondents of the sample has been carried out using frequency distributions and descriptive statistics. Focus of this analysis was the examination of different aspects including countries of origin, operating industry, dominant expansion mode choices, age of the international franchise system, system size, and franchise contract agreement terms.

Afterwards, a bivariate correlation analysis between the different items of the questionnaire and the dependent variable has been conducted in order to detect possible cases of multicollinearity. More precisely, Spearman's non-parametric statistic, which is considered a appropriate for ordinal variables was used to compute the correlation coefficients of the respective relationships. Basically, Spearman's correlation coefficient determines the strength and direction of the relationship between two variables. In general, the value of the correlation coefficient lies between -1 and +1. In this sense, correlations where the coefficient equals + 1, indicate a perfectly positive relationship. Conversely, correlation coefficients which equal - 1, depict a perfectly negative relationship between two items. Obviously, a value of 0 is an indicator for the non-existence of a correlation between two items. (Field, 2009) Evans (1996) suggests a classification in five categories. While 'very weak' correlations range between 0.000 and 0.190, 'weak' relationships usually reveal a correlation coefficient between 0.200 and 0.390. A 'moderate' correlation, on the other hand, is represented due to values between 0.400 and 0.590. As regards 'strong' correlations, they can be contributed to relationships with a correlation coefficient between 0.600 and 0.790. Naturally, values above 0.800 can be classified as 'very strong' relationships between the items. Overall, the criterion for significance is $p < 0.05$. The correlation analysis revealed findings which were useful for the conduction of the factor analysis. As the hypotheses are concerned, only one item was able to predict the direction of the hypothesis statistically significant. The SPSS outcomes as well as the results of the correlation analysis will be displayed in detail in section 6.

¹¹ In the course of this thesis, IBM SPSS Statistics version 23 has been used.

As the independent variables were based on different items, the conduction of a factor analysis was necessary in order to extract representative factors for these predictors as well as overcome potential problems of multicollinearity. More precisely, the factor analysis was concerned with the independent variables ‘system-specific assets’, ‘local market assets’, ‘intangibility of system-specific assets’ and ‘intangibility of local market assets’. Being based solely on one item, the extraction of a factor for the predictor ‘financial assets’ was not essential. In general, the selection of the items included in the factor extraction was based on different criteria: While the gap between the cross-loading items is supposed to exceed a minimum of 20% (Tabachnick & Fidell, 2006), any items with cross-loadings < 0.3 were not retained (Comrey & Lee, 1992). In addition, the value of the communalities of the items should fulfill the minimum criterion of 0.5 (Larose & Larose, 2015). Based on this, a reduced set of three items was subject to the extraction of the factor ‘system-specific assets’. As regards the predictor ‘local market assets’, the selection of items was mostly based on the categorization propositions from Windsperger & Dant (2006), who suggested to group them into factors including 2 items per factor. Besides, the selection of items for these two factors was also based on the above mentioned criteria (Tabachnick & Fidell, 2006; Comrey & Lee, 1992; Larose & Larose, 2015). The independent variable ‘intangibility of assets’ has been grouped into the factors ‘intangibility of system-specific assets’ and ‘intangibility of local market assets’. Turning to the dimension reduction technique itself, a Principal Component Analysis (PCA) has been carried out. PCA is concerned with the decomposition of the original data into a group of linear components and yields shared variance among the variables within the data set after the extraction of factors. Initially, before the analysis, the value of the common variance (communality) is assumed to be 1, which indicates that all variance is shared between the variables. The value of the communality after the extraction reflects how well the original data is explained by the retained factor(s). Thus, values close to 1 are worth striving for due to good representativity of the data set. Within the process of factor extraction, all factors with eigenvalues > 1 have been retained according to Kaiser’s criterion. Since only one factor has been extracted in each analysis, factor rotation was neither possible nor necessary. Part of this analysis was the preliminary testing of the sample adequacy. The Kaiser-Meyer-Olkin Measure represents one of these tests. Since values can vary between 0 and 1, scores close to 1 indicate reliable factors and therefore an adequate sample. In general, scores below 0.5 speak of insufficiency of the sample while values above 0.5 are considered to be acceptable but can be categorized into mediocre ($0.5 \leq x < 0.7$), good ($0.7 \leq x < 0.8$), great ($0.8 \leq x < 0.9$) and superb ($x \geq 0.9$) sample fit. (Field, 2009; Hutcheson

& Sofroniou, 1999) Additionally, Bartlett's Test of Sphericity refers to the suitability of the data. If the population correlation matrix bears a resemblance to the identity matrix of the sample, the PCA should not be carried out. Regarding the analysis within this thesis, both prerequisites for the conduction of a PCA have been fulfilled for all five predictors. (Field, 2009) The SPSS outcomes as well as the results of the factor analysis will be displayed in detail in section 5.7.

As regards the testing of the hypothesis, a logistic regression has been carried out. In the course of this thesis, the need for a binary logistic regression was given due to the questionnaire being based on a categorical answer scheme (7-point Likert-type scale). Additionally, the selected dependent variable has been coded as binary. In order to evaluate the results of the analysis, different tests concerning the fit of the model, the effect size of the model and the significance of individual independent predictors have to be executed. First, the omnibus test of model coefficients which is concerned with the adequacy of fit of the data to the model was executed and analyzed. Basically, it indicates the independent variables' suitability for the prediction of the dependent variables. This was done by comparing the log-likelihoods of the intercept-only model and the new model where statistically significant ($p \leq 0.05$) differences indicate the adequacy of fit of the new model. In the course of this thesis, the (non-)inclusion of control variables in the respective regression analyses has been based on the (non-)significance of this test. Subsequently, the results of the model summary have been examined. As part of the model summary, Nagelkerke's pseudo R-square relates to the effect size of the model. Since the value of the R-square can vary between 0 and 1, this value of variation in the outcome can either denote a 'weak', 'moderate', or 'strong' effect size of the whole model. In case of a weak effect size, the re-specification of the model is recommended. Simultaneously, the classification table, as an indicator for the accuracy of predictions of the dependent variable can be taken into consideration for the effect size of the model. Representing a contingency table of all observed and predicted reactions of the independent variables, the table reveals whether the predictions have been correctly classified. In addition, the comparison between the classification of the intercept-only model and the whole model depicts the extent of the improvement of prediction due to the whole model. Since this analysis is considered to be appropriate for small analyses, it was used in this thesis. (Field, 2009; Garson, 2014)

Afterwards, the Hosmer and Lemeshow Test, which is said to be the crucial test to take into consideration regarding the overall fit of the model and the data, was carried out. This is particularly true when compared to the tests mentioned before, including the omnibus test of

model coefficients and the classification table. Especially with small samples as dealt with in this thesis, this test also appears to be more robust than a conventional chi-square test. In terms of goodness of fit, a non-significant value of the chi-square statistic indicates that the model appears to be well-fitting. Thus, if the p-value is higher than 0.05 and therefore non-significant, observed and model-predicted values do not differ from each other. Being part of this test, the contingency table is concerned with the display of the observed and expected values which are then used to compute the value of the chi-square indicating the goodness of fit (Garson, 2014). The last part of this regression analysis was ultimately concerned with the actual testing of the hypotheses. On that account, a profound examination of different measures from the table ‘Variables in the Equation’ was fundamental. Besides the parameter estimates of the predictors and their respective significance levels, this table is also concerned with odds ratios and confidence intervals. While the parameter estimates of all predictors in the equation, commonly known as beta coefficients, form the regression function, the Wald statistic is used for the testing of the significance ($p \leq 0.05$) of the different predictors. More precisely, it is concerned with the significant difference between the predictor and zero. If this is the case, the predictor will most certainly contribute significantly to the prediction of the dependent variable. In order to tell the direction of the hypothesis, the value of the odds ratio (Exp (B)) appeared to be the most crucial value to look at in our analysis. Basically, it represents the key effect direction measure of all predictors in this table. Generally speaking, a value below 1 indicates that as the predictor increases, the odds of the event occurring decreases. Conversely, values above 1 denote that an increase of the predictor results in an increase of the odds of the event occurring. As a matter of fact, values close to 1 do not denote any effect and are considered as non-significant. However, in my analysis this conclusion was only admissible when referred to the respective confidence interval in the equation. While the values of the confidence interval can range between zero and infinity, it is essential that both limits sit either below or above 1. Similarly to the odds ratio, a confidence interval with limits between 0 and 1, reveals that the odds of the event occurring decreases. In contrast, limits between 1 and ∞ , indicates that the odds of the event occurring increases. In case the confidence interval of Exp(B) crosses 1, no concrete conclusion on the direction of the relationship can be made. (Field, 2009; Garson, 2014) The SPSS outcomes as well as the results of the binary logistic regression analyses will be displayed in detail in section 6.1.

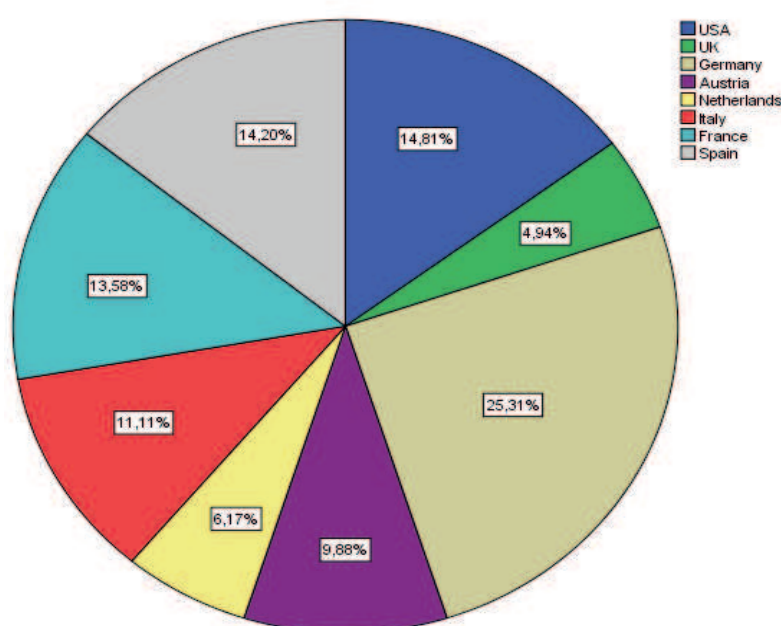
5.5. Descriptive Analysis

This chapter focuses on the examination of attributes regarding the respondents from this sample. Insights from 168 international franchise companies, based on descriptive statistics and frequency distributions, will be provided in terms of countries of origin, operating industry, dominant expansion mode choices, age of the international franchise system, system size, and franchise contract agreement terms.

Regarding the countries of origins from the different franchise companies in this sample,

Figure 5 displays the distribution of countries according to their respective headquarters. While Germany represents the biggest share (25.31%) of franchise companies in this survey, the U.S. embodies the second largest fraction (14.81%), closely followed by Spain (14.20%). With about 4.94, the United Kingdom stands for the minority group in this sample.

Figure 5: Frequency Distribution – Headquarter



With reference to dominant mode choice, the analysis clearly reveals Multi-Unit Franchising¹² to be in the lead. 91 international franchise companies, which refer to 56.2 % of the entire sample, prefer to choose Multi-Unit Franchising when expanding abroad. This is followed by Single-Unit Franchising with 53 companies (32.7%). Joint Venture Franchising

¹² In this analysis, Multi-Unit Franchising also includes the data of Master Franchising.

and the establishment of a Wholly-Owned Subsidiary appear to be uncustomary expansion modes within this sample.

Figure 6: Frequency Distribution - Dominant mode choice

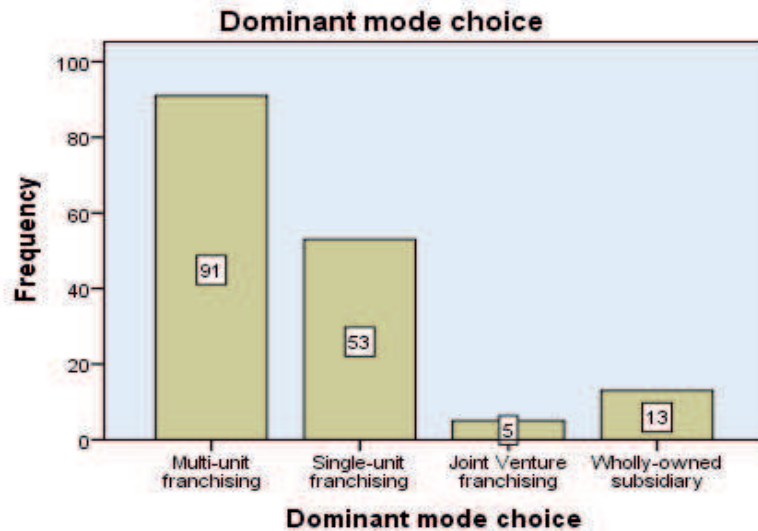


Table 3 displays the frequency distribution of dominant mode choices with respect to the countries of origin. Whereas Multi-Unit Franchising happens to be the prevailing governance mode in the U.S., the Netherlands, Italy, France, and Spain, Single-Unit Franchising is slightly more preferred in Austria. According to these results, Germany is indifferent between the application of MUF or SUF. The establishment of a Wholly-owned Subsidiary to enter foreign markets is used in Germany, Austria, Italy, France and Spain to a very low extent. Likewise, only few franchise companies in the U.S., Italy and France consider Joint Venture Franchising for international expansion.

Table 3: Cross tabulation - Headquarter and Dominant mode choice

		Dominant mode choice				Total
		Multi-unit franchising	Single-unit franchising	Joint Venture franchising	Wholly-owned subsidiary	
Headquarter	USA	17	4	3	0	24
	UK	6	2	0	0	8
	Germany	18	18	0	5	41
	Austria	6	7	0	3	16
	Netherlands	7	3	0	0	10
	Italy	12	4	1	1	18
	France	14	6	1	1	22
	Spain	11	9	0	3	23
Total		91	53	5	13	162

As regards the leading industry sector within this sample, international franchise businesses with operations in the service sector represent the majority. Still, about 24.7 % have based their business in the distribution sector. The remaining production sector appears to be unattractive for franchising.

Table 4: Frequency Distribution - Industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Distribution	40	24,7	28,0	28,0
	Service	90	55,6	62,9	90,9
	Production	13	8,0	9,1	100,0
	Total	143	88,3	100,0	
Missing	Not answered	19	11,7		
Total		162	100,0		

Considering the regular age of the franchise systems, the first international expansion dates back to 1965. At average, firms started to enter foreign markets in 2002. As regards the system size, the mean of franchise businesses within the sample totals 336 outlets in the home country and about 106 international outlets abroad. In contrast, they operate on average 53 national company-owned outlets and 33 international company-owned outlets abroad.

