

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Fornalska-Skurczynska, Anna

# **Working Paper**

How to effectively support export activity

Institute of Economic Research Working Papers, No. 49/2015

# **Provided in Cooperation with:**

Institute of Economic Research (IER), Toruń (Poland)

Suggested Citation: Fornalska-Skurczynska, Anna (2015): How to effectively support export activity, Institute of Economic Research Working Papers, No. 49/2015, Institute of Economic Research (IER), Toruń

This Version is available at: https://hdl.handle.net/10419/219665

# Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by/3.0/

### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





# **Institute of Economic Research Working Papers**

No.49 /2015

# How to effectively support export activity

Anna Fornalska - Skurczyńska

The paper submitted to

# VIII<sup>th</sup> INTERNATIONAL CONFERENCE ON APPLIED ECONOMICS CONTEMPORARY ISSUES IN ECONOMY under the title MARKET OR GOVERNMENT?

Institute of Economic Research and Polish Economic Society Branch in Toruń

18-19 June 18-19, 2015, Toruń, Poland

Toruń, Poland 2015

© Copyright: Creative Commons Attribution 3.0 License

# Anna Fornalska - Skurczyńska

a.fornalska@ug.edu.pl

University of Gdańsk, Institute of International Business, 80-952 Gdańsk, Bażyńskiego 1a

# How to effectively support export activity

JEL Classification: F10, F23, F40

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

Abstract: Export is crucial for every economy. It influences the level of economic growth, balance of payment and social welfare among many others. Therefore increase in exports becomes one of the main objectives of each government. 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 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. Author analyzes secondary data describing factors that determine export activity, describe profile of a company becoming an exporter and investigates actual connection between offered support and increase in export activity.

### 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 and 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. 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 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. Increase in export becomes one of the main objectives of each government, despite the fact that gains from trade are rather unevenly distributed both within and between the countries. This results in various attempts to encourage companies to export by offering both direct and indirect support. The desire

to promote and encourage export is an universal goal but achieved differently depending on the country. Government may support export directly with lending schemes for exporters<sup>1</sup>, direct export subsidies or estimating offices assisting exporters in selling abroad. Bernard and Jensen (2004) 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. In order to achieve this aim both Polish and foreign literature was analyzed, with special emphasis put on the newest trade theories including the model by Melitz (2003). Secondary data describing factors that determine export activity, describe profile of a company becoming an exporter and investigate actual connection between offered support and increase in export activity were analyzed.

The first part of this paper reviews the main international theories explaining trade and the exporters' role in the economy to then specify an exporter's profile which is needed to realize who the potential recipient of export support is. It then analyses the studies attempting to evaluate programs enhancing export activity. The paper finishes with an answer to the question: how to successfully support exports? Although there has been many studies on export promotion there is little empirical evidence proving its effectiveness.

### Theoretical basis for international trade

There are three main purposes of trade theories. First would be to explain the observed trade based on information about the characteristic of countries that trade. The second is to investigate the effects of trade on the economy and the third one to provide knowledge needed to evaluate a proper trade policy. It must be underlined that although substantial

<sup>&</sup>lt;sup>1</sup> 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:

 $<sup>\</sup>underline{https://www.gov.uk/government/news/direct-lending-scheme-launched-to-\underline{support-uk-exporters}}$ 

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. Macroeconomic approach has been complemented with a microeconomic one. There are three main 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 wherease new new trade theories consider trade on a micro level between companies. Traditional theories concerned trade between countries in terms of comparative advantage. The leading ones are two models, one by David Ricardo and the second one by Eli Hecksher and Bertil Ohlin. Ricardian comaparative advantage arises from productivity differences whereas Heckscher – Ohlin's from differences in abundance of production factors. In 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 but two factors of production (labor and capital). Again no trade barriers and costs of transports were assumed.

Assumptions made in both theories, that is: perfect competition and constant scale returns allowed to ignore the importance of companies in the international trade. What was 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 was 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 variety of productivity, capital and skill intensity across companies. As a consequence so called New New Trade models were developed, emphasizing the importance of heterogeneity of companies for analyzing international trade. Two leading models emerged. 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 similarily 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. This cost 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 above mentioned productivity which is a key factor in Export turns profitable for the most internationalization of firms. productive companies only. For those in the middle local market would be the target, the least productive fall out of the market entirely.

In order to know who to support, potential exporters must be identified using the theoretical background provided. It is important to decide whether everyone interested in or engaged in foreign trade should be a recipient of government export-related support. It might also be helpful to differentiate help being effective in case of exporters from assistance positively influencing the nonexporters only.

# The exporter's profile

As already mentioned export plays an important role in every economy due to enhancing employment or generating economies of scale, but it is relatively rare as an activity (Bernard, Jensen, Redding & Schott, 2007). There were 5 726 160 firms in United States in 2012 (according to 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.

	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%

<sup>\*</sup> Data for 2011

Source: Wołodkiewicz-Donimirski, Z. (2014), *Eksport małych i średnich przedsiębiorstw w 2012 r.*, Analizy BAS nr 1 (105), 2014 and Statistical Information and Elaborations, Financial Results of Economic Entities in I-XII 2013, Central Statistical Office, 2014.

This data proves how important small and medium enterprises are in terms of export, therefore their specificity should be taken into consideration when delivering export promotion programs. There has been many studies investigating the link between characteristic of companies and 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. They 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 them 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. According to their research exporters have more employees, higher productivity and greater capital and technology intensity (Bernard & Jensen, 1995). Past success increases the probability of future exporting. Bernard and Jensen (1999) estimated that exporting today increases the probability of exporting tomorrow by 39% (Bernard & Jensen, 1999)

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).

