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The application of survival analysis in the study of export and import duration – first insights from intermediaries in Poland

Identifying the duration of trade can be crucial to stabilize trade relations in a globalized world economy and common shocks of various types. We use non-parametric survival techniques (Kaplan Meier function) to analyse at the firm-level data from the trade relations between Polish intermediaries and their foreign partners from 2007 to 2015. In this paper, we also aim to fill a gap in the literature by analysing differences in survival curves for exporters and importers (which is far less common). Higher survival rates are common for intermediaries with high initial trade volumes, as well as firms trading with EU countries. The differences in duration curves for importers and exporters are statistically significant; import activities with higher trade volumes are marked by greater relationship stability. We also find that both product and geographic diversification increase the probability of survival in foreign markets. The trade duration is negatively affected by strong intermediary relationships with partners in CIS and NAFTA countries.

Keywords: firm survival, export and import duration, duration of trade relationships, intermediaries in foreign trade, Poland

JEL classification: F1, F14, F23, L81

Introduction

The survival of companies is often seen as crucial to economic growth [Giovannetti et al., 2011]. And activity in foreign markets is seen as adding value to activity in the domestic market, often being more competitive and therefore more profitable. Thus, the survival of companies operating in foreign markets is even more important for building market advantages. Although evidence on the patterns and determinants of the duration of companies activity in foreign markets is growing, it is still insufficient and yields inconclusive results [Martincus, Carballo, 2009]. Although Bernard and Jensen [1999] find that exporters are more likely to survive than non-exporters with similar characteristics, nevertheless, Giovannetti et al. [2011] reveals the opposite conclusion that internationalized firms show

higher failure risk. The reasons for such a state of affairs are probably to be found in a variety of conditions, both external and internal, which only confirms the need for a deeper exploration of export duration. And the question of the characteristics of both companies and the economic climate conducive to higher survival rates and trade duration still remains.

While there are numerous studies of enterprise survival in the Polish literature [Szymanski, 2011; Nehrebecka, Dzik, 2013; Markowicz, 2015; Zawadzka, Kurdyś-Kujawska, 2016], studies of trade duration are rare [e.g. Markowicz, Baran, 2022]. This strand of global literature is dominated, indeed, by works on exports [e.g. Martincus, Carballo, 2009; Fugazza, Molina, 2016], as well as manufacturing companies [e.g. Giovannettii et al., 2011; Fu, Wu, 2014]. Trading companies, however, provide a good benchmark against manufacturing companies because they do not make the scope of their activities in foreign markets dependent on the industry and its associated demand. Thus, analysis of the duration of export or import leads to conclusions that are less dependent on factors internal to the company. Moreover, by far the most common subject of survival analysis is the duration of active trade in foreign markets ("trade survival"), rather than whether the company itself trading with foreign partners continues its activities ("trading firm survival") [e.g. Dzhumashev et al., 2016].

The dominance of empirical considerations of export duration, exporting firms survival over the import side, has its justification in the policies of individual countries [e.g. Besedes, Prusa, 2006a, 2006b]. Export activity is an expression of having a competitive capacity in an open economy, and is often subject to state support as a result. This article aims to fill this gap in the empirical literature on trade, considering both directions of the commodity exchange. Specifically, using survival analysis methods (Kaplan–Meier function), we examine the duration of exports and imports using firm-level data for intermediaries in foreign trade in Poland from 2007 to 2015. Our contribution is innovative not only because of the inclusion of both directions of trade or the specificity of the group of firms included in the analysis, but also by including several groups of partner countries (significant to Polish trade in total) allows us to assess the impact of relations with them on trade duration.

The aim of the article is to determine the general patterns of the trade duration of Polish export and import intermediaries in foreign trade, in both ways: together and separately, exporters and importers. In addition, based on the identified differences in the length of trade relationships, we investigate a few factors favouring, or hindering, the establishment of stable trade relationships (such as product and geographic diversification, initial trade volumes).

We organized the manuscript as follows – Section 2 shortly reviews the literature on the export survival and its determinants of a firm's survival and

situation in intermediation of foreign trade firms. Statistical data and methods to verify them are described in Section 3. In Section 4 we present results on the export duration for intermediaries and briefly refer to the literature on the subject. Section 5 concludes.

