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MARKET SHARES IN THE POST-URUGUAY ROUND ERA:

A CLOSER LOOK USING SHIFT-SHARE ANALYSIS

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A CLOSER LOOK USING SHIFT-SHARE ANALYSIS

A STAFF WORKING PAPER

BY

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ABSTRACT

Shift-Share Analysis aims to break down total change of economic indicators into various components to identify underlying sources of growth or decline. A key feature is that the unit of analysis (e.g. a city, a region or a country) exists within a broader frame of reference that strongly influences it (e.g. a national productive system or the world economy). It is based on the principle that total change can be disaggregated into contributing factors and any change that can not be accounted for by these factors can be interpreted as the "local contribution" to that total change.

This method has been subject to many refinements. Because the objectives of this paper are both didactic and analytic, traditional Shift-Share Analysis is applied to international trade. It uses the "constant market share" assumption by decomposing the growth of exports into four separate components: a global component (GLOBO) indicating changes due to overall growth of world trade, a geographical component (GEO) indicating changes due to the country's distribution of trading partners, a product composition component (COMPO) indicating growth due to the mix of products exported, and a residual term (the "local" contribution) indicating changes in competitiveness, or performance (PERFO). The first 3 components, GLOBO, COMPO and GEO all relate to the "expected change in trade" should trade change proportionally. The fourth and residual component, PERFO, refers to that part of the change in trade that "shifts away" from expected proportional changes, hence the term "Shift-Share Analysis".

This paper will analyse a change or "shift" in shares in trade (particularly exports) of different economies. By focusing on selected time periods and using the PERFO indicator, the method will show what industries shift away from the expected change in trade, which economies have experienced such shifts in their industries, and to which regions.

Keywords: Shift-Share Analysis, International Trade

JEL: C49, F13, F14

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ABBREVIATIONS AND SYMBOLS

AFR	AFRICA
AG	AGRICULTURE PRODUCTS
ASI	ASIA
CEPII	CENTRE ETUDES PROSPECTIVES INFORMATIONS INTERNATIONALES
CIS	COMMONWEALTH OF INDEPENDENT STATES
COMPO	SECTORAL OR INDUSTRY EFFECT
CSC	SOUTH AND CENTRAL AMERICA
EUR	EUROPE
EU27	EUROPEAN UNION (27)
FDI	FOREIGN DIRECT INVESTMENT
GEO	GEOGRAPHICAL/PARTNER EFFECT
GLOBO	GLOBAL EFFECT
IMF	INTERNATIONAL MONETARY FUND
IMTS	INTERNATIONAL MERCHANDISE TRADE STATISTICS
LDCs	LEAST DEVELOPED COUNTRIES
MA	MANUFACTURES
MEA	MIDDLE EAST
MI	FUELS AND MINING PRODUCTS
NA	NORTH AMERICA
NAFTA	NORTH AMERICAN FREE TRADE AGREEMENT
PERFO	PERFORMANCE/COMPETITIVENESS EFFECT
SSA	SHIFT-SHARE ANALYSIS
WTO	WORLD TRADE ORGANIZATION
...	NOT AVAILABLE

INTRODUCTORY NOTE

This document examines the extent to which Shift-Share Analysis can be applied to international trade. It focuses in particular on determining whether this method of analysis can provide a useful summary measure of export competitiveness for countries, regions and economic groupings over time, and whether it correctly identifies countries which the method shows to be export competitive.

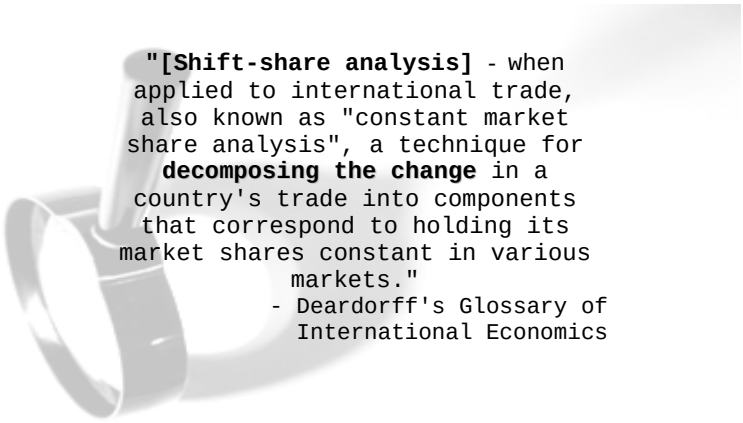
Shift-Share Analysis has been used by international trade analysts for many years, though limited by a number of well-documented problems with the methodology. Certain refinements, however, can give the technique some renewed relevance. Even in its traditional form, Shift-Share Analysis continues to be an accepted analytical tool for researchers and policy makers in that it can provide clear answers to a number of important questions in international trade. Also, since it is essentially an accounting technique, Shift-Share Analysis does not require a knowledge of sophisticated statistical methods and is relatively transparent compared to more sophisticated tools.

This paper starts with a general overview and contains six major sections. The first section provides an overview of academic and professional literature of relevance to Shift-Share Analysis (SSA) – its use, the types, and its application. The second section shows how the method can be applied to a hypothetical numerical example using 6 countries and 3 products. The third section discusses the application of this method to selected developing and developed economies, least-developed countries and countries in transition. The fourth section focuses on the results, i.e. what Shift-Share Analysis can tell us about the selected economies' export competitiveness over the Post-Uruguay period. Annex I further describes the methodology and other data issues encountered during the anaylsis. Finally, Annex II provides supplementary tables resulting from the study which further complete the tables provided in the earlier sections.

I. AN OVERVIEW OF THE SHIFT-SHARE METHOD

This section gives readers an insight of documentation that has been published on shift-share analysis – its use, how it is calculated, its application to international trade, what other fields it has been previously applied to, how to further refine it.

A. WHAT IT IS



Shift-Share Analysis (SSA) is a statistical technique in which discrete changes in a variable are broken down into various components to identify underlying sources of growth or decline. This type of analysis has been widely used to examine changes in employment by geographic area, but it can also be applied to questions of export competitiveness in international trade. A key feature of SSA is that the unit of analysis (e.g. a city, a region or a country) exists within a broader frame of reference that strongly influences it (e.g. the national productive system or the world economy). For example, changes in employment in a particular city can be attributed at least in part to employment growth at the national level, or to the changing mix of industries present in the city. Similarly, the growth of a country's exports can be partly explained by the overall growth of world trade, by the country's particular mix of trading partners, or by the products that it exports predominantly. Once all of these obvious and easily measurable sources of trade growth have been accounted for, any remaining variation in the data is captured by a residual term. This residual includes all factors that might otherwise influence the growth of exports, but it is usually interpreted as an indicator of competitiveness.

B. RELATED LITERATURE ON SHIFT-SHARE ANALYSIS

Classical SSA (as proposed by Fuchs, 1962 and Ashby, 1964) breaks down changes into three major components: reference area growth, industrial mix, and regional share. Initially, shift-share techniques were mainly used to analyse employment growth. The classical SSA approach, however, is subject to a number of limitations. In particular, SSA has been criticized for its lack of a theoretical base; see Bartels et al. (1982). Other criticism also refer to its dependence on the degree of disaggregation of industries as well as the underlying hypothesis of interdependence of the industrial mix and competitive effects.

In response to these limitations, several attempts have been made to improve the classical SSA equation. Esteban-Marquillas (1972) tackles the problem of interdependence between industrial mix and competitive effect by introducing two new concepts: homothetic employment and the allocation effect. The former is incorporated in the competitive effect and rids the latter of the "regional

structural influence" and thus ends its interdependence with the industry mix. The latter shows if a region is specialising in the sectors in which it has competitive advantages. Later, Arcelus (1984) uses the framework of Esteban-Marquillas and extends the concept of homotheticity to all components of SSA.

The application range of SSA has gradually extended to other areas such as policy prescriptions or forecasts. Moore and Rhodes (1973) study the effectiveness of British regional policies offering incentives to firms to locate to chronically underemployed areas of the country. They apply SSA to examine how the value of the competitive effect changes between the period before and the period after the policy implementation.

SSA is predominantly a tool for understanding past events. But Brown (1969) provides first empirical studies on the strength of Shift-Share projections. Paraskevopoulos (1971), Floyd and Sirmans (1973), and James and Hughes (1975) propose further significant extensions to Brown's investigations. Moreover, they develop SSA as an applicable tool for forecasts.

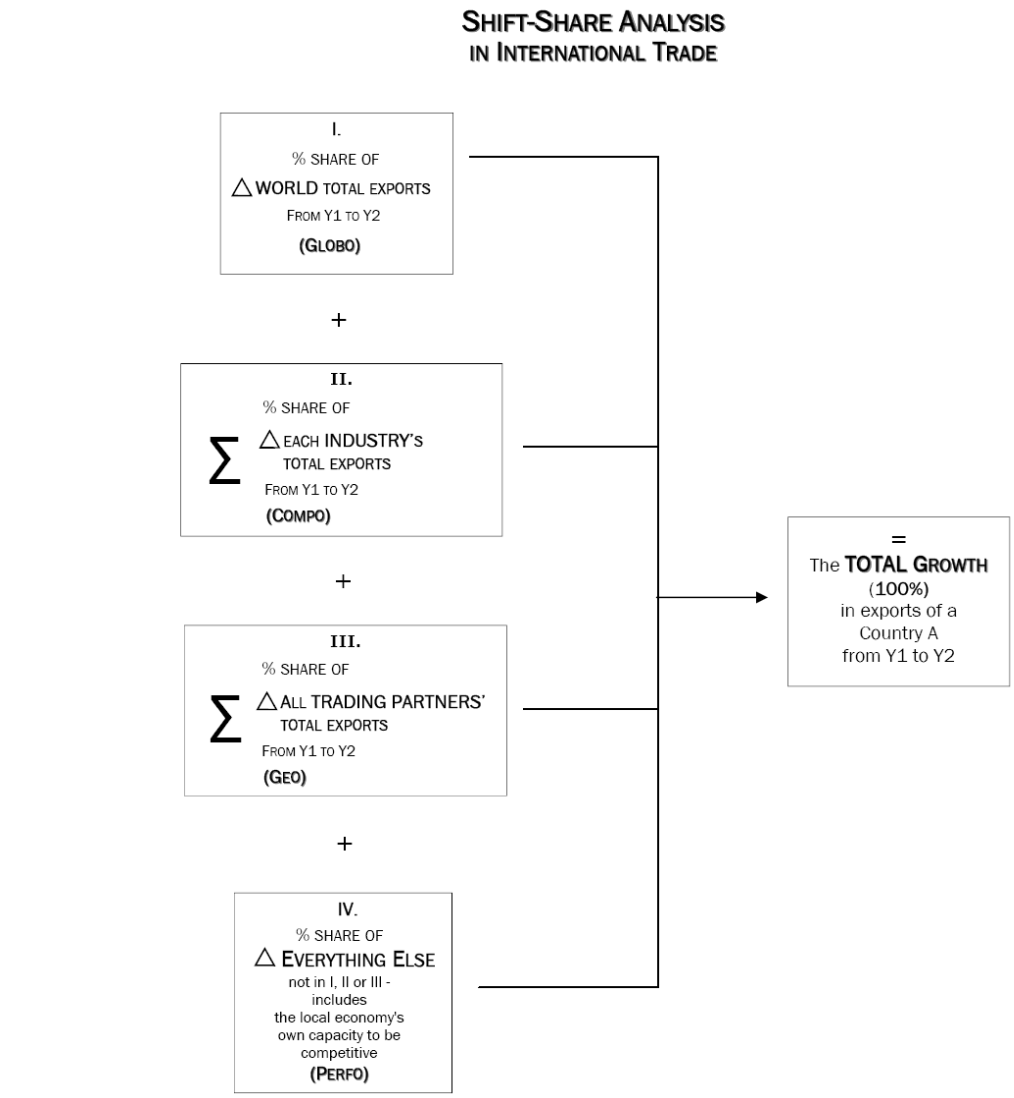
Since the 1990s, the method has also been applied to examine growth in a trade-related context. Markusen, Noponen, and Driessen (1991) use SSA to estimate the shares of employment growth for export and import penetration in nine U.S. regions. Hayward and Erickson (1995) extend the model and apply it to examine the impact of NAFTA trade on US states. Gazel and Schwer (1998) develop a method to study international exports' growth of the US states by focusing on the demand conditions. The 1998 CEPII report on competitiveness displays very close links to this paper. It decomposes the export growth of a given country into a global demand effect, a sectoral composition effect, a geographical composition effect, and a competitiveness effect which is captured by the residual term. A detailed disaggregate view of world trade competitiveness with the same components is provided by Cheptea, Gaulier, Zignago (2005). In recent years, SSA has increasingly been applied to the services sector, whereas several studies (Sirakaya et al. (1995), Fuchs et al. (2000), Sirakaya et al. (2002) and Toh et al. (2004) amongst others) have focused more specifically on the tourism industry.

C. TRADITIONAL SHIFT-SHARE APPLIED TO INTERNATIONAL TRADE

All statistical models rely on at least a few minimal assumptions about the nature of the underlying data generating processes, and SSA is no different. The key assumption when applying this method to international trade is that, if a country's export competitiveness does not change and all other factors influencing its exports are held constant, this country's share in world trade should remain constant over time as well. Alternatively, any change in the country's exports that can not be accounted for by major explanatory factors such as global trade growth, the mix of trading partners or the product composition of traded goods can be interpreted as a change in competitiveness. It is this constant market share assumption that justifies our decomposing the growth of exports into the following four separate components: a global component (GLOBO) indicating changes due to overall growth of world trade, a geographical component (GEO) indicating changes due to the country's distribution of trading partners, a product composition component (COMPO) indicating growth due to the mix of products exported, and a residual term indicating changes in competitiveness, or performance (PERFO). The first 3 components, GLOBO, COMPO and GEO all relate to what the change in trade would be if trade changes proportionally. The fourth and residual component, PERFO, refers to the trade that "shifts away" from expected proportional changes, hence the term "shift-share analysis".

Consequently, the exports growth of a given country can be written as the sum of four terms.

Diagram 1.



ΔGLOBAL	+ ΔSECTORAL	+ ΔGEOGRAPHICAL	+ ΔRESIDUAL	= ΔTOTAL EXPORTS
(__%)	+ (__%)	+ (__%)	+ (__%)	= 100%

1. Definitions and Assumptions:

Before proceeding, we need to introduce some notation conventions and establish a number of definitions[1]. In order to keep the notation relatively uncluttered we use the following conventions.

Let

$V_{i.}$ = the value of country A's exports of product i in period 1,

[1] Notation taken from Leamer and Stern (1970), Quantitative International Economics, p. 172.

$V'_{i.}$ = the value of country A's exports of product i in period 2,
$V_{.j}$ = the value of country A's exports to country j in period 1,
$V'_{.j}$ = the value of country A's exports to country j in period 2,
V_{ij} = the value of country A's exports of product i to country j in period 1,
V'_{ij} = the value of country A's exports of product i to country j in period 2,
r = percentage change in world exports between periods 1 and 2,
r_i = percentage change in world exports of product i between periods 1 and 2, and
r_{ij} = percentage change in world exports of product i to country j between periods 1 and 2.

Note: All of the above definitions apply to a single reporting[2] country even though many countries will typically be considered in any shift-share table. Since in practice we will always be focusing on one exporting country or region at a time, an additional index would only serve to clutter the formulas.

The above definitions imply that

$$\Sigma_j V_{ij} = V_{i.}$$
and
$$\Sigma_i V_{ij} = V_{.j}$$

in period 1, with similarly results holding in period 2 with the addition of a prime symbol. In words, we can obtain country A's total exports of good i by summing V_{ij} over all trading partners, which are indexed by j. Similarly, by summing V_{ij} over all products using the i index produces total exports of country A to country j.

Country A's total merchandise exports can be obtained by aggregating over all products i and all partner countries j, as follows:

$$\Sigma_i\Sigma_j V_{ij} = \Sigma_j V_{.j} = \Sigma_i V_{i.} = V_{..}$$

The above expression says that total merchandise exports can be obtained in one of three ways. First, by privileging a product composition approach, and having already calculated total exports of each product i by country A, we can simply add all of these figures together to get total merchandise exports (i.e. $\Sigma_i V_{i.}$). Second, focusing on geographical aspects, after we have already calculated total exports of country A to each country j for all of A's trading partners, we can then aggregate these figures over all partners (i.e. $\Sigma_j V_{.j}$). Finally, we can also aggregate the V_{ij} values directly over all products i and all partners j using double summation ($\Sigma_i\Sigma_j V_{ij}$). All three approaches should produce the same figure for total merchandise exports, but one or the other may be more convenient if all products or all partners have already been calculated. Deriving total exports in more than one way also provides a useful check on the accuracy of calculations.

2. DECOMPOSING THE TOTAL CHANGE

If all countries were similar, each would grow exactly at the same global rate. Thus, the difference between countries can be measured by the gap with the global rate. In particular, if the change in country A's exports attributable to global trade growth is denoted $rV_{..}$, i.e. country A's total merchandise exports in period 1 multiplied by the growth rate of world trade, then we have the following identity:

[2] A reporting country is meant to refer to a country whose exports data was officially submitted by its own national statistical office. This is relevant when referring to mirror data where countries' exports data are estimated using inverted trade flows, i.e. using the country's trading partners' imports to estimate its exports data, which may either be unavailable or incomparable.

$$V'_{..} - V_{..} \equiv rV + (V'_{..} - V_{..} - rV_{..})$$

This equation has an interesting interpretation. It says that the change in country A's exports is equal to the change due to world trade growth (GLOBO) plus a residual represented by the term in parenthesis. If country A experienced no change in either its product composition, partner mix or export competitiveness between period 1 and period 2, then the constant share assumption implies that this residual would be equal to zero. The likelihood of such an event in the real world is extremely small because these variables are changing frequently –and sometimes quite substantially– which can result in either positive or negative residuals depending on whether the shifts are favourable or unfavourable for exports.

In this identity, exports are not differentiated by product. If we are indeed interested in a particular class of goods, then the following is an equivalent statement for product i only:

$$V'_{i.} - V_{i.} = r_i V_{i.} + (V'_{i.} - V_{i.} - r_i V_{i.})$$

This expression is valid for each product and can be aggregated across the product range, then combined with the previous equation as follows:

$$V'_{..} - V_{..} = \Sigma_i (V'_{i.} - V_{i.}) = \Sigma_i r_i V_{i.} + \Sigma_i (V'_{i.} - V_{i.} - r_i V_{i.})$$

Rearranging the first term, we obtain [3]

$$V'_{..} - V_{..} = \underset{(1)}{rV_{..}} + \underset{(2)}{\Sigma_i (r_i - r) V_{i.}} + \underset{(3)}{\Sigma_i (V'_{i.} - V_{i.} - r_i V_{i.})}$$

This indicates that changes in total exports from a given country can be decomposed in changes due to global trade growth (1), the fact that world trade in the products that it exports is growing faster (or more slowly) than overall world trade (2), plus a residual (3). The second term above is the COMPO effect mentioned earlier.

Further distinguishing country A's exports by trading partner results in the following decomposition:

$$V'_{ij} - V_{ij} = r_{ij} V_{ij} + (V'_{ij} - V_{ij} - r_{ij} V_{ij})$$

and aggregating over all products and partners results in our final decomposition of export growth.

$$\begin{aligned} V'_{..} - V_{..} &= \Sigma_i \Sigma_j r_{ij} V_{ij} + \Sigma_i \Sigma_j (V'_{ij} - V_{ij} - r_{ij} V_{ij}) \\ &= \underset{(1)}{rV_{..}} + \underset{(2)}{\Sigma_i (r_i - r) V_{i.}} + \underset{(3)}{\Sigma_i \Sigma_j (r_{ij} - r_i) V_{ij}} + \underset{(4)}{\Sigma_i \Sigma_j (V'_{ij} - v_{ij} - r_{ij} V_{ij})} \end{aligned}$$

As before, the first two terms on the right hand side of the equation represent the change in country A's exports due to the growth of world exports (1) and due to the mix of products exported (2). The third term represents now the market distribution of the country's exports, i.e. a "geographic" or "partner" effect (3). This is the GEO component discussed previously. The fourth and last term is a residual indicating "competitiveness" or "performance" (4). This is the PERFO component.

Accordingly, it is helpful to normalize by dividing by $V_{..}$, so that the GLOBO, GEO, COMPO and PERFO components add up to the percentage growth of exports. Thus we obtain the decomposition in four terms:

[3] Note that $rV_{..} + \Sigma_i (r_i - r) V_{i.} = \Sigma_i (r_i V_{i.})$

EXPORTS' GROWTH = GLOBO (1) + COMPO(2) + GEO(3) + PERFO (4)

The final output is a table showing the growth of exports for all available countries broken down by the change due to increasing world trade, the commodity composition of exports, the market distribution of exports and a competitiveness residual. Each of these components can be either positive or negative, but they should all add up to the overall change in exports, whether these are expressed in percentage or other terms.

The residual (4) in this final decomposition must be interpreted with care. In contrast to the first three terms on the right hand side, the PERFO effect is not observed and is not even measurable. Like the Solow residual in economic growth accounting, it can be seen as the "measure of our ignorance" since it captures the cumulative effect of all factors other than GLOBO, COMBO and GEO that could conceivably influence a country's exports. It is possible to interpret it as an indicator of competitiveness, but only in a very broad sense. For example, a natural disaster such as a hurricane could reduce a country's ability to export independently of trends in world trade or the mix of export products and partners. It is possible to view such an event as bringing about a change in the country's competitive position relative to other countries, but this stretches the common understanding of the word to the limit since competitiveness usually implies something akin to productivity. Macroeconomic policy can also affect the "performance" indicator in a counter-intuitive way: in a successful economy, if the economic policy is geared at increasing population welfare by distributing internally the results of growth, the welfare enhancing policy will boost internal demand. As a result, net exports will decrease and the PERFO will –ceteris paribus– turn negative. In fact,

A POSITIVE **PERFO** COMPONENT MERELY REFLECTS THE ABILITY OF A COUNTRY TO INCREASE ITS SHARE IN WORLD EXPORTS BEYOND WHAT CAN BE EXPLAINED BY THE GLOBO, GEO AND COMPO EFFECTS, WHILE A NEGATIVE RESIDUAL REFLECTS AN OPPOSITE SITUATION, WHATEVER THE REASONS.

II. AN EXAMPLE: 6 COUNTRIES, 3 PRODUCTS

This section shows the accounting side of the method, i.e. how each of the 4 effects, GLOBO, COMPO, GEO and PERFO are mechanically calculated, using a sample of 6 countries and 3 product groups

A. COVERAGE AND CALCULATIONS

Considering a sample of 6 countries namely USA, EU27, Japan, Canada, China and the Russian Federation, and 3 products (namely agriculture (AG), fuels and mining (MI) and manufactures (MA)), from time period 2002(Y) to 2007(Y'). Results are analysed from the USA perspective. Let's consider the following total exports data of the USA with the selected partner countries, in 2002 (V) and 2007 (V'):

Table 1a. US' total exports to selected destinations, 2002 and 2007
(mil USD)

2002 (V)							
Destination (j) / Product (i)	Total	EU27	RU	JP	CN	USA	CA
TOTAL	369934	140744	2384	49671	21822	0	155313
AG	37062	9761	625	11744	2899	0	12033
MI	13320	4245	16	1403	1282	0	6374
MA	319552	126738	1743	36524	17641	0	136906
2007 (V')							
Destination (j) / Product (i)	Total	EU27	RU	JP	CN	USA	CA
TOTAL	605543	234616	7311	60696	64586	0	238334
AG	59113	13756	1394	12913	12088	0	18962
MI	45362	15027	95	3831	8023	0	18386
MA	501068	205833	5822	43952	44475	0	200986

Table 1b. Total exports of 6 selected countries, 2002 and 2007
(mil USD, %)

	2002	2007	% change
EU (27)	353530	655293	85%
RU	65185	229487	252%
JP	237083	390453	65%
CN	219182	760011	247%
US	369934	605543	64%
CA	221818	360804	63%
Total above	1466731	3001591	105%

Table 1c. Total exports by selected destinations, 2002 and 2007
(Percentage, %)

Percentage change, % (r)							
Destination (j) / Product (i)	Total	EU27	RU	JP	CN	USA	CA
TOTAL(6)	105%	159%	330%	70%	171%	72%	62%
AG	66%	71%	162%	27%	232%	45%	63%
MI	240%	293%	287%	182%	492%	182%	182%
MA	94%	141%	357%	73%	147%	63%	56%

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

B. INTERPRETATION

Box 1. Calculation of classic shift-share, USA total exports, 2002-2007

BASED ON THE NOTATIONS IN SECTION I, THE FOLLOWING EFFECTS WERE CALCULATED:

TOTAL CHANGE = $V'' - V$
= 605543-369934
= 235609

(1) GLOBO = $r*V$
= 105/100 * 369934 , OR
= (105/100 * 37062) + (105/100 *13320) + (105/100 * 319552)
= 388431

(2) COMPO = $\Sigma_i(r_i - r)V_{i.}$
= (.66-105/100)*37062 + (2.40-105/100)*13320 + (.94-105/100)*319552
= -31623

(3) GEO = $\Sigma_i\Sigma_j(r_{ij} - r_i)V_{ij}$
= (.71-.66)*9761 + (1.62-.66)*625 + ... + (.63-.66)*12033 +
(2.93-2.4)*4245 + (2.87-2.4)*16 + ... + (1.82-2.4)*6374 +
(1.41-.94)*126738 + (3.57-.94)*1743 + ... + (.56-.94)*136906
= 15743

(4) PERFO = $\Sigma_i\Sigma_j(V'_{ij} - V_{ij} - r_{ij}V_{ij})$
= (13756-9761)-(.71*9761)+....+(18962-12033)-(.63*12033) +
= (15027-4245)-(2.93*4245)+...+(18386-6374)-(1.82*6374) +
= (205833-126738)-(1.41*126738)+...+(200986-136906)-.56*136906)
= -136942

235609 = 388431 - 31623 + 15743 - 136942

CONVERTING THESE CONTRIBUTIONS TO SHARE IN TOTAL CHANGE:

TOTAL CHANGE = GLOBO + COMPO + GEO + PERFO

100% = 164.9% - 13.4% + 6.7% – 58.1%

The total change in US exports was due to a potential increase of roughly 165% in the share of total exports supposedly due to the positive total exports behaviour of all 6 countries together. The COMPO gives a total of 13.4% representing share of exports "lost" due to global behaviour of the 3 individual sectors, agriculture, fuels and mining and manufacturing. A 6.7% share of exports increased due to the respective behaviour of the 5 individual partners, and 58% "lost" to due to losses of competitiveness. Hence, by isolating the global, product or sectoral and geographical effect, the results indicate that along with other unknown factors, the United States' domestic economy was not "competitive" enough (or export-oriented enough) to be able to increase its exports in line with other partners, and therefore, lost market shares.

