Sourcing strategies in the Italian coffee industry

MATTEO BORZONI and NIGEL POOLE

While the socio-economics of the coffee industry has received much attention, this article presents a novel analysis of B2B relationships in order to understand what determines coffee roasters' sourcing strategies. The theoretical framework is based on new institutional economics and relational contracting. The methodology is qualitative and uses a multiple-case approach. The evidence shows that different modes of transactions are devised in order to cope with the business uncertainty and to guarantee supplies of the coffee with the desired quality attributes. Traders offer to roasters guarantees that growers and exporters cannot provide. Relational components in transactions are essential to reduce uncertainty and transaction costs, and are important coordination mechanisms in trader–roaster linkages and even more so in the exporter–roaster interface. Roasters devise stronger coordination mechanisms with suppliers when the quality reputation of the core product is critical in their business strategy.

Keywords: buyer–seller relationships, coffee, Italy, new institutional economics, sourcing, supply chain management.

Coffee as a global industry is second only to oil in value

Coffee is a global industry second only to oil in value, and of enormous social, economic and environmental significance. The international trade in coffee has attracted substantial attention from analysts, policymakers and development practitioners in the last 10–15 years. This is not least because of the collapse of the International Coffee Agreement at the end of the 1980s, and the precipitous fall in world prices during the late 1990s. The role of multinational manufacturers and coffee retailers, various analyses of 'inequitable' margins by NGOs, the resurgence of differentiation strategies among smallholders, and their links to major international retailers such as Starbucks (Argenti, 2004) have created a strong blend of research output and polemic.

But the industry overview remains incomplete. It is curious that the 'business' of coffee has received so little attention compared with the 'socio-economics' of production and the niche markets for fair trade and organic coffee. Research at the distribution level of the chain is novel still, and little is known of how coffee roasters source

Matteo Borzoni is with the Management and Innovation Laboratory, Sant'Anna School of Advanced Studies, Pisa, Italy; and Nigel Poole is a senior lecturer at the Centre for Development, Environment and Poverty, SOAS, University of London.

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their supplies and how they interrelate with upstream suppliers and downstream retail distributors. The focus on roasters reflects how roasters have strengthened their position vis-à-vis other actors by expanding their control of the supply chain through flexibility in blending, the implementation of supplier-managed inventory systems (SMI) and oversupply (Ponte, 2002). However, there is still a lack of research into the business reasons that determine roasters' sourcing choices. This paper addresses this significant gap in the coffee chain by reporting an exploratory study of roasters' business in the country from which the now global consumption model originated: Italy. Using a qualitative approach we present an exploration of the determinants of roasters' sourcing strategies.

There is a lack of research into the business reasons that determine roasters' sourcing choices

Background

Business uncertainty: Product and market

Coffee supply chains have gone through a deep transformation since 1990 after the breakdown of the International Coffee Agreement, the deregulation of the coffee industry and the dismantling of government exporting authorities in many producing countries. Dramatic price fluctuations have been observed throughout this period with market power shifting throughout the chain. Latterly, the new role of coffee roasters as 'channel captains' in shaping the supply chain has been recognized (Daviron and Ponte, 2005).

Coffee roasters have emerged as 'channel captains', shaping the supply chain

The raw product quality varies with origin, variety, growing conditions and handling. Along the coffee supply chain, from the farmer to the roaster, the uncertainty arising from asymmetries of information is pervasive. Like many commodities that have variable characteristics, quality concerns cannot be easily resolved by protocols: physical defects in beans are quite easy to detect and to measure at different stages, but the complete and actual characteristics can be evaluated only by taste (Poole et al., 2007). Technology and special equipment helps, but quality assurance requires special human skills in quality control based on tacit knowledge and inter-firm common language to communicate product attributes. Measuring in an incontestable way the attributes that can be evaluated only by taste is not possible. Therefore, international traders use standardized broad descriptors related to the origin of the coffee, the size of the beans and the production process as proxies for the organoleptic characteristics. Such descriptors allow the parties to differentiate prices on the basis of a presumed average quality. However, other organoleptic attributes (e.g. special flavours or aromas) cannot be specified. The consequence is that incentives to farmers and exporters to differentiate the premium quality products are missing when coffee is traded only through average descriptors.