1. Literature background

1.1. Trade duration and its determinants

As Fugazza and Molina [2016, p. 2] claim, there is no theoretical framework that directly analyses the duration of trade relationships. But according to Sabuhoro et al. [2006] a searching through search-cost theory [Rauch, Watson, 2003] or the sunk cost models [Roberts, Tybout, 1997] might provide some theoretical foundation for further consideration. Also the literature reports a close relationship between exporter exit from foreign markets and firm failure [Deng et al., 2014].

Esteve-Pérez et al. [2008] in their work for the first time grouped the determinants of firm failure as: (1) a firm-based risk, i.e. risk typical only of a given firm, theoretically controlled by it (concerns such characteristics as management skills, age size, structure, foreign capital participation); (2) an industry-based risk – risk associated with the industry in which an enterprise is operating (an assessment of the entire sector, on which the firm indirectly has influence); and finally (3) an economy-based risk (and we can also add here politics-based risk) – slightly dependent on the firm, derived from the state and its actions.

The growing literature which looks at the determinants of export survival and the duration of trade has largely the character of empirical studies. Their contribution is to determine the factors that affect the probability that a company will stop operating or leave a particular market (under the conditions analysed in the various studies); most often they concern a specific country, exceptionally countries grouped in some organization. Thus, these variables are often selective in nature.

Mostly, export duration increases with the level of economic development of the exporting country [Fugazza, Molina, 2016]. And prior export experience also plays an important role in increasing the stability of trade relations [Albornoz et al., 2012].

Foreign trade firms are more strongly exposed to rapid changes in the political or economic situation of their key trading partners [Martincus, Carballo, 2009; Sui, 2010]. Dependence on one trading partner (including its business cycle) reduces the chances of survival in foreign markets. The probability of exit decreases with the number of markets served [Bernard, Jensen, 2007]. Likewise, the impact of exporting different products (product diversification) is analogous to geographic diversification.

The literature on firm survival has found a positive relationship between size and survival [Esteve-Pérez et al., 2008], taking into account the initial or current size of the trade volume.

Several authors have noted that the determinants of survival or exit may differ between retail (and wholesale) and manufacturing companies. Thus, the impact of international competition on their activity is less obvious than its impact on manufacturers [Feinberg, 2010]; here the additional factor – producers' pressure on intermediaries' margins is also essential.

As can be seen from this review, studies of trade duration most often analyse the impact of factors directly related to the activity of a given firm; evidence of a relation to factors of a sectoral or economy-wide nature, or related to location, is definitely missing.

1.2. Specifics of intermediation in foreign trade

Export/import and forms of the internationalization of companies have often been considered from the point of view of manufacturing companies and the analysis of their internal situation and external conditions. Among the factors underlying the choice of the form of internationalization are the relationship between a company's possible capital commitment in a given foreign market, the desired level of control and the accepted level of risk, where export and import are among the low values of risk and control [Bradley, 2005], or factors related to the attractiveness of the foreign market and the company's competitive position in that market, where indirect export is the form chosen due to the weak position of the manufacturing company [Sznajder, 1995].

As indicated by Schröder et al. [2003], a number of theoretical models, such as innovation adoption, organizational learning and relationship marketing, have been adapted to provide a conceptual basis for existing research on export development. In contrast, theoretical efforts to explain the development of export intermediaries as an organizational form or to understand why some intermediaries succeed and others fail have been largely ad hoc, with little connection to the broader literature on management, marketing and international business.

Although the phenomenon of trade intermediation is well known to specialists, and foreign trade intermediation is an important topic in trade transactions, it has only recently come into the spotlight of the economic literature. The few theoretical contributions that there are [Ahn et al., 2010; Blum et al., 2010; Akerman, 2018] focus on the foundation for the existence of wholesalers, the differences between manufacturing firms and intermediaries, and are mainly used to motivate empirical analysis [Petropoulou, 2011, p. 2; Akerman, 2018, p. 156]. The work of Rauch et al. [2004] as well as Petropoulou [2011] model intermediaries as

agents who facilitate the match between exporters and foreign buyers [Blum et al., 2010, p. 419].

Matching buyers and sellers, intermediaries are of key importance in economic world systems. Therefore, intermediaries in foreign trade often specialize in markets with relatively higher entry costs. In the US, 11% and 24% of exports and imports, respectively, are the trade of wholesalers and retailers [Bernard et al., 2007]. On the other hand, some markets are characterized by a high share of intermediated rather than directly traded goods, such as Hong Kong [Schröder et al., 2003]. In Poland, the intermediary sector accounts for less than 15% of the foreign trade volume [Szejgiec-Kolenda, 2022] and has a decidedly uneven spatial distribution. It is relatively easier to perform this kind of foreign trade in economically weaker areas (lower initial costs).

