International trade in services in developing countries – threats and opportunities
Are developing countries competitive?

Andżelika Kuźnar

1. Abstract

The paper is a part of the wider research project. Its aim is the examination of international trade in services and particularly the position of developing countries in this trade. Will they have contribution in the growth of services share in international trade? Would it have unquestionably positive effects for them? What actions should be undertaken to maximise their profits and minimise risk?

To achieve so defined goal the research study is divided into two main parts. Firstly, I will examine which theories apply to international trade in services. To what extent does comparative trade theory give the answer to the current trade directions? What are the alternative theories explaining trade patterns? This part will not be presented in the current paper.

Secondly, I will examine in this paper whether developing countries are competitive in the field of international trade in services. The results depend on how one measures the country’s competitiveness. The paper deals with three indices: observed and so called adjusted exports share and Revealed Comparative Advantage. Countries’ openness to services trade is also presented as a complementary measure. The results show that the popular measure of country’s participation in world exports (observed exports share) understates the position of developing countries in services exports.

Finally, I will identify the sources of advantages of developing countries. It is well known that these countries have comparative advantage in labour services (construction, tourism, transport services). New opportunities also emerge because of the technological progress changing the possible ways of delivering services. The question is whether developing countries can change their position in international division of labour by means of more active participation in services trade. What are the possible threats of more liberal trade regimes? What are the possible gains for participating countries? What are the costs of sustaining the “status quo”?

Key words: international trade, services, revealed comparative advantage, developing countries.

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2. Introduction

Until recently the common belief was that since services are underdeveloped in developing countries\(^2\) the latter are unable to participate actively in international trade in services. According to Riddle\(^3\) the widespread assumption that only developed countries have substantial service sector capacity was even one of the reasons of rare studies of comparative advantage in services.

Governments of developing countries were also reluctant to include services in negotiating agendas of liberalization aiming bodies (e.g. GATT). Many of them are still very anxious to protect their domestic service industries\(^4\), which is one of the reasons of slow liberalisation developments in GATS. The common explanation of such attitude of numerous developing countries (apart from the above mentioned underdevelopment of many service industries) is the lack of awareness about service exporters and their needs as well as benefits they can obtain from an active participation in international trade in services. Another factor that is rarely raised in the literature is the fact that countries might be unaware of their possible high position in international trade in services due to improper measurement.

The purpose of this paper was to examine the current position of developing countries in international trade in services. The main intention was to prove that the reluctance of developing countries to more active participation in liberalisation processes, based on the belief that their competitiveness is low, is not fully justified.

Different measures can be used in order to assess a country’s competitiveness in international trade. This paper deals with four indices. Their advantages and disadvantages were presented in a paper by Barras and Peterson\(^5\), who calculated three indices and analysed results for 22 countries. The scope of their analysis was limited due to data available

\(^{2}\) Services’ share in value added ranges in developing countries from less than one third in many Sub-Saharan African countries (e.g. Liberia, Central African Republic, Guinea Bissau or Nigeria) to two thirds in some small Asian (Kiribati, Palau, Vanuatu) and Latin American and Caribbean countries (Panama, Barbados, St. Lucia). Large differences exist also in terms of employment. There are economies where less than a fifth of population is employed in services industries (e.g. China, Cambodia, Uganda, Vietnam) and those where only a fifth works outside this sector (Oman, Peru) – Source: WDI On-line. Development of service sectors was especially distorted in countries with colonial heritage. Certain sectors were not developed at all (and supplied by colonial power, e.g. financial and professional services) while other were developed in a way that they were meeting the needs of foreign-owned companies (e.g. transportation networks, education systems). See: D. I. Riddle, Service-Led Growth. The Role of the Service Sector in World Development, Praeger Publishers, New York 1986, pp. 38-39.

\(^{3}\) Ibidem, p. 44.