Table 5: Descriptive Statistics - Age and System Size

	N	Minimum	Maximum	Mean	Std. Deviation
International Time line & System size: YEAR when internationalization started	133	1965	2015	2002,58	10,142
Age of International Franchise System	133	0	50	12,42	10,142
National Time line & System size: Number of franchise outlets in the HOME COUNTRY	134	0	12000	336,34	1286,802
International Time line & System size: Number of franchise outlets ABROAD	136	0	3000	106,25	322,946
National Time line & System size: Number of company-owned outlets in the HOME COUNTRY	137	0	1500	52,72	160,349
International Time line & System size: Number of company-owned outlets ABROAD	132	0	1277	32,60	142,865
Valid N (listwise)	123				

Turning to the common contract terms, Table 6 reveals the differences within the franchise business in the sample. The initial fee for single-unit franchises ranges between no fee and 100,000 \$, more precisely 161,889 \$ in the mean. In contrast, the development fee for a master franchise license (Multi-Unit Franchising) varies between no fee at all and 447,890 \$. At average, multi-unit franchisees pay about 63,241 \$ for an outlet to be granted. The ongoing royalty rate accounts for approximately 4 % of the outlet's turnover in the mean. For the establishment of a foreign franchise outlet, franchise partners in the sample required a maximum of 22,000,000 \$. However, the average investments sum accounts for nearly 600,000 \$. As regards the training of the new franchisees, initial training days range between 1 and 180 days. In the mean, new franchisees were trained about 21 days in the beginning. Quite the opposite is the case for annual formal visits by the system owners: on average, visits occurred quarterly.

Table 6: Descriptive Statistics - Contract Terms

	N	Minimum	Maximum	Mean	Std. Deviation
Agreement terms: Initial fee for a single franchise unit in \$	87	0	100000	16188,79	17743,381
Agreement terms: Development fee for a master franchise licence in \$	52	0	447890	63241,18	93437,006
Agreement terms: On-going royalty rate (% of turnover)	74	0	20	4,42	4,021
Agreement terms: Total investment required for opening a franchise outlet in \$	86	0	22000000	599011,08	2520380,135
Agreement terms: Number of initial training days for a franchisee	87	1	180	20,59	27,770
Agreement terms: Number of formal visits per year of a franchise unit	87	0	25	4,18	4,775
Valid N (listwise)	36				

5.6. Correlation Analysis

To prevent problems of multicollinearity in logistic regression, the relationships between the different items will be investigated further through the course of this chapter. More be exact, we will now focus on the correlation between all items related to SSA, all items related to LMA and all items related to IA. In case multicollinearity will be detected, these items will be excluded from the factor analysis. Furthermore, the correlation between the independent items and the dependent variable will be analyzed.

Table 7: Correlations - Items (SSA)

			Dominant mode choice reduced	System-specific assets: ... customer competence (like marketing / advertising / promotion, pricing)	System-specific assets: ... innovation capabilities (like product and organizational innovations)	System-specific assets: ... foreign market competence (like setting up foreign operations, knowledge of foreign markets)	System-specific assets: ... management competence (like operating policies and procedures and HR management)	System-specific assets: ... organizational capabilities (like cultural management and information management)	System-specific assets: ... product and service competence (like product/service quality and design)
Spearman's rho	Dominant mode choice reduced	Correlation Coefficient	1,000	-,088	-,220*	,083	,105	,154	-,153
		Sig. (2-tailed)	.	,378	,030	,407	,296	,125	,129
		N	144	102	98	101	101	100	99
	System-specific assets: ... customer competence (like marketing / advertising / promotion, pricing)	Correlation Coefficient	-,088	1,000	,255**	,436**	,460**	,479**	,371**
		Sig. (2-tailed)	,378	.	,007	,000	,000	,000	,000
		N	102	115	111	114	114	113	112
	System-specific assets: ... innovation capabilities (like product and organizational innovations)	Correlation Coefficient	-,220*	,255**	1,000	,430**	,163	,219*	,575**
		Sig. (2-tailed)	,030	,007	.	,000	,087	,022	,000
		N	98	111	111	111	111	110	110
	System-specific assets: ... foreign market competence (like setting up foreign operations, knowledge of foreign markets)	Correlation Coefficient	,083	,436**	,430**	1,000	,358**	,332**	,211*
		Sig. (2-tailed)	,407	,000	,000	.	,000	,000	,025
		N	101	114	111	114	114	113	112
	System-specific assets: ... management competence (like operating policies and procedures and HR management)	Correlation Coefficient	,105	,460**	,163	,358**	1,000	,756**	,292**
		Sig. (2-tailed)	,296	,000	,087	,000	.	,000	,002
		N	101	114	111	114	114	113	112
	System-specific assets: ... organizational capabilities (like cultural management and information management)	Correlation Coefficient	,154	,479**	,219*	,332**	,756**	1,000	,368**
		Sig. (2-tailed)	,125	,000	,022	,000	,000	.	,000
		N	100	113	110	113	113	113	111
	System-specific assets: ... product and service competence (like product/service quality and design)	Correlation Coefficient	-,153	,371**	,575**	,211*	,292**	,368**	1,000
		Sig. (2-tailed)	,129	,000	,000	,025	,002	,000	.
		N	99	112	110	112	112	111	112

*, Correlation is significant at the 0.05 level (2-tailed).

**, Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows the correlation matrix of all six items that are related to system-specific assets. Within this table, the strongest correlations between two items can be related to the relationship between organizational capabilities and management competences. Organizational capabilities are positively related with management competences with a correlation coefficient of $r_s = 0.756$ and significance value less than 0.001. Thus, as organizational capabilities become more important, the importance for management competences rises as well.

As regards the connection between innovation capabilities and product and service competences, it represents one of a moderate correlation with a correlation coefficient of $r_s = 0.575$ and significance value less than 0.001. Simultaneously, moderate correlations can be found between organizational capabilities and customer competences ($r_s = 0.479$; $p < 0.001$), management competences and customer competences ($r_s = 0.460$; $p < 0.001$), foreign market competences and customer competences ($r_s = 0.436$; $p < 0.001$) and, between innovation capabilities and foreign competences ($r_s = 0.430$; $p < 0.001$) while all of them being highly statistically significant.

Still, this correlation matrix shows weak correlations between customer competences and product and service competences ($r_s = 0.371$; $p < 0.001$), between product and service competences and organizational capabilities ($r_s = 0.368$; $p < 0.001$), between management competences and foreign market competences ($r_s = 0.358$; $p < 0.001$), between foreign market competences and organizational capabilities ($r_s = 0.332$; $p < 0.001$), between management competences and product and service competences ($r_s = 0.292$; $p < 0.001$), between customer competences and innovation capabilities ($r_s = 0.255$; $p < 0.001$), and between organizational capabilities and innovation capabilities ($r_s = 0.219$; $p < 0.001$).

The items innovation capabilities and management competences show a very weak but statistically not significant correlation. Remarkable is the fact that none of these items are negatively related to each other.

Regarding the relationship between the modal choice and the different items, although the correlations between the items and the dependent variable are very weak, only one item is statistically significantly related to the dominant mode choice. With a correlation coefficient of $r_s = -0.220$ innovation capabilities and the choice between MUF and SUF are negatively related. As a matter of fact, as the importance of innovation capabilities increases, the probability of choosing MUF decreases. Although only one item is considered, this would be contradictory to the proposed hypothesis H1.1.

Table 8: Correlations - Items (LMA)

			Dominant mode choice reduced	Local market assets: ... administrative know-how	Local market assets: ... human capital resources and management know-how (recruitment)	Local market assets: ... innovation know-how	Local market assets: ... marketing know- how	Local market assets: ... local market knowledge	Local market assets: ... organizational know-how	Local market assets: ... quality control know-how
Spearman's rho	Dominant mode choice reduced	Correlation Coefficient	1,000	-,036	,140	-,083	,007	,077	,073	,011
		Sig. (2-tailed)	.	,731	,174	,426	,943	,454	,478	,913
		N	144	96	96	95	96	96	97	96
	Local market assets: ... administrative know-how	Correlation Coefficient	-,036	1,000	,538**	,396**	,278**	,527**	,662**	,299**
		Sig. (2-tailed)	,731	.	,000	,000	,004	,001	,000	,002
		N	96	107	107	106	107	107	107	107
	Local market assets: ... human capital resources and management know-how (recruitment)	Correlation Coefficient	,140	,538**	1,000	,291**	,236*	,476**	,602**	,412**
		Sig. (2-tailed)	,174	,000	.	,002	,015	,000	,000	,000
		N	96	107	107	106	107	107	107	107
	Local market assets: ... innovation know-how	Correlation Coefficient	-,083	,396**	,291**	1,000	,390**	,152	,465**	,662**
		Sig. (2-tailed)	,426	,000	,002	.	,000	,120	,000	,000
		N	95	106	106	106	106	106	106	106
	Local market assets: ... marketing know-how	Correlation Coefficient	,007	,278**	,236*	,390**	1,000	,291**	,380**	,317**
		Sig. (2-tailed)	,943	,004	,015	,000	.	,002	,000	,001
		N	96	107	107	106	107	107	107	107
	Local market assets: ... local market knowledge	Correlation Coefficient	,077	,527**	,476**	,152	,291**	1,000	,374**	,335**
		Sig. (2-tailed)	,454	,001	,000	,120	,002	.	,000	,000
		N	96	107	107	106	107	107	107	107
	Local market assets: ... organizational know-how	Correlation Coefficient	,073	,662**	,602**	,465**	,380**	,374**	1,000	,355**
		Sig. (2-tailed)	,478	,000	,000	,000	,000	,000	.	,000
		N	97	107	107	106	107	107	108	107
	Local market assets: ... quality control know-how	Correlation Coefficient	,011	,299**	,412**	,662**	,317**	,335**	,355**	1,000
		Sig. (2-tailed)	,913	,002	,000	,000	,001	,000	,000	.
		N	96	107	107	106	107	107	107	107

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 8 is concerned with the correlation matrix of all seven items that are related to local market assets. Within this table, the strongest correlations between two items can be related to the relationship between innovation know-how and quality control know-how. Innovation know-how is positively linked to quality control know-how with a correlation coefficient of $r_s = 0.697$ and significance value less than 0.001. Thus, as innovation know-how becomes more important, the significance of quality know-how rises as well. In the correlation matrix, this highly correlated relationship is followed by the strong connection between administrative know-how and organizational know-how based on a correlation coefficient of $r_s = 0.645$ at a significance level of $p < 0.001$.

As regards the relationship between human capital resources and management know-how and administrative know-how, it represents one of a moderate correlation with a correlation coefficient of $r_s = 0.550$ and a significance value less than 0.001. Simultaneously, moderate correlations can be found between human capital resources and management know-how and organizational know-how ($r_s = 0.532$; $p < 0.001$), between human capital resources and management know-how and local market knowledge ($r_s = 0.437$; $p < 0.001$), between innovation know-how and organizational know-how ($r_s = 0.436$; $p < 0.001$), between local market knowledge and organizational know-how ($r_s = 0.411$; $p < 0.001$), and between

innovation know-how and marketing know-how ($r_s = 0.409$; $p < 0.001$) while all of them being highly statistically significant.

Notwithstanding, this correlation matrix also shows weak correlations between innovation know-how and administrative know-how ($r_s = 0.385$; $p < 0.001$), between marketing know-how and organizational know-how ($r_s = 0.343$; $p < 0.001$), between administrative know-how and local market knowledge ($r_s = 0.339$; $p < 0.001$), between human capital resources and management know-how and quality control know-how ($r_s = 0.326$; $p < 0.01$), between administrative know-how and quality control know-how ($r_s = 0.320$; $p < 0.01$), between organizational know-how and quality control know-how ($r_s = 0.315$; $p < 0.01$), between marketing know-how and quality control know-how ($r_s = 0.314$; $p < 0.01$), between marketing know-how and local market knowledge ($r_s = 0.294$; $p < 0.01$), between human capital resources and management know-how and innovation know-how ($r_s = 0.254$; $p < 0.01$), between local market knowledge and quality control know-how ($r_s = 0.253$; $p < 0.01$), between administrative know-how and marketing know-how ($r_s = 0.244$; $p < 0.05$)

The correlations between human capital resources and management know-how and marketing know-how and between innovation know-how and local market knowledge show a very weak but statistically not significant relationship. It is noteworthy that none of the system-specific items are negatively related to each other.

Regarding the relationship between the modal choice and the different items, the correlations between the items and the dependent variable are very weak and none of them is statistically significant. Therefore, no directions on the hypothesis H1.2 can be made.

Table 9: Correlations – Items (IA)

		Intangibility of assets: ... for our headquarters to acquire the local market knowledge needed to operate the franchise...	Intangibility of assets: ... to transfer the foreign partners' market know-how to our headquarters.	Intangibility of assets: ... to understand how to deliver our franchise products/services by studying blueprints.	Intangibility of assets: ... for our competitors to assess the success factors/competitive advantage of our franchise...	Intangibility of assets: ... to document critical parts of our franchise business format.	Intangibility of assets: ... to write a manual describing our service delivery processes.	Intangibility of assets: ... to educate and train new personnel or partners.
Intangibility of assets: ... for our headquarters to acquire the local market knowledge needed to operate the franchise...	Pearson Correlation Sig. (2-tailed) N E104_06	1 113	,631** ,000 112	,348** ,000 113	,447** ,000 110	,414** ,000 113	,368** ,000 113	,329** ,000 113
Intangibility of assets: ... to transfer the foreign partners' market know-how to our headquarters.	Pearson Correlation Sig. (2-tailed) N E104_07	,631** ,000 112	1 112	,385** ,000 112	,299** ,002 110	,464** ,000 112	,356** ,000 112	,464** ,000 112
Intangibility of assets: ... to understand how to deliver our franchise products/services by studying blueprints.	Pearson Correlation Sig. (2-tailed) N E104_03	,348** ,000 113	,385** ,000 112	1 114	,369** ,000 110	,701** ,000 114	,613** ,000 114	,651** ,000 114
Intangibility of assets: ... for our competitors to assess the success factors/competitive advantage of our franchise...	Pearson Correlation Sig. (2-tailed) N E104_05	,447** ,000 110	,299** ,002 110	,369** ,000 110	1 110	,474** ,000 110	,492** ,000 110	,359** ,000 110
Intangibility of assets: ... to document critical parts of our franchise business format.	Pearson Correlation Sig. (2-tailed) N E104_02	,414** ,000 113	,464** ,000 112	,701** ,000 114	,474** ,000 110	1 114	,855** ,000 114	,510** ,000 114
Intangibility of assets: ... to write a manual describing our service delivery processes.	Pearson Correlation Sig. (2-tailed) N E104_01	,368** ,000 113	,356** ,000 112	,613** ,000 114	,492** ,000 110	,855** ,000 114	1 114	,450** ,000 114
Intangibility of assets: ... to educate and train new personnel or partners.	Pearson Correlation Sig. (2-tailed) N E104_04	,329** ,000 113	,464** ,000 112	,651** ,000 114	,359** ,000 110	,510** ,000 114	,450** ,000 114	1 115

** . Correlation is significant at the 0.01 level (2-tailed).

In comparison to the correlation analyses of system-specific assets and local market assets, the correlation matrix of Table 9, representing all items of intangibility of assets, differs substantially in terms of correlations. All of these items are highly statistically significant at a 0.01 level and none of the items show very weak correlations in the interval [0.00 ; 0.19].

Most certainly, the items E104_02¹³ and E104_01 show a very high correlation of $r_s = 0.855$. Strong correlations ranging from 0.613 to 0.701 can be found between E104_01 and E104_03, between E104_06 and E104_07, between E104_03 and E104_04, and between E104_02 and E104_03.

