Franchising Contracts in Fashion Supply Chain Operations: Models, Practices, and Real Case Study

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Last revised: August 3, 2018

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Abstract

Franchising, defined as a special operations model in the manufacturer-retailer supply chain, is playing an increasingly important role in the fashion industry nowadays. However, regardless of the popularity of franchising in practice, the literature on franchising operations is still relatively limited. Motivated by this research gap, we conduct a comprehensive review on the literature discussing the application of franchising contracts in the fashion industry. In the meantime, the case of Guangzhou Jinyu Garments Co., Ltd. (GJG) is also examined. Based on the combination of both the literature review and the case study, managerial insights are generated concerning how the franchising contracts are implemented in the fashion industry. Besides, key factors influencing the implementation of franchising contracts in the fashion industry are identified, referring to the channel structure, channel operations and channel interaction. The future research opportunities are also discussed.

Keywords: Literature review, Case study, Franchising contract, Fashion Industry

1. Introduction

Franchising, as a business operations model effective in business expansion and establishing collaborative relationships (Kaufmann and Dant, 1999; Clarkin and Rosa, 2005; Combs et al., 2011), has significantly contributed to the development of the global business. The franchising business in 2016, for example, has reported reaching US$552 billion, which approximately accounts for 3% of US GDP with an annual increase of 5.6% (International Franchise Association Educational Foundation, 2016). In the fashion industry, which is one of the biggest industries with a total value of US$ 3 trillion achieved in 2017 (Fashion United, 2018), franchising has also been advocated by many brands as the premier strategy to enter a new market (Märzheuser-Wood and Chatwood, 2015). Benetton, Principles, Next, River Island, Etam, Mango and Esprit are all representative instances of franchisors in the fashion industry (Castelli and Brun, 2010; Franchise Europe, 2017; MacCarthy & Jayarathne, 2013). 14 fashion companies are even listed as top 100 global franchisors, among which PVH Corp., Iconix Brand Group and Authentic Brands Group are ranked as top 3rd, 6th and 10th respectively with the annual retail sales of US$ 18 billion, US$ 7 billion and US$ 5.3 billion (License Global, 2017). In addition, franchising has also flourished the fashion industry in China (Peng et al., 2015).

The fashion distribution channels consist of both direct retailing and franchising distribution. Direct retailing refers to the retail channel in which all the shops are owned and managed by the fashion brand owner himself. While under the franchising distribution channel, the products are firstly distributed by the fashion brand owner to the regional agent and then further allocated by the regional agent to the franchisees. Comparing to the high operations costs of direct retailing, franchising distribution is advantageous as it can integrate the branding value of the franchisor with the commercial expertise in specific regions of the franchisee to make the best use of the channel resources for rapidly expanding the business and market share. Consequently, under the fashion distribution channels, some fashion brands choose both direct retailing and franchising distribution while some rely more on franchising distribution.

Fig.1 below elucidates the general structure of the fashion distribution channels. As shown in Fig.1, the fashion brand owner, as the franchisor, firstly chooses either direct retailing or franchising distribution. If under the direct retailing channel, the franchisor establishes his own retail shops, denoted as Shop (B) in Fig.1, which directly sells the products to the consumers. While if under the

franchising distribution channel, the franchisor firstly sells the products to the regional agent who is responsible for the franchising business within a specific province or several cities. Afterwards, the regional agent allocates the products to the franchisees who further distribute the products to the consumers. Besides, to distinguish from the case of direct retailing, retail shops under the franchising distribution channel is denoted as Shop (F) in Fig.1. Usually, when the market scale of the fashion franchising system is relatively small, there exists competition between direct retailing (i.e., Shop B) and franchising distribution (i.e., Shop D) since all the shops locate near to each other and share nearly the same target consumers. In practice, the franchisor can lessen the direct competition between Shop (B) and Shop (F) through monitoring and coordinating. For example, the franchisor may propose commercial districts partition and differentiate product portfolios. Besides, in addition to the common structure of the franchising channel described in Fig.1, in the fashion industry, there also exist franchising channels without the regional agent, in which the franchisor directly cooperates with the franchisee to distribute the products, and one typical instance is Santa Barbara Polo & Racquet Club (S.B.P.R.C). Our research focuses on the franchising distribution. Different structures of the fashion franchising system can consequently induce the differences in franchising operations.

Besides, since a complete fashion supply chain is comprised of fabric suppliers, garment manufacturers, fashion brand owners, fashion retailers and fashion franchisees (Newman and Cullen, 2002; De Brito et al., 2008; Choi, 2011; Kim, 2013), different interests of various supply chain members also make the franchising operations even more complex. This, therefore, highlights the application of franchise contracts in the franchising channel, which is defined as a kind of contractual relationships that authorize the franchisees to use the franchisor's commercial assets or sell the franchisor's products under certain conditions (Blair and Lafontaine, 2005). The franchise contracts are crucial for franchising operations. In the extant literature, however, the franchising contracts still have not been adequately explored yet, especially in the context of the fashion industry. As a result, considering this research gap, this study deeply explores the implementation of various franchising contracts in the fashion industry.

Fig.1. Fashion distribution channels

To the best of our knowledge, this paper is the first work to specifically examine the implementation of various franchising contracts in the fashion industry. To be specific, we aim to address the following four research questions:

(1) What are the present research findings in the literature of franchising contracts for the fashion industry?

(2) How does a fashion brand owner utilize franchising contracts in practice?

(3) What are the functions of franchising contracts in the fashion franchising system?

(4) What are the future research opportunities for applying franchising contracts in the fashion industry?

In this paper, we firstly review the related literature and discuss the application of various franchising contracts in the literature. Afterwards, we proceed to conduct a case study on Guangzhou Jinyu Garments Co., Ltd. (GJG), which is one of the leading fashion brands for young ladies in China, to investigate the implementation of franchising contracts in practice. The findings are mainly concentrated on three dimensions, referring to the channel structure, channel operations and channel interaction (i.e., how different members interact with each other in the franchising system). The research methodology of this paper is demonstrated in Fig.2.
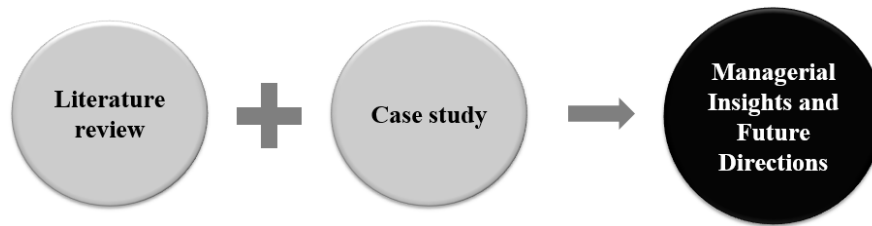
Fig. 2. Research methodology

The rest of the paper is as follows. We conduct the comprehensive literature review in Section 2. Section 3 presents the insights derived from the case study on GJG. We then discuss the key factors influencing the implementation of franchising contracts in Section 4. Finally, we conclude the paper with the future research opportunities in Section 5.

2. Literature review

With the keywords of 'franchise', 'franchising', 'contract' and 'fashion', we choose Google Scholar as the main engine to extensively search the papers published in the journals covered by the Science Citation Index (SCI) that was launched by the Institute for Scientific Information (ISI) in 1964. We believe the quality of the collected papers can be well guaranteed as SCI contains more than 8,500 notable and significant journals and is described as the world's leading journals of science and technology due to a rigorous selection process. As the franchising business increasingly expanded globally since the early 1990s and the academic research on such domain became more and more flourishing simultaneously, in order to obtain a comprehensive understanding on the present research findings, we define the timeline coverage as 1990 to 2017. The result of the search is crossed-checked with Thomson's Web of Science to ensure the selected articles are from reputable peer refereed sources. The search was completed in January 2018. Initially, we found 164 related papers. While after further analysis, only 61 papers are finally selected.

The following discussion is divided into four main sectors: applications of contracts in fashion supply chains, the prevalently implemented franchising contracts, franchising contracts systems and analytical approaches for the contracts in fashion supply chains.

2.1. Applications of contracts in fashion supply chains

Eppen and Iyer (1997a) explore the application of backup contracts, according to which the

manufacturer holds a portion of the committed quantity as the backup. The authors discover that the backup contracts can impact the expected profit by inducing an increase in the committed quantity of fashion products. Donohue (2000) studies the design of supply contracts in fashion distribution channels considering the influences of the wholesale price, production modes and return price. The author derives the pricing conditions for coordinating the distribution system. Using a mean-variance model together with the empirical data, Chiu et al. (2012) examine the application of sales rebate contracts in fashion supply chains. The authors propose the optimal sales rebate contract to coordinate the retail sales efforts and achieve higher profits and lower risks for both the manufacturer and the retailer. Shen et al. (2013) investigate how the markdown contract coordinates fashion supply chains with different risk preferences of the members. The authors demonstrate that the risk tolerance level of the supplier can directly influence the performance of the retailer and the supply chain and develop the markdown contract to help the supplier to make the accurate decision. Xu et al. (2013) also apply the contracts to coordinate fashion supply chains with different risk-averse preferences. The authors explicate that either using the revenue-sharing contract and the two-part tariff contract separately or jointly can achieve the coordination. Peng and Zhou (2013) study how the quantity discount contract coordinates the fashion supply chain under uncertain yields and random demands. The authors analytically elaborate that the proposed quantity discount contract can greatly decrease the negative effects of the uncertain yields and demands and achieve the optimal supply chain performance. Li et al. (2014) illustrate that a two-echelon fast fashion supply chain with multiple retailers can be coordinated with the contract containing a simple return policy. The authors further explain that such contract is also applicable to realize the coordination even in the presence of multiple retailers. Shen et al. (2014) examine the markdown contract and the profit-sharing contract employed by the fashion department store. The authors analytically derive the conditions for the supply chain coordination addressing the cost-sharing mechanism for the sales efforts. Shen et al. (2015) further elucidate the application of markdown money policies in the fashion industry from a cross-cultural perspective. The authors discover that the Chinese fashion companies tend to offer the markdown money policy to the retailer to maintain their channel leadership while the American fashion suppliers would rather bargain with the retailers than offer the markdown money policy. Ren et al. (2017) conduct a comparative study on demand forecasting models with various sources of uncertainties in the fast fashion setting. With the computational models, the authors protract the perceived importance of different demand

forecasting systems applied to the fashion industry. Choi et al. (2017) explore the online-offline fashion franchising supply chains with the wholesale price contract and the profit-sharing contract. The authors analyze different scenarios for the optimal decisions upon different order time points and contract selections.

2.2. The prevalently implemented franchising contracts

Franchising contracts are widely implemented in the distribution channel, which are offered by the franchisor to the franchisee to deal with pricing, ordering, inventory management and payment methods. In this paper, we classify the franchising contracts into four different types according to their specific variables, contract structures and functions in the franchising channel. We characterize the first category as the simple franchising contracts. The contacts with simple variables for the single operations function are included in this category such as wholesale price contracts, buyback contracts, markdown money contracts, quantity discount contracts and quantity commitment contracts. The second category is characterized as the two-part tariff franchising contracts referring to those contracts involving two independent business interactions with certain fixed parameters or dynamic variables. To be specific, the involvement of franchise fee is the distinctive feature for the two-part tariff franchising contract, e.g., franchise fee contracts and revenue or profit-sharing contracts in franchising operations. The third category comprises the integrated franchising contracts with more complexity and variables compared to the two-part tariff contracts. Some instances are service requirement contracts, retail price maintenance contracts, price rebate and returns contracts. In addition to the above three types of franchising contracts, other franchising contracts with different functionality are characterized as the fourth category, namely particular franchising contracts, including tying contracts, vertical contracts and incomplete contracts, which are designed for solving the volatile issues like the contract coverage and the channel relationship in the franchising system.