\(^{4}\) One should remember that this statement does not reflect only developing countries’ attitude to liberalization. Even in highly integrated marked such as European Union huge problems were encountered while trying to introduce the so called Services Directive.

at the time of writing the paper (1986). Much wider scope of countries and service sectors is analysed in the current paper. The number of countries varies in particular services sectors (from 80 in “construction” to 128 in “travel” in 2003) due to availability of data provided by these countries. All sub-sectors of commercial services covered by the IMF Balance of Payments Statistics were analysed.

Wherever possible developing countries were grouped according to definition used by World Bank and provided in its World Development Indicators, 2006 Edition. Three groupings were used: low income, lower middle income and upper middle income economies. All countries for which data of 2003 were available were analysed. Though there exist some data of later years but then the sample of countries would be much smaller and thus the results - less accurate.

Data was obtained from internet databases of international organisations, mainly World Bank, UNCTAD and World Trade Organisation.

3. Method

3.1. Measuring country’s competitiveness

Peterson and Barras\(^6\) present three indices that may be used for the evaluation of a country’s competitive position in trade. These are: observed export share, adjusted export share and index of RCA (revealed comparative advantage). The first index is commonly presented in various studies and statistical data sets. It shows a country’s share in n-group of countries exports of product \(i\) (e.g. share of Ukrainian transportation exports in world\(^7\) transportation exports). Its formal form is presented in formula 1:

\[
OES = \frac{X_{ij}}{\sum_{j=1}^{n} X_{ij}} \times 100
\]

where: \(OES\) – observed export share, \(X_{ij}\) – country \(j\)’s exports of product \(i\), \(\sum_{j=1}^{n} X_{ij}\) - total exports of product \(i\).

According to Peterson ad Barras this approach, even though very popular, does not reflect properly countries’ competitive position. They prove formally that a relatively large country (in terms of its GDP) can have a high export share just because it is large. Similarly, an

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\(^6\) Ibidem.

\(^7\) Ideally, world exports of particular service should be equal to the summed value of exports from all countries of these services. However, available data show large discrepancies. If not stated otherwise, the sum of exports is used (calculated on the base of IMF BOP data derived from UNCTAD Handbook of statistics).
economy that is relatively open (measured as a ratio of country’s total exports to its GDP) will also have a high export share. As there is no casual link between size and competitiveness in a particular product on the one hand, and on the other hand the openness factor is not based on specialization since it is an aggregated measure, the index of observed export share may give improper results.

The second formula eliminates shortages of the first index. It is called adjusted export share:

\[ AES = \frac{\sum_{i=1}^{m} X_{ij}}{\sum_{j=1}^{n} \frac{X_{ij}}{\sum_{i=1}^{m} X_{ij}}} \times 100 = \frac{r_{ij}}{\sum_{j=1}^{n} r_{ij}} \times 100 = \frac{r_{ij}}{n \bar{r}_{ij}} \times 100 \]

where: \( AES \) – adjusted export share, \( r_{ij} \) – country j’s share of exports of product i in its exports of m-products (or degree of export concentration), \( \sum_{j=1}^{n} r_{ij} = n \bar{r}_{ij} \) – average degree of export concentration for the n-country group as a whole.

This index reflects the share of a particular country’s exports of product i in its exports of m-products – i.e. degree of export concentration (e.g. Ukrainian transportation exports in relation to its whole services exports) in relation to the sum of shares of product i in exports of m-products of n-countries – i.e. average degree of export concentration for the whole group (e.g. the sum of shares of transportation exports in world total services exports). As the degree of export concentration shows to what extent a country’s exports is dominated by a particular product it thus measures a country’s specialization and competitiveness in that product.

The third measure widely used in assessments of countries’ competitiveness is the index of Revealed Comparative Advantage (RCA) introduced by B. Balassa\(^8\). The assumption is made here that the country export structure is dominated by products in which it has a relatively strong comparative advantage. The formula adjusted to the notation used above would take the following form:

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\( \text{RCA}_{ij} = \frac{X_{ij}}{\sum_{j=1}^{m} X_{ij}} \times 100 \)

Where: \( \text{RCA}_{ij} \) – index of country \( j \)'s revealed comparative advantage with respect to product \( i \).