Each of these total effects could also be disaggrated by product group. For instance, of the potential 165% increase in share in total exports expected to be attributed to the GLOBO effect, 142%, (i.e. 105/100*319552), would have been the potential increase in manufactures.

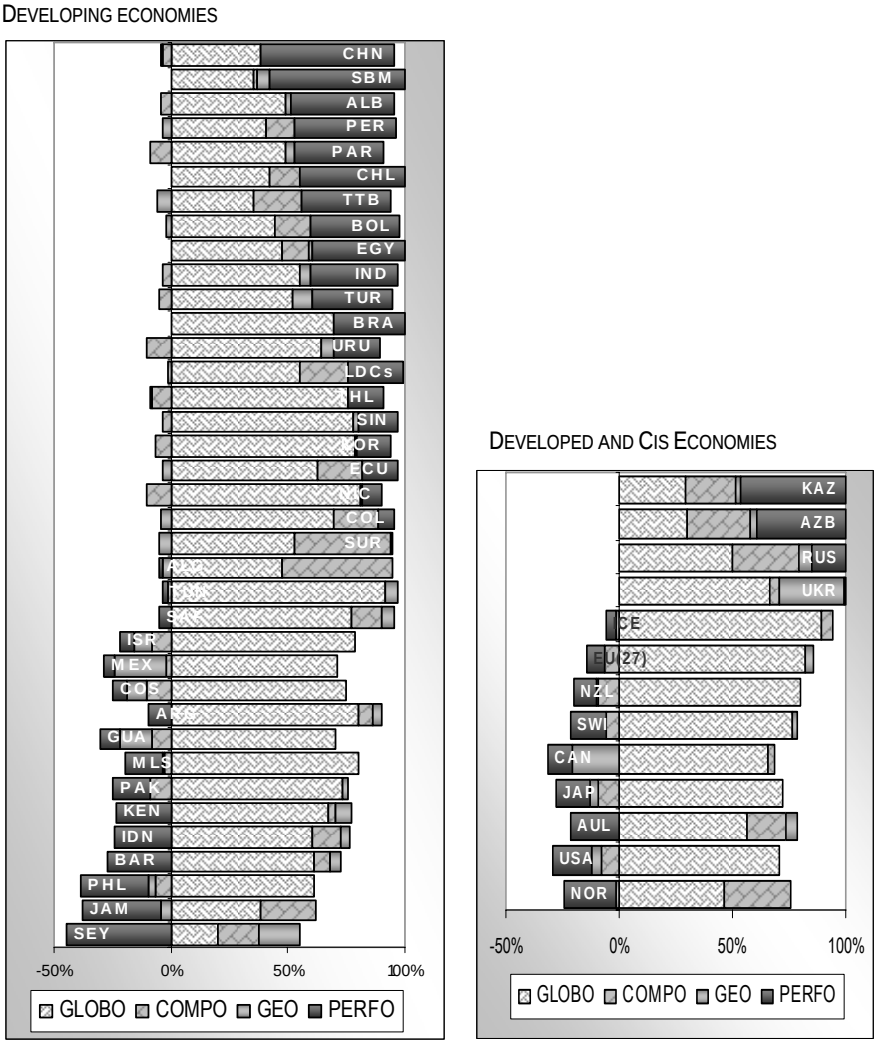
C. LIMITATIONS TO SHIFT-SHARE AND WHAT COULD BE EXPECTED FROM IT

While this method proves useful in that it isolates and approximates changes due to global, sectoral and geographical behaviour in the merchandise trade of an economy between 2 specified periods, this technique is limited in that it says nothing further than assuming that the remaining or "residual" change in trade is attributed to "everything else", assuming this to be none other than the “local” factor (or the PERFO effect), i.e. a measure of the economy's own ability to be competitive and export-oriented given its own domestic economic and policy conditions.

1. ECONOMIES' LEVELS OF DEVELOPMENT NOT REFLECTED

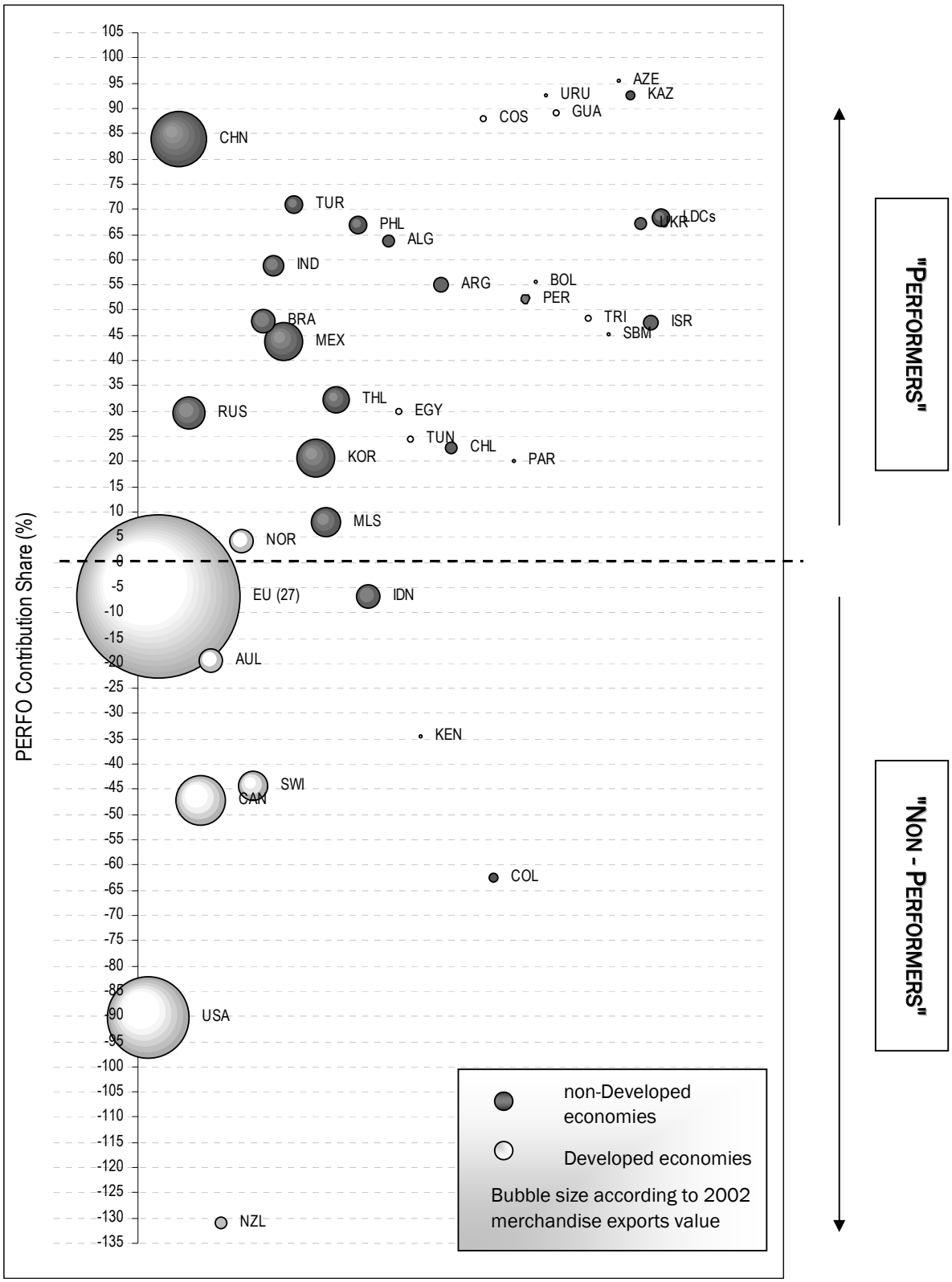
Because SSA is based on changes and does not reflect the economies' levels of development, it cannot be used to compare the relative positions of countries in terms of competitiveness, and only indicates changes in this indicator. For example, it would be logical to expect that developing countries as a group tend to show a positive PERFO indicator, because they are gradually catching up with industrialised countries. Chart 1 below somewhat reflects these assumptions. In 2002-2007, a negative sign or near 0 value is seen for developed countries' performance and a number of developing countries show positive PERFO shares. A more complete picture of how most countries fared in both periods and showing the sizes of their economies can be seen in Charts 2 and 3 further below.

Chart 1. Shift-Share Analysis of Developing, Developed and CIS economies, 2002-2007



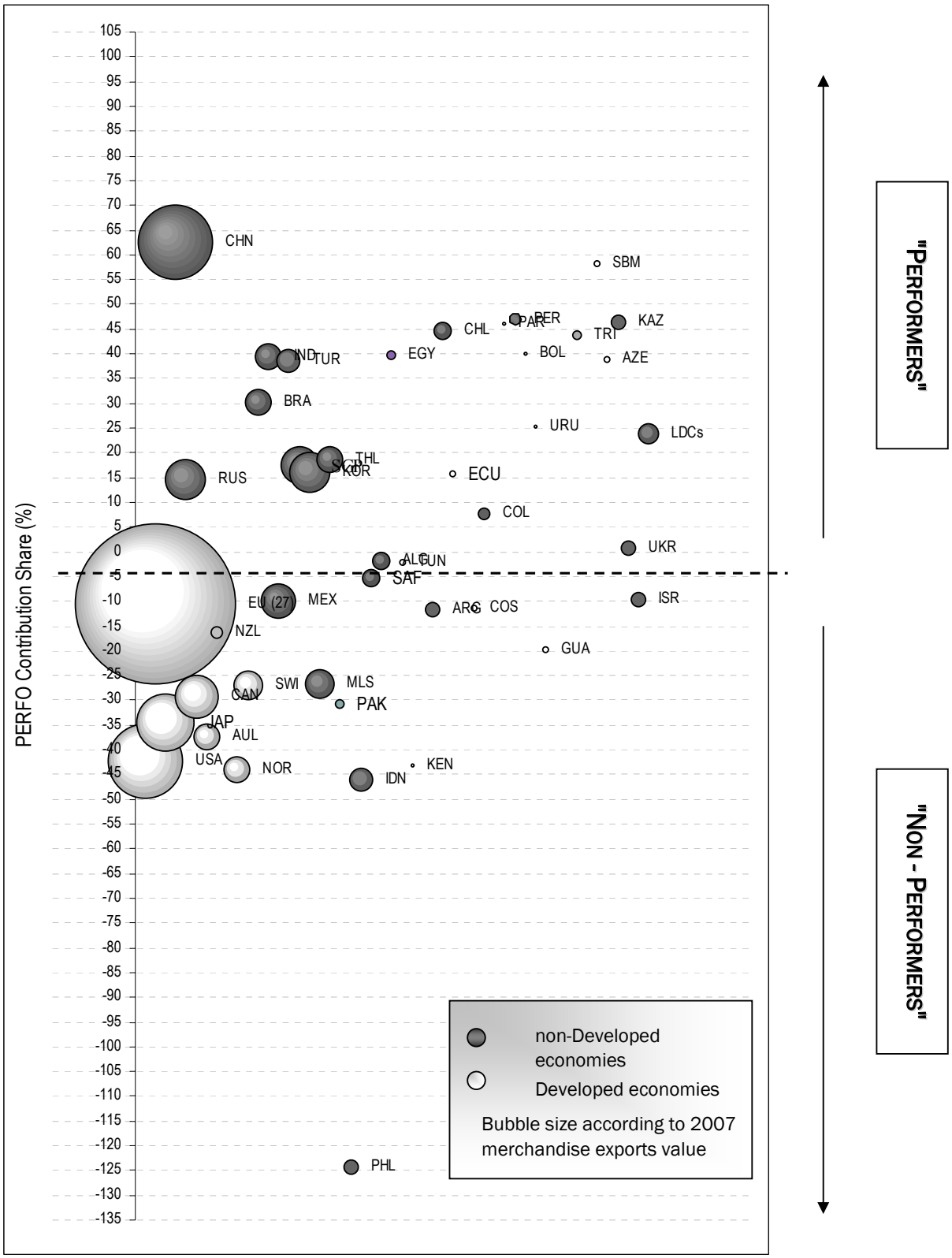
Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Chart 2. Shift-Share Analysis of selected economies, 1996-2002
(Percentage)



Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Chart 3. Shift-Share Analysis of selected economies, 2002-2007
(Percentage)



Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

2. PROCESSING TRADE

Another shortcoming of the method would be that it is based on market shares. This necessarily gives the analyst a mercantilist vision of world trade, i.e. a "zero-sum" game where the one's gains are somebody else's losses. In particular, it would be incorrect to conclude that industrialised countries are losing in productivity and welfare just because their performance indicator is shown to be negative. A possible explanation could be found especially when considering the special case of trade in goods for processing. Part of the increase in developing countries' trade is due to a process of outsourcing and offshoring from firms located in industrialised countries. This process not only boosted North-South trade (i.e., increased South's relative participation in total trade because they started with lower basis), but also improved the productivity and competitiveness of the off-shoring firms. Consequentially, the PERFO indicator will systematically be negative for the industrialsed countries as a group despite gains of competitiveness at the micro-level. Measuring trade in value added, instead of gross commercial value, however, is expected to partially correct this bias[4].

3. THE GLOBO EFFECT

The global effect serves to normalize the rates of change in relation to the world average. Given the way this is calculated in the method, i.e. (GLOBO = Value at Year 1 * "World" total exports' % change), the global effect is logically expected to have a mechanical relationship with the countries' total exports growth rates. In fact, looking further closely at the data, an inverse relationship exists between the GLOBO effect and the countries' total exports growth rates, i.e. THE HIGHER THE COUNTRY'S EXPORT GROWTH RATE, THE SMALLER ITS GLOBO EFFECT. (see Annex II Table A1). In the previous illustration in Box 1 (p.17), US' GLOBO effect is greater than 100% indicating that its exports grew slower than the World average.

4. THE PERFO EFFECT

It also seems logical to think that there should be some kind of inverse relationship between the PERFO effect and the GLOBO effect . In other words, high "Performers" would be expected to have low global contributions. That is, because of its own unique capacity a "Performer" would do well (i.e. to do better than the world average) in increasing its exports regardless of the global behaviour of its trading partners and the industries as a whole. Having a closer look at the exports data, this shows that the high "Performers" happen to be the countries in the upper half of the scale of total export growth rates, the "World" being, as expected, in the middle. In other words, the "Performers" are the "source of the global tide". And in fact, looking further closely at the data, a pattern seems to exist between a country's total exports growth rate and its PERFO effect, i.e. THE HIGHER ABOVE THE WORLD EXPORTS GROWTH RATE, THE HIGHER THE CHANCES OF A POSITIVE PERFO EFFECT (see Annex II Table A2)

5. SENSITIVITY TO DATA ISSUES

Another very important limitation of this method is that results may be misleading if units of analysis have very small numbers, thus producing very large growth rates. The size of a country's economy, for example, is not reflected when SSA is applied. This is particularly an issue when products are very disaggregated. Hence, results derived from growth rates generated from low export values cannot be immediately detected. Efforts have to be taken to have robust, and as much as possible, as

[4] This is a project which is currently underway at WTO Statistics Group to produce this alternative measurement of international trade flows).

little "near-zero" data as possible. Consequently, small values have to be flagged when interpreting the results.

6. SENSITIVITY TO THE ORDER OF CALCULATION OF COMPO AND GEO

A well known problem with the traditional approach to SSA is that the numerical values of the COMPO and GEO effects are not invariant to the order of calculation. In other words, different results are obtained depending on whether the effect of COMPO is removed before GEO or vice versa. Consider the illustration below using China as an example (with the same 6 trading partners as specified previously),

(A) TRADITIONAL ORDER (PRODUCTS ON ROWS, DESTINATIONS/PARTNERS ON COLUMNS):

Table 2a. China's total exports to selected destinations, 2002 and 2007 (mil USD)

2002 (V)							
Destination (j) / Product (i)	Total	EU27	RU	JP	CN	USA	CA
TOTAL	219182	64656	3521	55291	0	91412	4303
AG	12586	2609	441	7066	0	2284	185
MI	6680	1653	71	3617	0	1251	88
MA	199916	60394	3009	44607	0	87877	4029
2007 (V')							
Destination (j) / Product (i)	Total	EU27	RU	JP	CN	USA	CA
TOTAL	760011	299091	28467	123956	0	289149	19349
AG	25375	7222	1202	10297	0	5987	666
MI	20087	7241	420	7130	0	4853	444
MA	714549	284627	26845	106529	0	278309	18239

Table 2b. Total exports by selected destinations, 2002 and 2007 (Percentage change, %)

Percentage change, % (r)							
Destination (j) / Product (i)	Total	EU27	RU	JP	CN	USA	CA
TOTAL(6)	105%	159%	330%	70%	171%	72%	62%
AG	66%	71%	162%	27%	232%	45%	63%
MI	240%	293%	287%	182%	492%	182%	182%
MA	94%	141%	357%	73%	147%	63%	56%

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Using the same way of calculating illustrated previously, the following results were obtained:

$$\text{TOTAL CHANGE (100\%)} = \text{GLOBO} + \text{COMPO} + \text{GEO} + \text{PERFO}$$

$$100\% = 42.6\% - 3.3\% - 1.2\% + 62.0\%$$

(B) CHANGING THE ORDER OF COMPO AND GEO, (I.E. DESTINATIONS ON ROWS, PRODUCTS ON COLUMNS):

Table 3a. China's total exports to selected destinations and by major product, 2002 and 2007 (mil USD)

2002 (V')				
Product (j) / Destination (i)	Total	AG	MI	MA
TOTAL	219182	12586	6680	199916
EU(27)	64656	2609	1653	60394
RU	3521	441	71	3009
JP	55291	7066	3617	44607
CN	0	0	0	0
USA	91412	2284	1251	87877
CA	4303	185	88	4029
2007 (V')				
Product (j) / Destination (i)	Total	AG	MI	MA
TOTAL	760011	25375	20087	714549
EU(27)	299091	7222	7241	284627
RU	28467	1202	420	26845
JP	123956	10297	7130	106529
CN	0	0	0	0
USA	289149	5987	4853	278309
CA	19349	666	444	18239

Table 3b. Total exports of selected major products, 2002 and 2007 (Percentage change, %)

Product (j)	2007 / 2002 (r)			
Destination (i)	Total	AG	MI	MA
TOTAL	105%	66%	240%	94%
EU(27)	159%	71%	293%	141%
RU	330%	162%	287%	357%
JP	70%	27%	182%	73%
CN	171%	232%	492%	147%
USA	72%	45%	182%	63%
CA	62%	63%	182%	56%

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Using the same method of calculating but using switched data on partner and product, the following results were obtained:

Box 2. Calculation of classic shift-share of China total exports in 2002-2007, (transposed order)

USING THE TRANSPOSED DATA, THE FOLLOWING EFFECTS WERE CALCULATED:

TOTAL CHANGE	=	V'' – V
	=	760011-219182
	=	540829
(1) GLOBO	=	r*V
	=	105/100 * 219182 , OR
	=	(105/100 * 64656) + (105/100 * 3521) + ... + (105/100 * 4303)
	=	230141
(2) COMPO	=	$\Sigma_i\Sigma_j(r_{ij} - r_i)V_{ij}$
	=	(.71-1.59)*2609 + (2.93-1.59)*1653 + (1.41-1.59)*60394 + ... + (.63-.62)*185+(1.82-.62)*185+(.56-.62)*4029
	=	-2296 + 2215 -10871+ ... + 2+ 106 - -242
	=	-15844
(3) GEO	=	$\Sigma_i(r_i - r)V_{i.}$
	=	(1.59-105/100)*64656 + (3.30-105/100) * 3521 + ... + (.62-105/100)*4303
	=	34914+7922+... -1850
	=	-8532
(4) PERFO	=	$\Sigma_i\Sigma_j(V'_{ij} - V_{ij} - r_{ij}V_{ij})$
	=	(7222-2609)-(.71*2609)+ (7241-1653)-(2.93*1653)+(284627- 60394) + ... + (666-185)*(.63*185)+(444-88)-(1.82*88)+(18239-4029)-(.56*4029)
	=	2761+745+139077+ ...+ 364+196+11954
	=	335065
540829	=	230141 -15844 - 8532 + 335065

CONVERTING THESE CONTRIBUTIONS TO SHARE IN TOTAL CHANGE:

TOTAL CHANGE	=	GLOBO + COMPO + GEO + PERFO
100%	=	42.6% - 2.9% - 1.6% + 62.0%

The example above shows very slight differences in the COMPO and GEO effect. Nevertheless, the PERFO as well as the GLOBO effect remain the same. Although the numbers may differ slightly depending on the order of calculation, qualitative results tend to be very similar regardless of how they were arrived at, e.g. a large positive or negative GEO, COMPO or PERFO effect tends to remain large and retain its sign in either case, however numbers close to zero are more problematic since they may easily change sign from period to period (i.e., the results are not robust).

More importantly, results are also sensitive to product classification, the level of disaggregation of the data, the number of countries or regions considered and the inclusion or exclusion of intra-trade (for ex. EU-intra trade), but broad qualitative findings tend to be robust across all methods of calculation. Different results can be obtained by changing either the countries concerned, the time period, or the type of shift-share used. Slight variations could result to countries having large positive or negative PERFO contribution shares, for example.

D. REFINEMENTS TO SHIFT-SHARE

The traditional SSA has been progressively enriched to correct shortcomings and cover new fields. Among these additions, the paper will address two of them.

1. NOMINAL OR REAL

A source of difficulty in interpretation using classic shift share is the fact that the above equations are expressed in nominal terms. Using nominal values doesn't take into account commodity price changes that may have affected the total export values, i.e. making comparisons across countries can be difficult when relative prices fluctuate heavily during the period under review. In such a situation, large changes in relative prices can result into large changes in market share, without a clear relationship with economic policy or structural factors affecting countries' respective competitiveness. Such price fluctuations which are mostly beyond the control of national economic policies may distort results. To go around this, total exports values were deflated with IMF world commodity prices, especially in the mining sector where exports may have been significantly affected by prices of crude oil which had risen starting 2002, or by prices of food which had gone up in 2007.

2. CLASSIC SHIFT-SHARE OR DYNAMIC SHIFT-SHARE

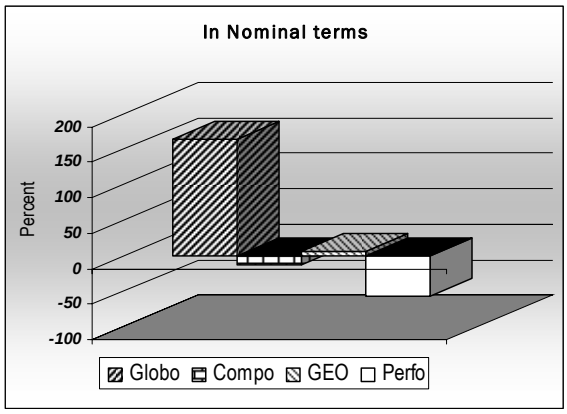
Using dynamic shift-share instead of classic shift-share is also another refinement to SSA. Classic shift-share only takes into account exports values of the start year and the end year, where such end values could also be outliers. The advantage of dynamic shift-share analysis is that it literally is, a sum of all classic shift-share calculations of each pair of adjacent years, hence, taking into account movements in exports values in the in-between years. The disadvantage is that it may be cumbersome and more difficult to interpret. The present analysis opted for a "middle of the road" approach segmenting the time frame into smaller periods.

Illustrated in Chart 4 below are the SSA results for United States' total exports comparing various methodological modifications. The charts show that results can differ depending on the type of SSA used (classic vs dynamic), whether using exports in nominal terms or real terms, using exports from various time-frames (for ex. 1996-2002 or 2002-2007), or using different partner groups (for ex. 6 partner countries or 7 regional partners). Results vary slightly for each pair of scenarios. The most obvious gap in results occurs, however, when using dynamic SSA in total exports in 1996-2002, comparing both nominal and deflated figures. Here we see the PERFO effects to have opposite trends, having a positive sign using deflated figures, and a negative sign using exports in current prices.

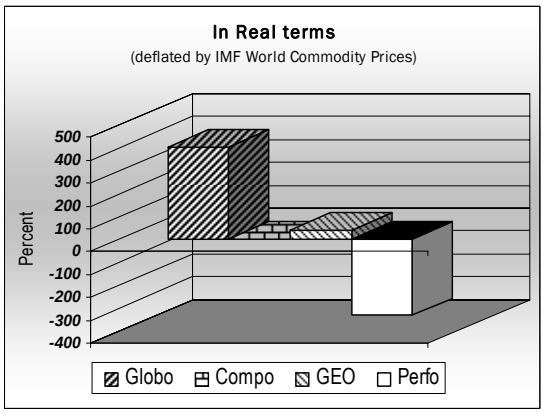
Chart 4. United States' total exports and Shift-Share Analysis, 1996-2007
(Percentage)

USING CLASSIC SHIFT-SHARE, 1996-2002, 6 TRADING PARTNERS

a)

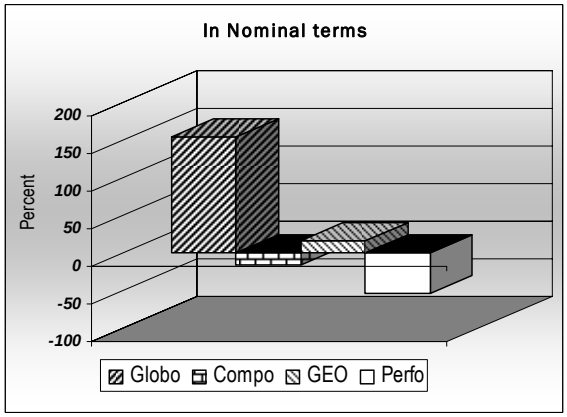


b)

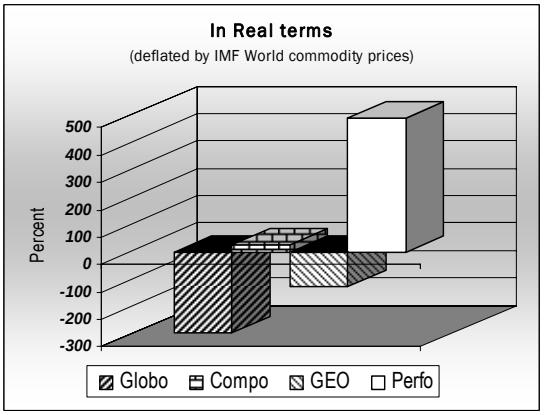


USING DYNAMIC SHIFT-SHARE, 1996-2002, 6 TRADING PARTNERS

c)

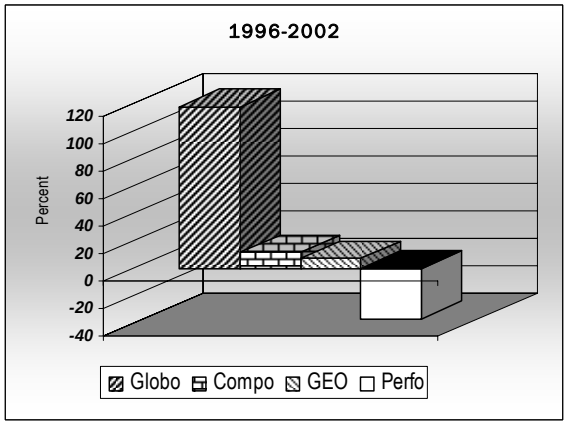


d)

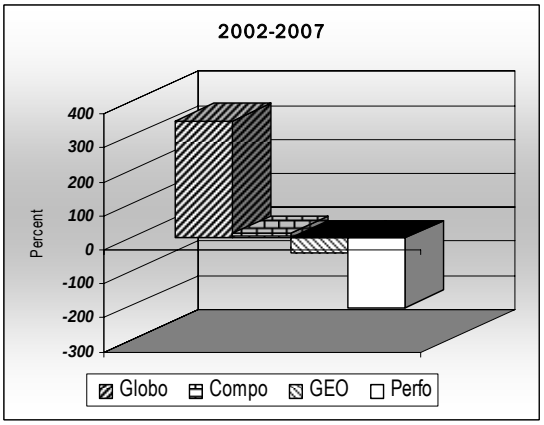


USING CLASSIC SHIFT-SHARE ANALYSIS, NOMINAL TERMS, 7 REGIONAL TRADING PARTNERS

e)



f)



Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

III. USING SHIFT-SHARE TO ANALYSE STRUCTURAL CHANGES IN GLOBAL TRADE: 99 COUNTRIES AND 3 PRODUCTS

This section applies SSA to a selected group of developing and developed economies, least-developed countries (LDCs) and countries in transition. Results give an indicator of these economies' export competitiveness or market access capability during the period under review, taking into consideration the limitations identified in the previous chapter.

