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**International Purchasing Offices in China
Roles and resource/capability requirements**

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Review

International Purchasing Offices in China

Roles and resource/capability requirements

Abstract

Purpose – This paper addresses global sourcing organisational design through the following research questions: 1) How do the roles performed by International Purchasing Offices (IPOs) change over time? 2) What are the resources/capabilities required by an IPO for an effective performance and how do they change over time? and 3) What are the contingent factors affecting such changes?

Design/methodology/approach – We employed an exploratory multiple case study approach and analysed 14 Western IPOs located in China for a period between 2007 and 2012. The data were primarily collected through 34 direct, semi-structured interviews of IPO heads and sourcing managers or senior buyers.

Findings – We identify and discuss the importance of 10 roles played by IPOs and 12 required resources/capabilities. Furthermore, considering the changes that occurred to these IPOs over a five-year period (2007-2012), we observe three distinct evolutionary behaviours (i.e. ‘overall development’, ‘selective development’, and ‘stable configuration’) and highlight three contingent factors that jointly affect these behaviours (i.e. the architectural and technological complexity of the sourced items, annual volume sourced abroad, and experience in the foreign context).

Originality/value – This paper contributes to the resource-based view of the firm in a global sourcing context by highlighting the resources/capabilities required by IPOs and discussing their characteristics. Furthermore, it proposes a typology of IPO micro-organisational evolutionary behaviours. Finally, it applies contingency theory and identifies three factors that might affect the evolutionary behaviours.

Keywords: global sourcing; International Purchasing Office; organisational design; capabilities; case study; China

Article Classification: Research paper

Introduction

International sourcing (IS) is a major trend of last decades (Christopher *et al.*, 2011; Javalgi *et al.*, 2009;), which even the current economic recession has not appeared to reverse (Hultman *et al.*, 2012). Both academics and managers have acknowledged the strategic relevance of IS, and the number of studies focusing on the topic has rapidly increased (Karjalainen and Salmi, 2013; Größler *et al.*, 2013). On the one hand, particular issues (e.g. motivations for engaging foreign supply markets) have been well researched (e.g. Quintens *et al.*, 2006b), but on the other hand, many authors (e.g. Hartmann *et al.*, 2008; Trautmann *et al.*, 2009) argue that the organisational design of global sourcing deserves further study.

To manage the complexity caused by cultural heterogeneity, the presence of multiple actors, relationships with different and distant interlocutors, and unfamiliar business rules and behaviours (e.g. Trent and Monczka, 2003; Birou and Fawcett, 1993; Swamidass, 1993; Handfield, 1994; Nassimbeni *et al.*, 2014; Jia and Zsidisin, in press), multinational corporations (MNCs) increasingly tend to establish International Purchasing Offices^[1] (IPOs) (Dobson and Yue, 1997; Nassimbeni and Sartor, 2006; Monczka *et al.*, 2008).

A recent extensive review of the body of literature on IPOs (Sartor *et al.*, 2014) indicates that, despite the increasing relevance of IPOs and the research tackling the topic since the 1990s, rigorous empirical studies of IPOs are almost completely lacking. Furthermore, the extant literature is not grounded in mainstream theories (e.g. transaction costs or resource-based views) and a number of thematic gaps exists, e.g. the

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3 value of IPOs, internal operations issues, and relationships between IPOs and primary
4 stakeholders (ibid.).
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7 This review encouraged us to develop a wide empirical research project to advance
8 the body of knowledge on IPOs and achieve three macro objectives: (1) to highlight the
9 relationship between strategy and structure in a global purchasing context; (2) to study
10 IPO macro-organisational structures (i.e. organisational archetypes) and their evolution
11 over time; and (3) to study IPO micro-organisational structures (e.g. individual tasks,
12 activities, and capabilities) and their evolution over time. This project was based on 14
13 in-depth case studies of Western MNC IPOs located in China conducted by a team of
14 European and Chinese researchers from different Universities who performed 34 face-
15 to-face interviews in Europe and China.
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27 We focused on China because it is one of the world's most attractive sourcing
28 regions for manufactured products and is currently the world's second-largest economy
29 (International Monetary Fund, 2012). Furthermore, as noted in the aforementioned
30 literature review (Sartor *et al.*, 2014), Western IPOs located in China represent the most
31 frequent examples of this practice. Finally, several scholars (e.g. Salmi, 2006;
32 Nassimbeni and Sartor, 2007; Schoenherr, 2009; Hultman *et al.*, 2012; Horn *et al.*,
33 2013; Liu *et al.*, 2013) have called for studies of global purchasing in the Chinese
34 context.
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45 The results of our extensive research project are presented in three separate papers,
46 which each addresses one objective and is grounded in different theories.
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49 In the first paper (Jia *et al.*, 2014a), we developed a causal model of the relationship
50 between the global purchasing strategy and IPO structure. We proposed that in addition
51 to a direct link in which 'structure follows strategy', IPO structure may also 'back-
52 influence' GP strategy through the 'IPO followership' construct.
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3 In the second paper (Jia *et al.*, 2014b), we applied role theory and classified the IPO
4 macro-organisational structures into five types based on the number, breadth, and depth
5 of the roles performed and observed that IPOs tend to progress along the five identified
6 types, i.e. from the 'Intermediary International Sourcing Office' towards the 'Overseas
7 Corporate Purchasing Organisation'.
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14 Finally, this paper adopts a micro-organisational perspective and is grounded in the
15 resource-based view of the firm and contingency theory with the following three main
16 aims: 1) to study the evolution of the roles and tasks/activities performed by IPOs over a
17 five-year study period (2007-2012); (2) to explore the IPO resources/capabilities
18 required to assume these roles and to study their evolution; (3) to highlight the
19 contingent factors that might affect such changes.
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27 The need for this paper is demonstrated by the fact that while certain scholars (e.g.
28 Monczka and Trent, 1991; Trent and Monczka, 2002, 2005; Birou and Fawcett, 2003)
29 have studied the resources/capabilities for global sourcing, these studies (1) assume a
30 headquarter-centric perspective, which completely ignores the resources/capabilities
31 required at a geographical (IPO) level; (2) do not link resources/capabilities to roles or
32 activities (despite being highly interconnected as noted by Harland and Knight (2001),
33 Ghosh *et al.* (2001), etc.); and (3) do not address the topic in a dynamic/evolutionary
34 way (despite many authors highlight that resources and capabilities are dynamic, see,
35 for instance, Eisenhardt and Martin (2000)).
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47 The contribution provided by this paper to Operations Management literature is
48 autonomous and distinct from the two aforementioned previous works based on the
49 same research project. Though Jia *et al.* (2014b) was aimed at identifying the roles
50 performed by IPOs and studying the evolution of the IPOs' macro-organizational
51 structures (i.e., organisational structural archetypes), that paper did not deal with: (a) the
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3 importance of each role; (b) the resources/capabilities underpinning IPO roles; (c) the
4 changes occurred over a five year period to the micro-organisational profiles (e.g.,
5 individual tasks, activities, and capabilities) of IPOs; (d) the contingent factors that
6 might affect such changes. These topics are the focus of and are entirely developed in
7 the current paper.
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14 The remainder of the paper is structured as follows. The following section is devoted
15 to the literature review. We then describe the research method and present the main
16 findings. Then, the results are discussed, and three evolutionary behaviours of IPOs are
17 identified. Finally, the contributions and the limitations of the study are presented.
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24 **Literature review**

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26 This section reviews the following major themes of previous research on IS
27 organisational design and evolution: 1) the roles and activities of purchasing
28 departments and subsidiaries (e.g. central purchasing organisations, purchasing
29 departments of global plants or business units, and IPOs); 2) the resources and
30 capabilities required to an effective task performance; 3) the evolution of IS
31 organisational structure; and 4) the contingent factors affecting IS organisational design.
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41 ***Roles of foreign purchasing subsidiaries***

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43 A relevant issue for the global sourcing organisational design is the assignment of
44 responsibilities to different purchasing departments and subsidiaries (e.g. central
45 purchasing organisations, purchasing departments of global plants or business units, and
46 IPOs).
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53 Theoretically, this issue lies within a wider debate over the roles of foreign
54 subsidiaries in the international business (IB) and international operations management
55 (IOM) literatures. The IB literature has identified and discussed the roles/types of
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3 subsidiaries without a specific functional focus (e.g. Birkinshaw and Morrison, 1995;
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5 Surlemont, 1998; Taggart, 1998a, 1998b); the IOM literature has instead addressed
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7 roles of plants within the MNCs (e.g. Ferdows, 1989, 1997)^[2]. Although some of these
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9 studies (e.g. Ferdows, 1997) consider certain purchasing activities to be among the tasks
10
11 used to define plant/subsidiary roles, no studies have specifically focused on the roles of
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13 foreign purchasing subsidiaries (e.g. IPOs).
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16 In the IS literature, some scholars (e.g. Rajagopal and Bernard, 1993; Liu and
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18 McGoldrick, 1996; Nassimbeni and Sartor, 2006; Fernie *et al.*, 2009) have addressed
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20 the activities that may be performed by IPOs. Drawing from Sartor *et al.*'s (2014)
21
22 review of literature on IPOs, five groups of IPO activities can be identified: supplier
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24 management, logistics management, selling related activities, financial activities, and
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26 other activities (see table 1).
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31 *Insert Table 1 approximately here*
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35 Although the roles of foreign manufacturing, sales, and R&D subsidiaries have been
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37 extensively discussed in existing literature, the roles of foreign purchasing subsidiaries
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39 (e.g. IPOs) have been ignored. Despite authors recognise the existence of many
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41 organisational levels (e.g. headquarters, global plants, business units, IPOs, product
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43 divisions, and geographical divisions), the debate over the
44
45 centralisation/decentralisation of purchasing decisions mainly considers the division of
46
47 responsibilities between headquarters and global plants/business units (i.e. a
48
49 headquarter-centric view).
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52 For these reasons, in a previous work based on our research project (Jia *et al.*, 2014b)
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54 we defined – drawing from literature on the roles of supply managers/functions (see
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56 table 2) – and empirically validated the roles performed by IPOs.
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Insert Table 2 approximately here

Resources/capabilities for global sourcing

A second relevant issue for global sourcing organisational design concerns the identification of the resources, competences, and capabilities required by the purchasing departments/subsidiaries.