In other words, the equation defines export specialization in terms of country \( j \)'s share in \( n \)-group of countries exports of product \( i \) (i.e. OEX) in relation to country \( j \)'s share in exports of \( m \)-products in exports of \( n \)-countries (e.g. Ukrainian share of transportation exports in world transportation exports in relation to the share of Ukrainian total services exports in world total services exports). As demonstrated in Barras and Peterson\(^{10}\), the index implicitly normalises for both a country's relative size and its degree of openness. When it exceeds 100 it indicates competitiveness (the country has a relative advantage in exports of the product in comparison with the world as a whole), a value below 100 denotes uncompetitiveness in a given product. The larger the index, the greater the country's competitiveness.

Additionally an openness factor was calculated. This measure indicates a country’s dependency on trade of particular product. Its formal form can presented as follows:

\( \text{OF} = \frac{X_{ij} + M_{ij}}{GDP_j} \times 100 \)

Where: \( \text{OF} \) – openness factor, \( M_{ij} \) – country \( j \)'s imports of product \( i \), \( GDP_j \) – country \( j \)'s gross domestic product.

3. 2. Definition of international mobility of services

The central issue in studies on international trade in services is the definition that is accepted. There are two main approaches. The model for the first, narrow definition is merchandise trade. This approach lets specify so called non-factor services. It is used by the IMF which assumes that international trade occurs only when the two parties involved reside in two different states. As a result only traditional export and import transactions are considered as international trade. The transactions are covered by balance of payments.

\(^{9}\) The formula can be also interpreted as the share of exports of product \( i \) in country \( j \)'s exports of \( m \)-products in relation to product \( i \)'s export share in exports of \( m \)-products of \( n \)-countries.

statistics and consist of the following categories of services: transport, travel and other services: communications, construction, computer and information services, insurance, financial services, royalties and license fees, other business services, personal, cultural and recreational services, government services. In economic studies usually government services are not taken into account. What is left is defined as commercial services.

As corporations and their affiliates are assumed to be residents of the country in which they are operating, their (services) activities in this country are not recorded as (services) trade. Income from such companies is reported in the current account as investment income. Flows of capital are classified as direct investments in financial account. The rule of residency applies also to labour related flows. Information on short-term (up to one year) employment of foreigners is included in compensation of employees in current account. Those who stay in an economy for more than one year are regarded as residents of the economy and therefore their incomes are outside the scope of the balance of payment statistics. They are called migrants and their financial transfers are recorded under heading: workers’ remittances in current transfers section. All labour and investment income services are called factor services.

The above characterized approach does not take into account the fact that differences between goods and services determine the way they are delivered to international markets. There are services that cannot exist in international markets unless they are sold in the consumer’s country (e.g. hotels, restaurants). The conventional definition of trade, where only a product crosses the frontier misses a wide scope of international transactions. Thus much wider definition was accepted in GATS, where four modes of supply were recognized: mode 1 - cross-border supply and mode 2 - consumption abroad (mainly covered by current account statistics), mode 3 - commercial presence (foreign direct investments as an approximation of the mode), mode 4 - presence of natural persons (compensation of employees and workers’ remittances as approximate indicators of the mode). This concept of mobility of services identifies all services as tradable (they can be provided and consumed under one mode or another) and covers all possible ways they can be delivered internationally.

The advantages of the second approach in staking out a country’s negotiating position in liberalisation process are easily visible. However, there are also large shortcomings: no distinction is made between direct investment and investment incomes in manufacturing and services, values of compensation of employees and workers’ remittances cover not only flows of capital from persons working in services sectors but in other industries as well, and, above all, data collected by the IMF and presented in its Balance of Payments Statistics Yearbooks do not correspond with the GATS’s modes of supply.
Bearing in mind these disadvantages and adding the spatial limitations of the paper the first approach to defining international mobility of services was taken into account.

