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Globalizacja – gra z dodatnim czy ujemnym wynikiem?

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**SMALL AND MEDIUM SIZED ENTERPRISES
IN INTERNATIONAL TRADE:
THE CASE OF CENTRAL AND EASTERN
EUROPEAN COUNTRIES**

**MAŁE I ŚREDNIE PRZEDSIĘBIORSTWA
W HANDLU MIĘDZYNARODOWYM.
PRZYKŁAD KRAJÓW
EUROPY ŚRODKOWEJ I WSCHODNIEJ**

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Summary: This paper aims at providing insights into the role of SMEs from selected CEE countries in international trade. The evidence from other regions suggests that SMEs have not participated much in exporting and importing comparing to large firms. The research method used in this paper is the quantitative analysis of trade patterns of four Central and East European countries: the Czech Republic, Hungary, Poland and Slovakia. France and Germany were used here as examples of developed countries for the purpose of comparison. The level of concentration of trade is much higher in the case of large firms. They frequently control almost 100% of trade in the industries. The very important fact is that there are only slight differences between the remaining groups of enterprises. Micro, small and medium enterprises report similar level of participation in imports and exports. SMEs have limited abilities to conquer foreign markets. The fact that small and medium sized enterprises play a minor role in the international trade should not be only interpreted as their weakness. This is rather associated with the dominance of multinational enterprises in international trade. There are also objective limitations to the expansion of SMEs in some industries, especially when the economies of scale are required. Therefore, even with a great support of governments, the chances that SMEs will dominate trade in automotive or IT industry are quite weak.

Keywords: international trade, small and medium enterprises, internationalization, Central and Eastern Europe.

Streszczenie: Artykuł ma na celu poszerzenie wiedzy na temat roli w handlu międzynarodowym małych i średnich przedsiębiorstw (MŚP) z wybranych krajów Europy Środkowej i Wschodniej. Weześniejsze badania z innych regionów wskazują, że MŚP w ograniczonym stopniu uczestniczyły w eksporcie i imporcie w porównaniu z dużymi firmami. Metodą badawczą zastosowaną w niniejszej pracy jest analiza ilościowa handlu czterech krajów Eu-

ropy Środkowej i Wschodniej: Czech, Węgier, Polski i Słowacji. W celach porównawczych użyte zostały również dane dotyczące dwóch rozwiniętych gospodarek: Francji i Niemiec. W wyniku przeprowadzonej analizy można konkludować, że poziom koncentracji handlu jest znacznie wyższy w przypadku dużych firm. Kontrolują one często niemal 100% handlu w branży. Mikro-, małe i średnie przedsiębiorstwa odnotowują podobny – niski – poziom uczestnictwa w imporcie i eksporcie. Wynika to z faktu, że MŚP mają ograniczone możliwości dotarcia do rynków zagranicznych. Jednak niewielkiego udziału MŚP w handlu międzynarodowym nie należy interpretować wyłącznie, opierając się na ich słabości. Jest to bowiem związane z dominacją korporacji transnarodowych w handlu międzynarodowym. Istnieją także obiektywne ograniczenia ekspansji MŚP w niektórych branżach. Zwłaszcza, gdy wymagane są korzyści skali. Wówczas nawet przy silnym wsparciu rządów, szanse, że MŚP będą dominować w branży motoryzacyjnej lub IT, są dość niskie.

Słowa kluczowe: handel międzynarodowy, małe i średnie przedsiębiorstwa, umiędzynarodowienie, Europa Środkowa i Wschodnia.

1. Introduction

Small and medium sized enterprises (SMEs) constitute an important element of most economies in the world. However, not only. They are also most numerous and they play a key role in employment and gross domestic product (GDP), which is highlighted. From the point of view of political economy, SMEs are also perceived as more patriotic. They are frequently owned by domestic capital and serve local communities. They are also not as footloose as multinational enterprises, which frequently underlines their global character and can move their operations to any location providing favorable climate for investment. However, SMEs are not only tied to their domestic area. They also utilize opportunities created by the globalized world economy. Modern communication technology and efficient logistics of SMEs allowed them to participate in the global value chains. Thanks to this reduction of the barriers to enter foreign markets, new opportunities for smaller entities emerged.