While investigating reasons for exporting it is important to remember that exporters might exit and nonexporters might enter exporting at any given time so the set of exporting companies undergoes continuous changes and is therefore more problematic to study. Bernard and Jensen (1999) state that there is a high degree of reentering by former exporters, so past performance and experience influence positively propensity to export. In another of their studies Bernard and Jensen (2004) examine characteristics of companies, their size, labor force, entry costs, past performance in exports, effect of spillovers and efficacy of government interventions.

## **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, Lopez-Melendo, Pablo-Romero &Sanchez Braza 2013). It is however expected that public funds are always 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 doing so. One of the most popular methods of assessing support programs is using a survey addressed to the recipients of such assistance, but 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 done by Armah & Epperson (1997), Richards et al. (1997) (Cansino, Lopez-Melendo, Pablo-Romero &Sanchez Braza, 2013). It was widely

criticised 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, Lopez-Melendo, Pablo-Romero & Sanchez Braza (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 participants to non-participants in a public program, using a treatment indicator and a variable that will measure the effect of analysed policy (See also: Cadot, Fernandes, Gourdon, & Mattoo, 2012).

Bernard and Jensen (2004) name potential benefits of supporting and promoting exports. 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).

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 non-exporters 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 non-recipients 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, Henry & Strobl, 2005). Brewer (2009) 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) 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, wherease 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 regardless 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). 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).

# **Summary**

The very idea of supporting export seems indisputable. Majority of researchers and politicians would answer positively to the question whether to support export or not. They would also 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 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 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 a purposeful export assistance.

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

The most problematic however, is measuring the effectiveness of the support provided. Apart from choosing the most adequate method it would be helpful to divide recipients into the groups according to the: size, level of internationalization and productivity and assess the results accordingly.

### References

Bernard, A. B. & Jensen, J. (2004). Why Some Firms Export, *Review of Economics and Statistics*, 86. http://dx.doi.org/10.1162/003465304323031111

Bernard, A.B., & Jensen, J. (1995). Exporters, Jobs and Wages in U.S. Manufacturing 1976-1987. *Brookings Paper on Economic Activity, Microeconomics*.

Bernard, A.B., & Jensen, J. (1999), Exceptional exporter performance: cause, effect or both?, *Journal of International Economics*, 47 (1)

Bernard, A.B., Jensen, J., Redding, J., Schott, P. (2007), Firms in International Trade, *Journal of Economic Perspectives*, (21).

http://dx.doi.org/10.1257/jep.21.3.105

Brewer, P. (2009), Australia's Export Promotion Program: Is It Effective?, Australian Journal of Management

Cadot, O., Fernandes, A.M., Gourdon, J. & Mattoo, A. (2012). Are the Benefits of Export Support Durable? Evidence from Tunisia. *Policy Research Working Paper*, 6295

Cansino, J.M., Lopez-Melendo, J., Pablo-Romero, M. & Sanchez Braza, A. (2013) An economic evaluation of public programs for internationalization: The case of the Diagnostic program in Spain. *Evaluation and Program Planning*, 41

Creusen, H. & Lejour, A. (2013), Market entry and economic diplomacy, *Applied Economic Letters*, 20(5)

Francis, J. & Collins – Dodd, C. (2004), Impact of export promotion programs on firm competencies, strategies and performance. The case of Canadian high-technology SMEs, *International Marketing Review*, (21), http://dx.doi.org/10.1108/02651330410547153

Görg, H., Henry, M. & Strobl, E. (2005). Grant Support and Exporting Activity: Evidence from Irish Manufacturing. *Review of Economics and Statistics*, 90.

Hagemejer, J. (2006). Czynniki wpływające na decyzję przedsiębiorstw o eksporcie. Analiza danych mikroekonomicznych. *Bank i kredyt*, 37(7).

Kotabe, M. & Czinkota, M.R. (1992), State Government Promotion of Manufacturing Exports: A Gap Analysis, *Journal of International Business Studies*, (23)

Krugman, P. (1980). Scale Economies, Product Differentiation, and the Pattern of Trade. *American Economic Review*, 9(4).

Melitz, M. J. (2003). The Impact of Trade on Intra-Industry Rellocations and Aggreate Industry Productivity. *Econometrica* 71: 1695-1725. <u>DOI: 10.1111/1468-0262.00467</u>

Melitz, M. J. (2008). International trade and heterogeneous firms. <u>The New Palgrave Dictionary of Economics</u>. Second Edition. Eds. Steven N. Durlauf and Lawrence E. Blume. Palgrave Macmillan, 2008. <a href="http://dx.doi.org/10.1057/9780230226203.0838">http://dx.doi.org/10.1057/9780230226203.0838</a>

Number of Firms, Number of Establishments, Employment, and Annual Payroll by Enterprise Employment Size for the United States, Totals: 2012, retrieved from: <a href="http://www.census.gov/econ/susb/">http://www.census.gov/econ/susb/</a>

Roberts, M. J. & Tybout, J.R. (1997). The Decision to Export in Colombia: An Empirical Model of Entry with Sunk Costs. *The American Economic Review*, 87 (4).

Statistical Information and Elaborations, Financial Results of Economic Entities in I-XII 2013. Central Statistical Office. 2014

U.S. Trading Companies, 2012, International Trade Administration, Department of Commerce, United States of America

Wołodkiewicz-Donimirski, Z. (2014), Eksport małych i średnich przedsiębiorstw w 2012 r., Analizy BAS nr 1 (105)