4. Results

4.1. Competitive position of countries in international trade in services

International trade in services in 2003 accounted for 1896 bln USD. The major players in terms of their exports share were developed countries. However, developing countries are also engaged in services trade and since the beginning of 1990s their share increased rapidly, in spite of the slowing down in the end of 1990s. Even these with lowest income experienced growth (Fig. 1).

**Fig. 1. Share of developing countries in world’s exports of services, in %, 1990-2003**

![Graph showing share of developing countries in world's exports of services](source)


All three groups of developing economies achieved faster then the world’s and OECD’s average annual growth rates of services exports in 1990-2003. As the Figure 2 indicates the lower the level of income, the faster the growth rate was achieved in that period.
Table 1 summarises results of the calculation of four competitiveness measures described above. According to the first formula (observed export share) international trade in services is greatly dominated by developed countries. High income OECD economies accounted for some two thirds of exports. The single main exporter is United States with its almost 16% share in world services exports. The EU-15 countries as a whole were responsible for almost 45% of exports at that time (intra-EU trade included). Low income countries share is minor – 2,5%, and lower and upper middle income countries achieved levels of about 8% of world exports in 2003. There was only one developing country (China) among top 15 exporters of services.

When we look at other indicators of countries competitiveness – the picture shifts more in favour of developing countries. What is more, dominance of developed countries is not observed any more. There are plenty developing countries that achieve much higher level of trade in services as a relation to their GDP (formula 4) than Japan (3,1%), United States (5,1%) and many EU countries. In fact, these are low and upper middle income countries that achieve on average higher openness factor than developed economies. Many low and middle income countries are at the top of the rank. All of the top 15 in the rank are small economies.

The following two formulas, adjusted export share (2) and RCA index (3) perfectly correlate with each other. On average, the most competitive countries are high income OECD ones, but when we disaggregate the groups we find out that the countries with the strongest competitive position in services are Lebanon, French Polynesia, Cyprus, the Bahamas (these two are high income countries), Barbados and so on. Even Ethiopia with its 0,04% share in world services exports does much better than the United States when these measures are used.

(adjusted export share 1,6% (USA – 0,8%), RCA index – 297,4 (USA – 146,9)). The comparatively disadvantaged countries, with RCA index below 100 include China, Canada, Germany, Japan. Their comparatively week position in exports seems to have confirmation in their services trade balance: all of them are net importers of services.

Table 1. Competitiveness of countries/country groups in services exports, 2003

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country Group</th>
<th>Formula (1)</th>
<th>Formula (2)</th>
<th>Formula (3)</th>
<th>Formula (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low income</td>
<td>2,5</td>
<td>29,7</td>
<td>105,4</td>
<td>9,7</td>
</tr>
<tr>
<td>2</td>
<td>Lower middle income</td>
<td>7,9</td>
<td>18,5</td>
<td>65,5</td>
<td>9,2</td>
</tr>
<tr>
<td>3</td>
<td>Upper middle income</td>
<td>7,6</td>
<td>20,1</td>
<td>71,3</td>
<td>11,7</td>
</tr>
<tr>
<td>4</td>
<td>High income: OECD</td>
<td>73,4</td>
<td>31,7</td>
<td>112,6</td>
<td>9,5</td>
</tr>
</tbody>
</table>

Table 1 continued...