There are some limitations to the development of SMEs. On the one hand, they are treated as relatively smaller enterprises, but dynamically developing. Thanks to this fact they are small now, but have potential to become large enterprises occupying significant positions in their industries. This is an evolutionary approach, especially, if we consider SMEs as a result of entrepreneurial spirit. On the other hand, SMEs are frequently perceived as weaker and less innovative entities. They are frequently stacked in the trap of middle size. They cannot grow because they do not have enough resources. As a result, they are less productive and less competitive. Especially in comparison to large domestic and multinational firms.

This lower productivity of SMEs may be translated into weaker chances in their internationalization. SMEs also frequently operate in industries not requiring the economy of scale. Because of the limitations SMEs should also choose the entry modes that do not require much engagement. Exporting and importing are the entry

modes meeting the requirements. Even though these two modes may be perceived as “cheap and easy”, from the perspective of SMEs they are frequently costly and challenging. It is associated with limited resources that are under control of SMEs.

This paper is aimed at providing insights into the role of SMEs in international trade. This is a new approach to importing and exporting that may also bring policy recommendations. The rest of the paper is organized as follows: Section 2 presents the theoretical background on the role of trade in internationalization process of a firm. This section also provides the literature review on the participation of SMEs in international trade, Section 3 is devoted to the presentation of results of cross-section analysis of international trade of selected Central and Eastern Europe economies and the final part contains final conclusions illustrating the role of SMEs in international trade.

2. Theoretical background

The underlying literature can be divided into two main strands. From the point of view of international economics, firms were only recently added as bearers of international trade. Classic and neoclassical approaches to trade took into consideration the abundance of production factors of larger economic organisms – countries. The role of firms in international trade can be traced to the “new” trade theory by Krugman [Krugman 1980]. However, the emphasis was placed on the economies of scale and consumer preference for variety, whilst the role of firms was not explicitly revealed. Melitz [Melitz 2003] enhanced the Krugman’s model by introducing firm heterogeneity. Also the seminal work of Bernard, et al. [Bernard et al. 2007] shed some light on the role of firms in international trade. However, the distinction was rather on their productivity, not size.

From the international business (IB) point of view, international trade was perceived as a form of foreign expansion. In many cases it was depicted as a transition mode from being a domestic firm to becoming a multinational firm. According to Johanson and Vahle [Johanson, Vahle 1977] exporting was an important and long-lasting stage in the internationalization process of a firm.

Internationalization of SMEs has been analyzed thoroughly in the literature [e.g. Anderson et al. 2004; De Clercq, et al. 2005]. The export performance of SMEs has been frequently analyzed from the micro perspective. Export behavior of SMEs has been frequently explained by the attitude of owners and managers [Coudounaris 2011]. Also the structure of ownership has been analyzed. In the case of Finnish SMEs, family-owned firms reported weaker export-performance than non-family-owned entities [Larimo 2013]. Other limitations to the internationalization of SMEs have been identified by Xie and Suh [Xie, Suh 2014].

IB literature focuses only on the technical side of the foreign expansion and only from the perspective of a firm. Thus economic results in broader context were not revealed. This paper distinguishes between the internationalization of SMEs and

their influence on international trade. Such a perspective has been neglected in the literature on international trade.

This limited coverage of the issue of SMEs in international trade may be somehow justified by their limited internationalization. The underrepresentation of SMEs in international trade is an issue observed in all regions of the world. In countries constituting Asian Pacific Economic Cooperation (APEC) the exports of SMEs does not exceed 30%, whilst the share in output is more than 50% (APEC 2003). Much weaker results are generally observed in the case of their participation in foreign direct investment (FDI). Higher values were reported for the South Korean economy. Already in the early 1990s the share of SMEs averaged over 40% [Kim et al. 1997].

Governments are trying to encourage firms, especially of the smaller size, to develop their export operations. However, in most cases such support is perceived by exporters as unsatisfactory and having not much influence on their expansion [Kim et al. 1997]. Small and medium-sized firms are more prone to negative impact of trade barriers. Among the reasons of such a situation Fliess and Busquets [Fliess, Busquets 2006] list limited capabilities to influence the trade policy process, difficulties in adjusting operations in response to barriers or lost competitiveness. Foreign markets barriers and lack of home government support are found to be particularly important constrains to export operations of SMEs [Rutihinda 2008]. However, there are also many barriers that are endogenous to SMEs. Arteaga-Ortiz and Fernández-Ortiz [Arteaga-Ortiz, Fernández-Ortiz 2010] list among internal barriers: knowledge barriers, resources barriers and procedure barriers.