Potential for opportunistic trading can be found at almost any level of the market chain

Before coffee reaches the final consumer it goes through many hands (see Figure 1). Potential for opportunistic trading can be found at almost any level of the market chain. The contract regulating coffee transactions by roasters and traders within Europe is a standard one. Contractual disagreements between a European trader and roaster can be referred to arbitration. In global commerce, the absence of effective arbitration between producing and importing firms means that enforcement is much more difficult, or impossible, if one of the parties is under the jurisdiction of a producing country in Latin America, Africa or Asia. Even in cases where arbitration is effective, what can easily be claimed are only the measurable attributes: the physical defects. The organoleptic characteristics are much more difficult to demonstrate.

The Italian coffee sector

Italy is the third largest unroasted coffee importer in the world

Quality coffee culture is intrinsic to modern Italian food consumption. Importing more than 8 million 60 kg bags, Italy is the third largest unroasted coffee importer and second in Europe (ICO, 2009). A good part of the imported coffee is re-exported, piggy-backing on the successful export of the retail model. The sector in Italy is much more fragmented than in the rest of Europe, but the recent economic crisis is provoking a significant market concentration. According to Databank, in 2008 there were 720 roasters, while at the beginning of 2010 there were only 580, an overall 19 per cent decrease.

Seventy per cent of all coffee is consumed at home, while about 20 per cent is consumed in bars and restaurants (the market known as known as HoReCa: hotels, restaurants and cafes). The remaining 10 per cent is consumed through vending machines. The structures of the home consumption (HCM) and HoReCa markets are very different. HCM is highly concentrated and five roasters control 70 per cent of the volume, with one firm, Lavazza, dominating 40 per cent of the volume. In contrast, the HoReCa market is much more fragmented. Here the 10 biggest roasters control only 40 per cent of the total volume (with the market leader, Illycaffè, controlling just 7 per cent). The vending market is characterized by the presence of one firm that controls 25 per cent of the volume and the rest is dispersed among many medium-size roasters (Databank 2010).

Table 1 reports trends in the three main markets.

Table 1. Tons of coffee consumed in the Italian coffee markets

	2006	*2007*	*2008*	*2009*	*Average annual change*	*Total change (2006/2009)*
HCM	164,020	164,400	164,100	162,600	-0.3%	-0.9%
HoReCa	61,500	60,500	59,700	58,150	-1.8%	-5.4%
Vending	24,360	26,350	29,600	30,600	7.9%	2.6%

Source: Databank (2010)

Consumers are changing their coffee consumption habits towards time-saving products

The HoReCa market is undergoing a significant contraction while the HCM reduction is much less marked. Such effects are partially compensated for by an increase in the vending sector. These figures suggest that consumers are changing their coffee consumption habits towards convenient, time-saving products.

The roasters' business

The business of roasters is sourcing, roasting and distributing coffee, within which the principal challenges are:

- securing regular supplies and adequate quantities of high-quality, raw, core product, which is unroasted (also called green) coffee;
- adding 'roasting' value through appropriate investments in facilities, best industry management practice and proprietary knowledge of the product, based on blending coffee of different origins;
- distributing high-quality assured roasted coffee to the target market.

Figure 1 depicts the whole supply chain. It shows that roasters source coffee from three main channels: direct importation from exporters in producing countries; purchase from brokers; and purchase from dealers. Transacting through these channels raises the following uncertainty problems:

Roasters source coffee from exporters in producing countries, brokers and dealers

Direct importation is risky since the buyer comes into possession of the coffee only when the sale contract is signed by both parties, so post-shipment claims are difficult to settle.

Brokers sell coffee contracts to roasters for a wide variety of coffees, which, at the moment of purchase, may be as yet unharvested, on ships, or in customs warehouses.

Dealers buy coffee directly from exporters in producing countries or from brokers. The dealer sells the physical good and delivers it to the roaster, controls the product quality and eliminates damaged beans and impurities.

Literature review

Sourcing strategy is a popular topic in economics and management research. In order to understand its real economic nature different theoretical perspectives can be used. Here we present the approach of transaction cost economics (TCE). We then add a sociological perspective to include relational governance between the vertical integration and spot market extremes.