In general, export-import intermediaries are characterized by a high flexibility of their activities, responding to market demand by adjusting their assortment and trading partners. In Polish conditions, this is reflected in the activity of companies in markets related to the CIS countries (a shift toward imports, instead of the earlier export specialization in Poland). In addition, intermediaries are characterized by high volatility in terms of entering and ceasing operations. These companies are also inclined to change their business profile, especially when it comes to operating in more demanding markets, such as the Far East. The number of foreign trade intermediaries is steadily growing, but the intermediary market is highly dispersed [Szejgiec-Kolenda, 2022].

2. Materials and methods

2.1. Data on intermediaries

The studies on the activity of intermediaries in foreign trade clearly show [e.g. Akerman, 2010; Bernard et al., 2010; Ahn et al., 2011] that adopted definitions of the term intermediary in foreign trade are not exactly the same. It follows from the fact that there is difficulty in gaining access to data. Trading firms are probably the best known group within the trade intermediaries. However, foreign trade can also be intermediated by wholesale firms, retail firms, or chains of supermarkets [Schröder et al., 2003]. In the present paper, an intermediary in foreign trade is considered to be a trade enterprise (wholesale or retail trade) dealing with transactions in foreign trade (export or import), located in Poland. The data include the export and import of goods in terms of value-based data – i.e. activity carried out by intermediary companies in international trade, which are engaged exclusively or in a prevailing part in the purchasing of goods with a view to

selling them, acting on their own behalf, at their own account and risk, that is, belonging to section G of NACE: Wholesale and retail trade; repair of motor vehicles, excluding motorcycles.

Data on exporters and importers come from information collected on the borders (EXTRASTAT – system that uses data registered on customs declaration and refers to Polish trade turnover with EU non-member countries) or under the framework of EU reporting (INTRASTAT – system that refers only to Polish intra-EU trade) gathered by the National Revenue Administration (Krajowa Administracja Skarbowa, KAS) [cf. Umiński, 2021]. Generally, firms for which the value of the trade turnover with member states either in the year preceding a given reference year or in a given reference year has exceeded the value of an accordingly established basic threshold are liable to reporting this obligation in INTRASTAT.

As a result, the complete, anonymized database contains annual transactions of intermediaries exporting or importing goods by firm, destination, product, its localization and the value of trade (in euro) realized between 2007 and 2015; in total, this means more than 37,000 exporters and 22,000 importers. For the survival analysis, only a database of 26,889 firms that traded in 2007 was used (Table 1), with almost twice more importers than exporters. It provides 9 years to be taken into account.

On average, Polish importers serve more than 13 markets, while exporters serve seven. The product diversification of exporters is also lower than that of importers. The directional division of trade was based on the most important groupings of countries in terms of volume. In Poland, the largest trade partners (especially in exports) are Germany and other European Union countries (EU; 28 countries including the UK); from non-European countries, China and the Far East are very important importers [cf. Drelich-Skulska et al., 2020; Szejgiec-Kolenda, Duma, 2020]. Also, due to some historical linkages the traditional direction of trade – Eastern countries (before 1989 – Commonwealth of Independent States – CIS countries) has been analysed, as well as NAFTA countries (North American Free Trade Agreement). In order to assess product structures, the study used the standard classification of international trade – the Combined Nomenclature (CN) – used for statistics on foreign trade in goods, dividing the total volume of exports or imports into 21 sections.

2.2. Kaplan–Meier survival functions

In survival analysis, we study the time it takes for a certain event to occur. In economic research, the most natural direction of research is the so-called business demography [cf. Markowicz, 2017]. This time is then called the firm survival time, understood as the period of time which elapses from the beginning of the study until the company ceases operations. Currently, the development of survival

Table 1. Descriptive statistics on exporting and importing intermediaries in Poland in 2007

	No. of firms	Average vol. of trade (million euro)	Average no. of markets	Average no. of CN sections	Average vols. of trade with (1,000 euro)			
					EU28	CIS	NAFTA	Far East
Exporters	9,472	1.3	7.0	2.6	917.2	257.2	19.5	23.6
Importers	17,417	2.2	13.5	3.5	1,468.4	129.4	50.6	396.3
Total	26,889	1.9	11.2	3.2	1,274.3	174.4	39.6	265.0

Source: Own calculations.

analysis in economic research, particularly in international business, increasingly includes issues related to "export survival time", known as export duration [cf. Fu, Wu, 2014]. Therefore, also for the purpose of this study, we adopted the survival analysis to search for patterns in the trade duration of intermediaries.