2.2.1 Simple franchising contracts

The wholesale price contract is a contract with a fixed amount of payment charged by the franchisor for each product (Cachon, 2003). Under the cooperative relationship regulated by the wholesale price contract, the franchisor acquires the profit margin by setting the wholesale price surpassing the total cost (Choi et al., 2017). Zhao et al. (2017) study the wholesale price contract with the risk preference of the retailer. The authors analytically assess the performance of such contract with value risks and derive the closed-form results.

The buyback contract is another example of simple franchising contracts. In literature, Chiu et al. (2011) incorporate the return policy, wholesale price and channel rebate for coordinating the supply chain. The authors derive the sufficient condition for the coordination via both the additive and multiplicative price-dependent demand models. Shen et al. (2013) study the retailer's conflicts between the profitability and the supply chain sustainability with the adoption of buyback contracts in fashion supply chains.

Different from the buyback contract, the markdown money contract does not involve the physical return of the unsold products after such products are paid by the supplier (Tsay, 2001; Shen and Li, 2015). Shen et al. (2013) examine the markdown policy in the fashion supply chain containing a risk-averse supplier. The authors argue that when the supply chain is coordinated, the wholesale price increases in the markdown price. Shen et al. (2014) further explain the application of the markdown contract between the fashion department store and the national brand. The analytical results accentuate that the coordination can be realized only when the national brand can share the cost of the sales efforts. Chow et al. (2015) study the minimum profit share ratio (MPSR) in supply chains with markdown contracts through both the modeling and empirical approaches. The authors find that the average profit and absolute risk of the supplier decrease when the MPSR increases while those of the retailer increase under the same situation.

Besides, the quantity discount contract allows a certain rate of discount for the franchisee based on the order quantity (Cachon, 2003). Utilizing a two-period quantity flexibility model, Wang (2002) investigates the quantity commitment contract with the case of famous fashion brands as DKNY, Liz Claiborne and Catco. The author shows that the quantity commitment contract provides more flexibility for the manager to make decisions in a volatile market where temporary promotions or significant markdowns exist.

2.2.2 Two-part tariff franchising contracts

2.2.2.1 Franchise fee contract

The franchise fee contract is a typical two-part tariff contract involving both the wholesale price and the franchising charge (Mukhopadhyay et al., 2009). Gurnani and Erkoc (2008) design a fixed-fee contract and a general franchise contract. With the analytical comparison of different contracting approaches, the authors reveal that the manufacturer may prefer to offer the fixed-fee individual contract in the case of high reservation utility and information asymmetry.

2.2.2.2 Revenue/profit-sharing contract

One distinctive feature of franchising contracts is the application of royalty, which specifies a sharing rule of the earnings or profits generated from the selling activities carried by the franchisee (Katz and Owen, 1992; Mukhopadhyay et al., 2009). Cachon (2003) proposes a revenue-sharing contract where the manufacturer can enjoy additional earnings from the distribution channel. Shen et al. (2014) focus on the coordination issue with the profit-sharing contract between fashion department stores and private labels. The authors address an equivalent relative level of risk but a different absolute level of risk between the scenarios of applying the profit-sharing contract and the markdown money contract. Giovanni (2017) establishes two incentive games upon a profit-sharing contract for combining the motivation of the manufacturer and the retailer in a closed-loop supply chain. The analytical findings substantiate the coordination realized by adjusting the sharing parameter in the scenarios of the symmetric and asymmetric information. Liu et al. (2017) illustrate the coordination with the revenue-sharing contract and the government price regulation policy in a supply chain with a dominating retailer. The authors develop various optimal revenue-sharing contracts to coordinate the supply chain when the demand is disrupted. Choi et al. (2017) explicate how the profit-sharing contract influences the interaction between the franchisor and the franchisee as well as the profit of the whole fashion franchising channel.

2.2.3 Integrated franchising contracts

2.2.3.1 Franchise fee with service requirement contract

The franchise fee with service requirement contract extends the two-part tariff contract by adding the service level. Xie et al. (2016) examine the franchise fee with service requirement (FFS) contract and the franchise fee with centralized service requirement (FFCS) contract in the supply chain with product service system (PSS). The authors prove that the decisions and profitability of the supply chain members are affected by such contracts, among which the FFCS contract can realize the maximal channel profit.

2.2.3.2 Retail price maintenance contract

The retail price maintenance (RPM) contract is another instance of integrated franchising contracts. It extends the wholesale price contract by empowering the franchisor to specify the order quantity and even the retail price (Mukhopadhyay et al., 2009). The retail price maintenance contract is only applicable when the franchisor is adequately powerful to force the franchisee to accept the

terms regulating her marketing activities (Gurnani and Xu, 2006). As is released by Mukhopadhyay et al. (2009), the retail price maintenance contract may be less dynamic than the franchise fee contract in stimulating marketing efforts. According to Gurnani and Xu (2006), given the dominating power of the franchisor, the retail price maintenance contract is popular among the giant fashion brands. Gucci applies fixed retail prices for their products in both the vertically integrated and independent channels. Nike sets the bottom prices for the shoe products and does not allow any retailer to sell the products below the bottom price.

2.2.3.3 Price rebate and returns contract

The price rebate and returns (PRR) contract integrates the wholesale price, channel rebate and return policy. Chiu et al. (2011) demonstrate the analytical conditions for the optimal price rebate and returns contract for coordinating the decentralized supply chain containing the risk-neutral manufacturer and retailer with the additive and multiplicative price-dependent demands. The authors further derive the maximal profit for the manufacturer and the equilibrium for Pareto improvement.

2.2.4   Particular franchising contracts

2.2.4.1 Tying contract

The tying contract is a special contractual agreement in the franchising channel. The franchisor supplies the franchisee with a product only when the franchisee agrees to purchase another product (Etro, 2011). Whinston (1990) explores the tying contract under the leverage theory. The author reveals that once a monopolistic franchisor in a primary market is also dominant in a secondary market, the tying contract helps to improve his competitive strength. If the market demand for the bundled product is close to that of the core product, the tying contract can even benefit the franchisor more.

2.2.4.2 Vertical contract

The vertical contract aims to deal with the hold-up problem[1] caused by the vertical separation in the franchising channel. It is effective in activating the internalization of the franchising channel and uniting the channel members into a common system (Etro, 2011). Both Bonanno and Vickers (1988) and Rey and Stiglitz (1994) discuss the profit issues with the vertical contract where the franchisor and the franchisee are vertically separated. The authors find that the franchisor may charge a certain amount of franchise fee in addition to the wholesale price below the cost to enhance the competitive strength.

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1   The hold-up problem is a situation where two parties may be able to work most efficiently by cooperating but refrain from doing so because of concerns that they may give the other party increased bargaining power, and thereby reduce their own profits.

Incomplete contracts can be applied to overcome the limitations of the transaction complexity or the vagueness of language. For instance, Hendrikse and Jiang (2011) develop an incomplete contract in dual distribution franchising. The authors conclude that whether a traditional franchise or a cooperative franchise can achieve the benefits of the dual distribution depends on whether the most value is added upstream or downstream.

Table 1. Various contract types in franchising channel

Contract Types	Contracts	Main Related Literature
Simple Franchising Contracts	Wholesale Price Contract, Buyback Contract, Markdown Money Contract, Quantity Discount Contract and Quantity Commitment Contract	Lal (1990), Gallini and Lutz (1992), Desai and Srinivasan (1995), Huang (2000), Li et al. (2002), Gurnani and Erkoc (2008), Shen et al. (2013), Shen et al. (2014), Chow et al. (2015), Shen and Li (2015), Choi et al. (2017)
Two-Part Tariff Franchising Contracts	Franchise Fee Contract, Revenue/Profit-Sharing Contract	Katz and Owen (1992), Huang (1997), Huang (2000), Li et al. (2002), Gurnani and Erkoc (2008), Babich and Tang (2016), Choi et al. (2017)
Integrated Franchising Contracts	Franchise Fee with Service Requirement Contract, Retail Price Maintenance Contract, Price Rebate and Returns Contract	Mukhopadhyay et al. (2009), Xie et al. (2016), Chiu et al. (2011)
Particular Franchising Contracts	Tying Contract, Vertical Contract, Incomplete Contract	Etro (2011), Hendrikse and Jiang (2011)

2.3. Franchise contracting systems

2.3.1 Franchising contract design and contract optimization

In the franchising system, contract optimization refers to the elimination of the drawbacks in maximizing the profits of both the franchisor and the franchisee. As a common practice, the franchisor formulates fundamental business standards like the franchise fee, the wholesale price, the royalty payment, the franchising territory and the duration to the franchisee. The franchisor may even specify some additional clauses on the retail price, the service level and the order quantity to induce the marketing efforts of the franchisee. The franchising contracts raised by Xie et al. (2016) help the franchisor to acquire more private information from the franchisee. In the meantime, the franchise fee with centralized service requirement (FFCS) contract is found to be optimal in maximizing the profit of the whole franchising channel. Further to the above findings, Lanchimba et al. (2017) show that the franchising contract with a risk-incentive adjusted royalty can substantially improve the channel performance. The analytical results of Babich and Tang (2016) suggest that the important property of the optimal franchising contract should be in the setting of positive royalties and no fees under the specific conditions.

2.3.2　Franchising contract offering and selection

The contract offering and selection is also critically important in franchising operations. Katz and Owen (1992) construct franchise contracts based on the fixed fee and the royalty sharing mechanism. The authors find that it is more beneficial for the franchisor to offer separating contracts and offering a nonlinear contract can help the franchisor to stimulate more marketing efforts from the franchisee. Different methods for offering the contract provide various flexibility. According to Hempelmann (2006), the franchisor prefers to offer the menu contracts to detect the franchisee's private information, especially the marginal cost of sales. Gurnani and Erkoc (2008) compare the different performances of the price-only contract, the fixed-fee contract and the general franchise contract. The authors prove that both the individual contract and the menu contract perform better than the pooling contract. The menu method is preferable for offering the price-only contract and the fixed fee contract. The contract selection can reveal the franchisee's preference for the total reservation profit level and the cost type. The findings in Mukhopadhyay (2009) illuminate that the franchise fee contract is superior in driving marketing efforts and generating the profit for the whole franchising channel while the retail price maintenance contract is preferred by the franchisor with a high allocable profit level. Xie et al. (2016) provide the insights for the franchisor to offer the menu franchising contracts under different circumstances. To be specific, the franchise fee (FF) contract gives the franchisee more freedom to choose the optimal service level, while the franchise fee with centralized service requirement (FFCS) contract squeezes the franchisee's profit to the minimum.

2.3.3　Coordination for the franchising channel

Another important role of franchising contracts is to coordinate the channel performance through various variables in the franchising system. Lal (1990) illustrates that a simple two-part tariff contract without the royalty payments and the monitoring can coordinate the franchising channel when the market demand fluctuates with the retail price and the retailer's service. Agrawal and Lal (1995) and Huang (1997) address the role of the royalty rate in coordinating the franchising channel. The authors argue that the internal coordinated relationships regulated by the franchising contract are also affected by the franchisee's risk preference. Xie et al. (2016) concentrate on the channel coordination problem upon three different franchising contracts implemented in an asymmetric information sharing environment. The authors discover that the maximum channel profit is achieved under the FFCS contract while the FFS contract presents the highest efficiency in stimulating more service effort.