Measuring and screening product information is a source of transaction costs (Barzel, 1985). The variability of the product, such

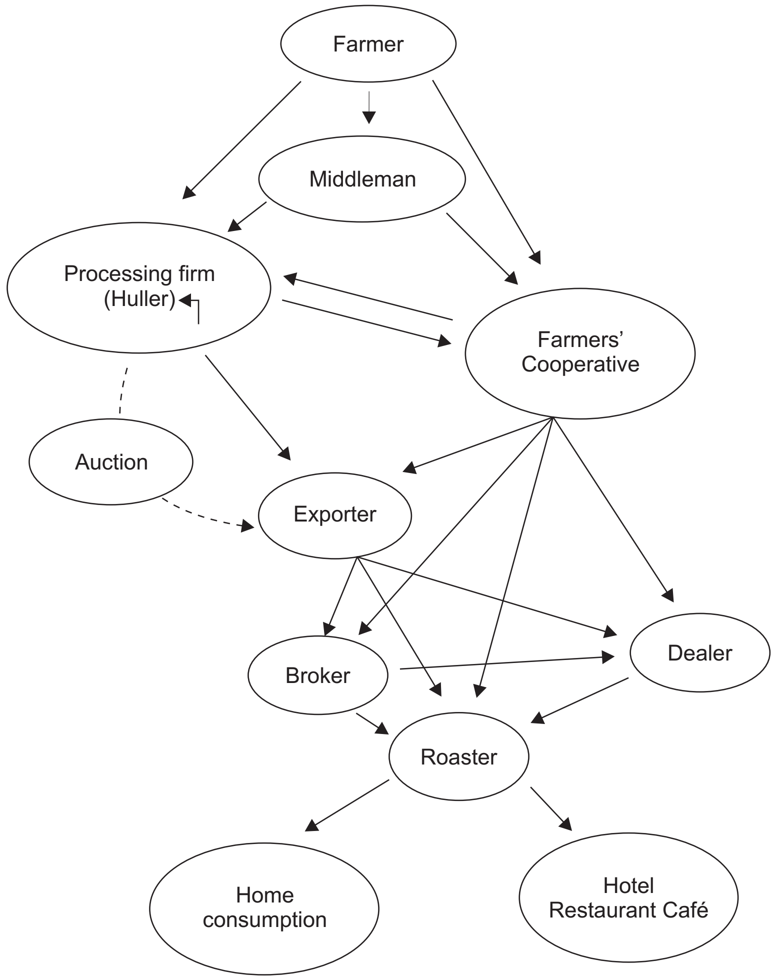

Figure 1. The coffee supply chain

as coffee, affects the measuring costs. When products are subject to variability, the buyer faces high measurement costs, so a guarantee is often required in order to minimize measuring activities before the transaction is finalized.

According to Williamson (1985) there are three critical dimensions for describing transactions: the frequency at which transactions occur, uncertainty and asset specificity. Asset specificity usually refers to physical assets, but human resources, industry skills and tacit knowledge can be specific assets of equal or even greater significance. The degree of uncertainty, frequency and asset specificity influence the transaction governance form that is most likely to take place: spot market, vertical integration and hybrid forms. Vertical integration becomes more attractive as the degree of uncertainty increases, as the frequency of transactions rises, and as greater investments are made in specific assets.

Three critical dimensions for describing transactions are their frequency, uncertainty and asset specificity, including physical assets, but also human resources, skills and knowledge

A growing number of empirical studies and management theories have challenged the cost-based view implicit in TCE. Between the two extremes of markets and hierarchical governance, a conceptual perspective wider than just TCE is necessary to allow for the social essence of inter-firm linkages: the concept of relational governance adds value (Rindfleish and Heide, 1997), emphasizing the role of collaboration as a coordination mechanism in addition to market forces, contracts and administrative fiat (Pimentel Claro et al., 2003). This is particularly appropriate for understanding the coffee trade and strategic attempts to reduce uncertainty.