A. THE GIVENS: WHEN, WHO, WHAT AND HOW?

WHEN? The study covers one long-run period (1996-2007) covering the post-Uruguay Round years, subdivided into two sub-periods: 1996-2002 and 2002-2007. This 11-year period marks the start of the influx of members of the WTO following its creation in 1995. The earlier sub-period particularly covers a number of world crises. These are: the Asian financial crisis (1997), the Russian "ruble" crisis (1998), Brazilian currency crisis (1999), the IT boom in 2000, Argentina's economic crisis (2001), the attacks on the World Trade Center in the US in September 2001 and a sharp increase in world prices of crude oil starting in 2001. Prior to 1996 was also the collapse of the USSR, creating a period of deep structural crisis for the CIS countries after that.

WHO? In this exercise, SSA was used with respect to the exports of 49 individual countries and the LDCs (50 countries as one reporting group). SSA calculations were done using data from the WTO Secretariat or extracted from the United Nations Comtrade database. Among the 99 countries, developing countries and countries in transition represented 42% of trade while developed countries represented 58% in 2007. The selection of countries was determined by exports data availability and reliability. Grouping all 50 of the LDC countries into 1 reporting group was necessary because exports data for the individual LDC countries is limited and largely estimated. The GEO component in the calculation is based on a further aggregation of trading partners into 7 regions comprising the "WORLD" namely, North America (NA), South and Central America (CSC), Europe (EUR), Commonwealth Independent States (CIS), Africa (AFR), Middle East (ME), and Asia (ASI). The regional partner data used in this study are the estimates regularly published by the WTO Secretariat as part of its merchandise trade network by origin and destination.

WHAT? The product coverage in this study was limited to analysing Agriculture (AG), Fuels and Mining (MI) and Manufactures (MA) . These product groups are defined according to Revision 3 of the Standard International Trade Classifi cation (SITC). In particular, the product groups are defined as follows: Agriculture products (SITC sections 0, 1, 2 and 4 minus divisions 27 and 28) consist of food and raw materials; Fuels and mining products (SITC section 3 and divisions 27, 28, 68) consist of ores and minerals, fuels, and non-ferrous metals; and Manufactures (SITC sections 5, 6, 7, 8 minus division 68 and group 891) consist of iron and steel, chemicals, other semi-manufactures, machinery and transport, textiles, clothing, and other manufactures. In the paper, the term "agricultural exporters" refers to countries who, for a specified period, predominantly exported agriculture products. Similarly, "fuels and mining exporters" and "manufacture exporters" refer to countries who, for a specified period, predominantly exported fuels and mining and manufacture products, respectively.

NOMINAL OR DEFLATED? To have a balanced set of results, the exercise was done using export values in current prices, as well as exports values deflated using world commodity prices. The effects of international changes in world commodity price, particularly in the price of crude oil may bias the results due to their large fluctuation during the period. Hence, to complement the nominal analysis, the same SSA was done using deflated export figures, in particular, using IMF World Commodity Prices of the 3 product groups to deflate nominal values. The analysis, however, is mostly based on the results using nominal values.

CLASSIC OR DYNAMIC? The classical method of SSA was used in this exercise, thus, only taking into account data of the starting and ending years of each period, and hence, not taking into account fluctuations of data that may have occurred in the years in between. Because two subperiods are used, the SSA results on the 1996-2007 period can be checked against the subperiods.

B. THE "COMPETITIVENESS" INDICATOR: THE RESIDUAL ("PERFO")

In this exercise, we focus our interest on the performance "competitiveness" effect as it is the effect that gives us an indication of how much of the change in a given industry is assumed to be due to some unique competitive advantage that the country possesses, i.e. how much of the growth that cannot be explained by the export behaviour of the global economy as a whole, the global trends in each industry covered, or the global behaviour of the various regional partners. It is also the weakest one on methodoligical ground, being a "residual", i.e. a measure of unknown causes.

IDEALLY, THE **SUCCESS INDICATOR** THAT WOULD BE DESIRABLE WHEN APPLYING SSA TO TRADE WOULD BE THAT **A COUNTRY'S MAIN CHANGES IN EXPORTS BE AS A RESULT OF ITS OWN COMPETITIVITY, (I.E. PERFO BEING ITS HIGHEST EFFECT)** AND DUE TO A LESSER EXTENT FROM GLOBAL INFLUENCES OF THE WORLD ECONOMY, THE MIX OF INDUSTRIES IN GENERAL, AND THE RESPECTIVE PERFORMANCE OF ITS TRADING PARTNERS.

1. THE CRITERIA

When was a country considered to be a "Performer"? In mechanical terms, countries whose PERFO effect > 0 were the countries categorized as being the "Performers" of the group. Annex II Table A2 shows a listing of all economies considered sorted by descending PERFO effect. Using this very general criteria (PERFO > 0), however, the table shows a long list of countries having positive PERFO indicators. So the real question is, how can this list be narrowed down to find the bonafide performers in the group? In other words,

WHICH OF THESE COUNTRIES ARE THE "CONFIRMED" PERFORMERS ?

2. NARROWING IT DOWN

A country was initially categorized as a "Performer" when it showed a positive PERFO effect in its shift-share calculation, i.e. PERFO > 0. But because many countries qualified in this criteria, some additional criteria had to be introduced.

In this analysis, the "Performers" were categorized into 2 main groups: the CONSISTENT performers and the OCCASIONAL performers. Among the consistent performers are 3 subgroups: the "CONFIRMED" performers, the "PARTIAL" performers, and the "SLOW" performers. In particular,

"CONSISTENT" performers were countries who were in any one of the 3 categories below, for both 1996-2002 and 2002-2007, and for the combined period of 1996-2007;

"Confirmed" performers were considered to have the following criteria:

(a) PERFO IS > 0;
(b) TOTAL EXPORTS GROWTH RATE IS > TOTAL "WORLD" EXPORTS GROWTH RATE DURING THE PERIOD CONSIDERED;
(c) ITS PERFO EFFECT IS THE MAXIMUM OF ALL THE EFFECTS

(d) THE SECTOR IN WHICH ITS PERFO EFFECT IS AT ITS MAXIMUM IS THE SAME AS ITS MAIN EXPORTED OR PREDOMINANTLY EXPORTED SECTOR

"Partial" performers had the following criteria:
(a) PERFO IS > 0;
(b) TOTAL EXPORTS > "WORLD" (I.E. ALL COUNTRIES) TOTAL EXPORTS GROWTH RATE. BUT;
(c) PERFO EFFECT IS NOT THE MAXIMUM. MAXIMUM SECTOR IS EITHER COVERED BY ANY OF THE ABOVE EFFECTS OR NOT AT ALL.

"Slow" performers had the following criteria:
(a) PERFO is > 0;
(b) TOTAL EXPORTS GROWTH RATE < WORLD EXPORTS GROWTH RATE;

On the other hand,

"OCCASIONAL" performers were countries who were in any one of the 3 categories of performers above (but not always in the same category), for 1996-2002, 2002-2007, and the combined period 1996-2007. (Note: An "OCCASIONAL" would be a better category than a "SLOW" performer).

"NON-PERFORMERS" were simply countries whose PERFO effect < 0. [5]

C. PERFORMERS AND NON-PERFORMERS

1. DEVELOPED VS NON-DEVELOPED COUNTRIES

THE DEVELOPING COUNTRIES AND 2 OIL EXPORTING CIS COUNTRIES SEEM TO HEAD THE LIST AS "PERFORMERS" for 1996-2002, 2002-2007 (see Annex II Tables A3 and A4) and the combined period 1996-2007. In particular, countries showing positive PERFO effects are headed by China, the oil exporters Azerbaijan and Kazakhstan, south-eastern European countries including Turkey, other members of the BRIC (Brazil, Russia, and India), other Asian countries namely South Korea, Thailand and the Philippines, Ukraine, some Latin American countries, and even the LDCs. The developing countries with positive competitive components represented 31% of total trade of the 99 countries.

Interestingly, Asian countries who had suffered from the financial crises during the 1996-2002 period resulted in positive performance components in both subperiods. There were 4 developing countries, on the other hand, which consistently showed negative competitivity components for the selected periods. These were South Africa, Pakistan, Indonesia and Kenya, representing 2% of total trade of the 99 countries considered in the analysis.

MOST DEVELOPED ECONOMIES, ON THE OTHER HAND, FARED BADLY. Except for Iceland, Norway and Canada whose PERFO indicators where positive in at least one period, all others resulted into negative competitivity components for both periods 1996-2002, 2002-2007 and the combined period 1996-2007. These countries accompanied by the 4 non-performing developing economies listed above represented 65% of the trade of all countries included in the analysis.

[5] Henceforth in the paper, performers can also be designated as follows: Consistent Confirmed (CC); Consistent Partial (CP); Consistent Slow (CS); Occasional Confirmed (OC); Occasional Partial (OP), Occasional Slow (OS). Non-performers are designated as Consistent Non-performers (CN) or Occasional Non-performers (ON).

(A) WHY THE NEGATIVE COMPETITIVE NUMBERS FOR DEVELOPED COUNTRIES?

Except for a few developing countries, what might explain the positive performance of developing countries, and the poor performance reflected in the numbers of the developed countries? A first and most important possibility is the logical assumption mentionned in the earlier section, i.e. the "catching up" tendency of developing countries, or the "convergence" between developed and developing countries. Indeed, negative or near-0 competitivity components are seen for developed countries' performance while a number of developing countries show positive PERFO shares. limitations for both subperiods, 1996-2002 and 2002-2007.

The second possible answer is simply that developing country exporters' "capacity to shift" or adapt their markets in order to gain new markets, is much better than that of developed countries. The results could suggest that during these periods, developing countries, by their own productivtiy and resources, fared better in boosting their own economies and making their exports profitable, than did developed countries with their own economies.

Suggesting the opposite, however, for the developed countries is, of course, not necessarily true. And this is supported by the assumption also mentioned earlier in the previous section concerning trade in goods for processing. While trade in developing countries has enjoyed a boost through the outsourcing and hiring of offshore firms by developed countries in developing countries, thus increasing their contribution to world trade, this does not necessarily mean that developed countries' contributions to world trade has not. This would be better measured by taking into consideration only the value added component of trade flows.[6]

As previously mentionned, one aspect that SSA results do not reflect is the level of development of the economies. SSA analyses changes but says nothing on levels of productivity or factor endowment. While developed countries result to negative or even near 0 PERFO levels, they probably still enjoy a greater margin of competitiveness despite smaller increases because they had started from a much higher level of development (i.e. productivity) compared to developing economies. Incidentally, SSA results of developed countries are consistent in that they show PERFO indicators for their manufacturing sectors (where most processing, outsourcing and offshoring trade occurs) to be the least or most negative.

Looking more closely, the manufacture shift-share results of such economies show machinery and transport equipment, particularly the office and telecom product groups for the United States, Japan and Canada to have the most negative or least "competitive" results, while Europe, Australia and New Zealand show the most negative or least results in the remaining manufacture product groups[7]. Below is the data for the United States.

Table 4. United States breakdown shift-share results in Manufactures, 1996-2002, 2002-2007
(Percentage, %)

	1996-2002					2002-2007				
	Globo	Compo	Geo	Perfo	Total	Globo	Compo	Geo	Perfo	Total
Total Manufactures	141	28	21	-67	123	141	-20	-8	-40	72
Iron and steel	2	-1	0	0	1	1	1	-1	0	2
Chemicals	18	11	5	-5	29	21	1	-1	-5	15

[6] Measuring Trade in Value Added in the New Industrial Economy: Statistical Implications, Hubert Escaith, 2008

[7] The product coverage in this study was limited to analysing only agriculture, fuels and mining and manufactures. However, to further investigate this point for developed countries, the product groups were extended for the developed countries to find out where the least increase in exports share were within their manufactures sectors.

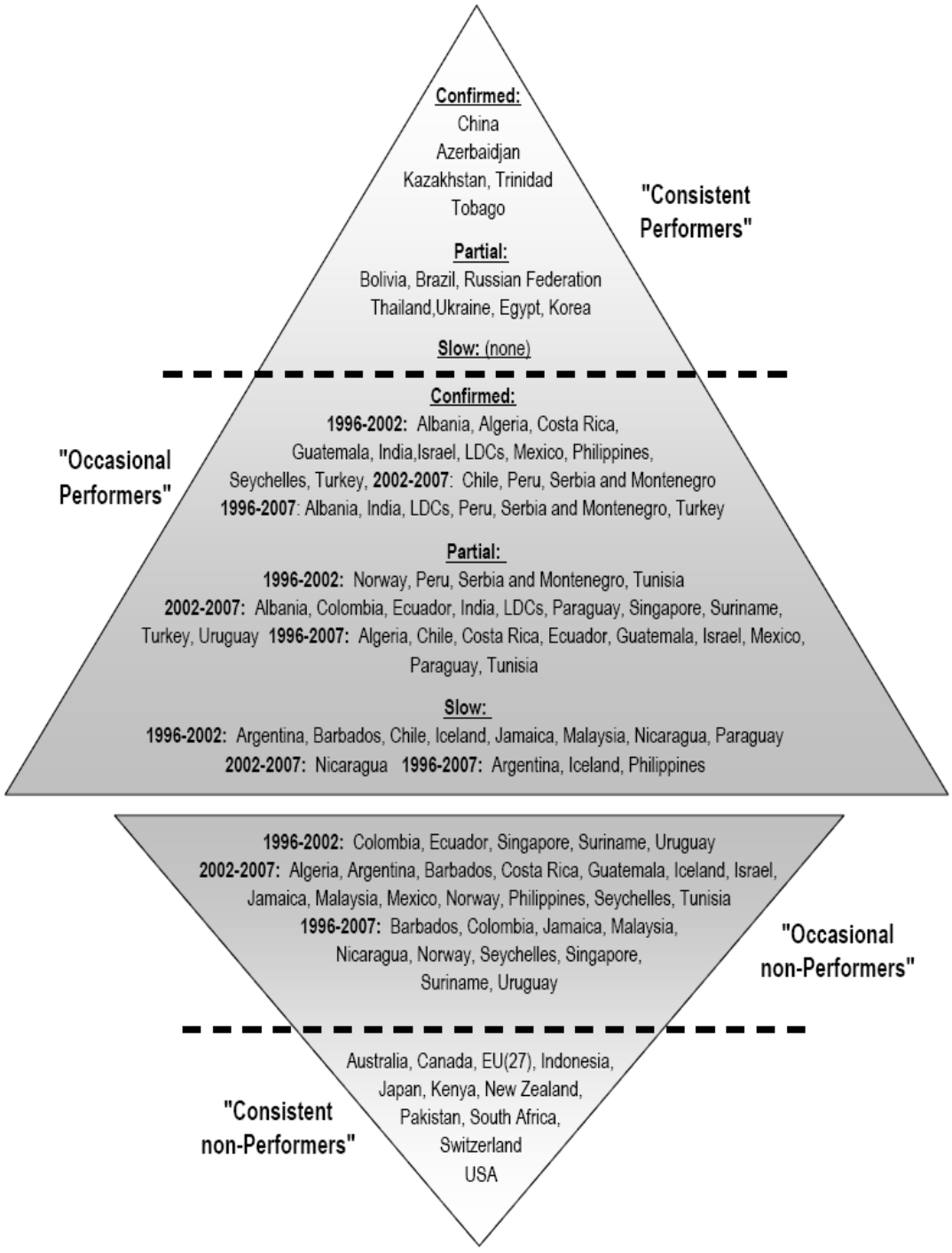
	1996-2002					2002-2007				
	Globo	Compo	Geo	Perfo	Total	Globo	Compo	Geo	Perfo	Total
Pharmaceuticals	2	3	0	7	13	4	0	0	0	4
Other chemicals	16	8	5	-12	17	17	1	-1	-5	11
Other semi-manufactures	10	-3	4	-2	9	10	-2	-2	-2	6
Machinery and transport equipment	89	23	7	-57	62	86	-17	-4	-25	40
Office and telecom equipment	30	20	-3	-42	6	27	-10	1	-13	5
EDP and office equipment	13	7	-2	-27	-9	10	-4	0	-4	1
Telecommunications equipment	6	4	-1	-4	5	6	-1	0	-3	3
Integrated circuits	11	9	0	-10	10	11	-5	0	-5	1
Transport equipment	28	4	8	-5	35	30	-7	-3	-3	18
Automotive products	16	8	8	-14	17	17	-4	-4	1	9
Other transport equipment	12	-3	1	9	18	13	-3	1	-3	9
Other machinery	31	-2	1	-10	20	29	-1	-1	-10	17
Textiles	2	-2	3	1	4	3	-1	0	-1	0
Clothing	2	0	0	-4	-2	1	-1	0	-1	0
Other manufactures	17	0	2	1	20	18	-2	0	-6	10
Personal and household goods	1	0	0	-1	1	1	0	0	0	0
Scientific and controlling instruments	6	0	0	5	11	7	1	0	-5	4
Miscellaneous manufactures	10	0	1	-3	8	10	-2	-1	-1	5

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

2. DEVELOPING ECONOMIES AND ECONOMIES IN TRANSITION

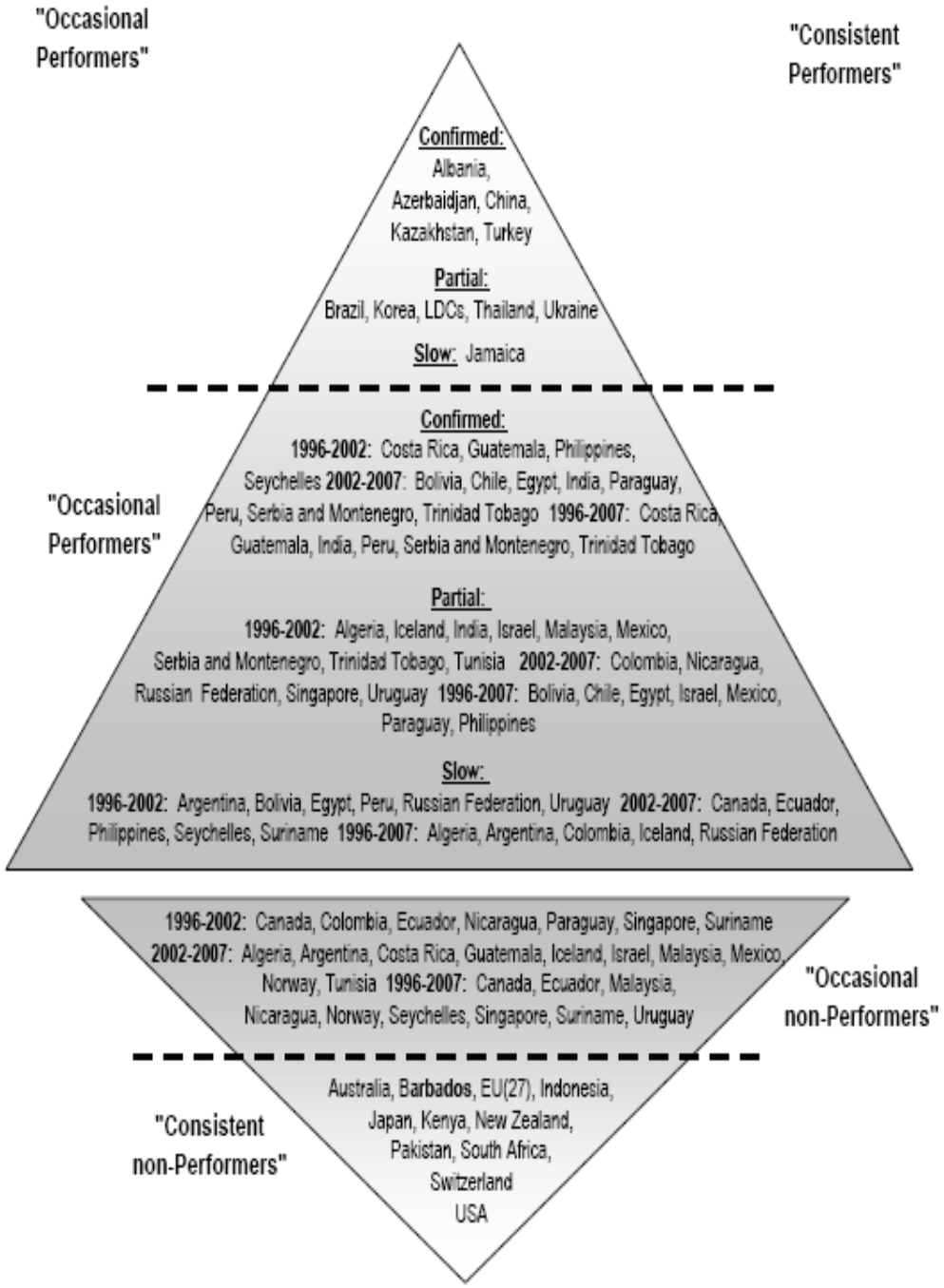
Using the more specific criteria for "Performers" mentionned previously, a complete list of all performers, consistent and occasional as well as resulting non-performers, using current prices as well as constant 2000 prices are illustrated in Diagram 2 and 3 below. Their listing of contribution shares and corresponding sectors to the change in their total exports are in Annex II Tables A5 and A6.

Diagram 2. Shift-Share Analysis: Performers and non-Performers, 1996-2007 (using current prices)



Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Diagram 3. Shift-Share Analysis: Performers and non-Performers, 1996-2007 (using constant 2000 prices)



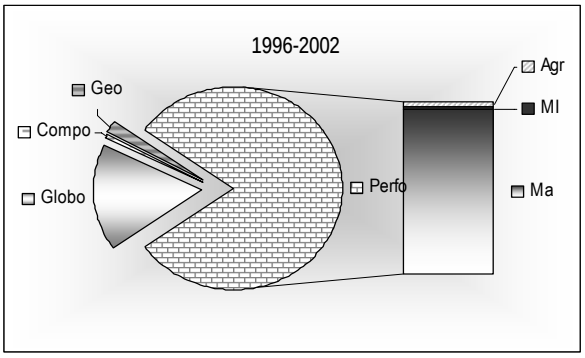
Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

(A) CHINA, A CONFIRMED PERFORMER

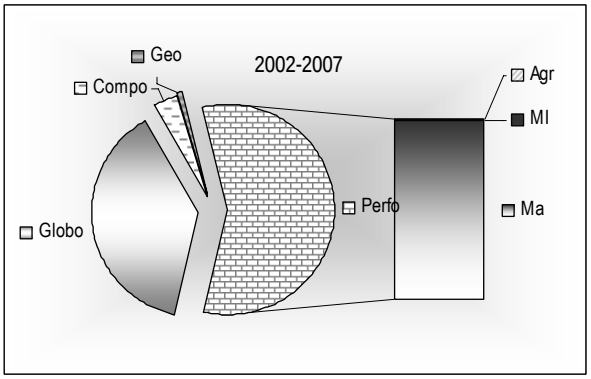
China's shift-share results show that its increase in exports is significantly attributed to its own competitiveness (Perfo = 84%, against all other effects, 16% for 1996-2002 and 63% and 27% respectively for 2002-2007). Results also indicate that the increase in total exports in both periods is mostly visible in its main exported product, manufactures. In Chart 5 below, notice also how the contribution share of the GLOBO effect almost increases by half in the period of 2002-2007.

Chart 5. China's Shift-Share Analysis of total exports, 1996-2002, 2002-2007
(Percentage, Total change=100%)

a)



b)



Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Table 5. Evolution of China's total exports, 1996-2007
(Percentage share)

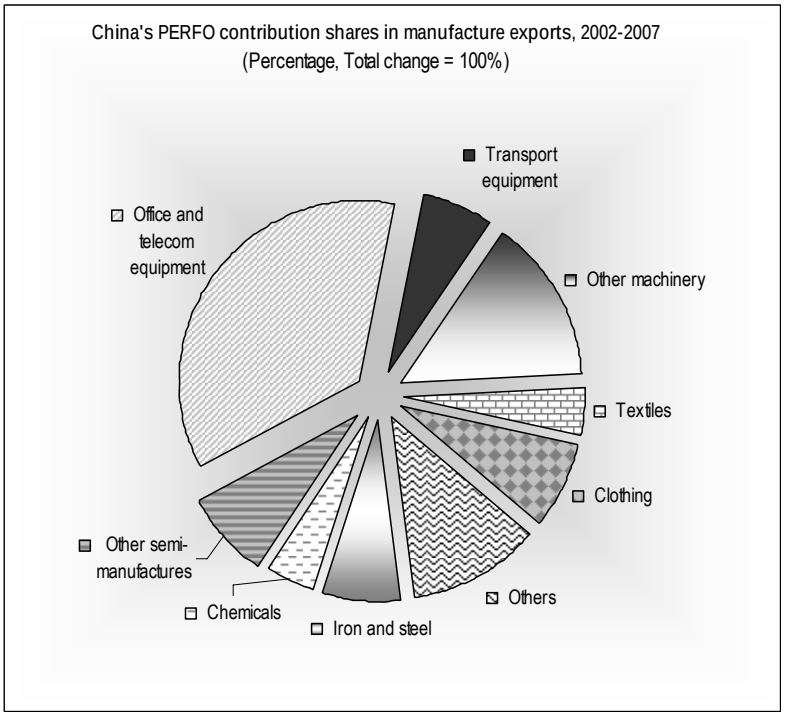
China	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Agriculture	10	9	8	7	7	6	6	5	4	4	3	3
Food	8	7	7	6	5	5	5	4	4	3	3	3
Raw materials	2	1	1	1	1	1	1	1	1	1	0	0
Fuels and mining products	6	6	5	4	5	5	4	4	4	4	4	3
Ores and minerals	1	1	1	1	0	0	0	0	0	0	0	0
Fuels	4	4	3	2	3	3	3	3	2	2	2	2
Non-ferrous metals	1	1	1	1	1	1	1	1	2	1	2	2
Manufactures	84	85	87	88	88	89	90	91	91	92	92	93
Iron and steel	2	2	2	1	2	1	1	1	2	3	3	4
Chemicals	6	5	5	5	5	5	5	4	4	5	5	5
Other semi-manufactures	7	7	7	7	7	8	8	7	7	8	8	8
Machinery and transport	22	22	26	28	33	36	39	43	45	46	47	47
Textiles	8	8	7	7	6	6	6	6	6	5	5	5

China	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Clothing	17	17	16	15	14	14	13	12	10	10	10	9
Other manufactures	23	23	24	24	20	19	18	17	16	16	15	15
Residual	0	0	0	0	0	0	0	0	0	0	0	0
Total merchandise exports	100	100	100	100	100	100	100	100	100	100	100	100

Source: Authors' calculation based on WTO Statistics.