The concepts of resources, competences, and capabilities were introduced by the resource-based view (RBV). Resources are specific physical, human, and organisational assets that can be used to implement value-creating strategies (e.g. Barney, 1986b; Wernerfelt, 1984). Capabilities are “*a special type of resource, specifically an organisationally embedded non-transferable firm-specific resource whose purpose is to improve the productivity of the other resources possessed by the firm*” (Makadok, 2001). Competencies are organisational routines and processes obtained by combining firm-specific assets (Teece *et al.*, 1997). Although few differences exist between the three concepts, RBV theorists believe that they all assure sustainable competitive advantages for firms that possess them because of their value, rareness, inimitability, and non-substitutability (e.g. Barney, 1986a, 1991, 2001).

We consider resources, competences, and capabilities as potential sources of sustainable competitive advantage and analyse them together in this study (a similar approach was followed by Harland and Knight (2001), Trent and Monczka (2003), etc.).

In the IS literature, relatively little research has been conducted on the resources, competencies and capabilities required to effectively manage international sourcing activities. Monczka and Giunipero (1984) propose three types of global sourcing success factors: global sourcing organisation and focus (e.g. logistics, global purchasing

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3 skills, and integrated information systems); foreign language skills; and business
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5 capabilities (e.g. understanding of foreign markets, knowledge of foreign business
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7 customs and of foreign supplier qualification methods). Birou and Fawcett (1993)
8
9 consider a wide list of possible success factors and find that the four most important
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11 factors include top management support, development of communication skills,
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13 establishment of long-term relationships, and development of global sourcing skills.
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15 The importance of top management support/commitment is also emphasised by
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17 Petersen *et al.* (2000), Rajagopal and Bernard (1994), and Trent and Monczka (2005).
18
19 Finally, Trent and Monczka (2002, 2003, 2005) argue in favour of the following
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21 resources/capabilities: rigorous and well-defined processes, availability of required
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23 resources (e.g. financial, human, technological), well-established communication
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25 methods, operations/manufacturing support of the global sourcing process, and
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27 awareness of potential global suppliers.
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32 We summarise this body of literature and develop a conceptual framework of the
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34 resources/capabilities in global sourcing (see table 3).
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38 *Insert Table 3 approximately here*
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42 The literature on IS resources/capabilities is characterised by three major limitations: (1)
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44 most authors address these issues without grounding their research in the RBV; (2)
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46 despite the importance of balance between centralisation and decentralisation of
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48 sourcing responsibilities (e.g. Chadwick and Rajagopal, 1995), all contributions
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50 employed the headquarter-centric perspective, completely ignoring the
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52 resources/capabilities required at the peripheral (IPO) level; and (3) no research has
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54 attempted to link resources/capabilities to IS roles or activities (despite the highly
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3 interconnected nature of these aspects noted by Harland and Knight (2001), Ghosh *et al.*
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5 (2001), etc.).
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8 9 ***Evolution of global sourcing***

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11 A third category of research focuses on the evolution of global sourcing organisational
12 design over time. Several authors identify a sequence of stages characterised by the
13 organisational design that companies adopt to address increasing involvement in foreign
14 supply markets or by the development from transactional to strategic global sourcing
15 (Monczka and Trent, 1991; Rajagopal and Bernard, 1993; Swamidass, 1993; Giunipero
16 and Monczka, 1997; Matthyssens and Faes, 1997; Trent and Monczka, 2003) (see table
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28 *Insert Table 4 approximately here*
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32 This line of inquiry emphasises that global sourcing organisational design may evolve
33 over time and should be studied dynamically, which highlights another gap in the body
34 of IS literature discussed above. That is, previous research adopts a static perspective
35 and does not study whether and how roles and resources/capabilities might change over
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45 46 ***Contingent factors affecting IS organisational design***

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48 The mainstream literature on organisational design and performance has been
49 dominated by structural contingency theory since the 1950s (e.g. Woodward, 1965;
50 Burns and Stalker, 1961; Chandler, 1962; Lawrence and Lorsch, 1967). These scholars
51 postulate that there is no best way to organise or manage a firm and that the effect of
52 structure (or processes) on performances is moderated by a number of contextual factors
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3 (e.g. Donaldson, 2001).

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5 This theoretical approach has increasingly been applied in the branch of IS research
6 devoted to global sourcing organisational design. For example, Giunipero and Monczka
7 (1997) recognise that the particular organisational approach to global sourcing adopted
8 by firms (i.e. completely decentralised, decentralised but co-ordinated, functionally
9 unique international purchasing groups specialising in IS, or centralised) might depend
10 on two contingent factors: characteristics of purchased commodities (e.g. standard vs.
11 custom, labour intensive vs. capital intensive) and global sourcing experience.
12 Hartmann *et al.* (2008), drawing from the information processing (IP) perspective of
13 contingency theory, propose a modified IP model for global sourcing that links the
14 organisational configuration (i.e. global purchasing strategy, corporate organisational
15 structure, and distribution of purchasing expertise among subsidiaries), information
16 processing requirements of the organisation, information processing capabilities of the
17 organisational design, and control mechanisms. Trautmann *et al.* (2009), drawing from
18 Tushman and Nadler's (1978) framework, identify three key contingent factors that
19 affect the integration of the global sourcing organisation: (1) category characteristics
20 (i.e. purchase novelty, purchase importance, category complexity, and demand
21 volatility); (2) supply environment (i.e. availability of global suppliers, transparency of
22 the supply market, and familiarity with the suppliers); and (3) interdependence of
23 purchasing units distributed across locations.
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47 While contingency theory has proved to be a useful framework to study factors
48 affecting global sourcing organisational design (especially centralisation vs.
49 decentralisation and integrations vs. responsiveness), it was never adopted to understand
50 the factors influencing the roles of foreign purchasing subsidiaries and
51 resources/capabilities for global sourcing.
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Research design

Research questions

The literature review highlights significant limitations and gaps in the existing research.

First, while a few studies address IS resources/capabilities, they do not consider which resources/capabilities are required at an IPO level. Moreover they are not adequately grounded in RBV, and do not link resources/capabilities to IS roles or activities.

Second, IS organisational design may evolve over time and should therefore be studied dynamically, particularly focusing on the contingent factors underpinning these changes.

We propose the following three research questions for our study: 1) How do the roles performed by International Purchasing Offices (IPOs) change over time? 2) What are the resources/capabilities required by an IPO for an effective performance and how do they change over time? and 3) What are the contingent factors affecting such changes?

Research method and sampling

Although this topic is not new (the first works were published in the early 1990s), research on IPOs remains at an early stage in term of approaches, methodologies, and topics (see Sartor *et al.*, 2014). We therefore utilise an exploratory ‘multiple case study’ approach.

The unit of analysis of our study was the IPO, and the population consisted of all of the IPOs located in China that belonged to Western MNCs. While detailed information about such a population was impossible to obtain (e.g. no thorough lists of IPOs in China are available from government agencies or consultancy companies), we selected a sample (drawing from data on foreign investors provided by the European Union Chamber of Commerce in China and the American Chamber of Commerce in China,

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3 company websites, news sources, and previous research contacts) that was sufficiently
4 heterogeneous and ranged from simple sourcing offices to fully fledged IPOs. Such a
5 maximum variation sampling strategy is commonly adopted in case study research and
6 considered a form of theoretical sampling (e.g. Patton, 2002; Mahoney and Goertz,
7 2004; Fletcher and Plakoyiannaki, 2011; Poulis *et al.*, 2013; Zomerdijk and de Vries,
8 2007).

9
10 The resulting sample, summarised in table 5 (using code names to disguise
11 identities), consisted of 14 Chinese IPOs belonging to 14 Western MNCs. The IPO
12 parent companies were large-scale firms located in the USA (5), the UK (3), Italy (2),
13 the Netherlands (2), Sweden (1), and Germany (1). Ten of the 14 IPOs were founded
14 between 2003 and 2007, two were founded in 1998, and *Retailer A* and *Retailer B* were
15 founded in 1992 and 1994, respectively. The spectrum of purchased products included
16 mechanical, electrical, electronic, chemical, aluminium, and plastic products. The
17 number of employees working for each IPO ranged from three to five hundred.

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Data collection

We interviewed thirty-four individuals working at all levels in the 14 IPOs: 14 IPO heads, 13 sourcing managers, 4 buyers, 2 supplier quality engineers and 1 coordinator. At a minimum, for each IPO, interviews were conducted with the head of the IPO and a sourcing manager or senior buyer. Each interview lasted approximately 1-1.5 hours. Some interviewees were interviewed twice or more.