2.3.4 Franchising contract evolution, duration and termination

Cochet and Garg (2008) empirically examine the evolution of franchising contracts and point out that the franchising contract should be gradually revised from time to time. The changes in the franchising contracts incurred by the change in the management can influence the efficiency of the contracts (Azoulay and Shane, 2001). The tendency for the uniformity also accounts for the evolution of franchising contracts as a change in any clause may lead to the occurrence of the relevant changes in other clauses as well (Cochet and Garg, 2008). The interaction between different variants can affect the duration of franchising contracts (Rubin, 1978; Fudenberg et al., 1990). Vázquez (2008) concludes that the franchisor is apt to offer a shorter contract when facing the threat of free-riding but offer longer contract to alleviate the franchisee's concern on the hold-up problem. Moreover, the contracting experience has a positive influence on the time horizon of the franchising contract. Lafontaine and Kaufmann (1994) depict that terminating the franchising contract can be utilized as the punishment for those franchisees who caught free riding. Winsor et al. (2012) accentuate the chain effect that terminating the contract for one franchisee may cause other franchisees to consider terminating their contracts as well.

2.3.5 Governance structure and ownership of the franchising channel

The franchising channel may consist of the wholly franchised shops, the shops in dual distribution and the wholly company-owned shops (Gallini and Lutz, 1992; Blair and Lafontaine, 2005). The franchisee's multi-unit propensity not only increases the risk of moral hazard and free riding (Rubin, 1978; Eisenhardt, 1989; Vázquez, 2008) but also internalizes the externality that may trigger cheating (Brickley and Dark, 1987; Brickley, 1999). Consequently, the franchisor is forced to adopt stricter monitoring and punishment terms. According to Combs et al. (2011), the franchisor learning, the franchisor goals and the geographical setting are the key moderators for the ownership redirection. The franchisor expects to merge the franchised outlets concerning the factors of size, age, and resource that are accessible to create unique long-term competitiveness in a franchise system under the minimum risk of failure (Dant and Kaufmann 2003; Chabowski et al., 2011).

Table 2. Summary of the findings on the franchising contracting systems extracted in some key related papers.

Papers	Coordination for supply chain and Franchising Channel	Franchising Contract Design and Contract Optimization	Franchising Contract Offering and Selection	Motivation to Apply Franchising System	Franchising Contract Evolution,	Franchising governance, Channel Structure and Ownership

					Duration and Termination	
Gallini and Lutz (1992)				Yes		Yes
Katz and Owen (1992)		Yes	Yes			
Agrawal and Lal (1995)	Yes					
Desai and Srinivasan (1995)		Yes				
Huang (1997)	Yes					
Huang (2000)			Yes			
Li et al. (2002)			Yes			
Brickley (2002)		Yes			Yes	
Combs and Ketchen (2003)				Yes		
Combs et al. (2004)				Yes		
Hempelmann (2006)		Yes				
Shane et al. (2006)				Yes		
Cochet and Garg (2008)					Yes	
Gurnani and Erkoc (2008)			Yes			
Mukhopadhyay et al. (2009)			Yes			
Vázquez (2008)					Yes	Yes
Etro (2011)		Yes			Yes	
Combs et al. (2011)		Yes				Yes
Hendrikse and Jiang (2011)	Yes					Yes
Dant et al. (2011)						Yes
Chabowski et al. (2011)						Yes
Yan and Wang (2012)	Yes					
Dant et al. (2013)						Yes
Peng et al. (2015)		Yes				
Babich and Tang (2016)			Yes			
Xie et al. (2016)	Yes	Yes	Yes			
López-Fernández and López-Bayón (2017)					Yes	Yes
Lanchimba et al. (2017)		Yes				
Sadeh and Kacker (2017)				Yes		
Choi et al. (2017)	Yes					

2.4 Analytical approaches for the contracts in fashion supply chains

2.4.1 Game theory

Game theory is widely applied in contract analysis in fashion supply chains. Desai and Srinivasan (1995) employ game theory to analyze a two-part price contract and a three-part contract for the problem of two-sided information to achieve the first-best pricing scheme. Mukhopadhyay et al. (2009) examine the optimal design for the franchise contract with a two-part price schedule and the retail price maintenance contract specifying the retail price and the service level with game theory under the scenario of asymmetric information and double marginalization. Yan and Wang (2012) apply a game theory model to demonstrate how the franchisor uses the wholesale discount and profit sharing mechanism as the incentive to encourage the franchisee to share the private information. Zhao et al. (2017) explore the issue of coordinating a two-echelon fuzzy closed-loop supply chain with symmetric and asymmetric information contracts on the basis of game theory. The analytical results show that the

low-collecting-scale-level retailer's maximal expected profit is higher under the asymmetric information contract than that under the symmetric information contract. Giovanni (2017) substantiates the coordination in the closed-loop supply chain through incentives under information asymmetry applying a dynamic game model. The author discovers that within the specific sharing parameter scope, both the manufacturer and the retailer can economically better-off with an exogenous incentive. Xie et al. (2016) develop the contract regarding product service system (PSS) under a game-theoretic framework to reduce the loss caused by the information asymmetry and the double marginalization. Huang (1997), Huang (2000) and Li et al. (2002) develop the basic game theory to the cross-constrained game theory for the respective research. Huang (1997) and Huang (2000) apply the cross-constrained game theory to study how the franchising compensation schemes influence the channel coordination and the cooperative problem together with the impact on the behavior of the channel members. Li et al. (2002) employ the chance-constrained game theory to examine the transaction between the franchisor and the franchisee regarding the interaction among fixed fees, royalties, wholesale prices and retail prices.

Table 3. Key related papers with the application of game theory

Paper	Channel Structure	Period	Analytical Approach	Research Issue	Key Variables	Objective Function
Desai and Srinivasan (1995)	One franchisor and one franchisee	Single period	Game Theory	Profit Optimization	Demand type, fixed franchise fee, variable royalty, service level	Profit
Huang (1997)	One franchisor and one franchisee	Single period	Game Theory	Channel Coordination	Fixed lump sum fees, variable royalty, retail price, per unit variable costs, risk level	Profit
Huang (2000)	One franchisor and one franchisee	Single period	Game Theory	Profit Optimization	Fixed lump-sum fees, royalties, wholesale price, and retail price	Profit
Li et al. (2002)	One manufacturer and one retailer	Two periods	Game Theory	Profit Optimization	Fixed lump-sum fees, royalties, wholesale price, and retail price	Profit
Mukhopadhyay et al. (2009)	One manufacturer and one sales agent	Single period	Game Theory	Profit Optimization	production cost, marketing effort, reservation profit level, retail price, wholesale price, fixed fee and order quantity	Profit
Yan and Wang (2012)	One franchisor and one franchisee	Single period	Game theory	Profit Optimization	Fixed lump sum fees, variable royalty, wholesale price, retail price and product quantity	Profit
Xie et al. (2016)	One manufacturer and one retailer	Single period	Game Theory	Profit Optimization	Wholesale price, retail price, service added value, value-added cost and service level	Profit
Zhao et al. (2017)	One manufacturer and one retailer	Two periods	Game Theory	Channel Coordination	Manufacturing cost, remanufacturing cost, wholesale price, retail price, collecting cost and transfer cost	Profit

Giovanni (2017)	One manufacturer and one retailer	Two periods	Game Theory	Channel Coordination	Wholesale price, retail price, advertising efforts, forgetting effects, return rate, logistics cost, remanufacturing cost and Discount factor	Revenue, Profit

2.4.2 Bargaining-related model

Bargaining-related model is another approach commonly used in analyzing contracts in fashion supply chains. Lal (1990) constitutes the Nash equilibrium in a mixed strategy to explore the issue of improving channel coordination through franchising. The author addresses that the optimal frequency of monitoring increases in the monitoring cost while when the penalty size decreases, the optimal frequency of monitoring also increases. Gallini and Lutz (1992) integrate the Bayesian Nash equilibrium into the analytical approach aiming at the information asymmetry problem in dual distribution. The authors explain how the franchisor signals the private information by distributing the new products via both the company-owned and the franchised channels. Bargaining theory also can be found in Huang (1997) that comprises the Nash bargaining model and the Kalai and Smordinsky model to solve the problem of allocating the profit between the channel members. The author suggests that the franchisor and the franchisee can equally share the additional channel profits via cooperation under the Nash bargaining model while the Kalai and Smordinsky model instructs the channel members to share the additional channel profits to achieve the cooperation. The similar setting can be found in Li et al. (2002) that utilize the Nash bargaining model to analyze profit sharing between the franchisor and the franchisee to achieve the cooperation, where the franchisor imposes the fixed franchise fee, the wholesale price and the royalty payment while the franchisee determines the retail price and the order quantity. In Hempelmann (2006), the Nash equilibrium is developed when designing the contract to motivate the franchisee to share the cost information considering the profit margin and the advertising effectiveness. Peng and Zhou (2013) establish new quantity discount models based on the Nash equilibrium between the supplier and the manufacturer to achieve the optimal profit margin in a centralized supply chain. Pan and Choi (2016) propose an agent-based negotiation model comprising of the competitive negotiation and the cooperative negotiation for a two-period bargaining scheme in a make-to-order supply chain. The authors prove that the model is effective to optimize the utility of the channel members and reach a win-win outcome for both members. Liu et al. (2017) construct the Nash equilibrium on the optimal decisions for the coordination in the centralized supply chain

compared to the decentralized one. The authors find that the subsidies should be offered by the government to encourage the channel members to accept the contract for improving the profitability of the whole supply chain.

Newsvendor model, as a classic approach aiming at the analytical problems, can be integrated for studying the bargaining on operations management of fashion supply chains. Eppen and Iyer (1997b) combine the newsvendor model and the Bayesian model for updating a distribution upon the fashion buying problem. The authors elaborate the importance of updating as the demand uncertainty increases. Donohue (2000) employs a two-stage newsvendor model to study the efficiency of contracts in the supply chain with two production modes regarding the forecast information and the production decisions of the manufacturer and the distributor. The author proposes the coordinating contract covering the wholesale prices of the two production modes and the return price. Chiu et al. (2011) integrate the wholesale price, channel rebate, and returns to the newsvendor model for the supply chain coordination. The authors prove the existence of multiple equilibrium policies for the channel coordination and further delineate Pareto improvement achieved by adjusting such policies. Niu et al. (2017) adopt a single-period newsvendor model to study the policies of punishing and subsidizing under two procurement outsourcing modes - control and agency. With a logistic service provider in fashion supply chains, the authors show that the order size decreases with the punishment while the retailer is apt to adopt agency as the procurement strategy when the subsidy reaches a certain level.

Stackelberg game is another important bargaining-related approach widely applied in the research of contracts. In Huang (2000), Stackelberg game structure is constructed. The author explicates the situation that the franchisor, as the leader, cooperates with the franchisee, as the follower, to decide the retailer price and the order quantity. Yan and Wang (2012) apply the Stackelberg game to demonstrate how the wholesale price contract is offered by the franchisor and how the profit-sharing mechanism is proposed as the incentive for information sharing. Shen and Li (2015), Chow et al. (2015) and Shen et al. (2017) consider the newsvendor model as Stackelberg setting, where all the suppliers are the leaders. The papers investigate the optimal quantity with return prices and return cost, the effect of minimum profit share ratio (MPSR) and the supply chain coordination under the all-unit quantity discount policy, the capacitated linear pricing policy, and the profit sharing policy.