(1) – observed export share, (2) – adjusted export share, (3) – RCA index, (4) – openness factor
The m-product export figure in formulas 2 and 3 is the sum of merchandise and services exports.
Source: calculated on data from in World Development Indicators (Edition: September 2006), ESDS International, (MIMAS) University of Manchester

As we can see there is no similarity between a country’s competitive position measured by means of simple shares of services exports (OES) and two other indices of competitiveness (AES and RCA). As it was proved by Peterson and Barras it is attributable to the differences in the size of countries’ GDPs and variations in the degree of openness between countries. The effect of these two factors can be measured by the size of correlation coefficient between the two sets of data (OES and AES or OES and RCA, the result will be the same as the correlation coefficient between AES and RCA is 1). It is only -0,0246 ($r^2 = 0,0006$), which is not statistically significantly different form zero. The effect is also noticeable when observed and adjusted export shares are compared for individual countries. For United States actual export share is larger than the adjusted one by 15,8 percentage points, in United Kingdom – 7,4, Germany – 6,3. On the opposite are countries with large adjusted export share and small observed share, though they still rank very high in revealed
comparative advantage index (French Polynesia, Cape Verde, Barbados, the Bahamas, Vanuatu – difference above 2 pp.).

International market is particularly important in small (very often island) economies, commonly represented in the above presented statistics. Being small means they are price takers and therefore they depend on international economy. Economies of scale limit the range of products that can be produced for small local markets and therefore make international market more important for them than for large economies. The export opportunities of such countries are determined by the activities in developed countries as well as other factors such as commodity composition and their prices, geographical location and foreign economic policies of importing countries. The policy of subsidizing agriculture production and exports in North America and EU makes fair competition in agricultural products in world market impossible. Moreover, small developing countries are confronted with exporting small volumes over long distances. Additional obstacles spring from weather conditions such as hurricanes and storms that destroy crops (case of many small Caribbean countries). In case of manufacturing exports the progress is even more difficult. Technological developments make the competition in manufactured goods more difficult for countries that cannot benefit from the economies of scale and experience lack of modern technology. As a result small countries usually export primary products and import manufacturers and suffer from deteriorating in time terms of trade. Since services are generally not dominated by the scale effect and many sectors are less capital intensive than manufacturing, greater specialization in the exports of services might be a good alternative for them.

4.2. Developing countries’ comparative advantage in service sub-sectors

The laws of comparative advantage were initially formulated to explain patterns of trade in tangible goods.

“Theories explaining trade in goods can, broadly, be divided into two categories. First, in a perfect competition, constant returns to scale framework, trade flows are induced by comparative advantage arising from (i) international differences in technologies (Ricardian model), (ii) international differences in relative factor endowments (H-O model), and (iii) international differences in tastes and preferences (Linder hypothesis). Secondly, trade can also arise when

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12 Ibidem, p. 131.
countries are identical, but only when comparative advantage is due to a context of IRS [increasing returns to scale] and imperfect competition.\textsuperscript{13}

Several studies were undertaken to verify the applicability of traditional trade theories to services trade. Hindley and Smith\textsuperscript{14}, Deardoff\textsuperscript{15}, Sapir and Lutz\textsuperscript{16} claim that (under different assumptions) these theories can be used to explain patterns of services trade. In principle then, a country should specialize in the production and export of services in which it has a relative (comparative) advantage and import these in which it has a comparative disadvantage.

Riddle\textsuperscript{17} distinguishes between cultural and economic advantage. Culture is not commonly recognized as the source of comparative advantage, but it offers an interesting perspective enabling to point out possible cultural determinants of trade. The requirement of the proximity between producers and customers of services influences the importance of cultural sensitivity needed when trading services internationally. Some cultural characteristics can be utilized to benefit from increased participation in international activities while others will cause impediments to successful trade.

