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Small and medium-sized enterprises in global value chains

Abstract. This article is dedicated to possibilities and importance of SMEs' involvement in global value chains (GVCs). The purpose of this paper is to identify the position of SMEs and their opportunities in GVCs in the context of development processes taking place in GVCs and the world economy. To meet the objectives of the research, the authors formulated the following questions; «What is the state of the art of GVCs issues in literature in the context of international economic relations and efficiency?», «What are the positions, potential and opportunities for SMEs in GVCs?», «What solutions would contribute to more effective functioning of GVCs in the overall productive process?». The theoretical part of the paper points out that the nature and impact of GVCs on various aspects of economic processes can be examined from different perspectives. In the analytical part, attention is paid to small and medium-sized enterprises in the EU and GVCs concerning the next issues: determinants of businesses participation in GVCs; perceived benefits of SMEs' participation in GVCs; advantages of SMEs' participation in GVCs; importance of SMEs for economic progress and their participation in GVCs. The main results and discussion are related to the following areas: steps to improve functioning of GVCs in the overall productive process and implementation of recommendations for future government support for SMEs' internationalising. In conclusion, the authors of the article mentioned and summarised issues and topics for further research in the area of GVCs, namely: competitiveness, trade, services, investment, economic development, as well as adaptation and risk areas of GVCs.

Keywords: Small and Medium-sized Enterprises; Global Value Chains; European Union; Internationalisation; OECD

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Малі та середні підприємства в глобальних виробничо-збутових ланцюгах

Анотація. Метою цієї роботи є визначення ролі малих і середніх підприємств та їхніх можливостей з огляду на процеси, що відбуваються як у глобальних ланцюгах вартості, так і в світовій економіці в цілому. Теоретична частина роботи вказує на те, що природу та вплив глобальних ланцюгів вартості можна розглядати з різних точок зору. В аналітичній частині увагу приділено малим та середнім підприємствам ЄС у глобальних ланцюгах вартості. Основні результати дослідження пов'язані з напрямками функціонування глобальних ланцюгів вартості, такими як поліпшення функціонування глобальних ланцюгів вартості в загальному виробничому процесі й імплементація рекомендацій стосовно подальшої державної підтримки малого та середнього бізнесу. У висновках авторами статті було узагальнено досліджені питання, а також окреслено аспекти подальших досліджень глобальних ланцюгів вартості, такі як конкурентоспроможність, торгівля, послуги, інвестиції, економічний розвиток, адаптація та ризики.

Ключові слова: малі та середні підприємства; глобальні ланцюги вартості; виробничо-збутові ланцюги; ОЕСР.

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Малые и средние предприятия в глобальных производственно-сбытовых цепях

Аннотация. Целью данной работы является определение роли малых и средних предприятий, а также их возможностей в контексте процессов, происходящих как в глобальных цепочках создания стоимости, так и в мировой экономике в целом. Для достижения поставленной в работе цели авторы ответили на ряд вопросов, а именно: как в профильной литературе освещаются вопросы, имеющие отношение к функционированию глобальных цепочек создания стоимости (производственно-сбытовых цепях) в контексте международных экономических отношений; какое значение, потенциал и возможности имеют малые и средние предприятия в глобальных цепочках создания стоимости; решение каких проблем будет способствовать эффективному функционированию глобальных цепочек создания стоимости в производственном процессе. Теоретическая часть работы указывает на то, что природу и влияние глобальных цепочек создания стоимости можно рассматривать с разных точек зрения. В аналитической части внимание уделено малым и средним предприятиям ЕС в глобальных цепочках создания стоимости. Основные результаты исследования связаны с направлениями функционирования глобальных цепочек стоимости, такими как улучшение функционирования глобальных цепочек создания стоимости в производственном процессе, а также имплементации рекомендаций по дальнейшей государственной поддержке малого и среднего бизнеса. В части выводов авторами статьи были обобщены исследованные вопросы, а также обозначены аспекты дальнейших исследований глобальных цепочек создания стоимости, таких как конкурентоспособность, торговля, услуги, инвестиции, экономическое развитие, адаптация и риски.

Ключевые слова: малые и средние предприятия; глобальные цепочки создания стоимости; производственно-сбытовые цепи; ОЭСР.

1. Introduction

To understand the nature of the problem which results from the topic, it will be useful to provide some context and status of the global value chains (GVCs) business and the importance which is paid to the area by researchers, integration groupings (EU), respectively selected international organisations (OECD).

Entrepreneurship is a powerful driver of economic growth and job creation: it creates new companies and jobs, opens up new markets and nurtures new skills and capabilities. In the field of industry, for instance, it is therefore particularly important for fast development of the six emerging growth sectors identified in the Commission's Industrial Policy update.

GVCs are important units of analysis to understand enterprise competitiveness. Activities along GVCs may involve concept, design, production, marketing, distribution, retailing and R&D: they might even include waste management and recycling. Depending on the industry needs, each link of the chain performs an activity, and different firms add value at each stage of the production or service process. New transportation, information and communication technologies have driven down the cost of accessing information and trading products, services and facilitated the spatial division of value chains. Accordingly, a certain production process can be located in a particular geographical area because of the location-specific competitive advantages. (UNCTAD, 2010).

