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What makes a joint venture: micro evidence from Sino-Italian contracts

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Abstract

This paper provides new contract-level evidence on control rights allocation in order to define what makes a joint venture. Property rights theory of the firm identifies circumstances under which joint control alleviates investment distortions due to contract incompleteness. We compare predictions of the theoretical literature with actual governance structures of Sino-Italian joint ventures, as reported in a questionnaire submitted to the entire population of Italian enterprises operating in China. With an exceptional response rate of 60%, our evidence confirms most of the theoretical predictions and helps select among competing approaches to model joint ventures.

Keywords: contract incompleteness, China, Italy, joint venture
JEL Codes: D23, F23

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1. Introduction

In the last two decades, the world stock of inward Foreign Direct Investment (FDI)[1] has increased almost ten-fold, from 2 trillion US dollars in 1990 to the record value of 19 trillion US dollars in 2010. Over the same period, world flows of inward FDI rose by almost 900%, peaking at 1.9 trillion US dollars in 2007 (UNCTAD, 2011). A substantial share of these flows and stock is in partnership with local enterprises, with joint ventures (JVs) and international alliances playing a prominent role (Buchel, 2003; Moskalev and Swensen, 2007). The literature on foreign entry mode focuses on equity JVs as opposed to wholly owned affiliates. This is a neat distinction, but it does little to unveil the nature of partnerships between foreign and local firms. Widely used in international business studies (Wei et al., 2005), attention is on the determinants of equity shares leaving unanswered questions about control. Control features prominently in anecdotal evidence about business relations and is shown to be of paramount importance when and where contract enforceability is an issue (Midler, 2009).

Property rights theory of the firm (Grossman and Hart, 1986; Hart and Moore, 1990) provides a framework to predict the allocation of control rights to cooperating partners. Residual rights of control over assets are "the right to decide how these assets are to be used except to the extent that particular usages have been specified in an initial contract" (Hart and Moore, 1990, p. 1120). Allocation of such rights affects the bargaining power of the parties and shapes their incentive to invest in the relationship. Optimal allocation of residual rights of control depends on the nature and importance of the parties' investments and it can take the form of sole ownership or joint control. Joint ventures vs. wholly owned enterprises can be used to exemplify joint control vs. sole ownership.

[1] Consistently with IMF/OECD definitions, FDI is an investment in a foreign company where the investor owns at least 10% of the ordinary shares, undertaken with the objective of establishing a lasting interest in the country, a long-term relationship, and a significant influence on the management of the firm (IMF, 1993; OECD, 1996).

In this paper we ask: What makes a joint venture? What are the main characteristics of JV contracts? Do they present features consistent with predictions of the property rights theory? To answer these and other related questions, new contract-level evidence is provided on Sino-Italian JVs. The choice of the home and host market is not by chance, but inspired by recent evidence about cross-country alliances. The well documented preference of Italian entrepreneurs for JVs makes Italy a suitable focus of this study (see, among others: Bontempi and Prodi, 2009; Morresi and Pezzi, 2011). Furthermore, China is an interesting host country, known for the predominance of shared ownership of foreign affiliates, even though wholly foreign owned enterprises (WFOEs) have been allowed since the 1980s (Moskalev and Swensen, 2007).

Survey interviews submitted by the authors in the period 2010-2011 to the entire population of Italian enterprises with JVs in the People's Republic of China (PRC) is the source of the original data for this research. With an exceptional response rate of 60%, we document the main characteristics of 77 contracts, offering an unprecedented large number of details about the negotiation process, establishment of JVs and investment decisions, as well as control rights, equity shares and governance issues.

To the best of our knowledge, this is the first attempt at collecting survey data on international partnerships at the contract, rather than country, industry or firm level, providing a comprehensive picture in terms of sample representation and topic coverage[2]. This markedly differentiates our contribution from previous studies aimed at providing an overview of general trends in inter-firm alliances through already existing databases (see, for instance: Hagedoorn, 1996, 2002; Moskalev and Swensen, 2007; Morresi and Pezzi, 2011). Having designed the data-collection questionnaire, we were able to include questions suitable

[2] For instance, Bai et al. (2004) collect survey data on JV contracts signed in China in the period 1986-1996, but they restrict attention to control rights and equity shares.

to understand what makes a JV and to what extent the empirical evidence supports the theoretical expectations. Hence, even if we narrow down the scope for research by adopting a single home/single host perspective and selecting JVs within the broader array of contracts considered in Hagedoorn (1996, 2002), Moskalev and Swensen (2007) and Morresi and Pezzi (2011), we still cover all classes of industries and firms and comment on a wider spectrum of contractual features adding to sector, country and ownership structure. As a result, our analysis is strongly complementary to previous ones. To summarise, we believe that the main contribution of the present paper is the presentation of an exhaustive definition of JVs, by exploring the empirical relevance of the different characteristics assumed in the theoretical literature. The main conclusion is that what makes a JV in theory mostly makes a JV in practice, given the impressive match between theoretical predictions and empirical evidence.

That said, there are a few limits to this research that should be considered in the evaluation of the empirical findings. First, despite the high response rate, the limited number of observations prevents us from conducting a proper econometric exercise. Hence, the main characteristics of Sino-Italian partnerships are presented in a descriptive way, by means of graphs and summary statistics. Second, even though we believe that it is of particular interest to focus on JVs involving Italian and Chinese enterprises, we cannot generalise these results too much, given the single home/single host nature of this study. On the contrary, we suggest considering the present exercise as a first attempt at characterising JVs on international markets, and providing a theoretically grounded and empirically documented definition.

The remainder of this paper is organised as follows. Section 2 describes the conceptual framework and reviews the main JV features emerging from the theoretical literature. Section 3 is entirely devoted to empirical analysis, paying attention to survey design and most important results. Section 4 concludes and sets future lines of research.

2. What makes a joint venture: in theory

As noted in the introduction, JVs are the subject of a vast amount of literature. Albeit differing in many dimensions, contributions to this literature can be broadly grouped according to the definition of JV they adopt. As in Raff et al. (2009), a JV can be described by the sharing rule governing the distribution of profits among partners cooperating on a project[3]. The underlying assumption in this class of research is that JV partners are engaged in team production[4]. Profit shares reward partners' contributions and when the latter are ex-ante non-contractible, they alleviate the ensuing moral hazard problem. As the sharing rule can be implemented through the allocation of equities, we expect to observe a variety of ownership patterns reflecting the relative importance of each partner's input. This approach has been widely used to study the choice between wholly owned affiliates and partnerships as entry mode across industries (as in Moskalev and Swensen, 2007; Hagedoorn, 1996, 2002) and markets (see, among others: Javorcik and Saggi, 2010; Bontempi and Prodi, 2009; Wei et al., 2005; Makino and Neupert, 2000; Hennart and Larimo, 1998; Gomes-Casseres, 1989).

Still, the empirical evidence presented in these studies raises questions concerning the approach itself. A robust regularity emerging from empirical studies is that equity shares in partnerships tend to cluster around an equal split (Bleeke and Ernst, 1991; Hauswald and Hege, 2003; Moskalev and Swensen, 2007). This is potentially in contrast with the prediction that ownership shares reflect partners' contributions. Concurrently, it is common in the managerial literature to find warnings to firms entering a JV that a majority shareholding is

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[3] Raff et al. (2009) study the choice of multinational firms between wholly owned affiliates and JVs and define the latter as follows: "*The second option is to undertake the investment in cooperation with a local firm. This cooperation involves the combination of the multinational's assets with those of the local firm and includes a contract specifying a payment T from the multinational to the local firm for the use of its assets and a sharing rule for the resulting profit….. We call this option a 'joint venture'. …*" (p. 573).