“Cultural values determine when self-service is appropriate, from whom customers will accept services, and how much control the customer will expect to exercise the transaction. Similarly, cultural philosophies dictate in what manner the service sector will be developed, the role played by public services, and the accessibility of services by the general populace.”\textsuperscript{18}

Let me quote some examples. Culture issues are second the most frequently cited problems when considering off-shoring IT functions.\textsuperscript{19} In case of language differences the quality and effectiveness of the services can be affected. Humour for example can be culture specific, not translatable and cause problems in foreign call centres. Different values and different ways to communicate can result in different interpretations having sometimes negative consequences. There can also occur some problems due to different life experiences. Indian call center personnel are unable to answer questions concerning home improvement products as they

\textsuperscript{14} B. Hindley, A. Smith, \textit{Comparative advantage and trade in services}, „The World Economy”, 7/1984, pp.369-390.
\textsuperscript{18} Ibidem, p. 152.
usually have no personal experience in using such products. In countries like India or Japan purchases of services from total stranger would be avoided whenever possible because of high importance of interpersonal relationship. Those who form a group are like family, while the rest are not trusted or even respected. Summing up, the influence of cultural factors on a country’s comparative advantage cannot be neglected, even though it is hard to measure.

The economic advantage is derived from abundance of certain endowments. Endowments taken into account most often in goods theories are land, labour and capital. However, there are also other factors that can influence a country’s comparative advantage. Faulkner and Segal-Horn call them “advanced” factors. They are particularly important in case of services. Daniels recognizes some of them: finance capital, political and cultural factors, characteristics of human capital, the pattern and level of existing development in a country. Other “advanced” factors include the quality of life, health care facilities, knowledge resources.

The most commonly analysed are physical capital and human capital. The relative importance of them differs in industries and group of countries. Developed economies tend to benefit from the abundance of human capital that is critical for many producer services. Physical capital (both natural, environmental and man-made) is more significant in case of developing countries, specializing generally in services requiring specific natural or cultural resources (tourism) and labour intensive services, such as hotel operations, transportation or construction services. Apart from these traditional sectors, some more modern service activities also intensively use labour: data processing, data input, software production.

Exports data indicate that travel followed by transportation account for the largest share of developing countries services exports (60%). Other services (total services minus transportation, travel and government services) – a driving force of services exports in the last decades – on average comprise some 40%. But developing countries experienced the fastest growth rates of exports in other services in the last 13 years – see fig. 3.

20 D. Crane et al., *International sourcing..., op. cit.*
24 A group of services meeting intermediate demand and contributing to the competitiveness of other sectors of the economy, e.g. insurance, banking, engineering, information services. (As opposed to consumer services, satisfying the final demand, e.g. entertainment, education, travel, tourism).
As it was in case of general advantage in services exports, observed export shares in all service sub-sectors indicate dominance of developed economies, but indices of RCA as well as adjusted export shares reveal that the highest positions in some sub-sectors are taken by developing countries. The position of most developed economies (and also China) is usually overstated when observed and adjusted export shares are compared. Developing countries position on other hand is underestimated when the same measures are taken into account. Calculations show that most developed countries have revealed comparative advantage in insurance, financial services, royalties and license fees. In remaining sub-sectors relative dominance of developing countries is observed. It can be noticed that they achieve good results not only in traditional sectors, such as transport, travel and construction but also in communications, computer services (with India being the most often quoted success country as an exporter of IT-related services), other business services\(^{25}\), as well as personal and recreational services (e.g. audiovisual services)\(^{26}\).

\(^{25}\) A category that consists of various activities, such as merchanting and trade related services, professional services – e.g. legal services, accounting, consulting, advertising, technical services, etc.
\(^{26}\) Transactions by embassies, aid missions, promotion offices, transactions associated with the provision of joint military arrangements and peacekeeping forces.
Table 2. Revealed comparative advantage in commercial services of top 10 countries, 2003