The interview protocol (see appendix) consisted of four parts: (1) company and IPO profile; (2) IPO roles; (3) IPO resources and capabilities; and (4) IPO evolution. The interviews were prepared in English and Chinese and used according to the

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3 interviewees' preference. All interviews were recorded, transcribed verbatim, and
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5 translated as necessary (i.e. from Chinese to English) by a professional
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7 transcriber/translator. Some English transcripts translated from Chinese were back
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9 translated to compare the translation with the original transcripts. Finally, efforts were
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11 made to collect archival data for the 14 MNCs and their IPOs in China, including the
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13 profile and the evolution process.
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16 17 18 ***Data analysis***

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20 We created a database for each case consisting of the interview transcripts, field notes,
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22 and archival data and analysed the data following a two-step procedure (i.e. within-case
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24 and cross-case analyses), as suggested by Eisenhardt (1989) and Voss et al. (2002).
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27 Coding and data analysis were conducted manually by both field research teams to
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29 ensure inter-coder reliability (Duriiau *et al.*, 2007). The research teams and an additional
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31 researcher who was assigned the role of "resident devil's advocate" discussed and
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33 resolved any disagreements.
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36 We first conducted a within-case analysis for each of the 14 IPOs, creating a detailed
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38 case study write-up. Then, we performed the cross-case analysis to propose a common
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40 operationalisation of IPO roles and resources/capabilities and to identify patterns in the
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42 change of organisational profiles of the sampled IPOs^[3]. Excerpts of the cross-case
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44 analysis tables are reported in the discussion (see table 6 and table 7).
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48 49 ***Validity and reliability***

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51 Triangulation of multiple sources of evidence (mainly interviews and documents) and
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53 multiple respondents (two to five in each case) provided a stronger substantiation of
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55 constructs and hypotheses and fostered construct validity (Eisenhardt, 1989). This
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57 validity was also assured by establishing chains of evidence while collecting the data
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3 and by performing additional interviews (in cases of conflicting or missing data).
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5 Furthermore, the national composition of the research team (Italian, British, and
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7 Chinese), translation, and back-translation of interview transcripts helped to reduce
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9 linguistic and cultural biases. Internal validity was enabled by pattern matching, which
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11 involves comparing the findings of the within-case analysis with the identified patterns.
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13 To increase external validity (i.e. the generalizability of results), we analysed a large
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15 number of cases (14 IPOs) and adopted heterogeneous (maximum variation) sampling
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17 (see the ‘research method and sampling’ section). Finally, reliability was achieved by
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19 creating a case study database and following the case study protocol above described.
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24 **Results**

25 *IPO roles*

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27 The cross-case analysis allowed us to study the changes that occurred during the five-
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29 year study period (2007-2012) to the roles of the sampled IPOs. To preserve the chain
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31 of evidence, we collected major keywords and sentences from the interviews on the
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33 importance of roles at the time of the research and five years before. Due to space
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35 limitations, we report this coding in table 6 for three exemplary cases that will be
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37 discussed in the ‘discussion’ section.
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48 Most of the analysed IPOs were strongly involved in **negotiator** role, the can be
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50 summarised in the activities of defining agreements and drawing up contracts. In some
51
52 cases, IPOs not only managed negotiations but also made final purchasing decisions
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54 (‘Engineering’: “[...] orders are negotiated, prepared, signed directly by the IPO.”).
55
56 Almost all respondents argued that the importance of this role increased significantly
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3 over the five-year period. This change was attributed to two different factors. *First*,
4 labour and material costs have risen significantly in China, which demands careful
5 negotiation to achieve expected savings ('Industrial B': "*now labour and materials*
6 *costs have increased. This requires us to negotiate harder*"). *Second*, Chinese suppliers'
7 bargaining power has increased stemming from their improved capabilities ('Industrial
8 Tool': "*the Chinese suppliers have grown up, their bargaining power has increased and*
9 *the negotiation has become a more complex and time-consuming activity.*").
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18 As far as the **coordinator** role is concerned, some IPOs were involved in inter-
19 organisational project management, while in other cases this responsibility was
20 managed directly by headquarters. In the sampled companies, centralisation typically
21 prevailed when the profile of the local suppliers was more international ('Industrial C':
22 "*if the supplier is more westernised we do inter-organisational project management*
23 *from the HQ; if it is more local we use the IPO support.*"). Some cases also indicated
24 IPO involvement in facilitating buyer-supplier relationships ('Engineering': "*one of the*
25 *IPO's challenges is to build up long-term and stable relations with suppliers also*
26 *through informal and off-work life.*"). All but one IPO ('Identification') were involved
27 in logistics management. Some cases highlighted that improvement opportunities still
28 existed in this area, while other cases revealed significant improvements ('Industrial
29 Tool': "*logistics has been recently improved a lot through new information systems.*").
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45 An important responsibility linked to the **gatekeeper** role was the management of
46 information flows ('Identification': "*the IPO is an information processor, sourcing not*
47 *only products but also information.*"). Searching for suppliers was still considered
48 fundamental by the interviewees but less critical than 5 years before. A possible
49 explanation is improved knowledge of the Chinese context ('Industrial A': "*we now*
50 *better understand the Chinese complex environment and we are more confident to*
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3 *easily find high quality suppliers*") as well as greater stability in relations with the local
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5 supply base ('Industrial A': "*a strong effort was devoted to the detection of the*
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7 *suppliers, their assessment and the kick off the relationship. Now we can spend this*
8
9 *energy for other activities.*"). Great importance was still assigned by interviewees to
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11 quality control. Eleven IPOs employed Supplier Quality Engineers (SQEs).
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13 Respondents emphasised that SQEs should be independent and separate from the
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15 purchasing team for autonomous quality control. Some IPOs ('Engine', 'Industrial A',
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17 'Engineering', 'Appliance', and 'Industrial Tool') also helped to counter intellectual
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19 property rights violations and highlighted the importance of this activity, especially in
20
21 the Chinese context ('Appliance': "*Intellectual Property matters affect the structure of*
22
23 *the IPOs in China. [...] The process of the evaluation of the suppliers starts with*
24
25 *checking IP aspects.*"). On average, the importance of gatekeeper role increased during
26
27 the five-year period for all but three IPOs (the exceptions were 'Engine', 'Printing', and
28
29 'Retailer A').
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33
34 **Supplier developer** was another key IPO role identified by most interviewees. Its
35
36 importance was emphasised by several respondents ('Printing': "*the main role of our*
37
38 *IPO shifted from supplier selection to supplier development for improving their*
39
40 *performance.*" 'Engineering': "*one of the most important tasks of our expeditors is the*
41
42 *training of suppliers.*"). The support provided by some IPOs included both technical
43
44 and managerial aspects ('Engine': "*we help our suppliers to improve by pushing 6*
45
46 *sigma, Toyota production system and lean management.*"). Only one IPO was not
47
48 involved in supplier training ('Industrial C': "*we are doing quite a lot of education but it*
49
50 *comes directly from the headquarters.*").
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53
54 **Cultural broker** was an important role identified by a number of interviewees
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56 ('Identification', 'Engine', 'Industrial A', 'Engineering', 'Appliance', 'Retailer B',
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3 'Automation', 'Lighting', and 'Solar System'). Some of the sampled IPOs facilitated a
4
5 high level of cultural integration ('Identification': "*we act as a cultural bridge helping*
6
7 *the communication.*"). Others ('Printing' and 'Retailer A') considered this role less
8
9 important than 5 years before because of improved knowledge of the Chinese culture
10
11 and increased ability of mediating among different cultures ('Printing': "*people in the*
12
13 *west have largely adapted to cultural differences and they are working more easily with*
14
15 *the Chinese companies.*"). Another relevant cultural broker IPO activity identified was
16
17 *guanxi*^[4] management ('Identification': "*in China, personal relationship matters a lot.*
18
19 *A supplier is willing to collaborate with you, if you have good guanxi. IPO is very*
20
21 *useful in this.*").
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26 Seven IPOs reported explicitly playing an **innovator** role at the time of the research.
27
28 For instance, they verified opportunities for early cooperation in new product
29
30 development ('Engine': "*Chinese suppliers need to be involved as early as possible in*
31
32 *the new product development process. IPO works with them on Advanced Product*
33
34 *Quality Planning.*") or in the distribution of design activities between headquarters and
35
36 the IPOs ('Retailer B': "*the design team is based in both the UK headquarters and in*
37
38 *the Chinese IPO.*"). Furthermore, all respondents argued that the importance of this role
39
40 significantly increased over the considered five-year period.
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43
44 The importance of **network structuring agent** and **supplier advocate** roles varied
45
46 among the IPOs. Eight cases considered a **network structuring agent** role to be
47
48 important or very important for improving supply chain efficiency and limiting
49
50 disruptions. One case showed that IPOs could play a **supplier advocate** role in a "*do ut*
51
52 *des*" manner ('Lighting': "*if we defend local suppliers' interests against the*
53
54 *headquarters, the local suppliers will do the same with our sub-suppliers.*"). In two
55
56 cases ('Engine' and 'Engineering'), this role could cause misunderstandings or clashes
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3 between headquarters and IPOs ('Engineering': "*headquarters' management doesn't*
4 *appreciate the fact that the IPO protects the suppliers.*"). The analysed IPOs are
5
6 particularly cautious of representing Chinese suppliers if their staffs are mainly
7
8 composed of Chinese employees for the fear of not being considered loyal by their
9
10 parent companies. Interviewees highlighted that the importance of **supplier advocate**
11
12 role increased significantly over the five-years study period with three exceptions:
13
14 'Industrial A', 'Industrial B', and 'Printing' ('Industrial B': "*suppliers are now able to*
15 *directly explain their needs to headquarters and the other company's plants.*").
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21 Ten IPOs mentioned the importance of the **internal advisor** role, mainly to increase
22
23 knowledge on issues concerning sourcing in China at headquarters and plants ('Engine':
24
25 "*we train our internal stakeholders about risks and opportunities of the Chinese*
26 *market.*"). Some cases revealed that IPOs were called to overcome resistance within the
27
28 MNCs to changing domestic sourcing preferences ('Industrial B': "*in Europe and US,*
29 *the plants have been working with their domestic suppliers for years. It is difficult to*
30 *change this habit.*"). Certain interviewees (e.g. 'Engineering', 'Lighting', and 'Retailer
31
32 B') include a **knowledge broker** role to highlight as the role of the IPO in providing
33
34 advice not only on sourcing in China (as in the **internal advisor** role) but also on
35
36 general supply chain management (SCM) best practices as a centre of excellence for
37
38 such activities.
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46 Most of the sampled IPOs were moderately involved in a **supply policy maker** role
47
48 ('Solar System': "*most of the strategic planning and decisions are made by*
49 *headquarters.*"). However, 'Retailer B' was a genuine policy maker ('Retailer B':
50
51 "*China is the predominant sourcing area for us. We are offshoring all our main*
52 *procurement responsibilities to the IPO.*"). China is the predominant sourcing area for
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3 'Retailer B', which evidently affected the decision to enhance the strategic role of this
4
5 IPO.
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7 In sum, most interviewees reported that the importance of all of the analysed roles
8 increased during the five-year study period. The roles that grew considerably included
9 *supplier developer* and *innovator*. Growth in importance of the *supplier developer* role
10 might be related to the increase in the technological and architectural complexity of
11 items being purchased from Chinese suppliers. Moreover, the analysed experiences
12 indicated that the training programmes provided by these Western companies focused
13 on advanced issues such as the Toyota Production System, lean management, and,
14 recently, corporate social responsibility. The significant growth of the *innovator* role
15 might be explained by the increasing involvement of the Chinese supply base and IPOs
16 in new product development projects.
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30 *IPO resources/capabilities*