3. Empirical results

The research method used in this paper is the analysis of trade patterns of enterprises from four Central and East European countries: the Czech Republic, Hungary, Poland and Slovakia. France and Germany were used here as examples of developed countries for the purpose of comparison. The most important issue in such research is an access to reliable data over long period of time. One of few sources of data on the trade of SMEs is Eurostat. However, it provided detailed data only for year 2011. Therefore, the analysis will take a cross-section form. In this paper, micro enterprises are those employing 1-9 workers, small entities are those employing 10-49 workers, medium firms are those employing 50-249 workers and entities employing more than 249 workers are large firms.

I start with the presentation of the overall impact of particular groups of enterprises on the trade of selected countries. The general conclusion is that trade concentrates among the largest enterprises. In the case of France it is over 50% (Tab. 1). It concerns both intra-EU and extra-EU trade. This is the highest value of all analyzed countries. However, the rest of the sample records similar values.

The very important fact is that there are only slight differences between the remaining groups of enterprises. Micro, small and medium enterprises report similar participation in imports and exports. We can draw a conclusion that advancing from the smallest firms to medium ones does not change the importance of trade. Only in cases of Germany and the Czech Republic such a trend was observed. Importantly, the difference in values between intra-EU and extra-EU trade was very small. This can be read as the mere importance of EU status. However, the case is that analyzed CEE countries still have many trade ties with other Eastern European countries that do not belong to EU.

Table 1. Imports of selected countries in 2011 by size of enterprises (in %)

Partner	EU27	Extra-EU27	EU27	Extra-EU27	EU27	Extra-EU27	EU27	Extra-EU27
Employment	0-9	0-9	10-49	10-49	50-249	50-249	250+	250+
France	14.5	13.9	13.5	13.5	16.1	13.0	50.6	54.4
Germany	8.9	7.2	11.7	14.0	17.0	15.9	39.1	35.9
Czech Republic	5.1	3.4	11.3	8.6	20.6	14.7	38.4	42.7
Hungary	10.0	9.6	12.1	7.3	18.3	7.5	45.2	67.4
Poland	7.1	5.8	14.3	7.9	23.2	10.6	44.5	65.8
Slovakia	15.2	4.8	13.0	4.5	17.3	5.6	42.2	73.2

Source: own elaboration based on Eurostat data.

The concentration of trade in the group of the largest enterprises is even more evident in the case of exports (Tab. 2). It reaches over 70% in the case of Slovakia. It means that there is little room for trade of smaller entities. It cannot be expected that micro enterprises will have particular impact on trade. However, the middle enterprises have many advantages to undertake foreign expansion. Still no discrimination between intra-EU and extra-EU trade is revealed.

The second part of the analysis takes a form of detailed analysis of industry pattern for the four selected countries. Imports of the Czech Republic in the group of

Table 2. Imports of selected countries in 2011 by size of enterprises (in %)

Partner	EU27	Extra-EU27	EU27	Extra-EU27	EU27	Extra-EU27	EU27	Extra-EU27
Employment	0-9	0-9	10-49	10-49	50-249	50-249	250+	250+
France	15.8	11.8	10.5	8.6	14.6	12.9	54.0	62.1
Germany	6.7	6.8	8.6	8.1	15.5	12.6	47.2	57.5
Czech Republic	3.0	3.6	5.9	6.7	15.0	11.9	44.7	51.5
Hungary	5.4	4.5	7.3	3.8	14.6	9.1	55.4	47.7
Poland	3.9	5.6	7.4	7.5	17.7	13.9	58.6	58.0
Slovakia	8.4	3.0	6.9	4.6	12.8	8.2	59.6	73.5

Source: own elaboration based on Eurostat data.

