# Offshore outsourcing and backshoring patterns in the Italian manufacturing sector: the role of learning and local spillovers

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#### Introduction

This paper explores the main determinants of offshore outsourcing and backshoring in the manufacturing sector, focusing on the impact of learning and spatial spillovers and drawing on new firm-level data on Italian Small and Medium Enterprises (SMEs). The empirical analysis aims to assess whether production internationalization activities by neighbouring firms influence the decision of small businesses to outsource production abroad and to identify the role of spatial factors in explaining the duration and stability of subcontracting relationships established with foreign suppliers.

The analysis is motivated by the observation that the number of businesses engaged in international activities has increased dramatically in the last decades. In this context, the role of production internationalization has been particularly relevant: large firms invest in existing or new production facilities abroad in an attempt to exploit the benefits arising from lower labor costs, access to natural resources and foreign markets, and the possibility to leverage diverse sources of knowledge. However, these businesses are not alone in their journey: indeed, several case studies have shown that SMEs often engage in internationalization activities. Contrary to large firms, SMEs show a higher propensity to choose light forms of production internationalization, such as offshore outsourcing, i.e. production outside the firm and outside the country by non-affiliated suppliers. This tendency has been motivated by a number of factors, such as limited access to

financial resources, risk aversion and the lack of the required know-how to engage in more complex relocation strategies. However, the process leading SMEs to establish new links with international subcontractors is still relatively poorly understood. Therefore, new empirical research is needed to advance our knowledge of these complex phenomena.

#### **Theoretical Framework**

In the economic literature, the decision to engage in international activities has been framed by two competing theories. One the one hand, internationalization is seen as the result of a rational process where firms ponder costs and benefits associated with the investment and choose the location that maximizes their expected utility (Porter, 1985; Dunning, 1988). This approach has been challenged by several contributions (e.g. Melin, 1992), which have argued that entrepreneurs are in fact making decisions under limited information. Under this alternative view, control of foreign assets is often not achieved through a perfect ex ante plan but tends to be the result of a complex trial-and-error process.

When information on foreign opportunities is costly to acquire, learning from firms located in the same geographical area can increase the chances of successful investment decisions (Sharma & Johanson, 1987): in this respect, the signals received from other entrepreneurs already engaged in the same activities abroad is likely to reduce the uncertainty associated with this process. Such aspect appears to be critical for small firms, which have limited resources and tend to display risk-averse behavior (Coviello & McAuley, 1999).

The economic literature has provided empirical evidence of the effects of learning in influencing the likelihood a firm would engage in export activities (Koenig, Mayneris & Poncet, 2010;

Fernandes & Tang, 2014). However, the role of these factors in production internationalization has often been overlooked due to the lack of appropriate firm-level data. The aim of this paper is thus to contribute to fill the existing gap in the empirical literature, evaluating the role of local learning in influencing the offshore outsourcing decisions of SMEs.

# **Empirical approach**

The empirical analysis proposed in this paper is developed in two different directions: firstly, the determinants of offshore outsourcing are inspected through a firm-level approach, evaluating the role of internal learning (proxied by firm's previous international experience as exporter) and isolating the effect of spatial proximity associated with local learning from neighboring firms. If such effect is present, it is expected that, with all else equal, the probability for a firm to relocate production abroad is higher in regions characterized by greater concentrations of internationalizing firms in the years immediately preceding the investment decision. Secondly, the investigation focuses on the duration of offshore outsourcing strategies, assessing whether imitative behaviors are more likely to result in conscious decisions that lead to long lasting investments. If this is the case, it is expected that the probability to break the links with foreign suppliers and move production back to the home country will be lower in the short term among firms which have been influenced by their neighbors' behavior.