Research questions and methodology

Analysing roasters' sourcing strategies has the purpose of answering the following research questions: 1) what are the main coffee roasters' sourcing strategies? How do roasters choose them and why? 2) How are the roasters' sourcing strategies influenced by each firm's broader business model?

Initially, three pilot case studies (i.e. two roasters and one trader) were undertaken in order to understand the general sourcing procedures of the Italian roasters. From the analysis of these first cases and of the literature review undertaken, a qualitative approach was defined to elicit sensitive information about firms' business strategies. The determinants of the purchasing strategies were found to be extremely complex, dynamic and characterized by the interlacing of economic exchange and social relations. The appropriate methodology was believed to be a multiple-case study design, reflecting the exploratory approach to building theories (Eisenhardt, 1989).

The purchasing strategies were extremely complex, dynamic and characterized by the interlacing of economic and social relations

The unit of analysis was the single roaster. The cases were selected through purposive sampling, using the 'maximum variation' criterion, indicated by Patton (1990). The representatives of the three pilot firms were asked to suggest other roasters who could enrich the study because of their different purchasing policies and company strategies. Finally, in order to increase external validity, eight different roasters were selected. This is a reduced number compared with the total number of roasting companies in Italy but offers a wide range of firm typologies in respect of firm size and target market (HCM and HoReCa).

Individual, face-to-face, semi-structured interviews with different representatives of the selected firms were conducted. Once the firm had been approached and the purpose of the research explained, the interviews were held with the purchasing manager, quality manager, and with the managers responsible for sourcing and marketing strategies. Guidelines for the interview questions were related to the following dimensions:

- firm size and volumes of transactions;
- marketing objectives, marketing positioning and overall business strategy;
- market targeting (i.e. HoReCa, HCM and vending);
- relations with suppliers.

On average each interview lasted 90 minutes. Follow-up questions were explored through a combination of face-to-face interviews and telephone conversations. In order to test for convergence, interview data were triangulated with other data sources: a dealer and a broker from whom some of the selected roasters sourced coffee were also interviewed. Annual reports, press releases, web sites and product descriptions were reviewed, along with other public sources of information about the firms.

The firms

The main characteristics of the interviewed firms are reported in Table 2. The presentation of the results and discussion section below draws on specific quotes from interviews along with a cross-case analysis.

Table 2. Characteristics of interviewed firms

Firm	*Size*	*Sourcing channel*	*Target market*	*Business/distribution strategy*
A	Large	Direct importation	HoReCa HCM	Reputation for high quality Only one blend
B	Large	Direct importation/Brokers	HoReCa HCM	Wide variety of blend offers in HCM Financial services in HoReCa
C	Medium	Brokers	HCM HoReCa	Wide variety of offers in HCM Financial and technical assistance services in HoReCa
D	Medium	Brokers/Small direct importation	HoReCa minimal HCM	High level and variety of services offered to bar owners
E	Medium	Direct importation with broker involvement	HoReCa	High quality of blends through accurate selection of raw material + service components
F	Medium	Direct importation with broker involvement/Brokers	HoReCa minimal HCM	High quality of blends + some technical and financial assistance to bar owners
G	Medium	Brokers	HoReCa minimal HCM	Financial and technical assistance services to bars
H	Small	Dealers	HoReCa	High quality of core product

Note: * Under 15 employees were considered small firms; from 15 to 100, medium firms; 101 plus, large firms

The firms represented here try to differentiate themselves in various ways in their main markets. In the HCM, excepting Firm A, all roasters offer a wide variety of blends. This is done in order to satisfy all consumer segments and to occupy more shelf space at the expense of competitors.

In the HoReCa market the roasters differentiate themselves by the kinds of service offered to bars

In the HoReCa market the roasters differentiate themselves not only by the quality and price of their blends but also by the kinds of service offered to bars. Excluding firms A and H, all the firms in this research supply financial services to their customers, either offering banking warranties or direct financing from their own resources. Often, these financial services are provided to bar owners when they set up a new bar or renovate an existing one. The bar owner has to buy at least an agreed amount of coffee for a number of years. This retail exclusivity limits competition because the bar owner is bound for years to a specific roaster.