Obviously, a lot of items show correlations on a moderate level with correlation coefficients in the interval [0.414 ; 0.510]. These include the correlations between E104_02 and E104_06, between E104_05 and E104_06, between E104_01 and E104_04, between E104_02 and E104_07, between E104_04 and E104_07, between E104_02 and E104_05, between E104_01 and E104_05, and between E104_02 and E104_04.

Still, this correlation matrix shows weak correlations ranging in the interval [0.299 ; 0.385]. These include the positive relationship between E104_05 and E104_07, between E104_04

¹³ A detailed description of all items is provided in section 10.7.

and E104_06, between E104_03 and E104_06, between E104_07 and E104_01, between E104_04 and E104_05, between E104_01 and E104_06, between E104_03 and E104_05, and between E104_03 and E104_07.

Table 10: Correlations - FA

			Dominant mode choice reduced	Financial assets
Spearman's rho	Dominant mode choice reduced	Correlation Coefficient	1,000	,145
		Sig. (2-tailed)	.	,164
		N	144	94
	Financial assets	Correlation Coefficient	,145	1,000
		Sig. (2-tailed)	,164	.
		N	94	105

The correlation matrix of Table 10 represents the relationship between financial assets and the entry mode choice. With a correlation coefficient of $r_s = 0.145$, this relationship is considered as very weak. In addition, this relationship is not regarded to be statistically significant.

Based on these correlations as well as further criteria, several items need to be omitted for the extraction of factors during the factor analysis. Although the relationship between the independent items and the dependent variable has been observed within this chapter, valid conclusions on the direction of the hypotheses can only be made when running the logistic regression.

5.7. Factor Analysis

This chapter deals with a factor analysis that has been conducted to overcome potential problems of multicollinearity between the predictor variables and to enable the extraction of the predictor variables to one factor. More precisely, five different factors have been created to explain the intangible assets of the franchisor and franchisee.

5.7.1. Factor I (SSA)

The first factor analysis (principal component analysis) relates to the franchisor's system-specific assets and includes the items management competence (E101_01), organizational capabilities (E101_02) and customer competence (E101_03) from the questionnaire. The aim of this analysis is the creation of the factor system-specific assets (SSA). The selection of the items is based on cross-loadings.¹⁴

In order to test the adequacy of the sample as well as the levels of correlations between the predictors, preliminary tests have been conducted. The Kaiser-Meyer-Olkin Measure confirmed the adequacy of our sample (N=162). With a score of 0.633 the KMO statistic lies above the bare minimum of 0.5 and consequently indicates a mediocre sample adequacy.

As Table 11 shows, Bartlett's Test of Sphericity was significant with $p < 0.001$. Therefore, the correlations between the predictor values are significantly different from 0 and prerequisites for the conduction of a factor analysis are fulfilled.

Table 11: KMO and Bartlett's Test - System-specific assets

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,633
Bartlett's Test of Sphericity Approx. Chi-Square	107,726
df	3
Sig.	,000

The output of Table 12 shows the eigenvalues which explain the percentage of variance of all three components respectively, before and after extraction. With regard to the eigenvalues before the extraction, it is evident that the eigenvalues of the first component show relatively high amounts of percentages compared to the remaining components. Thus, component 1 indicates 68.709% of total variance while the remaining components explain their percentage contribution to total variance on a range between 9.162% and 22.129%. Typically, the extraction of components is influenced by Kaiser's criterion which indicates that all initial

¹⁴ See Appendix 10.4.1 for selection criteria of the items.

eigenvalues greater than 1 should be extracted. According to Table 12 component 1 presents eigenvalues that are greater than 1, suggesting the extraction of only one factor which explains 68.709% of total variance.

Table 12: Total Variance Explained - System-specific assets

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,061	68,709	68,709	2,061	68,709	68,709
2	,664	22,129	90,838			
3	,275	9,162	100,000			

Extraction Method: Principal Component Analysis.

As regards the communalities of this factor, illustrated in Table 13, they show the proportion of common variance within a variable. Initially, this value equals 1 before the extraction, indicating that all variance is common. More precisely, since the amount of factors equals the amount of variables, total variance can be described by the respective factor which results in a communality of 1 for each factor (variable).

After factor extraction, customer competences share about 50.00% of its variance with the other variables in the factor while management competences explain about 78.30% of common variance. Regarding organizational capabilities, 78.20% of its variability is shared in common with the remaining variables. As all variables fulfill the minimum communality criterion by exceeding the bare minimum of 0.5, they are considered to be adequate components for the factor extraction. However, the more the value of the communalities approximates towards 1, the better the proportion of variance is explained and the more suitable the extracted factor is.

Table 13: Communalities - System-specific assets

	Initial	Extraction
System-specific assets: ... customer competence (like marketing / advertising / promotion, pricing)	1,000	,496
System-specific assets: ... management competence (like operating policies and procedures and HR management)	1,000	,783
System-specific assets: ... organizational capabilities (like cultural management and information management)	1,000	,782

Extraction Method: Principal Component Analysis.

The component matrix shows the factor loadings for the three variables associated with the factor of system-specific assets. Similarly to the initial factor loadings when all six items were used¹⁵, the factor loadings are very high. This matrix is also typically concerned with rotated factors. Considering the fact that only one factor has been extracted, SPSS states that the solution cannot be rotated.

Table 14: Component Matrix^a - System-specific assets

	Component
	1
System-specific assets: ... management competence (like operating policies and procedures and HR management)	,885
System-specific assets: ... organizational capabilities (like cultural management and information management)	,885
System-specific assets: ... customer competence (like marketing / advertising / promotion, pricing)	,704

Extraction Method: Principal Component Analysis.

a.1 component extracted.

To conclude the findings of the factor analysis for the factor SSA, the KMO statistic confirmed the adequacy of the sample while Bartlett's test of sphericity revealed that the correlations between the three items were large enough. Thus, all prerequisites to follow a PCA were met.

The initial analysis of eigenvalues showed that one of the three components had eigenvalues > 1 (Kaiser's criterion) and explains 68.709 % of total variance. Due to the extraction of only 1 factor, the solution couldn't be rotated.

5.7.2. Factor II+III (LMA)

The factor analysis (principal component analysis) of the franchisee's local market assets is concerned with the extraction of two factors. While the first factor relates to the local market exploitation assets, the second factor refers to the local market exploration assets. LMEXPLOIT includes the items administrative know-how (E105_07), and human capital resources and management know-how (E105_08) from the questionnaire. Conversely, LMEXPLOR consists of the items innovation know-how (E105_12) and marketing know-how (E105_05). The selection of the items is based on categorization proposition of Windsperger & Dant (2006).

¹⁵ See Appendix 10.4.1 for selection criteria of the items.

5.7.2.1. Factor II (LMEXPLOIT)

In order to test the adequacy of the sample as well as the levels of correlations between the predictors, preliminary tests have been conducted. The Kaiser-Meyer-Olkin Measure confirmed the adequacy of our sample (N=162). With a score of 0.500 the KMO statistic equals the bare minimum of 0.5 and consequently the sample is considered as adequate.

As Table 15 shows Bartlett's Test of Sphericity was significant with $p < 0.001$. Therefore, the correlations between the predictor values are significantly different from 0 and prerequisites for the conduction of a factor analysis are fulfilled.

Table 15: KMO and Bartlett's Test – Local market exploitation assets

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,500
Bartlett's Test of Sphericity	Approx. Chi-Square
	37,657
	Df
	1
	Sig.
	,000

The output of Table 16 shows the eigenvalues, which explain the percentage of variance of all two components respectively, before and after extraction. With regard to the eigenvalues before the extraction, it is evident that the eigenvalues of the first component show relatively high amounts of percentages compared to the remaining components. Thus, component 1 indicates 77.503% of total variance while the second component explains the percentage contribution to total variance with 22.497%. Typically, the extraction of components is influenced by Kaiser's criterion which indicates that all initial eigenvalues greater than 1 one should be extracted. According to Table 16, component 1 presents eigenvalues that are greater than one, suggesting the extraction of only one factor which explains 77.503% of total variance.

Table 16: Total Variance Explained -Local market exploitation assets

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,550	77,503	77,503	1,550	77,503	77,503
2	,450	22,497	100,000			

Extraction Method: Principal Component Analysis.

As regards the communalities of this factor, illustrated in Table 23, they show the proportion of common variance within a variable. Initially, this value equals 1 before the extraction, indicating that all variance is common. More precisely, since the amount of factors equals the amount of variables, total variance can be described by the respective factor which results in a communality of 1 for each factor (variable).

After factor extraction, administrative know-how shares about 77.50% of its variance with the other variables in the factor. Regarding human capital resources and management know-how, 77.50% of its variability is shared in common with the remaining variables. As the all variables fulfill the minimum communality criterion by exceeding the bare minimum of 0.5, they are considered to be adequate components for the factor extraction. However, the more the value of the communalities approximates towards 1, the better the proportion of variance is explained and the more suitable the extracted factor is. In this case, the communalities represent a good factor explanation.

Table 17: Communalities - Local market exploitation assets

	Initial	Extraction
Local market assets: ... administrative know-how	1,000	,775
Local market assets: ... human capital resources and management know-how (recruitment)	1,000	,775

Extraction Method: Principal Component Analysis.

The component matrix shows the high factor loadings for the two variables associated with the factor of local market exploitation assets. This matrix is also typically concerned with rotated factors. Minding that only one factor has been extracted, SPSS states that the solution cannot be rotated.

Table 18: Component Matrix^a - Local market exploitation assets

	Component
	1
Local market assets: ... human capital resources and management know-how (recruitment)	,880
Local market assets: ... administrative know-how	,880

Extraction Method: Principal Component Analysis.

a. 1 component extracted.

To conclude the findings of the factor analysis for the factor LMEXPLOIT, the KMO statistic confirmed the adequacy of the sample while Bartlett's test of sphericity revealed that the correlations between the three items were large enough. Thus, all prerequisites to follow a PCA were met.

The initial analysis of eigenvalues showed that one of the three components had eigenvalues > 1 (Kaiser's criterion) and explains 77.503 % of total variance. Due to the extraction of only 1 factor, the solution couldn't be rotated.

5.7.2.2. Factor III (LMEXPLOR)

In order to test the adequacy of the sample and the levels of correlations between the predictors, preliminary tests have been conducted. The Kaiser-Meyer-Olkin Measure confirmed the adequacy of our sample (N=162). With a score of 0.500 the KMO statistic equals the bare minimum of 0.5 and consequently the sample is considered as adequate.

As Table 19 shows, Bartlett's Test of Sphericity was significant with $p < 0.001$. Therefore, the correlations between the predictor values are significantly different from 0 and prerequisites for the conduction of a factor analysis are fulfilled.

Table 19: KMO and Bartlett's Test - Local market exploration assets

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,500
Bartlett's Test of Sphericity	Approx. Chi-Square	18,990
	df	1
	Sig.	,000

The output of Table 20 shows the eigenvalues, which explain the percentage of variance of all two components respectively, before and after extraction. With regard to the eigenvalues before the extraction, it is evident that the eigenvalues of the first component show relatively high amounts of percentages compared to the remaining components. Thus, component 1 indicates 70.471% of total variance while the second component explains the percentage contribution to total variance with 29.529%. Typically, the extraction of components is influenced by Kaiser's criterion which indicates that all initial eigenvalues greater than 1 should be extracted. According to Table 20, component 1 presents eigenvalues that are greater than 1, suggesting the extraction of only one factor which explains 70.471% of total variance.

Table 20: Total Variance Explained - Local market exploration assets

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,409	70,471	70,471	1,409	70,471	70,471
2	,591	29,529	100,000			

Extraction Method: Principal Component Analysis.

As regards the communalities of this factor, illustrated in Table 21, they show the proportion of common variance within a variable. Initially, this value equals 1 before the extraction, indicating that all variance is common. More precisely, since the amount of factors equals the amount of variables, total variance can be described by the respective factor which results in a communality of 1 for each factor (variable).

After factor extraction, innovation know-how shares about 70.50% of its variance with the other variables in the factor. Regarding marketing know-how, 70.50% of its variability is shared in common with the remaining variables. As all variables fulfill the minimum communality criterion by exceeding the bare minimum of 0.5, they are considered to be adequate components for the factor extraction. However, the more the value of the communalities approximates towards 1, the better the proportion of variance is explained and the more suitable the extracted factor is. In this case, the communalities represent a good factor explanation.

Table 21: Communalities - Local market exploration assets

	Initial	Extraction
Local market assets: ... innovation know-how	1,000	,705
Local market assets: ... marketing know-how	1,000	,705

Extraction Method: Principal Component Analysis.

The component matrix shows the high factor loadings for the two variables associated with the factor of local market exploitation assets. This matrix is also typically concerned with rotated factors. Minding that only one factor has been extracted, SPSS states that the solution cannot be rotated.

Table 22: Component Matrix^a - Local market exploration assets

	Component
	1
Local market assets: ... marketing know-how	,839
Local market assets: ... innovation know-how	,839

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

To conclude the findings of the factor analysis for the factor LMEXPLOR, the KMO statistic confirmed the adequacy of the sample while Bartlett's test of sphericity revealed that the correlations between the three items were large enough. Thus, all prerequisites to follow a PCA were met. The initial analysis of eigenvalues showed that one of the three components had eigenvalues > 1 (Kaiser's criterion) and explains 70.471 % of total variance. Due to the extraction of only 1 factor, the solution couldn't be rotated.

5.7.3. Factor IV (IA_SSA)

The fourth factor analysis (principal component analysis) relates to the interaction term - intangibility of system-specific assets which will be used for the interaction analysis during the regression analysis. Intangibility of system-specific assets includes the items 'writing a manual for service delivery processes' (E104_01), 'documentation of critical parts of the franchise business format' (E104_02), 'understanding for delivery of franchise products/services via studying blueprints' (E104_03) from the questionnaire. The intention of this analysis is the creation of the factor intangibility of system-specific assets (IA_SSA). In order to test the adequacy of the sample plus the levels of correlations between the predictors, preliminary tests have been conducted. The Kaiser-Meyer-Olkin Measure confirmed the adequacy of our sample (N=162). With a score of 0.678, the KMO statistic lies above the bare minimum of 0.5 and consequently indicates a good sample adequacy.

As Table 23 shows Bartlett's Test of Sphericity was significant with $p < 0.001$. Therefore, the correlations between the predictor values are significantly different from 0 and prerequisites for the conduction of a factor analysis are fulfilled.

Table 23: KMO and Bartlett's Test - Intangibility of System-specific assets

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,678
Bartlett's Test of Sphericity	Approx. Chi-Square
	221,028
	df
	3
	Sig.
	,000

The output of Table 24 shows the eigenvalues, which explain the percentage of variance of all three components (factors) respectively, before and after extraction. With regard to the eigenvalues before the extraction, it is evident that the eigenvalues of the first factor show relatively high amounts of percentages compared to the remaining components. Thus, component 1 indicates 81.673 % of total variance, while the remaining components explain their percentage contribution to total variance on a range between 4.487 % and 13.841 %.

According to Kaiser's criterion, all initial eigenvalues that are greater than one should be extracted. According to Table 24, component 1 presents eigenvalues that are greater than one, suggesting the extraction of only one factor which explains 81.673 % of total variance.