The OECD report, in cooperation with the World Trade Organisation and the World Bank, for the meeting of G20 trade ministers on 19 July 2014 in Sydney underlines the importance of GVCs for shaping of economic policy and its impact on trade, economic growth, job creation and distribution of added value through GVCs. GVCs attention is focused on connecting the trades, investments, services and know-how which become a determining factor of future trade flows and investments deployment as a precondition for further economic growth.

The growth of GVCs has increased interdependence of economies and led to increasing specialisation in particular stages of the chain. More than 70% of world trade is intermediate products, services and investment goods. The income generated within GVCs has doubled in the last 15 years. The individual national economies are involved in GVCs with varying portions. This diversity is affected by objective factors such as their geographic location and availability of raw materials. However, relevant are conditions resulting from the country's economic policy, including the business and investment environment, the level of education, the state of infrastructure, etc.

GVCs are almost exclusively carried out by multinational companies; they are an important part of foreign trade in intermediate products. Also, finished goods and services are implemented within the branches of these multinationals. Eventually, independent suppliers, especially small and medium-sized enterprises, such as subcontractors of production inputs (intermediate goods or services) should be increasingly involved in GVCs. In such a case, their intermediate goods or services will

reach foreign consumers as part of the finished goods or services. The potential of the largest economies in the world can be derived from data about the share in added value of those countries, which is stated in Table 1.

The purpose of this paper is to identify the position and the opportunities which SMEs have in GVCs in the context of the development process in GVCs and the world economy. *Methodology.* To conduct the research, it was important to study publications on the subject. Those which are listed in the literature contain mainly theory relate to the issues under our study and the relevant implications in the environment of the European Union (EU) and the OECD countries. The authors have applied the methods of abstraction, induction, analysis, synthesis and quantitative methods. The data source was mainly statistical databases (Eurostat, national statistical materials). To meet the objectives of the research, the authors formulated the following questions: «What is the state of the art of GVCs issues in the literature in the context of international economic relations and efficiency for SMEs in GVCs?», «What are the positions, potential and opportunities for SMEs in GVCs?», «What solutions would contribute to more effective functioning of GVCs in the overall productive process?».

2. The essence of GVCs and knowledge status of the topic in the literature

Global value chains (GVCs) is a term that refers to the geographic deployment of production and services into the areas with the most effective economic conditions and business environment (OECD, 2014).

For the first time, the concept of global value chains appeared in the 1970s in relation to the research of commodity chains (Hopkins, Wallerstein, 1976). The substance of commodity chains was to map all inputs and process steps which result in the production of a product. In 1994, G. Gereffi first introduced the concept of global commodity chains based on the clothing example where he described the supply chain and operations from raw materials to the final product. The terms «commodity» and «value chain» are largely similar; however the «value chain» has a broader meaning as it is used to describe the organisation of production (Bair, 2005). In the 1980s, the term «global value chain» started to be used under the influence of literature on world trade and value chains (Porter, 1985).

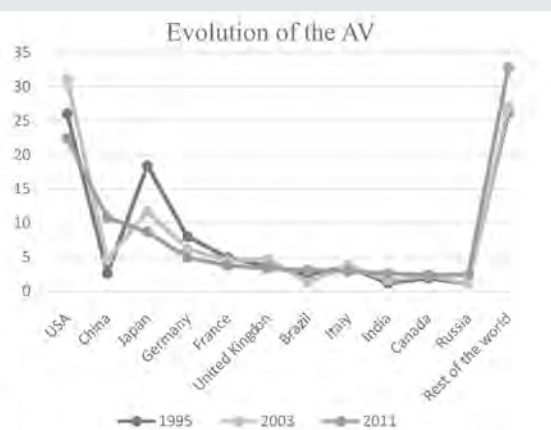
An essential function of GVCs is to ensure an optimal ratio of input to output and create the greatest possible degree of added value. The more a country develops value added, the higher the standard of living is for its people. The income obtained from GVCs is a «value that was added in the country at any stage of production of any product» (Timmer et al., 2014). Added value has two basic components: income from work (wages, salaries and remunerations of personnel) and capital income (profits, interest, rents).

The nature and effect of GVCs on various aspects of economic processes can be examined from different perspectives. In this sense, an important snapshot of processing resources and literature on GVCs states Kowalski (2015). Other

Tab. 1: Share of the largest economies on the added value

	1995	2003	2003: 1995, %	2011	2011: 1995, %
USA	26	31.1	119.6	22.4	86.2
China	2.6	4.6	176.9	10.8	415.4
Japan	18.4	11.7	63.6	8.7	47.3
Germany	8	6.2	77.5	4.9	61.3
France	4.9	4.5	91.8	3.8	77.6
United Kingdom	3.7	4.7	127.0	3.3	89.2
Brazil	2.4	1.3	54.2	3.1	129.2
Italy	3.6	3.8	105.6	2.9	80.6
India	1.2	1.6	133.3	2.6	216.7
Canada	1.9	2.3	121.1	2.4	126.3
Russia	1.1	1.1	100.0	2.4	218.2
Rest of the world	26.2	27	103.1	32.8	125.2

Source: [23]



aspects of GVCs problems, in particular the theoretical basis of GVCs, the place and the possibility of participation of SMEs in GVCs, topic development in developing and developed countries, specifically in the OECD, etc. (see references) were published by Gereffi et al., (2001); Baldwin, (2012); OECD, (2013); Hausmann, (2014); Stamm, (2004); Baldwin, (2012); Escaith, (2014); UNCTAD, (2013b); Primo Braga, (2013); Bamber et al., (2014); Mankiw and Swagel, (2006); Blinder, (2006); Baldwin, (2009); Grossman and Rossi-Hansberg, (2008); De Backer and Miroudot, (2013); OECD-WTO-UNCTAD, (2013).