Other services offered to bars are the provision of technical assistance for the installation and maintenance of coffee machines under different contractual forms (free loan, rental, sales, etc.). Frequent and regular visits and deliveries to bars (in order to guarantee freshness of the product and restocking in small amounts) are also included, along with training activities for baristas, technical assistance for bar refurbishing, and the formulation of business plans. The actual range of services provided varies from firm to firm, but the greater the focus on downstream services provision, the less interest on the part of the roaster in upstream control of its coffee supply chain, and the greater the reliance on intermediary traders for coffee supplies.

Some firms offer technical assistance or financial services

Firm strategy, therefore, involves quality, price and financing and service levels. A strategic focus on distribution is a means to ensure market share – at least in the short to medium term – but can have perverse effects on product quality:

> The great problem of this sector is financing. We offer financing because we don't have alternatives. Because we charge the same market interest rate as banks, we incur losses, but at least this permits us to stay in the market. Our competitors very often don't offer financial services, they simply 'buy' customers by giving them non-repayable grants. And when they have bound the bar owner for years, the quality of the product becomes completely irrelevant (Interview 12).

Results and discussion

The sourcing strategies of different firms

The model for coping with uncertainty that emerges from our case study is presented in Figure 2. The main dimensions are the size of

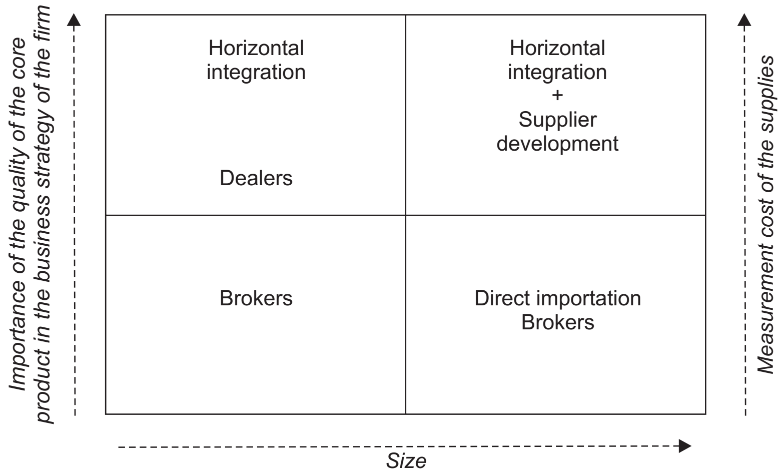

Figure 2. The sourcing options of coffee roasters.

the firm and the overall business strategy. This last one influences the measurement costs of the attributes of the raw material. The discussion that follows presents the different sourcing options of case study firms.

Vertical integration

To ensure the required quality characteristics, two of the largest roasters have vertically integrated the importation function

Integration of exporters significantly increased the level of control over raw material supply and reduced quality variability

For the great majority of the Italian roasters, Brazilian coffee is the main ingredient of the blend. In order to assure the procurement of coffee with the required quality characteristics, two firms, which are among the biggest roasters in Italy, have vertically integrated the importation function. While vertical integration of the importation function is an option only for large firms, in other respects the two companies do not behave in the same way concerning coffee purchases. About 15–20 per cent of the coffee of Firm B comes from brokers, whereas Firm A imports all the coffee it roasts without intermediation. In addition, the companies make different levels of investment in their suppliers' capacities and different levels of vertical integration. Firm A illustrates the case of vertical integration.

Firm A has undertaken specific investments in order to procure huge amounts of high-quality coffee from Brazil: a permanent training centre has been set up; each year a competition is organized among the farmers in order to reward the best qualities of coffee produced; and recently the traditional sole exporter that has always supplied the firm has been vertically integrated into the firm. Such investments, which directly influence the chain upstream (including the coffee farmers' behaviour), significantly reduce the uncertainty surrounding the production and commercialization of quality coffee.

The reason for the different behaviour of the two firms is related to their business position and strategy and the consequent necessity to purchase raw material with specific characteristics. The intended position of Firm A is clearly summarized by the words of its marketing department director: 'We want to offer the best coffee in the world' (Interview 6). Pursuing such a strategy in a coherent way implies the use of raw material whose attributes are not generally captured by the standardized descriptors. Thus, Firm A has its own purchasing personnel who are trained to recognize and measure the coffee with the desired organoleptic characteristics. Integrating the exporter in Brazil has increased the level of control over its raw material supply chain and reduced the quality variability. The activities promoting the production of quality coffee in the producing country, such as the organization of a training centre and the creation of quality competitions, are coherent supplier development strategies devised to increase the availability of a product whose quality and quantity are considered critical for the overall business positioning.