Table 24: Total Variance Explained - Intangibility of System-specific assets

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,450	81,673	81,673	2,450	81,673	81,673
2	,415	13,841	95,513			
3	,135	4,487	100,000			

Extraction Method: Principal Component Analysis.

As regards the communalities of this factor, illustrated in Table 25, they show the proportion of common variance within a variable. Initially, this value equals 1 before the extraction, indicating that all variance is common. More precisely, since the amount of factors equals the amount of variables, total variance can be described by the respective factor which results in a communality of 1 for each factor (variable).

After factor extraction, the item 'writing a manual for service delivery processes' shares about 83.80 % of its variance with the other variables in the factor while the variable 'documentation of critical parts of the franchise business format' explains about 89.80 % of common variance. Regarding the item 'understanding for delivery of franchise products/services via studying blueprints', 71.40% of its variability is shared with the remaining variables. As all variables fulfill the minimum communality criterion by exceeding

the bare minimum of 0.5, they are considered to be adequate components for the factor extraction. However, the more the value of the communalities approximates towards 1, the better the proportion of variance is explained and the more suitable the extracted factor is.

Table 25: Communalities - Intangibility of System-specific assets

	Initial	Extraction
Intangibility of assets: ... to write a manual describing our service delivery processes.	1,000	,838
Intangibility of assets: ... to document critical parts of our franchise business format.	1,000	,898
Intangibility of assets: ... to understand how to deliver our franchise products/services by studying blueprints.	1,000	,714

Extraction Method: Principal Component Analysis.

The component matrix shows the high factor loadings for the three variables associated with the factor of the intangibility of system-specific assets. This matrix is also typically concerned with rotated factors. Considering the fact that only one factor has been extracted, SPSS states that the solution cannot be rotated.

Table 26: Component Matrix^a - Intangibility of System-specific assets

	Component
	1
Intangibility of assets: ... to write a manual describing our service delivery processes.	,915
Intangibility of assets: ... to document critical parts of our franchise business format.	,948
Intangibility of assets: ... to understand how to deliver our franchise products/services by studying blueprints.	,845

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

To conclude the findings of the factor analysis for the factor IA_SSA, the KMO statistic confirmed the adequacy of the sample while Bartlett's test of Sphericity revealed that the correlations between the three items were large enough. Thus, all prerequisites to follow a PCA were met.

The initial analysis of eigenvalues showed that one of the three components had eigenvalues > 1 (Kaiser's criterion) and explains 81.673 % of total variance. Due to the extraction of only 1 factor, the solution couldn't be rotated.

5.7.4. Factor V (IA_LMA)

The fifth factor analysis (principal component analysis) relates to the interaction term - intangibility of local market assets which will be used for the interaction analysis during the regression analysis. Intangibility of local market assets includes the items ‘for our headquarters to acquire the local market knowledge needed to operate the franchise network in the foreign countries’ (E104_06) and ‘to transfer the foreign partners’ market know-how to our headquarters’ (E104_07) from the questionnaire. The intention of this analysis is the creation of the factor intangibility of local market assets (IA_LMA). In order to test the adequacy of the sample plus the levels of correlations between the predictors, preliminary tests have been conducted. The Kaiser-Meyer-Olkin Measure confirmed the adequacy of our sample (N=162). With a score of 0.500, the KMO statistic equals the bare minimum of 0.5 and consequently indicates the adequacy of the sample.

As Table 27 shows Bartlett’s Test of Sphericity was significant with $p < 0.001$. Therefore, the correlations between the predictor values are significantly different from 0 and prerequisites for the conduction of a factor analysis are fulfilled.

Table 27: KMO and Bartlett's Test - Intangibility of Local Market Assets

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,500
Bartlett's Test of Sphericity	Approx. Chi-Square	55,614
	df	1
	Sig.	,000

The output of Table 28 shows the eigenvalues, which explain the percentage of variance of all three components (factors) respectively, before and after extraction. With regard to the eigenvalues before the extraction, it is evident that the eigenvalues of the first factor show relatively high amounts of percentages compared to the second component. Thus, component 1 indicates 81.553 % of total variance, while the second component contributes to about 18.447 % of total variance.

According to Kaiser’s criterion, all initial eigenvalues that are greater than one should be extracted. According to Table 28, component 1 presents eigenvalues that are greater than one, suggesting the extraction of only one factor which explains 81.553 % of total variance.

Table 28: Total Variance Explained - Intangibility of Local market assets

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,631	81,553	81,553	1,631	81,553	81,553
2	,369	18,447	100,000			

Extraction Method: Principal Component Analysis.

As regards the communalities of this factor, illustrated in Table 29, they show the proportion of common variance within a variable. Initially, this value equals 1 before the extraction, indicating that all variance is common. More precisely, since the amount of factors equals the amount of variables, total variance can be described by the respective factor which results in a communality of 1 for each factor (variable).

After factor extraction, the item ‘for our headquarters to acquire the local market knowledge needed to operate the franchise network in the foreign countries’ shares about 81.60 % of its variance with the other variables in the factor. Equally, the variable ‘to transfer the foreign partners’ market know-how to our headquarters’ explains about 81.60 % of common variance. As both variables fulfill the minimum communality criterion by exceeding the bare minimum of 0.5, they are considered to be adequate components for the factor extraction. However, the more the value of the communalities approximates towards 1, the better the proportion of variance is explained and the more suitable the extracted factor is.

Table 29: Communalities - Intangibility of Local market assets

	Initial	Extraction
Intangibility of assets: ... for our headquarters to acquire the local market knowledge needed to operate the franchi...	1,000	,816
Intangibility of assets: ... to transfer the foreign partners` market know-how to our headquarters.	1,000	,816

Extraction Method: Principal Component Analysis.

The component matrix shows the high factor loadings for the two variables associated with the factor of the intangibility of local market assets. This matrix is also typically concerned with rotated factors. Considering the fact that only one factor has been extracted, SPSS states that the solution cannot be rotated.

Table 30: Component Matrix^a - Intangibility of System-specific assets

	Component
	1
Intangibility of assets: ... for our headquarters to acquire the local market knowledge needed to operate the franchi...	,903
Intangibility of assets: ... to transfer the foreign partners' market know-how to our headquarters.	,903

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

To conclude the findings of the factor analysis for the factor IA_LMA, the KMO statistic confirmed the adequacy of the sample while Bartlett's test of Sphericity revealed that the correlations between the three items were large enough. Thus, all prerequisites to follow a PCA were met. The initial analysis of eigenvalues showed that one of the two components had eigenvalues > 1 (Kaiser's criterion) and explains 81.553 % of total variance. Due to the extraction of only 1 factor, the solution couldn't be rotated. At this point it needs to be noted that the conduction of a factor analysis for the independent variable financial assets is not necessary as it is only based on one item (E105_10 – financial capital) from the questionnaire.

6. Regression Analysis

6.1. Binary Logistic Regression

This chapter is concerned with the main analysis of the/our hypotheses. In particular, a binary logistic regression has been carried out since the dependent variable, which refers to the choice between SUF (0) and MUF (1), is coded binary. For each hypothesis, an individual regression analysis has been run in order to be able to obtain more detailed results.

6.1.1. System-specific assets

This section deals with the testing of the following hypothesis:

H1.1 : The more important the franchisor's system specific assets for value creation, the more likely the franchisor will use MUF over SUF.

As there have been differences concerning the adequate fit of the data between testing the model with and without the control variables¹⁶ (age and size of the system), the results of the logistic regression model will be displayed including control variables.

The Omnibus Tests of Model Coefficients or Chi-Square Goodness of Fit Test demonstrates that this model, including three predictors, appears to be significantly better compared to the intercept-only model. The value of the chi-square statistic is strongly significant at a 0.000 level which indicates that there is a significant difference between the log-likelihoods of the intercept-only model and the new model. Consequently, this implies that the addition of the three predictors (system-specific assets, age and system size) has a strong impact on the fit of the model.

Table 31: Omnibus Tests of Model Coefficients – System-specific assets

		Chi-square	df	Sig.
Step 1	Step	22,471	3	,000
	Block	22,471	3	,000
	Model	22,471	3	,000

¹⁶ See Appendix, 10.4.2 for Omnibus Test of Model Coefficients without control variables

As the model summary is concerned with the effect size of the model, the value of Nagelkerke's R-square (0,326) suggests that the model explains 32.6% of the variation in the outcome. Since the value of the R-square can vary between 0 and 1, in this case 0.326 indicates a moderate effect size. Thus, there is no necessary need for the re-specification of the model with more or different predictors.

Table 32: Model Summary^a – System-specific assets

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	82,934 ^a	,230	,326

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

In addition to the Omnibus Tests of Model Coefficients, the Classification Table can also be used for the assessment of the effect size of the model. To be precise, it indicates the accuracy of predictions. Table 33 illustrates the comparison between predicted and observed scores. While this model correctly predicts 10 cases which actually use Single-Unit Franchising, it also fails to predict 16 cases that actually did not apply Single-Unit Franchising. Also, the current model classifies 55 cases that have applied Multi-Unit Franchising but misclassifies 5 cases that did not do so. Overall, 75.6% of the current model's predictions appeared to be accurate. Obviously, this indicates a moderate improvement from the intercept-only model of 5.8 %¹⁷.

Table 33: Classification Table^a - System-specific assets

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
	Observed				
Step 1	Dominant mode choice reduced	Single-unit franchising	10	16	38,5
		Multi-unit franchising	5	55	91,7
	Overall Percentage				75,6

a. The cut value is ,500

The Hosmer and Lemeshow Test examines the goodness-of-fit between the model and the data. This test illustrates the value of the chi-square statistic which is non-significant as $p = 0.716$ (> 0.05). In this setting, however, non-significance implies that the model occurs to be

¹⁷ See Appendix, 10.4.2 for Classification Table of Initial Model (Step 0)

well-fitting. Consequently, as can be inferred from Table 35, the observations of the model regarding the modal choices between SUF and MUF do not differ significantly from their predictions.

Table 34: Hosmer and Lemeshow Test - System-specific assets

Step	Chi-square	df	Sig.
1	5,379	8	,716

Table 35: Contingency Table for Hosmer and Lemeshow Test - System-specific assets

		Dominant mode choice reduced = Single-unit franchising		Dominant mode choice reduced = Multi-unit franchising		Total
		Observed	Expected	Observed	Expected	
Step 1	1	7	6,911	2	2,089	9
	2	5	4,623	4	4,377	9
	3	3	3,740	6	5,260	9
	4	4	3,092	5	5,908	9
	5	4	2,710	5	6,290	9
	6	1	2,304	8	6,696	9
	7	1	1,473	8	7,527	9
	8	0	,844	9	8,156	9
	9	1	,302	8	8,698	9
	10	0	,000	5	5,000	5

Table 36 displays the parameter estimates and their respective significance levels of the predictor system-specific assets and the control variables age and system size. The regression function results in the following equation:

$$Y = -0.829 - 0.129 * SSA - 0.082 * AGE_{Int} + 0.008 * SYS_SIZE_Total$$

The Wald statistic, which is considered to be the crucial statistic for testing significant impacts of the predictors, appears to be non-significant for the predictor system-specific assets as well as for the control variable age. In both cases the p-value lies above the critical values of 0.05 which indicates that their coefficients are not significantly different from 0. Therefore, neither the degree of importance of the franchisor's system-specific assets nor the age of the franchise system does have a significant impact on the prediction of MUF or SUF. Still, the Wald statistic is only significant for the control variable system size. Thus, only the size of the franchise system contributes significantly to the prediction of modal choice.

Furthermore, the odds ratio ($\text{Exp}(B)$) which represents the key effect size measure of all predictors in this table shows that the value of the predictor system-specific assets (0.879) as well as of the control variable age (0.921) is below 1. Generally speaking, a value below 1 indicates that as the predictor increases, the odds of the event occurring decreases. In this specific case, it entails that as system-specific assets become more important, the tendency to choose MUF decreases. Nevertheless, this conclusion is only admissible if the odds ratio is related to the confidence interval. As the confidence interval of $\text{Exp}(B)$ crosses 1, no concrete conclusion on the direction of the relationship can be made. Consequently, the hypothesis will be rejected. The increasing importance of a franchisor's system-specific assets for value creation does not statistically significant increase the tendency of choosing MUF. However, the limits of the confidence interval [0.503 ; 1.535] show that the confirmation of the opposite hypothesis is not possible either.

Table 36: Variables in the Equation^a - System-specific assets

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a SSA	-,129	,285	,206	1	,650	,879	,503	1,535
AGE_Int	-,082	,031	7,074	1	,008	,921	,867	,979
SYS_SIZE_Total	,008	,003	9,024	1	,003	1,008	1,003	1,013
Constant	,829	,478	3,012	1	,083	2,290		

a. Variable(s) entered on step 1: SSA, AGE_Int, SYS_SIZE_Total.

6.1.2. Local market assets

This section is concerned with the testing of the following hypothesis:

H2.1 : The more important the franchisee's local market assets for value creation, the more likely the franchisor will use SUF over MUF.

As there have been differences concerning the adequate fit of the data between testing the model with and without the control variables¹⁸ (age and size of the system), the results of the logistic regression model will be displayed including control variables.

The Omnibus Test of Model Coefficients or Chi-Square Goodness of Fit Test demonstrates that this model including four predictors appears to be significantly better compared to the intercept-only model. The value of the chi-square statistic is strongly significant at a 0.000 level which indicates that there is a significant difference between the log-likelihoods of the intercept-only model and the new model. Consequently, this implies that the addition of the four predictors (local exploitation assets, local exploration assets, age and system size) has a strong impact on the fit of the model.

Table 37: Omnibus Tests of Model Coefficients - Local market assets

		Chi-square	df	Sig.
Step 1	Step	21,647	4	,000
	Block	21,647	4	,000
	Model	21,647	4	,000

As the model summary is concerned with the effect size of the model, the value of Nagelkerke's R-square (0,323) suggests that the model explains 32.3% of the variation in the outcome. Since the value of the R-square can vary between 0 and 1, in this case 0.323 indicates a moderate effect size. Thus, there is no necessary need for the re-specification of the model with more or different predictors.

¹⁸ See Appendix, 10.4.3 for Omnibus Test of Model Coefficients without control variables

Table 38: Model Summary^a - Local market assets

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	82,273 ^a	,232	,323

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

In addition to the Omnibus Test of Model Coefficients, The Classification Table can also be used for the assessment of the effect size of the model. More precisely, it indicates the accuracy of predictions. Table 39 illustrates the comparison between predicted and observed scores. While this model correctly predicts 11 cases that actually use Single-Unit Franchising, It also fails to predict 16 cases that actually did not apply Single-Unit Franchising. Also, the current model classifies 50 cases that have applied Multi-Unit Franchising but misclassifies 5 cases that did not do so. Overall, 74.4% of the current model's predictions appeared to be accurate. Obviously, this indicates an improvement from the intercept-only model of 7.7 %¹⁹.

Table 39: Classification Table^a - Local market assets

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
Step 1	Observed				
	Dominant mode choice reduced	Single-unit franchising	11	16	40,7
		Multi-unit franchising	5	50	90,9
	Overall Percentage				74,4

a. The cut value is ,500

The Hosmer and Lemeshow Test examines the goodness-of-fit between the model and the data. This test illustrates the value of the chi-square statistic which is non-significant as $p=0.061$ (> 0.05). In this setting, however, non-significance implies that the model occurs to be well-fitting. Consequently, as can be inferred from Table 41, the observations of the model regarding the modal choices between SUF and MUF do not differ significantly from their predictions.

