



Fornalska-Skurczyńska, A. (2015). How to Effectively Support Export Activity? *Oeconomia Copernicana*, 6(3), pp. 61-71, DOI: <http://dx.doi.org/10.12775/OeC.2015.021>

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How to Effectively Support Export Activity?

JEL Classification: F10; F23; F40

Keywords: *exporter; export activity; support; heterogeneous firms*

Abstract: *Export is crucial for economy. It influences the level of economic growth, balance of payment and social welfare among many others. Therefore, increase in exports often becomes one of the main objectives of governments. This raises the question of how to support export activity of the companies in order to ensure the expected increase in export. Approaches towards this problem differ significantly. The fact that this support is covered mainly from public funds raises the question of the justifiability and effectiveness of such assistance. The aim of this paper is to investigate whether to support export activity at all, and if so, how to do it effectively. To achieve the goal of the article the author analyzed both Polish and foreign literature, with special emphasis on the newest trade theories. The Author analyzes secondary data describing factors that determine export activity, describes the profile of a company becoming an exporter and investigates actual connection between the offered support and the increase in export activity.*

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Date of submission: March 12, 2015; date of acceptance: July 1, 2015

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Introduction

Export is of great importance for the economic development of the country and thus to the welfare of the society. It not only allows countries to exploit their comparative advantage but also ensures greater variety of goods and competition and allows to benefit from scale economies. It influences the level of economic growth and balance of payment, among many others. According to the newest trade theories, exporters are believed to be more competitive and more productive, to generate more profit and to provide more employment than nonexporters. That is why exporters are often perceived as especially important for the economy. It therefore seems a justified desire to create government programs to support and advance the growth of exports. In order to encourage companies to export, both direct and indirect support is offered. Promoting and encouraging export might be a universal goal, but it is achieved differently depending on a country. Government may support export directly with lending schemes for exporters¹, direct export subsidies or estimating offices assisting exporters in selling abroad. Bernard and Jensen (2004, p. 2) noted that all fifty US states have such offices. Support might also take an indirect form of supporting productivity through various research & development programmes, training or consulting services. But in order to successfully support export, it must be clear who the exporter is and what the reasons for exporting are. Numerous theories of trade are meant to answer these questions.

The aim of the following paper is to investigate whether to support export activity at all, and if so, how to do it effectively. To achieve this aim, both Polish and foreign literature was analyzed, with special emphasis put on the newest trade theories including the model by Marc Melitz (2003). Secondary data describing factors that determine export activity, provide a profile of a company becoming an exporter and investigate the actual connection between the offered support and an increase in export activity were analyzed. The first part of the following paper reviews the main theories explaining international trade and exporters' role in the economy of a country. Then an exporter's profile is specified, which is essential in order to realize who the potential recipient of export support should be. Next, the studies attempting to evaluate programs enhancing export activity are presented. The paper ends with an answer to the question: if and how

¹ Direct Lending Scheme developed by UK Export Finance (the UK's official Export Credit Agency) is one of the examples. It was announced by the Chancellor of the Exchequer in the 2012 Autumn Statement and is available till March 2016. Up to £1.5 billion funding is provided. See: <https://www.gov.uk/government/news/direct-lending-scheme-launched-to-support-uk-exporters>.

exports should be successfully supported? Although there have been many studies regarding export promotion, there is little empirical evidence proving its effectiveness.

Theoretical Basis for International Trade

There are three main purposes of trade theories. The first one would be to explain the observed trade based on information about the characteristic of countries that trade with one another. The second is to investigate the effects of trade on the economy of a country, and the third one is to provide the knowledge necessary to evaluate and apply a proper trade policy. It must be emphasized that although substantial developments concerning trade theory have been made, they are not that substantially reflected in modern trade policy.

There has been a significant shift in attitude towards theories of trade. The macroeconomic approach has been complemented with the microeconomic one. There are three fundamental groups of trade theories: traditional, New Trade Theories and so called New New Trade Theories. Traditional trade theories discussed trade between countries, new trade theories concentrated on trade between sectors, whereas new trade theories consider trade between companies – on a micro level. A subjective review of trade theories is presented in this section.