[4] Output is a non-separable function of individual contributions.

not akin to control rights (Bleeke and Ernst, 1995). With a sample of Chinese JVs¸ Bai et al. (2004) document that decision making in JVs reflects board representation – largely consistent with equity shares – as well as specifically adopted voting rules covering a large number of issues and varying from simple majority to unanimity.

Property rights theory of the firm (Grossman and Hart, 1986; Hart and Moore, 1990) offers a framework to address these issues. According to the theory, a firm is a collection of assets and property rights or residual rights of control over it are “the right to decide how these assets are to be used except to the extent that particular usages have been specified in an initial contract.” (Hart and Moore, 1990, p. 1120). The notion of residual rights of control rests on the assumption of contract incompleteness. Parties to an exchange are unlikely to be able to specify in an enforceable contract the actions each of them should undertake in any foreseeable contingency affecting their relationship. As a consequence, contracts may have “gaps or missing provisions” (Hart, 1988, p. 123), paving the way to opportunistic behaviour which in turns induces parties to undertake costly self-protection actions. To limit the adverse effects of contract incompleteness, parties can assign to one partner the right to decide in all events not covered contractually; that is, they can allocate residual – as opposed to specific – rights of control. Contract incompleteness can be ascribed to the difficulties parties may face in spelling out the conditions of trade. Cross-cultural deals may suffer from it more than domestic transactions[5]. Lack of verifiability is another source of contract incompleteness. In many business transactions, events as well as actions observable by the parties involved may not be so by a court of law. The latter may also find it difficult to interpret and complete contracts stipulated under different legal traditions. Adding that countries may differ in

[5] To exemplify, Serapio and Cascio (1996) recommend executives: “Where different languages are involved (e.g., in different countries), take the necessary steps to make certain that all parties have a common understanding of the agreement.” (p. 72).

contract-enforcement standards (Nunn, 2007), it is easy to see that contract incompleteness is a particularly serious concern in cross-border operations.

The allocation of residual rights of control between partners cooperating on a project gives rise to two alternative ownership regimes: sole ownership[6] and joint control. Under sole ownership, control rights are assigned to just one partner, who can then grant or deny the other access to the assets constituting the firm[7]. Under joint control, residual rights are conferred to each partner and as a consequence each has veto power over the use of assets. JVs appear to be consistent with a definition of joint control. The open question is: under which conditions is joint control preferred to sole ownership? A small but growing body of theoretical literature addresses this question.

Consider two partners cooperating on a production project requiring the use of some assets and investments[8]. Investments are relation-specific[9] and ex-ante non-contractible. Non-contractibility holds also for the division of the surplus from cooperation: partners bargain ex-post over it. As long as the marginal return to investment depends on access to the asset, the allocation of property rights shapes the parties' incentive to invest. To understand why this is so, suppose negotiation over the division of the surplus fails. The partner in control of the asset can deny the other access to it, thereby acquiring substantial bargaining power over the division of the surplus. This reduces the incentive to invest by the non-controlling party while enhancing the incentive to invest by the controlling partner. The trade-off in investments drives the main predictions of the approach. These can be summarised as follows: In a regime

[6] We use "wholly owned affiliate" and "sole ownership" interchangeably.

[7] In this, we follow Hart and Moore (1990) in which residual rights of control are defined as the right "to exclude others from the use of the asset" (p. 1121).

[8] As common throughout the literature, we assume that partners have the same cost functions in investments.

[9] That is, the marginal return of each partner's investment is higher when they trade with each other than with a third party.

of sole ownership, control rights are assigned to the partner whose investment matters the most in generating the surplus. Joint control deprives both partners of control rights and on the face of it one might argue that it results in significant underinvestment with respect to sole ownership. This is not always the case. We examine the circumstances described in the literature under which joint control outperforms sole ownership and identify the set of characteristics a JV should exhibit to fit the description of a of joint control regime.

2.1 The nature of investments

As shown in a number of contributions, the nature of each partner's investment affects the efficiency ranking of sole ownership and joint control. Investments can be substitutes (Rosenkranz and Schmitz, 2004) or complements (see, among others: Hart and Moore, 1990) and they can be in human or physical capital (Hart, 1995; Noldeke and Schmitz, 1998). Furthermore, investments can be one-dimensional or multidimensional (Cai, 2003).

2.1.1 Substitutes vs. complements

Parties' investments are substitutes when total surplus depends on the overall level of investment and not on composition[10] (Rosenkranz and Schmitz, 2004). When this is the case, joint control cannot elicit more investment than sole ownership. Remember that under sole ownership the controlling party invests so as to equate the marginal benefit of investment accruing to it through its share of the surplus from trade and its outside option to marginal cost. Under joint control, both parties invest so as to equate the marginal benefit of investment accruing to them only through their share of the surplus from trade to marginal cost. Suppose one party does just that; the other party then finds it optimal to invest zero. In fact, any additional investment results in a marginal surplus lower than marginal cost – under the standard assumption of the concavity of the surplus function. It follows that aggregate investment and total surplus under joint control do not exceed that under sole ownership.

[10] Consider cash contributions to a joint undertaking.

Thus, a necessary condition for total surplus to be larger under joint control than under sole ownership is that investments are complementary. This is the standard assumption in the literature[11].

2.1.2 Human vs. physical capital

Investments by the parties can be in human as well as physical capital. When investment is in human capital, cooperation by both parties is required to generate a surplus. When investment is in physical capital, the non-controlling partner can be excluded by the controlling one from any return of its investment. It follows that under sole ownership, the controlling party invests up to the first best level[12] while the non-controlling one makes no investment. Joint control provides more balanced incentive to invest. The party losing control invests less, while the party gaining control invests more. Aggregate investment may increase and total surplus under joint control exceed total surplus under sole ownership (Hart, 1995). Thus, JVs are likely to be formed when parties invest in physical capital.

2.1.3 Specific vs. general capital

While cooperating on a project, partners can choose how much to invest in activities promoting the success of the project and how much to invest in activities that allow for a return if the project fails (Cai, 2003). To exemplify, consider an Italian entrepreneur cooperating with a Chinese firm on the marketing and distribution of a good in China. When in China, the Italian entrepreneur can devote her time to visiting customers and promoting sales or to learn Mandarin. Visiting customers is a relation-specific investment; its returns are higher within the relationship with the Chinese partner than outside it. Whereas learning Mandarin is a general investment activity; it pays off if the Italian entrepreneur no longer has access to her partner's communication skills.

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[11] See Noldeke and Schmitz (1998), p.640.

[12] The controlling party invests at the first best level when the marginal product of investments are independent.

If the marginal product of general as well as specific investment is increasing in asset control[13], sole ownership promotes overall investment by the controlling party and inhibits it from the non-controlling one. Joint control has an adverse effect on the general investment of both partners, while it may have an opposite effect on specific investments. Suppose the marginal cost of specific investment is increasing in general investment, i.e. general investment and specific investment are substitutes in the partners' cost function. When this is the case, joint control may dominate sole ownership. Under joint control, no party can access the asset without the consent of the other. As parties no longer have an outside option, the incentive to invest in general capital is removed. As a consequence of the fall in general investment, the marginal cost of providing specific investment decreases for both partners and their contributions in specific capital increases. This suggests that joint control is likely to prevail when there are easily available usages outside the relationship for the parties' investments.