¹⁹ See Appendix, 10.4.3 for Classification Table of Initial Model (Step 0)

Table 40: Hosmer and Lemeshow Test - Local market assets

Step	Chi-square	df	Sig.
1	14,916	8	,061

Table 41: Contingency Table for Hosmer and Lemeshow Test - Local market assets

		Dominant mode choice reduced = Single-unit franchising		Dominant mode choice reduced = Multi-unit franchising		Total
		Observed	Expected	Observed	Expected	
Step 1	1	6	6,195	2	1,805	8
	2	5	4,591	3	3,409	8
	3	3	3,703	5	4,297	8
	4	4	3,229	4	4,771	8
	5	4	2,982	4	5,018	8
	6	4	2,490	4	5,510	8
	7	0	1,824	8	6,176	8
	8	0	1,226	8	6,774	8
	9	0	,656	8	7,344	8
	10	1	,104	9	9,896	10

Table 42 displays the parameter estimates and their respective significance levels of the predictors' local market exploitation assets, local market exploration assets and the control variables age and system size. The regression function results in the following equation:

$$Y = 0.545 + 0.48 * LMEXPLOIT - 0.103 * LMEXPLOR - 0.69 * AGE_{Int} + 0.08 * SYS_SIZE_Total$$

The Wald statistic, which is considered to be the crucial statistic for testing significant impacts of the predictors, appears to be non-significant for both predictors of the local market assets. In both cases, the p-value lies above the critical values of 0.05 which indicates that their coefficients are not significantly different from 0. Therefore, the degree of importance of the franchisee's local market assets does not have a significant impact on the prediction of MUF or SUF. Still, the Wald statistic is significant for the control variables age and system size. Thus, only the independent control variables contribute significantly to the prediction of modal choice. Furthermore, the odds ratio (Exp(B)) which represents the key effect size measure of all predictors in this table is slightly above 1 for the first factor of the local market assets (1.050). Generally speaking, a value above 1 indicates that as the predictor increases,

the odd(s) of the event occurring increase(s). The opposite is true for values below 1. In this specific case, as local exploitation assets show a value close to 1, they do not denote any effect and are considered as non-significant.

In contrast to that, with a value below 1, as local exploration assets (0.902) become more important, the tendency to choose MUF decreases slightly, indicating an increased likelihood to choose SUF at the same time. Nevertheless, both conclusions are only admissible if their odds ratios are related to their respective confidence intervals. As the confidence interval of Exp(B) crosses 1 for both predictors, no concrete conclusion on the direction of the relationship can be drawn. Consequently, the hypothesis will be rejected. The increasing importance of a franchisee's local market assets for value creation does not statistically significantly increase the tendency of choosing SUF.

Table 42: Variables in the Equation^a - Local market assets

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a LMEXPLOIT	,048	,299	,026	1	,871	1,050	,584	1,888
LMEXPLOR	-,103	,289	,127	1	,722	,902	,512	1,590
AGE_Int	-,069	,031	5,110	1	,024	,933	,878	,991
SYS_SIZE_Total	,008	,003	8,650	1	,003	1,008	1,003	1,013
Constant	,545	,482	1,281	1	,258	1,725		

a. Variable(s) entered on step 1: LMEXPLOIT, LMEXPLOR, AGE_Int, SYS_SIZE_Total.

6.1.3. Financial assets

This section is concerned with the testing of the following hypothesis:

H3.1 : The higher the financial resources in order to apply the franchise concept in the host country, the more likely the franchisor will use MUF over SUF.

As there have been differences concerning the adequate fit of the data between testing the model with and without the control variables²⁰ (age and size of the system), the results of the logistic regression model will be displayed including control variables. Additionally, the categorical variable 'financial assets' has been transformed into a standardized variable as SPSS was not able to find any solution based on its former measure.

²⁰ See Appendix, 10.4.4 for Omnibus Test of Model Coefficients without control variables

The Omnibus Test of Model Coefficients or Chi-square Goodness of Fit Test demonstrates that this model including three predictors appears to be significantly better compared to the intercept-only model. The value of the chi-square statistic is strongly significant at a 0.000 level which indicates that there is a significant difference between the log-likelihoods of the intercept-only model and the new model. Consequently, this implies that the addition of the three predictors (financial assets (standardized), age and system size) has a strong impact on the fit of the model.

Table 43: Omnibus Tests of Model Coefficients - Financial assets

		Chi-square	df	Sig.
Step 1	Step	20,979	2	,000
	Block	20,979	2	,000
	Model	21,440	3	,000

As the model summary is concerned with the effect size of the model, the value of Nagelkerke's R-square (0,323) suggests that the model explains 32.3% of the variation in the outcome. Since the value of the R-square can vary between 0 and 1, in this case 0.323 indicates a moderate effect size. Thus, there is no necessary need for the re-specification of the model with different or more predictors.

Table 44: Model Summary^a - Financial assets

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	81,675 ^a	,233	,323

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

In addition to the Omnibus Tests of Model Coefficients, The Classification Table can also be used for the assessment of model effect size. More precisely, it indicates the accuracy of predictions. Table 45 illustrates the comparison between predicted and observed scores. While this model correctly predicts 10 cases that actually use Single-Unit Franchising, it fails to predict 17 cases that actually did not apply Single-Unit Franchising. Also, the current model classifies 48 cases that have applied Multi-Unit Franchising but misclassifies 6 cases that did

not do so. Overall, 71.6% of the current model's predictions appeared to be accurate. Obviously, this indicates an obvious improvement from the intercept-only model of 4.9 %²¹.

Table 45: Classification Table^a - Financial assets

	Observed		Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
Step 1	Dominant mode choice	Single-unit franchising	10	17	37,0
	reduced	Multi-unit franchising	6	48	88,9
	Overall Percentage				71,6

a. The cut value is ,500

The Hosmer and Lemeshow Test examines the goodness-of-fit between the model and the data. This test illustrates the value of the chi-square statistic which is significant as $p = 0.009$ (<0.05). In this setting, however, significance implies that the model does not occur to be well-fitting. Additionally, as can be inferred from Table 47, some observations of the model regarding the modal choices between SUF and MUF differ significantly from their predictions. According to the literature, models with a significant Hosmer and Lemeshow Test need to be rejected as they do not fit the data. Although the hypothesis will be rejected by all means, further results of the analysis will still be displayed for the estimation of the direction of the thesis.

²¹ See Appendix, 10.4.4 for Classification Table of Initial Model (Step 0)

Table 46: Hosmer and Lemeshow Test - Financial assets

Step	Chi-square	df	Sig.
1	20,263	8	,009

Table 47: Contingency Table for Hosmer and Lemeshow Test - Financial assets

		Dominant mode choice reduced = Single-unit franchising		Dominant mode choice reduced = Multi-unit franchising		Total
		Observed	Expected	Observed	Expected	
Step 1	1	7	6,169	1	1,831	8
	2	3	4,564	5	3,436	8
	3	5	3,757	3	4,243	8
	4	3	3,392	5	4,608	8
	5	5	2,893	3	5,107	8
	6	2	2,577	6	5,423	8
	7	1	1,821	7	6,179	8
	8	0	1,165	8	6,835	8
	9	0	,593	8	7,407	8
	10	1	,069	8	8,931	9

Table 48 displays the parameter estimates and their respective significance levels of the predictor financial assets and the control variables age and system size. The regression function results in the following equation:

$$Y = 0.499 + 0.126 * FA_standardized - 0.068 * AGE_{Int} + 0.008 * SYS_SIZE_Total$$

The Wald statistic, which is considered to be the crucial statistic for testing significant impacts of the predictors, appears to be non-significant for the predictor financial assets (standardized). In this case, the p-value lies above the critical values of 0.05 which indicates that its coefficients are not significantly different from 0. Therefore, the degree of importance of the franchisor's financial assets does not have a significant impact on the prediction of MUF or SUF. Still, the Wald statistic is only significant for the control variables system size and age. Thus, only the age and size of the franchise system contribute significantly to the prediction of modal choice.

Furthermore, the odds ratio (Exp(B)) which represents the key effect size measure of all predictors in this table, shows that the value of the predictor financial assets (1.134) is above 1. Generally speaking, a value above 1 indicates that as the predictor increases, the odds of the event occurring increases. Thus, in this specific case, as financial assets become more important, the tendency to choose MUF increases, too. The opposite is true for values below 1 such as the age of the franchise system. If we had not rejected the model in the first place due to a significant Hosmer and Lemeshow test, this conclusion would only be admissible when odds are related to the respective confidence interval. As the confidence interval of Exp(B) crosses 1, no concrete conclusion on the direction of the relationship can be made. Consequently, the hypothesis will be rejected. The increasing importance of a franchisee's financial assets for value creation does not statistically significantly increase the tendency of choosing MUF. However, the limits of the confidence interval [0.603 ; 2.134] show that the confirmation of the opposite hypothesis is not possible either.

Table 48: Variables in the Equation^a - Financial assets

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a FA_standardized	,126	,323	,152	1	,697	1,134	,603	2,134
AGE_Int	-,068	,030	5,103	1	,024	,934	,881	,991
SYS_SIZE_Total	,008	,003	8,727	1	,003	1,008	1,003	1,013
Constant	,499	,480	1,080	1	,299	1,647		

a. Variable(s) entered on step 1: AGE_Int, SYS_SIZE_Total.

6.1.4. Moderator analysis - System-specific assets

This section is concerned with the testing of the following hypothesis:

H1.2 : The intangibility of system-specific assets positively moderates the impact of system-specific assets on the franchisor's tendency to use MUF over SUF.

As there have been differences concerning the adequate fit of the data between testing the model with and without the control variables²² (age and size of the system), the results of the logistic regression model will be displayed including control variables.

The Omnibus Test of Model Coefficients or Chi-Square Goodness of Fit Test demonstrates that this model including three predictors appears to be significantly better compared to the intercept-only model. The value of the chi-square statistic is strongly significant at a 0.000 level which indicates that there is a significant difference between the log-likelihoods of the intercept-only and the new model. Consequently, this implies that the addition of the predictors (interaction term system-specific assets and intangibility of system-specific assets, age and system size) has a strong impact on the fit of the model.

Table 49: Omnibus Tests of Model Coefficients - Moderator analysis SSA

		Chi-square	df	Sig.
Step 1	Step	21,306	2	,000
	Block	21,306	2	,000
	Model	24,706	5	,000

As the model summary is concerned with the effect size of the model, the value of Nagelkerke's R-square (0,353) suggests that the model explains 35.3% of the variation in the outcome. Since the value of the R-square can vary between 0 and 1, in this case 0.353 indicates a moderate effect size. Thus, there is no necessary need for the re-specification of the model with different or more predictors.

²² See Appendix, 10.4.5 for Omnibus Test of Model Coefficients without control variables

Table 50: Model Summary^a - Moderator analysis SSA

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	80,699 ^a	,250	,353

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

In addition to the Omnibus Tests of Model Coefficients, The Classification Table can also be used for the assessment of model effect size. More precisely, it indicates the accuracy of predictions. Table 51 illustrates the comparison between predicted and observed scores. While this model correctly predicts 10 cases that actually use Single-Unit Franchising, it fails to predict 16 cases that actually did not apply Single-Unit Franchising. Also, the current model classifies 54 cases that have actually applied Multi-Unit Franchising but misclassifies 6 cases that did not do so. Overall, 74.4% of the current model's predictions appeared to be accurate. Obviously, this indicates a moderate improvement from the intercept-only model of 4.6 %²³.

Table 51: Classification^a Table - Moderator analysis SSA

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
Step 1	Dominant mode choice reduced	Single-unit franchising	10	16	38,5
		Multi-unit franchising	6	54	90,0
	Overall Percentage				74,4

a. The cut value is ,500

The Hosmer and Lemeshow Test examines the goodness-of-fit between model and data. This test illustrates the value of the chi-square statistic which is non-significant as $p = 0.545$ (>0.05). In this setting, however, non-significance implies that the model occurs to be well-fitting. Consequently, as can be inferred from Table 53, the observations of the model regarding the modal choices between SUF and MUF do not differ significantly from their predictions.

²³ See Appendix, 10.4.5 for Classification Table of Initial Model (Step 0)

Table 52: Hosmer and Lemeshow Test - Moderator analysis SSA

Step	Chi-square	df	Sig.
1	6,925	8	,545

Table 53: Contingency Table for Hosmer and Lemeshow Test - Moderator analysis SSA

		Dominant mode choice reduced = Single-unit franchising		Dominant mode choice reduced = Multi-unit franchising		Total
		Observed	Expected	Observed	Expected	
Step 1	1	7	7,152	2	1,848	9
	2	4	4,705	5	4,295	9
	3	5	3,794	4	5,206	9
	4	3	3,230	6	5,770	9
	5	4	2,629	5	6,371	9
	6	2	2,107	7	6,893	9
	7	0	1,387	9	7,613	9
	8	0	,757	9	8,243	9
	9	1	,237	8	8,763	9
	10	0	,000	5	5,000	5

Table 54 displays the parameter estimates and their respective significance levels of the predictor system-specific assets*intangibility of assets and the control variables age and system size. The regression function results in the following equation:

$$Y = 0.789 - 0.305 * IA_SSA * SSA + 0.279 * IA_SSA - 0,172 * SSA - 0.080 * AGE_{Int} + 0.008 * SYS_SIZE_Total$$

The Wald statistic, which is considered to be the crucial statistic for testing significant impacts of the predictors, appears to be non-significant for the predictor system-specific assets*intangibility of assets. In this case, the p-value lies above the critical values of 0.05 which indicates that its coefficient is not significantly different from 0. Therefore, the degree of the intangibility of the franchisor's system-specific assets does not have a significant impact on the prediction of MUF or SUF. Still, the Wald statistic is only significant for the control variables age and system size. Thus, only the size and age of the franchise system contribute significantly to the prediction of modal choice.

Furthermore, the odds ratio (Exp(B)) which represents the key effect size measure of all predictors in this table, shows that the value of the predictor system-specific

assets*intangibility of system-specific assets (0.737) as well as of the control variable age (0.923) is below 1. Generally speaking, a value below 1 indicates that as the predictor increases, the odds of the event occurring decreases. In this specific case this entails that as the intangibility of system-specific assets rises, the tendency to choose MUF decreases. Nevertheless, this conclusion is only admissible if the odds ratio is related to the confidence interval. As the confidence interval of $\text{Exp}(B)$ crosses 1, no concrete conclusion on the direction of the relationship can be made. Consequently, the hypothesis will be rejected. The increasing intangibility of a franchisor's system-specific assets for value creation does not statistically significant increase the tendency of choosing MUF. However, the limits of the confidence interval [0.419 ; 1.298] show that the confirmation of the opposite hypothesis is not possible either.