2.1. Global value chains at micro- and macroeconomic level

Micro level

Identification of the input - output structure of production activities in the value chain can be realised by mapping manufacturing operations sequence «from raw materials to a finished product». Within each production phase, we can identify companies involved in the key operations of production. A typical feature of GVCs is that the activity (and phase of the production process) take place in different countries of the world. Geographical mapping of the value chain begins with identifying the key company. This is usually original equipment manufacturer (OEM). The main direct suppliers to the OEM companies are first-degree suppliers (Tier 1 suppliers). Companies providing subcontracting for first-level suppliers are categorised under Tier 2, etc. The length of the value chain can vary greatly according to the complexity of the manufactured product and the level of the supplier's specialisation for specific production activities. Although value chains are global, specific phases of the production process are concentrated in certain regions of the world. In general, sophisticated activities of the value chain are located in developed countries, while inter-consumption and finalisation is carried out in less developed countries. An analysis of the geographical structure of GVCs shows a trend towards increasingly higher regional concentration of GVCs.

The logic of regional concentration (especially at the level of economic groupings) is based on the following factors: 1) geographical proximity and the resulting savings in transportation costs; 2) benefits of spill-over effects coming from the possibility of direct personal communication of key actors at different stages of the production process; 3) harmonisation of the production process and consumption within the EU or NAFTA groupings (Slusna and Balog, 2015).

Macro level

Mapping the country's participation in global value chains uses two basic approaches. The first one is based on tracking flows of gross exports, while the second approach focuses on the analysis of flows of added value. At macro level, the GVC mapping is important for the analysis of the country's position in global trade, in particular in terms of added value. The international division of labour is reflected in an increase in different countries' and companies' specialisation related to those activities where they have a comparative advantage. A deepening division of labour results in a gradual fragmentation of vertically integrated production. There are several indicators that describe the degree of production fragmentation between specialised manufacturers and countries. The most widely used are the *participation index* and the *length of the production chain index* (OECD, 2012).

Summary of the first research issue:

The term «global value chain» means the full set of activities that companies and their workers are performing, from the initial product concept till the usage by customers. The creation of global value chains is the result of the growing international division of labour. The division of labour is reflected in the ongoing fragmentation of manufacturing operations, which are spread among different countries. Countries specialise in those parts of the manufacturing process in which they have a particular comparative advantage, for example the presence of raw materials, skilled labour or good institutional environment supporting a specific stage in the production process. The ultimate effect of the global value chains functioning is to achieve an optimal ratio between inputs and outputs. Global value chains mapping can be made at the micro- (company) or macroeconomic level.

3. Status, potential and opportunities for SMEs in GVCs

3.1. Small and medium-sized enterprises in the EU and GVCs

SMEs are the backbone of Europe's economy. They represent 99% of all businesses in the EU. In the past five years, they have created around 85% of new jobs and provided two-thirds of the total private sector employment in the EU. The European Commission considers SMEs and entrepreneurship as a key to ensuring economic growth, innovation, job creation and social integration in the EU.

SMEs accounted for 71.4% of the increase in employment in 2014 in the non-financial business sector, which includes all sectors of the economy except for financial services, government services, education, health, arts and culture, agriculture, forestry and fishing. SMEs are a highly diverse population of enterprises, and are present in every nook and cranny of the economy, with activities ranging from the production of artisan food to the production of high tech space exploration equipment, from retail services to the provision of highly specialised professional services, from focusing primarily on serving domestic customers to focusing mainly on the export markets. Hvizdova and Balogova (2016) see a great opportunity for SMEs in the creative industries.

In short, SMEs are ubiquitous; they accounted for 99.8% of all enterprises in the non-financial business sector in the EU28 in 2014, for every square kilometre of land surface the EU has an average of 5 SMEs. Moreover, in 2014 SMEs employed almost 90 million people, which is 67% of total employment, and generated 58% of the sector's value added (table 2).

Almost all SMEs (93%) are micro SMEs employing less than 10 people. About three quarters of SMEs are active in the five key sectors: wholesale and retail trade, manufacturing, construction, business services and accommodation and food services.

The tentative green shoots of the growth of 2013 gained in strength in 2014. Namely, in 2014 EU28 SMEs' value added grew by 3.3% and employment - by 1.2%, while in 2013 value added grew by 1.6% and employment declined by 0.5% [1].