<table>
<thead>
<tr>
<th>Country</th>
<th>Transport</th>
<th>Travel</th>
<th>Other services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ukraine</td>
<td>311.6</td>
<td>328.0</td>
<td>199.9</td>
</tr>
<tr>
<td>2. Latvia</td>
<td>272.4</td>
<td>325.6</td>
<td>189.8</td>
</tr>
<tr>
<td>3. Belarus</td>
<td>263.9</td>
<td>324.6</td>
<td>174.4</td>
</tr>
<tr>
<td>4. Norway</td>
<td>263.0</td>
<td>320.1</td>
<td>169.1</td>
</tr>
<tr>
<td>5. Tajikistan</td>
<td>255.6</td>
<td>319.6</td>
<td>162.9</td>
</tr>
<tr>
<td>6. Panama</td>
<td>254.7</td>
<td>317.6</td>
<td>158.8</td>
</tr>
<tr>
<td>7. Chile</td>
<td>247.2</td>
<td>240.9</td>
<td>149.1</td>
</tr>
<tr>
<td>8. Korea, Rep.</td>
<td>240.3</td>
<td>169.2</td>
<td>148.6</td>
</tr>
<tr>
<td>9. Moldova, Rep.</td>
<td>231.0</td>
<td>169.1</td>
<td>146.2</td>
</tr>
<tr>
<td>10. Lithuania</td>
<td>229.6</td>
<td>261.0</td>
<td>144.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Communications</th>
<th>Construction</th>
<th>Computer and information services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Haiti</td>
<td>777.1</td>
<td>1560.0</td>
<td>1247.6</td>
</tr>
<tr>
<td>2. El Salvador</td>
<td>661.7</td>
<td>818.8</td>
<td>971.1</td>
</tr>
<tr>
<td>3. Guyana</td>
<td>653.8</td>
<td>581.9</td>
<td>741.4</td>
</tr>
<tr>
<td>4. Honduras</td>
<td>637.9</td>
<td>538.4</td>
<td>211.3</td>
</tr>
<tr>
<td>5. Yemen</td>
<td>624.7</td>
<td>325.2</td>
<td>183.8</td>
</tr>
<tr>
<td>6. Philippines</td>
<td>603.1</td>
<td>321.5</td>
<td>168.0</td>
</tr>
<tr>
<td>7. Bosnia and Herzegovina</td>
<td>586.3</td>
<td>296.8</td>
<td>167.0</td>
</tr>
<tr>
<td>8. Macedonia, TFYR</td>
<td>571.3</td>
<td>291.3</td>
<td>146.0</td>
</tr>
<tr>
<td>9. Tajikistan</td>
<td>538.9</td>
<td>284.6</td>
<td>138.9</td>
</tr>
<tr>
<td>10. Ecuador</td>
<td>525.7</td>
<td>276.3</td>
<td>136.3</td>
</tr>
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<table>
<thead>
<tr>
<th>Country</th>
<th>Insurance</th>
<th>Financial services</th>
<th>Royalties and license fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ireland</td>
<td>483.9</td>
<td>1102.1</td>
<td>646.9</td>
</tr>
<tr>
<td>2. Bolivia</td>
<td>441.1</td>
<td>654.9</td>
<td>581.5</td>
</tr>
<tr>
<td>3. Libyan Arab Jamahiriya</td>
<td>436.4</td>
<td>462.1</td>
<td>337.2</td>
</tr>
<tr>
<td>4. Switzerland</td>
<td>355.4</td>
<td>277.9</td>
<td>309.1</td>
</tr>
<tr>
<td>5. Mexico</td>
<td>323.1</td>
<td>234.8</td>
<td>308.2</td>
</tr>
<tr>
<td>6. Canada</td>
<td>280.9</td>
<td>222.0</td>
<td>148.6</td>
</tr>
<tr>
<td>7. Barbados</td>
<td>271.1</td>
<td>188.8</td>
<td>130.6</td>
</tr>
<tr>
<td>8. United Kingdom</td>
<td>251.5</td>
<td>177.9</td>
<td>130.5</td>
</tr>
<tr>
<td>9. Côte d'Ivoire</td>
<td>201.6</td>
<td>143.6</td>
<td>123.9</td>
</tr>
<tr>
<td>10. Guatemala</td>
<td>196.6</td>
<td>137.6</td>
<td>96.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Other business services</th>
<th>Personal, cultural and recreational services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Saudi Arabia</td>
<td>406.8</td>
<td>1007.4</td>
</tr>
<tr>
<td>2. Angola</td>
<td>274.1</td>
<td>707.8</td>
</tr>
<tr>
<td>3. Congo</td>
<td>254.0</td>
<td>305.1</td>
</tr>
<tr>
<td>4. China, Taiwan Province o</td>
<td>237.6</td>
<td>290.5</td>
</tr>
<tr>
<td>5. Myanmar</td>
<td>188.2</td>
<td>282.3</td>
</tr>
<tr>
<td>6. China, Hong Kong SAR</td>
<td>172.8</td>
<td>281.1</td>
</tr>
<tr>
<td>7. Brazil</td>
<td>161.0</td>
<td>257.5</td>
</tr>
<tr>
<td>8. Denmark</td>
<td>159.0</td>
<td>189.8</td>
</tr>
<tr>
<td>9. Netherlands Antilles</td>
<td>152.0</td>
<td>180.2</td>
</tr>
<tr>
<td>10. China</td>
<td>151.7</td>
<td>173.1</td>
</tr>
</tbody>
</table>