In addition, the table above shows China's share of the manufacturing sector to have grown from 84% to 93% since 1996. This strong performance is predominantly due to trade in goods for processing, offshored by firms located in industrialised countries. SSA reflects a little bit of this when disaggregating [8] the manufactured products for China (see Chart 5c) . In this chart, a relatively large portion of the positive "shifting" of total exports happens to be in the Office and Telecommunication products where China leads many developing countries, especially, in the assembly and processing of such products.

Chart 5c. China's Shift-Share Analysis of manufacture exports, 2002-2007
(Percentage, Total change=100%)



Source: Authors' calculation based on WTO Statistics.

(B) AZERBAIJAN, KAZAKHSTAN

Azerbaijan and Kazakhstan also appear to be "CONFIRMED" performers in the energy sector, using both current prices as well as constant prices. It should be recalled from an earlier section that the periods considered in the study marked a period of structural re-building for the CIS countries. Rising

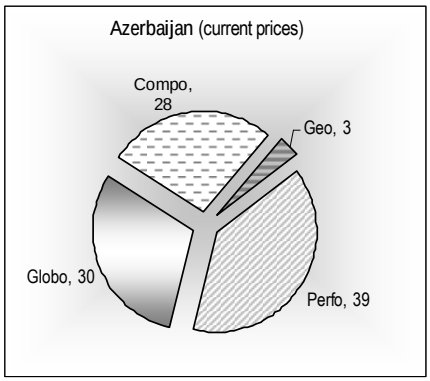
[8] The product coverage in this study was limited to analysing only agriculture, fuels and mining and manufactures. However, as China engages significantly in processing trade which is primarily in manufactures, the analysis was extended to find out where the significant shift in trade is within the manufactures exports of China.

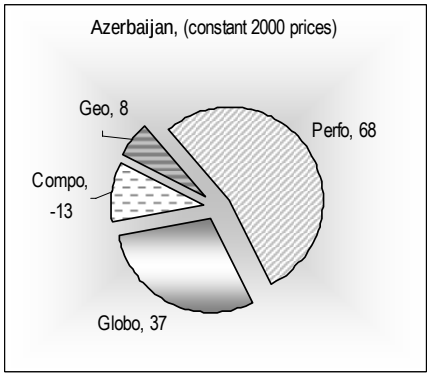
oil prices also marked the 2002-2007 period which could be another reason for high export values for these countries. The high increase in exports from one year to the other can be attributed to price effects.

In order to isolate this effect, export values were deflated using world commodity price changes in fuels. SSA results, nevertheless, show positive and high performance indicators (PERFO) for both these countries, indicating that the recovery after the collapse of the former Soviet Union is still at work. Chart 6 below shows SSA results of CIS countries.

Chart 6. CIS oil exporters ' Shift-Share Analysis, 2002-2007, current and constant prices
(Percentage)

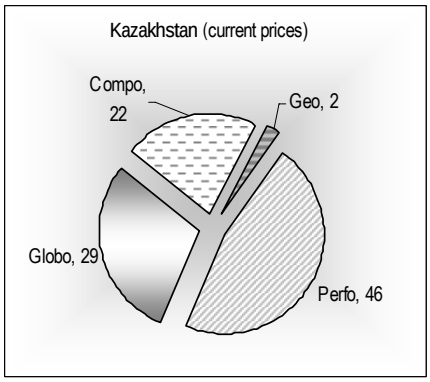
a)

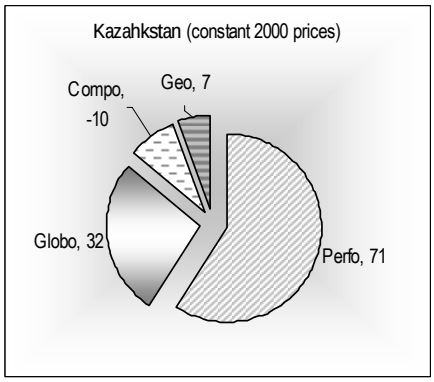




b)

c)





d)

Source: Authors' calculation based on WTO Statistics.
Note: Negative effects are represented by their absolute values.

As mentioned previously, a limitation of SSA is that it cannot give an explanation behind the resulting performance effect, except that it is neither attributed to the global export behaviour, nor the individual sectoral behaviour, nor the individual partner behaviour. One can only suspect that as might also be the case for some performers like Bolivia and commodity-oriented LDCs, these countries have benefited from the boom in commodity prices by attracting more FDI. Hence, they appear as winners at nominal prices as well as at constant prices as they were able to increase their volume production and international market share.

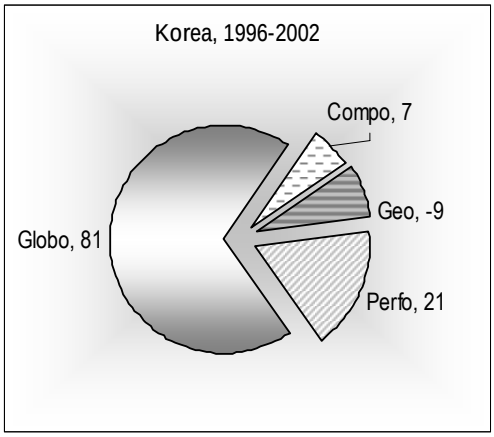
(C) KOREA AND THAILAND

These two countries along with Indonesia were hit the hardest by the Asian financial crises in 1998-1999. Yet in the 1996-2002 period, they resulted to have positive performance components in the manufactures sector. Compared to their exports in 1996, Korea and Thailand increased their total

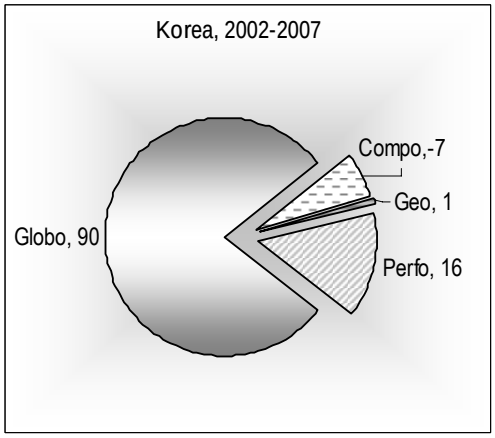
exports in 2002 by 25% and 22%, respectively, higher but not far from the global rate of 20%. (See Annex II Tables A3 and A4). The same trend was seen for 2002-2007 and the combined period 1996-2007. Chart 7 below shows their SSA results.

Chart 7. Korea's and Thailand's Shift-Share Analysis of change in total exports, 1996-2002, 2002-2007 (using current prices)
(Percentage)

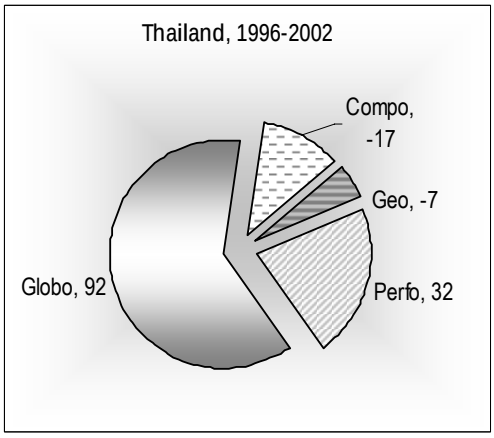
a)



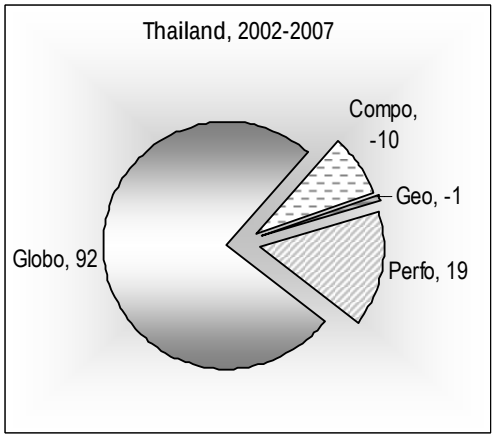
b)



c)



d)



Source: Authors' calculation based on WTO Statistics.
Note: Negative effects are represented by their absolute values.

(D) INDIA AND THE LEAST DEVELOPED COUNTRIES: THE OCCASIONALS

India and the Least Developed Countries were categorized as "Occasional" performers. They were Confirmed Performers in the 1996-2002 period but became "Partial" Performers in 2002-2007. They were "Confirmed" performers in the first period because both their PERFO effects had contributed the most to the increase in their total exports, especially in their main exported product groups (Manufactures for India, and fuels and mining for LDCs).

In the 2002-2007 period, however, their GLOBO effects became higher than their PERFO effects. For the LDCs, the GLOBO effect was the largest contributor for its increase in its main exported product group, fuels and mining. In the case of India, the GLOBO effect was also the largest

contributor for its increase in its main exported product group, manufactures. Its PERFO effect, however, was in a sector that was not its main exported sector (fuels and mining).

(E) OTHER PERFORMERS

Bolivia and Brazil were also consistent Partial Performers since their increase in total exports, especially their main exported product groups, were mostly as a result of the global effects. In 1996-2002, however, their PERFO or competitivity effects indicate that they were successful in being competitive in Agriculture (not their main exported product), and thus being able to gain exports by "shifting" to this sector. (see Annex II Table A5)

Egypt's main exported product group in 1996-2002 was manufactures and its change its total export seemed to have been 30% attributed to its competitiveness or capacity to "shift its exports share" in this sector. The effect with the most contributing share to its change in total exports, however, seems to be the GLOBO effect , which was mostly due to increase in exports in the fuels and mining sector. The same trend also occurred in 2002-2007.

Using current prices, Jamaica turned out to be a "slow" performer in 1996-2002 period because while it exhibited a high performance indicator in manufactures which is not its main exported sector, it ranked as one of the "slower than average" exporters of the group. In 2002-2007, however, its overall PERFO effect turned negative. Most of the rest of the developing countries turned out to be "Occasional" Performers.

3. THE NON-PERFORMERS: INDONESIA, PAKISTAN, SOUTH AFRICA AND KENYA

Along with the consistent performers were also consistent non-performers, 4 of which were developing countries. These countries were manufacture exporters Indonesia, Pakistan and South Africa, and agriculture exporter, Kenya. SSA results show that their largest contributing effect in their increase their total exports was the GLOBO effect, most especially in their respective main exported products.

It is interesting to note that while Korea and Thailand showed positive performance indicators in manufactures despite the Asian crisis in 1998-1999, Indonesia did not. Indonesia fell negative in the PERFO effect due to a negative change in the mining sector in 1996-2002 and in both mining and manufactures in 2002-2007. Korea and Thailand, on the other hand, showed both positive change in mining and manufactures for both periods. As for Kenya, according to shift-share results, it had "lost" market share in the agriculture sector and then to the mining sector in 1996-2002 and 2002-2007 respectively.

All performers and non-performers, consistent as well as occasional, confirmed, partial or slow for periods 1996-2002 and 2002-2007 are listed in Annex II Tables A5 and A6.

4. THE PERFO EFFECT, BY SECTORS

For both periods 1996-2002 and 2002-2007, PERFO effects of all the countries show to have mostly increased exports in the manufactures sector, then in fuels and mining, and the least increase in the agriculture sector. (Annex II Tables A7 and A8 contain figures related to this section).

(A) 1996-2002: AGRICULTURE EXPORTERS DIVERSIFYING INTO OTHER SECTORS

An important point to understand SSA results is that it focuses on changes rather than levels. For example, a country specializing in agricultural exports, may nevertheless gain in performance because it was able to diversify into other natural resource type of exports (i.e. minerals or fuels), even if they remain minor exports. In this study, overall PERFO effects of agriculture exporters for this period showed to have been primarily concentrated on the manufactures and fuels and mining products sectors, and not the agriculture sector.

A peculiar observation, however, lies in 3 of these countries i.e. Nicaragua, Uruguay and Paraguay. Their PERFO effects show to have been primarily due to an increase in manufactures but seem to be inconsistent with their actual shares in manufactures for the period. In particular, their manufactures' share had either gone down in 2002 or had stayed at the same level. Indeed, the above-mentionned countries happen to fall under the "Occasional Slow" (OS) performers category. In other words, their total and agriculture exports grew slower than the World rate, as well as slower than the more "dynamic" developing countries in this sector such as Egypt, Russia, China and Brazil. In general, however, 1996-2002 was, in fact, a period of decline for world agriculture exports where the value of exports had declined by 3%.

Fuels and mining exporters also showed to have gained trade in their main sector through their export competitivity, during this period. For South America were Jamaica and Trinidad Tobago, Norway for Europe, the 3 CIS oil exporters Azerbaijan, Kazakhstan and Russia, and Algeria, Seychelles, and the LDCs. For the above countries, reported shares of fuel and mining products for this period had indeed increased from 1996-2002.

The manufacture exporters, on the other hand, showed to have gained trade primarily in manufactures, during this period. The "performing" exporters for this period were lead by Mexico for North America, Barbados, Guatemala, Costa Rica and Brazil for South America, southeastern European countries Albania, Turkey and Serbia and Montenegro for Europe, China, Philippines, Indonesia, Thailand, Korea and Malaysia for Asia, as well as Ukraine, Israel, and Egypt and Tunisia for the rest of the world. Except for Barbados and Brazil, these countries all showed their shares in manufactures to have increased from 1996-2002.

Under the same group, the "losers" were USA and Canada for North America, EU(27) and Switzerland for Europe, South Africa, and Pakistan, Japan and Singapore for Asia. Oddly, except for Switzerland and Japan, most of these "non-performing" manufacture exporters showed their share in manufactures to have, in fact, increased from 1996-2002. Except for Canada, their rate of change in manufacture exports were also lower than the world rate of 23%. This observation, however, is consistent with the SSA trend that most of the developed countries were mostly affected by the GLOBO effect, especially in the sector of manufactures. Colombia and Indonesia showed to have increased their share in manufacture exports but lost export shares in the fuels and mining sector. (See Annex II Table A3 for GLOBO effects).

(B) 2002-2007: PERFO EFFECTS HIGHEST IN THE PREDOMINANTLY EXPORTED SECTORS

Among the performers, South American agriculture exporters Paraguay, Uruguay and Nicaragua show positive PERFO effects primarily attributed to agriculture. This observation also seems consistent with their share of agriculture in their exports for 2002 and 2007. Other agriculture exporters had negative overall PERFO effects, but in fact show positive PERFO effects attributed to agriculture. These countries were Argentina, New Zealand, Kenya and Seychelles.

For fuels and mining exporters, among the "performers" were Bolivia, Peru, Chile, Trinidad Tobago and Ecuador for South America, as well as the 3 CIS exporters, Azerbaijan, Kazakhstan and Russia, as well as Egypt and the LDCs. Except for Azerbaijan, whose share in fuels actually went down by

2% in 2007, these countries' reported share in fuels and mining products had increased from 2002 to 2007.

Among manufacture exporters, Brazil and Colombia showed positive PERFO effects primarily in manufactures. An odd observation about Brazil's results, however, is that its share in total of manufactures, dropped in manufactures in 2007 but its mining sector to which it had registered minimum but positive PERFO effects was the sector whose share in total trade had increased.

For Europe, southeastern European countries Albania, Serbia and Montenegro and Turkey continued to show positive PERFO effects. Ukraine was positive for the CIS countries, and so was South Africa for Africa. For Asia, China continued to be the frontrunner followed by India, Thailand and Korea. Singapore which showed negative PERFO results for the 1996-2002 period, this time showed positive PERFO effects. Its share in manufactures, however, does not show any increase from 2002 to 2007. Its fuels and mining sector was the sector that actually increased, also showing a positive PERFO effect.

Non-performing manufacture exporters, United States, Canada, the European Union and Switzerland, among others, continue to have lost shares in manufacture exports in this period according to the results. Consistently, their GLOBO effect had the largest contribution share in their change in total exports. (See Annex II Table A4 for GLOBO effects).

D. THE OTHER EFFECTS

1. GEOGRAPHICAL EFFECT (GEO)

The geographical effect represents that part of the total change in exports which would have been due to the importing behaviour of the various regional partners at the global level.

In this exercise, the total geographical effect (GEO) is broken down into the effects of the 7 main regions, i.e. NA, CSC, EUR, CIS, AFR, MEA and Asia. Effects attributed to each of these regions gives an indication of which region total GEO effect is concentrated on. To see a listing of all countries and their GEO effects broken down by region and sector, see Annex II Table A9 for 1996-2002 and Annex II Table A10 for 2002-2007.

When analysing the GEO effect, the following questions were asked:

a. In what sectors did most countries benefit from the geographical effect?
b. Do these countries fall under faster growing exporters of the group or slow growing exporters of the group?
c. Was there a region with whom countries predominantly traded with in the time periods considered (i.e. 1996-2002, 2002-2007, 1996-2007)
d. In what sectors did these countries have the highest regional effect and with whom? Were these sectors also their predominantly exported sectors? If not, were these also sectors for which the country had a the highest or positive PERFO indicator?

(A) 1996-2002: A GENERAL SHIFT OF EXPORTS TOWARDS NORTH AMERICA

According to resulting GEO effects of countries in the analysis, almost all countries and the LDCs had indicated that the regions to which an increase in exports had been mostly due to was the Americas, more particularly, NA. In Annex II Table A9, note that most grey cells representing regions with the maximum contribution share in the GEO effect fall under NA and CSC. Moreover, the contribution shares coming from these regions also indicate that the increases in exports fall under the countries' main exported product group.

Eight countries, 5 of which were from South and Central America had benefitted from the strong import demand from North America for agriculture products. In manufactures, 26 countries including 6 of the underperforming developed countries, the BRIC, and the 3 underperforming developing countries Kenya, Pakistan and Indonesia had also benefitted from a strong demand from NA. In the mining sector, 8 countries including the LDC group and 5 South and Central American countries benefitted from a strong import demand in the fuels and mining sector from NA. Likewise, the LDCs and 3 of the South American countries namely Colombia, Trinidad and Suriname showed positive GEO effects.

8 countries did not show their maximum GEO effect to be in NA. Four South American countries, Barbados, Paraguay, Nicaragua and Uruguay show a maximum increase in their exports by "shifting" export shares to their own region. Kenya shows the same by "shifting" to Africa, Jamaica to Europe, and both Azerbaijan and Ukraine to the Middle East.

(B) 2002-2007: A SHIFT AWAY FROM NORTH AMERICA AND A PERIOD OF MORE INTRA-TRADE

Unlike 1996-2002, 2002-2007 exhibits a general shifting of exports away from NA. In Annex II Table A10, note that most grey cells fall under regions except NA. Intra-trade within regions as well as proximity seem to be the reasons for increases in total exports for countries who had benefitted from this effect.

Countries who mostly shifted export shares to ASI were also Asian countries, (i.e. Australia, Indonesia and Korea, and Singapore) in both mining and manufacture products. Australia and Indonesia showed increases in market share in the mining sector while Korea and Singapore, showed increases in exports share in their main exported product group, manufactures.

Countries who mostly shifted export shares to CSC were also from South America. The increase represented mostly manufactures except for Paraguay which exported agriculture products. In Europe, Switzerland and Albania increased total exports especially in their main exported sector, manufactures, by shifting export shares to Europe. Ukraine and Russia increased exports by shifting export shares of manufactures to fellow CIS countries as well as neighboring EUR.

In Africa, Kenya, Tunisia and South Africa, all non-performers, showed to have shifted their manufacture export shares to AFR. Imports from the MEA of both manufactures and fuels and mining products also resulted to increases in total exports of neighboring countries India, Pakistan and Egypt (manufactures) as well as Azerbaijan and Kazakhstan (fuels and mining products).

(C) THE GEO EFFECT: NOT A KEY DRIVER BUT NEVERTHELESS AN INFLUENCE IN THE INCREASE OF COUNTRIES' TOTAL EXPORTS

Out of the 23 countries in 1996-2002 which showed positive GEO effects, 17 of them showed that the product groups with the highest GEO effect was also their main exported product group. This, on the other hand, was no longer the case in 2002-2007. Almost half of those with positive GEO effects showed the increase in exports to be in sectors other than their predominant exported sector. For instance, agriculture exporters Seychelles, Kenya, Uruguay, Argentina and Nicaragua exhibited positive GEO sectors in both mining and manufacture products. Asian manufacture exporters Indonesia, Pakistan, Singapore and Korea exhibited increases in their exports in mining products. Another manufacture exporter Brazil showed increases in exports to due shifts to agriculture. Consistent performers and fuels exporters Azerbaijan and Kazakhstan showed increases in total exports due to shifts in exports of manufactures.

2. COMMODITY EFFECT (COMPO)

The sectoral or industry effect represents that part of total change in exports which would have been due to the growth of each industry or sector at the global level.

In analysing the product or sectoral effect, a few questions were asked:

a. Which sectors expanded at the global level?
b. Which countries benefitted from this expansion?
c. Among the countries who benefitted from the global tide, which actually did some expansion on their own?, and finally,
d. From this same set of benefitting countries, who were the "slow" performers?

(A) LIKE THE GEO EFFECT, THE COMPO EFFECT SHOWS TO BE A "SECONDARY" FACTOR IN THE INCREASE OF COUNTRIES' TOTAL EXPORTS.

Out of the 49 reporting countries and LDC group, 21 of them show to have increased their total exports as a result of the import demand in the individual sectors agriculture, fuels and mining, and manufactures, i.e. the COMPO effect. Countries in this list include quite a number of "performers" (17) including the consistent confirmed performers, and a few "non-performers" (4). Moreover, except for a few cases, countries showing positive COMPO effects showed the effect to be mostly in their predominantly exported sectors

(B) 1996-2002 : MARKET SHARES SHIFTING AWAY FROM AGRICULTURE

The 1996-2002 period is marked by a notable loss of exports share of many countries in the agriculture sector. In particular, out of the 33 countries showing COMPO effects attributable to agriculture, 29 showed negative effects. This is supported by the negative growth of the value of World agriculture exports of 2002 compared to 1996.

COMPO effects attributed to the manufacture and fuel and mining exports exports show mostly positive effects. In the case of the LDCs which predominantly exports mining products, overall COMPO effect is negative. This overall COMPO effect , however, is largely pulled down by loss of exports in the agricultural products. (see agriculture PERFO effects in Annex II Table A11).

Among the agriculture exports, 5 South American countries exceptionally showed to have positive PERFO effects in agriculture. Only 2 of them, however, showed that their actual share of agriculture products had increased from 1996 to 2002.

(C) 2002-2007: COUNTRIES GAINED EXPORT SHARES BECAUSE OF THE "OIL TIDE" BUT LOST IN MANUFACTURES AND AGRICULTURE

2002-2007 period, however, marked a period where COMPO effects were positive only in the fuels and mining sector. (see grey cells in Annex II Table A12). This is supported by the fact that world exports of fuels and mining exports of the increased twice as fast as total exports, contrary to the 1996-2002 period where fuels and mining only grew 7% faster than total exports. This is also a period where commodity prices of oil after a negative change of 14.7% in 2001, had been constantly increasing starting 2002.

(D) OIL EXPORTERS AND NON-OIL EXPORTERS ALIKE SHOWED TO HAVE BENEFITTED FROM STRONG FUEL IMPORT DEMAND

Positive COMPO effects were only attributable to the fuels and mining sector. And among those countries with positive effects, half did not show to be predominant oil exporters. For example, Kenya and Argentina which predominantly exported agriculture, shows to have its COMPO effect to the fuels and mining sector. Non-performers Indonesia, Canada, and South Africa, showed to have increased their exports due to the mining tide, even if their predominantly exported products were in manufactures.

Among the oil exporters, confirmed performers Azerbaijan, Kazakhstan, Trinindad Tobago as well as partial performers Russia, Bolivia and Egypt show to have part of their increase in total exports to have been due to this strong import demand for oil. This was also true for occasional performers like the LDCs, Chile, Ecuador, Peru as well as non-performers Norway, Algeria and Australia.

A complete list of countries and their COMPO effect is in Annex II Tables A11 and A12.

IV. CONCLUSIONS

After applying Shift Share Analysis to the 11-year Post-Uruguay Round period, the following conclusions can be made.

The 11-year period under review marked a liberalizing and recovery phase for the developing economies and economies in transition. This was a period when a number of developing countries were striving to adopt export-led growth strategies, open their markets and fulfill the domestic policy, legal and institutional reform required to be eligible for structural loans granted by multilateral or regional development banks, or to become members of the WTO after its establishment in 1995. Twenty five countries acceded to the WTO since 1 January 1995, of which 14 were developing countries, 4 from the CIS, and 3 LDCs. Twenty nine countries are still in the process of acceding, of which 10 are developing countries, 6 CIS countries, and 9 LDCs including 3 LDC oil exporters. Shares of WTO members in world trade as well as GDP have increased since January 1995 upon the adhesion of the 25 members to the WTO, increasing from 87% to 97% in the trade side, and from 89% to 97% in World GDP[9].

Post-1995 was also the post-breakup period, and hence a period of recovery and restructuring for the members of the former Soviet Union. Seven of the ex-USSR had acceded to the WTO since 1995 which included 4 CIS countries namely Armenia, Georgia, Kyrgyz Republic and Ukraine. Six of the ex-USSR are still trying to accede, 3 of which are the region's oil exporters Azerbaijan, Kazakhstan and Russia.