Table 54: Variables in the Equation^a - Moderator analysis SSA

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a IA_SSA	,279	,292	,916	1	,339	1,322	,746	2,341
SSA	-,172	,300	,327	1	,567	,842	,467	1,517
IA_SSA by SSA	-,305	,288	1,116	1	,291	,737	,419	1,298
AGE_Int	-,080	,032	6,027	1	,014	,923	,866	,984
SYS_SIZE_Total	,008	,003	9,097	1	,003	1,008	1,003	1,013
Constant	,789	,489	2,597	1	,107	2,200		

a. Variable(s) entered on step 1: AGE_Int, SYS_SIZE_Total.

6.1.5. Moderator analysis - Local market assets

This section is concerned with the testing of the following hypothesis:

H2.2 : The intangibility of local market assets positively moderates the impact of local market assets on the franchisor's tendency to use SUF over MUF.

As there have been differences concerning the adequate fit of the data between testing the model with and without the control variables²⁴ (age and size of the system), the results of the logistic regression model will be displayed including control variables.

The Omnibus Test of Model Coefficients or Chi-Square Goodness of Fit Test demonstrates that this model including three predictors appears to be significantly better compared to the intercept-only model. The value of the chi-square statistic is strongly significant at a 0.000 level which indicates that there is a significant difference between the log-likelihoods of the intercept-only model and the new model. Consequently, this implies that the addition of the predictors (interaction term local market assets* intangibility of local market assets, age and system size) has a strong impact on the fit of the model.

Table 55: Omnibus Test of Model Coefficients – Moderator analysis LMA

		Chi-square	df	Sig.
Step 1	Step	19,240	2	,000
	Block	19,240	2	,000
	Model	24,454	6	,000

As the model summary is concerned with the effect size of the model, the value of Nagelkerke's R-square (0,362) suggests that the model explains 36.2% of the variation in the outcome. Since the value of the R-square can vary between 0 and 1, in this case 0.362 indicates a moderate effect size. Thus, there is no necessary need for the re-specification of the model with different or more predictors.

²⁴ See Appendix, 10.4.6 for Omnibus Test of Model Coefficients without control variables

Table 56: Model Summary^a - Moderator analysis LMA

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	78,661 ^a	,261	,362

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

In addition to the Omnibus Tests of Model Coefficients, the Classification Table can also be used for the assessment of model effect size. More precisely, it indicates the accuracy of predictions. Table 57 illustrates the comparison between predicted and observed scores. While this model correctly predicts 13 cases that actually use Single-Unit Franchising, it also fails to predict 14 cases that actually did not apply Single-Unit Franchising. Also, the current model classifies 48 cases that have applied Multi-Unit Franchising but misclassifies 6 cases that did not do so. Overall, 75.3% of the current model's predictions appeared to be accurate. Obviously, this indicates a moderate improvement from the intercept-only model of 8.6 %²⁵.

Table 57: Classification Table^a - Moderator analysis LMA

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
Observed					
Step 1	Dominant mode choice reduced	Single-unit franchising	13	14	48,1
		Multi-unit franchising	6	48	88,9
	Overall Percentage				75,3

a. The cut value is ,500

The Hosmer and Lemeshow Test is concerned with the goodness-of-fit between the model and the data. This test illustrates the value of the chi-square statistic which is significant as $p=0.005$ (<0.05). In this setting, however, non-significance implies that the model occurs to be not well-fitting. Additionally, as can be inferred from Table 59, some observations of the model regarding the modal choices between SUF and MUF differ significantly from their predictions. According to the literature, models with a significant Hosmer and Lemeshow Test need to be rejected as they do not fit the data. Although the hypothesis will be rejected by all means, further results of the analysis will still be displayed for the estimation of the direction of the thesis.

²⁵ See Appendix, 10.4.6 for Classification Table of Initial Model (Step 0)

Table 58: Hosmer and Lemeshow Test - Moderator analysis LMA

Step	Chi-square	df	Sig.
1	22,132	8	,005

Table 59: Contingency Table for Hosmer and Lemeshow Test - Moderator analysis LMA

		Dominant mode choice reduced = Single-unit franchising		Dominant mode choice reduced = Multi-unit franchising		Total
		Observed	Expected	Observed	Expected	
Step 1	1	7	6,443	1	1,557	8
	2	5	5,002	3	2,998	8
	3	4	3,883	4	4,117	8
	4	3	3,148	5	4,852	8
	5	3	2,837	5	5,163	8
	6	4	2,385	4	5,615	8
	7	0	1,624	8	6,376	8
	8	0	1,128	8	6,872	8
	9	0	,495	8	7,505	8
	10	1	,055	8	8,945	9

Table 60 displays the parameter estimates and their respective significance levels of the predictor local market assets*intangibility of assets and the control variables age and system size. The regression function results in the following equation:

$$Y = 0.551 + 0.254 * IA_{LMA} * LMEXPLOIT * LMEXPLOR - 0.124 * IA_{LMA} + 0.161 * LMEXPLOIT - 0.305 * LMEXPLOR - 0.071 * AGE_{Int} + 0.008 * SYS_SIZE_Total$$

The Wald statistic, which is considered to be the crucial statistic for testing significant impacts of the predictors, appears to be non-significant for the predictor local market assets*intangibility of local market assets. In this case, the p-value lies above the critical values of 0.05 which indicates that its coefficient is not significantly different from 0. Therefore, the degree of the intangibility of the franchisor's local market assets does not have a significant impact on the prediction of MUF or SUF. Still, the Wald statistic is only significant for the control variables age and system size. Thus, only the size and age of the franchise system significantly contribute to the prediction of modal choice.

Furthermore, the odds ratio (Exp(B)) which represents the key effect size measure of all predictors in this table, shows that the value of the predictor local market assets*intangibility of local market assets (1.289) is above 1 while the value of the control variable age (0.931) is below 1. Generally speaking, a value above 1 indicates that as the predictor increases, the odds of the event occurring increases. The opposite is correct for values below 1. In this specific case, it entails that as the intangibility of local market assets rises, the tendency to choose MUF increases. This indicates the opposing effect to the postulated hypothesis. Nevertheless, this conclusion is only admissible if the odds ratio is related to the confidence interval. As the confidence interval of Exp(B) crosses 1, no concrete conclusion on the direction of the relationship can be made. Consequently, the hypothesis will be rejected. The increasing intangibility of a franchisor's local market assets does not statistically significantly increase the tendency of choosing SUF. However, the limits of the confidence interval [0.821; 2.022] show that the confirmation of the opposite hypothesis is not possible either.

Table 60: Variables in the Equation^a - Moderator analysis LMA

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a IA_LMA	-,124	,374	,110	1	,740	,883	,425	1,838
LMEXPLOIT	,161	,323	,248	1	,619	1,174	,624	2,210
LMEXPLOR	-,305	,343	,789	1	,374	,737	,376	1,445
IA_LMA by LMEXPLOIT by LMEXPLOR	,254	,230	1,218	1	,270	1,289	,821	2,022
AGE_Int	-,071	,033	4,746	1	,029	,931	,873	,993
SYS_SIZE_Total	,008	,003	8,600	1	,003	1,008	1,003	1,013
Constant	,551	,494	1,243	1	,265	1,735		

a. Variable(s) entered on step 1: AGE_Int, SYS_SIZE_Total.

6.1.6. Moderator analysis – Financial assets

This section is concerned with the testing of the following hypothesis:

H3.2 : The intangibility of local market assets positively moderates the impact of financial assets on the franchisor’s tendency to use MUF over SUF.

As there have been differences concerning the adequate fit of the data between testing the model with and without the control variables²⁶ (age and size of the system), the results of the logistic regression model will be displayed including control variables.

The Omnibus Test of Model Coefficients or Chi-Square Goodness of Fit Test demonstrates that this model, including three predictors and two control variables, appears to be significantly better compared to the intercept-only model. The value of the chi-square statistic is strongly significant at a 0.001 level which indicates that there is a significant difference between the log-likelihoods of the intercept-only model and the new model. Consequently, this implies that the addition of the predictors (interaction term financial assets *local market assets* intangibility of local market assets, age and system size) has a strong impact on the fit of the model.

Table 61: Omnibus Tests of Model Coefficients – Moderator Analysis FA

		Chi-square	df	Sig.
Step 1	Step	20,423	2	,000
	Block	20,423	2	,000
	Model	23,602	7	,001

As the model summary is concerned with the effect size of the model, the value of Nagelkerke’s R-square (0,354) suggests that the model explains 35.4% of the variation in the outcome. Since the value of the R-square can vary between 0 and 1, in this case 0.354 indicates a moderate effect size. Thus, there is no necessary need for the re-specification of the model with different or more predictors.

²⁶ See Appendix, 10.4.6 for Omnibus Test of Model Coefficients without control variables

Table 62: Model Summary^a – Moderator Analysis FA

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	78,696 ^a	,255	,354

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

In addition to the Omnibus Tests of Model Coefficients, the Classification Table can also be used for the assessment of model effect size. More precisely, it indicates the accuracy of predictions. Table 63 illustrates the comparison between predicted and observed scores. While this model correctly predicts 12 cases that actually use Single-unit franchising, it also fails to predict 15 cases that actually did not apply Single-Unit Franchising. Also, the current model classifies 48 cases that have applied Multi-Unit Franchising but misclassifies 5 cases that did not do so. Overall, 75.0 % of the current model's predictions appeared to be accurate. Obviously, this indicates a moderate improvement from the intercept-only model of 8.7 % ²⁷.

Table 63: Classification Table^a - Moderator Analysis FA

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
	Observed				
Step 1	Dominant mode choice reduced	Single-unit franchising	12	15	44,4
		Multi-unit franchising	5	48	90,6
	Overall Percentage				75,0

a. The cut value is ,500

The Hosmer and Lemeshow Test examines the goodness-of-fit between the model and the data. This test illustrates the value of the chi-square statistic which is significant as $p = 0.000$ (<0.05). In this setting, however, significance implies that the model occurs to be not well fitting. Additionally, as can be inferred from Table 65, some observations of the model regarding the modal choices between SUF and MUF differ significantly from their predictions. According to the literature, models with a significant Hosmer and Lemeshow Test need to be rejected as they do not fit the data. Although the hypothesis will be rejected by all means, further results of the analysis will still be displayed for the estimation of the direction of the thesis.

²⁷ See Appendix, 10.4.7 for Classification Table of Initial Model (Step 0)

Table 64: Hosmer and Lemeshow Test – Moderator Analysis FA

Step	Chi-square	df	Sig.
1	35,234	8	,000

Table 65: Contingency Table for Hosmer and Lemeshow Test – Moderator Analysis FA

		Dominant mode choice reduced = Single-unit franchising		Dominant mode choice reduced = Multi-unit franchising		Total
		Observed	Expected	Observed	Expected	
Step 1	1	6	6,431	2	1,569	8
	2	6	4,835	2	3,165	8
	3	2	3,818	6	4,182	8
	4	6	3,368	2	4,632	8
	5	3	2,852	5	5,148	8
	6	2	2,426	6	5,574	8
	7	1	1,706	7	6,294	8
	8	0	1,101	8	6,899	8
	9	0	,430	8	7,570	8
	10	1	,035	7	7,965	8

Table 66 displays the parameter estimates and their respective significance levels of the predictor financial assets *local market assets* intangibility of assets and the control variables age and system size. . The regression function results in the following equation:

$$Y = 0.527 + 0.174 * FA_{standardized} * IA_{LMA} * LMEXPLOIT * LMEXPLOR + 0.195 * FA_{standardized} - 0.031 * IA_{LMA} + 0.097 * LMEXPLOIT - 0.282 * LMEXPLOR - 0.075 * AGE_{Int} + 0.008 * SYS_SIZE_Total$$

The Wald statistic, which is considered to be the crucial statistic for testing significant impacts of the predictors, appears to be non-significant for the predictor financial assets *local market assets* intangibility of assets. In this case, the p-value lies above the critical values of 0.05 which indicates that its coefficient is not significantly different from 0. Therefore, the degree of the intangibility of the franchisor's local market assets does not significantly moderate the impact of financial assets on the prediction between MUF or SUF.

Still, the Wald statistic is only significant for the control variables age and system size. Thus, only the size and age of the franchise system contribute significantly to the prediction of modal choice.

Furthermore, the odds ratio (Exp(B)) which represents the key effect size measure of all predictors in this table, shows that the value of the predictor financial assets *local market assets* intangibility of local market assets (1.190) is above 1. Generally speaking, a value above 1 indicates that as the predictor increases, the odds of the event occurring also increases. The opposite is correct for values below 1. In this specific case, it entails that as the intangibility of local market assets rises and therefore the impact of financial assets increases, the tendency to choose MUF increases. If we had not rejected the model in the first place due to a significant Hosmer and Lemeshow test, this conclusion would only be admissible when odds are related to the respective confidence interval. As the confidence interval of Exp(B) crosses 1, no concrete conclusion on the direction of the relationship can be made. Consequently, the hypothesis will be rejected. The increasing intangibility of local market assets does not statistically significantly increase the impact of financial assets on the franchisor's tendency to use MUF. However, the limits of the confidence interval [0.764; 1.853] show that the confirmation of the opposite hypothesis is not possible either.

Table 66: Variables in the Equation^a - Moderator Analysis FA

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a IA_LMA	-,031	,364	,007	1	,932	,970	,475	1,978
FA_standardized	,195	,349	,313	1	,576	1,216	,613	2,410
LMEXPLOIT	,097	,332	,086	1	,770	1,102	,575	2,113
LMEXPLOR	-,282	,365	,596	1	,440	,755	,369	1,542
FA_standardized by IA_LMA by LMEXPLOIT by LMEXPLOR	,174	,226	,594	1	,441	1,190	,764	1,853
AGE_Int	-,075	,033	5,093	1	,024	,928	,870	,990
SYS_SIZE_Total	,008	,003	8,441	1	,004	1,008	1,002	1,013
Constant	,527	,493	1,142	1	,285	1,694		

a. Variable(s) entered on step 1: AGE_Int, SYS_SIZE_Total.

7. Results and Discussion

In this final section of the thesis, focus will be put on the results that have been obtained from the empirical study.

To start with H1.1, this hypothesis, which was based on the RBV and OCT from a theoretical background, was concerned with the system-specific assets of the franchisor himself. More specifically, our area of interest was whether or not the value of a franchisor's system-specific assets have an impact on choosing MUF as governance mode. Results have shown that as the system-specific assets become more important, the tendency to choose MUF decreases, providing the basis for the rejection of the hypothesis.

Nevertheless, the confirmation of the opposite proposition was not admissible either, owing to statistical non-significance. Therefore, these results do not contribute to the findings of Erramill et al. (2002) and Jell-Ojobor & Windsperger (2014) either, who suggest that the tendency towards higher control (e.g. SUF) modes increases with the importance of system-specific assets to generate economic rents.

Regarding the moderator analysis of H1.2 close relations to the propositions of H1.1 are apparent: Theoretically based on PRT, it assumes to positively moderate the impact of system-specific assets to enter new markets by applying MUF. Unsurprisingly, the results of the moderator analysis do not differ essentially from the findings of H1.1. Correspondingly, increasing intangibility of system-specific assets decreases the franchisor's tendency to choose MUF. Although H1.2 aimed to show an even stronger impact of system-specific assets on the franchisor's propensity for the application of MUF than H1.1, results revealed no corroboration. As a matter of fact, the results of the moderator analysis were statistically non-significant either, which led to the rejection of H1.2.