The quality strategy involves specific investments in relationships that develop reciprocal trust and transparency

Firm A's quality strategy involves specific investments in human resources. Its personnel continuously visit suppliers to instruct them in quality control measures, tasting techniques, cultivation methods and post-harvest operations. These investments in knowledge relationships create a strong bilateral dependency, but the development of reciprocal trust and transparency is part of the strategy. The exporter's personnel are often invited to training courses organized in Italy. Exporters are chosen not only for their commercial reliability and their ability to provide a quality product, but also for their willingness and capacity to transfer part of the premium price paid by the roaster to their farmers. The company considers farmers to be their partners in its strategy and wants to reward farmers' efforts to ensure that the production of quality coffee starts in the field. So, the integration of the importation function allows the roaster a stronger control of supplies and suppliers, and mitigates the risk of reputational loss due to quality problems.

Brokerage

Brokers require minimum amounts of coffee to be purchased that are too large for a small business

Brokerage is particularly important for small and medium-size firms which, unlike Firm A, do not have the resources to invest throughout the chain and particularly in the search for coffee at the origin. Small roasters face two problems: first, brokers require minimum amounts of coffee to be purchased that are beyond the scale of a small business to handle; and, second, firms with a premium quality strategy cannot rely on the average quality of coffee defined by the standardized descriptors.

One such roaster is Firm H, which buys about 1,000 bags of green coffee per year and employs only five persons. The firm focuses its quality assurance strategy only on the quality of the core product. The solution to the sourcing problem is to rely on a dealer specialized in high-quality coffee. The dealer searches for and purchases coffee at the origin with the desired attributes and assumes the risks concerned with international transactions: it manages international logistics and customs clearance, undertakes quality testing, and delivers the product directly to the roaster's plant. Often a dependency relationship can develop between the exporter and the importing roaster, which requires the intermediation of the traders, as one dealer explains:

A dependency relationship can develop between the coffee exporter and the importing roaster

> In the course of time a relationship of dependency arises between the exporter and the roaster, as the roaster always presents great resistance to changing the ingredients of its blend. This is why the exporter increases its bargaining power with us, fetching higher prices (Interview 7).

Another roaster commented about his dependency on this same dealer:

> We have a very long and trusting relationship with X [the dealer]. He always provides products of constant quality and if for some reason he has a product that is not of great quality, he is the first one to advise us not to buy it. If we don't like the coffee he has sold us, he takes it back immediately, without any resistance. Sometimes, if he has a new coffee he sends me a sample, asking me for advice even if he knows that I will never buy it because I always buy the same coffee from him (Interview 8).

Horizontal integration

Economies of scale create advantages for large roasters in procurement costs, bargaining and distribution, as well as investment in human assets and quality control systems. The kinds of investment made by big companies are not possible for small and medium-size roasters. For smaller roasters, an assurance strategy for the quality of the core product requires alternative contractual mechanisms to reduce uncertainty. Some such firms have developed hybrid arrangements between complete reliance on traders and direct importation. Within the sample, two roasters had joined with other roasters to develop a proprietary certified system of coffee purchases. The certification guarantees that the product is of high quality and that the coffee comes directly from the farmer that exports it. These roasters visit individual farmers at the origin to find the coffee with the distinctive characteristics they want and to identify those farmers who are willing to invest in specific quality production processes. Once identified, the

Medium-sized roasters formed a consortium to create economies of scale in quality control

farmers are contracted and rewarded by a quality premium. In addition, contracting farmers are periodically invited to Italy to observe the business and handling processes. These medium-size roasters have formed a consortium to create economies of scale in quality control, in searching for raw materials and in building a relationship based on trust and personal knowledge of the farmer. Nevertheless, for small roasters, the risks associated with the direct importation of coffee may still be considered too high. Consequently, importation is delegated to a broker with a clear guarantee function. In the event of quality problems when the product is already shipped, the broker – not the roasters – becomes the residual claimant.