The main drivers of change in world trade differ from one sub-period to the other one. In 1996-2002, the study indicates that most agriculture exporters had diversified into other sectors by "shifting" export shares to the manufacture and fuels and mining sector. In that same period, it was in the Americas (North and South) were export shares were mostly "gained". The 2002-2007 period, however, was characterized by the "oil wave" were prices of oil annually increased, thus creating increases in export shares in the fuels and mining sectors of oil and non-oil exporters alike.

Consistently, the SSA "success indicator", the PERFO effect, which also captures the result of successful departure from the initial product and market composition, showed to be highest in more cases in the 1996-2002 period than in 2002-2007. The 1996-2002 period which was marked by the start of international structural changes, showed 19 economies to have had the PERFO effect as the largest contributing effect to change in their total exports, while 2002-2007 showed to have only 8 economies showing the PERFO effect as their srongest contributing effect.

As a result, SSA results indicates that during the Post-Uruguay Round era:

- Developing countries showed better PERFO results than developed countries indicating that their increases in total exports are a result of their own capacity in adapting to market changes, and make their products more competitive. Developing countries strived to "catch up" or converge with the developed countries. They increased their exports much faster than the developed countries gaining market shares in the process. [10]
- A number of developing countries were able to adapt their trade in certain sectors to the new global economy using their own "export competitivity" even if the sectors were not their predominant exported products. For example, Brazil's most exported sector in the 1996-2002

[9] based on data from the WTO Secretariat.

[10] Since the late eighties, the participation of developing countries rose from 23% to 38% of world merchandise exports in 2008, and from 20% to 27% in the case of commercial services (WTO, WT/COMTD/W/172, 23 November 2009).

period, manufactures, showed to have the highest incidence of the GLOBO factor among its sectors (see Annex II Table A3) but it was in agriculture that it was able to be "competitive" (i.e. gaining market share). In the case of India in 2002-2007, the GLOBO effect showed have been the largest contributor to the increase in its main exported product, manufactures. Nevertheless, it also increased its total exports by being "competitive" in the fuels and mining sector (see Annex II Table A4). This favourable "repositioning" of the product-mix is sometimes more the effect of changes in relative prices, than an increase in exportable supply. To isolate the price effects, SSA was also applied on trade in constant prices where trends showed to be similar. As would be expected, some economies changed in performance category. For instance, the LDCs went down from being Confirmed performers to Partial performers in the 1996-2002 period, while Canada went from being a Non-performer to a Slow performer in 2002-2007 using constant prices. (see Diagrams 2 and 3 in pp. 33-34, and p.29-30 for category definitions).

- Despite the broad convergence observed among developing countries, there were differences between countries, and also fluctuations in time. Indeed, among the group of developing countries, there were only a few consistent performers. The criteria provided earlier allowed identifying 4 consistent performers, namely 1 manufacture exporter (China) and 3 oil exporters (Azerbaijan, Kazakhstan and Trinidad & Tobago). China increased its exports by 84% thanks to its own export competitivity. As for the 2 CIS countries, both also increased their exports through their own export competitivity. These countries showed very high export growth rates in their predominant exported sectors.
- In addition, a few consistent non-performers were developing countries. Most were manufacture exporters (Indonesia, Pakistan and South Africa), and one agriculture exporter (Kenya). These 4 countries barely followed the global trend to increase their total exports, most especially their respective main exported products.
- Non-oil exporting developed countries showed to have poor performance levels compared to the developing economies and countries in transition.. The developed countries conspicuously fall under the category of consistent non-performer, exhibiting, negative or almost near-zero PERFO components. Except for oil-exporting Canada and Norway, the developed countries' export growth rates were all consistently lower than the World total exports growth rate.

In most cases, the GEO and the COMPO effects are almost always **SECONDARY CONTRIBUTORS** in changes in total exports. This observation is important because it confirms that in the Post-Uruguay Round period (i.e. 1996-2007), the global economy experienced such structural changes that it was necessary for exporters to adapt their initial export structure by shifting towards new markets and products instead of maintaining their traditional mix of products and markets.

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ANNEX I. METHODOLOGY AND DATA ISSUES

This section further describes the methodology and other data issues encountered during the anaylsis.

A. AVAILABILITY AND THE USE OF PARTNER STATISTICS

Data in this exercise was primarily from the WTO merchandise trade network, by product, origin and destion, and from the United Nations Comtrade database. One limitation of the data used in this exercise is the use of inverted trade to make up for missing or incomparable data. Such is the case for the LDCs. Out of the 50 LDCs, only 11 countries report data until 2004 and only 20 countries provide time series data with at least 5 consecutive years. Some countries only offer data from 1962 to 1977.

In addition, data reported by some countries do not necessarily comply with international standards as laid out by the United Nations International Merchandise Trade Statistics concepts and Definitions (IMTS, Rev.2). Data vary in coverage as, for example, some countries report only domestic exports. Others do not provide estimates of unrecorded trade, for instance, cross-border and illicit trade. Most of them do not include processing zones in their merchandise trade statistics.

B. VERIFICATION AND VIABILITY OF DATA

Due to the many varied results which came in the form of very high numbers, fluctuations in calculations, changes in the signs of the shift-share results, verification of the data in terms of the formula, the method of deflating, the reliability of deflators, the actual viability of data had to be ensured.

C. STATISTICAL TOOLS

A SAS program was used to perform the mechanical calculations of the 49 reporter countries and the LDC group. Prior to using the program a mock test was done using an Excel spreadsheet to test the results as well as to fine-tune the parameters used for the study. This was especially useful when comparing results using deflated or nominal exports data, classic or dynamic shift-share, as well as comparing results when changing the order of calculation of the market effect (GEO) and the sectoral effect (COMPO).

D. METHODOLOGICAL LIMITATIONS

As mentionned in an earlier section, wWhile SSA proves to be a practical and useful tool in analyzing the past, it also comes with a few limitations.

- Depending on the parameters used, i.e. type of shift-share used, time-period covered, using current or constant prices, product group coverage, trading partners coverage, a country may show varied results when applying SSA. For instance, nominal figures deflated by commodity prices may isolate the effect of sometimes volatile price movements, especially in oil, but nevertheless, come up with similar general findings on the leading “performers”.

- Given the way the method is calculated, there are certain expected results regarding the GLOBO effect and the PERFO effect. First, the farther above a country's total exports growth rate is from the World's export growth rate,. the lower its resulting GLOBO effect, and vice versa. Also, the

higher a country's total exports growth rate, most likely the higher its PERFO effect and the lower its GLOBO effect

- The “decomposing” nature of this method can give an approximate idea of the relational shifts of trade, not so much on the actual quantity of the shifts, but more on where the shifts are attributed to, in what sectors of trade, or with which trading partners.
- The method is very sensitive to small values. Because it primarily works with growth rates, results using units of analysis with small numbers can produce very large growth rates and can make some results quite misleading.
- Unfortunately, this decomposing technique is not meant to provide explanations to results generated from the analysis. One can only make assumptions on why certain countries are more performant than others, why certain countries are prone not to perform as much as others, or why certain countries are more competitive in a particular sector and not at others, with a particular region and not with others. Through supporting research can one only come up with meaningful interpretations of the results.

ANNEX II: SUPPLEMENTARY TABLES

Table A1. Inverse relationship between the global effect and the countries' total exports' growth rates
(Percentage)

THE FARTHER BELOW THE WORLD'S TOTAL EXPORTS GROWTH RATE, THE HIGHER A COUNTRY'S GLOBAL EFFECT

	1996-2002	
Country	%	GLOBO
Azerbaidjan	243	8
China	116	18
Guatemala	105	19
Costa Rica	89	23
Philippines	72	29
Algeria	69	29
Mexico	68	30
Kazakhstan	64	32
Seychelles	64	32
Albania	61	33
Turkey	56	36
Least developed countries	51	40
Trinidad Tobago	51	40
India	47	43
Israel	43	47
Egypt	33	62
Peru	32	63
Brazil	26	77
Bolivia	26	78
Korea	25	81
Canada	25	82
Ukraine	25	83
Tunisia	25	83
Serbia and Montenegro	24	87
Thailand	22	92
Norway	22	95
Russian Federation	21	97
World	20	
Malaysia	20	102
Indonesia	19	108
Chile	18	114
Iceland	18	117
EU (27)	17	120
Switzerland	15	133
Colombia	12	174
USA	11	181
Suriname	10	206
Australia	8	253
Argentina	8	255
Pakistan	6	322
Kenya	6	327
Ecuador	3	659
New Zealand	2	1042
South Africa	2	1190
Japan	1	1418
Singapore	0	16981
Paraguay	-9	-220
Barbados	-13	-156
Nicaragua	-15	-136
Jamaica	-20	-104
Uruguay	-22	-91

THE FARTHER ABOVE THE WORLD'S TOTAL EXPORTS GROWTH RATE, THE LOWER A COUNTRY'S GLOBAL EFFECT

	2002-2007	
Country	% change	GLOBO
Kazakhstan	394	29
Azerbaijan	384	30
Serbia and Montenegro	326	36
Trinidad Tobago	289	40
Chile	276	42
China	274	42
Peru	262	44
Bolivia	251	46
Egypt	244	47
Russian Federation	231	50
Algeria	220	53
Albania	215	54
Suriname	199	58
Turkey	197	59
India	195	59
Paraguay	194	60
Ukraine	174	67
Ecuador	174	67
Brazil	166	70
LDCs	155	56
Colombia	152	76
Uruguay	142	82
Singapore	139	84
South Africa	135	86
Norway	129	90
Korea	129	90
Thailand	126	92
Tunisia	119	98
Australia	117	99
Argentina	117	99
World	116	
Nicaragua	114	101
Iceland	114	102
EU (27)	102	114
Indonesia	99	117
Kenya	93	125
New Zealand	88	132
Malaysia	87	133
Switzerland	87	133
Barbados	86	135
Israel	84	138
Pakistan	80	145
Costa Rica	78	149
Jamaica	74	156
Japan	71	163
Mexico	69	167
USA	68	171
Guatemala	66	175
Canada	66	176
Seychelles	58	200
Philippines	43	267

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.
Note: For some reason, Latin America countries Paraguay, Barbados, Nicaragua, Jamaica Uruguay do not seem to follow this trend.

Table A2. Average Share of Performance Effects (PERFO) of selected economies, 1996-2007
(Percentage and share)

"PERFORMERS" % CHANGE > WORLD % CHANGE

% Share 2007	2007 Value Mil USD	2007/ 1996 (%)	Country	PERFO Average
10	1217776	706	China	75
0	10500	1563	Azerbaijan	72
0	47755	710	Kazakhstan	69
0	1202	82	Nicaragua	61
0	1072	408	Albania	60
1	107215	365	Turkey	54
0	9684	426	Serbia and Montenegro	54
1	145325	334	India	51
0	15100	488	Trinidad Tobago	49
0	27956	379	Peru	49
0	4813	343	Bolivia	47
1	103496	286	Least developed countries	47
0	9353	236	Costa Rica	43
0	6926	241	Guatemala	40
1	160649	236	Brazil	39
0	2785	167	Paraguay	37
1	68296	343	Chile	36
0	16201	358	Egypt	33
0	4496	88	Uruguay	32
0	60163	442	Algeria	31
0	4772	152	Iceland	30
1	153533	176	Thailand	26
0	49248	242	Ukraine	23
3	355175	301	Russian Federation	21
0	54065	164	Israel	18
3	371321	186	Korea	18
2	271990	184	Mexico	17
0	55779	134	Argentina	14
0	15029	172	Tunisia	9
0	450	62	Barbados	-9
44	5319660	136	EU (27)	-9
1	176194	125	Malaysia	-13
0	50466	146	Philippines	-18
0	29991	182	Colombia	-19
1	136345	179	Norway	-25
1	141317	135	Australia	-31
1	118014	137	Indonesia	-33
0	1400	228	Suriname	-33
1	172043	116	Switzerland	-34
0	4080	105	Kenya	-40
3	418974	107	Canada	-40
0	26974	91	New Zealand	-59
10	1162479	87	USA	-65
0	17838	91	Pakistan	-106
0	1942	40	Jamaica	-112
0	13800	182	Ecuador	-115
0	360	158	Seychelles	-137
1	69788	139	South Africa	-277
6	712769	74	Japan	-561
2	298266	139	Singapore	-5712
100	12224823	160	Countries above ="WORLD"	

"NON-PERFORMERS" % CHANGE < WORLD % CHANGE

PERFO GETTING SMALLER

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.
Note: Agriculture exporters Nicaragua, Uruguay, Paraguay, Iceland and Argentina do not seem to follow this trend.
Countries in bold represent developed countries.

Table A3. Shift-Share Analysis: ALL contribution shares in change in total exports, 1996-2002 (using nominal values)
(Percentage)

EXPORTS GROWING **FASTER** THAN WORLD EXPORTS

EXPORTS GROWING **SLOWER** THAN WORLD EXPORTS

PERFO GETTING BIGGER

PERFO GETTING SMALLER

Country	Main exports	1996/ 2002	PERFO	GLOBO	COMPO	GEO							
						Total	NAX	CSC	EUR	CIS	AFR	MEA	ASI	NES
Azerbaidjan	MI	243	**96 MI**	8 MI	1 MI	-5 MA	0	0	0	-5	0	**1**	0	0
Kazakhstan	MI	64	**93 MI**	32 MI	1 MI	-26 MA	**0**	0	-2	-23	0	0	-2	0
Guatemala	MA	105	**89 MA**	19 AG	-13 MA	5 AG	**11**	-6	0	0	0	0	0	0
Costa Rica	MA	89	**88 MA**	23 AG	-18 MA	7 AG	**13**	-4	0	0	0	0	0	0
China	MA	116	**84 MA**	18 MA	1 MA	-2 MI	**3**	0	0	0	0	0	-5	0
Albania	MA	61	**72 MA**	33 MA	-3 MA	-2 AG	**1**	0	-3	0	0	0	0	0
Turkey	MA	56	**71 MA**	36 MA	-4 MA	-3 MI	**3**	0	-1	-4	0	2	-1	-2
LDCs	MI	51	**68 MI**	40 MI	-9 MI	1 MI	**7**	0	-2	-1	1	0	-2	-3
Ukraine	MA	25	67 MI	**83 MA**	-8 MA	-42 MI	2	-1	-3	-38	0	**2**	-5	0
Philippines	MA	72	**67 MA**	29 MA	0 MA	4 MA	**11**	0	-1	0	0	0	-6	0
Algeria	MI	69	**64 MI**	29 MI	9 MI	-2 AG	**4**	-1	-4	-1	0	0	0	0
Seychelles	MI	64	**63 MI**	32 MA	-6 MA	11 MA	**12**	0	0	0	0	1	-2	0
India	MA	47	**59 MA**	43 MA	-5 MA	3 MA	**10**	0	-1	-1	0	3	-6	0
Bolivia	MI	26	56 AG	**78 MI**	-21 MI	-12 MA	**18**	-26	-3	0	0	0	0	-1
Peru	MI	32	52 MA	**63 MI**	-15 MI	0 MI	**16**	-8	-6	0	0	0	-3	0
Trinidad Tobago	MI	51	**48 MI**	40 MI	5 MI	6 MI	**19**	-12	0	0	0	0	0	0
Brazil	MA	26	48 AG	**77 MA**	-22 MA	-3 AG	**19**	-16	-2	-1	1	1	-5	-1
Israel	MA	43	**48 MA**	47 MA	3 MA	2 MA	**15**	-1	-1	-1	0	0	-5	-4
Serbia & Montenegro	MA	24	45 MA	**87 MA**	-22 MA	-10 AG	**2**	0	-7	-6	1	0	0	0
Mexico	MA	68	**44 MA**	30 MA	2 MA	24 MA	**26**	-2	0	0	0	0	0	0
Thailand	MA	22	32 MA	**92 MA**	-17 MA	-7 MI	**20**	-1	-1	0	0	2	-24	-3
Egypt	MA	33	30 **MA**	**62** MI	3 MI	6 MA	**7**	0	-5	-1	0	5	0	-1
Russian Federation	MI	21	30 MI	**97 MI**	12 MI	-38 AG	**4**	-2	-11	-25	0	1	-5	-1
Tunisia	MA	25	24 MA	**83 MA**	5 MA	-13 AG	**1**	-1	-6	0	0	1	-2	-6
Korea	MA	25	21 MA	**81 MA**	7 MA	-9 MI	**16**	-4	-1	-1	-1	2	-19	0
Norway	MI	22	4 MI	**95 MI**	9 MI	-8 MA	**10**	-1	-15	-1	0	0	-2	0
Canada	MA	25	-47 MI	**82 MA**	-6 MA	70 MA	**75**	-1	-1	0	0	0	-3	0
WORLD	**MI**	**20**												
Jamaica	MI	-20	**232** MA	-104 AG	7 AG	-35 AG	-50	5	**6**	3	-1	0	1	0
Nicaragua	AG	-15	**207** MA	-136 MI	93 **AG**	-64 MI	-84	**18**	2	0	0	-1	0	0
Barbados	MA	-13	**161 MA**	-156 MI	49 AG	46 MA	-32	**61**	1	0	0	0	1	15
Uruguay	AG	-22	**93** MA	-91 MI	59 **AG**	39 AG	-9	**42**	1	1	0	-1	5	1
Iceland	AG	18	74 MI	**117 AG**	-97 MI	6 AG	**23**	-4	-6	-2	0	0	-6	0
Argentina	AG	8	55 MI	**255 AG**	-140 MI	-70 AG	**29**	-95	-2	-2	8	7	-14	-1
Chile	MI	18	23 AG	**114 MI**	-32 MI	-4 AG	**24**	-16	-5	-1	0	1	-5	-1
Paraguay	AG	-9	20 MA	-220 MI	**200 AG**	100 AG	-13	**109**	2	0	0	0	2	0
Malaysia	MA	20	8 MA	**102 MA**	-2 MA	-7 MI	**20**	-1	-1	0	0	1	-27	0
EU (27)	MA	17	-7 AG	**120 MA**	-1 MA	-12 AG	**9**	-2	-8	-2	0	2	-6	-6
Indonesia	MA	19	-7 AG	**108 MA**	-2 MI	0 MI	**18**	-1	-1	0	0	2	-17	0
Australia	MI	8	-20 AG	**253 MI**	-59 MI	-75 MI	**18**	-2	-4	0	1	2	-34	-56
Kenya	AG	6	-34 MI	**327 AG**	-216 MA	23 AG	16	0	-5	0	**26**	7	-14	-6
Switzerland	MA	15	-44 MI	**133 MA**	14 MA	-3 AG	**15**	-3	-6	0	-1	4	-11	0
Colombia	MA	12	-62 **MA**	**174** MI	-38 MI	26 AG	**77**	-41	-5	-1	0	0	-3	-3
USA	MA	11	-90 MI	**181 MA**	-9 MA	18 MA	**61**	-12	-5	-1	0	3	-28	0
Suriname	MI	10	-97 MI	**206 MI**	-15 MI	5 MA	**62**	-18	-20	-10	0	0	-9	0
New Zealand	AG	2	-131 AG	**1042 AG**	-670 MA	-141 MI	**158**	-23	-7	-15	10	18	-267	-14
Pakistan	MA	6	-227 MI	**322 MA**	-14 MA	19 MA	**61**	-5	-7	-2	2	23	-52	0
Ecuador	AG	3	-366 MA	**659 AG**	-324 MI	130 AG	**300**	-125	-16	-18	1	2	-13	-1
South Africa	MA	2	-794 AG	**1190 MA**	-153 MI	-143 MI	**107**	-21	-108	-4	-3	17	-47	-84
Japan	MA	1	-1556 AG	**1418 MA**	171 MA	67 MA	**446**	-42	-20	-2	-5	23	-333	0
Singapore	MA	0	-17138 AG	**16981 MA**	1745 MA	-1487 MI	**3335**	-183	-194	-76	-9	178	-4537	-1

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Countries in bold represent countries whose sector of maximum effect is PERFO and is also the main exports sector.
Figures in bold represent maximum effects.
Regions in grey represent regions with least geographical effect.
Sectors in grey represent sectors which are the same as the main exports sector.

Table A4. Shift-Share Analysis: ALL contribution shares in change in total exports, 2002-2007 (using nominal values)
(Percentage)

EXPORTS GROWING **FASTER** THAN WORLD EXPORTS

EXPORTS GROWING **SLOWER** THAN WORLD EXPORTS

PERFO GETTING BIGGER

PERFO GETTING SMALLER

Country	Main exports	2002/ 2007	PERFO	GLOBO	COMPO	GEO								
						Total	NAX	CSC	EUR	CIS	AFR	MEA	ASI	NES
China	MA	274	**63 MA**	42 MA	-4 MI	-1 MI	-5	0	0	**1**	0	1	1	0
Serbia and Montenegro	MA	326	**58 MA**	36 MA	1 MI	5 **MA**	0	0	1	**4**	0	0	0	0
Albania	MA	215	48 MA	**54 MA**	-5 MI	2 MA	0	0	**2**	0	0	0	0	1
Peru	MI	262	**47 MI**	44 MI	13 MI	-4 MA	-4	**1**	-2	0	0	0	1	0
Kazakhstan	MI	394	**46 MI**	29 MI	22 MI	2 MA	-2	0	0	2	0	**2**	1	0
Paraguay	AG	194	46 AG	**60 AG**	-11 MI	5 AG	-1	**6**	0	0	0	0	0	0
Chile	MI	276	**45 MI**	42 MI	13 MI	0 **MI**	-3	**1**	0	0	0	0	1	1
Trinidad Tobago	MI	289	**44 MI**	40 MI	23 MI	-6 AG	-8	**1**	0	0	0	0	0	0
Bolivia	MI	251	40 MI	**46 MI**	16 MI	-2 AG	-3	**1**	-1	0	0	0	0	0
Egypt	MI	244	40 **MI**	**47** MA	11 MI	1 MI	-4	0	0	0	1	**3**	1	0
India	MA	195	39 MI	**59 MA**	-4 MI	5 MA	-5	0	0	2	1	**4**	1	1
Azerbaidjan	MI	384	**39 MI**	30 MI	28 MI	3 MA	0	0	-1	2	0	**3**	0	0
Turkey	MA	197	38 MA	**59 MA**	-6 MI	9 MA	-2	0	1	**7**	1	2	0	-1
Brazil	MA	166	30 MA	**70 MA**	0 MI	0 AG	-8	**3**	0	1	1	1	1	0
Uruguay	AG	142	25 AG	**82 AG**	-14 MI	6 MA	-4	**7**	0	1	1	1	0	0
Least developed countries	MI	155	24 MI	**56 MI**	21 MI	-1 MI	-4	0	0	0	0	1	**2**	-1
Thailand	MA	126	19 MA	**92 MA**	-10 MI	-1 MI	-7	0	0	0	1	2	**3**	0
Singapore	MA	139	18 MA	**84 MA**	-3 MI	2 MI	-5	1	0	0	0	1	**5**	0
Korea	MA	129	16 MA	**90 MA**	-7 MI	1 MI	-8	1	1	2	1	2	**4**	0
Ecuador	MI	174	16 MI	**67** AG	21 **MI**	-3 MA	-9	1	0	**2**	0	0	1	0
Russian Federation	MI	231	15 MI	**50 MI**	29 MI	6 MA	-1	0	-1	**6**	0	1	1	0
Colombia	MA	152	8 MA	**76 MA**	21 MI	-5 MA	-12	**6**	0	0	0	1	0	0
Suriname	MI	199	1 AG	**58 MI**	46 MI	-6 MA	-5	0	-1	0	**0**	0	0	0
Ukraine	MA	174	1 MA	**67 MA**	4 MI	29 MA	-1	0	0	**25**	1	2	1	0
Algeria	MI	220	-2 AG	53 MI	**53 MI**	-4 MA	-3	0	-1	0	**0**	0	0	0
Tunisia	MA	119	-2 AG	**98 MA**	-2 MI	6 MA	0	0	2	0	**3**	1	0	-1
South Africa	MA	135	-5 MA	**86 MA**	14 MI	6 MA	-4	0	-1	0	**4**	1	4	0
Argentina	AG	117	-12 AG	**99 AG**	7 MI	5 MA	-5	**6**	0	1	1	1	0	0
Australia	MI	117	-37 MA	**99 MI**	30 MI	9 MI	-4	0	0	0	1	3	**8**	0
Norway	MI	129	-44 AG	**90 MI**	57 MI	-3 MA	-4	0	-2	**1**	0	0	1	0
WORLD	**MI**	**116**												
Nicaragua	AG	114	10 AG	**101 AG**	-13 MI	1 MA	-10	**9**	0	2	0	0	0	0
Iceland	AG	114	-5 MA	**102 AG**	5 MI	-1 MA	-4	0	**1**	1	1	0	0	0
Israel	MA	84	-10 AG	**138 MA**	-15 MI	-13 MI	-23	1	1	**4**	1	0	2	0
Mexico	MA	69	-10 AG	**167 MA**	-4 MI	-53 AG	-55	**2**	0	0	0	0	0	-1
EU (27)	MA	102	-10 AG	**114 MA**	-9 MI	5 MA	-4	1	2	**4**	1	1	1	0
Costa Rica	MA	78	-11 MI	**149 MA**	-21 MI	-17 MI	-28	**9**	1	0	0	0	1	0
New Zealand	AG	88	-16 **AG**	**132 AG**	-15 MI	-1 MI	-8	0	1	0	1	1	**3**	1
Guatemala	MA	66	-20 AG	**175 MA**	-20 MI	-35 MI	-45	**9**	0	1	0	1	0	0
Malaysia	MA	87	-27 AG	**133 MA**	-5 MI	-1 MI	-11	0	1	0	1	1	**7**	0
Switzerland	MA	87	-27 AG	**133 MA**	-10 MI	4 MA	-7	1	**3**	2	1	2	2	0
Canada	MA	66	-29 AG	**176 MA**	8 MI	-55 AG	-57	**0**	0	0	0	0	0	0
Pakistan	MA	80	-31 MI	**145 MA**	-18 MI	4 MI	-15	1	2	1	3	**10**	2	0
Japan	MA	71	-35 MI	**163 MA**	-20 MI	-8 MI	-20	1	1	1	1	2	**6**	0
USA	MA	68	-42 MI	**171 MA**	-18 MI	-11 MI	-24	**4**	1	2	1	2	3	0
Kenya	AG	93	-43 MA	**125 AG**	7 MI	12 MI	-5	0	1	0	**14**	1	0	0
Indonesia	MA	99	-46 AG	**117 MA**	23 MI	6 MI	-6	0	0	0	1	2	**9**	0
Barbados	MA	86	-61 MA	**135 MA**	15 MI	11 MA	-8	**16**	1	0	0	0	0	1
Philippines	MA	43	-124 MI	**267 MA**	-30 MI	-13 MI	-27	0	2	0	0	1	**11**	0
Jamaica	MI	74	-136 MA	**156 MI**	98 MI	-18 MA	-22	**2**	-1	0	1	0	1	1
Seychelles	AG	58	-451 **AG**	**200** MI	179 MI	172 MI	-2	0	0	0	1	**174**	-1	0

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Countries in **bold** represent countries whose sector of maximum effect is PERFO and is the main exports sector.
Figures in **bold** represent maximum effects.
Regions in grey represent regions with least geographical effect.
Sectors in grey represent sectors which are the same as the main exports sector.