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32 The cross-case analysis allowed us to study IPO resources/capabilities, to characterise
33 them accurately, and to highlight their changes over the five-year study period. The
34 major keywords and sentences on the importance of IPO resources/capabilities at the
35 time of this study and the five years before were collected and systematised to preserve
36 the chain of evidence. Table 7 reports this coding for three exemplary cases that will be
37 discussed in the 'discussion' section.
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48 *Insert Table 7 approximately here*
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52 **Advanced skills of employees** were considered important or very important by all
53 respondents. The most frequently cited skills were communication skills (e.g.
54 presentation, public speaking, listening and writing), which were mentioned by 8
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3 interviewees, and technical skills, mentioned by 7 interviewees. Other decisive skills
4
5 were team building (e.g. leadership, the ability to influence and produce an acceptable
6
7 arrangement), strategic planning (project scoping and goal-setting) and commercial
8
9 capabilities. Respondents mentioned also other abilities: project management, problem
10
11 solving, ethics, flexibility, and ability to involve internal and external stakeholders. No
12
13 respondents mentioned financial skills as important for managing an IPO.
14
15

16 All IPOs except 'Retailer A' and 'Industrial Tool' highlighted the importance of
17
18 **executive commitment** (e.g. 'Engineering': "*if managers don't have commitment to*
19
20 *source from China, relevant obstacles arise.*"). Two IPOs ('Identification' and
21
22 'Industrial C') considered executive commitment extremely important but reported that
23
24 strong commitment was lacking.
25
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27 As might be expected from the findings about IPO roles, the capability that had
28
29 increased most in its perceived importance was innovation. **Innovation capabilities**
30
31 were considered important or very important by all respondents. Several IPOs were
32
33 involved in new product development projects, and their ability to create an effective
34
35 link between R&D departments and Chinese suppliers (for joint design, search for
36
37 advanced materials, etc.) appeared crucial. In one case (i.e. 'Retailer B'), the design
38
39 team was even located within the IPO.
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43 Unsurprisingly, all IPOs considered the **availability of necessary resources** a
44
45 decisive element ('Lighting': "*This is essential. We cannot do anything without*
46
47 *adequate budget, time, human and technical resources.*"). Some interviewees reported
48
49 that they possessed the necessary resources, while others experienced difficulties in
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51 obtaining them, especially financial support. This aspect appeared strongly connected
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53 with another important key factor of success, i.e. executive commitment.
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3 Most IPOs (exceptions were 'Industrial C' and 'Solar System') identified **rigorous**
4 **and well-defined processes** as important. Some companies reported difficulties in
5 following Chinese processes, especially regarding goals, budgets and times ('Industrial
6 B': *"it is difficult to go through the process in great details; this is particular true with*
7 *Chinese suppliers."*).

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14 Several cases highlighted the importance of a **structured approach to**
15 **communication**. Videoconferencing and web-based collaboration tools were some of
16 the solutions used for a continuous alignment of the IPO's strategy to the one adopted
17 by headquarters. According to the interviewees, this alignment seemed to require some
18 time ('Retailer B': *"typically, in the early phase an IPO hasn't got a structured*
19 *approach to communication and it develops approaches and norms with the time*
20 *passing by."*). Some companies also indicated that the importance of this aspect had
21 progressively decreased as the IPO matured ('Automation': *"this is less important now*
22 *than in the past because during start-up it is essential to have a structured approach.*
23 *Now the IPO is more based on its own experience."*).

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36 Several IPOs reported that the availability of **adequate information technology** was
37 an important resource ('Engineering': *"the ERP system was established in China*
38 *immediately and it is integrated in all the facilities and offices of the group."*). Three
39 cases underlined the difficulty of managing large amounts of data ('Retailer B': *"we still*
40 *have to spend a lot of time getting data and don't have time to think and analyse*
41 *them."*).

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50 Most respondents (except 'Identification', 'Retailer A', 'Retailer B', and 'Lighting')
51 underlined the importance of **operations/manufacturing support to the IPOs**. The
52 type of support (e.g. engineering, R&D, quality, or logistics) and its source (internal or
53 external stakeholders) varied within the sample ('Identification': *"we need quality and*
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3 *logistics teams to support us.”*; Industrial A: *“We need support from quality and R&D*
4 *of the plants.”*; Industrial C: *“we get support from engineering department at the*
5 *headquarters and from the quality department at the Shanghai plant.”*). These
6
7 experiences indicate that support can generate mutual benefits (‘Industrial A’: *“we need*
8 *support from quality and R&D departments at the headquarters. Their supports have*
9 *been improved because they also start obtaining benefits from this collaboration.”*).

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16 Most of the sampled IPOs considered the **availability of suppliers with advanced**
17 **capabilities** essential to developing collaborations that satisfy the company's
18 requirements for design, cost, quality, and time (‘Engine’: *“the availability of adequate*
19 *suppliers is crucial. To develop Chinese suppliers can be very costly and time*
20 *consuming.”*).

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27 Interviewees reported that **cross-cultural adaptation** is another critical capability.
28
29 The sampled IPOs valued employees who understand different cultures with minimal
30 bias and make valid cross-cultural judgments. Respondents highlighted the need to
31 employ at least one ‘trans-cultural person’ within the IPO, preferably in top-level
32 management (‘Retailer B’: *“most of the senior expatriate managers have long*
33 *international experience.”*). Some IPOs (‘Engineering’, ‘Appliance’, ‘Industrial B’,
34 ‘Industrial C’, and ‘Retailer A’) reported that this role was less important now than in
35 the past (‘Engineering’: *“China has become more international.”*).

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45 Finally, several companies considered **vendor rating systems** important (‘Engine’:
46 *“it is useful because we need to measure the suppliers in a rigorous way;”* ‘Industrial
47 B’: *“we need to give suppliers fair judgments and feedback.”*), while all but three IPOs
48 (‘Solar System’, ‘Industrial B’, and ‘Lighting’) perceived **methodologies for**
49 **measuring savings** important (‘Engine’: *“this is important because the IPO presence*
50 *and development is based on it.”*).