2.2 Repeated interactions

So far, attention has been focused on models of one-off interactions among cooperating partners. However, cooperation among partners can extend over several periods. The parties may expect to cooperate on different projects or the same project may require the parties to undertake a number of investments over time. When the parties interact repeatedly, joint control may prove effective in promoting investment by both partners (Halonen, 2002; Rosenkranz and Schmitz, 2004). As is known from non-cooperative game theory, repeated interactions allow the parties to sustain cooperation via the adoption of trigger strategies; both parties cooperate until they observe a deviation, at which point, they revert to a non-cooperative strategy. Trigger strategies support cooperation as long as the benefits of a

[13] In our example, think of the list of customers as the main asset of the firm.

deviation are smaller than the punishment that deviation entails. Partners in a joint project can sustain first best levels of investment through the adoption of appropriate trigger strategies.

The benefits as well as the costs of deviating from first best levels of investment depend on the allocation of property rights. The benefits from deviation are larger under joint control than under sole ownership[14], but more so can be the costs. Absent conditions discussed above[15], joint control delivers less overall investment than sole ownership[16] and thus it is associated with the largest fall in surplus with respect to the first best level. Adopting a regime of joint control, parties can raise the net cost of future deviations from the first best levels of investment and make cooperation easier to sustain. Therefore, the expectation is that there will be a regime of joint control when parties interact repeatedly over time and across projects.

2.3 Control rights and equity shares

In the property rights theory of the firm, residual income and residual control usually go together. Hart (1995) provides a number of reasons in support of this. Nonetheless, as illustrated in Bai et al. (2004), equity shares cannot be considered a proxy for control rights in JVs. A distinct role for equity shares and control rights arises when the controlling party can divert some of the surplus from cooperation. Suppose the controlling party can take ex-post decisions having opposite effects on the surplus from cooperation and its own private gains (Bai et al., 2004). If the controlling party's private benefits are small relative to the surplus

[14] Under joint control partners have no access to outside options and thus the deviating party can appropriate half the surplus generated from the first best investment level of the non-deviating partner. Under sole ownership instead, parties can access their outside option and thus a deviating party can appropriate less than half of surplus generated from the first best investment level selected by the non-deviating one.

[15] See subsections 2.1.1 to 2.1.3.

[16] When we move from sole ownership to joint control, the incentive to invest of the non-controlling party does not change, while the incentive to invest of the controlling one decreases. Thus, overall investment falls.

from cooperation, sole ownership dominates joint control. It provides a stronger incentive to invest ex-ante while the controlling party itself maximises total surplus ex-post. However, what if private benefits are large? In this case, not even a large share of total surplus can stop the controlling party from expropriating the partner. This can be achieved through joint control instead in that it prevents ex-post expropriation and rebalances the incentive to invest. It follows that control rights and equity shares are disjoint and a party with a minority equity share can still wield substantial control.

2.4 Complex property rights allocations

In the property rights theory of the firm, the distinctive feature of joint control is the partners' veto power over the use of assets. This raises the question of what will become of the assets if parties do not reach an agreement. Parties may deliberately fail to specify ex-ante how to dispose of the assets, as in Comino et al. (2010). Without a termination procedure, dissolution of the partnership requires court intervention. This makes disagreement costly and gives parties a strong incentive to invest and take action to promote cooperation.

Alternatively, partners in a joint project can enter arrangements allowing for shifts in control rights. As in Cai (2003), the shift in control can be in favour of a third party; disagreement results in selling the assets on the market. A slightly more complex ownership structure could give one of the firms the right to buy (sell) the other firm's (its own) control rights at a specified price. In Maskin and Tirole (1999), such options combined with a penalty to be paid to a third party are shown to deliver first best investments. In Noldeke and Schmitz (1998), simple contingent ownership structures achieve first best when firms invest sequentially and the incentive to invest for the non-controlling party is weak, e.g. when investment is embodied in physical capital or a patented good. Consider two partners – A and B – cooperating on a project (e.g. the development, production and marketing of a new product). Investment by B (e.g. marketing) can be undertaken only after the parties observe the results of A's investment (e.g. the characteristics of the new product due to R&D by A). After observing A's investment, B has the option to acquire at a specified price the control rights held by A over the production facilities for the new product. B exercises the option only if the investment undertaken by A makes the option price attractive. An appropriate choice of the option price can induce A to invest at first best level. If A under-invests, B does not exercise the option and at the same time invests little as A has control rights over the production facilities for the new product. As a consequence, A prefers to invest efficiently and receive the option price rather than under-invest and be left with control over an asset of little value without B's investment. It follows that sequential investments favour the adoption of complex property rights allocations.

3. What makes a joint venture: in practice

After describing the main characteristics of JV contracts, highlighted in the theoretical literature, this section provides new empirical evidence at the micro level on Sino-Italian partnerships. Our data derive from a comprehensive survey conducted between 2010 and 2011, using a multiple-choice questionnaire designed by the authors and submitted to the entire population of Italian enterprises with JVs in the People's Republic of China (PRC). The questionnaire has four sections, inspired by the theoretical literature reviewed in the previous section, for approximately 40 questions overall. In the first section, questions asked are about background information on Chinese operations in order to characterise the involvement of Italian firms in the PRC. In the second section, we investigate the local partner selection, the negotiation process, JV establishment and investment decisions. In the third section, there is a focus on governance issues, equity shares and control rights. In the fourth section, satisfaction with the JV contract and major problems in dealing with local counterparts are explored in detail.

In order to be comprehensive, the entire population of Italian investors were targeted, rather than restricting attention to a given industry, home or host region. The original list of investors derives from the ICE-Reprint database that contains micro-level information on inward and outward FDI in Italy. For the outward side, it displays the contact details of the parent company and local affiliates, by host country and equity share. For our purposes it was a valuable starting point to extract an exhaustive list of Italian firms with JVs in China. All firms were contacted by phone, and the questionnaire was then submitted to senior managers of the parent company by email (80%) and fax (20%). At the end of this process, eliminating companies not engaged in partnerships abroad, those with erroneous contact details or out of business, we identified a population of 121 investors, of which 68 answered the questionnaire. Our survey has an exceptional response rate of 60%, allowing us to collect detailed information for a highly representative sample of 77 Sino-Italian JV contracts, signed by 68 partners from the two countries.

To the best of our knowledge, this is the first attempt at gathering survey data about international partnerships at the contract level, offering a deep picture in terms of sample representation and topic coverage. Nonetheless, given the single home/single host nature of our study, we resist from generalising, and consider the present work as a first step to describe what makes a JV in practice, using Sino-Italian contracts as a case study. Furthermore, despite the high response rate, the limited number of observations prevents us from conducting a proper econometric exercise. Hence, in what follows, we present the main survey results through a number of graphs and summary statistics, comparing theoretical priors and empirical results for the main issues put forward in section 2.

3.1 Background information and general overview

As mentioned, our sample consists of 77 JV contracts between Italian and Chinese firms. Evidence shows that Italian enterprises have been pioneers in approaching the “Dragon market", as the first partnerships date back to the early 1980s. Not surprisingly, half of the JVs in our sample were established after 2002, when China entered the WTO, thus accepting international standards in terms of trade and FDI flows. The most recent contract included in this research was signed in 2010.

Our data also reveal that Sino-Italian JV plants are not evenly distributed throughout the PRC, but cluster along the coast. In particular, Shanghai is the most important host, accounting for 23% of the sample, followed by Guangdong (15%), Zheijiang (11%), Beijing (10%), Jiangsu (10%), Shandong (8%), and Liaoning (7%). This geographical distribution reflects the main steps along China's modernisation process over the past 30 years, with the "Open Door Policy" promoting globalisation and growth along the coast since the late 1970s, and the "Go West Policy" encouraging foreign penetration to the inner areas only since the mid 1990s. As a result, today's investors still prefer to open subsidiaries to set up operations in the more developed coastal provinces, where incentives to FDI have a long tradition and experience in dealing with Western players is more established.