Generally, we used the Kaplan–Meier estimator to model the trade duration and to find differences in the trade duration of intermediaries, based on the adopted criteria. The Kaplan–Meier estimator is a non-parametric method used to estimate survival functions. This estimator incorporates information from all of the observations available, both uncensored and censored, by considering survival at any point in time as a series of steps defined by the observed survival and censored times [Sabuhoro et al., 2006, p. 50].

To verify the similarity of the survival function for intermediaries, log-rank tests were used (at a significance level of 0.05), where H0 means that the survival curves are the same, versus H1 – not all survival curves are the same. In the study of differences in trade duration, criteria directly related to the export or import activities of intermediaries were considered (without taking into account factors related to the external environment or structural characteristics of the companies): (1) the form of activity in foreign markets (export or import), (2) the volume of annual trade turnover, (3) the number of markets served, (4) the number of products offered (CN sections), and (5) the main directions of trade activity (divided into main 4: EU28, NAFTA, Far East and CIS).

All calculations were made in the PQStat software.

3. Results and discussion

On average, intermediaries in foreign trade actively operate for 5 years (median survival time). Such a duration of trade is common for developed countries, which, through experience (known in literature as "learning by exporting", but in the case of this research the term "learning by trading" is more appropriate), are more likely to maintain partners abroad and compete in the global market. This gives a much higher result than, for example, that obtained from the example of Peruvian export firms, for which the median duration is only one year [Martincus, Carballo, 2009]. As claimed by Besedeš and Prusa [2006], trade relationships face a high hazard in the initial years; this is in line with intermediaries duration of trade, whose estimated survival function records the highest declines in the first two years of their trade performance.

The analysis showed that the degree of survival (duration of activity in foreign markets) of Polish foreign trade intermediary companies is strongly related to the type of activity, as importers have been operating relatively longer than exporters.

An unreported log-rank test shows that the functions are significantly different, indicating that survival is significantly higher for importers than for exporters. On average, export intermediaries operated for 3 years during the study period, while importers lasted twice as long (Figure 1). These results are contrary to the research of Markowicz and Baran [2022] on trade among the intra-community market, which shows that when it comes to trade in vehicles and automotive parts export relationships tend to last longer than import relationships (but this may be due to the specifics of the industry itself). In addition, the export business is more risky than the import business, which may be partly due to the scale of importers' operations, where larger players dominate (see Table 1). This thesis, that larger companies are more likely to remain active in international markets, is supported by the findings of Martincus and Carballo [2009]. Moreover, Esteve-Pérez et al. [2008] found that larger Portuguese firms experience a lower risk of failure. Among Polish export intermediaries, there are definitely more of those with smaller turnovers, hence they are more vulnerable to international competition [Feinberg, 2010].

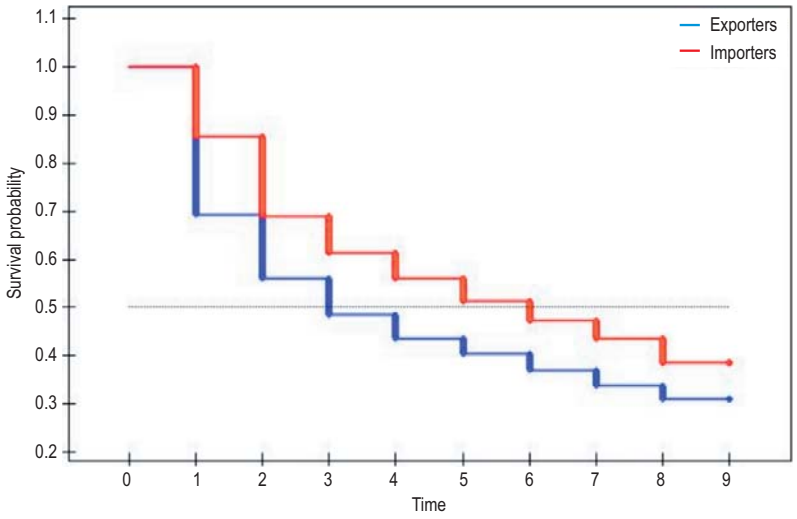

Figure 1. Kaplan–Meier survival functions: Exporters vs importers

Source: Own calculations.