Table A5. Contribution shares in change in total exports of Performers and non-Performers, 1996-2002 (current prices)
(Percentage)

Country	Product	Main X 2002	2002 / 1996	Share in 1996	Share in 2002	TOTAL CHANGE		PERFO		GLOBO		COMPO		GEO	
Consistent Performers															
Confirmed: (CC)															
Azerbaijan	Total	MI	243	100	100	100	MI	*96*	MI	8	MI	1	MI	-5	MI
	AG		15	13	4	1		2		1		-1		-1	
	MI		356	68	90	99		95		6		2		-4	
	MA		-17	20	5	-1		-3		2		0		0	
Kazakhstan	Total	MI	64	100	100	100	MI	*93*	MI	32	MI	1	MI	-26	MI
	AG		-32	15	6	-8		-1		5		-5		-6	
	MI		136	53	76	112		106		17		5		-16	
	MA		-24	32	15	-12		-20		10		2		-4	
China	Total	MA	116	100	100	100	MA	*84*	MA	18	MA	1	MA	-2	MA
	AG		26	10	6	2		3		2		-2		-1	
	MI		57	6	4	3		1		1		0		0	
	MA		130	84	90	95		79		15		2		-2	
Trinidad T.	Total	MI	51	100	100	100	MI	*48*	MI	40	MI	5	MI	6	MI
	AG		18	8	7	3		4		3		-4		-1	
	MI		80	51	60	79		49		20		6		4	
	MA		22	41	33	18		-5		16		2		3	
Partial: (CP)															
Ukraine	Total	MA	25	100	100	100	MA	67	MI	*83*	MA	-8	AG	-42	AG
	AG		-7	20	15	-6		14		17		-19		-18	
	MI		77	13	18	39		32		10		3		-7	
	MA		24	66	66	65		18		55		8		-17	
Bolivia	Total	MI	26	100	100	100	MI	56	AG	*78*	MI	-21	AG	-12	AG
	AG		11	38	34	17		30		30		-34		-9	
	MI		21	45	44	36		-8		35		11		-3	
	MA		25	16	16	15		2		12		2		-1	
Brazil	Total	MA	26	100	100	100	MA	48	AG	*77*	MA	-22	AG	-3	MA
	AG		20	34	32	25		27		26		-30		2	
	MI		58	11	14	24		13		8		3		0	
	MA		24	53	52	48		6		41		6		-5	
Thailand	Total	MA	22	100	100	100	MA	32	MA	*92*	MA	-17	AG	-7	MA
	AG		-11	25	18	-13		-9		23		-26		0	
	MI		98	2	4	10		7		2		1		0	
	MA		28	71	75	89		22		65		10		-8	
Egypt	Total	MA	33	100	100	100	MA	30	MA	*62*	MI	3	MI	6	MA
	AG		50	15	17	22		23		9		-10		1	
	MI		-17	54	34	-27		-71		33		11		1	
	MA		76	32	42	72		46		19		3		4	
Russian F.	Total	MI	21	100	100	100	MI	30	MI	*97*	MI	12	MI	-38	MI
	AG		29	8	8	11		14		7		-8		-3	
	MI		29	58	62	82		34		57		18		-27	
	MA		1	30	25	1		-25		29		4		-7	
Korea	Total	MA	25	100	100	100	MA	21	MA	*81*	MA	7	MA	-9	MA
	AG		-12	3	2	-2		0		3		-3		-1	
	MI		73	4	5	11		7		3		1		0	
	MA		29	89	92	104		29		72		11		-8	
World	Total		20	100	100										
	AG		-3	12	9										
	MI		27	12	13										
	MA		23	74	75										
Occasional Performers															
Confirmed (OC):															
Guatemala	Total	MA	105	100	100	100	MA	*89*	MA	19	AG	-13	AG	5	AG

Table A5. Contribution shares in change in total exports of Performers and non-Performers, 1996-2002 (current prices) *(continued)*
(Percentage)

Country	Product	Main X 2002	2002 / 1996	Share in 1996	Share in 2002	TOTAL CHANGE		PERFO		GLOBO		COMPO		GEO	
	AG		-7	66	30	-4		-10		13		-15		8	
	MI		147	4	5	5		4		1		0		0	
	MA		243	31	51	71		67		6		1		-3	
Costa Rica	Total	MA	89	100	100	100	MA	*88*	MA	23	AG	-18	AG	7	AG
	AG		-9	72	35	-7		-14		17		-19		9	
	MI		68	2	2	2		1		0		0		0	
	MA		373	25	63	106		101		6		1		-2	
Albania	Total	MA	61	100	100	100	MA	*72*	MA	33	MA	-3	AG	-2	MA
	AG		-22	20	10	-7		-6		7		-8		0	
	MI		-42	15	5	-10		-15		5		2		-1	
	MA		102	65	81	108		85		22		3		-1	
Turkey	Total	MA	56	100	100	100	MA	*71*	MA	36	MA	-4	AG	-3	MA
	AG		-21	21	11	-8		-6		8		-9		0	
	MI		44	4	4	3		2		2		0		0	
	MA		75	74	83	98		69		27		4		-2	
LDCs	Total	MI	51	100	100	100	MI	*68*	MI	40	MI	-9	MI	1	MI
	AG		7	29	20	4		6		11		-13		0	
	MI		88	33	41	57		37		13		4		3	
	MA		87	28	35	48		33		11		2		1	
Philippines	Total	MA	72	100	100	100	MA	*67*	MA	29	MA	0	MA	4	MA
	AG		-13	11	6	-2		-3		3		-4		1	
	MI		-10	5	3	-1		-3		1		0		0	
	MA		89	83	91	103		73		24		4		3	
Algeria	Total	MI	69	100	100	100	MI	*64*	MI	29	MI	9	MI	-2	MI
	AG		-67	1	0	-1		-1		0		0		0	
	MI		76	94	97	103		67		28		9		-1	
	MA		-19	5	2	-1		-3		2		0		-1	
Seychelles	Total	MI	64	100	100	100	MI	*63*	MI	32	MA	-6	AG	11	MA
	AG		-36	30	12	-17		-15		10		-11		-1	
	MI		558	22	88	193		182		7		2		1	
	MA		-100	48	0	-76		-104		15		2		11	
India	Total	MA	47	100	100	100	MA	*59*	MA	43	MA	-5	AG	3	MA
	AG		-7	21	13	-3		-2		9		-10		0	
	MI		123	5	8	13		11		2		1		0	
	MA		52	72	74	80		41		31		5		3	
Israel	Total	MA	43	100	100	100	MA	*48*	MA	47	MA	3	MA	2	MA
	AG		-10	7	4	-2		-1		3		-4		0	
	MI		155	2	3	6		5		1		0		0	
	MA		45	91	92	95		43		43		6		3	
Mexico	Total	MA	68	100	100	100	MA	*44*	MA	30	MA	2	MA	24	MA
	AG		23	8	6	3		1		2		-3		2	
	MI		21	14	10	4		-4		4		1		2	
	MA		81	78	84	93		47		23		3		19	
Partial (OP):															
Peru	Total	MI	32	100	100	100	MI	52	MA	*63*	MI	-15	AG	0	AG
	AG		9	31	25	9		11		20		-22		1	
	MI		17	44	39	23		-16		28		9		1	
	MA		52	14	16	23		12		9		1		1	
Serbia M.	Total	MA	24	100	100	100	MA	45	MA	*87*	MA	-22	AG	-10	MA
	AG		4	32	27	6		11		28		-32		-2	
	MI		14	17	16	10		-6		15		5		-3	
	MA		44	49	57	92		49		42		6		-5	
Tunisia	Total	MA	25	100	100	100	MA	24	MA	*83*	MA	5	MA	-13	MA
	AG		8	8	7	3		3		7		-8		0	
	MI		13	12	11	6		-5		10		3		-1	
	MA		27	80	82	89		24		66		10		-12	
Norway	Total	MI	22	100	100	100	MI	4	MI	*95*	MI	9	MI	-8	MI

Table A5. Contribution shares in change in total exports of Performers and non-Performers, 1996-2002 (current prices) *(continued)*
(Percentage)

Country	Product	Main X 2002	2002 / 1996	Share in 1996	Share in 2002	TOTAL CHANGE		PERFO		GLOBO		COMPO		GEO	
	AG		0	9	7	0		2		8		-10		-1	
	MI		32	62	67	90		17		58		19		-4	
	MA		14	23	21	15		-9		22		3		-1	
Slow (OS):															
Jamaica	Total	MI	-20	100	100	100	MA	*232*	MA	-104	MI	7	AG	-35	MA
	AG		-24	24	22	29		33		-25		28		-8	
	MI		7	50	67	-17		60		-52		-17		-8	
	MA		-71	26	9	94		145		-27		-4		-19	
Nicaragua	Total	AG	-15	100	100	100	MA	*207*	MA	-136	AG	93	AG	-64	AG
	AG		-8	64	69	35		62		-87		100		-39	
	MI		185	2	5	-19		-17		-2		-1		0	
	MA		-49	33	20	109		183		-45		-7		-22	
Barbados	Total	MA	-13	100	100	100	AG	*161*	MA	-156	MA	49	AG	46	MA
	AG		-29	38	31	82		60		-59		67		14	
	MI		47	14	23	-49		-35		-21		-7		14	
	MA		-21	48	44	78		146		-75		-11		19	
Iceland	Total	AG	18	100	100	100	MI	74	MI	*117*	AG	-97	AG	6	AG
	AG		0	77	65	-1		3		90		-103		9	
	MI		117	11	20	72		58		12		4		-3	
	MA		43	11	14	28		14		13		2		-2	
Argentina	Total	AG	8	100	100	100	MI	55	MI	*255*	AG	-140	AG	-70	MA
	AG		-9	56	47	-60		-25		142		-163		-14	
	MI		60	14	21	105		73		36		11		-15	
	MA		9	30	30	35		-12		77		11		-41	
Chile	Total	MI	18	100	100	100	AG	23	AG	*114*	MI	-32	AG	-4	MA
	AG		15	37	36	30		35		42		-48		1	
	MI		5	45	40	12		-57		51		16		0	
	MA		39	13	15	28		18		15		2		-7	
Paraguay	Total	AG	-9	100	100	100	AG	20	MA	-220	AG	*200*	AG	100	AG
	AG		-7	82	85	58		-45		-180		206		78	
	MI		-15	1	1	1		3		-2		-1		1	
	MA		-22	17	15	40		63		-37		-6		20	
Malaysia	Total	MA	20	100	100	100	MA	8	MA	*102*	MA	-2	AG	-7	MA
	AG		-16	14	10	-11		-7		14		-16		-2	
	MI		23	9	9	11		-3		9		3		1	
	MA		26	76	80	99		16		77		11		-6	
Non-Performers															
Consistent (CN):															
EU (27)	Total	MA	17	100	100	100	MA	-7	MA	*120*	MA	-1	AG	-12	MA
	AG		-2	11	10	-2		1		14		-16		-1	
	MI		24	5	6	8		0		7		2		-1	
	MA		20	80	83	94		-8		96		14		-8	
Indonesia	Total	MA	19	100	100	100	MA	-7	MI	*108*	MA	-2	AG	0	MI
	AG		10	17	16	9		11		18		-21		1	
	MI		12	32	30	19		-29		34		11		3	
	MA		25	51	54	69		9		56		8		-4	
Australia	Total	MI	8	100	100	100	MI	-20	MA	*253*	MI	-59	AG	-75	AG
	AG		-5	29	26	-18		34		75		-85		-42	
	MI		23	35	40	98		-7		88		28		-11	
	MA		-1	27	24	-4		-61		68		10		-21	
Kenya	Total	AG	6	100	100	100	MI	-34	AG	*327*	AG	-216	AG	23	AG
	AG		-10	64	54	-105		-122		208		-238		46	
	MI		111	10	19	173		129		32		10		2	
	MA		5	26	26	20		-53		86		13		-25	
Switzerland	Total	MA	15	100	100	100	MA	-44	MA	*133*	MA	14	MA	-3	MA
	AG		-5	4	3	-1		-1		5		-5		0	
	MI		152	3	6	26		21		3		1		0	

Table A5. Contribution shares in change in total exports of Performers and non-Performers, 1996-2002 (current prices) *(continued)*
(Percentage)

Country	Product	Main X 2002	2002 / 1996	Share in 1996	Share in 2002	TOTAL CHANGE		PERFO		GLOBO		COMPO		GEO	
	MA		12	94	91	75		-66		125		19		-3	
Canada	Total	MA	25	100	100	100	MA	-47	MA	*82*	MA	-6	AG	70	MA
	AG		0	16	13	0		-8		13		-15		10	
	MI		28	17	17	19		-6		14		4		7	
	MA		27	62	63	68		-34		51		8		43	
USA	Total	MA	11	100	100	100	MA	-90	MA	*181*	MA	-9	AG	18	MA
	AG		-16	13	10	-19		-16		24		-27		1	
	MI		-3	4	4	-1		-12		7		2		1	
	MA		18	78	82	123		-50		141		21		11	
New	Total	AG	2	100	100	100	MA	-131	MA	*1042*	AG	-670	AG	-141	MA
Zealand	AG		-2	61	59	-58		76		633		-724		-44	
	MI		-12	7	6	-41		-139		69		22		8	
	MA		2	30	30	36		-229		312		46		-93	
Pakistan	Total	MA	6	100	100	100	MA	-227	MA	*322*	MA	-14	AG	19	MA
	AG		-15	15	12	-34		-31		48		-55		4	
	MI		130	1	2	20		16		3		1		0	
	MA		8	84	85	109		-217		270		40		15	
South	Total	MA	2	100	100	100	MA	-794	MI	*1190*	MA	-153	AG	-143	MA
Africa	AG		-5	14	13	-36		-28		162		-185		15	
	MI		13	24	27	186		-218		289		92		23	
	MA		13	41	45	313		-201		482		72		-40	
Japan	Total	MA	1	100	100	100	MI	-1556	MA	*1418*	MA	171	MA	67	MA
	AG		3	1	1	2		6		15		-17		-2	
	MI		7	2	2	8		-24		22		7		3	
	MA		-1	95	93	-37		-1617		1345		200		35	
Occasional (ON):															
Uruguay	Total	AG	-22	100	100	100	AG	*93*	MA	-91	AG	59	AG	39	AG
	AG		-23	62	61	64		36		-57		65		20	
	MI		-44	2	1	3		5		-2		-1		1	
	MA		-22	36	36	35		54		-33		-5		19	
Colombia	Total	MA	12	100	100	100	MA	-62	MI	*174*	MI	-38	AG	26	AG
	AG		-15	32	25	-40		-53		56		-64		21	
	MI		12	37	37	39		-64		64		20		19	
	MA		43	29	38	109		68		51		8		-19	
Suriname	Total	MI	10	100	100	100	MI	-97	MA	*206*	MI	-15	AG	5	MA
	AG		-11	23	19	-25		0		48		-55		-18	
	MI		26	69	80	184		1		143		46		-6	
	MA		-8	2	1	-1		-6		3		0		1	
Ecuador	Total	AG	3	100	100	100	MI	-366	MI	*659*	AG	-324	AG	130	AG
	AG		-4	53	49	-73		-155		349		-399		132	
	MI		16	37	41	190		-163		241		77		36	
	MA		23	8	9	58		29		52		8		-31	
Singapore	Total	MA	0	100	100	100	MA	-17138	MA	*16981*	MA	1745	MA	-1487	MA
	AG		-40	4	3	-1477		-1177		759		-867		-192	
	MI		-21	11	9	-1927		-4506		1876		598		105	
	MA		1	83	85	1005		-13801		14164		2107		-1465	

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Note: Total effects also include effects from non-specified products which are not shown in this table.
Legend: *Grey cells* indicate the maximum contribution share to total change in exports.

Table A6. Contribution shares in change in total exports of Performers and non-Performers, 2002-2007 (current prices)
(Percentage)

Country	Product	MainX 2007	2007/ 2002	Share in Total 2002	Share in Total 2007	TOTAL CHANGE		PERFO		GLOBO		COMPO		GEO	
Consistent Performers															
Confirmed (CC):															
China	Total	MA	274	100	100	100	MA	*63*	MA	42	MA	-4	MA	-1	MA
	AG		107	6	3	2		0		2		0		0	
	MI		209	4	3	3		-1		2		2		0	
	MA		288	90	93	94		63				-5		-1	
Kazakhstan	Total	MI	394	100	100	100	MI	*46*	MI	29	MI	22	MI	2	MA
	AG		164	6	3	3		0		2		0		1	
	MI	MI	449	76	84	86		43		22		23		-2	
	MA		255	15	11	10		3				-1		3	
Trinidad T.	Total	MI	289	100	100	100	MI	*44*	MI	40	MI	23	MI	-6	MI
	AG		53	7	3	1		-1		3		-1		0	
	MI	MI	344	60	69	72		28		24		25		-5	
	MA		235	33	28	27		17				-2		-2	
Azerbaijan	Total	MI	384	100	100	100	MI	*39*	MI	30	MI	28	MI	3	MA
	AG		487	4	5	5		4		1		0		1	
	MI	MI	373	90	88	87		31		27		28		1	
	MA		276	5	4	3		1				0		1	
Partial (CP):															
Bolivia	Total	MI	251	100	100	100	MI	40	MI	*46*	MI	16	MI	-2	MI
	AG		70	34	16	9		-4		16		-3		1	
	MI	MI	498	44	74	86		47		20		21		-1	
	MA		52	16	7	3		-2				-1		-1	
Egypt	Total	MI	244	100	100	100	MI	40	MI	*47*	MA	11	MI	1	MI
	AG		102	17	10	7		0		8		-2		1	
	MI	MI	531	34	61	73		39		16		17		1	
	MA		131	42	28	22		4				-3		1	
Brazil	Total	MA	166	100	100	100	MA	30	MA	*70*	MA	0	MA	0	AG
	AG		152	32	30	29		10		22		-5		1	
	MI		291	14	20	24		4		10		10		0	
	MA		143	52	47	44		16				-5		-2	
Thailand	Total	MA	126	100	100	100	MA	19	MA	*92*	MA	-10	MA	-1	MA
	AG		101	18	16	15		2		17		-3		-1	
	MI		271	4	6	8		0		3		4		1	
	MA		129	75	76	77		19				-10		-1	
Korea	Total	MA	129	100	100	100	MA	16	MA	*90*	MA	-7	MA	1	MI
	AG		63	2	2	1		0		2		0		0	
	MI		290	5	9	12		1		5		5		1	
	MA		122	92	89	87		16				-12		0	
Russian F.	Total	MI	231	100	100	100	MI	15	MI	*50*	MI	29	MI	6	MA
	AG		169	8	7	6		2		4		-1		0	
	MI	MI	284	62	73	77		15		31		33		-2	
	MA		162	25	19	17		0				-2		7	
Ukraine	Total	MA	174	100	100	100	MA	1	MA	*67*	MA	4	MI	29	MA
	AG		154	15	14	13		2		10		-2		3	
	MI		76	18	11	8		-16		12		12		-1	
	MA		200	66	72	76		12				-6		26	
World	Total		116	100	100										
	AG		92	9	8										
	MI		236	13	20										
	MA		100	75	70										
Occasional Performers															
Confirmed (OC):															

Table A6. Contribution shares in change in total exports of Performers and non-Performers, 2002-2007 (current prices) *(continued)*
(Percentage)

Country	Product	MainX 2007	2007/ 2002	Share in Total		TOTAL CHANGE		PERFO		GLOBO		COMPO		GEO	
				2002	2007										
Serbia M.	Total	MA	326	100	100	100	MA	*58*	MA	36	MA	1	MI	5	MA
	AG		208	27	20	17		9		10		-2		0	
	MI		252	16	13	12		1		6		6		0	
	MA		396	57	67	69		47				-3		5	
Peru	Total	MI	262	100	100	100	MI	*47*	MI	44	MI	13	MI	-4	MI
	AG		114	25	15	11		3		11		-2		-1	
	MI	MI	437	39	58	65		31		17		18		-1	
	MA		165	16	12	10		4				-1		0	
Chile	Total	MI	276	100	100	100	MI	*45*	MI	42	MI	13	MI	0	MI
	AG		108	36	20	14		3		15		-3		-1	
	MI	MI	499	40	64	72		38		17		17		1	
	MA		135	15	10	8		2				-1		0	
Partial (OP):															
Albania	Total	MA	215	100	100	100	MA	48	MA	*54*	MA	-5	MA	2	MA
	AG		184	10	9	8		4		5		-1		0	
	MI		726	5	14	18		12		3		3		0	
	MA		173	81	71	65		26				-6		2	
Paraguay	Total	AG	194	100	100	100	AG	46	AG	*60*	AG	-11	AG	5	AG
	AG		195	85	85	85		40		50		-10		4	
	MI		163	1	1	1		0		1		1		0	
	MA		172	15	13	13		4				-1		1	
India	Total	MA	195	100	100	100	MA	39	MI	*59*	MA	-4	MA	5	MA
	AG		145	13	11	10		3		8		-2		0	
	MI		825	8	24	33		22		5		5		1	
	MA		152	74	64	58		17				-6		3	
Turkey	Total	MA	197	100	100	100	MA	38	MA	*59*	MA	-6	MA	9	MA
	AG		168	11	10	9		4		6		-1		1	
	MI		467	4	7	9		4		2		2		0	
	MA		191	83	81	80		31				-7		8	
Uruguay	Total	AG	142	100	100	100	AG	25	AG	*82*	AG	-14	AG	6	MA
	AG		151	61	64	65		23		50		-10		3	
	MI		865	1	5	8		6		1		1		0	
	MA		97	36	30	25		-4				-4		4	
LDCs	Total	MI	155	100	100	100	MI	24	MI	*56*	MI	21	MI	-1	MI
	AG		57	20	13	7		0		11		-3		0	
	MI	MI	296	41	64	79		27		23		28		0	
	MA		65	35	22	15		0				-3		-2	
Singapore	Total	MA	139	100	100	100	MA	18	MA	*84*	MA	-3	MA	2	MI
	AG		76	3	2	1		0		2		0		0	
	MI		320	9	15	20		4		7		8		2	
	MA		119	85	77	72		12				-10		0	
Ecuador	Total	MI	174	100	100	100	MI	16	MI	*67*	AG	21	MI	-3	MI
	AG		71	49	31	20		-6		33		-7		0	
	MI	MI	305	41	61	72		20		27		28		-4	
	MA		130	9	8	7		0				-1		1	
Colombia	Total	MA	152	100	100	100	MA	8	MA	*76*	MA	21	MI	-5	MI
	AG		101	25	20	16		3		19		-4		-2	
	MI		165	37	39	40		-11		28		29		-6	
	MA		162	38	39	40		12				-4		3	
Suriname	Total	MI	199	100	100	100	MI	1	AG	*58*	MI	46	MI	-6	MI
	AG		199	19	19	19		11		11		-2		0	
	MI	MI	199	80	80	80		-10		47		48		-5	
	MA		199	1	1	1		1				0		0	
Slow (OS):															
Nicaragua	Total	AG	114	100	100	100	AG	10	AG	*101*	AG	-13	AG	1	MA
	AG		138	69	77	84		27		70		-14		1	

Table A6. Contribution shares in change in total exports of Performers and non-Performers, 2002-2007 (current prices) *(continued)*
(Percentage)

Country	Product	MainX 2007	2007/ 2002	Share in Total 2002	Share in Total 2007	TOTAL CHANGE		PERFO		GLOBO		COMPO		GEO	
	MI		18	5	3	1		-9		5		5		-1	
	MA		34	20	12	6		-15				-3		4	
Non-Performers															
Consistent (CN):															
South	Total	MA	135	100	100	100	MI	-5	AG	*86*	MA	14	MI	6	MA
Africa	AG		52	13	8	5		-4		11		-2		0	
	MI		241	27	39	48		0		23		24		1	
	MA		137	45	46	46		9				-5		4	
EU (27)	Total	MA	102	100	100	100	MA	-10	MA	*114*	MA	-9	MA	5	MA
	AG		93	10	9	9		0		11		-2		0	
	MI		214	6	9	12		-1		7		7		0	
	MA		95	83	80	77		-9				-13		5	
New Zealand	Total	AG	88	100	100	100	AG	-16	MA	*132*	AG	-15	AG	-1	AG
	AG		88	59	59	59		2		77		-16		-4	
	MI		198	6	9	13		-4		8		8		1	
	MA		72	30	28	25		-9				-6		-1	
Switzerland	Total	MA	87	100	100	100	MA	-27	MA	*133*	MA	-10	MA	4	MA
	AG		124	3	3	4		1		4		-1		0	
	MI		94	6	6	6		-9		8		8		0	
	MA		85	91	90	89		-19				-17		4	
Canada	Total	MA	66	100	100	100	MI	-29	MA	*176*	MA	8	MI	-55	MA
	AG		49	13	12	10		-4		23		-5		-4	
	MI		187	17	29	48		-4		30		31		-8	
	MA		42	63	54	40		-19				-15		-37	
Pakistan	Total	MA	80	100	100	100	MA	-31	MA	*145*	MA	-18	MA	4	MI
	AG		94	12	13	14		-1		18		-4		2	
	MI		467	2	7	12		5		3		3		2	
	MA		69	85	80	73		-33				-17		0	
Japan	Total	MA	71	100	100	100	MA	-35	MA	*163*	MA	-20	MA	-8	MA
	AG		69	1	1	1		0		2		0		0	
	MI		288	2	4	7		1		3		3		0	
	MA		65	93	90	85		-37				-21		-9	
Australia	Total	MI	117	100	100	100	MI	-37	MI	*99*	MI	30	MI	9	MI
	AG		46	26	17	10		-9		26		-5		-1	
	MI	MI	201	40	55	68		-17		39		41		6	
	MA		71	24	19	15		-7				-3		1	
USA	Total	MA	68	100	100	100	MA	-42	MA	*171*	MA	-18	MA	-11	MA
	AG		65	10	10	10		-3		17		-3		-1	
	MI		241	4	7	13		1		6		6		-1	
	MA		59	82	78	72		-41				-20		-9	
Kenya	Total	AG	93	100	100	100	AG	-43	MI	*125*	AG	7	MI	12	MI
	AG		98	54	55	57		1		67		-14		3	
	MI		-39	19	6	-8		-64		24		25		6	
	MA		176	26	37	49		18				-5		3	
Indonesia	Total	MA	99	100	100	100	MI	-46	MI	*117*	MA	23	MI	6	MI
	AG		164	16	21	26		12		18		-4		-1	
	MI		144	30	36	43		-33		34		36		6	
	MA		56	54	42	30		-24				-9		1	
Occasional (ON):															
Algeria	Total	MI	220	100	100	100	MI	-2	MI	53	MI	*53*	MI	-4	MI
	AG		84	0	0	0		0		0		0		0	
	MI	MI	222	97	98	98		-2		51		53		-4	
	MA		67	2	1	1		-1				0		0	
Tunisia	Total	MA	119	100	100	100	MA	-2	MA	*98*	MA	-2	MA	6	MA
	AG		210	7	10	12		6		7		-1		1	