Table 3. Top 5 industries in the imports of the Czech Republic in 2011 according to the size of enterprise (in %)

Intra EU27		Extra EU27	
Employment: 0-9			
Manufacture of coke and refined petroleum products	66.24	Financial and insurance activities	48.04
Real estate activities	33.18	Water supply, sewerage, waste management and remediation activities	39.22
Construction	15.54	Real estate activities	34.38
Wholesale and retail trade and repair of motor vehicles and motorcycles	14.24	Agriculture, Forestry and Fishing	19.15
Wholesale trade, except motor vehicles and motorcycles	14.17	Manufacture of coke and refined petroleum products	18.52
Employment: 10-49			
Administrative and support service activities	56.35	Wholesale and retail trade and repair of motor vehicles and motorcycles	50.57
Wholesale trade, except motor vehicles and motorcycles	30.40	Construction	49.10
Manufacture of leather and related products	30.40	Agriculture, Forestry and Fishing	34.70
Trade	26.91	Wholesale trade, except motor vehicles and motorcycles	30.57
Professional, scientific and technical activities	24.19	Professional, scientific and technical activities	29.26
Employment: 50-249			
Manufacture of furniture	58.05	Manufacture of furniture	66.29
Manufacture of wood and products of wood and cork	53.11	Retail trade, except motor vehicles and motorcycles	64.53
Manufacture of textiles	50.40	Manufacture of wood and products of wood and cork	57.54
Water supply, sewerage, waste management and remediation activities	50.34	Other manufacturing	53.39
Financial and insurance activities	48.15	Manufacture of food products	43.58
Employment: 249+			
Manufacture of motor vehicles, trailers and semi-trailers	94.33	Manufacture of tobacco products	99.98
Manufacture of tobacco products	93.34	Manufacture of chemicals and chemical products	93.71
Manufacture of electrical equipment	80.69	Manufacture of computer, electronic and optical products	93.08
Manufacture of computer, electronic and optical products	79.51	Manufacture of motor vehicles, trailers and semi-trailers	90.81
Manufacture of basic pharmaceutical products and pharmaceutical preparations	77.16	Electricity, gas, steam and air conditioning supply	90.50

Source: own elaboration based on Eurostat data.

micro enterprises both in the case of the European Union and other partners is concentrated on services (Tab. 3). This kind of activity does not require as much economies of scale as production. Agricultural products also belong to the activities that are chiefly conducted by smaller entities. The group of enterprises employing from 10 to 49 workers represents very similar industry pattern. The group of medium sized enterprises is rather concentrated on manufacturing. The common feature of the operation is that they are low and medium intensive with respect to technology. This group may be also described as dominated by domestic firms. The last group of the largest enterprises dominates the industries of high technology and economies of scale. This group can be described as dominated by multinational firms.

The industry pattern of Czech exports is similar to imports (Tab. 4). This can be explained by high level of intra-industry trade among EU countries. Moreover, items present in imports are frequently used in exports. The smallest enterprises still focus on services, while the largest on high-tech production. In the latter group, the technology of intensive industries, like automotive or pharmaceuticals, is accompanied by activities associated with natural resources. Moreover, the highest level of concentration in small enterprises is around 20-30%. In industries, where large enterprises dominate, the concentration level is frequently equal or close to 100%. It means that in some industries only the largest enterprises are able to conduct international activities.

Micro enterprises are most active international traders in Hungary in construction and services (Tab. 5). Interestingly, the concentration level in the top industries in this group is very high. It could be interpreted that trade in these industries is reserved for smaller firms. Moreover, there is a very small difference in trade pattern between the EU and external partners. It somehow contradicts the general opinion that membership in the EU significantly influences the trade pattern. It is especially interesting in the case of small firms. For them trade barriers are very costly. However, they do not highly influence their trade activities.

In the case of Hungarian exports, agricultural products are mostly traded by the enterprises of size between 10 to 49 employees. It is different than in the case of the Czech Republic, where the smallest firms were the most important international traders in agriculture products. The general trade in the Hungarian trade is a very high level of concentration irrespective of the size of enterprises. Even in the group of the smallest firms, the top industry takes almost 100%.

The concentration levels in the group of micro and small enterprises is quite low in the case of Poland (Tab. 7). Only the group of largest firms represents high concentration reaching 100%. In such industries there is no room for smaller participants. The structure of Polish agriculture production dominated by family farms incurs that trade is also limited to this group. Industry pattern for EU and non-EU markets is very similar. This is consistent with earlier findings regarding the geographic distribution of Polish exports [Cieřlik et al. 2012].