The trade value (with foreign markets) is a variable that differentiates the probability of survival. In line with conjecture, by far the companies with the smallest annual turnover (up to 50,000 euros) were the shortest active in foreign markets, with their median survival time being only 2 years (Figure 2). Also Besedes and Prusa [2006b] prove that firms beginning with small trade value are at greatest risk, and the survival functions for such companies radically fall already in the first

year of their trading activity. For Polish intermediaries hazard rates decline very rapidly, by 45% (!), not found in any other curve analysed.

In this case, one can speak of a trend, namely, as turnover increases, the probability of lasting longer in foreign markets increases (it also applies to groups of exporters and importers separately). With a turnover of 50–500,000 euros, the median survival time doubles to 4 years. Kaplan–Meier curves for a turnover of more than 500,000 euros show that the median survival of companies exceeds the time of analysis, which is 9 years. Thus, the size of a company's turnover in the first year of analysis determines its survival strength, and large market players are more stable. Trade duration models developed for many other countries are consistent with the results for Polish firms and generate a positive relationship between initial trade values and the length of the trade relationship [cf. Feinberg, 2010; Lejour, 2013; Fugazza, Molina, 2016]; less frequently this involves final trade values.

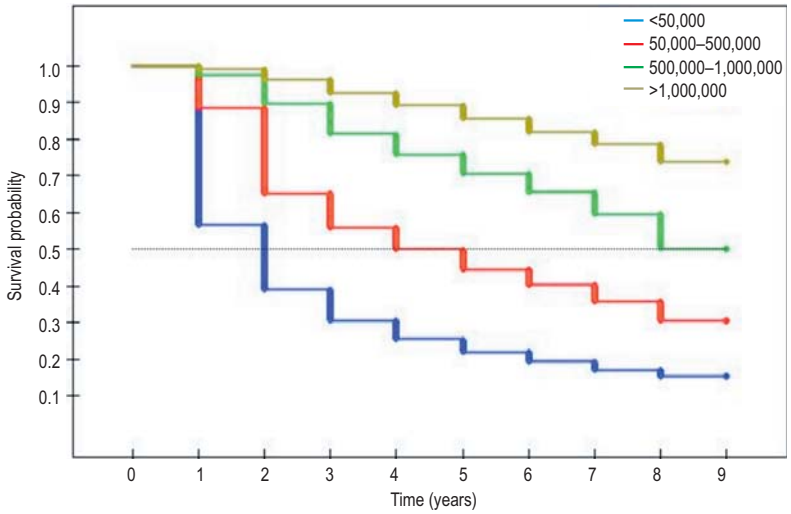

Figure 2. Kaplan–Meier survival functions: Trade values

Source: Own calculations.

In the study population, there is a trend in the position of Kaplan–Meier curves, according to the differentiation of the type of activity, in favour of multi-section enterprises. A narrow range of activities also means a lower median duration time. For a specialized intermediary, trade within 1 commodity group (CN section) is only 2 years median duration time, while for 4 sections (out of 21 possible) – it is already 8 years (Figure 3). Multi-section at the level of 5 or more sections significantly extends the duration of trade, with a median survival time of more than 9 years. For homogeneous goods, the median survival time is consistent with the results for the United States obtained by Besedes and Prusa [2006b]. But already

for differentiated products the advantage in duration of trade is gained by Polish intermediaries (compared to 5 years from the US market).

Moreover, while in the Polish market hazard rates decline very rapidly for homogenous products in the first two years, the US market turns out to be more complex with a much higher risk (45% decline) already in the first year of trade for homogenous goods [Besedes, Prusa, 2006a]. This situation may be indirectly due to the environment in which Polish companies operate, in particular the benefits associated with the functioning of the economic union (more on the impact of geographic differentiation on duration of trade is shown further in the Results section). Namely, the current trade linkages with the EU favour the relationships of subcontractors located in Poland with parent companies (headquarters) located in other EU countries (this also applies to wholesalers), hence the possible greater stability of relationships for homogeneous products. Moreover, as Fugazza and Molina [2016] demonstrate, the relationship between trade duration and the type of product, portrays the degree of competition patterns characterizing traded products, and thus the commodity structure of Polish foreign trade might be more competitive in this case (even if only in terms of price).