Table A6. Contribution shares in change in total exports of Performers and non-Performers, 2002-2007 (current prices) *(continued)*
(Percentage)

Country	Product	MainX 2007	2007/ 2002	Share in Total		TOTAL CHANGE		PERFO		GLOBO		COMPO		GEO	
				2002	2007										
	MI		289	11	20	27		5		11		11		0	
	MA		89	82	71	61		-13				-11		5	
Iceland	Total	AG	114	100	100	100	MA	-5	AG	*102*	AG	5	MI	-1	MI
	AG		43	65	44	25		-28		66		-14		-1	
	MI		208	20	29	36		-4		20		21		-1	
	MA		310	14	27	38		26				-2		0	
Israel	Total	MA	84	100	100	100	MA	-10	MA	*138*	MA	-15	MA	-13	MA
	AG		78	4	4	4		-1		6		-1		0	
	MI		172	3	5	6		-2		4		4		0	
	MA		78	92	89	86		-10				-18		-13	
Mexico	Total	MA	69	100	100	100	MA	-10	MA	*167*	MA	-4	MA	-53	MA
	AG		75	6	6	6		1		9		-2		-2	
	MI		209	10	18	30		0		17		17		-4	
	MA		51	84	75	62		-12				-20		-47	
Costa Rica	Total	MA	78	100	100	100	MA	-11	AG	*149*	MA	-21	MA	-17	MA
	AG		69	35	33	31		-5		52		-11		-5	
	MI		119	2	2	3		-2		3		3		-1	
	MA		82	63	65	66		-4				-13		-11	
Argentina	Total	AG	117	100	100	100	AG	-12	MI	*99*	AG	7	MI	5	MA
	AG		137	47	52	55		16		47		-10		2	
	MI		53	21	15	10		-31		21		21		-2	
	MA		120	30	31	31		1				-4		5	
Guatemala	Total	MA	66	100	100	100	AG	-20	MA	*175*	MA	-20	MA	-35	MA
	AG		129	30	41	58		20		52		-11		-3	
	MI		231	5	9	16		2		8		8		-2	
	MA		61	51	50	48		-12				-13		-18	
Malaysia	Total	MA	87	100	100	100	MA	-27	MA	*133*	MA	-5	MA	-1	MA
	AG		125	10	12	14		4		13		-3		0	
	MI		212	9	16	23		-5		13		13		2	
	MA		67	80	71	61		-26				-15		-4	
Norway	Total	MI	129	100	100	100	MI	-44	MI	*90*	MI	57	MI	-3	MI
	AG		72	7	6	4		-2		7		-1		0	
	MI	MI	149	67	73	77		-41		60		62		-4	
	MA		92	21	18	15		-2				-3		1	
Barbados	Total	MA	86	100	100	100	MA	-61	AG	*135*	MA	15	MI	11	MA
	AG		13	31	19	5		-29		42		-9		0	
	MI		158	23	32	43		-22		31		32		1	
	MA		106	44	49	54		-7				-8		10	
Philippines	Total	MA	43	100	100	100	MA	-124	MA	*267*	MA	-30	MA	-13	MA
	AG		54	6	6	7		-4		15		-3		-1	
	MI		314	3	8	19		3		7		7		1	
	MA		34	91	85	71		-126				-34		-13	
Jamaica	Total	MI	74	100	100	100	MI	-136	MI	*156*	MI	98	MI	-18	MI
	AG		29	22	17	9		-16		35		-7		-3	
	MI	MI	99	67	76	89		-109		104		108		-14	
	MA		18	9	6	2		-9				-2		-2	
Seychelles	Total	AG	58	100	100	100	AG	-451	MI	*200*	MI	179	MI	172	MI
	AG		643	12	55	130		113		23		-5		-2	
	MI		-23	88	43	-35		-569		177		184		174	
	MA		...	0	2	5		5				0		0	

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Note: Total effects also include effects from non-specified products which are not shown in this table.
Legend: *Grey cells* indicate the maximum contribution share to total change in exports.

Table A7. PERFO contribution shares in change in total exports, by sector and region, 1996-2002 (using nominal values)
(Percentage)

Country	Product	Share in Total 1996	Share in Total 2002	2002/1996	Main X 2002	Change in Exports Total		Change in Exports PERFO	
Agriculture as main exported sector									
South and Central America									
Nicaragua	Total	100	100	-15	AG	100	MA	207	MA
	AG	64	69	-8		35		62	
	MI	2	5	185		-19		-17	
	MA	33	20	-49		109		183	
Uruguay	Total	100	100	-22	AG	100	AG	93	MA
	AG	62	61	-23		64		36	
	MI	2	1	-44		3		5	
	MA	36	36	-22		35		54	
Paraguay	Total	100	100	-9	AG	100	AG	20	MA
	AG	82	85	-7		58		-45	
	MI	1	1	-15		1		3	
	MA	17	15	-22		40		63	
Argentina	Total	100	100	8	AG	100	MI	55	MI
	AG	56	47	-9		-60		-25	
	MI	14	21	60		105		73	
	MA	30	30	9		35		-12	
Ecuador	Total	100	100	3	AG	100	MI	-366	MI
	AG	53	49	-4		-73		-155	
	MI	37	41	16		190		-163	
	MA	8	9	23		58		29	
Europe:									
Iceland	Total	100	100	18	AG	100	MI	74	MI
	AG	77	65	0		-1		3	
	MI	11	20	117		72		58	
	MA	11	14	43		28		14	
Africa:									
Kenya	Total	100	100	6	AG	100	MI	-34	AG
	AG	64	54	-10		-105		-122	
	MI	10	19	111		173		129	
	MA	26	26	5		20		-53	
Asia:									
New Zealand	Total	100	100	2	AG	100	MA	-131	MA
	AG	61	59	-2		-58		76	
	MI	7	6	-12		-41		-139	
	MA	30	30	2		36		-229	
Fuels and mining products as main exported sector									
South and Central America									
Bolivia	Total	100	100	26	MI	100	MI	56	AG
	AG	38	34	11		17		30	
	MI	45	44	21		36		-8	
	MA	16	16	25		15		2	
Chile	Total	100	100	18	MI	100	AG	23	AG
	AG	37	36	15		30		35	
	MI	45	40	5		12		-57	
	MA	13	15	39		28		18	
Jamaica	Total	100	100	-20	MI	100	MA	232	MA
	AG	24	22	-24		29		33	
	MI	50	67	7		-17		60	
	MA	26	9	-71		94		145	
Peru	Total	100	100	32	MI	100	MI	52	MA
	AG	31	25	9		9		11	
	MI	44	39	17		23		-16	
	MA	14	16	52		23		12	

Table A7. PERFO contribution shares in change in total exports, by sector and region, 1996-2002 (using nominal values) *(continued)*
(Percentage)

Country	Product	Share in Total 1996	Share in Total 2002	2002/1996	Main X 2002	Change in Exports Total		Change in Exports PERFO	
Suriname	Total	100	100	10	MI	100	MI	-97	MA
	AG	23	19	-11		-25		0	
	MI	69	80	26		184		1	
	MA	2	1	-8		-1		-6	
Seychelles	Total	100	100	64	MI	100	MI	63	MI
	AG	30	12	-36		-17		-15	
	MI	22	88	558		193		182	
	MA	48	0	-100		-76		-104	
Trinidad T.	Total	100	100	51	MI	100	MI	48	MI
	AG	8	7	18		3		4	
	MI	51	60	80		79		49	
	MA	41	33	22		18		-5	
Europe:									
Norway	Total	100	100	22	MI	100	MI	4	MI
	AG	9	7	0		0		2	
	MI	62	67	32		90		17	
	MA	23	21	14		15		-9	
CIS:									
Azerbaijan	Total	100	100	243	MI	100	MI	96	MI
	AG	13	4	15		1		2	
	MI	68	90	356		99		95	
	MA	20	5	-17		-1		-3	
Kazakhstan	Total	100	100	64	MI	100	MI	93	MI
	AG	15	6	-32		-8		-1	
	MI	53	76	136		112		106	
	MA	32	15	-24		-12		-20	
Russian Fed.	Total	100	100	21	MI	100	MI	30	MI
	AG	8	8	29		11		14	
	MI	58	62	29		82		34	
	MA	30	25	1		1		-25	
Africa:									
Algeria	Total	100	100	69	MI	100	MI	64	MI
	AG	1	0	-67		-1		-1	
	MI	94	97	76		103		67	
	MA	5	2	-19		-1		-3	
Asia:									
Australia	Total	100	100	8	MI	100	MI	-20	MA
	AG	29	26	-5		-18		34	
	MI	35	40	23		98		-7	
	MA	27	24	-1		-4		-61	
LDCs:	Total	100	100	51	MI	100	MI	68	MI
	AG	29	20	7		4		6	
	MI	33	41	88		57		37	
	MA	28	35	87		48		33	
Manufacture products as main exported sector									
North America:									
Mexico	Total	100	100	68	MA	100	MA	44	MA
	AG	8	6	23		3		1	
	MI	14	10	21		4		-4	
	MA	78	84	81		93		47	
Canada	Total	100	100	25	MA	100	MA	-47	MA
	AG	16	13	0		0		-8	
	MI	17	17	28		19		-6	
	MA	62	63	27		68		-34	
USA	Total	100	100	11	MA	100	MA	-90	MA
	AG	13	10	-16		-19		-16	
	MI	4	4	-3		-1		-12	
	MA	78	82	18		123		-50	

Table A7. PERFO contribution shares in change in total exports, by sector and region, 1996-2002 (using nominal values) *(continued)*
(Percentage)

Country	Product	Share in Total 1996	Share in Total 2002	2002/1996	Main X 2002	Change in Exports Total		Change in Exports PERFO	
South and Central America:									
Barbados	Total	100	100	-13	MA	100	AG	161	MA
	AG	38	31	-29		82		60	
	MI	14	23	47		-49		-35	
	MA	48	44	-21		78		146	
Guatemala	Total	100	100	105	MA	100	MA	89	MA
	AG	66	30	-7		-4		-10	
	MI	4	5	147		5		4	
	MA	31	51	243		71		67	
Costa Rica	Total	100	100	89	MA	100	MA	88	MA
	AG	72	35	-9		-7		-14	
	MI	2	2	68		2		1	
	MA	25	63	373		106		101	
Brazil	Total	100	100	26	MA	100	MA	48	AG
	AG	34	32	20		25		27	
	MI	11	14	58		24		13	
	MA	53	52	24		48		6	
Colombia	Total	100	100	12	MA	100	MA	-62	MI
	AG	32	25	-15		-40		-53	
	MI	37	37	12		39		-64	
	MA	29	38	43		109		68	
Europe:									
Albania	Total	100	100	61	MA	100	MA	72	MA
	AG	20	10	-22		-7		-6	
	MI	15	5	-42		-10		-15	
	MA	65	81	102		108		85	
Turkey	Total	100	100	56	MA	100	MA	71	MA
	AG	21	11	-21		-8		-6	
	MI	4	4	44		3		2	
	MA	74	83	75		98		69	
Serbia & Mon.	Total	100	100	24	MA	100	MA	45	MA
	AG	32	27	4		6		11	
	MI	17	16	14		10		-6	
	MA	49	57	44		92		49	
EU (27)	Total	100	100	17	MA	100	MA	-7	MA
	AG	11	10	-2		-2		1	
	MI	5	6	24		8		0	
	MA	80	83	20		94		-8	
Switzerland	Total	100	100	15	MA	100	MA	-44	MA
	AG	4	3	-5		-1		-1	
	MI	3	6	152		26		21	
	MA	94	91	12		75		-66	
CIS:									
Ukraine	Total	100	100	25	MA	100	MA	67	MI
	AG	20	15	-7		-6		14	
	MI	13	18	77		39		32	
	MA	66	66	24		65		18	
Africa:									
Egypt	Total	100	100	33	MA	100	MA	30	MA
	AG	15	17	50		22		23	
	MI	54	34	-17		-27		-71	
	MA	32	42	76		72		46	
Tunisia	Total	100	100	25	MA	100	MA	24	MA
	AG	8	7	8		3		3	
	MI	12	11	13		6		-5	
	MA	80	82	27		89		24	
South Africa	Total	100	100	2	MA	100	MA	-794	MI
	AG	14	13	-5		-36		-28	

Table A7. PERFO contribution shares in change in total exports, by sector and region, 1996-2002 (using nominal values) *(continued)*
(Percentage)

Country	Product	Share in Total 1996	Share in Total 2002	2002/1996	Main X 2002	Change in Exports Total		Change in Exports PERFO	
	MI	24	27	13		186		-218	
	MA	41	45	13		313		-201	
Middle East:									
Israel	Total	100	100	43	MA	100	MA	48	MA
	AG	7	4	-10		-2		-1	
	MI	2	3	155		6		5	
	MA	91	92	45		95		43	
Asia:									
China	Total	100	100	116	MA	100	MA	84	MA
	AG	10	6	26		2		3	
	MI	6	4	57		3		1	
	MA	84	90	130		95		79	
Philippines	Total	100	100	72	MA	100	MA	67	MA
	AG	11	6	-13		-2		-3	
	MI	5	3	-10		-1		-3	
	MA	83	91	89		103		73	
India	Total	100	100	47	MA	100	MA	59	MA
	AG	21	13	-7		-3		-2	
	MI	5	8	123		13		11	
	MA	72	74	52		80		41	
Thailand	Total	100	100	22	MA	100	MA	32	MA
	AG	25	18	-11		-13		-9	
	MI	2	4	98		10		7	
	MA	71	75	28		89		22	
Korea	Total	100	100	25	MA	100	MA	21	MA
	AG	3	2	-12		-2		0	
	MI	4	5	73		11		7	
	MA	89	92	29		104		29	
Malaysia	Total	100	100	20	MA	100	MA	8	MA
	AG	14	10	-16		-11		-7	
	MI	9	9	23		11		-3	
	MA	76	80	26		99		16	
Indonesia	Total	100	100	19	MA	100	MA	-7	MI
	AG	17	16	10		9		11	
	MI	32	30	12		19		-29	
	MA	51	54	25		69		9	
Pakistan	Total	100	100	6	MA	100	MA	-227	MA
	AG	15	12	-15		-34		-31	
	MI	1	2	130		20		16	
	MA	84	85	8		109		-217	
Japan	Total	100	100	1	MA	100	MI	-1556	MA
	AG	1	1	3		2		6	
	MI	2	2	7		8		-24	
	MA	95	93	-1		-37		-1617	
Singapore	Total	100	100	0	MA	100	MA	-17138	MA
	AG	4	3	-40		-		-1177	
	MI	11	9	-21		-		-4506	
	MA	83	85	1		1005		-13801	
World	Total	100	100	20	MA				
	AG	12	9	-3					
	MI	12	13	27					
	MA	74	75	23					

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Legend:
Figures in **bold** indicate "Performers" in the region, i.e. countries with positive PERFO effects.
Sectors in **bold** represent sector where PERFO is supposedly most affected.

Table A8. PERFO contribution shares in change in total exports, by sector and region, 2002-2007 (using nominal values)
(Percentage)

Country	Product	Share in Total 2002	Share in Total 2007	2007/ 2002	Main X 2007	Total change Total		Total change PERFO	
Agriculture as main exported sector									
South and Central America									
Paraguay	Total	100	100	194	AG	100	AG	46	AG
	AG	85	85	195		85		40	
	MI	1	1	163		1		0	
	MA	15	13	172		13		4	
Uruguay	Total	100	100	142	AG	100	AG	25	AG
	AG	61	64	151		65		23	
	MI	1	5	865		8		6	
	MA	36	30	97		25		-4	
Nicaragua	Total	100	100	114	AG	100	AG	10	AG
	AG	69	77	138		84		27	
	MI	5	3	18		1		-9	
	MA	20	12	34		6		-15	
Argentina	Total	100	100	117	AG	100	AG	-12	MI
	AG	47	52	137		55		16	
	MI	21	15	53		10		-31	
	MA	30	31	120		31		1	
Europe:									
Iceland	Total	100	100	114	AG	100	MA	-5	AG
	AG	65	44	43		25		-28	
	MI	20	29	208		36		-4	
	MA	14	27	310		38		26	
Africa:									
Kenya	Total	100	100	93	AG	100	AG	-43	MI
	AG	54	55	98		57		1	
	MI	19	6	-39		-8		-64	
	MA	26	37	176		49		18	
Seychelles	Total	100	100	58	AG	100	AG	-451	MI
	AG	12	55	643		130		113	
	MI	88	43	-23		-35		-569	
	MA	0	2	...		5		5	
Asia:									
New Zealand	Total	100	100	88	AG	100	AG	-16	MA
	AG	59	59	88		59		2	
	MI	6	9	198		13		-4	
	MA	30	28	72		25		-9	
Fuels and mining products as main exported sector									
South and Central									
Peru	Total	100	100	262	MI	100	MI	47	MI
	AG	25	15	114		11		3	
	MI	39	58	437		65		31	
	MA	16	12	165		10		4	
Chile	Total	100	100	276	MI	100	MI	45	MI
	AG	36	20	108		14		3	
	MI	40	64	499		72		38	
	MA	15	10	135		8		2	
Trinidad T.	Total	100	100	289	MI	100	MI	44	MI
	AG	7	3	53		1		-1	
	MI	60	69	344		72		28	
	MA	33	28	235		27		17	
Bolivia	Total	100	100	251	MI	100	MI	40	MI
	AG	34	16	70		9		-4	
	MI	44	74	498		86		47	
	MA	16	7	52		3		-2	

Table A8. PERFO contribution shares in change in total exports, by sector and region, 2002-2007 (using nominal values) *(continued)*
(Percentage)

Country	Product	Share in Total 2002	Share in Total 2007	2007/ 2002	Main X 2007	Total change Total		Total change PERFO	
Ecuador	Total	100	100	174	MI	100	MI	16	MI
	AG	49	31	71		20		-6	
	MI	41	61	305		72		20	
	MA	9	8	130		7		0	
Suriname	Total	100	100	199	MI	100	MI	1	AG
	AG	19	19	199		19		11	
	MI	80	80	199		80		-10	
	MA	1	1	199		1		1	
Jamaica	Total	100	100	74	MI	100	MI	-136	MI
	AG	22	17	29		9		-16	
	MI	67	76	99		89		-109	
	MA	9	6	18		2		-9	
Europe:									
Norway	Total	100	100	129	MI	100	MI	-44	MI
	AG	7	6	72		4		-2	
	MI	67	73	149		77		-41	
	MA	21	18	92		15		-2	
CIS:									
Kazakhstan	Total	100	100	394	MI	100	MI	46	MI
	AG	6	3	164		3		0	
	MI	76	84	449		86		43	
	MA	15	11	255		10		3	
Azerbaijan	Total	100	100	384	MI	100	MI	39	MI
	AG	4	5	487		5		4	
	MI	90	88	373		87		31	
	MA	5	4	276		3		1	
Russian Fed.	Total	100	100	231	MI	100	MI	15	MI
	AG	8	7	169		6		2	
	MI	62	73	284		77		15	
	MA	25	19	162		17		0	
Africa:									
Egypt	Total	100	100	244	MI	100	MI	40	MI
	AG	17	10	102		7		0	
	MI	34	61	531		73		39	
	MA	42	28	131		22		4	
Algeria	Total	100	100	220	MI	100	MI	-2	MI
	AG	0	0	84		0		0	
	MI	97	98	222		98		-2	
	MA	2	1	67		1		-1	
Asia:									
Australia	Total	100	100	117	MI	100	MI	-37	MI
	AG	26	17	46		10		-9	
	MI	40	55	201		68		-17	
	MA	24	19	71		15		-7	
LDCs	Total	100	100	155	MI	100	MI	24	MI
	AG	20	13	57		7		0	
	MI	41	64	296		79		27	
	MA	35	22	65		15		0	
Manufacture products as main exported sectors									
North America									
Mexico	Total	100	100	69	MA	100	MA	-10	MA
	AG	6	6	75		6		1	
	MI	10	18	209		30		0	
	MA	84	75	51		62		-12	
Canada	Total	100	100	66	MA	100	MI	-29	MA
	AG	13	12	49		10		-4	
	MI	17	29	187		48		-4	
	MA	63	54	42		40		-19	

Table A8. PERFO contribution shares in change in total exports, by sector and region, 2002-2007 (using nominal values) *(continued)*
(Percentage)

Country	Product	Share in Total 2002	Share in Total 2007	2007/ 2002	Main X 2007	Total change Total		Total change PERFO	
USA	Total	100	100	68	MA	100	MA	-42	MA
	AG	10	10	65		10		-3	
	MI	4	7	241		13		1	
	MA	82	78	59		72		-41	
South and Central America									
Brazil	Total	100	100	166	MA	100	MA	30	MA
	AG	32	30	152		29		10	
	MI	14	20	291		24		4	
	MA	52	47	143		44		16	
Colombia	Total	100	100	152	MA	100	MA	8	MA
	AG	25	20	101		16		3	
	MI	37	39	165		40		-11	
	MA	38	39	162		40		12	
Costa Rica	Total	100	100	78	MA	100	MA	-11	AG
	AG	35	33	69		31		-5	
	MI	2	2	119		3		-2	
	MA	63	65	82		66		-4	
Barbados	Total	100	100	86	MA	100	MA	-61	AG
	AG	31	19	13		5		-29	
	MI	23	32	158		43		-22	
	MA	44	49	106		54		-7	
Guatemala	Total	100	100	66	MA	100	AG	-20	MA
	AG	30	41	129		58		20	
	MI	5	9	231		16		2	
	MA	51	50	61		48		-12	
Europe:									
Serbia & Mon.	Total	100	100	326	MA	100	MA	58	MA
	AG	27	20	208		17		9	
	MI	16	13	252		12		1	
	MA	57	67	396		69		47	
Albania	Total	100	100	215	MA	100	MA	48	MA
	AG	10	9	184		8		4	
	MI	5	14	726		18		12	
	MA	81	71	173		65		26	
Turkey	Total	100	100	197	MA	100	MA	38	MA
	AG	11	10	168		9		4	
	MI	4	7	467		9		4	
	MA	83	81	191		80		31	
EU (27)	Total	100	100	102	MA	100	MA	-10	MA
	AG	10	9	93		9		0	
	MI	6	9	214		12		-1	
	MA	83	80	95		77		-9	
Switzerland	Total	100	100	87	MA	100	MA	-27	MA
	AG	3	3	124		4		1	
	MI	6	6	94		6		-9	
	MA	91	90	85		89		-19	
CIS:									
Ukraine	Total	100	100	174	MA	100	MA	1	MA
	AG	15	14	154		13		2	
	MI	18	11	76		8		-16	
	MA	66	72	200		76		12	
Africa:									
Tunisia	Total	100	100	119	MA	100	MA	-2	MA
	AG	7	10	210		12		6	
	MI	11	20	289		27		5	
	MA	82	71	89		61		-13	
South Africa	Total	100	100	135	MA	100	MI	-5	AG
	AG	13	8	52		5		-4	

Table A8. PERFO contribution shares in change in total exports, by sector and region, 2002-2007 (using nominal values) *(continued)*
(Percentage)

Country	Product	Share in Total 2002	Share in Total 2007	2007/ 2002	Main X 2007	Total change Total		Total change PERFO	
	MI	27	39	241		48		0	
	MA	45	46	137		46		9	
Middle East:									
Israel	Total	100	100	84	MA	100	MA	-10	MA
	AG	4	4	78		4		-1	
	MI	3	5	172		6		-2	
	MA	92	89	78		86		-10	
Asia:									
China	Total	100	100	274	MA	100	MA	63	MA
	AG	6	3	107		2		0	
	MI	4	3	209		3		-1	
	MA	90	93	288		94		63	
India	Total	100	100	195	MA	100	MA	39	MI
	AG	13	11	145		10		3	
	MI	8	24	825		33		22	
	MA	74	64	152		58		17	
Thailand	Total	100	100	126	MA	100	MA	19	MA
	AG	18	16	101		15		2	
	MI	4	6	271		8		0	
	MA	75	76	129		77		19	
Singapore	Total	100	100	139	MA	100	MA	18	MA
	AG	3	2	76		1		0	
	MI	9	15	320		20		4	
	MA	85	77	119		72		12	
Korea	Total	100	100	129	MA	100	MA	16	MA
	AG	2	2	63		1		0	
	MI	5	9	290		12		1	
	MA	92	89	122		87		16	
Malaysia	Total	100	100	87	MA	100	MA	-27	MA
	AG	10	12	125		14		4	
	MI	9	16	212		23		-5	
	MA	80	71	67		61		-26	
Pakistan	Total	100	100	80	MA	100	MA	-31	MA
	AG	12	13	94		14		-1	
	MI	2	7	467		12		5	
	MA	85	80	69		73		-33	
Japan	Total	100	100	71	MA	100	MA	-35	MA
	AG	1	1	69		1		0	
	MI	2	4	288		7		1	
	MA	93	90	65		85		-37	
Indonesia	Total	100	100	99	MA	100	MI	-46	MI
	AG	16	21	164		26		12	
	MI	30	36	144		43		-33	
	MA	54	42	56		30		-24	
Philippines	Total	100	100	43	MA	100	MA	-124	MA
	AG	6	6	54		7		-4	
	MI	3	8	314		19		3	
	MA	91	85	34		71		-126	
World	Total	100	100	116	MA				
	AG	9	8	92					
	MI	13	20	236					
	MA	75	70	100					

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Legend:
Grey cells indicate "Performers" in the region, i.e. countries with positive PERFO effects.
Sectors in **bold** represent sector where PERFO is supposedly most affected.