Mercantilism is one of the traditional trade theories, which states, in simplification, that wealth derives from accumulating precious metals and maintaining surplus in balance of trade. It was Adam Smith that in 18th century undermined mercantilism and argued that a country should produce only the goods in producing which it is more efficient. His theory assumes the exchange of two products between two countries with labor as an only factor of production. Smith explained trade between countries using the concept of an absolute advantage. Subsequent traditional theories concerned trade between countries in terms of comparative advantages. The leading ones are two models, one by David Ricardo and the second one by Eli Heckscher and Bertil Ohlin. Ricardian comparative advantage arises from productivity differences whereas Heckscher – Ohlin's from differences in abundance of production factors. In the Ricardian model there are only two countries and two products and each of the countries possesses different technology. It is assumed that there is only one factor of production – labor (fully employed) and workers might migrate between the sectors, but not between the countries. There are no trade barriers or costs of transports. In Heckscher – Ohlin model there are two countries and two

products, and two factors of production (labor and capital). Again no trade barriers and costs of transports were assumed.

Assumptions made in the above mentioned theories, that is: perfect competition and constant scale of returns allowed ignoring the importance of companies in the international trade. What was especially strongly objected by researchers was that trade structure is often far from perfect competition. Moreover, although traditional theories explained interindustry trade, they did not explain trade between developed countries and intraindustry trade which were observed. Only in late 1970's so called New Trade Theories based on monopolistic competition were developed. Lancaster (1975), Spence (1976), Dixit and Stiglitz (1977) provided some insight into the behavior of companies in imperfect competition by creating models of intraindustry trade in differentiated goods. The essence of the New Trade model by Krugman (1980) are the preferences for variety between and within countries, economies of scale and products that are differentiated. New Trade Theories presented trade in terms of sectors which helped to explain the observed intraindustry trade.

Despite the substantial evolution of trade theories, both "old" and "new" assumed a representative company. This approach ignored behavior of companies within the sector and their role in international trade. It seemed insufficient, taking into account the diversity of productivity, capital and skill intensity across companies. As a consequence, so called New New Trade models were developed, emphasizing the importance of heterogeneity (nonuniformity) of companies for analyzing international trade. Two leading models emerged. The first one – the BEJK model, was introduced by Bernard, Eaton, Jensen and Kortum (2003). They used random productivity of companies in multicountry extension of Ricardian model by Eaton and Kortum (2002). The second one, which now seems fundamental, was developed by Melitz (2003). He introduced the heterogeneity of companies into Krugman's (1980) model describing intraindustry trade. Melitz's model describes the demand similarly to Krugman's and consumers' preferences are consistent with the CES function (Hagemejer, 2006). According to this model, the company draws its productivity from a random distribution, but only after paying the fixed market entry cost, which is thereafter sunk. There is an assumed level of productivity allowing a company to remain on the market, drawing productivity from below this threshold means being forced to exit. According to Melitz (2003, 2008), companies differ significantly, especially in terms of the abovementioned productivity, which is a key factor in internationalization of firms. Export turns profitable for the most productive companies only. For those in the

middle of the scale of productivity local market would be the target, the least productive companies fall out of the market entirely.

In order to know whom to support, potential exporters must be identified using the theoretical background provided. It is important to determine whether everyone interested in or engaged in international trade should become a recipient of government export-related support. It would also be helpful to differentiate assistance that is effective in case of exporters from assistance positively influencing the performance of nonexporters only.

The Exporter’s Profile

As already mentioned, export plays an important role in economy due to enhancing employment and generating economies of scale among many others, but it is relatively rare as an activity (Bernard, Jensen, Redding & Schott, 2007, p. 108). There were 5 726 160 firms in the United States in 2012 (according to the United States Census Bureau), of which 221 067 exported and 83 800 both exported and imported (report U.S. Trading Companies, 2012). Majority of exporting companies belonged to the SMEs. In comparison, in Poland out of 1 762 321 companies 110 424 export.

Table 1. Micro, small, medium and large companies in Poland and their export activity in 2012

| | Number of enterprises | % | Exporting | % of Micro/S/M/L |
|--------|------------------------------|----------|------------------|-------------------------|
| Micro* | 1 710 598 | 97,1% | 94 083 | 5,5% |
| Small | 32 728 | 1,9% | 7 272 | 22,2% |
| Medium | 15 841 | 0,9% | 7 075 | 44,7% |
| Large | 3 154 | 0,2% | 1 994 | 63,2% |
| Total | 1 762 321 | 100,0% | 110 424 | 6,3% |

* Data for 2011

Source: Wołodkiewicz-Donimirski, Z. (2014); 2014 and Statistical Information and Elaborations, Financial Results of Economic Entities in I-XII 2013, Central Statistical Office, 2014.