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3 All of the resources/capabilities analysed were considered important by the
4 interviewees at the time of the interviews. The proposed conceptual framework for IPO
5 resources/capabilities is therefore supported by the empirical evidence (table 3).
6
7 Furthermore, most analysed IPOs reported the increasing importance of many
8 resources/capabilities.
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13 Discussion

14 *A resource-based view of IPOs*

15
16 Having established the importance of these IPO resources and capabilities, we apply the
17 RBV to shed light on four key issues about them: (1) value; (2) rareness, (3)
18 inimitability; and (4) non-substitutability (e.g. Barney, 1986a, 1991, 2001).
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20

21 All twelve resources/capabilities included in the research framework were reported
22 by the interviewees as an important source of *value* for their IPOs. They may in fact
23 potentially contribute to reduce purchasing prices, to increase supply quality and
24 reliability, to find new materials/technical solutions, and to prevent (or reduce) cultural
25 problems and misunderstanding between the suppliers and the central purchasing office.
26
27

28 As far as the *rareness* is concerned, we observed that while some resources (e.g.
29 ‘adequate information technology solutions’, ‘structured approaches to communication’,
30 and ‘adequate vendor rating systems’) are considered technicalities that can be easily
31 acquired or transferred and are reported to be widespread among the IPOs, other
32 capabilities are characterised by greater social complexity, require a long time or
33 gradual learning processes to acquire and are quite rare. For instance the ‘cross-cultural
34 adaptation’ capability entails many aspects such as a deep knowledge of different
35 cultures, values, and ways of doing business and the ability to communicate and
36 mediate and can be acquired only through a long and gradual organisational learning
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3 process. Similar reasoning might apply to ‘advanced skills of employees’ and
4
5 ‘innovation capabilities’. If we consider ‘resource/capability bundles’ (rather than
6
7 ‘individual resources/capabilities’) following Barney (1991), we will argue that the
8
9 analysed set of resources/competences is rare. It consists in fact of some particularly
10
11 rare competences that should be exploited in combination with other more widely
12
13 available resources. ‘Advanced skills of employees’, ‘adequate information technology
14
15 solutions’, ‘structured approaches to communication’, and ‘adequate vendor rating
16
17 systems’ constitute for instance a resource/capability bundle in which the rare capability
18
19 (i.e. ‘advanced skills of employees’) requires the other three resources to exploit its
20
21 potential value of reducing purchasing prices or increasing supply quality and
22
23 reliability.
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26
27 The bundle of resources and competences highlighted by this study is valuable and
28
29 rare and represents a potential source of competitive advantage. However, is this
30
31 competitive advantage sustainable? To answer this question, we must consider the
32
33 imperfect imitability and non-substitutability of the analysed resources/competences.
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37 Most cases suggested that human resources can easily move to competitors (in our
38
39 sample the IPO annual turnover rate often exceeded 10%), as well as some practices can
40
41 be copied. However, our cases showed that the overall IPO’s resources and capabilities
42
43 can be difficultly imitated since the effectiveness of these know-how and human
44
45 resources transfers is challenged by the importance of the IPO context and of the
46
47 relationships with suppliers and internal stakeholders.
48

49
50 All of the analysed resources/capabilities appeared to be difficult to *substitute*. The
51
52 cases did not suggest a resource/capability that could substitute the twelve presented in
53
54 the research framework.
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In sum, the analysed resources and competences present the four features of the core competences, i.e. value, rareness, inimitability, and non-substitutability.

Evolution and contingency perspective

Changes in the organisational profiles (i.e. roles and resources/capabilities) of the sampled IPOs and the contingent factors affecting such changes also deserve discussion.

The analysed cases allowed us to identify three evolutionary behaviours:

- **Overall development** that affects all roles studied (i.e. all roles have undergone significant increases in importance);
- **Selective development** that occurs along one or a few directions (mainly innovation and supplier development);
- **Stable configuration** where the stability is the main characteristic (i.e. little change in the importance of roles).

The aim of this section is to build a typology of these evolutionary behaviours and to illustrate them through three representative cases. Drawing from the cross-case analysis tables containing keywords and quotes (table 6 and table 7), we coded the changes in importance of the analysed roles and resources/capabilities into five levels, i.e. high increase, increase, no significant change, decrease, high decrease. Table 8 summarises the changes in roles and resources/capabilities importance for the three representative cases. In addition, at the end of this section possible contingent factors affecting the three behaviours are identified and discussed.

Insert Table 8 approximately here

Overall development

A representative example of this behaviour is ‘Appliance.’

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2
3 Five years before the research (when sourcing activities in China were limited), the
4 IPO mainly conducted supplier selection for the parent company. More recently,
5 increased international competition led the company to relocate a large proportion of its
6 production to low-cost countries to reap the benefits of comparative cost advantage.
7 Thus, 'Appliances' started restructuring its strategic orientation toward cost efficiency.
8 Within a few years, approximately 70 percent of purchases were transferred to low-cost
9 countries (mainly China). Accordingly, the IPO assumed more responsibilities and its
10 profile grew considerably along all of the considered dimensions.
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20 An enabling factor of this evolution is the level of **executive commitment**. The
21 growing number of competitors working in China made management aware of the
22 importance of this sourcing base for achieving a sustainable competitive advantage
23 ('Appliance': *"everything arose from the management's awareness of the importance of*
24 *the IPO's growth."*).
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32 Other resources/capabilities that were previously critical elements were mainly
33 related to supplier selection, especially the adoption of **adequate vendor rating**
34 **systems**. With the increase in the IPO's responsibility and complexity, other
35 resources/capabilities rose in importance (e.g. **adequate information technology**
36 **solutions, innovation capabilities, rigorous and well-defined processes,**
37 **operations/manufacturing support to the IPO**).
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45 Other IPOs that have followed a similar path are 'Automation', 'Engineering',
46 'Industrial B', 'Industrial C', 'Industrial Tools', and 'Retailer B'. However, some of
47 these, despite being characterised by overall development, had not yet reached the
48 advanced configuration of the 'Appliance' IPO because the percentage of sourcing in
49 China remained low (e.g. 'Automation') or executive commitment was limited (e.g.
50 'Industrial B').
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3 *Selective development*
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5 A representative example of this behaviour is ‘Retailer A.’
6

7 This company, characterised by extensive experience in the Chinese context, had
8 considerably grown in the **innovator** and **supplier developer** roles in recent years;
9
10 other roles had instead remained constant or experienced a little increase (i.e. negotiator
11 and coordinator) or decrease (i.e. supplier advocate and cultural broker).
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16 Initially, ‘Retailer A’ purchased simple products in this region. The main activities
17 performed by the IPO were supplier selection and negotiation. More recently, the
18 company decided to source products with greater technological and architectural
19 complexity from China. Rather than pushing the suppliers to lower their prices, the IPO
20 began to work with them to increase their technological and managerial profiles. As
21 such, the **innovation capabilities** and **advanced skills of employees** became critical.
22
23 The IPO was able to support local suppliers in the development of advanced
24 management concepts, such as lean production and six-sigma. More generally, the IPO
25 guided the development of supplier capabilities.
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36 Other resources/capabilities included the adoption of **rigorous and well-defined**
37 **processes, adequate information technology solutions, and availability of necessary**
38 **resources**. ‘Retailer A’ – during the five-year study period – rethought and codified
39 some of its business processes and selected new IT solutions to build a better
40 connection with the supply base.
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47 Other IPOs that have followed a similar path are ‘Printing’ and ‘Lighting’. Using the
48 Chinese supply base to source advanced products tend to be encouraged by increasing
49 prices, which made China less attractive than other geographic areas for basic items.
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Stable configuration

A representative example of this behaviour is ‘Engine.’

Although this IPO was only established in 2003, the parent company had penetrated the Chinese sales market in 1979. The IPO was already well developed five years before the study (it was mainly used to train suppliers, set supply policies, define the supplier evaluation systems, and develop multi-annual contracts) and its configuration remained stable during the five-year period of analysis. Both the importance of the roles and the importance of the resources/capabilities reflected this stability.

Other IPOs that have followed a similar path are ‘Identification’, ‘Industrial A’, and ‘Solar System’. IPO maturity, the long lasting presence of the parent company in China, and a stable sourcing strategy are common features of these cases (with the exception of ‘Solar System’ which represents a rather particular case of sourcing in China photovoltaic products for a product availability reasons).

Contingent factors

The cross-case analysis identified three factors that could affect IPO evolutionary behaviours:

- *The architectural and technological complexity of the sourced items.* China has recently lost cost advantages due to increasing costs of some productive inputs (e.g. labour and raw materials) and Renminbi (Chinese Yuan) appreciation. These changes have forced three sampled companies to source from the country for new reasons (e.g. access to advanced competencies and proximity to a strategic sales market), to source more complex items, and to cooperate with suppliers and support their development. The head of the ‘Printing’ IPO argued, for instance: “China is not considered a low cost country anymore. [...] For this

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3 *reason we [the IPO] have [has] moved up in the value chain*". A similar change
4
5 was experienced by the 'Lighting' and 'Retailer A' IPOs ('Lighting': "*if you*
6
7 *start applying the total cost of ownership concept, then a lot of strategic factors*
8
9 *and the best country sourcing is not always China*"). These three cases were
10
11 characterised by 'selective development' behaviour. We might propose that the
12
13 increase in the architectural and technological complexity of the sourced items
14
15 encourages the growth of certain roles assumed by IPOs (especially 'supplier
16
17 developer' and 'innovator').
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- 20
21 • *The annual volume sourced abroad.* While individual differences in the annual
22
23 volume sourced in China exist, all companies that exhibited 'overall
24
25 development' behaviour (i.e. 'Appliance', 'Automation', 'Engineering,
26
27 'Industrial B', 'Industrial C', 'Industrial Tools', and 'Retailer B') were
28
29 characterised by increasing volumes over the five-year study period. Such a
30
31 growth in the annual volume sourced from China appears to have led these
32
33 companies to transfer responsibilities from headquarters to the peripheral
34
35 purchasing organisation. In other words, we might hypothesise that the increase
36
37 in the sourcing volume leads to an overall growth of (all) roles assumed and
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39 resources/capabilities required by IPOs.
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43 • *The experience in the foreign context.* We observed that companies that have a
44
45 long lasting presence in China (even if only a sales or a representative office)
46
47 tend to have strengthened and quite stable IPOs. This might be due to their
48
49 greater experience and deeper understanding of the language, cultural values,
50
51 institutions, and local way of doing business. A representative case for this
52
53 pattern is 'Engine' (see the 'stable configuration' section), but similar reasoning
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55 might apply even to the 'Identification' and 'Industrial A' IPOs. We propose
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3 that a long lasting presence in a foreign context increases the stability of the
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5 roles assumed by IPOs.
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9 Our findings (i.e. the three affecting factors) are partially consistent with the results of
10
11 previous studies on contingent factors affecting IS organisational design (see the
12
13 'literature review' section). The effect of the characteristics of the sourced items on IS
14
15 organisational design has been noted by Giunipero and Monczka (1997) and Trautmann
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17 *et al.* (2009). The annual volume is one dimensions of the 'purchase importance' (i.e.
18
19 one of the contingent factors) adopted by Trautmann *et al.* (2009). Experience in a
20
21 foreign context represents an extension of the 'global sourcing experience' highlighted
22
23 by Giunipero and Monczka (1997).
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27 In addition to the three affecting factors highlighted by our study, an additional
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29 contingency is the country of location of the sourcing basin. Although we focused on a
30
31 single country (i.e. China), which does not allow cross-country comparison (the reason
32
33 we discuss this contingent factor separately), the analysed cases provided interesting
34
35 information about the effect of the country on IS organisational design and evolution.
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38 We noticed as the relevance of certain roles is emphasised by some features of the
39
40 Chinese context. The monitoring of intellectual property (IP) rights ('gatekeeper role')
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42 is for instance of particular relevance while sourcing in a country where IP rights
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44 violations are not infrequent. In addition, the cultural differences between the company
45
46 headquarters and the sourcing basin – see, for instance, the three differences between
47
48 China and the West highlighted by Jia and Rutherford (2010), i.e. 'family orientation vs.
49
50 self-interest', 'guanxi network vs. multiple institutions', 'guanxi building process vs.
51
52 Western relationship-building process' – contribute to cause the need for a 'cultural
53
54 broker' role within the IPO. Finally, even the physical/geographical distance between
55
56 the company headquarters and the sourcing basin might contribute to shape the IPO
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organisational profile. The importance of warehousing and logistics ('coordinator' role) is in fact affected by such physical/geographical distance.