Tab. 2: Share of SMEs in value added of non-financial business sector (2014)

Country/Value added share (%)	Country/Value added share (%)
MT 77	DN 62
EE 76	SK 61
EL 75	AT 61
CY 73	FI 60
LV 69	SE 59
LT 69	FR 58
LU 68	CZ 56
IT 67	HR 55
PT 67	UK 54
SI 63	HU 54
NL 63	DE 53
ES 63	PL 50
BE 62	RO 50
BG 62	IE 47

Source: [1]

3.2. Determinants of businesses participation in GVCs

Determinants of GVCs participation structural characteristics of countries are the main determinants of GVCs participation and their relationships with backward and forward engagement are diverse. The following elements are the most important:

a) *Market size.* The larger the size of the domestic market, the lower the backward engagement of a country, and the higher the forward engagement. The intuition is that countries with a larger market can draw on a wider array of domestic intermediates both in terms of purchases and sales.

b) *Level of development.* The higher the per capita income is, the higher the aggregate forward and backward engagement is. Developed countries tend to source more from abroad and sell a higher share of their gross exports as intermediate products.

c) *Industrial structure.* The higher the share of the manufacturing sector in GDP, the higher the backward engagement, and the lower the forward engagement.

d) *Location.* GVCs activity is organised around large manufacturing hubs. The larger the distance to the main manufacturing hubs in Europe, North America and Asia, the lower the backward

engagement, suggesting that there is a premium to locating close to large «headquarter» economies (source).

3.3. Perceived benefits of SMEs' participation in GVCs

From a theoretical point of view, many factors suggest that the integration of SMEs in global value chains, under specific conditions, is for the benefit of those firms. During the OECD (2008) interviews, SMEs were asked about their perception or experience of participation in GVCs. The main findings can be summarised as follows:

- The answers by the SMEs in all sectors support the argument that the participation in global value chains brings benefits to SMEs or is expected to bring them.
- Firms that have successfully integrated in one or more value chains have been able to gain stability or expand their business. Even those SMEs, who have chosen to remain at the margins of the global value chain, recognise the potential for growth associated with participation in GVCs.
- Co-operation within the network is one of the key factors of successful integration. Coordination of work with partners upstream and downstream increases the chances of success due to substantial benefits in terms of information flow, access to superior technologies and learning opportunities.

3.4. Advantages of SMEs' participation in GVCs

Firstly, according to OECD «Enhancing the Role of SMEs in Global Value Chains», participation in GVCs may provide SMEs with a number of benefits, including stability and productivity improvements through new niches for the supply of products and services at lower costs. If SME owners take a proactive as opposed to a reactive approach, SMEs can position themselves quickly to capture opportunities in new production areas. This internationalisation of production, through increased outsourcing and development of GVCs, can have a significant impact on SMEs. Secondly, participation in GVCs provides new avenues of growth for SMEs looking to expand. New finance growth opportunities, uncovering more efficient suppliers and untapped markets, and mutually beneficial relationships with other SMEs owners, are all potential gains by small business owners who board the cabins of the GVC express, as opposed to the risk and reality of stagnation when limiting themselves in local or in some cases, even suburban supply chains (OECD, 2008).

3.5. Importance of SMEs for economic progress and their participation in GVCs

SMEs are the backbone of the economy in several developing countries, too. Indeed, they account for more than half of all formal employment worldwide (IFC, 2013). A cross-country study of 49,370 firms in 104 countries finds out that while small and medium-sized firms (<100 employees) have a comparable share of aggregate employment as large firms, the small firms (<20 employees) provide the largest shares of job creation, highest sales growth and employment growth. (Ayyagari et al., 2014). These findings are also common in OECD countries, where 75% of new jobs are created by SMEs. Forecast growth for employment in the European SMEs for 2014-2016 is shown in table 3. Over the last several years, however, additional research has revamped the debate, indicating that the size is not a relevant measure, but rather it is the age of the firm which determines its contribution to net job creation. Evidence for the United States (Haltiwanger et al., 2013), Colombia (Eslava and Haltiwanger, 2013) shows that once the firm age is controlled for, there is no systematic relationship between its size and job creation, highlighting the role of start-ups and young firms to contribute to the creation of new jobs. However, more evidence is needed to determine what kind of firms play a significant role in net job creation among developing countries. GVCs likewise operate to the benefit of smaller firms, as they provide opportunities to specialise in tasks within the chain. While SMEs find it difficult to compete along an entire line of activities, in the GVC world of today they can more readily participate in those tasks in which they have expertise, as long as market failures that disproportionately affect SMEs are addressed (table 4). Gereffi, Humphrey, and Sturgeon (2005) discuss in detail the principal actors in GVCs and the power relations between them: multina-

Tab. 3: Forecast growth of SMEs by the EU Member States, 2014-2016

Member State	SME value added % change 2014-2016	SME employments % change 2014-2016	Member State	SME value added % change 2014-2016	SME employments % change 2014-2016
AT	6.0	1.9	IT	-1.9	-3.7
BE	6.4	2.2	LT	15.3	5.0
BG	4.8	1.2	LU	6.4	1.3
CY	20.5	15.8	LV	12.6	2.8
CZ	6.5	0.3	MT	13.0	5.6
DE	10.8	4.9	NL	6.5	2.0
DK	10.5	3.0	PL	5.8	0.0
EE	10.3	0.8	PT	7.8	2.6
EL	5.0	5.4	RO	17.7	7.2
ES	1.8	1.5	SE	6.2	4.7
FI	3.8	-0.3	SI	3.3	-0.6
FR	4.7	1.0	SK	4.9	-1.1
HR	4.6	3.1	UK	12.9	1.7
HU	0.6	-1.8	EU28	7.0	1.7
IE	10.1	5.2			