As for the JVs' legal form, our sample includes 71% Equity Joint Ventures (EJVs) and 29% Contractual Joint Ventures (CJVs). EJVs were introduced in China in 1979, and they are governed by a well structured FDI contract, with many clauses in terms of minimum length, equity shares, partners' contributions etc. CJVs appeared only in the 1990s, as a more flexible contract in which revenue sharing identifies with the equity shares only if specified in the contract, and the JV classifies as an independent legal entity only if agreed by the parties at the constitution stage.

For what follows it is particularly important to consider the reasons why Italian investors decide to operate in China with a local partner rather than alone[17]. This helps

[17] Based on the survey design, we interviewed Italian and not Chinese firms about their partnerships in the PRC. This means that when we ask questions about motivation, satisfaction and problems, we are likely to capture a

characterise the host market in terms of contract incompleteness, and possibly reconcile theory with empirical evidence. As shown in Figure 1, the main rationale behind the Sino-Italian analysed partnerships is the need of the Italian firm to gain local support, consistent with Raff et al. (2009) and Buchel (2003). This is stressed by 43% of the respondents and translates into the possibility to take advantage of the local partner's network (38%), market knowledge (36%) and access to Chinese suppliers (26%). Adding to local support, 20% of the firms opted for JVs in order to share risks and costs while for 15% of them JVs also represent a mean of exploiting economies of scale and reaching optimal size. Not surprisingly, such motivations are particularly noted by Italian small and medium enterprises that often lack capital and expertise to operate alone in a foreign market. If we further consider Figure 1, we realise that for a handful of respondents the choice of a partnership was dictated by law. This refers to firms that started their business in China before wholly foreign owned enterprises were allowed in 1986, and never switched to a different ownership structure, or firms that operate in one of the few sectors where JVs are still encouraged[18]. Last but not least, the desire of product diversification and access to local technology and know-how motivate the rest of JV contracts signed by Italian entrepreneurs in China. It is worth mentioning that the numbers reported in Figure 1 are consistent with the overall framework of contract incompleteness assumed in the theoretical literature. Indeed, interviews reveal that the Chinese market is still perceived as distant and complex, therefore from a Western point of view local support is of primary importance to succeed.

[Insert Figure 1 here]

unilateral rather than a bilateral point of view. However, recent evidence about Chinese FDI in Italy suggests lots of similarities between the two countries' investors for all issues mentioned above (Gattai, 2012). Therefore, we are quite confident that our results characterise both the Italian and the Chinese point of view.

[18] For more information see www.ice.org.

This evidence is further reinforced by our data about partner selection and the negotiation process. According to the survey, 43% of Italian firms find their Chinese counterpart in more than one year, and only 26% in less than six months. Moreover, a successful selection process is one involving more than one potential candidate in 47% of the cases, to save time and minimise trips to and from the PRC. Notice that the partner-selection process is guided mainly (42%) by strategic considerations such as the partner's network, experience and access to key resources. Organisational considerations defined as type of ownership, human capital and managerial skills follow at 25%, while geographical and financial criteria account for 19% and 14%, respectively. If 25% of the respondents met their partners through Italian or Chinese business associations, the large majority of firms in the sample was contacted directly by potential Chinese partners or signed a JV contract with firms it was already engaged with in business operations. The establishment of a JV is a complex and lengthy process that requires a lot of effort from both parties and seldom takes only a few months. Figure 2 shows that negotiation with the selected partner lasts more than six months for 62% of the firms in our sample and more than one year for 22%. Likewise, time elapsing between finalising the contract and starting local operations is more than six months for 68% of JVs surveyed and one year for 24%. These data provide further support to the contract incompleteness hypothesis, which seems particularly fitting for the Chinese marketplace.

[Insert Figure 2 here]

Notice also that transaction costs in dealing with local firms are particularly high since negotiation is difficult and time consuming, and cooperation problems often arise despite serious attempts at finding a suitable Chinese counterpart. Figure 3 summarises the main difficulties encountered by Italian entrepreneurs in dealing with local partners. Consistent with Hagedoorn (1996), they range from cultural distance and different business practices

(41%) to low-skilled human capital (6%), adding to the opportunistic behaviour of local players, who are used to appropriating Western technology and know-how (15%). That said, only in a few cases were these problems reported as serious enough to cause the collapse of the JV. On the contrary, the majority of respondents implemented original solutions to achieve better mutual understanding and promote stronger cooperation between the two parties. Remedies of this sort mainly consist of increasing local monitoring, through Italian expatriates or frequent trips to and from China, and defining roles and duties more clearly.

[Insert Figure 3 here]

Despite the existence of transaction costs, the overall satisfaction of Italian entrepreneurs with their partnerships in the PRC is high. According to our data, only 3% of the firms wish to close their JV and leave the Chinese market, while 68% are very satisfied, 19% are not very satisfied but do not plan to change their contract, and 10% are not satisfied and plan to switch to a WFOE.

3.2 The nature of the investment

As noted in subsection 2.1, JV contracts tend to emerge as an equilibrium solution to the hold-up problem depending on whether investments are substitutes versus complements, in human versus physical capital and in specific versus general capital. To provide empirical evidence, we asked Italian firms about the partners' contributions to the JV. As shown in Figure 4, Italian and Chinese players are used to contributing highly complementary assets, with the former being responsible for intangible resources such as technology, brand name and human capital, and the latter being in charge of supplying raw materials, operating plants, labour force, land and distribution network. Based on these data, it seems that the investment of the Italian partner is mainly in human capital, while that of the Chinese partner mostly involves physical capital.

[Insert Figure 4 here]

Not surprisingly, the majority of our respondents classify the former as specific and the latter as generic (Figure 5). Put another way, while Italian technology, brand name and human capital are generally tailored to the JV project and thus hardly applicable to a different business, Chinese labour force, plants, land, raw materials and distribution network are not relation-specific and may easily be employed elsewhere with minimum extra costs.

[Insert Figure 5 here]

3.3 Repeated interactions

As explained in section 2.2, JVs are likely to be predominant in situations of repeated interactions. In fact, when parties interact over a long time horizon, optimal investments by both can be effectively promoted under joint control. Our data strongly support this theoretical feature of JV contracts. As mentioned above (3.1), cooperation within Sino-Italian partnerships usually extends over several periods. This is made apparent by two basic facts: first, the average JV age, in our sample, is 8 years, meaning that cooperation is a medium-run issue[19]; second, the local partner is mostly identified on the basis of previous direct business contacts, rather than through Italian or Chinese associations. Our data thus suggest that the two parties usually deal with each other for several periods on the same as well as on different projects. This last piece of evidence receives further support in Figure 6, where we present data on current business relations undertaken together by the Italian and the Chinese partners in addition to the surveyed JV. What emerges from the data is that 12% of the respondents are currently engaged in import/export operations, 12% in other JVs, and 2% in wholly owned enterprises with the same JV partner in the PRC.

[Insert Figure 6 here]

[19] This is in contrast with Hagedoorn (1996) and Buchel (2003), where JVs are shown to experience a high failure rate in a short period of time (usually five years).

3.4 Control rights and equity shares

In line with the argument in Bai et al. (2004), control rights and equity shares are disjoint and should not be confused. To measure the former, we posed several questions about the nationality of the General Manager, the two Deputy General Managers, and the members of the Board of Directors (BoD), to understand who is actually responsible for JV operations. Furthermore, we explore the decision making procedure, to determine whether parties' veto power postulated by the theory applies to real-world partnerships. Results are as follows: Figure 7 displays the percentage of contribution by each partner, showing that the majority of equity shares usually rests with the Italian firm. For 64% of the surveyed JVs, the Italian share is larger than 50%, for 24% the Chinese share is larger than 50%, while the rest of the sample is characterised by 50:50 agreements.