Table 4. Top 5 industries in the exports of the Czech Republic in 2011 according to size of enterprise (in %)

Intra EU27		Extra EU27	
Employment: 0-9			
Manufacture of coke and refined petroleum products	30.97	Real estate activities	74.39
Financial and insurance activities	23.96	Wholesale and retail trade and repair of motor vehicles and motorcycles	60.52
Real estate activities	23.46	Retail trade, except motor vehicles and motorcycles	49.27
Wholesale and retail trade and repair of motor vehicles and motorcycles	20.84	Financial and insurance activities	37.15
Wholesale trade, except motor vehicles and motorcycles	19.60	Trade	26.92
Employment: 10-49			
Administrative and support service activities	58.49	Wholesale trade, except motor vehicles and motorcycles	44.60
Manufacture of coke and refined petroleum products	46.52	Professional, scientific and technical activities	42.87
Information and communication	33.23	Manufacture of leather and related products	41.08
Wholesale trade, except motor vehicles and motorcycles	26.99	Trade	37.89
Professional, scientific and technical activities	25.39	Water supply, sewerage, waste management and remediation activities	31.88
Employment: 50-249			
Manufacture of furniture	62.12	Manufacture of furniture	51.93
Manufacture of wood and of products of wood and cork	52.73	Printing and reproduction of recorded media	51.21
Financial and insurance activities	47.48	Manufacture of wood and of products of wood and cork	50.06
Professional, scientific and technical activities	46.98	Repair and installation of machinery and equipment	46.31
Manufacture of food products	45.99	Administrative and support service activities	44.41
Employment: 249+			
Manufacture of motor vehicles, trailers and semi-trailers	94.19	Manufacture of tobacco products	100.00
Mining and quarrying	93.76	Manufacture of coke and refined petroleum products	100.00
Manufacture of tobacco products	90.24	Manufacture of motor vehicles, trailers and semi-trailers	97.57
Manufacture of computer, electronic and optical products	84.46	Manufacture of other transport equipment	93.83
Manufacture of basic pharmaceutical products and pharmaceutical preparations	79.69	Manufacture of basic pharmaceutical products and pharmaceutical preparations	91.36

Source: own elaboration based on Eurostat data.

Table 5. Top 5 industries in the imports of Hungary in 2011 according to size of enterprise (in %)

Intra EU27		Extra EU27	
Employment: 0-9			
Real estate activities	68.80	Financial and insurance activities	89.21
Professional, scientific and technical activities	60.84	Water supply, sewerage, waste management and remediation activities	82.82
Other NACE sections	35.81	Professional, scientific and technical activities	80.24
Agriculture, Forestry and Fishing	35.09	Construction	72.10
Construction	34.27	Real estate activities	70.17
Employment: 10-49			
Electricity, gas, steam and air conditioning supply	59.25	Manufacture of fabricated metal products	49.73
Mining and quarrying	55.46	Agriculture, Forestry and Fishing	48.67
Agriculture, Forestry and Fishing	37.26	Electricity, gas, steam and air conditioning supply	38.07
Administrative and support service activities	34.31	Retail trade, except motor vehicles and motorcycles	32.84
Repair and installation of machinery and equipment	31.63	Mining and quarrying	30.69
Employment: 50-249			
Manufacture of wood and of products of wood and cork	82.83	Manufacture of wood and of products of wood and cork	74.93
Manufacture of fabricated metal products	58.76	Manufacture of other transport equipment	61.80
Manufacture of textiles	58.68	Other manufacturing	57.73
Manufacture of paper and paper products	51.08	Manufacture of paper and paper products	56.42
Printing and reproduction of recorded media	50.78	Manufacture of wearing apparel	52.56
Employment: 249+			
Manufacture of motor vehicles, trailers and semi-trailers	90.86	Manufacture of basic metals	97.56
Manufacture of computer, electronic and optical products	89.82	Manufacture of basic pharmaceutical products and pharmaceutical preparations	96.22
Manufacture of basic pharmaceutical products and pharmaceutical preparations	86.45	Manufacture of computer, electronic and optical products	96.10
Manufacture of coke and refined petroleum products	80.48	Manufacture of motor vehicles, trailers and semi-trailers	94.77
Manufacture of machinery and equipment n.e.c.	76.30	Manufacture of coke and refined petroleum products	94.38

Source: own elaboration based on Eurostat data.