Source: Annual Report on European SMEs 2014/2015. http://ec.europa.eu/growth/smes_en. ISBN 978-92-79-52922-1

Tab. 4: Key challenges faced by SMEs in international markets

Identifying international business opportunities, locating and analysing suitable markets	Engaging specialist staff to assist with the management of international markets
Contacting potential overseas customers	Meeting the costs of accessing markets
Obtaining reliable foreign representation	Dealing with anti-competitive behaviour
Accessing finance for internationalisation	Difficulties in accessing or identifying support from government
Allocating managerial time to deal with internationalisation	

Source: Compiled by the authors based on OECD, 2006

tional enterprises (MNEs), their affiliates abroad and independent suppliers in both domestic and foreign markets, including SMEs. Economic transactions within GVCs include intra-firm transactions between headquarters and affiliates, as well transactions between companies and independent suppliers (arm's-length trade and transactions accompanied by specifications on quality, product design, etc.). The distribution of power and the direction of knowledge flows will differ depending on the type of GVC. They may be largely concentrated in the lead firm or MNE or may be shared between lead firms and (upper-tier) suppliers. Factors such as the complexity of transactions, the ability to codify transactions, and the capabilities in the supply bases enter the equation (Gereffi, Humphrey, and Sturgeon 2005), but the business model's intrinsic characteristics matter too (Porter and Kramer, 2011). Owing to their size and capability to engage in international trade and investment, MNEs tend to be the leading actors in GVCs. But affiliates of cost efficiency seeking FDIs (Dunning, 1995) are essential links in GVCs. MNEs organize global production processes across different geographical locations and through a complex network of affiliates (that is offshoring), as well as through their arm's-length relationships with other companies and suppliers (that is outsourcing). MNEs dominate exports. In fact, cross-border trade between MNEs and their affiliates - often referred to as intra-firm trade - now accounts for a large share of international trade in goods. Earlier firm-level evidence, based on gross exports data, reveals that exports are driven by a limited number of large, often multinational companies. For example, Mayer and Ottaviano (2007) show that 1%, 5%, and 10% of companies account for no less than 40%, 70%, and 80%, respectively, of aggregate exports in Europe. Similar results are reported for the United States (Bernard et al. 2007), as well as for Low-Income Developing Countries (LIDCs) (Cebeci et al. 2012). Although evidence may show that GVCs is a «big-firm story», with MNEs as leading actors, those findings underestimate the importance and participation in GVCs of smaller firms, which often supply intermediates to exporting firms in their country and are, as such, integrated indirectly into GVCs. Slaughter (2013) finds that the typical US MNE buys more than USD 3 billion in inputs from more than 6,000 US small and medium-size enterprises (SMEs), or almost

25% of the total input purchased by those firms. Such domestic supplies are not reflected in international trade statistics, which count only direct exports. Estimates for the United States show that in 2007 the export share of SMEs increased from approximately 28% (in gross exports) to 41% (in value-added exports), when such indirect exports are taken into account (USITC, 2010).

Summary of the second research issue:

- **Situations:** In most cases, large firms dominate in GVCs; however, it is important to include SMEs in GVCs, as SMEs serve as the major driving force for economic performance and sustainability.
- **Benefits:** Added benefits for SMEs to engage in GVCs consist of:
 - enhancing industrial capabilities by meeting international standards and requirements.
 - encouraging production upgrades by associating with leading global firms.
- **Constraints:** Lack of: access to finance; advanced technology; skilled working force; networking and market information; economy scale (Hong, 2015).

4. Problems, topics and solutions to more effective functioning of GVCs in productive process

4.1. Steps to more effective functioning of GVCs in productive process

A. In the country's economic policy, it is necessary to create a business environment favourable to participation in GVCs. Based on OECD (2013), the economic policy priorities of the G20 in this area include (table 5):

- Ratification and immediate implementation of the WTO Agreement on trade facilitation.
- Provision of technical assistance from developed countries to developing countries for the latter to meet their commitments on trade facilitation.
- Improvement of the effectiveness of the services sector, which is a catalyst for the functioning of GVCs.
- Meeting the commitment to combat protectionism and withdraw all restrictive measures taken to fight the crisis, particularly non-tariff barriers to trade.
- Solving problems of supplier-customer relations in order to create as much space for the involvement of SMEs in GVCs.
- Ensuring that preferential trade and investment agreements create better business environment, and not vice versa.
- Implementation of the active labour market policy, policy to encourage investment, support of education and training so the labour supply would cope with demand, and at the same time to develop adequate social safety net for those who have difficulty adapting to new requirements.