[Insert Figure 7 here]

Contrary to expectations given the above findings, the General Manager is Chinese in most cases (56%), and the same is true for the Deputy General Managers as both are Italian only in 12% of the JVs. Figures 8 and 9 further dissect these data by percentage of Italian contribution. The complete absence of any correlation between equity shares and control rights is, again, impressive. As far as the General Manager is concerned, he/she is more likely to be Italian only in the case of 50:50 agreements (Figure 8). Adding to this, it is never the case that both Deputy General Managers are Italian for the majority of the contracts, even when the Italian firm owns majority shares (Figure 9). This means that ownership of the JV usually rests with the Western party but control rights, namely the effective power to decide whenever unforeseen contingencies occur, rests with the Eastern one.

[Insert Figure 8 here]

[Insert Figure 9 here]

Lastly, it is worth considering the composition of the Board of Directors, by percentage of Italian contribution. Here, there seems to be a positive correlation between equity shares and control rights because the majority of the members in the BoD tends to be Italian, when the Italian firm owns majority shares; the majority of the BoD members tends to be Chinese when the Chinese firm owns majority shares; finally, an equal distribution of seats prevails in the case of 50:50 agreements. However, a detailed examination of the decision making procedure and voting rules within the Board of Directors substantially alters this picture. Following Bai et al. (2004), for every typical decision pertaining to JV operations, in Figure 10 we distinguish among simple-majority voting, qualified-majority voting and unanimity.

[Insert Figure 10 here]

Our data confirm that the most ordinary decisions are discussed under simple-majority voting. They include approving the budget and profit or loss allocation among partners, hiring consultants, designing employment contracts and establishing or closing local subsidiaries. Qualified-majority voting tends to prevail for approving important reports on management and hiring or firing CEO and other senior managers, while unanimity, namely the right to exercise veto power, applies to the most sensitive issues such as changing the corporate charter, increasing or transferring registered capital, merging with other organisations and liquidating assets upon completion or termination. In summary, except for designing employment contracts and hiring consultants, all other decisions are taken via a qualified majority or unanimity in the majority of firms.

3.5 Complex property rights allocations

One of the distinctive features of JVs, assumed in the theoretical literature, is the partners' veto power over the use of assets. As mentioned, qualified-majority voting and unanimity cover most decisions of the Board of Directors, which offers strong empirical support to theoretical models. Given the existence of veto power on most sensitive issues, there is the concern of what happens to the assets if the parties fail to reach an agreement. Figure 11 sheds some light on this question, by showing typical clauses included in Sino-Italian JV contracts.

[Insert Figure 11 here]

Notice that the most common clauses refer to the resolution of disagreement between the two parties (20%) and the termination procedure (18%). This contradicts Comino et al. (2010), since Italian and Chinese firms do not deliberately fail to specify ex ante how to dispose of the assets, but rather pay particular attention to the event of JV dissolution. The termination procedure involves subsidiaries closing and plants shutting down in only 24% of the contracts, and it implies shifts in control rights for the rest of the sample. As in Cai (2003), this shift is in favour of a third party in 30% of the cases, while it results in the acquisition of the assets by one of the two partners for the rest of the sample.

More complex ownership structures are also agreed upon in many cases, specifying options to buy and options to sell, as in the models by Maskin and Tirole (1999) and Noldeke and Schmitz (1998). According to our data, we see that option clauses characterise 25% of the contracts and that a partner's right to buy (sell) the other partner's (its own) assets at a specified price is reserved both to Italian and Chinese firm in 80% of the cases. In addition, Figure 11 reveals that many of the surveyed contracts specify also a minimum length for the JV project (15%) and some rules about control rights allocation (15%). As a final point, revenue sharing and legal independence clauses appear in 6% and 1%, respectively, of the CJV contracts.

To conclude this section, it is worth mentioning that option clauses are often combined with sequential investments by Italian and Chinese partners, as in Noldeke and Schmitz (1998). To be more precise, Figure 12 displays timing of investments, as it emerges from our data. Not surprisingly, given the nature of the two parties' contributions described in Section 3.2, investments occur sequentially for 60% of the sample. Moreover, the Chinese firms tends to be the first contributor, providing basic production facilities, and the Italian firm is the second contributor, being responsible for intangible resources.

[Insert Figure 12 here]

4. Conclusions

This paper provides new contract-level evidence on the allocation of control rights, to define what makes a JV. Property rights theory of the firm identifies a set of mutually non-exclusive circumstances under which joint control alleviates investment distortions due to contract incompleteness. The property rights approach focuses attention on the nature of the investment, one-off vs. repeated interactions, control rights vs. equity shares and complex property rights allocations. We compare the theoretical predictions of the literature with actual governance structures and characteristics of a highly representative sample of Sino-Italian JVs, as reported by the firms themselves in a questionnaire designed by the authors and submitted in 2010-2011 to the entire population of Italian enterprises operating in China. Our evidence suggests that what makes a JV in theory mostly makes a JV in practice.

Partners in our sample undertake complementary investments. The Italian firm usually contributes intangibles while the Chinese one is responsible for tangibles such as raw materials, operating plants, labour force, land and distribution network. Respondents also report that investment by the Italian partner is relation-specific, while describing the contribution by the Chinese partner as generic. These features are consistent with the theoretical framework. Joint control dominates sole ownership when the non-controlling party can be easily excluded from the returns of its own investment by the controlling partner or the parties can choose the investments' degree of relation-specificity. Italian partners would be reluctant to contribute intangible assets whose returns are lost without access to the tangibles provided by their Chinese partners. Contributions by the Chinese firms are such that they can be profitably put to use also outside the relationship. Joint control deprives partners of access to outside options and thus fosters relation-specific investments, embedded in physical capital and local networks.

The firms forming the JVs in our sample interact repeatedly over time and across projects. The Italian enterprises select local partners mostly on the basis of previous business contacts and simultaneously run more than one project with the same partner. Furthermore, the average JV age in our sample is 8 years. The theoretical contributions stress the importance of joint control in supporting reputational equilibria. According to our survey data, the parties put substantial effort in promoting cooperation and smoothing difficulties arising throughout the life of the JVs.

Our evidence also suggests that control rights and equity shares are disjoint. The JVs in our sample grant both partners veto power through the adoption of qualified majority and unanimity for most of the issues on which the BoD decides. At the same time, top executives are an expression of the local partner even when the latter is the minority shareholder. This goes beyond the approach of a large number of international business studies and confirms that control rights more than equity shares make the JV.

Finally, disagreements can turn into costly stalemates when partners have veto power. The theoretical literature deems this feature as one of the benefits of adopting a regime of joint control. Without a road map to dissolution, it is best for parties to maintain cooperation. The JVs in our sample have carefully crafted the terms of separation. Contracts contain clauses specifying minimum length and termination clauses. Moreover, most of the surveyed contracts confer to partners option rights to buy or sell their shares. This gives rise to complex ownership structures which according to the theoretical literature promote efficiency when investments are sequential. This is the case for the Sino-Italian JVs: parties invest sequentially in 60% of them, with the local firm contributing first.

In conclusion, our evidence offers a first guide to select among competing modelling approaches to JVs. Given the difficulty of collecting contract-level information for large samples of enterprises, we believe that our preliminary findings are nonetheless promising. Therefore, further research could originate from the present work. Future contributions could extend the database along cross-countries and time-series dimensions. This would allow testing econometrically the predictions of the theory and give more scope for generalisation. At the same time, a complementary approach relying on case studies could provide in-depth information on contracts details stimulating new theoretical contributions.