Table 6. Top 5 industries in the exports of Hungary in 2011 according to size of enterprise (in %)

Intra EU27		Extra EU27	
Employment: 0-9			
Electricity, gas, steam and air conditioning supply	98.22	Real estate activities	74.45
Real estate activities	67.83	Financial and insurance activities	66.17
Other NACE sections	56.84	Administrative and support service activities	56.37
Professional, scientific and technical activities	55.09	Other NACE sections	54.74
Construction	46.06	Construction	37.03
Employment: 10-49			
Financial and insurance activities	51.36	Electricity, gas, steam and air conditioning supply	85.00
Retail trade, except of motor vehicles and motorcycles	39.17	Retail trade, except motor vehicles and motorcycles	55.26
Mining and quarrying	38.69	Agriculture, Forestry and Fishing	43.11
Agriculture, Forestry and Fishing	37.63	Manufacture of beverages	36.00
Repair and installation of machinery and equipment	33.55	Other NACE sections	29.07
Employment: 50-249			
Manufacture of tobacco products	99.79	Manufacture of tobacco products	99.26
Water supply, sewerage, waste management and remediation activities	71.79	Water supply, sewerage, waste management and remediation activities	89.25
Manufacture of wood and of products of wood and cork	68.18	Manufacture of wood and of products of wood and cork	89.07
Transportation and storage	59.79	Other manufacturing	78.25
Manufacture of fabricated metal products	59.01	Professional, scientific and technical activities	73.24
Employment: 249+			
Manufacture of motor vehicles, trailers and semi-trailers	93.82	Manufacture of motor vehicles, trailers and semi-trailers	98.05
Manufacture of coke and refined petroleum products	93.77	Manufacture of basic pharmaceutical products and pharmaceutical preparations	94.72
Manufacture of basic pharmaceutical products and pharmaceutical preparations	93.77	Manufacture of computer, electronic and optical products	91.20
Manufacture of computer, electronic and optical products	91.43	Manufacture of machinery and equipment n.e.c.	90.02
Manufacture of basic metals	85.00	Manufacture of coke and refined petroleum products	89.83

Source: own elaboration based on Eurostat data.

Table 7. Top 5 industries in the imports of Poland in 2011 according to size of enterprise (in %)

Intra EU27		Extra EU27	
Employment: 0-9			
Electricity, gas, steam and air conditioning supply	47.72	Real estate activities	74.45
Agriculture, Forestry and Fishing	35.27	Professional, scientific and technical activities	66.17
Real estate activities	30.88	Agriculture, Forestry and Fishing	56.37
Professional, scientific and technical activities	29.17	Construction	54.74
Transportation and storage	28.35	Electricity, gas, steam and air conditioning supply	37.03
Employment 10-49			
Wholesale trade, except motor vehicles and motorcycles	34.21	Agriculture, Forestry and Fishing	85.00
Agriculture, Forestry and Fishing	31.00	Water supply, sewerage, waste management and remediation activities	55.26
Trade	28.91	Wholesale and retail trade and repair of motor vehicles and motorcycles	43.11
Other manufacturing	22.43	Other manufacturing	36.00
Manufacture of wearing apparel	21.71	Wholesale trade, except motor vehicles and motorcycles	29.07
Employment 50-249			
Water supply, sewerage, waste management and remediation activities	59.66	Manufacture of leather and related products	99.26
Manufacture of wearing apparel	56.95	Manufacture of textiles	89.25
Wholesale and retail trade and repair of motor vehicles and motorcycles	51.38	Transportation and storage	89.07
Manufacture of textiles	43.68	Manufacture of fabricated metal products	78.25
Financial and insurance activities	43.16	Financial and insurance activities	73.24
Employment 249+			
Manufacture of tobacco products	98.87	Manufacture of coke and refined petroleum products	98.05
Manufacture of motor vehicles, trailers and semi-trailers	92.66	Manufacture of tobacco products	94.72
Manufacture of basic pharmaceutical products and pharmaceutical preparations	88.87	Manufacture of computer, electronic and optical products	91.20
Manufacture of coke and refined petroleum products	88.34	Manufacture of other transport equipment	90.02
Manufacture of electrical equipment	83.81	Mining and quarrying	89.83

Source: own elaboration based on Eurostat data.

A similar pattern that was observed in the case of importing is also revealed in the case of exporting (Tab. 8). However, in the group of the largest enterprises the concentration is of a high level.