B. At the EU level, trade policy must strengthen Europe's place in global supply chains. It must support the full range of economic activities through which Europeans create and sell value. That includes the manufacturing of components and final products, which is vital. It also includes services, research, design and marketing, assembly, distribution, and maintenance. Adapting to this reality, EU trade policy has already expanded from traditional tariff discussions. It takes a holistic approach, covering vital issues like public procurement, competition, including subsidies, or sanitary and phytosanitary barriers (SPS). These remain essential. Public procurement spending, for instance, accounts for 15% to 20% of GDP worldwide. Infrastructure investment and other public procurement in emerging and developed economies are likely to be major driving forces of economic growth in coming years. While the EU has progressively integrated and opened its markets, EU companies still encounter discrimination and restrictions abroad. It is therefore essential to ensure a level playing field in market access, and this can be achieved partly through foreign trade agreements and negotiations on the accession of new countries to the WTO Government Procurement Agreement (GPA). However, trade policy will need to tackle a wider range of issues if the EU is to secure its place in global value chains. This requires us to promote trade in services, facilitate digital trade, support the mobility of professionals, address regulatory fragmentation, secure access to raw materials, protect innovation and ensure the swift

Tab. 5: Recommendations for future government support for internationalising SMEs

Concluding outstanding trade negotiations leading to open markets, reduced trade barriers and contributing to a stable and transparent business environment.	Encouraging regulatory co-operation among governments to reduce trade-related compliance costs.
Actively removing non-tariff barriers to international trade (e.g. through mutual recognition of product standards, business and occupational licensing, efficient legal systems, improved customs procedures, facilitating business travel).	Providing a simplified, transparent and non-discriminatory domestic business regulatory environment (e.g. allowing equal access to government contracts for both foreign and domestic suppliers in authorised sectors).
Promoting clear and accessible public consultation mechanisms to facilitate SME participation in the trade policy process.	Ensuring high quality policy frameworks for encouraging private investments are in place.

Source: Compiled by the authors based on OECD, 2006

management of customs. Joined-up strategy across different areas of economic policy will also need to ensure responsible management of supply chains and to address aggressive corporate profit shifting and tax avoidance strategies that make use of the value chains fragmentation. The Commission is tackling this through different policy tools. Trade agreements support efforts promoting international standards of transparency and good governance¹.

5. Conclusions

The evolution of GVC implies the second unbundling of globalisation: production stages previously performed in close proximity were dispersed geographically (Baldwin, 2013):

- a) traditional indicators of globalisation by trade value of each country may be misleading, because the export value are double-counted from one country to another. To trace the domestic value-added from the export can be the better measures;
- b) higher value-added exports are associated with higher growth rates, part of which comes from participating in GVCs (IMF, 2013);
- c) SMEs with unique niche in different stages of manufacturing or different tasks of service could be the driving force for one country to participate more in GVCs;
- d) Policymakers need to fully understand how GVCs are or could be linked with the domestic economy in order to help SMEs to participate in GVCs (APEC 2014).

In light of this, governments could facilitate SMEs' gainful participation in global value chains through policy initiatives in specific areas (OECD, 2008):

1. Raising awareness of the potential of participation in global value chains.
2. Supplier financing (providing financing to small suppliers).
3. Facilitation of compliance procedures.
4. Promoting the development of industrial clusters.

Issues and topics for further research in the area of GVCs

As an important issues and topics for further research GVCs, we consider:

1. *Competitiveness* area: to increase attention to human capital investment, skills and quality infrastructure and to promote strong links between industry and science and research; the quality of institutions and the State to be deemed as important in making an investment decision of firms.
2. *Trade, services and investment* area: remove barriers to trade and mobility of investments; it will stimulate new business opportunities, global value chain requires the efficient service and the ability to move people, capital and technology across borders; focus investment promotion more on activities within global value chains than the industry.
3. *Economic development* impact of GVCs: integration into global value chains through access to networks, global markets, capital, knowledge and technologies is usually the first step to economic development.
4. *Adaptation and risk* area: the adaptation process should be facilitated by labour market policies and social policies, as well as by investing in education and skills.