Table 4. Key related papers with the application of the bargaining-related models

Paper	Channel Structure	Period	Analytical Approach	Research Issue	Key Variables	Objective Function
Lal (1990)	One franchisor and one franchisee	Single period	Bargaining model	Profit Optimization	Fixed fees, wholesale price, royalty, service level and monitoring	Profit
Gallini and Lutz (1992)	Dual distribution	Two periods	Bargaining model	Profit Optimization	Demand types, the proportion of company-owned outlet, up-front fixed fee, variable royalty payment	Profit
Eppen and Iyer (1997b)	One retailer and two manufacturers	Multiple periods	Newsvendor model	Profit Optimization	Season demand, purchase cost, retail price, holding cost and salvage value	Profit
Huang (1997)	One franchisor and one franchisee	Single period	Bargaining model	Channel Coordination	Fixed lump sum fees, variable royalty, retail price, per unit variable costs, risk level	Profit
Donohue (2000)	One manufacturer and one distributor	Two periods	Newsvendor model	Channel Coordination	Wholesale price, production mode, return price, production cost, shortage penalty, salvage value and production quantities	Profit
Huang (2000)	One franchisor and one franchisee	Single period	Stackelberg game	Profit Optimization	Fixed lump-sum fees, royalties, wholesale price, and retail price	Profit
Li et al. (2002)	One manufacturer and one retailer	Two periods	Bargaining model	Profit Optimization	Fixed lump-sum fees, royalties, wholesale price, and retail price	Profit
Hempelmann (2006)	One franchisor and one franchisee	Single period	Bargaining model	Profit Optimization	Transfer price, Fixed lump sum fees, royalty rate and retail price	Profit
Chiu et al. (2011)	One manufacturer and one retailer	Single period	Newsvendor model	Channel Coordination	Wholesale price, rebate value, refund value, target sales level, order quantity and retail price	Profit
Yan and Wang (2012)	One franchisor and one franchisee	Single period	Stackelberg game	Profit Optimization	Fixed lump sum fees, variable royalty, wholesale price, retail price and product quantity	Profit
Peng and Zhou (2013)	One supplier and one manufacturer	Single period	Bargaining model	Channel Coordination	Inventory cost, shortage cost, production cost, purchase price, order quantity and discount rate	Profit
Shen and Li (2015)	One supplier and one retailer	Single period	Stackelberg game	Channel Coordination	Wholesale price, retail price, production cost, salvage value, return price and cost of physical return	Profit
Chow et al. (2015)	One supplier and one retailer	Two periods	Stackelberg game	Profit Optimization	Wholesale price, retail price, production cost, order quantity and markdown price	Profit
Pan and Choi (2016)	One manufacturer and one supplier	Two periods	Bargaining model	Profit Optimization	Contracted price, reservation price, due date, semi-product holding days and pre-production days	Cost
Shen et al. (2017)	One supplier and one retailer	Single period	Stackelberg game	Channel Coordination	Product cost, retail price, online retail service, consumer group and marginal marketing cost	Profit
Niu et al. (2017)	One manufacturer, one retailer and one logistic service provider	Single period	Newsvendor model	Profit Optimization	Wholesale price, production cost, logistics service price, retail price, buy-back price, marginal cost and order quantity	Profit
Liu et al. (2017)	One manufacturer and multiple retailers	Single period	Bargaining model	Channel Coordination	Production cost, the retailer's added values, retail price and opportunity cost	Profit

2.4.3   Mean-variance analysis

Mean-variance approach is broadly employed for risk analysis in the recent literature related to stochastic supply chain operations and management. Katz and Owen (1992) study a common contract among multiple agents with various risk and effort features with mean-variance analysis. The authors elucidate the conditions of the franchise contract to maximize the expected utility. Chiu et al. (2012) apply mean-variance approaches together with real empirical data to examine the performance of sales

rebate contracts in fashion supply chains. The authors propose an optimal sales rebate to increase the profit and decrease the risk of both channel members. Under the mean-variance framework, Xu et al. (2013) investigate single contracts and joint contracts for coordinating the fashion supply chain containing a risk-averse retailer with price-dependent demand. The authors derive the optimal conditions for the revenue-sharing contract and the two-part tariff contract to achieve the coordination. Shen et al. (2013) portray how the markdown policy performs in fashion supply chains where the members have different risk preferences. The authors explore the optimal decisions for both the markdown money policy variables and the ordering with mean-variance analysis. Li et al. (2014) employ the mean-variance framework in a fast fashion supply chain with return policies. By developing a mean-variance optimization model, the authors delineate the channel coordination realized by a simple return policy. Zhao et al. (2017) analyze the wholesale price contract in supply chains with the mean-risk approach, considering the price-dependent demand, the contract value risk and the risk-aversion of the retailer. The authors address the existence of the equilibrium between the expected profit and the contract-related value risk. Chiu and Choi (2016) develop a comprehensive review on the application of mean-variance models in supply chain risk analysis. Focusing on 52 papers related to mean-risk supply chain models with respect to single-echelon problems, multi-echelon supply chain problems, and supply chain problems with information updating, the authors generate valuable insights for better understanding the application of mean-variance approaches and provide the suggestions on the future research for employing mean-variance supply chain models for risk analysis. Choi (2016a) and Choi (2016b) incorporate the risk-averse behavior of the retailer within a quick response fashion supply chain into the optimization model under a mean-risk framework. The optimal decision of the retailer and the optimal inventory service level is analytically obtained. Choi (2016c) extends the mean-variance approach to multi-period risk minimization inventory models for fashion merchandising involving the factors of interest rate, budget and profit target. The author concludes that with the application of the fixed-fee contract, the wholesale pricing contract and the product variety contract, the optimal ordering quantity increases in both the profit target and the market interest rate.

Table 5. Key related papers with the application of mean-variance analysis

Paper	Channel Structure	Period	Analytical Approach	Research Issue	Key Variables	Objective Function

| Katz and Owen (1992)	One franchisor and multiple franchisees	Single period	Mean-Variance	Profit Optimization	Number of production units, expenditure of national services, fixed joining fee, variable royalty payment, number of agents, agent's effort	Profit
Chiu et al. (2012)	One manufacturer and one retailer	Single period	Mean-variance	Channel Coordination	Wholesale price, retail price, production cost, sales rebate, order quantity, the value of the unsold quantity and target sales level	Profit
Xu et al. (2013)	One manufacturer and one retailer	Single period	Mean-variance	Channel Coordination	Wholesale price, retail price, production cost, sales rebate, the value of the unsold quantity, order quantity, target sales level, fixed transfer payment and revenue sharing rate	Profit
Shen et al. (2013)	One manufacturer and one retailer	Single period	Mean-variance	Channel Coordination	Wholesale price, retail price, production cost, markdown price, salvage value, order quantity and risk aversion threshold	Profit
Li et al. (2014)	One supplier and multiple retailers	Single period	Mean-variance	Channel Coordination	Wholesale price, retail price, production cost, returns rate, salvage value, order quantity and risk aversion threshold	Profit
Zhao et al. (2014)	One supplier and one retailer	Two periods	Mean-variance	Channel Coordination	Retail price, wholesale price, salvage value, production cost and production quantity	Profit
Choi (2016a)	One manufacturer and one retailer	Two periods	Mean-variance	Profit Optimization	Wholesale price, retail price, manufacturing cost, salvage value and order quantity	Profit
Choi (2016b)	One manufacturer and one retailer	Multiple periods	Mean-variance	Profit Optimization	Wholesale price, retail price, manufacturing cost, salvage value, market interest rate and order quantity	Profit
Choi (2016c)	One manufacturer and one retailer	Single period	Mean-variance	Channel Coordination	Wholesale price, retail price, manufacturing cost, salvage value, inventory service target and ordering quantity	Profit

3. Case study - GJG

In this section, we proceed to the case study on a representative fashion company in franchising operations. Notice that, the case study is a proper and applicable research method for our study. Since with case study, we can deeply explore why the franchisor and the franchisee establish the franchising cooperation and how the franchising contracts are implemented between different channel members. Besides, in this paper, in-depth interviews are conducted. We also review a variety of relevant documents in practice as the supporting materials, which contributes to the rigor of the case study.

To be specific, we follow the approach adopted by Choi et al. (2013), which conducts a lot of semi-structured interviews and discussion with the internal staff of the fashion company to support their literature findings. Similar to Choi et al. (2013), after addressing the literature review, we also conduct a case study to explore the franchising contracts in fashion industry operations. Various franchising contracts employed by the franchisor are analyzed within the dynamic fashion franchising channel in different evolving periods of the company. Furthermore, we integrate the insights with the

findings generated from multiple sources including in-depth interviews and discussion with the franchisor and the franchisees, and the review of relevant documents, to achieve a better validity of the outcomes.

To enhance the reliability of the case study, we initially formulate the systematic procedure for each step. The formulated plan is tested as pilot projects with GJG and further improved according to the feedback and suggestions. Categorization for the target interviewees is also conducted. Four target groups are defined as the decision-makers of GJG, who are the President, the General Manager and the Vice General Manager; the senior management for the franchising business of GJG including Franchising Director, Retail Director, Finance Director, Inventory Director and the regional managers of the Franchising Department; the crucial provincial agents and the key regional franchisees distinctive for the regional market status, sales volume, number of retail outlets and duration of cooperating with GJG. We adopt the 5-level questions portfolio depicted by Yin (2009) to develop the substantive interview questions for each group to extract the comprehensive qualitative evidence. The guideline of questions for the interviews is enclosed in the appendix. All the interviews are conducted by two experienced analysts to ensure the validity. The evidence collected from individual interviews is cross-checked and cross-evaluated by both analysts to avoid any ambiguity and misunderstanding. If any biased information is detected, additional discussions are carried out to gain a better grasp for any misunderstanding inputs. Furthermore, the relevant documentation of GJG, including the standard format of franchising contracts and the regional franchising business reports, are reviewed as supporting materials after being checked for the facticity and validity. Based on the findings generated from the case study, the key facts upon the implementation of franchising contacts are discussed from the perspectives of the channel interaction, channel operations and channel coordination. Fig.3 demonstrates the research model.
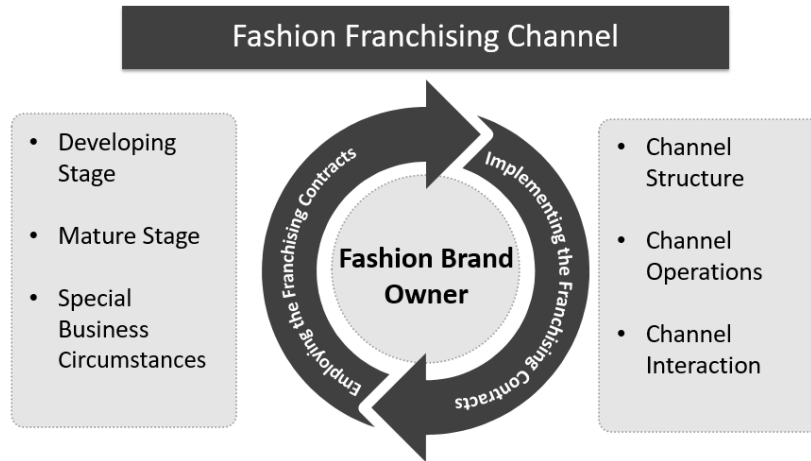
Fig.3. The research model

3.1. Company background

Founded in 1999, Guangzhou Jinyu Garments Co., Ltd (GJG) is a famous fashion company in China. Operated through the two well-reputed fashion brands names of A.Yilian and A.Sgirl, the company is recognized as one of the biggest fashion brand owners covering nearly all the provinces in China with more than one thousand retail outlets. GJG distributes its products through multiple channels with the presence of direct retail shops (operated by GJG), franchised shops (operated by the franchisees) and the online sales channel (operated by GJG). Among all the channels, the franchising business is reported to provide the largest contribution to the total sales volume. In light of the complexity of the franchising business, GJG applies a series of franchising contracts for the cooperation with different channel members, e.g., provincial agents, franchised distributors and joint-retailing cooperators. The franchising contract portfolio greatly helps GJG to well develop from a small wholesale fashion company to the owner of the leading young lady fashion brand in China. Focusing our case study on GJG enables us to obtain a holistic understanding of franchising operations in the fashion industry together with a comprehensive knowledge of how the franchising contracts function in practice.

