## **Extended** abstract

In a more globalised economy many firms have international contacts, and take advantage of international markets. Especially in small, and relatively open economies like Sweden. Exporting products is a way of increasing a firm's market size and demand and taking advantage of larger economies of scale in the production process. However, exporting products to new markets involves some hurdles. Firstly, in terms of formal barriers such as tariffs, import quotas, technical requirements etc. Secondly, there are other informal barriers such as different languages, rules, norms, and cultures that create information asymmetries where the foreign firm is disadvantaged compared to the domestic ones (see e.g. Barkema, Bell, and Pennings (1996)). The formal barriers are well-documented by official agencies, whereas the informal ones are not. Not having any previous information about these informal barriers could potentially deter firms from entering other markets.

Previous research has often focused on the choice of exporting or not, in a binary form, or the expansion of export markets (McNaughton, 2003). Such studies highlight the role of experience of the firm and their ability to gather information about the destination, although they do not necessarily mention the actual choice of that destination. Denis and Depelteau (1985) found that information acquired from business contacts were more important for reducing information asymmetries than information acquired from formal trading agencies. However, nothing is mentioned about the potential source that a firm already has through its employees. In addition, it is mentioned that firms prefer to export to countries to which the cultural distance is lower, where one has to assume that what is being referred to is the cultural distance from the country where the firm resides, regardless of the background of those working there.

Many traditional theories explaining international flows of goods, such as the Ricardian model and the factor proportions model advocated by e.g. Ohlin, Heckscher and Samuelson are focused on the nation as both the producing and exporting entity. If a country is very productive in a certain sector or has and abundance in the relevant production factors it will export goods from that sector. Incorporating economies of scale, it makes sense for a country to specialise in some sectors and produce large quantities of goods, enough to cover the demand not only domestically but also in foreign markets.

This is a very aggregated and simplified way of looking at trade flows. More recent literature moves the focus from the nation to the firms in the nation. One such strand is the

New Trade Theory (Krugman, 1980, 1991), which incorporates monopolistic competition frame as suggested by Dixit and Stiglitz (1977). Meaning that firms differentiate their goods in order make them less substitutable and thus allowing for prices above the marginal cost and consequently above zero profits.

In the late 1980s a series of articles were written with a focus on the changes in trade caused by exchange rate fluctuations (Baldwin, 1988; Baldwin & Krugman, 1989; Dixit, 1989a, 1989b). As highlighted by e.g. Dixit (1989a) firms entering the US market in the 1980s behaved in a manner that was theoretically irrational. They entered the US market as the US\$ appreciated, which is according to theory. However, as the exchange rate depreciated later the firms did not exit the US market, as the theory would suggest. This phenomenon was named hysteresis, and the suggested reason for its existence was sunk entry costs.

This suggestion has been tested empirically and some support has been found. E.g. Bernard and Jensen (2004) investigates this for exporting US manufacturers using their lagged export status as a proxy variable for sunk costs. Their results suggest that the entry costs are substantial, as a firm that exported is the previous period is about 39% more likely to export in the current period. Similar studies of Colombian firms (Clerides, Lach, & Tybout, 1998; Das, Roberts, & Tybout, 2007; Roberts & Tybout, 1997), German firms (Bernard & Wagner, 2001), Mexican (Clerides et al., 1998), and Moroccan (Clerides et al., 1998) find the same results. Roberts and Tybout (1997) also find that a firm who exited a foreign market is no more nor less likely to export than a previous non-exporter after only two years of absence. This is a result of the firm having to pay the sunk cost to enter the market, just like the non-exporters.

Since many studies have confirmed the existence of these costs the next question is what they consist of. Bernard and Wagner (2001) suggests that they include costs for learning about the foreign market, the relevant regulations and standards in use there, as well as locating foreign buyers. Das et al. (2007) also suggest that it is a cost to adapt products and packaging for foreign markets, and to find suitable distribution channels for them.

This sunk cost is present regardless of where the firm exports, and is often modelled as a constant (Alessandria & Choi, 2007; Baldwin & Krugman, 1989; Bernard & Jensen, 2004; Bernard & Wagner, 2001; Das et al., 2007). However, some argue that it is too simplified to expect the entry costs to be homogenous, both across firms (Roberts & Tybout, 1997) and across destinations (Ghemawat, 2001; Guiso, Sapienza, & Zingales, 2009). Roberts

and Tybout (1997) argue that the sunk costs not only depend on previous export experience, but that it is affected by plant characteristics such as location and size. Although they do not explicitly discuss the mechanisms behind that.

Ghemawat (2001) argues that the cost of trading not only depends on the geographical distance, which usually is a proxy for transport costs, but also on cultural and political dimensions of the export destination. These depend on differences in languages, norms, religion, political links etc. and these impact the size of the entry cost. Guiso et al. (2009) takes this one step further and claims that it is not simply a matter of saying that the costs vary between export markets, the variation also depends on which the exporting country is - i.e. it is dependent on the matching.

Acquiring information about cultural norms, distribution channels, bureaucratic regulations etc. is a large part of the sunk cost and there are several studies investigating how firms go about this task (Brewer, 2001; Ciravegna, Lopez, & Kundu, 2014; Denis & Depelteau, 1985; Ellis, 2000). Their results often indicate that personal contacts, such as previous customers (Denis & Depelteau, 1985), and networks (Ciravegna et al., 2014), are more valuable than formal agencies and market research (Ellis, 2000; Johanson & Vahlne, 2003). All these can be thought of as external to the firm, whereas others argue for the importance of sources within the firm. E.g. the previous international work experience of the management team (Hitt, Tihanyi, Miller, & Connelly, 2006; Kirca, Hult, Deligonul, Perryy, & Cavusgil, 2012; Tihanyi, Ellstrand, Daily, & Dalton, 2000; Wehner, Schwens, & Kabst, 2015).

Another way of gaining knowledge is to learn from other firms through spillover effects. Aitken, Hanson, and Harrison (1997) find that this is not the case for firms in general in the Mexican manufacturing sector, but that one is more likely to export if located close to a multinational enterprise. However, a more recent study by Bernard and Jensen (2004) of the US manufacturing sector suggests that this effect is negligible. A study on Norwegian firms by Maurseth and Medin (2016) show that firms are more likely to export to countries where other Norwegian firms already are present – i.e. spillovers at the destination rather than domestically.