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Figure 1: Reasons why Italian investors in China sign JV contracts

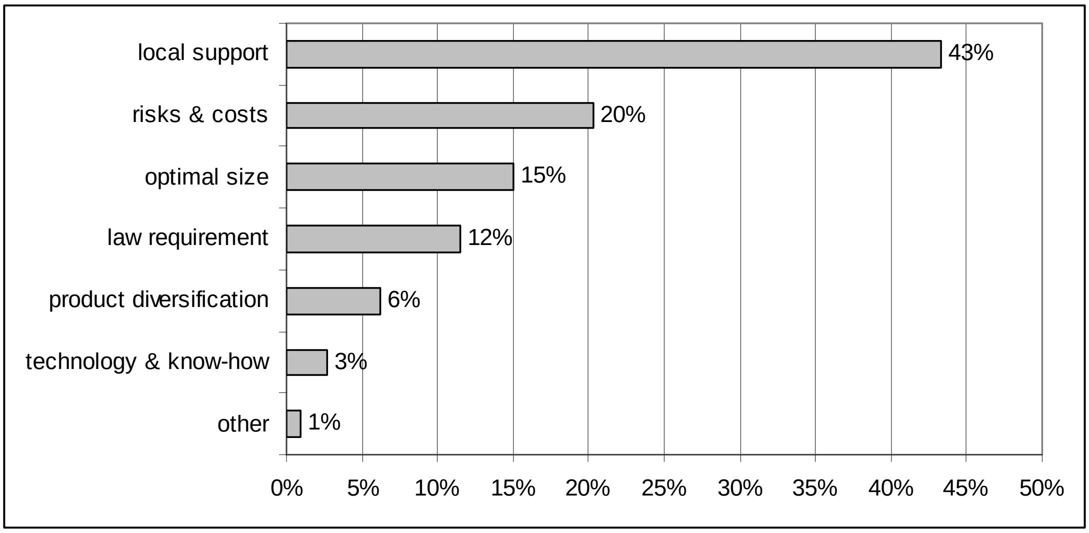

Figure 2: Time required establishing a JV in China

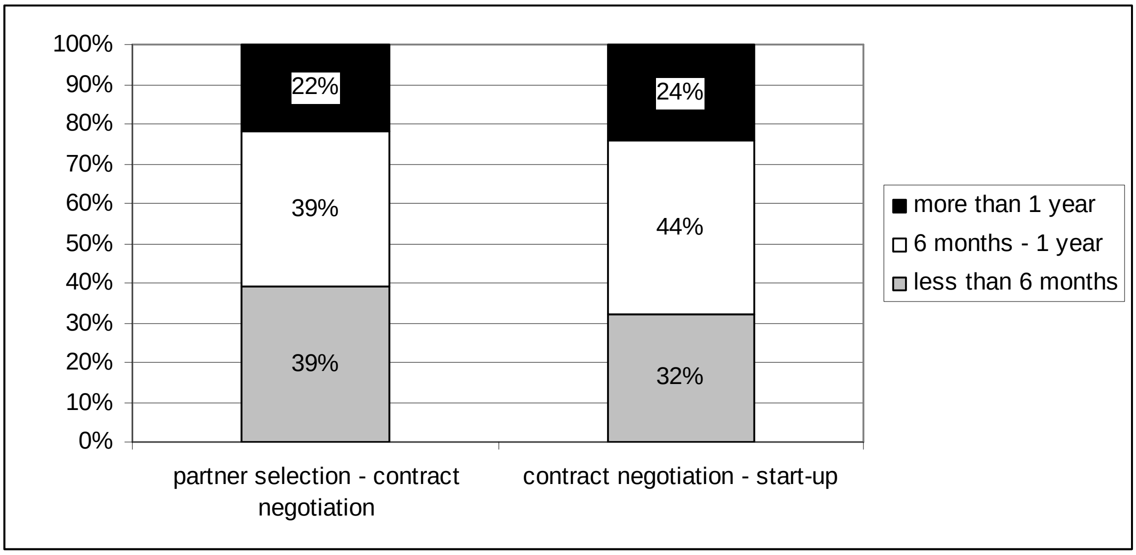

Figure 3: Cooperation problems within Sino-Italian JVs

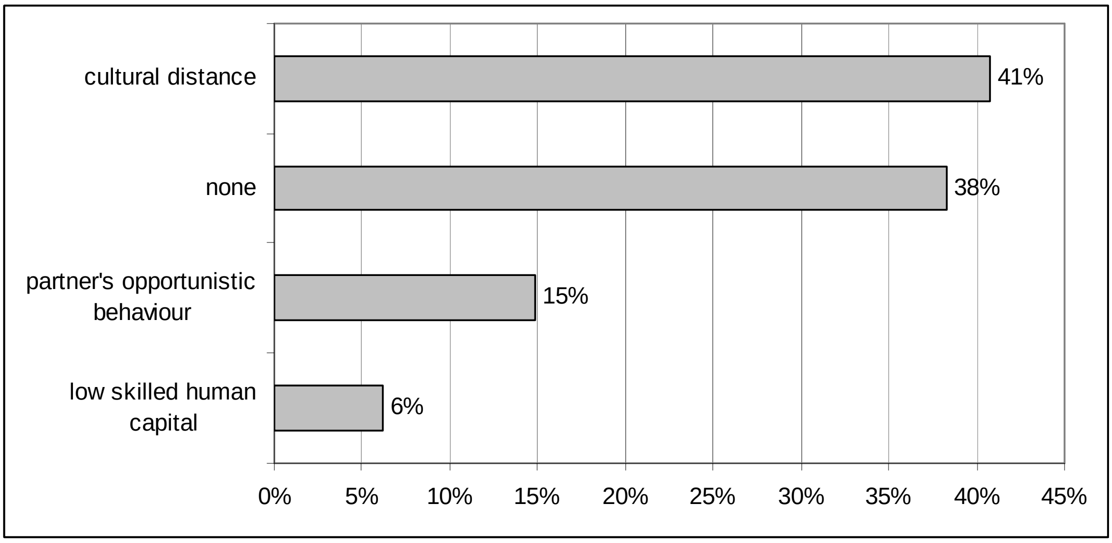

Figure 4: Partners' contributions to the JV

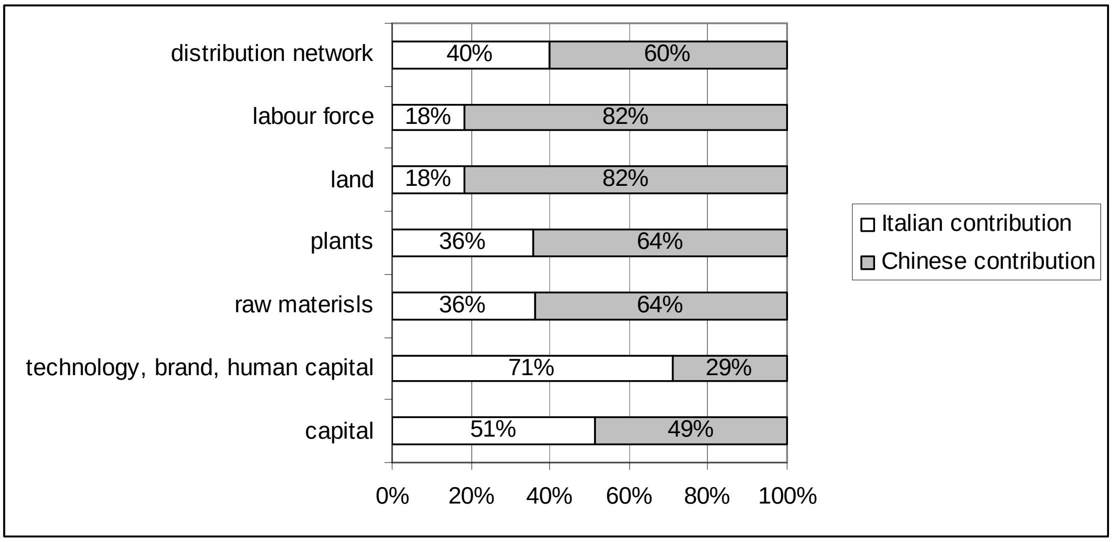