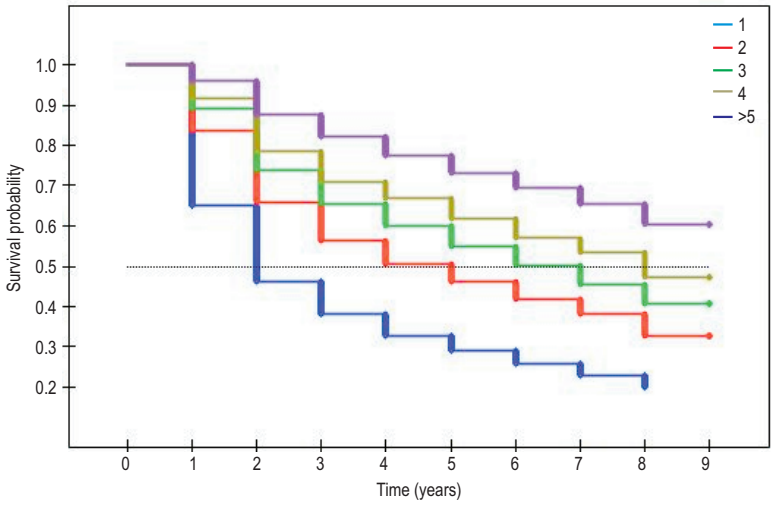

Figure 3. Kaplan–Meier survival functions: Number of CN sections

Source: Own calculations.

It turns out that not only product diversification affects the duration of trade, geographic diversification also matters. Geographic diversification increases the chances of survival in foreign markets. Moreover, Martincus and Carballo [2009] showed, based on Peruvian companies, that geographical diversification increases the probability of survival in export markets more than product diversification.

In Polish conditions, as the scope of presence in many foreign markets expands, the probability of long-term export or import increases (Figure 4). Indeed, it turns out that already for companies active in 20 or more markets, their median survival time exceeds 9 years. This is also partly related to the scale of operations. As can be observed from the figures, the survival curves are statistically significantly different from one another (except for the curves for the number of markets 30–39 and 40 or more countries). The median survival time of intermediaries in foreign trade operating in fewer than 10 markets is the smallest – at 3 years, while expanding operations to 10–19 markets definitely increases the probability of trade duration (the median is then 5 years). Thus, it appears that trading with more countries is associated with a greater reduction in the risk of failure abroad [Martincus, Carballo, 2009]. As indicated by the declining slopes of the estimated survival functions, hazard rates decline very rapidly in the first year: 35% for intermediaries trading with less than 10 countries but "only" a 15% drop for intermediaries trading with 10–19 countries.

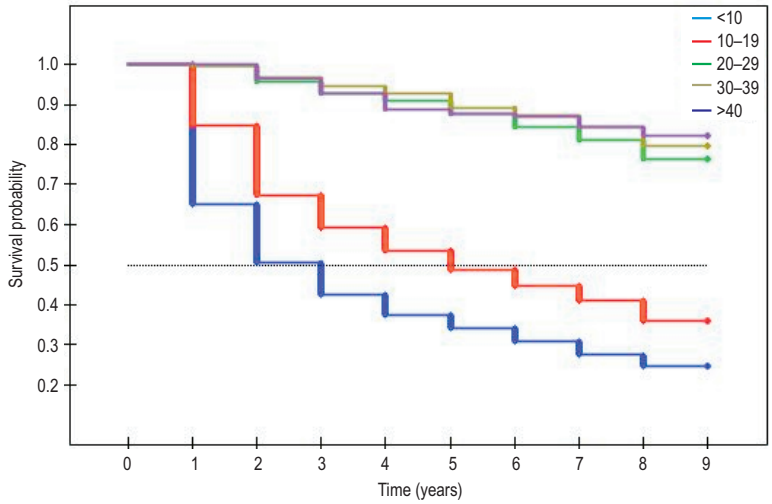

Figure 4. Kaplan–Meier survival functions: Number of markets

Source: Own calculations.

In a survival analysis considering their participation in different markets, it is characteristic that companies with an average (not extreme) share of these markets in trade volumes (20–80%) have the highest chance of survival (mostly exceeding the time of analysis). This confirms earlier conclusions about the positive effect of geographic diversification on hazard rates.

For the EU countries, the 3 curves with a moderate market share in intermediaries' yearly turnover are located at the highest level; thus EU markets guarantee

greater stability of trading activity. This also indicates that geographic diversification is one of the factors that increases the survival of companies. Both the strong dependence on activity in EU markets and the relatively insignificant activity in these markets definitely reduce the chances of long-term activity, compared to companies with moderate values of participation in this market (20–80%). With a share of turnover with EU countries below 20%, the median survival time is 3 years, and above 80% – already 7 years (Figure 5). It is consistent with the claim that intensification of trade relations is facilitated by linkages within formal or informal (historical) groups of countries [Szejgiec-Kolenda, Duma, 2020] and also Markowicz and Baran [2022], based on the automotive industry, with the claim that the most durable relationships of Polish enterprises are with the EU countries. In addition, the share of long-term trade relationships tends to be highest for relationships with developed countries [Fugazza, Molina, 2016].