Table 8. Top 5 industries in the exports of Poland in 2011 according to the size of an enterprise (in %)

Intra EU27		Extra EU27	
Employment: 0-9			
Professional, scientific and technical activities	39.38	Real estate activities	86.26
Other NACE sections	32.24	Financial and insurance activities	65.42
Financial and insurance activities	25.17	Electricity, gas, steam and air conditioning supply	34.55
Transportation and storage	22.60	Administrative and support service activities	30.75
Agriculture, Forestry and Fishing	21.92	Wholesale and retail trade and repair of motor vehicles and motorcycles	30.14
Employment 10-49			
Transportation and storage	28.67	Information and communication	47.43
Wholesale trade, except motor vehicles and motorcycles	27.32	Agriculture, Forestry and Fishing	42.08
Trade	25.62	Wholesale trade, except motor vehicles and motorcycles	29.05
Financial and insurance activities	24.80	Administrative and support service activities	28.02
Agriculture, Forestry and Fishing	22.22	Trade	26.76
Employment 50-249			
Manufacture of wearing apparel	50.06	Electricity, gas, steam and air conditioning supply	63.60
Financial and insurance activities	43.19	Manufacture of leather and related products	52.81
Other NACE sections	41.15	Manufacture of wearing apparel	51.87
Manufacture of textiles	40.94	Manufacture of textiles	50.31
Transportation and storage	40.63	Manufacture of fabricated metal products	46.40
Employment 249+			
Mining and quarrying	99.42	Mining and quarrying	99.45
Electricity, gas, steam and air conditioning supply	98.64	Manufacture of tobacco products	97.73
Manufacture of motor vehicles, trailers and semi-trailers	95.08	Manufacture of motor vehicles, trailers and semi-trailers	95.83
Manufacture of tobacco products	91.82	Manufacture of other transport equipment	94.09
Manufacture of basic pharmaceutical products and pharmaceutical preparations	91.39	Manufacture of basic pharmaceutical products and pharmaceutical preparations	92.82

Source: own elaboration based on Eurostat data.

Values for the imports of Slovakia stand out from the group of analyzed countries. Firstly, the concentration in the group of small enterprises is surprisingly high, especially in the case of manufacturing of tobacco products. In the rest of analyzed

Table 9. Top 5 industries in the imports of Slovakia in 2011 according to size of enterprise (in %)

Intra EU27		Extra EU27	
Employment: 0-9			
Manufacture of tobacco products	100.00	Administrative and support service activities	64.53
Water supply, sewerage, waste management and remediation activities	61.82	Real estate activities	48.63
Real estate activities	45.14	Other NACE sections	38.28
Professional, scientific and technical activities	40.79	Agriculture, Forestry and Fishing	32.88
Construction	39.99	Wholesale trade, except motor vehicles and motorcycles	29.72
Employment 10-49			
Financial and insurance activities	41.07	Manufacture of textiles	88.15
Wholesale trade, except motor vehicles and motorcycles	33.26	Wholesale and retail trade and repair of motor vehicles and motorcycles	82.72
Agriculture, Forestry and Fishing	31.68	Agriculture, Forestry and Fishing	53.60
Wholesale and retail trade and repair of motor vehicles and motorcycles	30.09	Water supply, sewerage, waste management and remediation activities	45.16
Trade	27.75	Manufacture of wood and of products of wood and cork	44.29
Employment 50-249			
Manufacture of textiles	74.56	Printing and reproduction of recorded media	92.19
Wholesale and retail trade and repair of motor vehicles and motorcycles	45.99	Manufacture of food products	52.10
Manufacture of other non-metallic mineral products	44.99	Manufacture of leather and related products	50.59
Repair and installation of machinery and equipment	44.09	Manufacture of wearing apparel	47.87
Financial and insurance activities	39.26	Repair and installation of machinery and equipment	47.48
Employment 249+			
Manufacture of motor vehicles, trailers and semi-trailers	90.84	Manufacture of basic metals	98.52
Manufacture of other transport equipment	90.54	Manufacture of motor vehicles, trailers and semi-trailers	97.14
Manufacture of computer, electronic and optical products	86.64	Electricity, gas, steam and air conditioning supply	95.84
Electricity, gas, steam and air conditioning supply	85.33	Manufacture of computer, electronic and optical products	95.40
Manufacture of basic metals	82.46	Financial and insurance activities	88.37

Source: own elaboration based on Eurostat data.

countries this industry was dominated by the largest firms. Secondly, concentration in all groups of firms is very high. The top industries take most of the trade. When it comes to the industry pattern, the smallest firms are active mostly in services, whilst largest corporations in the technologically advanced industries.