Some country influences might also be recognised in the evolutionary behaviours of the sampled IPOs. The economic development of China over the last decades and the improvement of its logistics infrastructures might have contributed to the increased annual volume sourced from China by the sample companies (i.e. 'Appliance', 'Automation', 'Engineering', 'Industrial B', 'Industrial C', 'Industrial Tools', 'Retailer B'). Such an increase is in turn one of the key determinants of 'overall development' behaviour. In addition, the increased costs of productive inputs in China and the Renminbi appreciation have made China no longer a low cost country for other companies (i.e. 'Lighting', 'Printing', and 'Retailer A'), which requires a change in sourcing strategy.

Finally, we believe that the rapid changes that have been taking place in China (e.g. rising costs, currency appreciation, economic and infrastructural development, and improvement in the technological and managerial profiles of local firms) have made this context dynamic and particularly suitable to study the IPO evolutionary behaviours.

Contribution

Contribution to theory

This paper is part of a debate on global sourcing organisational design, an under-researched area (e.g. Trautmann *et al.*, 2009). While the few existing studies (e.g. Giunipero and Monczka, 1997, Arnold, 1999, Quintens *et al.*, 2006a; Trautmann *et al.*, 2009; Monczka and Trent, 1991; Trent and Monczka, 2002, 2005; Birou and Fawcett, 2003) focus on centralisation vs. decentralisation (i.e. subdivision of responsibilities between headquarters and global plants), we focus on the activities (or roles) and

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3 capabilities of International Purchasing Offices and their evolution over time.
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5 We extend the resource-based view of the firm in a global sourcing context by
6 highlighting twelve resources/capabilities required by IPOs and discussing their
7 characteristics. In doing this, we overcome three major limitations of the previous
8 research on resources/capabilities for global sourcing: (1) inadequate grounding in the
9 RBV; (2) assuming a headquarter-centric perspective (completely ignoring IPOs); and
10 (3) not linking the resources/capabilities to the roles or activities that they underpin.
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13 Furthermore, this is the first study that proposes a typology of IPO micro-
14 organisational evolutionary behaviours by considering the changes occurred over a five-
15 year period. While the empirical contribution of typologies has been debated, we
16 borrow the Doty and Glick's (1994) argument that they are complex theories because
17 "*they have constructs, they predict relationships among the constructs, and these*
18 *predictions are falsifiable*" (p. 243).
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31 Finally, this study is grounded in contingency theory and recognises three factors
32 that might affect the evolutionary behaviours (i.e. the architectural and technological
33 complexity of the sourced items, the annual volume sourced abroad, and the experience
34 in the foreign context). As such, we provide a set of constructs and relationships
35 between constructs that could be formalised into a model and tested empirically in
36 future studies.
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46 ***Contribution to practice***

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48 This study provides a general view on one of the most frequently adopted sourcing
49 strategies: namely, the IPO. The results provide managers with an idea of the spectrum
50 of activities performed by these offices and of resources/capabilities required for their
51 success.
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3 Additionally, the identified behaviours (although they would need further refinement
4 and empirical tests conducted on a wider sample) can help managers reflect on IPO
5 evolution (e.g. which activities to improve, which resources/capabilities to develop).
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10 The focus on China, the world's most important sourcing basin, allows us to provide
11 managerial insights into that geographical area. The analysed experiences highlight the
12 changes that have affected sourcing in China during the last decade, including
13 overcoming the low-cost sourcing perspective and shifting towards more
14 (technologically and architecturally) complex items. This change has modified the
15 organisational structure of some IPOs, which had been increasingly focused on supplier
16 development and cooperation in new product development. Moreover, some country-
17 specific aspects (e.g. the *guanxi* management) were identified and their relationships
18 with IPOs were discussed.
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31 **Limitations and future research**

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34 This paper has three main limitations. *First*, the limited number of cases analysed does
35 not allow statistical generalisation to a broader population. However, we tried to
36 increase external validity of the results by using a large sample for a case study research
37 (14 IPOs) and a heterogeneous sample (from simple sourcing offices to fully fledged
38 and proactive IPOs). *Second*, this research is focused on IPOs located in China that
39 belong to large Western MNCs. Therefore, the results may be affected by the dimension
40 of the sampled companies (large scale multinationals) and by country-specific aspects
41 concerning the localisation of the headquarters (all in the West) and the IPOs (all in
42 China). This geographical/dimensional bias is common in studies on IPOs, as indicated
43 in a recent literature review (Sartor *et al.*, 2014). *Third*, we used retrospective data.
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3 data collection techniques and interviewing multiple informants), we acknowledge that
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5 this choice has some weaknesses (e.g., the recollection of past events by informants
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7 may be difficult and in certain cases biased).
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10 Notwithstanding these limitations, the paper clarifies some important aspects of a
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12 growing (and under-researched) organisational solution (i.e. the IPO) and more
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14 generally of the sourcing in China, providing some spurs for future studies.
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17 Additional case studies may be conducted to formalise a model and extend the
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19 geographical horizon of the analysis (both considering IPO and HQ locations). Surveys
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21 can be utilised to test the identified relationships empirically.
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Appendix: Interview protocol

1. Company and IPO profile

Please describe your company's operations in China (e.g. number and localisation of manufacturing plants and other units, evolutionary process, percentage of revenue contributed by China, percentage of Chinese sourcing compared to total direct spending).

Please describe your IPO (locations of the IPOs, financial profile, e.g. internal trading or funded centrally, location, year of establishment and evolutionary process, number of employees and organisational structure, items sourced, sourcing areas, and number of suppliers managed).

2. IPO roles

Please discuss the definition and importance of each role listed in the table below^[5] for your IPO. Are there any other roles not listed?

3. IPO resources and capabilities

Please discuss the definition and importance of each resource/capability provided in the table below^[6] for your IPO. Are there any other resources/capabilities not listed?

4. IPO evolution

Please describe the evolution of your IPO (over the last five years) in terms of importance of roles and resource/capabilities.

Notes

[1] The IPO was first defined as “an offshore buying office or buying house set up by an OEM [original equipment manufacturer] to procure components, parts, sub-assemblies materials and other industrial inputs at competitive prices for use by manufacturing plants globally” (Goh and Lau, 1998, p.120). This definition has been recently updated: “a buying office located abroad, either stand alone or stationed within a foreign subsidiary, that sources industrial inputs and/or services for a company’s global plants; it [...] manages the supplier relations and the materials/information flows in a geographically defined area” (Sartor *et al.*, 2014).

[2] For more about these lines of inquiry, sometimes labelled ‘subsidiary roles’ and ‘plant roles in MNCs’, see, for example, Shi and Gregory (1998), Vereecke *et al.* (2006), and Paterson and Brock (2002).

[3] Due space limitations, only cross-case findings are presented in this paper.

[4] The term *guanxi* generally refers to relationships or social connections based on mutual benefits (Yang, 1994). The term refers to a special type of relationship that bonds the exchange partners through the reciprocal exchange of favours and mutual obligations (Luo, 1997).

[5] We provided table 2.

[6] We provided table 3.