¹ http://trade.ec.europa.eu/doclib/docs/2006/december/tradoc_118238.pdf

References

1. Muller, P., Devnani, S., Julius, J., Gagliardi D., & Marzocchi, C. (2016). *Annual Report on European SMEs 2015/2016*. SME recovery continues. European Commission. PwC Luxembourg. doi: <https://doi.org/10.2873/76227>
2. *The Athens Action Plan for Removing Barriers to SME Access to International Markets* (2006). OECD-APEC Global Conference in Athens, on 8 November 2006. Retrieved from <https://www.oecd.org/cfe/smes/37818332.pdf>
3. Ayyagari, M., Dermiguc-Kunt, A., & V. Maksimovic (2014). Who creates jobs in developing countries? *Small Business Economics*, 43(1), 75-99. doi: <https://doi.org/10.1007/s11187-014-9549-5>
4. Bair, J. (2005). Global Capitalism and Commodity Chains: Looking Back, Going Forwar. *Competition & Change*, 9(2), 153-180. Retrieved from <http://journals.sagepub.com/doi/abs/10.1179/102452905X45382>
5. De Backer, K., & Miroudot, S. (2013). Mapping Global Value Chains. *OECD Trade Policy Papers*, No. 159, Paris: OECD Publishing. doi: <https://doi.org/10.1787/5k3v1trgnbr4-en>
6. Baldwin, R. (2012). Trade and Industrialisation after Globalisation's Second Unbundling: «How Building and Joining a Supply Chain Are Different and Why It Matters». In R. Feenstra and A. Taylor (Eds.). *Globalization in an Age of Crisis: Multilateral Economic Cooperation in the Twenty-First Century*. University of Chicago Press.
7. Baldwin, R. (2009). Integration of the North American Economy and New-Paradigm Globalisation. *CEPR Discussion Paper Series*, No. DP7523, London. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1507519
8. Escaith, H. (2014). Exploring the policy dimensions of trade in value-added. *MPRA Paper*, No. 59891, University Library of Munich, Germany. Retrieved from <https://mpra.ub.uni-muenchen.de/59891>
9. Eslava, M., & Haltiwanger, J. (2013). *Young businesses, entrepreneurship, and the dynamics of output and employment in Colombia's manufacturing industry*. CAF Working Papers No. 2012/08. Retrieved from https://www.caf.com/media/4220/young_businesses_entrepreneurship_dynamics_employment_colombia_industry.pdf
10. Gaulier, G., & Zignago, S. (2010). BACI: International Trade Database at the Product-Level The 1994-2007 Version. *CEPII Working Paper*, No. 2010-23, October. Retrieved from http://www.cepii.fr/PDF_PUB/wp/2010/wp2010-23.pdf
11. Gereffi, G. (1994). The Organization of Buyer-driven Global Commodity Chains: How US Retailers Shape Overseas Production Networks. Gereffi, G. and Korzeniewicz, M. (Eds): *Commodity Chains and Global Capitalism*. Westport, CT: Praeger, 95-122.
12. Gereffi, G., & Fernandez-Stark, K. (2011). *Global Value Chain Analysis: A Primer*. Center on Globalization, Governance & Competitiveness (CGGC). North Carolina, USA: Duke University.
13. Gereffi, G., Humphrey, J., Kaplinsky, R., & Sturgeon, T. (2001). Introduction: Globalisation, Value Chains and Development. *IDS Bulletin*, 32(3), 1-8. doi: <https://doi.org/10.1111/j.1759-5436.2001.mp32003001.x>
14. Grossman, G. M., & Rossi-Hansberg, E. (2008). Trading Tasks: A Simple Theory of Offshoring. *American Economic Review*, 98(5), 1978-1997.
15. Haltiwanger, J. et al. (2013). Who Creates Jobs? Small Versus Large Versus Young. *The Review of Economics and Statistics*. Vol. XCV, 95(2), 347-361. Retrieved from http://www.mitpressjournals.org/doi/pdf/10.1162/REST_a_00288
16. Hausmann, R. (2014). In Search of Convergence. *Project Syndicate*. Retrieved from <https://www.project-syndicate.org/commentary/ricardo-hausmann-asks-why-growth-rates-are-converging-among-some-countries-and-diverging-among-others?barrier=accessreg>
17. Hopkins, T. & Wallerstein, I. (1977). Patterns of Development of the Modern World-system. *Review*, 1(2), 157-170.
18. Hong, D. C. (2015). *SMEs in Global Value Chains*. Retrieved from <https://www.pecc.org/resources/trade-and-investment-1/2184-smes-in-global-value-chains/file>
19. Hvizdova, E. & Balogova, B. (2016). *Creative Industry of selected Handicrafts in Eastern Slovakia*. Logophon, Mainz.
20. OECD and World Bank Group (2015). *Inclusive Global Value Chains. Policy options in trade and complementary areas for GVC Integration by small and medium enterprises and low-income developing countries*. Retrieved from <http://www.oecd.org/tad/tradedev/OECD-WBG-g20-gvc-report-2015.pdf>
21. Kaplinsky, R., & Morris, M. (2003). *Handbook for Value Chain Research*, IDRC. Retrieved from http://www.value-chains.org/dyn/bds/bds2search.details2?p_phase_id=395&p_phase_type_id=1
22. Kowalski, P. Gonzalez, J. L., Ragoussis, Alexandros., & Ugarte, C. (2015). Participation of Developing Countries in Global Value Chains: Implications for Trade and Trade-Related Policies. *OECD Trade Policy Papers*, No. 179, Paris: OECD Publishing. doi: <http://dx.doi.org/10.1787/5js331fw0xxn-en>
23. Labaj, M. (2014). Structural aspects of economic development. Slovak economy in the global interdependencies. Bratislava: Ekonom (In Slovak).