The sample used for the empirical analysis includes all firms operating during the 2006-2013 period in three manufacturing sectors (clothing, footwear and furniture production) where the impact of production internationalization has been particularly widespread during the recent decades. The main data source from which the sample is extracted is the Italian Ministry of Economy and Finance Annual Survey (IMEFAS), which includes all Italian firms with a turnover

lower than 7.5 million euro. This database is extremely comprehensive of the Italian manufacturing firm population, considering the fragmented structure of the economic system in this country (Canello, 2017). The wide majority of these businesses are not part of the most commonly used firm-level data sources, even though they represent the 'backbone' of most Italian manufacturing industries. The structure of this database is also particularly suitable to identify 'soft' internationalization activities, given it contains specific information on external production costs associated with offshore outsourcing and the type of activities subcontracted abroad. Moreover, the use of this data source allows to track the evolution of production internationalization activities over time, with the possibility to identify the start and the end point of the offshore outsourcing activity. Information on offshore outsourcing is integrated with data on outward Foreign Direct Investment (FDI) extracted from AIDA BvD. This archive contains not only information on the population of multinational corporations (MNCs) in Italy, but also data on Italian companies having a controlling interest in a foreign firm. Information on outward FDI is crucial to evaluate whether the learning process is restricted to SMEs involved in offshore outsourcing activities or whether outward FDIs also generate local spillovers stimulating production internationalization decisions among SMEs.

The first part of the empirical analysis aims to evaluate the role of internal learning and local geographic spillovers from neighboring businesses in influencing the firm's decision to engage in production internationalization. The methodology used to address this research question is a logistic regression, where the discrete dependent variable is equal to 1 if the firm engages in offshore outsourcing activities at time t and 0 otherwise, and the Local Labour Market Area is the spatial unit used for the analysis. The key explanatory variables are the previous international experience of the firm (proxy for internal learning), measured as the share of exports on revenues

at time t-1, and the intensity of outward FDI and offshore outsourcing activities in the same geographical area where the firm is located. The specification also includes a set of financial and structural variables that are used to control for other firm-level and country-level factors that are believed to influence internationalization activity.

The second part of the empirical investigation focuses on the analysis of the duration patterns of offshore outsourcing activities implemented by the Italian manufacturing firms included in the sample. The main aim in this case is to evaluate whether firms characterized by higher spatial effects at the time of their internationalization decision are those engaging in more durable offshore outsourcing activities. Evidence of this pattern would suggest that learning from other outsourcers results in more conscious choices that tend to last longer. The methodology used to address this research question is the Cox Proportional Hazard Model, which represents the most popular approach for the analysis of survival data.

## **Policy implications**

The present paper has major potential implications not only for academia but also for policy makers. Indeed, the analysis of the indirect effects generated by local learning is expected to add new knowledge to understand the production internationalization process, thus promoting more informed decisions that are in line with national policy goals. The identification of local learning effects in production internationalization activities would provide evidence of indirect effects stemming from direct incentives towards production internationalization activities: if that is the case, the provision of financial support to new investments abroad is expected to generate a snowball effect in the regions where the target firms are located, thus increasing the likelihood that neighboring producers would engage in the same activities.

### References

Canello, J. (2017). Outward Foreign Direct Investment, Offshore Outsourcing and Local Network Resilience in Industrial Districts. *European Planning Studies* 25(2), 181-201.

Coviello, N. E., and A. McAuley (1999). Internationalisation and the Smaller Firm: A Review of Contemporary Empirical Research. *Management International Review* 39(3), 223–256.

Dunning J. H. (1988). The Eclectic Paradigm of International Production: a Restatement and Some Possible Extensions, *Journal of International Business Studies*, 19(1), 1-31.

Fernandes A. P. and Tang H. (2014). Learning to Export from Neighbors. *Journal of International Economics*, 94, 67-84.

Koenig P., Mayneris F. and Poncet S. (2010). Local Export Spillovers in France. *European Economic Review*, 54(4), 622-641.

Melin L. (1992). Internationalization as a Strategy Process. *Strategic Management Journal*, 13(2), 99-118.

Porter M. E. (1985). *Competitive advantage: creating and sustaining superior performance*. New York: The Free Press.

Sharma D. and Johanson J. (1987). Technical Consultancy in Internationalization. *International Marketing Review*, 4(4), 20-29.