Turning to H2.1, which was developed on the basis of RBV and OCT, it considered the local market assets of the franchisee. The initial assumption was that the more important a franchisee's local market assets become for value creation, the more recognizable a notion towards SUF in terms of ownership structure would become. However, our results did not support this view.. The present findings suggest that local market exploitation assets do not denote any effect and are considered as non-significant. In contrast, as local market exploration assets become more important, the tendency to choose MUF decreases causing the tendency to choose SUF to increase. Although this would indicate the confirmation of the

hypothesis as suggested by Bradach (1995), Garg et al. (2005) and Hussain & Windsperger (2010), the results turned out to be statistically insignificant.

Parallel to that, the moderator analysis of H2.2 shows uncertain findings compared to H2.1. Theoretically based on PRT, a positive moderating effect of a franchisee's local market assets on the choice towards SUF was assumed. The proposed model simply did not fit the underlying data set. However, not taking the fit of data into consideration, results revealed that as the intangibility of local markets assets increases by 1 unit, the tendency to choose MUF increases at the same time. Thus, the attempt to prove an even stronger impact of local market assets on the franchisee's propensity to choose SUF proves to be inefficient while leading to the rejection of the hypothesis.

As regards H3.1, the initial assumptions indicating a higher amount of financial resources available to the franchisor to have an impact on the choice towards MUF, could not be proven to be statistically significant with the underlying data set. Unfortunately, this model did not fit the data. However, if the model had not been rejected in the first place, results would have revealed that as the amount of financial assets available to the franchisor increases, the notion towards MUF, in terms of ownership structure, increases simultaneously. Still, these findings were not supported statistically. Thus, both the goodness-of-fit test as well as the hypothesis testing itself provided the basis for the rejection of the hypothesis.

Equally, the analysis of H3.2, which was theoretically based on PRT, but closely related to H3.1 in terms of content, revealed unsatisfactory results. The proposed model, which was developed on the assumptions that increasing intangibility of local market assets would moderate the effect of financial assets to choose MUF as governance mode, simply did not fit the underlying data set. However, not taking the fit of data into consideration, results revealed that as the intangibility of local market assets increases by 1 unit, the tendency to choose MUF, influenced by higher amounts of financial resources, increases. Due to statistical non-significance, the hypothesis was rejected.

8. Conclusion

This master thesis dealt with the exploration of the influence of franchisor's and franchisee's intangible assets on the choice of ownership structure. The main goal was to give insight into the phenomenon of Multi-Unit Franchising on an international level while relating it to different theoretical concepts.

Within the theoretical part of this thesis, the concepts of the Resource-Based View, Organizational Capabilities Theory and the Property Rights Theory were related to the field of franchising while scientific findings from the prevailing literature have been discussed correspondingly. In a further step, an integrative framework which was based on findings from the contemporary literature was developed. Based on these propositions, the effects of the franchisor's and franchisee's intangible assets on modal choice were tested.

Presenting empirical evidence from internationally operating franchise companies in Europe and North-America, a data set of 168 cases was consulted. Within the empirical part of the thesis, the impact of a franchisor's system-specific assets, a franchisee's local market assets, the franchisor's financial assets, as well as their moderating effects on the choice between SUF and MUF, was tested employing a binary logistic regression analysis.

Although statistically significant results could not be achieved, some of the obtained results were consistent with the proposed directions of the hypotheses. Based on these findings, future research in this field could incorporate further assistance regarding the completion of the questionnaire, which in my point of view, appears to be the main reason for these rather unsatisfactory statistical results. In addition to that, the inclusion of data from franchisees' points of view as well as the differentiation between the different types of MUF within the empirical study could be considered. As regards the generation of data in general, some sort of incentive mechanisms ought to be developed in order to receive useful data from internationally operating franchise companies which can be employed to make further theoretical as well as practical contributions in this field of research.

9. References

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10.3. Abbreviations

Abbreviation	Meaning
ADF	Area Development Franchising
ARF	Area Representative Franchising
AT	Agency Theory
FA	Financial Assets
HRM	Human Resource Management
IA	Intangibility of Assets
IF	Incremental Franchising
JVE	Joint Venture Entity
JVF	Joint-Venture Franchising
LMA	Local Market Assets
MF	Master Franchising
MUF	Multi-Unit Franchising
OCT	Organizational Capabilities Theory
PCA	Principal Component Analysis
PRT	Property Rights Theory
RBV	Resource-Based View
SUF	Single-Unit Franchising
SSA	System-specific Assets
WOS	Wholly owned subsidiary

10.4. Additional Tables and Figures – Empirical Study

10.4.1. Ad Factor Analysis – SSA

Component Matrix^a

Component	System-specific assets: ... organizational capabilities (like cultural management and information management)	System-specific assets: ... customer competence (like marketing / advertising / promotion, pricing)	System-specific assets: ... management competence (like operating policies and procedures and HR management)	System-specific assets: ... innovation capabilities (like product and organizational innovations)	System-specific assets: ... foreign market competence (like setting up foreign operations, knowledge of foreign markets)	System-specific assets: ... product and service competence (like product/service quality and design)
1	,741	,698	,669	,659	,655	,653
2	-,477	-,128	-,609	,615	,174	,506

Extraction Method: Principal Component Analysis.

a. 2 components extracted

Communalities

	System-specific assets: ... customer competence (like marketing / advertising / promotion, pricing)	System-specific assets: ... innovation capabilities (like product and organizational innovations)	System-specific assets: ... foreign market competence (like setting up foreign operations, knowledge of foreign markets)	System-specific assets: ... management competence (like operating policies and procedures and HR management)	System-specific assets: ... organizational capabilities (like cultural management and information management)	System-specific assets: ... product and service competence (like product/service quality and design)
Initial	1,000	1,000	1,000	1,000	1,000	1,000
Extraction	,504	,812	,460	,818	,777	,683

Extraction Method: Principal Component Analysis.

The items for the factor analysis in section 5.7.1 have been selected based on high cross-factor loadings where the gap between the cross-loadings did not exceed 20% and the value of the single cross-loadings was below 0.3. Additionally, items have been eliminated based on low

communalities (< 0.5). Thus, due to high cross-loadings, innovation capabilities and product and service competences have been excluded from the factor extraction. As a result of communalities below 0.5, the component 'foreign market competences' has also been eliminated.

10.4.2. Ad Binary Logistic Regression Analysis - SSA

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	,781	1	,377
	Block	,781	1	,377
	Model	,781	1	,377

Classification Table^{a,b}

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
Step 0	Dominant mode choice reduced	Single-unit franchising	0	26	,0
		Multi-unit franchising	0	60	100,0
	Overall Percentage				69,8

a. Constant is included in the model.

b. The cut value is ,500

10.4.3. Ad Binary Logistic Regression Analysis - LMA

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	,599	2	,741
	Block	,599	2	,741
	Model	,599	2	,741

Classification Table^{a,b}

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
Step 0	Dominant mode choice reduced	Single-unit franchising	0	27	,0
		Multi-unit franchising	0	54	100,0
	Overall Percentage				66,7

a. Constant is included in the model.

b. The cut value is ,500

10.4.4. Ad Binary Logistic Regression Analysis - FA

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	4,637	3	,200
	Block	4,637	3	,200
	Model	4,637	3	,200

Classification Table^{a,b}

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
Step 0	Dominant mode choice reduced	Single-unit franchising	0	27	,0
		Multi-unit franchising	0	54	100,0
	Overall Percentage				66,7

a. Constant is included in the model.

b. The cut value is ,500

10.4.5. Ad Binary Logistic Regression Analysis – Moderator analysis SSA

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	1,739	1	,187
	Block	1,739	1	,187
	Model	1,739	1	,187

Classification Table^{a,b}

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
Step 0	Dominant mode choice reduced	Single-unit franchising	0	26	,0
		Multi-unit franchising	0	60	100,0
	Overall Percentage				69,8

a. Constant is included in the model.

b. The cut value is ,500

10.4.6. Ad Binary Logistic Regression Analysis – Moderator analysis LMA

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	3,348	4	,501
	Block	3,348	4	,501
	Model	3,348	4	,501

Classification Table^{a,b}

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
	Observed				
Step 0	Dominant mode choice reduced	Single-unit franchising	0	27	,0
		Multi-unit franchising	0	54	100,0
	Overall Percentage				66,7

a. Constant is included in the model.

b. The cut value is ,500

10.4.7. Ad Binary Logistic Regression Analysis – Moderator analysis FA

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	4,433	5	,489
	Block	4,433	5	,489
	Model	4,433	5	,489

Classification Table^a

			Predicted		
			Dominant mode choice reduced		Percentage Correct
			Single-unit franchising	Multi-unit franchising	
	Observed				
Step 1	Dominant mode choice reduced	Single-unit franchising	4	23	14,8
		Multi-unit franchising	4	50	92,6
	Overall Percentage				66,7

a. The cut value is ,500

10.5. Abstract - German

Im Laufe der letzten Jahrzehnte wurde ein Trend innerhalb des sich konstant weiterentwickelnden internationalen Franchisings deutlich erkennbar. Gründe dafür stellen vor allem die Marktsättigung innerhalb der heimischen Märkte, der Einfluss auf die Wirtschaft sowie die enormen Wachstumschancen im Ausland dar.

Die vorliegende Arbeit untersucht den Einfluss immaterieller Güter im Bereich des internationalen Franchisings. Hauptsächlich konzentrieren sich die Untersuchungen auf die Wahl zwischen Single-Unit-Franchising und Multi-Unit Franchising als Organisationsformen, mithilfe derer ein Unternehmen in ausländische Märkte eintreten kann. Das Ziel dieser Arbeit liegt in der Verknüpfung der Wahl der Organisationsform von Franchise-Unternehmen mit dem theoretischen Ansatz der ressourcenorientierten Theorie und der ‚Organizational Capabilities‘ Theorie. Auf Basis dieser theoretischen Ansätze wird die Wirkung systemspezifischer, den lokalen Markt betreffender und finanzieller Ressourcen auf die Wahl der Organisationsform untersucht. Dieser integrative Ansatz bildet die Grundlage für eine internationale Umfrage, die in Europa und Nordamerika durchgeführt wurde und an welcher sich insgesamt 168 internationale Firmen aus Deutschland, Österreich, Italien, Frankreich, dem Vereinigten Königreich und den Vereinigten Staaten beteiligten. Aufgrund eines bestehenden Forschungsdefizits auf diesem Gebiet, beabsichtigt die vorliegende Masterarbeit, Übereinstimmungen zwischen wissenschaftlich belegten, theoretischen Aussagen und den empirischen Ergebnissen der Studie, auf welcher diese Arbeit fußt, zu finden.

10.6. Questionnaire



Vienna, 16th March 2015

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[Dr. Maria Jell-Ojobor, maria.jell-ojobor@univie.ac.at](mailto:maria.jell-ojobor@univie.ac.at)

Scientific Study on International Franchising

Dear Franchisor,

The Department of Management at the University of Vienna is conducting a research project on INTERNATIONAL FRANCHISING. The goal of our study is to investigate the **CHOICE OF ORGANIZATIONAL MODE** of international franchise companies.

International franchise systems utilize different modes of expansion into foreign markets, such as a WHOLLY-OWNED SUBSIDIARY, SINGLE-UNIT FRANCHISING, MULTI-UNIT FRANCHISING, MASTER FRANCHISING and JOINT VENTURE FRANCHISING.

Our findings will provide new insights on the factors that determine the internationalization strategies of franchise systems headquartered in the USA, UK, SPAIN, ITALY, FRANCE, NETHERLANDS, GERMANY, and AUSTRIA.

The successful implementation of the survey requires continued close cooperation between the corporate industry and science. Achieving the proposed objective of the survey can only be successful if a large number of franchisors fills the questionnaire from which the outcomes and relevant information gathered would become useful to both the corporate community and researchers in the academia.

Our target is to have all questions answered. Kindly find the best possible answer from the set of options available therein.

For any problems in completing the questionnaire, please contact us personally at your disposal through the following contact details:

Josef Windsperger - josef.windsperger@univie.ac.at, Tel: 00431427738180,

Maria Jell-Ojobor - maria.jell-ojobor@univie.ac.at, Tel: 00431427738158.

You find the questionnaire also at the following link:

http://im.univie.ac.at/windsperger/news/?no_cache=1.

You may also fill the questionnaire online following this link:

www.soscisurvey.de/InternationalFranchising/?l=dut

We apologize for receiving this questionnaire should you have already participated in the survey.

We will gladly share the outcome of this study with you in a scientific **Report on International Franchising**. *The information will be used exclusively for research purposes, and the contact details are treated strictly confidential and will not be disclosed to third parties.*

We thank you for your cooperation.

Sincerely yours,

In which country is your franchise system head-quartered?

☐ USA
 ☐ UK
 ☐ Germany
 ☐ Austria
 ☐ France
 ☐ Netherlands
 ☐ Italy
 ☐ Spain

Which industry does your business belong to?

☐ Distribution
 ☐ Service
 ☐ Production

Which type of business do you offer?

e.g. Advertising & promotion, business services, automotive, food & restaurants, etc.

Type of business

Please answer the following questions about your franchise system.

YEAR when your franchise system was founded

Number of company-owned outlets in the HOME COUNTRY

Number of franchise outlets in the HOME COUNTRY

Number of franchisees in the HOME COUNTRY

Do you have international franchise operations?

☐ yes
 ☐ no
 → If NO, please continue with the LAST PART of the questionnaire on page 8.

↓ If YES, please continue with the questionnaire.

Please answer the following questions about your franchise system.

YEAR when internationalization started

Number of company-owned outlets ABROAD

Number of franchise outlets ABROAD

Which market entry modes did you use when you entered the foreign countries?

Please choose one or more of the following franchising options:

- ☐ We used a WHOLLY-OWNED SUBSIDIARY in the foreign country.
- ☐ We used JOINT VENTURE FRANCHISING in the foreign country.
- ☐ We used SINGLE-UNIT FRANCHISING directly from our home country (...to develop the local franchise network with individual foreign partners = one franchisee with one outlet).
- ☐ We used MULTI-UNIT FRANCHISING directly from our home country (...to develop the local franchise network with foreign partners who own more than one outlet = one franchisee with more outlets).
- ☐ We used MASTER FRANCHISING in the foreign country (= Sub-Franchising).

Please specify the number of countries where you use a particular market entry mode.

Number of countries where you use ...

... a WHOLLY-OWNED SUBSIDIARY	
... JOINT VENTURE FRANCHISING	
... SINGLE-UNIT FRANCHISING	
... MULTI-UNIT FRANCHISING	
... MASTER FRANCHISING	

Please specify in which regions you used a particular market entry mode.

Please choose one or more regions.

	Wholly-owned subsidiary	Joint venture franchising	Single-unit franchising	Multi-unit franchising	Master franchising
Africa	☐	☐	☐	☐	☐
Asia	☐	☐	☐	☐	☐
Oceania	☐	☐	☐	☐	☐
North / Central America	☐	☐	☐	☐	☐
South America	☐	☐	☐	☐	☐
The Carribean	☐	☐	☐	☐	☐
Eastern Europe	☐	☐	☐	☐	☐
European Union	☐	☐	☐	☐	☐
Middle East	☐	☐	☐	☐	☐

Key question of the survey:

Please choose your **DOMINANT** (i.e. most used) **FRANCHISE MODE** to enter foreign countries.