3.2. The structure of the franchising distribution channel of GJG

Notice that above 80% of the total sales volume of GJG is obtained from the franchising business. Due to the unbalanced economic situation in different provinces and the varying capacity of the franchisees, GJG faces an intricate structure of channel members within the franchising system. (see Fig. 4), which can be featured as multiple distribution channels. The combination of provincial agents and sub-regional franchisees is the most widely observed channel operations in GJG's franchising

system. Under this hybrid system, GJG first supplies the products to the provincial agents. The products are then distributed to the sub-regional franchisees who operate retail shops, notated as Shop (F1). Nevertheless, some provincial agents also penetrate into the retail business via its own shops, notated as Shop (F2). Distributing the products through immediate regional franchisees is another emerging observation in GJG's franchising system. GJG can effectively shorten the franchising channel by skipping the provincial agents and directly supplying the products to the immediate regional franchisees. Then, the immediate regional franchisees sell GJG's products in the retail market via their shops, notated as Shop (F3), without the control and supervision exerted by any provincial agent. Under some circumstances, joint-retailing cooperators occur in GJG's distribution channel as special franchisees. For instance, seeing the difficulties of expanding business in some key cities in China or seeking the cooperation with strategic channel partners e.g. a famous department store, GJG tends to work with the joint-retailing cooperator for opening the jointly owned retail shops, notated as Shop (F4), to make full use of the resources for better franchising operations.
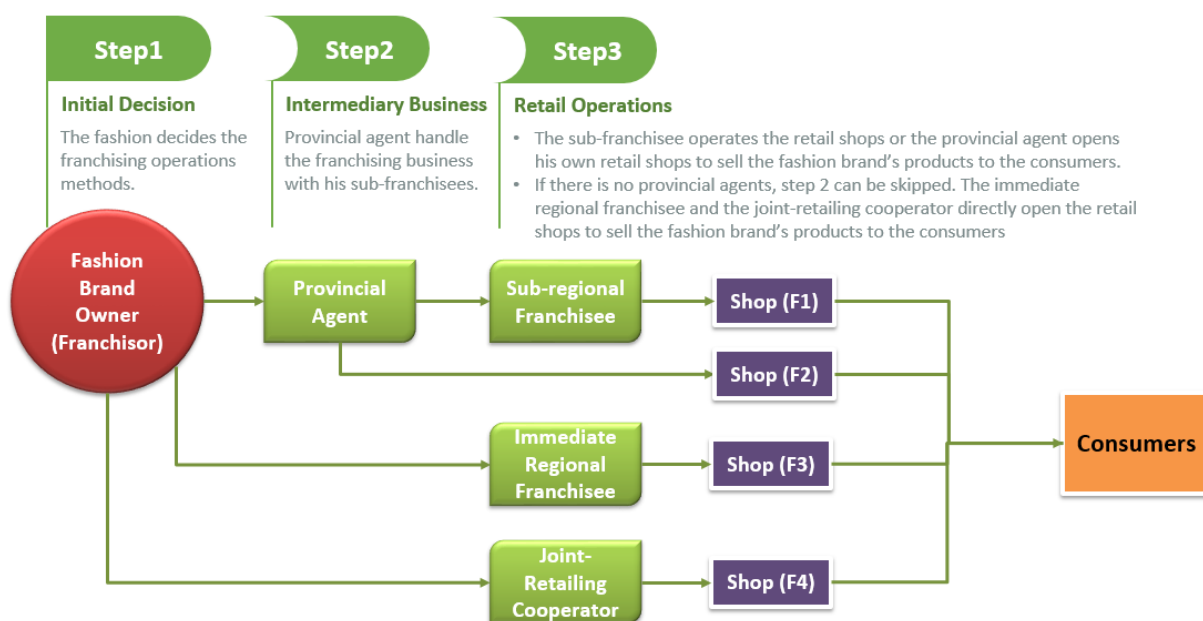
Fig.4. The franchising channel structure of GJG

3.2.1 Provincial agent

The provincial agent is the channel member handling the franchising business of the whole province. There are two types of provincial agents existing in GJG' franchising system. One is the single-provincial agent whose franchising business is restricted within only one province. The other is the cross-provincial agent who manages the franchising business in at least two provinces. Provincial agents are at the top of the pyramid of GJG's franchising distribution channels., the company has 18

single-provincial agents and 1 cross-provincial agent[2] in total. Permitted by GJG, nearly all the provincial agents have established the sub-franchising systems in their own regions in addition to their retail shops. Noticeably, the sub-franchising systems are regulated by the franchising contracts offered by GJG.

It is undoubted that the provincial agents play critical roles in the business expansion of GJG. On the other hand, however, the provincial agents also share certain portions of the revenue from GJG, which is considered negatively affecting the total profit of the company. Consequently, conflicting interests are detected between GJG and the provincial agents, which may hinder the optimization of the whole distribution channel. Therefore, GJG is motivated to tighten the control over the provincial agents in recent years. From 2015 to 2016, GJG has even withdrawn the franchising rights of several provincial agents due to their poor performance.

3.2.2 Regional franchisee

The regional franchisee is the franchisee directly operates one or several franchised shops in specified cities or areas with a relatively small scale and limited marketing resources. The regional franchisees consist of direct regional franchisees who are developed by GJG and sub-regional franchisees who are developed by the provincial agents. Both the two types of regional franchisees are granted under the franchising contracts issued by GJG. Compared to the sub-regional franchisees, the direct regional franchisees interact more closely with GJG in the marketing activities including the seasonal ordering, the marketing communication and the promotion. In addition, the direct regional franchisees also demonstrate a higher level of loyalty to the franchising system than the sub-regional franchisees.

It is notable that nearly two-thirds of the hundreds of regional franchisees are the sub-regional franchisees. GJG keeps putting efforts in recent years to increase the number of the direct regional franchisees aiming to shorten the distribution distance and impose stricter control on the franchising system. The increasing number of the direct regional franchisees also helps GJG to achieve the improvement in business capability and enhance the sense of belonging in the franchising channel.

3.2.3 Joint-retailing cooperator

The joint-retailing cooperator refers to the franchisee involving in the channel operations but is

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2 The only cross-provincial agent is based on Gansu province, which simultaneously handles GJG's franchising business in Qinghai province and Ningxia province.

not totally controlled by the franchising system. This kind of franchisees is particularly needed for some special business cooperation, e.g., sharing the costs and risks when opening a regional flagship shop in major cities. The joint-retailing cooperators include joint-operators and trustees. The joint-operators can negotiate the commercial terms such as the operations investment and the rate for sharing the revenue with the franchisor. For the case of GJG, the joint-operator must burden the cost for the store operations while GJG is responsible for the cost of the workforce, staff training and production. Specified by the franchising contract, the joint-operators can share a fixed percentage of the profit margins generated by the retailing operations, sometimes with the sales target. On the other hand, the trustees exist only when GJG lacks enough capacity of maintaining effective franchising management due to the remote location or short of sufficient resources. The trustee is thus authorized to handle the store operations without any proprietorship of the shops. Under the franchising contract, GJG bears nearly all the operations costs and risks while the trustee can obtain a fixed service charge or a certain percentage of the sales revenue[3].

As emphasized by GJG decision-makers, although the number of joint-retailing cooperators is relatively small compared to the provincial agent and the regional franchisee, they do exert important effects in the franchising system. According to GJG senior managers, the channel resources, the operations team and the market reputation are the key indicators when they select the joint-retailing cooperators. Meanwhile, they also thoroughly evaluate the potential benefit, cost, and risk before further proceeding the cooperation with the joint-retailing cooperators.

Table 6. Members of the GJG franchising channel

Franchisee Type	Franchisee Sub-category	Characteristic
Provincial Agent	Single-provincial agent	Handling the channel business of the one province. Granted to develop the sub-franchising system.
	Cross-provincial agent	Handling the channel business of more than one province. Granted to develop the sub-franchising system.
Regional Franchisee	Direct regional franchisee	Interact closely with the franchisor in the marketing activities, e.g., seasonal ordering and promotion implementation.
	Sub-regional franchisees	Closely controlled by the provincial agents and less capable of negotiating the business activities for their own.
Joint-Retailing Co-operators	Joint-operator	Co-operates the shop with the franchisor, may negotiate for the marketing terms for more commercial benefits.
	Trustee	Handle the operations without owning the shop and burdening any cost. Obtain a fixed charge or a certain percentage of the sales.

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3 The trustee can attain her profit under the agreed Key Performance Indicator (KPI), e.g. monthly or annual sales revenue or net profit.

3.3. The franchising contracts in GJG

Due to the different characteristics of the channel members, a portfolio of franchising contracts is adopted by GJG to manage the franchising system. Noteworthily, as accentuated by GJG decision-makers and the senior management staff, the franchising contracts vary in different periods of development.

3.3.1 Developing stage

Since GJG initiated the business from wholesaling, the wholesale price contract has been widely applied in GJG's franchising system from 1999 to 2000. As the business grows, GJG begins to incorporate the wholesale price contract with other franchising contracts. Regarding the inventory holding cost and the market uncertainty, the buyback contract is employed to share the inventory risk with the franchisees, where 5% to 20% of the unsold products are allowable to be returned from the franchisees to GJG at discounted prices. Further driven by the increasing order, the wholesale price contract is extended to the quantity discount contract for the pre-season ordering to encourage the franchisees to purchase in larger quantity. Such discount is only available for the pre-season order excluding the replenishment order. Afterwards, GJG revises the quantity discount from all unit discount to partly quantity discount with minimum order quantity. The franchisee can only enjoy the quantity discount for the proportion above the basic order quantity standard.

3.3.2 Mature stage

As the business further expands, GJG's franchising system becomes much more mature and stable. As a result, it leads to the emphasis on the centralized control for improving the channel efficiency. Therefore, since the winter of 2008, GJG starts to implement a two-stage ordering policy under the quantity commitment contract specifying the total seasonal order quantity. The franchisees can place the orders in two different time stages and GJG must satisfy any request of the franchisee within the contracted order quantity. The punishment is triggered for either party who fails to fulfill the terms specified in the contract. Furthermore, the franchise fee contract is utilized with the payment of the franchise fee for entering GJG's franchising system, which also guarantees the franchisee upon the unique franchising right in a specific region. The franchise fee serves not only as a criterion to select the qualified franchisees but also as a mechanism to balance the profit allocation within the franchising channel. As mentioned by some franchisees of GJG, the franchise fee can even push the franchisor to

invest more on branding and encourage the franchisees to devote more efforts to marketing. Motivated by the request of profit management, GJG applies the retail price maintenance (RPM) contract to fix the retail price for all the distribution channel. It contributes to better controlling the profit and maintaining the brand positioning. The franchisees of GJG address that they also feel comfortable with the RPM contact since it can effectively dampen the double marginalization problem and properly regulate the market competition.