Similar conclusions can be reached by analysing the data for activity in Far East markets. However, in this case, the median survival time for companies with little activity as well as those strongly dependent on a presence in the Far East was the same over the period analysed (5 years). Interestingly, hazard rates decline the least for any relationship with the Far East countries. Even for companies with the highest share of trade in the Far East, the decline in the first year (20%) is smaller than for EU countries (this is partly due to the higher frequency of such relationships specific to importers, which, as mentioned earlier, operate on a larger scale and with less risk than exporters).

Conducting trade in Eastern markets, as well as in NAFTA countries, significantly increases the risk of the rapid exit from trade. Specifically, companies whose share of CIS countries in trade exceeds 80% are characterized by the lowest median survival time (2 years). For NAFTA countries, it is only 1 year more. Moreover, hazard rates decline very rapidly in the first year (the highest drop among all groups of countries). It exceeds 30% both for intermediaries dependent on the Eastern countries' market and the distant US market (NAFTA). Also in both cases, a small share of turnover (less than 20%) paradoxically means a higher median survival time (5 years). This is because eastern markets are more sensitive to the current economic climate, as well as the political situation, and thus considerably at greater risk [Komornicki et al., 2005]. On the other hand, the risks in trade with NAFTA countries stem from, on the one hand, the need for deeper market insights, as well as distance itself, which automatically reduces the competitiveness of comparable goods from Europe in favour of closer markets [Esteve-Pérez et al., 2008].

It also turns out that the introduction of an additional variable into the study of market share – trade volume – leads to additional conclusions. In the case of EU markets, the regularities presented so far in Figure 5 do not apply to companies