Cross-cutting relational components

Direct importation is an option only for large firms that can exploit economies of scale in procurement costs, but it is only part of the story. The business strategy of all the roasters implies offering to distributors and consumers a final product of constant quality which is made with a raw material whose characteristics present a high degree of variability in time and space. Specific activities are undertaken to allow the personnel of the buying and supplying firms to develop reciprocal technical knowledge of each other's requirements and capacities. This is usually accompanied by general capacity-building activities and the development of reciprocal trust.

The exporters and roasters develop a high degree of dependency, characterized by shared technical knowledge and interpersonal relationships

Firms A and B have invested considerable resources in their suppliers. The personnel of the buying offices of the two companies frequently visit producing countries. Such visits are planned as formal training events or informal meetings during which the exporter's personnel learn about the roaster's organoleptic and physical specifications. At the same time, the two parties develop a common language to communicate about the coffee characteristics. When new personnel are employed within the roasters or by their suppliers, the new staff member is hosted for a certain period in the supplier's firm (or the roaster's) to learn 'cupping' techniques, the specific characteristics of the exporter's coffee, and the attributes sought by the roaster. A high degree of bilateral dependency develops between the parties, characterized by shared technical knowledge and interpersonal relationships.

Information sharing with exporters is considered essential for those that import directly, as Firm B's purchase director continued:

> If I talk half an hour on the phone with one of our suppliers in Brazil, for five minutes we talk about the coffee purchase, and for the rest of the conversation we talk about the ongoing harvest, the influence of climate, possible diseases in the country, and if the official forecasts are reliable or not. Confirmation or denial of

> government forecasts about the incoming harvest by somebody that we trust is essential for us. If official forecasts state that the harvest will be around 30 million bags, and this is confirmed by our suppliers, we start to buy whatever coffee we find, but if our suppliers tell us that the official forecasts are not reliable…we are much more confident (Interview 19).

Traders usually assume the risks of international transactions on behalf of the roasters

When roasters rely on traders for procurement, the traders assume the risks of the international transactions on behalf of the roasters. When a roaster is not satisfied with the coffee that has been purchased, friendly solutions are found and litigated disputes almost never arise. This is partly due to the enforceability of arbitration among European parties, but this is not the main reason. Traders are not so numerous in Europe and reputation is considered very important: firms know each other through horizontal and vertical relationships and this clustering phenomenon creates efficiency advantages both in sustaining reputation and in informal dispute resolution. They avoid formal arbitration and agree to settle the buyer's claims through compensation or by recalling the coffee, for the risk of not doing so is the loss of reputation.

The transaction costs involved in recalling coffee are much higher for the exporter in the producing country compared with the European trader who has a wide network of potential alternative buyers in the same port of destination. In case of direct importation, the fear that the exporter in the producing country may refuse to recall the shipped coffee is strong among roasters. Thus, the traders offer the guarantee function that farmers and exporters in producing countries cannot provide.

Trust and collaboration between the roaster and trader are considered essential

Trust and collaboration between the roaster and trader are considered essential:

> The traders that supply us are serious people, we know them, we trust them… They collaborate with us. If we order some coffee and then we realize that we don't need it in the period we settle it, we talk and we solve the problem… If we have some problem with the coffee they sold us they immediately solve it (Interview 10).

The same considerations about trust and collaboration are even more important if the dyad is that of the roaster–exporter. In this case the development of mutually preferential supportive actions is considered a source of competitive advantage. This is explained in the words of Firm B's purchase director:

> With some of our suppliers we have a relationship based on real friendship. I know that I can phone them and ask for an unforeseen and rapid shipment if we need it. If they tell me that

they can't do it, it's because there is absolutely no way they can do it, otherwise they would do it (Interview 19).

The relation between roasters and the suppliers is generally very long-standing

The quotations reported above suggest another characteristic that has been found in almost all the cases in this research: the relation between the roaster and the supplier is generally a very long-standing one. The traders on which the roaster relies rarely change. Again, this is a mechanism to attenuate the inherent uncertainty that surrounds coffee transactions, and once a roaster develops good commercial experiences with a trader, it will be reluctant to try new business partners.