3.3.3 Special business circumstances

Judged from the case study, GJG occasionally encounters the situations to deal with some special contractual interactions during the franchising operations, especially for the cooperation with the joint-retailing cooperators. The royalty payment is commonly applied by the means of revenue-sharing contracts or profit-sharing contracts. Both the two-part tariff contracts contain the sharing-arrangement for the sales volume or profit in addition to the terms of the wholesale price and the franchise fee. When GJG employs the revenue-sharing contract or the profit-sharing contract, the company may reduce the wholesale price even lower than the production cost to strengthen the competitive capability. The potential lost shall be compensated by the joint-operator with the rebate from the sales value or the obtained profit. Another situation is the strategic promotion occurring in the seasonal marketing events that are activated by GJG as the response to the competition or to push the sales of specific products. GJG issues the tying contract bundling some promotional products with a special offer to the franchisees. Under the tying contract, the franchisees must compulsorily order the bundled promotional products and actively push the sales for such products. Meanwhile, GJG may reward the franchisees with additional rebates as the complementarity according to their sales performance. As for the cooperation with the trustees, GJG sometimes offers the incomplete contract to construct the equilibrium governance structure with negotiable space. The incomplete contract works as the tacit mechanism to facilitate both parties to strive for the optimality of the franchising system with joint-efforts.

Table 7. summarizes the franchising contract application of GJG in different stages of the development. In the developing stage, the core objective of GJG is to rapidly expand the business and increase the sales revenue as well as the market share by boosting the order quantity in multiple distribution channels. Therefore, the major consideration for employing franchising contracts in the developing stage covers the wide acceptability for franchising partners, the easy handleability for the

implementation and the prominence of channel competitiveness. As the franchisor steps into the mature stage, the core objective is transferred to maintain the market status, better control the channel operations and optimize the channel resources. As a result, the major consideration for employing franchising contracts in the mature stage turns to the promotion of overall channel superiority, the dominance in the franchising system and the agglomeration of preponderant channel resources. While in rolling out special marketing plans, GJG can customize the franchising contracts to incorporate the mutual benefits for the individual franchising cooperator or the strategic advantages in a long term. In general, the company firstly identifies the periodical strategic goals before selecting a contract, e.g., to enhance the market share or to optimize the resource. Then the company develops the channel strategy with the consideration of the channel position, channel structure and channel member portfolio, which constructs the framework to design the franchising contract with the key business variables. In the meantime, the company also assesses the features of each franchisee on the business characteristics, company capacity, duration of cooperation, business preference and focus, and even the personality of the decision-maker. Only after the entire systematical evaluation finishes, the franchising contracts are designed and offered to the franchisees. In some circumstances, the contract may be revised according to the feedback or counteroffer from the franchisees. Usually, GJG may not issue many different contracts at the same time, which maintains the stability and consistency of the franchising system.

Table 7. Summary of contract application of GJG in different stages

Stage	Core Objectives	Major Considerations	Mainly Employed Contracts	Functions of the Contract
Developing Stage	Rapidly expand business; Increase sales revenue and market share by boosting the order quantity.	Wide acceptability; Easy handleability for the implementation; Prominence of channel competitiveness.	Wholesale price contract	Initiate the franchising business. The transactions are straightforwardly processed only by the wholesale price.
			Buyback contract	Reduce the inventory holding cost of the franchisee and share the franchisees' inventory risk.
			Quantity discount contract	Encourage the franchisees to raise the order quantity.
Mature Stage	Maintain the market status. Better control the channel operations; Optimize the channel resources.	Promotion of overall channel superiority; Dominance in the franchising system; Agglomeration of preponderant channel resources.	Quantity commitment contract	The franchisees can place the orders with better market information and more flexibility.
			Franchise fee contract	Guarantee the unique franchising right of the franchisee. Push the franchisor to invest more on branding.
			Retail price maintenance contract	Impose better control in pricing, profit management and market positioning
Special Circumstances	Cope with special marketing plans or business opportunities.	The mutual benefits for particular franchising co-operator. The strategic advantages in a long-term	Revenue/Profit-sharing contract	Reduce the ordering cost of the franchisee and strengthen the competitive capability.
			Tying contract	Push the sales of specific products in the strategic promotion.
			Incomplete contract	Facilitate the channel members to strive for the optimality for the franchising system with joint-efforts.

3.4. The implementation of the franchising contracts

It is clearly depicted in the GJG case study that the franchising contracts function significantly in the distribution channel in the fashion industry. In the following, the implementation of franchising contracts in GJG is discussed in the channel structure, channel operations and channel interaction.

3.4.1 Channel structure

The implementation of franchising contracts can synthesize the information on the products and market knowledge with the channel resources and attract qualified franchisees. According to GJG's senior management, the franchising contract with the signal of lower start-up cost may greatly drive the potential franchisees to join in the system. Additionally, allocating the decision rights for the critical terms such as pricing, franchise fees and royalties, is another important function of implementing the franchising contracts to maximize the channel benefit. Unlike some other franchisors that strictly restrict the multi-unit propensity of the franchisees, GJG holds an open attitude for multi-unit tendency and encourages the franchisee to expand the business by operating more shops. Concerning the channel conflict and the controversial activities among the channel members, the franchising contract can be utilized to control the disharmonies among the channel members and deploy the franchisor's preference as acquiring the franchised outlets and transferring them to be the company-owned ones.

3.4.2 Channel operations

For the channel operations, considering the franchisees' risk preference and the demand uncertainty, GJG implements the franchising contracts to improve the channel performance through the variables such as the royalty, pricing, incentive scheme and service level. According to our case study, for instance, the royalty payment can keep the franchisees working in line with the best interest of the whole channel and encourage information sharing between the franchisor and the franchisee (Gallini and Lutz, 1992; Agrawal and Lal, 1995; Hempelmann, 2006; Yan and Wang, 2012). With the retail price maintenance (RPM) contract, GJG regulates the retail price that is simultaneously fixed in the ERP system for the entire franchising channel. Besides, GJG also applies the profit-sharing contract to encourage the franchisees to share demand information. On the other side, the franchisees' risk preference is also frequently addressed by the decision-makers and the senior management of GJG. For example, the franchisee's risk aversion is preferable for the franchisor and beneficial for the whole franchising system.

3.4.3 Channel interaction

The franchising contracts can be utilized to interact with the channel members. In practice, GJG

offers franchising contracts in three different approaches to distinguish the franchisee types and detect their private information. The three approaches include the individual contract[4], the menu contract[5] and the pool contract[6]. As emphasized by the senior management of GJG, once the franchising business relationship is settled, the free-riding and the moral hazard problem unavoidably occur when the franchising contracts are implemented. With the dominance in the franchising system, GJG intensively imposes monitoring in the franchising channel, particularly for those new franchisees and the franchisees only operating one shop. Even at a high cost, the monitoring proves effective to supervise the franchisees and protect the brand reputation and equity. Besides, a certain amount of deposit must be paid by the franchisee to GJG as the guarantee before the franchising contract takes effects. If any franchisee is caught free-riding that seriously breaches the terms, GJG may terminate the contract immediately, withdraw the shops and confiscate the deposit. GJG imposes strict quality control standard as well to raise the threshold for free-riding of adding some low-quality products into GJG shops. As mentioned by GJG managers, when implementing the profit-sharing contract with the joint-operator, GJG may increase the profit share percentage as the eventual incentive to reduce the motivation of moral hazard.

## 4. Key factors: implementing franchising contracts in practice

Based on the detailed literature review in Section 2 and the case study in Section 3, a list of elements can be identified to influence the implementation of franchising contracts in various dimensions. The addressed factors can be summarized as information updating and information asymmetry, monitoring, free riding, moral hazard problem, royalty, incentive mechanism, service level, pricing, risk, power structure, franchise size, single-unit franchising and multi-unit franchising, dual distribution and signaling. Stimulated by these elements, we highlight the key factors for implementing franchising contracts in practice from the dimensions of the channel structure, channel operations and channel interaction (see Fig.5). The details are discussed as follows.

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4 Designed for one franchisee type and does not consider the individual rationality constraint of the others.

5 A separating equilibrium contract where each franchisee selects the contract expressions designed strictly for her type.

6 The contract must satisfy the participation constraint for all the types of franchisees.
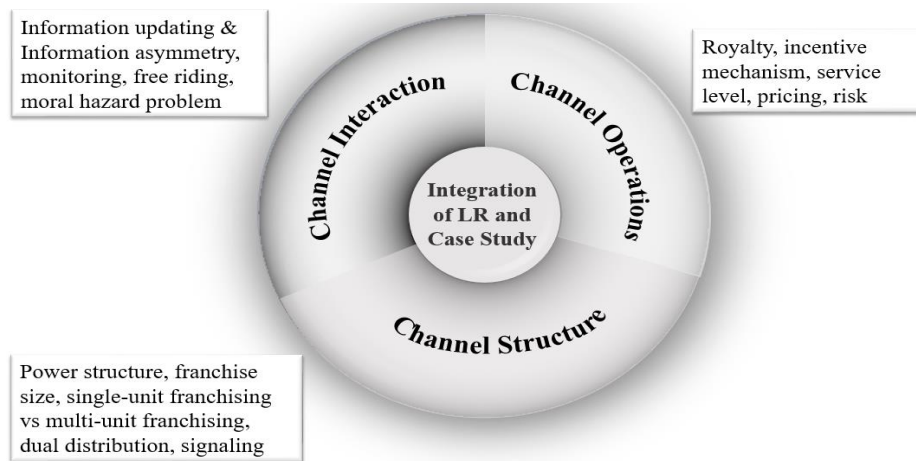
Fig.5. Key influencing factors

4.1. The factors within the channel structure

4.1.1. Power structure

During the case study, GJG decision-makers emphasize that the power structure can influence the framework of franchising contracts. In particular, the bargaining power and decision rights are critical in constructing the framework of the franchising channel. The findings are supported by Dant et al. (2011) mentioning that the asymmetrical power setting allows the franchisor to reign in the whole system but may slow down the growth of the franchising business. However, such power structure is overturning with the important role that franchisee plays, which can also be found in López-Fernández and López-Bayón (2017) discussing that the increase in franchisees' bargaining power may bring positive socialization effect towards the hold-up risk and the franchising contract termination. In some special case, the involvement of a third party, such as a franchisee council, can also help to coordinate the allocation of power in the franchising system (Ehrmann and Spranger, 2007; Hendrikse and Jiang, 2011).

4.1.2. Franchise size

Franchise size is the indicator reflecting the potential competitiveness of the franchising system and the franchisor's capacity. As reflected in the case study, both the GJG senior management and the franchisees admit that the franchise size is crucial in capturing the market share. In the literature, franchise size is featured as the measurement to prove the positive correlation between the royalty and the channel performance (Polo-Redondo and Lucia Palacios, 2011; Kacker et al., 2016). Franchise size is also the control variable to analyze the contract duration and the multi-unit propensity (Vázquez,

2008). The royalty rate is found negatively influencing the franchise size and the negative impact grows stronger as the system matures (Shane et al., 2006). According to the experienced franchisees interviewed in the case study, the young franchisors usually pay more attention to the franchise size, which is supported by Shane (1996).

4.1.3. Preference of multi-unit franchising

As verified by the interviews and the discussions in our case study, multi-unit franchising becomes obvious as a striking trend, which is mentioned as well in Grünhagen and Mittelstaedt (2005). According to Kalnins and Lafontaine (2004) and Kaufmann and Dant (1996), 84% of the franchised restaurants are operated by multi-unit franchisees and 88% of the franchisors employ multi-unit franchising. Opposite to the findings of Vázquez (2008) that the franchisor holds a negative attitude towards multi-unit propensity due to the concern of greater free riding threat, GJG decision-makers express a positive attitude towards the franchisee's multi-unit franchising propensity. Summarized in the present literature, economies of scale, monitoring expenses, rapid system growth, system-wide adaptation, general reduction of system attrition rates, and strategic delegation of price or quantity choices to franchisees, are all considered as the key driving forces to push the expansion of multi-unit franchising (Azoulay and Shane, 2001; Kalnins and Lafontaine, 2004; Kalnins et al., 2006). From the franchisees' perspective, the franchisor's strategy and experience, and the financial benefits are regarded as the main factors for the decisions on single-unit franchising or multi-unit franchising (Dant et al., 2013).