24. Mankiw, N. G., & Swagel, P. (2006). *The Politics and Economics of Offshore Outsourcing*, NBER Working Paper No. 12398. National Bureau Of Economic Research. doi: <https://doi.org/10.3386/w12398>
25. OECD (2008). *Enhancing the Role of SMEs in Global Value Chains*. Paris: OECD Publishing. Retrieved from https://www.ecb.europa.eu/home/pdf/research/compnet/Enhancing_the_role_of_SMEs.pdf
26. OECD (2015). Diagnostic of Chile's Engagement in Global Value Chains. *Global Value Chains*. Document Library. Retrieved from <http://www.oecd.org/sti/global-value-chains-library.htm>
27. OECD (2012). Mapping Global Value Chains. *Working Party of the Trade Committee*. Paris: OECD. Retrieved from http://www.oecd.org/dac/af/Mapping-GlobalValueChains_web_usb.pdf
28. Ministry of Foreign and European Affairs of the Slovak Republic (2014). *OECD in Brief. Information Bi-month Bulletin of the Permanent Delegation of the Slovak Republic to the OECD in Paris*. Retrieved from https://www.mzv.sk/zahranicna_politika/slovensko_v_oecd-oecd_v_skratke (in Slovak)
29. OECD (2007a). *Final Synthesis Report on Global Value Chains*, CFE/SME, Paris: OECD Publishing.
30. OECD (2013). *Interconnected Economies: Benefiting from Global Value Chains*. Paris: OECD Publishing. doi: <https://doi.org/10.1787/9789264189560-en>
31. OECD (2014, December). *Southeast Asia Investment Policy Perspectives*. Retrieved from <https://www.oecd.org/daf/inv/investment-policy/Southeast-Asia-Investment-Policy-Perspectives-2014.pdf>
32. OECD, WTO & the World Bank (2014). *Global Value Chains: Challenges, Opportunities and Implications for Policy*. Report prepared for submission to the G20 Trade Ministers Meeting, Sydney, Australia, July 2014. Retrieved from https://www.oecd.org/tad/gvc_report_g20_july_2014.pdf
33. OECD, WTO, UNCTAD (2013). *Implications of Global Value Chains for Trade, Investment, Development and Jobs*. Prepared for the G-20 Leaders Summit Saint Petersburg (Russian Federation) September 2013. Retrieved from http://unctad.org/en/PublicationsLibrary/unctad_oecd_wto_2013d1_en.pdf
34. Ministry of Foreign and European Affairs of the Slovak Republic (2016). *OECD in Brief. Information Bi-month Bulletin of the Permanent Delegation of the Slovak Republic to the OECD in Paris*, 31(5). Retrieved from <https://www.mzv.sk/documents/10182/2346765/031+OECD+v+skratke> (in Slovak)
35. Porter, M. E. (1985). *The Competitive Advantage: Creating and Sustaining Superior Performance*. NY: Free Press.
36. Porter, M. E. (1990). *Competitive advantage of nations*. Simon and Schuster, 1990.
37. Primo Braga, C. A. (2013). *Globalization in the 21st Century: The Role of Global Value Chains*. Lausanne: IMD.
38. Slusna, L., Balog, M. et al. (2015). *Automotive industry in Slovakia and global value chains*. Bratislava: Slovak Innovation and Energy Agency. Bratislava. Retrieved from https://www.siea.sk/materials/files/inovacie/publikacie/studia_Automobilovy_priemysel_na_Slovensku_a_globalne_hodnotove_retazce_SIEA_web.pdf (in Slovak)
39. Stamm, A. (2004). *Value Chains for Development Policy, Challenges for Trade Policy and the Promotion of Economic Development*. Concept Study, Eschborn: Deutsche Gesellschaft für Technische Zusammenarbeit. Retrieved from https://www.die-gdi.de/uploads/media/Value_Chains_for_Development_Policy.pdf
40. OECD (2016). Global Value Chains and Trade in Value Added: An Initial Assessment of the Impact on Jobs and Productivity. *OECD Trade Policy Papers*, No. 190, Paris: OECD Publishing. doi: <https://doi.org/10.1787/5j1vc7sb5s8w-en>
41. Timmer, M. P. Erumban, A. A., Los, B., Stehrer, R., & Vries de, G. J. (2014). Slicing Up Global Value Chains. *Journal of Economic Perspectives*, 28(2), 99-118. Retrieved from <https://www.aeaweb.org/articles?id=10.1257/jep.28.2.99>
42. Timmer, M. P., Stehrer, R., & de Vries, G. (2015). *Occupations in Global Value Chains: Patterns of International Specialisation*. OECD Trade Policy Paper, OECD Publishing (forthcoming).
43. United Nations (2010). *Integrating Developing Countries' SMEs into Global Value Chains*, United Nations Conference on Trade and Development. Geneva: United Nations Publication. Retrieved from http://unctad.org/en/Docs/diaeed20095_en.pdf
44. UNCTAD (2013b). *World Investment report 2013: Global Value Chains: Investment and Trade for Development*. United Nations Conference on Trade and Development, Geneva: United Nations Publication. Retrieved from http://unctad.org/en/PublicationsLibrary/wir2013_en.pdf
45. UNCTAD (2014). *Trade and Development Report 2014*. United Nations Conference on Trade and Development. Geneva: United Nations Publication. Retrieved from http://unctad.org/en/PublicationsLibrary/trd2014_en.pdf
46. UNECA (2012). *Study Report on Mainstreaming Regional Integration into National Development Strategies and Plans*, Addis Ababa. United Nations Economic Commission for Africa. Retrieved from <http://www.erisee.org/sites/default/files/paper-on-mainstreaming.pdf>
47. European Commission (2016). *What is an SME?* Retrieved from http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/index_en.htm

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