The m-product export figure in RCA index is the sum of all service sub-sectors (services total).
Source: calculated form UNCTAD Handbook of statistics on-line <http://stats.unctad.org/handbook> [17.06.2007].
Presented data should be interpreted with caution. Country’s position in some service sectors can be overstated if a foreign investor locates his activities in that country and uses methods reflecting the parent’s country advantages. Exports of such services will be reflected in a host country statistics, and thus its high comparative advantage can be misleading. It can be in case of some off-shoring service operations (e.g. computer services, research and development) located in many developing countries. Sometimes they also further outsource services off-shore. Some data indicate that among the 10 outsourcers of business processes are small developing countries, such as Angola, Republic of Congo, Mozambique, and Vanuatu. The pattern is similar for IT services. Among the top outsourcing countries in that category are Guyana and Namibia.\footnote{K. Lapid, *Outsourcing and Offshoring Under the General Agreement on Trade in Services*, “Journal of World Trade” 40(2), 2006, pp. 341-364.}

UNCTAD’s study\footnote{Assessment of Trade in Services of Developing Countries: Summary of Findings, UNCTAD/ITCD/TSB/7, 26 August 1999.} reveals six sub-sectors in which developing countries already have or potentially can have comparative advantage: professional and business services (such as computer and office services), health services, tourism, construction, audiovisual services and transport. OECD’s survey\footnote{J. Nielson, D. Taglioni, *Services Trade Liberalisation: Identifying Opportunities and Gains. Key Findings*, D/TC/WP(2003)25/FINAL, OECD, Paris, 18 July 2003.} based on examples of developing countries exports identifies sub-sectors in which developing countries can be particularly successful. They are audiovisual services, port and shipping services, construction and health services.

5. Conclusion

There are many reasons of developing countries’ modest interest in liberalizing market access in service industries. This paper deals with only one – concern that they will lose because their domestic service markets are non-competitive in global economy. Statements like that are based among others on developing countries’ service sub-sectors share in world’s exports. If it was the only index indicating a country’s position in international trade then the authorities of these countries would be justified – these are developed economies that account for the overwhelming proportion of services exports as a whole and in all service sub-sectors. However, other measures, such as adjusted exports share (which eliminates the influence of country’s size and its openness to trade) and index of Revealed Comparative Advantage show a different picture: low and middle income economies are competitive in services. Together they account for 70% of adjusted services exports and many of them achieve very high rates of RCA in certain service sub-sectors. They are particularly competitive in labour-intensive activities, such as transport, tourism, construction, but due to technological advances in
communication and computer related industries they increasingly participate in more sophisticated service trade, benefiting from highly skilled, well-educated and still cost-competitive labour (software programming, business, professional and financial services).

6. Bibliography