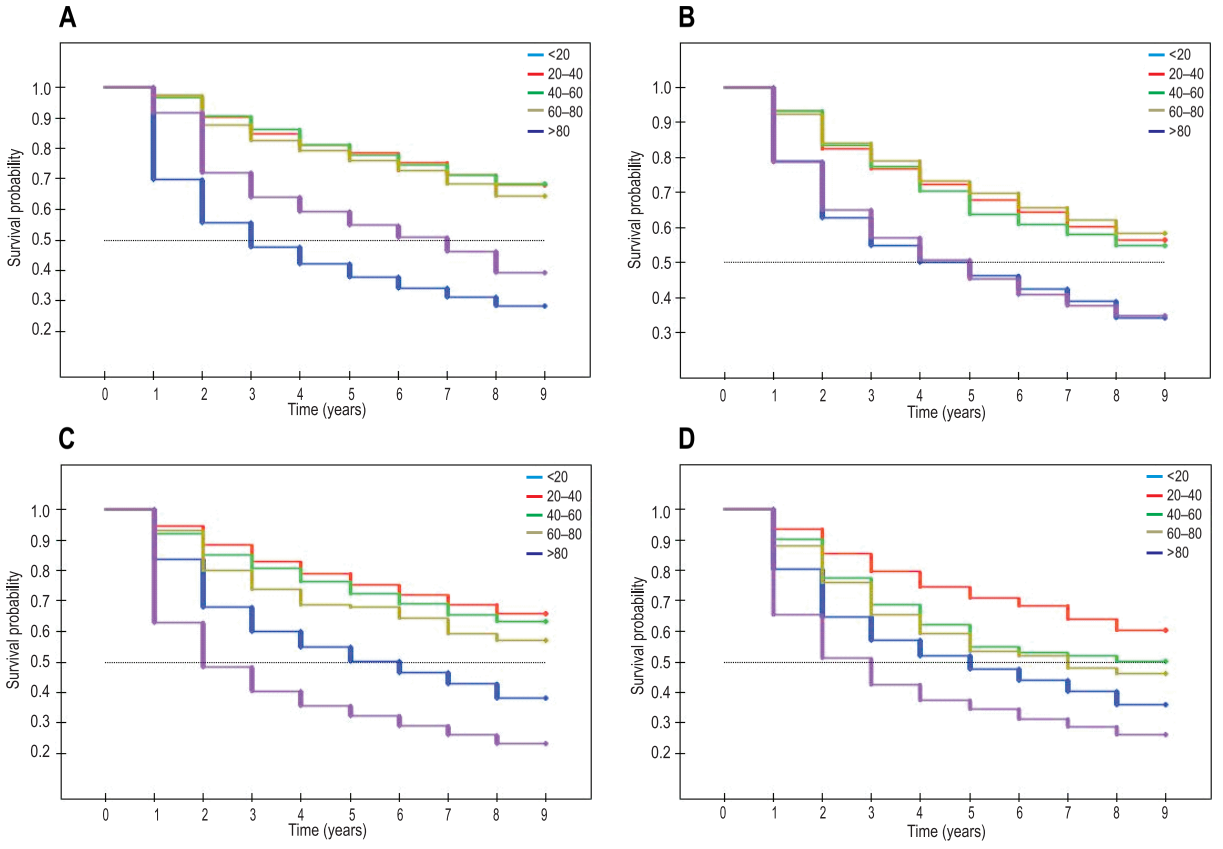

Figure 5. Kaplan–Meier survival functions: Market share

Notes: A – EU28; B – Far East; C – CIS; D – NAFTA.

Source: Own calculations.

with the smallest turnovers (less than 500,000 euros), for which the median survival time is in this case similar. In general, with low trade volume it is more challenging to have any sort of diversification. Therefore, only the larger scale of operations supports the thesis of the need to diversify sales markets to increase the probability of survival. For the other directions (CIS, Far East, NAFTA) no such regularities were observed.

Conclusions

This paper provides empirical evidence on the pattern of export and import duration and its determinants for Polish foreign trade intermediaries. We do so by focusing on several aspects related to trade activity, i.e. the form of activity in foreign markets; the trade volume; the number of markets served; the number of products offered, and some of the geographical directions of trade.

The main results are as follows. Polish foreign trade intermediaries, similarly to companies located in developed countries, are active for an average of 5 years. In the initial years, these trade relationships are of high risk, with export relationships being twice as risky as import relationships in the first year of activity. The difference between the export and import relationships is significant for the entire period analysed. For the following variables, both export and import duration separately show the same direction of influence. The value of trade is a variable that differentiates the probability of survival; the intermediaries with the lowest annual trade value in their first year have the lowest duration of trade. Moreover, a trend can be observed in the position of the Kaplan–Meier curves according to the differentiation of the product range, in favour of multi-section enterprises. The hazard ratios fall very quickly for homogeneous products in the first two years of activity. Geographic diversification increases the chances of survival in foreign markets. In the Polish conditions, as the scope of presence in many foreign markets expands, the likelihood of long-term exports or imports increases. But both a strong dependence on activity in EU markets and relatively low activity in these markets definitely reduce the chances of long-term business compared to companies with moderate values of participation in this market. Interestingly, the hazard rates decrease the least for any trade relations with the Far East. Trading in Eastern markets, as well as in NAFTA countries, significantly increases the risk of a quick exit. Specifically, companies whose share of CIS countries in trade is the highest, have the lowest median survival time.

The results confirm some popular conclusions from studies of various companies and markets. At the same time, while some of the patterns are more general (such as those regarding the sensitivity of the first trading year or initial trade

value to survival rates), some are specific to the world region from which the studied firms originate (such as the median length of export duration or relations with developed countries), and a few are exclusive to the population of intermediaries in foreign trade itself (such as broad product diversification). The findings on export and import survival determinants raise important implications for policy-makers as well as entrepreneurs. They are even more important in times of economic and political instability – indeed, as economic policy should foster improved access to foreign markets, find opportunities to explore new markets and provide support to remain in foreign markets.

Further research could explore different lines: (1) a more product or market oriented one, which could take up the issues of deepening the analysis over the competitiveness of specific types of products or trade directions, thus giving policy-makers more tools for creating the economic strategies of countries, including support for the emergence and survival of new firms; (2) drawing on the diversity of firms' experiences in conducting foreign trade, focusing on different models of export or import entries (born global vs non-born globals, small vs. large companies); (3) focus on the external environment of companies' operations, taking into account the mapping of local socio-economic factors that can foster the creation of long lasting trade relations and strengthening of trade companies' branding (also as support for local authorities in carrying out various activities); and finally (4) a focus on geographical aspects, answering the question to what extent the geographical aspects of localization (e.g. agglomeration, transportation corridors or functioning of borders) have an impact on the duration of trade relationships among intermediaries.

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