This data indicates how important small and medium enterprises are in terms of export, therefore their specificity should especially be taken into consideration when delivering export promotion programs. SMEs in Poland are responsible for over 45% of GDP. There has been many studies investi-

gating the link between the characteristics of companies and the probability of becoming an exporting company, size of the company was one of the analyzed factors. Studies proved that only some companies have necessary characteristics to become exporters.

Bernard and Jensen (1995) studied the relationship between exporting and the performance of plants. The authors used data from the Census Bureau's Annual Survey of Manufactures (ASM) for the years 1976–1987 and they found significant differences between exporters and nonexporters across the analyzed companies. According to their findings, exporters performed much better than nonexporters in every investigated dimension. They were not only larger, but also more productive and more capital intensive. It was also noted that wages in exporting companies were more than 14% higher (Bernard & Jensen, 1995, p. 70-71). According to their research, exporters have more employees, higher productivity and greater capital and technology intensity (Bernard & Jensen, 1995, p. 89). Past success increases the probability of future exporting. Bernard and Jensen estimated that exporting today increases the probability of exporting tomorrow by 39% (Bernard & Jensen, 2001, p.3). Roberts and Tybout (1997) noticed a positive correlation between propensity to export and plant size, age and structure of ownership. They notice that the size determinant may reflect Krugman's (1984) economy of scale in exports. Supporting the assumption that market forces select out the least efficient producers it is probable that the older the company is, the more time it had to learn and gain cost advantages (Roberts & Tybout, 1997, p.557).

While investigating the reasons for exporting, it is important not to forget that exporters might exit and that nonexporters might start exporting at any given time, so the set of exporting companies undergoes continuous changes and is therefore more problematic to study. There is a high degree of reentering by former exporters observed, so past performance and experience influence positively the propensity to export (Bernard & Jensen, 1999, p.3). In another of their studies, Bernard and Jensen (2004) examine the characteristics of companies, their size, labor force, entry costs, past performance in exports, effect of spillovers and efficacy of government interventions.

The set of characteristic of potential exporters might be perceived as being too vague and not appropriate for every economy but it must be kept in mind that government support is usually addressed to a group of enterprises fulfilling given selection criteria. It would be advisable to make adjustments based on thorough research on the given market, nevertheless some of the conclusions of the international trade research are common, regardless of the market they concern.

The above selection allows to sketch a very general profile of a potential exporter. It would be a relatively large company, both in terms of employees and production, more productive, capital and technology intensive than the average company in a population. A potential exporter is not a young company, and has already exported in the past, so some international experience has been gained.

Government Support in Studies

Potential benefits from international trade, such as boosting growth and employment, explain the desire to build export promotion and assistance programs. It also justifies covering the expenditure mainly from public funds (Cansino *et al.*, 2013, p. 86, 101). It is however expected that public funds are spent effectively and cautiously. This raises the question of how to evaluate the effectiveness of such support. There is a set of empirical studies investigating the possible ways of approaching this problem. One of the most popular methods of assessing support programs is to use a survey addressed to the recipients of such assistance, but the usefulness and reliability of this method have been widely questioned. In their work, Cansino, Lopez-Melendo, Pablo-Romero&Sanchez Braza (2013) reported numerous objections to surveys, reflected in the literature. They are as follows:

- respondents might be reluctant to evaluate the program negatively, since many of them got in without any cost (Brewer, 2009),
- lack of understanding between government and SME concerning the role of support programs increases dissatisfaction reflected in the survey (Albaum, 1983),
- respondent's opinions are often to varied (Crick & Czinkota, 1995),
- subjectivity of the given answers making it impossible to draw balanced conclusions (Francis & Collins-Dodd, 2004).

Another approach reflected in research was to compare the expenditure on export promotion to export performance (both values aggregated). It was performed by Armah & Epperson (1997), Richards *et al.* (1997), Cansino *et al.*, (2013). However it was widely criticized mainly because it is not possible to indicate the share of export increase resulting from export promotion programs. Many other factors influence the volume of export and it is difficult to separate them from the influence of export assistance programs.