4.1.4. Dual distribution

The dual distribution channel is quite a widespread governance structure in the fashion industry. GJG has been implementing such a channel approach for a long time. Dual distribution combines the features of fully franchised and fully company-owned channels, where the franchised outlets coexist with the company-owned outlets. The advantage of dual distribution is supported by Hendrikse and Jiang (2011) verifying that dual distribution is an efficient approach to improve franchising operations depending on the benefits to the system related to the investment of the channel members. Concerning the moral hazard problem, the company-owned outlet is preferable to the franchised outlets as the franchisees are more incentive-based (Rubin, 1978).

4.1.5. Signaling

As discovered in the case study, signaling is an important function of franchising contracts to link

the individual demand of the channel members. In the literature, the above function is highlighted as the franchisor's signaling strategy for the high demand for a risk-neutral agent. Such strategy substantially reduces the distortion in the franchising channel even at a high signaling cost as the service is unobservable (Agrawal and Lal, 1995). The Franchising Director and the Retail Director of GJG both emphasize that signaling is a useful tool to enhance the mutual understanding of business dimensions with the franchisees. The findings are supported by Shane et al. (2006) with the signaling theory demonstrating that the size of the franchise system is larger when the investment to initiate the franchising is lower. A similar application of the signaling theory can also be found in Combs et al. (2011) with the conclusion that the earning information should be released by the franchisor to the franchisee before it comes to a franchising contract.

4.2. The factors within the channel operations

4.2.1. Royalty

As stressed by GJG and his franchisees, undeniably, the royalty is a core problem when a franchising contract is being negotiated. In the literature, the royalty is regarded as the most decisive issue that distinguishes the characteristic of a typical franchising contract (Lal, 1990; Blair and Lafontaine, 2005). Defined by Babich and Tang (2016), the royalty rate is a continuous payment for the franchisor as a portion of the revenues or profits generated by the franchisee. Mentioned in the case study, GJG management admits that the royalty also functions as the coordinating and signaling tool to entice the information sharing and the marketing activities, which is in line with the findings of Gallini and Lutz (1992), Agrawal and Lal (1995), Hempelmann (2006) and Yan and Wang (2012). According to Lanchimba et al. (2017), the royalty also works as the balancer to synthesize the risk and incentive to achieve the franchising channel coordination.

4.2.2. Incentive mechanism

The incentive mechanism is the important element for the proper implementation of franchising contracts. Similar to the moral hazard, the incentive is also regarded as a two-sided mechanism by the franchisees of GJG. The incentive scheme is analyzed as the instrument in the literature to unify the respective interest of the franchising channel members (Hendrikse and Jiang, 2011). As examined in Hempelmann (2006), the franchising contracts involve the incentives for the marketing activities of both the franchisor and the franchisee in the scenario of information symmetry and asymmetry. Besides, the application of royalty is proved to be sufficient for designing optimal franchising contracts

considering risks. In Babich and Tang (2016), the authors explicate how the incentive can be positively related to the risk and propose a risk-incentive royalty that influences the performance of the franchising contracts.

4.2.3. Service level

Though the fashion products seem not closely related to service, the fashion brand owners such as GJG do plan to incorporate the service level into the retail sector, not only to provide a better shopping experience, but also to increase the customers' satisfaction and loyalty. The franchisor demands their franchisees to participate in such service involvement as well. In the literature, the service can be balanced with the royalty rate but negatively affected by the monitoring cost (Lal, 1990; Agrawal and Lal, 1995). As the franchising business grows, the franchisor can better observe the franchisees' service level via the monitoring systems (Shane et al., 2006). According to Desai and Srinivasan (1995), the observability of the service impacts the signaling of the high-demand franchisor. The service level can be enhanced by properly setting the variable income in the three-part franchising contract.

4.2.4. Pricing mechanism

Pricing is the key component when issuing the franchising contract. As for GJG, the properly designed pricing mechanism with the franchise fee and the royalty enables the franchisor to share the positive information to attract the new franchisee or seize other brand's franchisees. In the literature, the main pricing-related determinants include the wholesale price, the royalty rate, the fixed franchise fee and the initial investment (Shane et al., 2006). The pricing mechanism constructs the links connecting all the channel members including the franchisor, the franchisee or even the manufacturer (Anderson and Weitz, 1992). In some special franchising contracts, e.g., the retail price maintenance (RPM) contract applied by GJG, the retail price is even specified in the clause and fixed in the ERP system. In addition, the pricing mechanism may affect the size of the franchising system and signal the information updating as well (Desai and Srinivasan, 1995). Opposite to the findings of Lafontaine and Shaw (1999) regarding the variation in the franchise fee and the royalty rate, Shane et al. (2006) discover that the franchisor in big scale prefers to revise the pricing mechanism by increasing the franchise fee and decreasing the royalty rate over time.

4.2.5. Risk

Concurred in the opinion of both the decision-makers and the senior management of GJG, risk-

related variables are widely observed in applying the franchising contracts in the distribution channel. They all agree that the risk preferences of the channel members are among the most influential factors in franchising operations. In the literature, risk preference refers to the attitudes when the profit function is applied for the channel coordination, which can be categorized as risk-averse, risk-neutral and risk-seeking. According to Huang (1997), the franchisee's risk aversion plays a critical role for coordinating the franchising channel. The franchisee will cooperate with risk-averse and risk-neutral franchisors while the franchisor prefers to cooperate with risk-adverse and risk-seeking franchisees. Whereas, under all the franchisee's risk preferences, cooperation creates the largest profit for the entire channel. Mentioned by some regional managers of GJG, the royalty rate may fluctuate with the different risk preferences of the channel members. As the royalty rate increases, the risk can be transferred from the retail outlet to the franchisor (Lafontaine, 1992). The positive relationship between the risk and the incentive motivation can be identified for designing the franchising contract (Prendergast, 2002; Shi, 2011; Fung, 2013; He et al., 2013 and Lanchimba et al., 2017). Based on the risk-cost effect and the information-induced effect-return effect, as the risk increases, the adjustment in royalty rate to provide more incentive can improve the channel performance (Lafontaine and Bhattacharyya, 1995; Lafontaine and Slade, 2014).

4.3. The factors within the channel interaction

4.3.1. Information updating & Information asymmetry

Information updating and information asymmetry are crucial for implementing the franchising contracts in fashion supply chains. Adequately addressed in the operations of GJG, information updating is critical for enhancing the demand forecasting. In the literature, Hammond (1990), Fisher and Raman (1996), Iyer and Bergen (1997), Eppen and Iyer (1997a, 1997b), Kim (2003), Tang et al. (2004), Choi (2007), and Cachon and Swinney (2011) all study the use of the market information regarding to postponing the ordering decision time point to improve the inventory planning in the fashion business. The optimal inventory policies are derived under the respective scenario and the insights are generated by emphasizing how information updating can improve the supply chain performance and coordinate the franchising channel. Further revealed by the case study, implementing the contractual quick response is quite popular in the fashion industry. Quick response is widely explored with information updating from the perspectives of the strategic forward-looking consumers, the inventory service and the competitive market environment (Lin and Parlakturk, 2012; Yang et al.,

2015; Choi, 2016a). The interaction between the quick response and the demand forecast can be improved by market information updating with the franchising contracts in the online-offline operations of the fashion industry (Choi et al., 2017).

Extracted from the case study, both GJG and their franchisees at all levels are assumed to keep their own private information on the cost, profit or market demand. The franchising contracts work as the mutual beneficial mechanism to alleviate the negative effect of information asymmetry, for instance, the optimal franchising contract with the involvement of information asymmetry in the private marginal cost (Hempelmann, 2006). Besides, the inefficiency evoked by the asymmetric private information under the franchise contract and the franchise fee with service requirement contract is verified by Xie et al. (2016).

4.3.2. Monitoring

As shown in the GJG case, monitoring is widely imposed by both the franchisor and the provincial agents as a supervising tool to ensure the franchisees to behave in line with the best interest of the franchising channel. The findings are supported in the literature with the insights that the monitoring right is one of the focal elements in the franchising contract, which is crucial for the franchisors to handle the franchising relationships and keep the franchisee on the right track of obeying the contract terms (Lal, 1990; Bradach, 1998). Following the agency theory, franchising can be characterized as a balance of the monitoring cost and the risk of free riding (Rubin, 1978; Lafontaine, 1992). The insights of monitoring theory are enriched by Gallini and Lutz (1992) with the comparison on monitoring both the company-owned outlets and the franchised outlets. The findings prove the conclusion of Brickley and Dark (1987) that the decision to franchise with the franchising contracts can be largely affected by the monitoring cost. The monitoring cost, accounting for a portion of the franchisor's total cost, can be reduced by transferring the compensation to up-front fees in the franchising contract (Shane, 1998). Posited by Hsieh et al. (2010) and Kacker et al. (2016), downstream ownership can improve the monitoring with lower variability and higher reliability. The franchisor in a better position, such as GJG, may devote the capacity to monitoring the franchisees to protect the brand equity, especially for the new-entrant single-shop franchisees.

4.3.3. Free riding

Mentioned by the senior management staff of GJG, once the franchising system is established, free riding as a horizontal problem unavoidably occurs in the distribution channel. Consequently, strict

regulations should be imposed when designing the franchising contracts to cope with such a problem. The free riding issue is widely addressed in the literature. Illustrated by Kalnins (2004), free riding is exampled by the franchisees' encroachment on franchisor's brand name and adding proximate products to the existing franchisor's ones. Due to the insufficient controlling mechanism, certain franchisees may reduce the quality maintenance but still obtain the full amount of sales revenue as the customers hold the assumption that the offered products are of the same quality as those of other outlets under the same brand (Rubin, 1978; Bork, 1978; Mathewson and Winter, 1984). Argued by Sadeh and Kacker (2017), the externality that the franchisee's efforts on the quality are not fully compensated induces the free riding in the distribution channel. It also negatively affects the overall product quality of the brand. However, this phenomenon is not commonly observed among the franchisees of GJG, because GJG carries out harsh quality control by himself as the barrier for free riding. Specified by Vázquez (2008), the franchisors with less contracting experience face higher potential free riding risk. The problem is not applicable for GJG as a mature franchisor with adequate contracting experience for all kinds of franchisees. Studied from the theory of resource scarcity, the result of the game between the monitoring cost and the free riding cost may decide whether to maintain the franchising or to carry out the ownership redirection (Combs et al., 2011). In fact, GJG does have withdrawn the franchising authorization of some franchisees caught free riding and acquired their outlets to be company-owned. To some extent, with the increasing cost brought by free riding, the franchising channel may shrink and decline (Michael, 1999; Combs and Ketchen, 2003; Combs et al., 2004).

4.3.4. Moral hazard problem

Similar to free riding, the moral hazard is also treated as the critical problem once the franchising contract comes into being. In the literature, the moral hazard problem arises from the inverse relationship of risks and incentives under the agency theory framework on the contract design and payment mechanism (Bolton and Dewatripont, 2005; Macho-Stadler and Pérez-Castrillo, 2001; Blair and Lafontaine, 2005). Admitted by both the GJG decision-makers and the key franchisees, the two-sided moral hazard problem may be induced naturally during the business interaction. The problem is explained by Brickley (2002) that the optimization of allocating risks and two-sided moral hazards can be achieved with the sharing contracts. The conclusion of Brickley (2002) explicates that the royalty rate should be increased to cover the cost brought by the two-sided moral hazard. Aiming to reduce the moral hazard problem, Babich and Tang (2016) suggest that increasing the profit share for the

franchisee is the substantial incentive to reduce moral hazard problems. The suggestion is verified to be effective in GJG case study.