- ☐ Wholly-owned subsidiary
 ☐ Single-unit franchising
 ☐ Master franchising
☐ Joint Venture franchising
 ☐ Multi-unit franchising



Please answer the following questions for the foreign markets where you use the **DOMINANT MODE**.

Please assess the following environmental conditions faced in the foreign countries (where you use your **DOMINANT MODE**).

	strongly disagree	1	2	3	4	5	6	strongly agree
Cultural differences between our home and the foreign countries are high such as norms, values and habits.	☐	☐	☐	☐	☐	☐	☐	☐
The business practices in our home and the foreign countries are quite different.	☐	☐	☐	☐	☐	☐	☐	☐
The language barriers between our home and the foreign countries are high.	☐	☐	☐	☐	☐	☐	☐	☐
The legal protection of intellectual properties such as patents and trademarks is weak in the foreign countries.	☐	☐	☐	☐	☐	☐	☐	☐
The political environment is quite uncertain in the foreign countries.	☐	☐	☐	☐	☐	☐	☐	☐
The risk of ownership restrictions is high in foreign countries.	☐	☐	☐	☐	☐	☐	☐	☐
The quality of local infrastructure, such as phones, roads and IT, is under-developed in foreign countries.	☐	☐	☐	☐	☐	☐	☐	☐
Customer demand is strongly changing in foreign countries.	☐	☐	☐	☐	☐	☐	☐	☐
Sales forecasts are not easily predictable in foreign countries.	☐	☐	☐	☐	☐	☐	☐	☐
Market shares are pretty unstable in foreign countries.	☐	☐	☐	☐	☐	☐	☐	☐
The number of existing and potential competitors is high in foreign countries.	☐	☐	☐	☐	☐	☐	☐	☐



Please answer the following questions for the foreign markets where you use the DOMINANT MODE.

Please evaluate the monitoring in the foreign countries (where you use your DOMINANT MODE).

It is difficult to ...	strongly disagree	1	2	3	4	5	6	strongly agree	7
... evaluate the qualification of foreign partners.	☐	☐	☐	☐	☐	☐	☐	☐	☐
... monitor the franchise product/service quality in foreign countries.	☐	☐	☐	☐	☐	☐	☐	☐	☐
... monitor the misuse of proprietary knowledge by foreign partners.	☐	☐	☐	☐	☐	☐	☐	☐	☐
... assess the performance of foreign partners.	☐	☐	☐	☐	☐	☐	☐	☐	☐

Please evaluate the control in the foreign countries (where you use your DOMINANT MODE).

	strongly disagree	1	2	3	4	5	6	strongly agree	7
We closely monitor the extent to which the foreign partners follow established procedures.	☐	☐	☐	☐	☐	☐	☐	☐	☐
We regularly monitor the quality control maintained by our foreign partners.	☐	☐	☐	☐	☐	☐	☐	☐	☐
We frequently monitor the marketing activities performed by our foreign partners.	☐	☐	☐	☐	☐	☐	☐	☐	☐
We have developed specific procedures for our foreign partners to follow.	☐	☐	☐	☐	☐	☐	☐	☐	☐
The extent of territorial coverage that our foreign partners needs to attain for our products and services is clearly specified in the contract.	☐	☐	☐	☐	☐	☐	☐	☐	☐
The franchise contract specifies sales targets for our foreign partners.	☐	☐	☐	☐	☐	☐	☐	☐	☐
The terms of our agreement require our foreign partners to attain a certain market share for our products and services.	☐	☐	☐	☐	☐	☐	☐	☐	☐
Our future relationship with our foreign partners is contingent on how they achieve the specified goals.	☐	☐	☐	☐	☐	☐	☐	☐	☐



Please answer the following questions for the foreign markets where you use the DOMINANT MODE.

Please comment on the adaptation of your franchise business format in foreign countries (where you use your DOMINANT MODE).

Local adaptation of ...	not at all	1	2	3	4	5	6	7	to a very large extent
... franchise products / services (such as product mix and service offerings)	☐	☐	☐	☐	☐	☐	☐	☐	
... brand identity	☐	☐	☐	☐	☐	☐	☐	☐	
... operational strategies (such as training of employees and service quality control)	☐	☐	☐	☐	☐	☐	☐	☐	
... managerial strategies (such as operation manuals, pricing and marketing)	☐	☐	☐	☐	☐	☐	☐	☐	

Please evaluate the headquarters' resource commitments in the foreign countries (where you use your DOMINANT MODE).

Our Headquarters has ...	strongly disagree	1	2	3	4	5	6	7	strongly agree
... invested heavily in personnel dedicated to our foreign partners.	☐	☐	☐	☐	☐	☐	☐	☐	
... made significant investments in displays etc. dedicated to our franchise relationships.	☐	☐	☐	☐	☐	☐	☐	☐	
... developed very specialized procedures and systems for our foreign partners to follow.	☐	☐	☐	☐	☐	☐	☐	☐	
... involved considerable commitment of time and money in training and qualifying our foreign partners.	☐	☐	☐	☐	☐	☐	☐	☐	

Please evaluate the resource commitments of your foreign partners (of your DOMINANT MODE).

Our foreign partners ...	strongly disagree	1	2	3	4	5	6	7	strongly agree
... have made significant investments in tools, equipment and procedures dedicated to the franchise relationship.	☐	☐	☐	☐	☐	☐	☐	☐	
... have committed substantial time and money in employees' (or sub-franchisees') training of the franchise-specific techniques.	☐	☐	☐	☐	☐	☐	☐	☐	
... would lose a lot of their investment made to develop the local franchise network, if they decided to stop working with us.	☐	☐	☐	☐	☐	☐	☐	☐	



Please answer the following questions for the foreign markets where you use the DOMINANT MODE.

Please comment on the decision rights of your foreign partners (of your DOMINANT MODE).

Our foreign partners decide over ...	not at all	1	2	3	4	5	6	7	to a very large extent
... the development of new products and processes.	☐	☐	☐	☐	☐	☐	☐	☐	
... accounting and control systems.	☐	☐	☐	☐	☐	☐	☐	☐	
... HR practices (e.g. recruitment and training).	☐	☐	☐	☐	☐	☐	☐	☐	
... marketing and promotion strategies.	☐	☐	☐	☐	☐	☐	☐	☐	
... procurement strategies.	☐	☐	☐	☐	☐	☐	☐	☐	
... pricing at the local market.	☐	☐	☐	☐	☐	☐	☐	☐	
... financial investment strategies at the local market.	☐	☐	☐	☐	☐	☐	☐	☐	

How important are the following factors for the competitive advantage of the franchise network?

The Headquarters' ...	unimportant	1	2	3	4	5	6	7	very important
... management competence (like operating policies and procedures and HR management)	☐	☐	☐	☐	☐	☐	☐	☐	
... organizational capabilities (like cultural management and information management)	☐	☐	☐	☐	☐	☐	☐	☐	
... customer competence (like marketing / advertising / promotion, pricing)	☐	☐	☐	☐	☐	☐	☐	☐	
... foreign market competence (like setting up foreign operations, knowledge of foreign markets)	☐	☐	☐	☐	☐	☐	☐	☐	
... innovation capabilities (like product and organizational innovations)	☐	☐	☐	☐	☐	☐	☐	☐	
... product and service competence (like product/service quality and design)	☐	☐	☐	☐	☐	☐	☐	☐	



Please answer the following questions for the foreign markets where you use the DOMINANT MODE.

Please assess the know-how transfer between headquarters and the foreign partners (of your DOMINANT MODE).

It is difficult...	strongly disagree						strongly agree
	1	2	3	4	5	6	7
... to write a manual describing our service delivery processes.	☐	☐	☐	☐	☐	☐	☐
... to document critical parts of our franchise business format.	☐	☐	☐	☐	☐	☐	☐
... to understand how to deliver our franchise products/services by studying blueprints.	☐	☐	☐	☐	☐	☐	☐
... to educate and train new personnel or partners.	☐	☐	☐	☐	☐	☐	☐
... for our competitors to assess the success factors/competitive advantage of our franchise business.	☐	☐	☐	☐	☐	☐	☐
... for our headquarters to acquire the local market knowledge needed to operate the franchise network in the foreign countries.	☐	☐	☐	☐	☐	☐	☐
... to transfer the foreign partners' market know-how to our headquarters.	☐	☐	☐	☐	☐	☐	☐

How important are the foreign partner's know-how and resources for operating the franchise network at the local markets (where you use your DOMINANT MODE)?

The foreign partners'...	unimportant						very important
	1	2	3	4	5	6	7
... local market knowledge	☐	☐	☐	☐	☐	☐	☐
... organizational know-how	☐	☐	☐	☐	☐	☐	☐
... administrative know-how	☐	☐	☐	☐	☐	☐	☐
... human capital resources and management know-how (recruitment)	☐	☐	☐	☐	☐	☐	☐
... quality control know-how	☐	☐	☐	☐	☐	☐	☐
... innovation know-how	☐	☐	☐	☐	☐	☐	☐
... marketing know-how	☐	☐	☐	☐	☐	☐	☐
... financial capital	☐	☐	☐	☐	☐	☐	☐



Please answer the following questions for the foreign markets where you use the DOMINANT MODE.

Please evaluate the accomplishment of performance goals of your franchise company for the LAST THREE YEARS.

	strongly disagree	1	2	3	4	5	6	strongly agree	7
The relationship with our foreign partners is based on mutual trust.	☐	☐	☐	☐	☐	☐	☐	☐	
Generally, a foreign partner with whom I have a longer relationship is likely to help me when I need it.	☐	☐	☐	☐	☐	☐	☐	☐	
As a franchisor I feel more secure when I work with a foreign partner I know well than with someone I don't know.	☐	☐	☐	☐	☐	☐	☐	☐	
The foreign partners I trust are those with whom I have long-lasting relationships.	☐	☐	☐	☐	☐	☐	☐	☐	
Most people will respond in kind when they are trusted by others.	☐	☐	☐	☐	☐	☐	☐	☐	
Most people are trustworthy.	☐	☐	☐	☐	☐	☐	☐	☐	
Most people are trustful of others.	☐	☐	☐	☐	☐	☐	☐	☐	
Most people are basically dishonest.	☐	☐	☐	☐	☐	☐	☐	☐	
Most people are basically good and kind.	☐	☐	☐	☐	☐	☐	☐	☐	
I trust a person I don't know more than one I know well.	☐	☐	☐	☐	☐	☐	☐	☐	
I am trustful.	☐	☐	☐	☐	☐	☐	☐	☐	

LAST PART OF THE QUESTIONNAIRE!

Please evaluate the accomplishment of performance goals of your franchise company over the LAST THREE YEARS.

	not at all	1	2	3	4	5	6	7	8	9	10	to a very large extent
Sales volume	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Sales growth	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Profitability	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Return on investment	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Market share	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Marketing and distribution strategy	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Reputation	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Market access	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Customer satisfaction	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Please answer the last questions on your franchise agreement terms.

Initial fee for a single franchise unit in \$	
On-going royalty rate (% of turnover)	
On-going advertising rate (% of turnover)	
Total investment required for opening a franchise outlet in \$	
Term of the franchise agreement in years	
Number of initial training days for a franchisee	
Number of continuous training days per year for a franchisee	
Number of formal visits per year of a franchise unit	
Number of employees at headquarters	
Development fee for a master franchise licence in \$	

Please provide contact details of your franchise company to receive the report of our study (optional).

The information will be used exclusively for research purposes, and the contact details are treated strictly confidential and will not be disclosed to third parties.

Name of Company	
E-mail address	

Thank you for completing this questionnaire!

For inquiries, kindly contact us at:

internationalfranchising@univie.ac.at, University of Vienna – 2014

10.7. Overview of Items

Section E1: Franchisor and Partner Assets

[E101] Scale (extremes labeled) System-specific assets "How important are the following factors for the competitive advantage of the franchise network?"
E101_01 ... management competence (like operating policies and procedures and HR management) E101_02 ... organizational capabilities (like cultural management and information management) E101_03 ... customer competence (like marketing / advertising / promotion, pricing) E101_04 ... foreign market competence (like setting up foreign operations, knowledge of foreign markets) E101_05 ... innovation capabilities (like product and organizational innovations) E101_06 ... product and service competence (like product/service quality and design) 1 = unimportant [1] 2 = [2] 3 = [3] 4 = [4] 5 = [5] 6 = [6] 7 = very important [7] -9 = Not answered

[E105] Scale (extremes labeled) Local market assets "How important are the foreign partner's know-how and resources for operating the franchise network at the lo..."
E105_06 ... local market knowledge E105_14 ... organizational know-how E105_07 ... administrative know-how E105_08 ... human capital resources and management know-how (recruitment) E105_11 ... quality control know-how E105_12 ... innovation know-how E105_05 ... marketing know-how E105_10 ... financial capital 1 = unimportant [1] 2 = [2] 3 = [3] 4 = [4] 5 = [5] 6 = [6] 7 = very important [7] -9 = Not answered

[E104] Scale (extremes labeled) Intangibility of assets "Please assess the know-how transfer between headquarters and the foreign partners (of your DOMINANT MODE)."
E104_01 ... to write a manual describing our service delivery processes. E104_02 ... to document critical parts of our franchise business format. E104_03 ... to understand how to deliver our franchise products/services by studying blueprints. E104_04 ... to educate and train new personnel or partners. E104_05 ... for our competitors to assess the success factors/competitive advantage of our franchise business. E104_06 ... for our headquarters to acquire the local market knowledge needed to operate the franchise network in the foreign countries. E104_07 ... to transfer the foreign partners' market know-how to our headquarters. 1 = strongly disagree [1] 2 = [2] 3 = [3] 4 = [4] 5 = [5] 6 = [6] 7 = strongly agree [7] -9 = Not answered

10.8. Curriculum Vitae

Victoria Blumauer, BSc

Education

Since 2013

Master Programme

University of Vienna, Austria
International Business Administration
-International Management
-Organization and Personnel
Aspired Degree: MSc

2010-2013

Bachelor Programme

University of Vienna, Austria
International Business Administration
Degree: BSc

2001-2009

High School Diploma

Bundesgymnasium Freistadt, Upper
Austria

Professional Experience

Since 01/2014

Siemens, Vienna
Working Student (Part-Time)
Validation and Quality Management in
Pharma Projects

07/2013 - 08/2013

Siemens, Linz
Intern, Project Controlling

09/2012

Siemens, Linz

07/2012

Intern, Project Controlling
Greiner Bio-One, Rainbach, Austria
Intern, Production

08/2011

Greiner Bio-One, Rainbach, Austria
Intern, Production

07/2008

Energie AG, Linz
Intern, Public Relations

07/2007

Siemens, Linz
Intern, Project Controlling

International Experience

October 2009 – June 2010

Language stay in Vancouver, Canada

Voluntary Activities

2006 - 2010

Since 2010

Catholic Jungschar, Rainbach i.M.

Youth leader

Team leader

Additional Knowledge

Standard Software

Microsoft Office

SPSS

SAP

SQL

Excellent

Good

Basic

Basic

Driver's License

A, B

Languages

German

English

French

Spanish

Mother Tongue

Excellent command

Good working knowledge

Basic communication skills