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TABLE 1
IPO activities

Supplier management	<p>Supplier selection (Fernie et al., 2009; Humphreys et al., 1998a, 1998b; Lakemond et al., 2001; Lau, 2008; Liu and McGoldrick, 1996; Monczka and Trent, 1991, 1992; Nassimbeni and Sartor, 2006, 2007; Rajagopal and Bernard, 1993, 1994; Trent and Monczka, 2005)</p> <p>Supplier monitoring (Fernie et al., 2009; Goh and Lau, 1998; Lamming, 2000; Lau, 2008; Monczka and Trent, 1991, 1992; Nassimbeni and Sartor, 2006, 2007; Pachè, 1998; Rajagopal and Bernard, 1993; 1994; Trent and Monczka, 2005)</p> <p>Supplier development (Monczka and Trent, 1992; Nassimbeni and Sartor, 2006, 2007; Rajagopal and Bernard, 1993, 1994)</p> <p>Know-how and technology transfer (Nassimbeni and Sartor, 2006, 2007; Rajagopal and Bernard, 1994)</p> <p>Negotiation (Chung et al., 2004; Fernie et al., 2009; Humphreys et al., 1998a, 1998b; Liu and McGoldrick, 1996; Monczka and Trent, 1991; Nassimbeni and Sartor, 2006, 2007; Rajagopal and Bernard, 1993, 1994; Trent and Monczka, 2005)</p> <p>Cooperation in the product development (Chung et al., 2004; Fernie et al., 2009; Humphreys et al., 1998a, 1998b; Lakemond et al., 2001; Monczka and Trent, 1991, 1992; Nassimbeni and Sartor, 2006; Rajagopal and Bernard, 1993, 1994)</p>
Logistics management	Logistics and warehousing management (Chung et al., 2004; Liu and McGoldrick, 1996; Monczka and Trent, 1991)
Selling-related activities	<p>Sales promotion (Nassimbeni and Sartor, 2006; Pachè, 1998; Rajagopal and Bernard, 1994)</p> <p>Marketing support (Choi, 1999)</p> <p>Countertrade management (Humphreys et al., 1998a, 1998b; Monczka and Trent, 1991; Rajagopal and Bernard, 1993)</p>
Financial activities	Identifying, obtaining, and managing incentives by local governments (Pachè, 1998)
Other activities	<p>Legal support (Nassimbeni and Sartor, 2006; Pachè, 1998; Rajagopal and Bernard, 1994)</p> <p>Administrative support (Lakemond et al., 2001; Liu and McGoldrick, 1996; Nassimbeni and Sartor, 2006; Rajagopal and Bernard, 1994)</p> <p>Recruiting and training (Nassimbeni and Sartor, 2006)</p>

TABLE 2
Roles of purchasing managers

Roles of purchasing managers	Description
Gatekeeper (adapted from: Hallenbeck <i>et al.</i> , 1999; Harland and Knight, 2001; Knight and Harland 2005)	It collects, filters and transmits information concerning (actual and potential) suppliers to headquarters and other company's units. It identifies and selects suppliers, monitors them and controls IP rights violations.
Negotiator (adapted from: Wu <i>et al.</i> , 2010; Hallenbeck <i>et al.</i> , 1999)	It supports the negotiation process between internal purchasing units and local suppliers and it adapts the contracts to local context and requirements. In some cases it is responsible for the whole negotiation process and for the contract drawing.
Coordinator (adapted from: Harland and Knight, 2001; Knight and Harland, 2005; Wu <i>et al.</i> , 2010)	It facilitates buyer-supplier relationships and all the aspects concerning the material flows, including logistics issues and inter-organisational project management.
Supplier advocate (adapted from: Wu <i>et al.</i> , 2010)	It defends the suppliers' needs in front of the internal stakeholders. These actions may lead to the renegotiation of contractual clauses and/or the extension of delivery times.
Internal Advisor (adapted from: Harland and Knight, 2001; Knight and Harland, 2005; Wu <i>et al.</i> , 2010)	It provides formal and informal advices to the internal stakeholders. Advices often take the form of training of internal employees in order to improve their practices with foreign suppliers.
Supplier developer (adapted from: Ferdows, 1997; Kaiho and Iwasaki, 1997; Nassimbeni and Sartor, 2006)	It analyses the suppliers' technological and managerial profile and identifies possible actions for their improvement. It trains suppliers and provides them the needed technical and managerial support.
Supply policy maker (adapted from: Knight and Harland, 2005)	It cooperates in determining the supply chain policies and practices (e.g. single vs. multiple sourcing, short vs. long term agreements, adoption of lean solutions).
Network structuring agent (adapted from: Harland and Knight, 2001; Knight and Harland, 2005)	It works for increasing the network reliability. Examples are provided by the adoption of tools for the supply chain risk management (e.g. the FMEA methodology) in order to reduce possible failures.
Innovator (adapted from: Harland and Knight, 2001; Knight and Harland, 2005)	It acts as an interface between internal and external researchers and designers, supporting co-design activities. It also contributes to identify new material/technical solutions garrisoning purchasing markets.
Cultural Broker (adapted from: Gulbro and Herbig, 1999; Harland and Knight, 2001)	It facilitates mutual cultural comprehension between the companies' units and the local sourcing base. It reduces possible failures determined by cultural distance.

TABLE 3
International sourcing resources/capabilities

IS resources/capabilities	Key elements
Rigorous and well-defined processes (adapted from: Petersen <i>et al.</i> , 2000; Trent and Monczka, 2002, 2005)	Clear description of the processes and their interdependences. Definition of processes' goals, milestones and budgets. Continuous control and improvement of the procedures.
Adequate information technology solutions (adapted from: Petersen <i>et al.</i> , 2000; Monczka and Giunipero, 1984; Trent and Monczka, 2002, 2005)	Presence of structured data warehouses. Availability of technologies for a non-stop access to core data. Automatic warning systems.
Structured approaches to communication (adapted from: Birou and Fawcett, 1993; Trent and Monczka, 2002, 2005; Monczka and Giunipero, 1984)	Use of videoconferencing and web-based collaboration tools for a continuous alignment of the IPO's strategy and actions to those centrally defined.
Adoption of methodologies for measuring savings (adapted from: Rajagopal and Bernard, 1994; Trent and Monczka, 2002, 2005)	Presence of measurement systems able to support the calculation of savings achieved through the IPO's activities.
Advanced skills of employees (adapted from: Petersen <i>et al.</i> , 2000; Trent and Monczka, 2002, 2003, 2005)	Availability in the IPOs of employees skilled on team building, strategic planning, communication, technical, and financial aspects.
Cross-cultural adaptation (adapted from: Monczka and Giunipero, 1984; Petersen <i>et al.</i> , 2000; Jia and Rutherford, 2010; Jia and Lamming, 2013)	Recruitment of employees able to comprehend foreign cultures and to mediate with the domestic one.
Adequate vendor rating systems (adapted from: Rajagopal and Bernard, 1994; Nassimbeni <i>et al.</i> , 2012)	Presence of vendor rating systems updated and including also IP aspects.
Innovation capabilities (adapted from: Kotabe, 1990; Harland and Knight, 2001)	Availability of capabilities for promoting and facilitating new product development (NPD) and the innovation of products and processes.
Executive commitment (adapted from: Birou and Fawcett, 1993; Rajagopal and Bernard, 1994; Trent and Monczka, 2005; Petersen <i>et al.</i> , 2000)	Trust of the executive level of the company in the IPO's personnel and roles. Good formal and informal relations between IPOs' directors and the executive levels of the company.
Availability of necessary resources (adapted from: Trent and Monczka, 2005)	Adequate time, managerial and financial resources for managing all the activities assigned to IPOs.
Operations/manufacturing support (adapted from: Trent and Monczka, 2002, 2003)	Support of the (internal and external) stakeholders (mainly the employees of the other company's units and the customers) in the problem solving. Ability to connect different project teams and operating centres.
Availability of suppliers with advanced capabilities (adapted from: Kannan and Tan, 2002; Trent and Monczka, 2003)	Presence of suppliers that can satisfy (design, cost, quality, time) company's requirements.

TABLE 4
Evolution of international sourcing

	Monczka and Trent (1991)	Rajagopal and Bernard (1993)	Matthyssens and Faes (1997)
Involvement in the foreign supply market ↓	/	(1) Local sourcing;	/
	/	/	(1) Purchasing issues are coordinated by the largest user of a specific product or product group or by the user that is located in the supplier's country of origin;
	(1) Designate domestic buyer(s) for international purchasing;	/	(2) headquarters coordinates the purchasing activities;
	/	(2) import via agents or distributors;	/
	(2) use of subsidiaries or other corporate units for international assistance;	(3) import through subsidiaries / own representatives;	/
	(3) establish international purchasing offices;	(4) establish international purchasing offices;	(3) the company establishes regional purchasing groups to coordinate the purchasing activities;
	(4) assign design, build, and sourcing to specific worldwide business unit(s);	(5) integrate and co-ordinate global sourcing through direct investment.	(4) the company sets up profit-oriented purchasing centres, which sell their services to various customers within the company.
	(5) integrate and coordinate worldwide sourcing strategy.	/	/
Transactional IS Strategic IS ↓	Swamidass (1993)	Giunipero and Monczka (1997)	Trent and Monczka (2003)
	(1) No import sourcing;		(1) Domestic purchasing only;
	(2) import sourcing for cost minimisation;	(1) Operational/transactional stage, in which the focus is on minimisation of purchasing costs (in general, purchased items are relatively standard and labour intensive);	(2) international purchasing as-needed;
	(3) import sourcing for competitive advantage;	(2) planning/managing stage, in which the focus is on how to best manage international purchasing efforts, even improving supplier relations and signing long-term contracts (in general, purchased items are more complex).	(3) international purchasing as part of sourcing strategy;
	(4) import sourcing is a strategic asset.		(4) integration and coordination of global sourcing strategies across worldwide buying locations;
		(5) integration and coordination of global sourcing strategies with other functional groups.	