The key factors influencing the implementation of franchising contracts in some important related papers are summarized in Table 9 in the appendix.

5. Conclusion, insights and directions for the future research

5.1. Summary

With the comprehensive literature review and the case study on GJG, we have identified different types of franchising contracts prevalently implemented in the distribution channel. In addition, we have explored how these franchising contracts function in the fashion industry and elaborated how the franchising contracts are analyzed with the relevant analytical approaches. We find that the franchisor tends to offer a series of franchising contracts to different types of franchisees to cater their diverse characteristics within the complex franchising distribution channel. In the meantime, during the development process, the franchisor prefers to employ different franchising contracts with the respective objectives and considerations in different situations. Integrating the literature review and the findings of the case study on GJG, we have identified a list of key factors including information updating and information asymmetry, monitoring, free riding, moral hazard problem, royalty, incentive mechanism, service level, pricing, risk, power structure, franchise size, single-unit franchising and multi-unit franchising, dual distribution and signaling, which influence the implementation of franchising contracts in practice regarding the channel structure, channel operations and channel interaction.

5.2. Managerial insights derived from the literature review and the case study

The managerial insights for answering the four research questions proposed at the beginning are summarized as the conclusion of this paper.

A. Research findings on franchising contracts for the fashion industry

Based on the literature, the main research findings on franchising contracts for the fashion industry can be specified as the application of contracts in fashion supply chains and the study on franchise contracting systems. As for applying contracts in fashion supply chains, due to the demand uncertainty and the flexibility in the fashion industry, the wholesale prices with quantity discounts and

return or markdown money policies, revenue or profit sharing mechanism, sales rebates and sales efforts, and risk preference of channel members are considered to be the vital factors for the application of contracts in fashion supply chains in the literature. As for franchise contracting systems, the research findings in the areas of contract design and contract optimization, contract offering and selection, coordination for the franchising channel, franchising contract evolution, duration and termination and governance structure and ownership of the franchising channel are further validated in the case study on the fashion franchisor. With the comprehensive investigation on the present research, we have found that inadequate research efforts are engaged in the research on franchising contracts, particularly in the fashion industry area. More research efforts, therefore, should be contributed to applying the franchising contracts in the fashion distribution channel.

B. Implementations of the franchising contracts

Based on the literature review, we observe the prevalent franchising contracts can be categorized as simple franchising contracts, two-part tariff franchising contracts, integrated franchising contracts and particular franchising contracts. Integrated with the findings of the case study on GJG, we notice that the wholesale price contract is seldom used alone. It is always employed together with the buyback contract and the quantity discount contract to encourage the franchisee to boost the order quantity for the economy of scale. The quantity commitment contract is applied for flexible ordering with better market information. Due to the power dominance, the franchisor prefers to apply the retail price maintenance contract to fix the retail prices in all the distribution channel to maintain the brand image and optimize the market assets with considerable profit margins. Besides, the franchise fee contract and the revenue-sharing contract are both preferable to the franchisor for driving the franchisees to further devote to the franchising system with more marketing efforts. The incomplete contract is utilized by the franchisor upon some special channel members such as the joint-retailing cooperator to cope with the business relationship with subtle interactions. As for the regional promotion or themed products launching, the tying contract is imposed to bundle the specific products and motivate the franchisees to endeavor to deal with the market competition and penetration. Table 8. summarizes the advantages of the different franchising contracts.

Table 8. Summary of the advantages of different franchising contracts

Contract	Boost order quantities	Flexible ordering	Maintain the brand image	Maintain the profit margin	Entice more contribution	Handle subtle interactions	Push regional promotions
Buyback contract	Yes						
Quantity discount contract	Yes						
Quantity commitment contract		Yes					
Retail price maintenance contract			Yes	Yes			
Franchise fee contract					Yes		
Profit/revenue-sharing contract					Yes		
Incomplete contract						Yes	
Tying contract							Yes

C. Functions of franchising contracts in the fashion industry

Reflected by the case study on GJG, the franchising contracts contribute greatly to enhancing the efficiency of the channel operations and optimizing the market resources in the fashion industry. Aiming at attracting new entrants to join in the franchising system, the franchising contracts can specify the competitive strengths of the franchisor to strive for better channel resources, e.g., the quality franchisees. The franchising contracts can also regulate all the channel members to behave in line with the best interest of the whole distribution channel, especially in resisting the negative phenomenon in the channel operations including free riding and moral hazard problems. As mentioned in the case study, punishment or even contract termination is clearly stated in the franchising contracts as the game rule in the franchising system. In most circumstances, the franchising contracts manifest the dominance of the franchisor reining the entire distribution channel. However, the increasing bargaining power of the franchisee becomes more and more striking, reflected by the supplementary terms in the franchising contracts requested by the franchisee to demand more benefits, more incentives and more decision rights. The expanding power of the franchisee is regarded as the challenge to the traditional franchising governance as well. Facing the complex distribution structure, the franchisor is apt to offer the pool contract and the menu contract, not only to provide the flexible marketing solutions but also to detect the private information and business preference of the franchisee. Generally, the duration of the common franchising contracts is one year, which is renewable annually.

Some franchising contracts with the duration of three years also occur to tie up the cooperation with crucial franchisees, e.g., the provincial agents of the highly developed regions. Both the franchisor and the franchisee are fond of the franchising contracts remaining consistent within a relatively long period as it can stabilize the franchising system, maintain the brand image and accumulate the competitiveness and the sense of belonging among all the channel members.

D. Key factors of implementing franchising contracts in fashion supply chains

As shown in the case study, the implementation of franchising contracts in the fashion industry can be influenced by some key factors in the channel structure, channel operations and channel interaction. Within the channel interaction, information updating and information asymmetry are the critical factors for implementing the franchising contracts in the fashion industry, especially in the quick response production and the market demand forecasting. The franchisor can detect the franchisee's private information through their selections on the franchising contracts. The free riding and the moral hazard problem are considered as another two major concerns. The franchisor may impose the harsh monitoring clauses in the franchising contract to better control the franchising system and decrease the potential threats. For channel operations, the royalty, the incentive and the pricing mechanism are the key issues involved in the implementation of franchising contracts in the fashion industry. Concluded from the GJG case, the royalty and the incentive can be co-applied in the franchising contracts to deal with the franchisees of different risk preferences and improve the channel performance. Many franchisors pay increasing attention to the service for the consumers in retailing. It delineates the additional service involvement in the franchising contract, especially in VIP relationship management and the O2O channel interaction.

5.3. Limitations

Though our study provides comprehensive implications for franchising contracts in the fashion industry, the paper suffers some limitations. First, our search scope for the literature is constrained within the SCI indexed papers, which excludes some other database and commercial publications. The second limitation is that our case study only focuses on a single fashion company. The results of the case study may lack generalizability. Due to the resource limitations, we only can concentrate on a limited number of informants for the interview. Besides, personal biases may avoidably occur during the process of selecting papers and conducting the case study.

5.4. Future research opportunities

According to the findings derived from the literature review and the case study, future research directions are summarized as follows:

5.4.1. Multiple channel players

Most of the present research on the franchising contracts is conducted in the setting of one franchisor and one franchisee. However, derived from the GJG case, the franchisor usually operates the franchising system coping with many franchisees in multiple layers and may even allow the regional agents to develop their own sub-franchising systems. One prospective direction for the future research is to study the impact of implementing franchising contracts with multiple channel players, where the single franchisor-franchisee interaction may be upgraded to include one franchisor with multiple franchisees or even multiple franchisors with multiple franchisees. Given the broadened coverage of the channel members, both the vertical and horizontal competitive markets can be more dynamic and diverse. More efforts should be devoted to the research from the perspectives of different channel members, especially for the mutualistic phenomenon such as inventory allocations, channel relationships and control patterns.

5.4.2. Multiple products

Regarding the present research findings in the area, single product setting still dominates the study on franchising contracts. Nevertheless, discovered in the practice of the fashion industry, the franchisor always offers the product portfolio to the franchisee within the franchising contract framework. To enrich the research insights in such domain, multiple products scenario should be one of the prospective avenues for the future study. The academic concentration can be poured into how the menu of products affects the business decision of the channel members, and how the multiple-product involvement may diversify the research findings if a franchisor provides different but related products for the different distribution channels.

5.4.3. Complex franchise system

As can be observed in the case study, the fashion franchising channel operates in a complicated business environment with agile internal and external determinants. In such a sense, additional complexities should be worthy of further analysis regarding franchising contracts. As closely affecting the operations of the fashion franchising business, the law and legislation environment, the power or dominance transferred from the franchisor to the franchisee, and the risk management and sensitivity are the areas that scholars may further explore with priorities. Furthermore, as little literature is found

related to the channel integration of the online and offline presence, the strategic commitment in the franchising system and the mergence or acquisition of the channel members, future research efforts should be supplemented in such fields as well. Despite the limited findings, the macro environment for implementing franchising contracts has not yet been fully explored. More investigation is needed to analyze the deterministic environmental factors such as the competitive intensity and the governance structures in the market together with the entry pressure and the screening on the quality channel applicants. In addition, the future research can incorporate some supplementary entities involved in the franchising business for the more in-depth examination, e.g., the franchisee council and the external competitors.

5.4.4. More Variables

Owing to the nature of the franchising business, franchising contracts can be affected by a list of variables within the distribution channel. A future research direction is to conduct a variables-orientated study with more specific parameters. Derived from the literature review, some variables that are found influential but lack of adequate research attention, including the market demand uncertainty and variability, and the additional signaling mechanisms such as advertising and financial indicators. Moreover, some single variable should be jointly investigated with others for further insights, e.g., the incorporation of the wholesale price and the value-added service process, a menu of products with dynamic quality, the marginal and fixed cost of the production and the sales performance, and the interrelated mechanism linking the pricing and the promotion.

5.4.5. Information updating

Though intensive efforts have been found devoted to the research on information sharing and information asymmetry in franchising, the information-related area is still worthy of being more fruitfully addressed for the future research. As explored in the GJG case study, both the franchisor and the franchisee strive to improve the channel performance and efficiency by cultivating the data to enhance the accuracy of forecasting with joint-efforts. Information updating and balancing are crucial in implementing the franchising contracts, particularly with the involvement of cost, timing, demand randomness, sales prediction and profit. Admittedly, the existence of asymmetric information in the franchising channel leads to the problem of two-sided moral hazard and the negative psychological effect among the channel members. It should be further scientifically investigated in the future research as well.

As a remark, franchising has been developed into a critical business phenomenon related to many vigorous industries including the fashion industry as one of the most dynamic global business ecosystems. Franchising contracts are popularly implemented with different functions and features for coordinating the distribution channel and enhancing the business outcome in the fashion industry. We have discussed the implementation of different franchising contracts in the fashion franchising system from the perspective of the fashion brand owner. Our findings verify the significant functions carried by franchising contracts in the fashion industry. We also identify different crucial influencing factors related to implementing the franchising contracts under the diverse dimensions within the fashion franchising operations. The implementation of franchising contracts can be eventually improved for the fashion business with a better understanding of the addressed factors. It is beneficial not only for the franchisor and the franchisees but also for the whole industry.

Acknowledgement

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