Summary and conclusions

The focus of the paper has been on explaining the diverse sourcing strategies of the Italian roasters and the governance of transactions in the coffee supply chain. From a theoretical point of view it draws on concepts from TCE and relational contracting and relates them to different alternative sourcing strategies. From a practical point of view it offers exporters insights about the types of buyer they should target and provides roasters with indications about possible sourcing strategies. As Cox et al. (2007) noted, supply chain theories rarely consider security of raw material supply to be a strong risk to a firm's competitive strategy, but in the coffee business the sourcing strategies are strongly dependent on the strategies devised to cope with the inherent uncertainty of coffee sourcing.

Small and medium-sized roasters rely on source loyalty, collaboration and fair and responsive suppliers to manage supply chain risks

One of the main sources of the uncertainty of the market is the quality variability of the raw material. Small and medium-size roasters rely on source loyalty, national sourcing, collaboration and fair and responsive suppliers to manage supply chain risks.

The larger roasters import directly. However, the size of firms is not the only variable in the choice of the purchase channel. Firm distribution strategy is important in defining the sourcing strategy. The greater the focus on high quality and branding, the greater the need to control the coffee production process from the very first links of the supply chain. Firms that have chosen a differentiation strategy based on the reputation of the core product make different kinds of investment in their suppliers and maintain closely coordinated commercial and knowledge relations with them.

The smallest roasters rely on dealers who are able to provide quality coffee

The smallest roasters in this research, having chosen a quality differentiation strategy, rely on dealers. These traders are able to provide quality coffee and behave like the roaster that imports directly and positions itself for the quality of its products. In addition, the green coffee that makes up the final blend becomes an asset with a high degree of specificity, with the development of a strong interpersonal and dependency relationship. The same relationship that develops between the importing roaster and the exporter arises again with the intermediation of the dealer.

The medium-size roasters, which differentiate themselves in terms of product quality, develop hybrid arrangements between direct importation and trader intermediation: they devise horizontal arrangements with other roasters to cover the search costs and they make investments in trusting relationships with farmers. However, they rely on brokers' intermediation for the actual purchase.

Where service provision, which creates exclusivity and long-term dependency, is a strong element of the business model and distribution strategy, the roasters tend to rely on traders for coffee supplies.

Only large firms import without trader intermediation

The attributes of coffee in which the roasters are interested differ according to the firms' differentiation strategies in the downstream market as well: the premium HoReCa market, the HCM and the vending machine market. A differentiation strategy based on the quality of the core product means that traders' cheap standardized descriptors are inadequate to make premium purchase decisions. The management of proprietary specifications is performed through direct importation. Only large firms import without trader intermediation.

Unlike the growers and exporters, international traders are perceived to be endowed with enough capital to recall the coffee and substitute it if it does not deliver the expected quality. This guarantee by traders has important reputational elements.

Governance modes of spot market, hybrid arrangements and vertical integration can all be found in this study: brokers provide coordination mechanisms similar to spot markets, and vertical integration of the importation function implies direct importation from exporters; hybrid arrangements are also devised to exploit the respective advantages of vertical integration of the importation function and of reliance on brokers.

The findings may be transferable to other countries with similar fragmented markets, but may be less relevant in markets dominated by coffee titans such as Starbucks

These findings may be transferable to other South European countries which present similar characteristics: fragmented markets, roasters providing financial assistance to bars, and the presence of traders. The findings may be less relevant in Northern European countries characterized by the widespread presence of coffee titans such as Starbucks with their different sourcing approaches. Thus there are limitations underlying this exploratory work: it is based on the analysis of eight cases and caution must be exercised in generalizing to the industry as a whole. A more extended geographic area and a larger sample would be advisable for further research, and an explanatory quantitative approach would enable further testing of the propositions developed here. Moreover, this study reports only the roaster's point of view, while the involvement of other actors in the supply chain would certainly enrich the analysis. Also, this article does not address questions of performance and profitability of the different sourcing and distribution strategies. Further study is timely, particularly as the process of market concentration and restructuring is affecting firm strategies.

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