TABLE 5
Sampled companies

Company name	Parent company information				Analysed IPO information						
	Headquarter	N. of empl.	China		Location	Year of found.	Profile ¹	Items sourced	Covered sourcing area	N. of empl.	N. of sup.
			First operat.	Manuf. presence							
Appliance	Sweden	51000	1996	4 plants	Shanghai	1998	SA	Electrical, mechanical and chemical components	China	70	NA
Automation	Italy	744	2002	No presence	Shanghai	2007	SA	Mechanical, electro-mechanical and electric components	South East Asia	6/7	NA
Engine	USA	40000	1979	26 plants	Shanghai	2003	SA	Machining parts	East Asia	75	>100
Engineering	Italy	8663	1981	2 plants	Beijing, Changshu	2004	P	Mechanical parts	China	250	NA
Identification	USA	6500	1993	5 plants	Shanghai	2006	SA	Maintenance, repairing, operational identification	China	6	NA
Industrial A	USA	48000	2000	12 plants	Shanghai	2003	SA	Mechanical parts	Asia Pacific	7	20
Industrial B	USA	6500	1990	5 plants	Shanghai	2004	SA	Electrical, Mechanical and chemical components	China	20	>20
Industrial C	UK	2300	2006	1 plant	Shanghai	2006	P	Compressor components, machining parts	China	3	4/5
Industrial Tools	USA	36700	1985	2 plants	Suzhou	1998	P	Motors, plastic and machining parts	China	8	98
Lighting	Netherlands	119000	1985	16 plants	Shanghai	2003	SA	Lamps and automotive lighting	Asia	90	NA
Printing	UK	2150	1996	2 plants	Shanghai	2004	SA	Electronic parts	China	4	12
Retailer A	Netherlands	127000	1998	1 plant	Shenzhen	1992	SA	Furniture	China	500	>300
Retailer B	UK	6652	1994	1 JV plant	Shanghai	1994	SA	Toys, clothing, home and travel systems	Global/Asia	300	500/600
Solar system	Germany	5000	2000	No presence	Shanghai	2005	SA	Photovoltaic panels	Asia	7	4

1) SA – stand alone; P – part of a plant

TABLE 6
Cross-case analysis on IPO roles (exemplary cases)

	Appliance		Engine		Retailer A	
	Now	5 years ago	Now	5 years ago	Now	5 years ago
Gatekeeper	"most important"	"quite important"	"same as in the past" "We are an extension of CPO but we do everything ourselves"	"medium importance"	"very important now and 5 years ago" "HQ managers come to China only once or twice a year"	"very important now and 5 years ago"
Negotiator	"very important" (when the IPO starts to work with the supplier)"	"important" "most important role in the past"	"has become a very little bit more important"	"it was decided by HQ"	"crucial"	"important"
Coordinator	"important" "our IPO has a logistic team composed by 6 people"	"quite relevant"	"same as in the past"	"important with the growing number of suppliers and quantity and complexity of components and considering the long supply chain transporting by sea"	"important now" "we had an organization restructuring 2 years ago: we started to collaborate with suppliers"	"quite important"
Supplier advocate	"important but not crucial"	"not so relevant"	"The plants in America, UK and Brazil naturally consider the IPO part of the Chinese suppliers" "if there is a problem, we encourage the suppliers to write to the plants directly"	"we tried not to be involved too much to avoid misunderstanding from the plants"	"The importance of this has reduced because in the past the competition between countries were more harsh than now"	"moderately important"
Internal advisor	"crucial"	"it wasn't important"	"not changed"	"quite important because the low cost advantage is declining and we have to persuade our internal stakeholders to see China not only as a low cost market"	"not important both now and in the past" "the advice provided is all toward Chinese suppliers not for internal customers"	"not important both now and in the past" "the advice provided is all toward Chinese suppliers not for internal customers"
Supplier developer	"The IPO has a supplier improvement team, personnel who works in the suppliers' plant and support them."	"not relevant"	"lightly more relevant"	"We push our supplier to improve by pushing 6 sigma, Toyota production system and lean production. We also provide training materials and training events information"	"has become crucial" "we have changed our approach of developing suppliers. We shouldn't help them on this basic stuff; we collaborate with them and help them be the leader in the industry"	"we provided training before (e.g. lean production or 5s), but the supplier don't necessarily learn from that"
Supply policy maker	"not actively involved in this role" "the importance has increased a lot but it is still marginal"	"unimportant"	"very little increase of the importance"	"we are actively involved in making supply policy"	"not changed"	"We have not big influence on global supply policy. The process of influencing is more implicit."
Network structuring agent	"the most important role due to its strong increasing"	"quite important"	"same as in the past"	"I feel the biggest role is to maintain a stable supply network and long term collaborative relationship with suppliers. You got to do networking not business alone"	"a little bit more important than in the past"	"medium importance"
Innovator	"there is a low level of contribution to innovation" "the IPO will probably play a role in the future"	"unimportant"	"a little bit more important than in the past"	"Chinese suppliers need to be involved as early as possible in the NPD process. We work with them on APQP (Advanced Product Quality Planning) project management"	"crucial" "China is not considered a low cost country anymore. We can't just push the suppliers to lower their price. We need to discuss with them on new materials, new structures, new processes and new ways of doing things"	"it was not important"
Cultural Broker	"quite important"	"it wasn't important"	"no change"	"The bigger barriers are the ones of culture. We have to constantly educate the group about differences"	"less important now than 5 years ago"	"not so important"

TABLE 7
Cross-case analysis on IPO resources/capabilities (exemplary cases)

	Appliance		Engine		Retailer A	
	Now	5 years ago	Now	5 years ago	Now	5 years ago
Rigorous and well-defined processes	"relevant issue"	"completely unimportant"	"a little more important than in the past"	"important" "our procurement procedure has been well defined"	"important"	"quite important"
Adequate information technology solutions	"the most important capability"	"completely unimportant"	"no change"	"we have what we call GPS (Global Purchasing System) which includes all our databases."	"relevant role"	"medium importance"
Structured approaches to communication	"quite important"	"completely unimportant"	"important"	"relevant"	"same as 5 years ago"	"not important" "we have a culture that is people driven rather than process driven. We don't have a weekly meeting with HQ; if there is a problem, we contact the HQ"
Adoption of methodologies for measuring savings	/	/	"very little increase in importance"	"important but it is difficult to reach agreement on this" "the TCO methodology is desirable but difficult to implement as it requires accurate data from various departments."	"this is a very little bit more important now since we have more stringent requirements in measuring savings"	"moderately important"
Advanced skills of employees	"this is important now, in particular collaboration and communication, strategic planning and technical skills"	"not so important"	"same as five years ago"	"crucial." "IPO staff should have project management skills, communication skills, engineering background and leadership"	"crucial" "trading managers require: leadership, communication, strategic thinking and business sense" "business developers require: team leadership, negotiation skills, decision making and influence are important"	"not important"
Cross-cultural integration	"has become quite important"	"unimportant"	"no change"	"relavent issue" "IPO head should be a trans-cultural"	"moderately important both now and in the past"	"moderately important both now and in the past"
Adequate vendor rating systems	"important both now and in the past"	"important both now and in the past"	"increased a little because we need to measure the suppliers in a more rigorous way"	"quite important"	"This has become more important now. We have a detailed system."	"not so important"
Innovation capabilities	"important"	"unimportant"	"little increase due to a quite deeper involvement of supplier involved in the NPD process"	"quite relevant issue"	"it has become crucial" "this reflects the increasing importance of innovator role."	"of little importance"
Executive commitment	"crucial" "the biggest obstacle for the developing an IPO is, in fact, the internal resistance from the organization"	"of medium importance"	"same as in the past"	"the sponsorship from senior management on low cost country sourcing is very important" "I've been fortunate because of my senior position, I know the senior managers and they trust me"	"this has been more important in the past."	"a relevant role"
Availability of needed resources	"relevant issue"	"unimportant"	"no change"	"important for 3 reasons: you need to identify and manage capable suppliers; there must be right people in the IPO, engineering resources are our bottleneck"	"important" "we need to know why they want to develop this product, what function they want to achieve, if we can use alternative materials, if their design is feasible for manufacturing"	"medium importance"
Operations/manufacturing support	"important"	"unimportant"	"still crucial"	"We received a lot support from engineering department. We cannot achieve anything without their support"	"this has been and is not important"	"this has been and is not important"
Availability of suppliers with advanced capabilities	"important"	"of little importance"	"very little increase in importance"	"important" "since JVs and foreign suppliers are too expensive, we tend to develop Chinese suppliers (state owned enterprises which have been privatized)"	"this has been and is the less important element"	"this has been and is the less important element"

TABLE 8
Evolutionary behaviours

(++ high increase; + increase, 0 no significant change; - decrease; -- high decrease)

		Overall development	Stable configuration	Selective development
		Appliance	Engine	Retailer A
Roles	Gatekeeper	++	0	0
	Negotiator	+	0	+
	Coordinator	+	0	+
	Supplier advocate	+	0	-
	Internal advisor	++	0	0
	Supplier developer	++	+	++
	Supply policy maker	++	0	0
	Network structuring agent	++	0	+
	Innovator	++	+	++
	Cultural Broker	++	0	-
Resources/capabilities	Rigorous and well-defined processes	++	+	+
	Adequate information technology solutions	++	0	+
	Structured approaches to communication	++	0	0
	Adoption of methodologies for measuring savings		0	0
	Advanced skills of employees	++	0	++
	Cross-cultural integration	++	0	0
	Adequate vendor rating systems	0	+	+
	Innovation capabilities	++	+	++
	Executive commitment	++	0	-
	Availability of needed resources	++	0	+
	Operations/manufacturing support	++	0	0
	Availability of suppliers with advanced capabilities	++	0	0