Figure 5: Partners' specific versus generic contributions to the JV

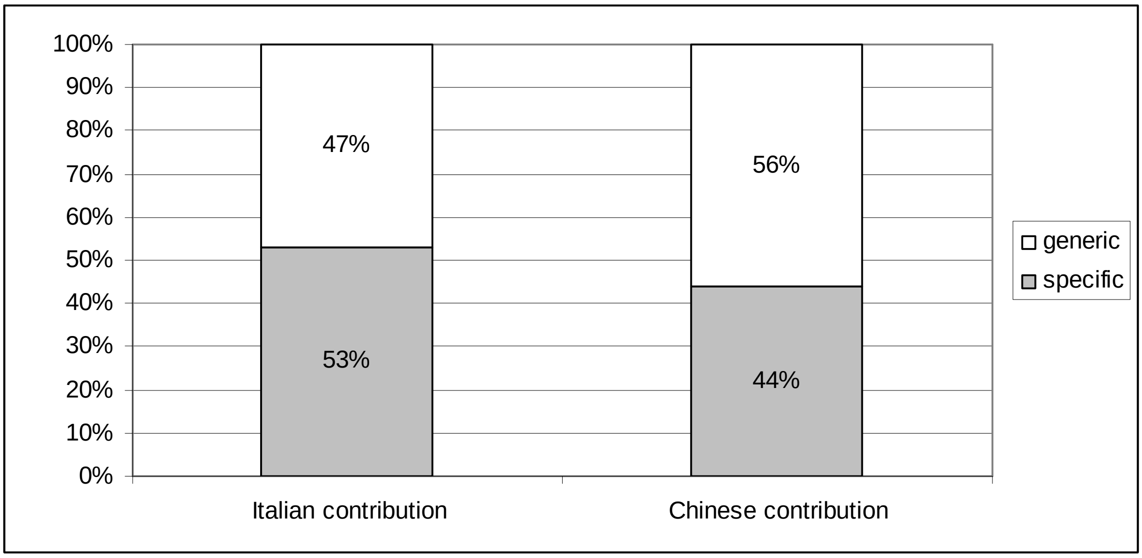

Figure 6: Current business relations in China between the two partners, in addition to the surveyed JVs

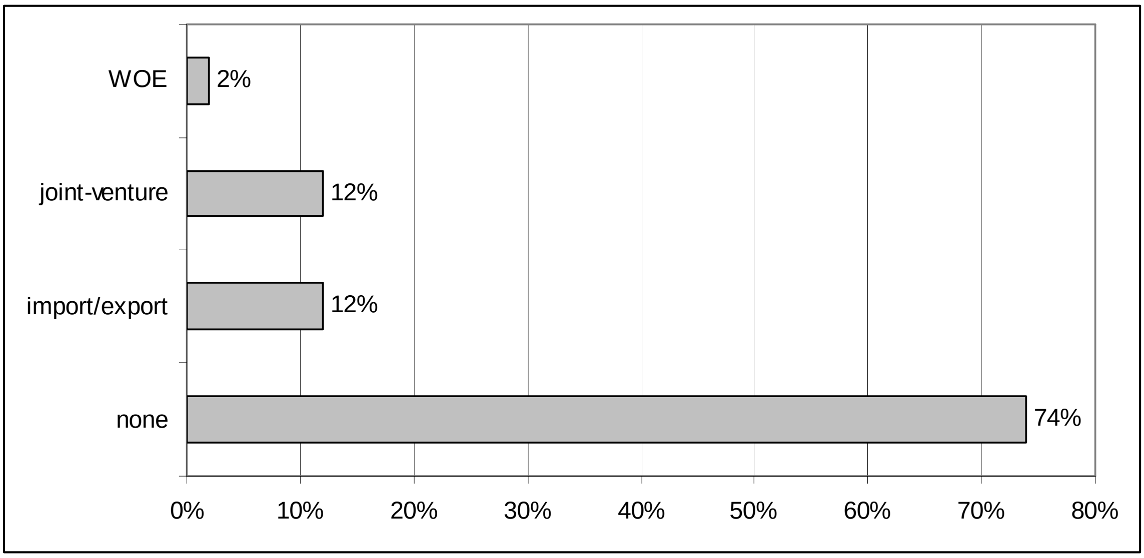

Figure 7: Percentage of Italian contribution to the JV

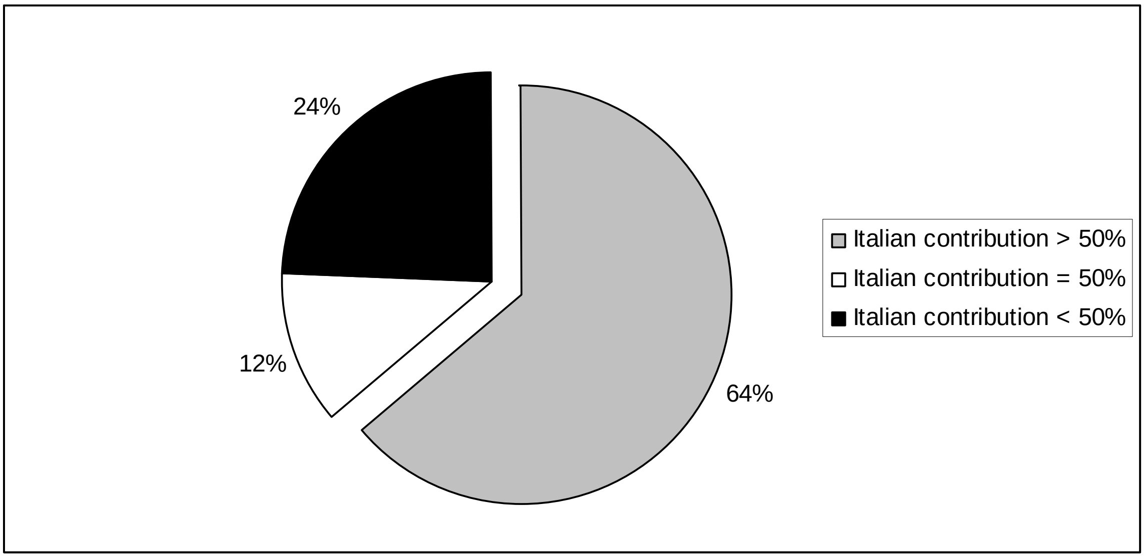

Figure 8: Nationality of the General Manager, by percentage of Italian contribution to the JV