Slovak exports represent a similar pattern as imports (Tab. 10). However, the distinction between manufacturing in the groups of medium and large enterprises does not correspond to the division between low and high-tech industries.

Table 10. Top 5 industries in the exports of Slovakia in 2011 according to the size of enterprise (in %)

Intra EU27		Extra EU27	
Employment: 0-9			
Other NACE sections	54.37	Other NACE sections	74.73
Information and communication	49.03	Real estate activities	50.72
Real estate activities	48.85	Retail trade, except motor vehicles and motorcycles	45.73
Construction	46.71	Wholesale trade, except motor vehicles and motorcycles	37.05
Professional, scientific and technical activities	44.70	Professional, scientific and technical activities	32.67
Employment 10-49			
Agriculture, Forestry and Fishing	38.95	Wholesale and retail trade and repair of motor vehicles and motorcycles	58.28
Wholesale and retail trade and repair of motor vehicles and motorcycles	35.50	Wholesale trade, except motor vehicles and motorcycles	48.18
Wholesale trade, except motor vehicles and motorcycles	31.86	Administrative and support service activities	47.52
Manufacture of beverages	28.15	Repair and installation of machinery and equipment	45.60
Other manufacturing	27.58	Manufacture of beverages	41.45
Employment 50-249			
Mining and quarrying	58.07	Manufacture of textiles	82.59
Manufacture of textiles	56.38	Manufacture of wood and of products of wood and cork	56.22
Financial and insurance activities	48.93	Manufacture of wearing apparel	55.50
Manufacture of food products	47.26	Real estate activities	44.15
Manufacture of fabricated metal products	37.56	Manufacture of beverages	43.76
Employment 249+			
Manufacture of motor vehicles, trailers and semi-trailers	93.15	Manufacture of motor vehicles, trailers and semi-trailers	99.05
Transportation and storage	91.16	Manufacture of basic metals	95.52
Manufacture of computer, electronic and optical products	90.03	Manufacture of computer, electronic and optical products	88.57
Manufacture of other transport equipment	89.65	Transportation and storage	86.24
Manufacture of chemicals and chemical products	85.06	Manufacture of furniture	84.71

Source: own elaboration based on Eurostat data.

There are some limitations to the method applied in this paper. Firstly, the data were available only for 2011. It made a longitude analysis and drawing the trend impossible. However, the data were quite recent and the results derived are in line with the analysis of trade of SMEs. The data presented above were, however, on a quite high level of aggregation. Due to this fact some item groups comprehended very distinctive categories of products. Anyway, this paper provides a new insight into the trade of SMEs. Most of earlier studies presented only a composite indicator for all industries. This paper helps to establish the industry pattern of trade of SMEs.

4. Final conclusions

This paper was devoted to reveal the development in the role of SMEs in international trade. The most important fact is that SMEs have limited abilities to conquer foreign markets. The fact that small and medium sized enterprises play a minor role in the international trade should not be only interpreted as their weakness. This is rather associated with the dominance of multinational enterprises in international trade. Especially the intra-firm trade plays a very important role here. The bargaining power of SMEs is also limited comparing to MNEs.

The level of concentration of trade is much higher in the case of large firms. Frequently they control almost 100% of trade in the industries. In such cases there is no room for smaller players. However, there are cases when the concentration level in the top industries in the group of micro is very high, e.g. Hungary.

The trade that is conducted by SMEs can be described as the genuine international trade. The export and import transactions are a result of their entrepreneurial power. Such transactions involve much effort from the trading partners and require establishing cross-border relationship. It is not just a transfer of goods between units of the same enterprise in different countries as it is in the case of MNEs.

This paper also brings policy recommendations. The role of small and medium-sized enterprises is very limited comparing to their role in GDP or employment. However, the industry pattern does not provide many clues how to program the support for SMEs in their internationalization. Many countries are introducing programs aiming at supporting smaller firms. However, the evidence confirms that such initiatives bring rather weak results.

There are also objective limitations to the expansion of SMEs in some industries, especially when the economies of scale are required. Therefore, even with a great support of governments, the chances that SMEs will dominate trade in automotive or IT industry are quite weak. On the other hand, supporting firms operating in traditional industries may not boost their competitiveness.

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