Cansino *et al.* (2013) examine the possibilities of using statistical casual interference methods to perform an economic evaluation of increase in export directly attributed to export promotion programs. They suggest the use of Neymann-Rubin Causal Model (RCM) that allows to compare par-

ticipants to nonparticipants in a public program, using a treatment indicator and a variable that will measure the effect of analyzed policy (see also: Cado *et. al.*, 2012).

Bernard and Jensen (2004) name potential benefits of supporting and promoting exports. According to the findings, reducing the market entry cost by helping to gather information on foreign markets could encourage export activity. Alternatively helping potential or current exporters to coordinate their actions could decrease the exporting cost and therefore result in increased volume of exports or increased number of exporters. The authors, however, found no significant impact of grants or subsidies on market entry. They suspect that the analyzed sample (large plants) might not be adequate to investigate, since most of the support is addressed to small and medium enterprises (Bernard & Jensen, 2004, p.19-20).

According to Francis and Collins-Dood (2004), programs enhancing export influence companies differently depending on the stage of export involvement. They concluded that in terms of short-time effects such support is of greater importance for beginners rather than for experienced exporters or nonexporters.

Görg, Henry and Strobl (2005) investigated whether government support can cause an increase in export activity. Their main conclusion was that depending on the size of grant support it can intensify exports of companies being already exporters, however they found no evidence supporting the assumption that it can encourage nonexporters to become exporters. Not the very fact of receiving a grant is important, it is its size that really matters. The main problem indicated in the study is how to estimate the effect of government support since it would demand knowing what export would have been without this support. Using nonrecipients as a comparison group would help, if grants were given randomly which they are obviously not. Recipients are always chosen according to specific selection criteria that might additionally cause some companies to self-reject from the application process (Görg *et al.*, 2005, p.9-13). Brewer (2009, p.130) states that lack of consensus concerning evaluating export support among the researchers might have caused the decrease in number of studies on the subject.

Creusen and Lejour (2013, p. 507) analysed the influence of economic diplomacy in the form of trade posts and trade missions on market entry. They noticed the impact of such support in case of middle-income countries, whereas no impact was found regarding higher-income countries. The study suggests that this type of support should focus on countries with high market entry barriers, like developing countries, and not on the type of firm applying for assistance.

There is a long list of activities that might be implemented by governments in order to promote export. They range from providing publications concerning export and potential foreign markets, organizing workshops, assistance in trade exhibitions, help in organizing business visits overseas, enabling contact with potential business partners to offering subsidized loans (Brewer, 2009, p.125). Wide range of export – related support tools that is available, might reflect varying needs of companies depending on a stage of internationalization they are in, taking into account that each stage means different obstacles (Kotabe & Czinkota 1992, Brewer, 2009).

Conclusions

The very idea of supporting export might seem indisputable. Majority of researchers and politicians would answer positively to the question whether to support export or not. They would also tend to agree that support should be granted to a cautiously chosen group of companies. What turns out to be problematic is what criteria to apply and how to evaluate the effectiveness of the programs used. There is no consensus so far regarding those issues.

New New Trade Theories would suggest that government support should be addressed to companies that could be described by a set of characteristics, with a special emphasis put on their productivity. According to Görg, Henry and Strobl (2005), supporting productivity may prove to be more effective than traditional export promotion programs. It would be advised to take a closer look at determinants of export activity in order to offer purposeful export assistance. But productivity of an enterprise should not be the only criteria used. Size in terms of employees and production, age, capital and technology intensity and level of internationalization should be taken into consideration when preparing government support programs.

Since it is not possible to indicate the share of export increase resulting from export promotion programs the help should be addressed as cautiously as possible. The studies would suggest that stress should be put on reducing entry market costs for the companies interested in export performance and assistance in projects initiated by exporters themselves. Government support might not induce new export performance, but it can intensify the existing one. There is, however, no evidence indicating that government support is effective enough to justify the expenditure.

It is also worth stressing that majority of statistical data is aggregated and, according to New Trade Theories, international trade should be evaluated using panel data on companies, which is much more difficult to obtain.

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