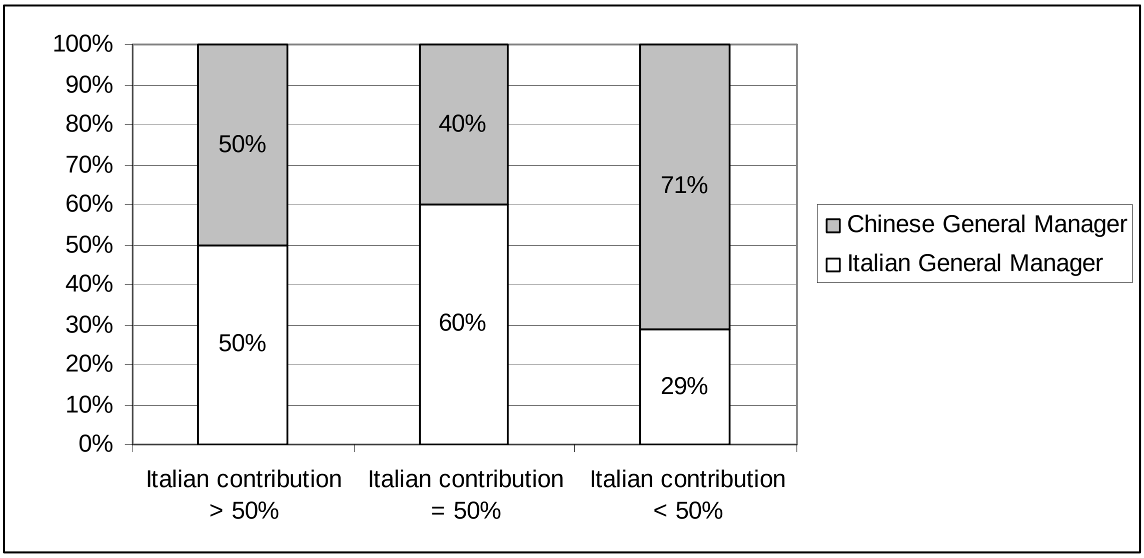

Figure 9: Nationality of the Deputy General Managers, by percentage of Italian contribution to the JV

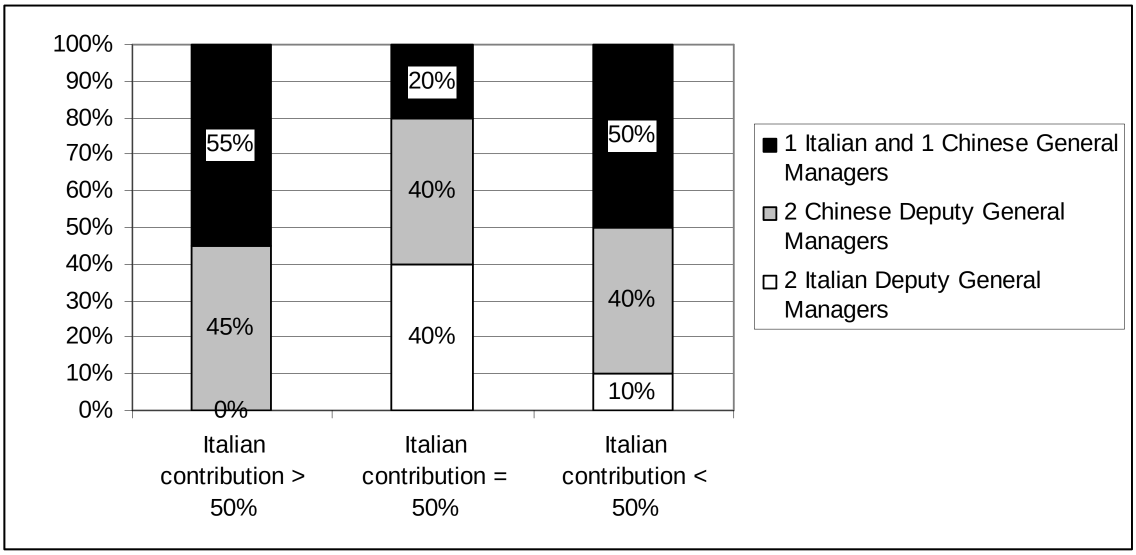

Figure 10: Voting rules within the Board of Directors of Sino-Italian JVs

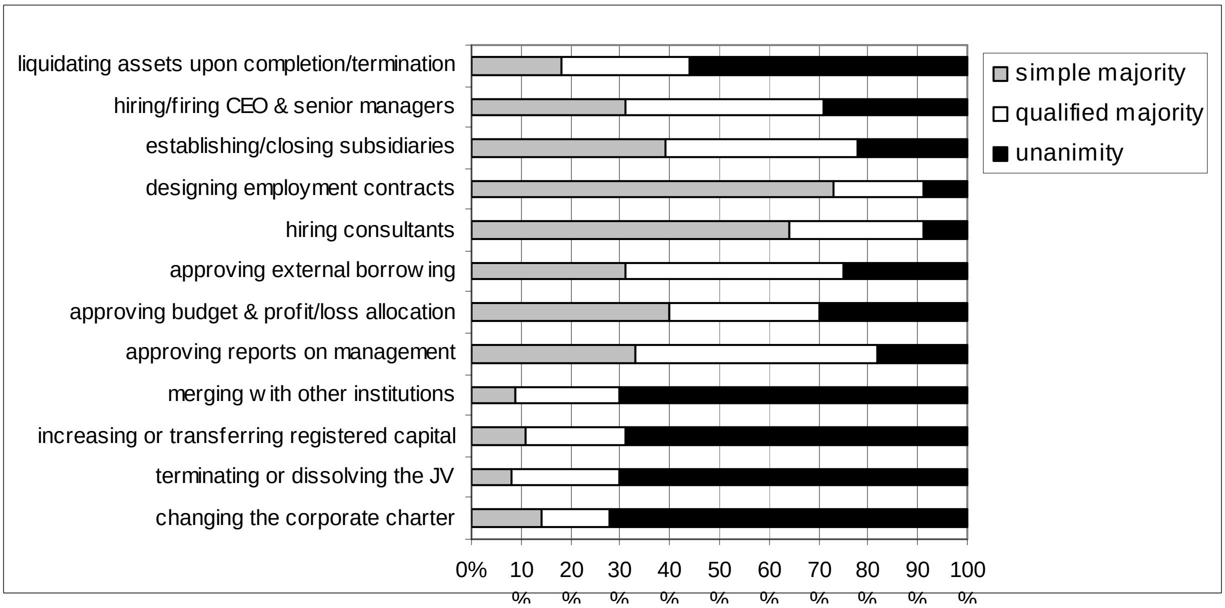

Figure 11: Most common clauses in Sino-Italian JV contracts

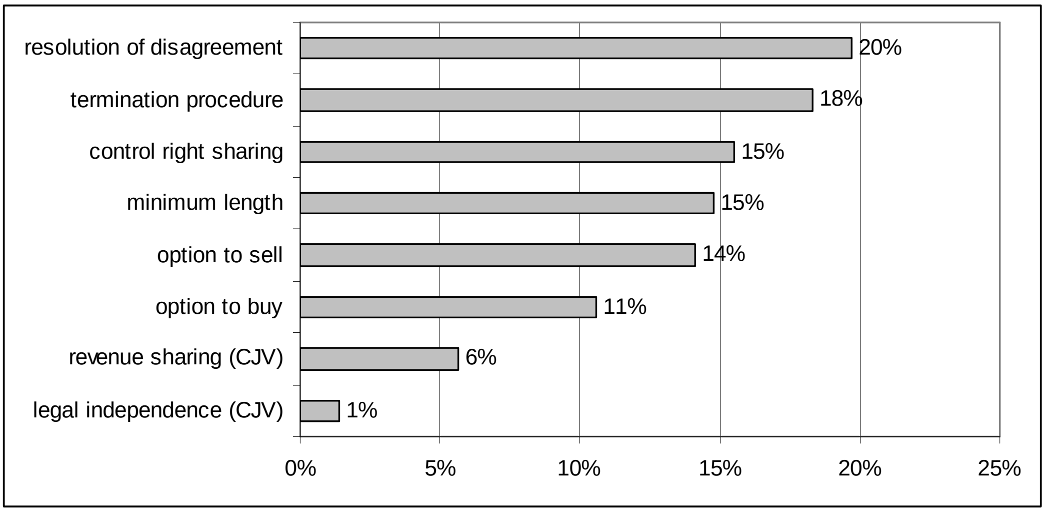

Figure 12: Timing of the partners' investments to the JV