MAXIMUM GEO MOSTLY IN NORTH AND SOUTH AMERICA (NA AND CSC)

Table A9. Selected economies' GEO contribution shares to change in total exports, 1996-2002 (current prices)
(Percentage)

Country	Product	GEO		NA		CSC		EUR		CIS		AFR		MEA		ASI	
Ecuador	Total	*130*	AG	*300*	AG	*-125*	MI	-16	AG	-18	AG	1	AG	2	AG	-13	AG
(ON)	AG	132		198		-31		-4		-18		1		2		-15	
	MI	36		91		-59		0		0		0		0		4	
	MA	-31		7		-36		0		0		0		0		-2	
Costa Rica	Total	*7*	AG	*13*	AG	*-4*	MA	0	AG	0	AG	0	AG	0	AG	0	AG
(OC)	AG	9		11		-1		0		0		0		0		0	
	MI	0		0		0		0		0		0		0		0	
	MA	-2		2		-3		0		0		0		0		0	
Iceland	Total	*6*	AG	*23*	AG	-4	MA	-6	MI	-2	AG	0	AG	0	AG	-6	AG
(OA)	AG	9		18		0		-2		-1		0		0		-6	
	MI	-3		0		0		-3		0		0		0		0	
	MA	-2		3		-3		0		0		0		0		0	
Guatemala	Total	*5*	AG	*11*	AG	*-6*	MA	0	AG	0	AG	0	AG	0	AG	0	AG
(OC)	AG	8		10		-2		0		0		0		0		0	
	MI	0		0		0		0		0		0		0		0	
	MA	-3		1		-4		0		0		0		0		0	
Canada	Total	*70*	MA	*75*	MA	-1	MA	-1	MI	0	MA	0	AG	0	MA	-3	MA
(CN)	AG	10		11		0		0		0		0		0		-1	
	MI	7		8		0		0		0		0		0		0	
	MA	43		45		-1		0		0		0		0		-1	
Japan	Total	*67*	MA	*446*	MA	-42	MA	-20	MA	-2	MA	-5	MA	23	MA	-333	MA
(CN)	AG	-2		3		0		0		0		0		0		-5	
	MI	3		2		0		0		0		0		0		2	
	MA	35		410		-42		-16		-2		-6		24		-333	
Mexico	Total	*24*	MA	*26*	MA	*-2*	MA	0	MI	0	MA	0	AG	0	MA	0	MA
(OC)	AG	2		3		0		0		0		0		0		0	
	MI	2		3		0		0		0		0		0		0	
	MA	19		21		-1		0		0		0		0		0	
Pakistan	Total	*19*	MA	*61*	MA	-5	MA	-7	MA	-2	MA	2	AG	23	MA	-52	MA
(CN)	AG	4		3		-1		0		0		4		7		-9	
	MI	0		0		0		0		0		0		0		0	
	MA	15		58		-4		-7		-2		-3		16		-43	
USA	Total	*18*	MA	*61*	MA	-12	MA	-5	MA	-1	AG	0	AG	3	MA	-28	MA
(CN)	AG	1		7		-1		0		-1		1		0		-5	
	MI	1		2		-1		0		0		0		0		0	
	MA	11		47		-11		-2		0		-1		3		-24	
Seychelles	Total	*11*	MA	*12*	MA	0	AG	0	AG	0	AG	0	AG	1	MI	-2	MA
(OC)	AG	-1		0		0		0		0		0		0		0	
	MI	1		0		0		0		0		0		1		0	
	MA	11		12		0		0		0		0		0		-1	
Egypt	Total	*6*	MA	*7*	MA	0	MI	*-5*	MI	-1	AG	0	AG	5	MA	0	AG
(CP)	AG	1		0		0		0		-1		0		2		0	
	MI	1		3		0		-4		0		0		1		0	
	MA	4		4		0		-1		0		0		2		0	
Philippines	Total	*4*	MA	*11*	MA	0	MA	-1	MA	0	AG	0	AG	0	MA	-6	MA
(OC)	AG	1		2		0		0		0		0		0		-1	
	MI	0		0		0		0		0		0		0		0	
	MA	3		9		0		0		0		0		0		-5	
India	Total	*3*	MA	*10*	MA	0	MA	-1	MA	-1	AG	0	MA	3	MA	-6	MA
(OC)	AG	0		1		0		0		-1		0		1		-2	
	MI	0		0		0		0		0		0		0		0	
	MA	3		8		0		-1		0		0		2		-5	
Israel	Total	*2*	MA	*15*	MA	-1	MI	-1	MI	-1	MI	0	AG	0	MA	-5	MI
(OC)	AG	0		0		0		0		0		0		0		0	
	MI	0		0		0		0		0		0		0		0	

Table A9. Selected economies' GEO contribution shares to change in total exports, 1996-2002 (current prices) *(continued)*
(Percentage)

Country	Product	GEO		NA		CSC		EUR		CIS		AFR		MEA		ASI	
	MA	3		15		-1		-1		0		0		0		-5	
Indonesia	Total	*0*	MI	*18*	MA	-1	MA	-1	MA	0	AG	0	MA	2	MA	-17	MA
(CN)	AG	1		6		0		0		0		0		0		-4	
	MI	3		1		0		0		0		0		0		3	
	MA	-4		11		-1		-1		0		0		2		-15	
Colombia	Total	*26*	AG	*77*	MI	*-41*	MA	-5	MI	-1	AG	0	AG	0	MI	-3	AG
(ON)	AG	21		29		-4		-1		-1		0		0		-2	
	MI	19		30		-9		-2		0		0		0		0	
	MA	-19		13		-28		0		0		0		0		-1	
Trinidad T.	Total	*6*	MI	*19*	MI	*-12*	MA	0	MI	0	MA	0	MI	0	MA	0	MA
(CC)	AG	-1		1		-1		0		0		0		0		0	
	MI	4		9		-5		0		0		0		0		0	
	MA	3		9		-5		0		0		0		0		0	
Suriname	Total	*5*	MA	*62*	MI	-18	AG	*-20*	MI	-10	MI	0	MI	0	ALL	-9	AG
(ON)	AG	-18		2		-10		0		0		0		0		-9	
	MI	-6		30		-7		-19		-10		0		0		0	
	MA	1		1		0		0		0		0		0		0	
LDCs	Total	*1*	MI	*7*	MI	0	MA	-2	AG	-1	AG	1	AG	0	AG	-2	MI
(OC)	AG	0		1		0		0		0		1		0		-2	
	MI	3		4		0		0		0		0		0		0	
	MA	1		3		0		0		0		0		0		0	
Paraguay	Total	*100*	AG	*-13*	AG	*109*	AG	2	AG	0	MA	0	AG	0	AG	2	AG
(OS)	AG	78		-8		83		2		0		0		0		2	
	MI	1		0		1		0		0		0		0		0	
	MA	20		-5		24		0		0		0		0		0	
Barbados	Total	*46*	MA	*-32*	MA	*61*	MA	1	AG	0	ALL	0	AG	0	AGMI	1	MA
(OS)	AG	14		-7		20		1		0		0		0		0	
	MI	14		0		0		0		0		0		0		0	
	MA	19		-24		41		0		0		0		0		1	
Uruguay	Total	*39*	AG	*-9*	MA	*42*	AG	1	AG	1	AG	0	AG	-1	AG	5	AG
(ON)	AG	20		-4		21		0		1		0		-1		3	
	MI	1		0		1		0		0		0		0		0	
	MA	19		-4		20		0		0		0		0		2	
Kenya	Total	*23*	AG	16	AG	0	AG	-5	AG	0	AG	*26*	AG	7	AG	-14	AG
(CN)	AG	46		14		0		-4		0		42		6		-11	
	MI	2		0		0		0		0		5		0		0	
	MA	-25		1		0		0		0		-21		0		-3	
Albania	Total	-2	MA	*1*	AG	0	AG	*-3*	MA	0	AG	0	MA	0	MA	0	MI
(OC)	AG	0		0		0		0		0		0		0		0	
	MI	-1		0		0		-1		0		0		0		0	
	MA	-1		0		0		-2		0		0		0		0	
Chile	Total	-4	MA	*24*	AG	*-16*	MA	-5	MI	-1	AG	0	AG	1	AG	-5	AG
(OS)	AG	1		13		-5		0		-1		0		1		-6	
	MI	0		5		-3		-3		0		0		0		2	
	MA	-7		3		-9		0		0		0		0		-1	
Argentina	Total	-70	MA	*29*	AG	*-95*	MA	-2	AG	-2	AG	8	AG	7	AG	-14	AG
(OS)	AG	-14		15		-29		-2		-2		8		6		-10	
	MI	-15		5		-20		0		0		0		0		0	
	MA	-41		9		-46		-1		0		0		1		-3	
New Zealand	Total	-141	MA	*158*	AG	-23	AG	-7	AG	-15	AG	10	AG	18	AG	-267	AG
(CN)	AG	-44		116		-18		-5		-15		11		16		-149	
	MI	8		2		-1		0		0		0		0		6	
	MA	-93		40		-5		-2		0		-1		2		-127	
China	Total	-2	MA	*3*	MA	0	MA	0	MA	0	AG	0	MA	0	MA	-5	MA
(CC)	AG	-1		0		0		0		0		0		0		-1	
	MI	0		0		0		0		0		0		0		0	
	MA	-2		3		0		0		0		0		0		-5	
Turkey	Total	-3	MA	*3*	MA	0	MA	-1	MA	-4	AG	0	MA	2	MA	-1	MA

Table A9. Selected economies' GEO contribution shares to change in total exports, 1996-2002 (current prices) *(continued)*
(Percentage)

Country	Product	GEO		NA		CSC		EUR		CIS		AFR		MEA		ASI	
(OC)	AG	0		1		0		0		-2		0		1		0	
	MI	0		0		0		0		0		0		0		0	
	MA	-2		2		0		-1		-1		0		2		-1	
Brazil	Total	-3	MA	*19*	MA	*-16*	MA	-2	MI	-1	AG	1	AG	1	AG	-5	MA
(CP)	AG	2		5		-1		0		-1		1		1		-2	
	MI	0		1		-1		-1		0		0		0		0	
	MA	-5		12		-14		-1		0		0		0		-3	
Switzerland	Total	-3	MA	*15*	MA	-3	MA	-6	MA	0	MA	-1	MA	4	MA	-11	MA
(CN)	AG	0		0		0		0		0		0		0		0	
	MI	0		0		0		-1		0		0		0		0	
	MA	-3		14		-3		-6		0		-1		3		-11	
Malaysia	Total	-7	MA	*20*	MA	-1	MA	-1	MA	0	MA	0	AG	1	MA	-27	MA
(OS)	AG	-2		1		0		0		0		1		0		-4	
	MI	1		0		0		0		0		0		0		1	
	MA	-6		19		-1		-1		0		0		1		-24	
Thailand	Total	-7	MA	*20*	MA	-1	MA	-1	MA	0	MA	0	AG	2	MA	-24	MA
(CP)	AG	0		5		0		0		0		1		1		-6	
	MI	0		0		0		0		0		0		0		0	
	MA	-8		14		-1		-1		0		0		2		-18	
Korea	Total	-9	MA	*16*	MA	-4	MA	-1	MA	-1	MA	-1	MA	2	MA	-19	MA
(CP)	AG	-1		0		0		0		0		0		0		-1	
	MI	0		0		0		0		0		0		0		0	
	MA	-8		15		-4		-1		-1		-1		2		-19	
Serbia M.	Total	-10	MA	*2*	MA	0	MA	*-7*	MI	-6	MA	1	AG	0	MA	0	MA
(OP)	AG	-2		1		0		-1		-2		1		0		0	
	MI	-3		0		0		-3		0		0		0		0	
	MA	-5		1		0		-2		-3		0		0		0	
EU (27)	Total	-12	MA	*9*	MA	-2	MA	*-8*	MA	-2	AG	0	MA	2	MA	-6	MA
(CN)	AG	-1		1		0		0		-1		0		0		0	
	MI	-1		0		0		-1		0		0		0		0	
	MA	-8		8		-2		-5		-1		-1		2		-5	
Tunisia	Total	-13	MA	*1*	MA	-1	MA	*-6*	MA	0	MA	0	MA	1	MA	-2	MA
(OP)	AG	0		0		0		0		0		1		0		0	
	MI	-1		0		0		-2		0		0		0		0	
	MA	-12		1		-1		-4		0		-1		1		-2	
Kazakhstan	Total	-26	MI	*0*	MA	0	MI	-2	MI	-23	MI	0	MA	0	MA	-2	MA
(CC)	AG	-6		0		0		0		-6		0		0		0	
	MI	-16		0		0		-2		-15		0		0		0	
	MA	-4		0		0		0		-3		0		0		-2	
Russian F.	Total	-38	MI	*4*	MA	-2	MI	-11	MI	-25	MI	0	AG	1	MA	-5	MA
(CP)	AG	-3		1		0		0		-2		0		0		-1	
	MI	-27		2		-2		-8		-19		0		0		0	
	MA	-7		2		0		-1		-4		0		1		-4	
Australia	Total	-75	AG	*18*	MA	-2	MI	-4	MI	0	AG	1	AG	2	AG	-34	MA
(CN)	AG	-42		8		0		0		0		1		1		-17	
	MI	-11		1		-1		-2		0		0		0		5	
	MA	-21		9		-1		-1		0		0		1		-25	
South Africa	Total	-143	MA	*107*	MA	-21	MA	-	MI	-4	AG	-3	MA	17	MA	-47	MA
(CN)	AG	15		14		-2		-3		-2		23		4		-19	
	MI	23		32		-3		-21		-2		5		1		11	
	MA	-40		60		-16		-13		0		-32		12		-51	
Singapore	Total	-1487	MA	*3335*	MA	-183	MA	-	MA	-76	MA	-9	MA	178	MA	-4537	MA
(ON)	AG	-192		44		-8		-2		-9		22		19		-258	
	MI	105		28		-53		-19		-12		8		2		151	
	MA	-1465		3205		-122		-		-56		-40		158		-4454	
Peru	Total	0	AG	*16*	MI	*-8*	MI	-6	MI	0	MI	0	AG	0	AG	-3	AG
(OP)	AG	1		4		-1		0		0		0		0		-3	
	MI	1		6		-4		-1		0		0		0		1	

Table A9. Selected economies' GEO contribution shares to change in total exports, 1996-2002 (current prices) *(continued)*
(Percentage)

Country	Product	GEO		NA		CSC		EUR		CIS		AFR		MEA		ASI	
	MA	1		4		-3		0		0		0		0		0	
Algeria	Total	-2	MI	*4*	MI	-1	MI	*-4*	MI	-1	MA	0	MI	0	MA	0	MI
(OC)	AG	0		0		0		0		0		0		0		0	
	MI	-1		4		-1		-4		0		0		0		0	
	MA	-1		0		0		0		-1		0		0		0	
Norway	Total	-8	MI	*10*	MI	-1	MA	*-15*	MI	-1	AG	0	AG	0	MA	-2	MA
(OP)	AG	-1		1		0		0		-1		0		0		0	
	MI	-4		6		0		-11		0		0		0		0	
	MA	-1		2		-1		-1		0		0		0		-1	
Bolivia	Total	-12	AG	*18*	MI	*-26*	AG	-3	MI	0	MI	0	AG	0	AG	0	AG
(CP)	AG	-9		6		-15		0		0		0		0		0	
	MI	-3		8		-8		-3		0		0		0		0	
	MA	-1		4		-4		0		0		0		0		0	
Nicaragua	Total	-64	AG	*-84*	AG	*18*	AG	2	AG	0	AG	0	AG	-1	AG	0	AG
(OS)	AG	-39		-53		13		1		0		0		-1		0	
	MI	0		-1		1		0		0		0		0		0	
	MA	-22		-27		4		1		0		0		0		0	
Azerbaijan	Total	-5	MI	0	MA	0	AG	0	MI	-5	MI	0	ALL	*1*	MI	0	MA
(CC)	AG	-1		0		0		0		-1		0		0		0	
	MI	-4		0		0		0		-4		0		1		0	
	MA	0		0		0		0		-1		0		0		0	
Ukraine	Total	-42	AG	2	MA	-1	MA	-3	MI	-38	AG	0	MA	*2*	MA	-5	MA
(CP)	AG	-18		0		0		0		-18		0		0		0	
	MI	-7		0		0		-1		-6		0		0		0	
	MA	-17		2		-1		-1		-14		0		2		-5	
Jamaica	Total	-35	MA	*-50*	MA	5	MA	*6*	MI	3	MI	-1	MI	0	AG	1	AG
(OS)	AG	-8		-10		1		0		0		0		0		1	
	MI	-8		-17		0		5		3		-1		0		0	
	MA	-19		-23		3		0		0		0		0		0	

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Note: Total GEO effects also include effects from non-specified areas which are not shown in this table.

Legend:
CC: Consistent Confirmed Performer CP: Consistent Partial Performer CS: Consistent Slow
OC: Occasional Confirmed Performer OP: Occasional Partial Performer OS: Occasional Slow Performer
CN: Consistent Non-Performer ON: Occasional Non-Performer

Grey cells indicate the region with the maximum "shift" of exports.
Grey figures indicate the region with the least "shift" in exports.
Bold and italic GEO figures indicate positive GEO effects.

Table A10. Selected economies' GEO contribution shares to change in total exports, 2002-2007 (current prices)
(Percentage)

EXPORTS TO AFRICA

EXPORTS TO ASIA

EXPORTS TO CIS

Country	Product	GEO		NA		CSC		EUR		CIS		AFR		MEA		ASI	
Kenya	Total	*12*	MI	*-5*	MA	0	MA	1	AG	0	AG	*14*	MA	1	MI	0	AG
(CN)	AG	3		-1		0		1		0		2		0		0	
	MI	6		0		0		0		0		6		1		0	
	MA	3		-4		0		0		0		7		0		0	
Tunisia	Total	*6*	MA	*0*	MA	0	MA	2	MA	0	MI	*3*	MA	1	MA	0	MA
(ON)	AG	1		0		0		0		0		1		0		0	
	MI	0		0		0		0		0		0		0		0	
	MA	5		0		0		3		0		2		1		0	
South Africa	Total	*6*	MA	*-4*	MA	0	MA	-1	MI	0	MA	*4*	MA	1	MA	4	MI
(CN)	AG	0		0		0		0		0		1		0		0	
	MI	1		-1		0		0		0		0		1		2	
	MA	4		-2		0		1		0		4		1		1	
Australia	Total	*9*	MI	*-4*	MA	0	MA	0	MI	0	MA	1	MA	3	MA	*8*	MI
(CN)	AG	-1		-1		0		0		0		0		0		-1	
	MI	6		-1		0		0		0		0		0		6	
	MA	1		-2		0		0		0		0		1		1	
Indonesia	Total	*6*	MI	*-6*	MA	0	MA	0	MA	0	MA	1	MA	2	MA	*9*	MI
(CN)	AG	-1		-1		0		0		0		0		0		-1	
	MI	6		0		0		0		0		0		0		7	
	MA	1		-5		0		0		0		1		2		2	
Singapore	Total	*2*	MI	*-5*	MA	1	MA	0	MA	0	MA	0	MA	1	MA	*5*	MA
(OC)	AG	0		0		0		0		0		0		0		0	
	MI	2		0		0		0		0		0		0		1	
	MA	0		-5		0		0		0		0		1		3	
Korea	Total	*1*	MI	*-8*	MA	1	MA	1	MA	2	MA	1	MA	2	MA	*4*	MA
(CP)	AG	0		0		0		0		0		0		0		0	
	MI	1		0		0		0		0		0		0		1	
	MA	0		-8		1		1		2		1		2		3	
Ukraine	Total	*29*	MA	*-1*	MA	0	MA	0	MA	*25*	MA	1	MA	2	MA	1	MA
(CP)	AG	3		0		0		0		3		0		0		0	
	MI	-1		0		0		0		0		0		0		0	
	MA	26		-1		0		1		23		1		2		1	
Turkey	Total	*9*	MA	*-2*	MA	0	MA	1	MA	*7*	MA	1	MA	2	MA	0	MA
(OC)	AG	1		0		0		0		0		0		0		0	
	MI	0		0		0		0		0		0		0		0	
	MA	8		-2		0		1		6		1		2		0	
Russian F.	Total	*6*	MA	*-1*	MI	0	MA	-1	MI	*6*	MA	0	MA	1	MA	1	MI
(CP)	AG	0		0		0		0		0		0		0		0	
	MI	-2		-1		0		-1		-1		0		0		1	
	MA	7		0		0		0		6		0		0		0	
EU (27)	Total	*5*	MA	*-4*	MA	1	MA	2	MA	*4*	MA	1	MA	1	MA	1	MA
(CN)	AG	0		0		0		0		0		0		0		0	
	MI	0		0		0		0		0		0		0		0	
	MA	5		-4		1		3		3		1		1		1	
Serbia M.	Total	*5*	MA	*0*	MA	0	MA	1	MA	*4*	MA	0	MA	0	MA	0	MA
(OC)	AG	0		0		0		0		0		0		0		0	
	MI	0		0		0		0		0		0		0		0	
	MA	5		0		0		1		4		0		0		0	
Barbados	Total	*11*	MA	*-8*	MA	*16*	MA	1	AG	0	ALL	0	MA	0	ALL	0	MA
(ON)	AG	0		-2		2		0		0		0		0		0	
	MI	1		0		0		0		0		0		0		0	
	MA	10		-5		14		0		0		0		0		0	
Uruguay	Total	*6*	MA	*-4*	MA	*7*	MA	0	AG	1	AG	1	AG	1	AG	0	MA
(OC)	AG	3		-1		2		0		1		1		1		0	
	MI	0		0		0		0		0		0		0		0	

Table A10. Selected economies' GEO contribution shares to change in total exports, 2002-2007 (current prices) *(continued)*
(Percentage)

Country	Product	GEO		NA		CSC		EUR		CIS		AFR		MEA		ASI	
	MA	4		-2		5		0		0		0		0		0	
Argentina	Total	*5*	MA	*-5*	MA	*6*	MA	0	AG	1	AG	1	AG	1	AG	0	MI
(ON)	AG	2		-1		1		0		0		1		1		0	
	MI	-2		-2		-1		0		0		0		0		0	
	MA	5		-3		6		0		0		0		0		0	
Paraguay	Total	*5*	AG	*-1*	AG	*6*	AG	0	AG	0	AG	0	AG	0	AG	0	AG
(OC)	AG	4		0		4		0		0		0		0		0	
	MI	0		0		0		0		0		0		0		0	
	MA	1		0		2		0		0		0		0		0	
Nicaragua	Total	*1*	MA	*-10*	AG	*9*	MA	0	AG	2	AG	0	ALL	0	ALL	0	AG
(OS)	AG	1		-5		4		0		2		0		0		0	
	MI	-1		-1		0		0		0		0		0		0	
	MA	4		-1		6		0		0		0		0		0	
Chile	Total	*0*	MI	*-3*	AG	*1*	MA	0	MI	0	AG	0	MA	0	MI	1	MI
(OC)	AG	-1		-1		0		0		0		0		0		0	
	MI	1		-1		0		0		0		0		0		1	
	MA	0		-1		1		0		0		0		0		0	
Brazil	Total	*0*	AG	*-8*	MA	*3*	MA	0	AG	1	AG	1	MA	1	MI	1	MI
(CP)	AG	1		-1		0		0		1		0		0		0	
	MI	0		-1		0		0		0		0		1		1	
	MA	-2		-6		3		0		0		0		0		0	
Switzerland	Total	*4*	MA	*-7*	MA	1	MA	*3*	MA	2	MA	1	MA	2	MA	2	MA
(CN)	AG	0		0		0		0		0		0		0		0	
	MI	0		0		0		0		0		0		0		0	
	MA	4		-7		1		3		2		1		2		1	
Albania	Total	*2*	MA	*0*	MA	0	MA	*2*	MA	0	ALL	0	ALL	0	ALL	0	ALL
(OC)	AG	0		0		0		0		0		0		0		0	
	MI	0		0		0		0		0		0		0		0	
	MA	2		0		0		2		0		0		0		0	
Seychelles	Total	*172*	MI	*-2*	AG	0	ALL	0	ALL	0	ALL	1	AG	*174*	MI	-1	AG
(ON)	AG	-2		-2		0		0		0		1		0		-1	
	MI	174		0		0		0		0		0		174		0	
	MA	0		0		0		0		0		0		0		0	
India	Total	*5*	MA	*-5*	MA	0	MA	0	MA	2	MA	1	MA	*4*	MA	1	MA
(OC)	AG	0		0		0		0		0		0		0		0	
	MI	1		0		0		0		0		0		1		1	
	MA	3		-4		0		0		2		1		3		1	
Pakistan	Total	*4*	MI	*-15*	MA	1	MA	2	MA	1	MA	3	MA	*10*	MA	2	MA
(CN)	AG	2		0		0		0		0		0		1		0	
	MI	2		0		0		0		0		0		1		0	
	MA	0		-15		1		2		1		2		8		2	
Azerbaijan	Total	*3*	MA	0	MI	0	MI	*-1*	MI	2	MA	0	MI	*3*	MI	0	MA
(CC)	AG	1		0		0		0		1		0		0		0	
	MI	1		0		0		-1		-1		0		2		0	
	MA	1		0		0		0		1		0		0		0	
Kazakhstan	Total	*2*	MA	*-2*	MI	0	MI	0	MI	2	MA	0	AG	*2*	MI	1	MI
(CC)	AG	1		0		0		0		1		0		0		0	
	MI	-2		-2		0		0		-1		0		2		0	
	MA	3		0		0		0		2		0		0		0	
Egypt	Total	*1*	MI	*-4*	MA	0	MA	0	MA	0	AG	1	MA	*3*	MA	1	MI
(CP)	AG	1		0		0		0		0		0		0		0	
	MI	1		-1		0		0		0		0		1		1	
	MA	1		-2		0		0		0		1		2		0	
Algeria	Total	-4	MI	*-3*	MI	0	MI	-1	MI	0	MI	*0*	MI	0	MA	0	MI
(ON)	AG	0		0		0		0		0		0		0		0	
	MI	-4		-3		0		-1		0		0		0		0	
	MA	0		0		0		0		0		0		0		0	
Suriname	Total	-6	MI	*-5*	MI	0	AG	-1	MI	0	ALL	*0*	MI	0	ALL	0	AG

EXPORTS TO CSC

EXPORTS TO EUROPE

EXPORTS TO MIDDLE EAST

EXPORTS TO AFRICA

GEO < 0

Table A10. Selected economies' GEO contribution shares to change in total exports, 2002-2007 (current prices) *(continued)*
(Percentage)

	Country	Product	GEO		NA		CSC		EUR		CIS		AFR		MEA		ASI	
	(OC)	AG	0		0		0		0		0		0		0		0	
		MI	-5		-4		0		-1		0		0		0		0	
		MA	0		0		0		0		0		0		0		0	
	New Zealand	Total	-1	AG	*-8*	AG	0	MA	1	AG	0	AG	1	AG	1	AG	*3*	MA
	(CN)	AG	-4		-4		0		0		0		0		1		-2	
		MI	1		0		0		0		0		0		0		1	
		MA	-1		-3		0		0		0		0		0		2	
	Thailand	Total	-1	MA	*-7*	MA	0	MA	0	MA	0	MA	1	MA	2	MA	*3*	MA
	(CP)	AG	-1		-1		0		0		0		0		0		0	
		MI	1		0		0		0		0		0		0		1	
		MA	-1		-6		0		0		0		0		1		3	
	LDCs	Total	-1	MI	*-4*	MI	0	MA	0	AG	0	AG	0	AG	1	AG	*2*	MI
	(OC)	AG	0		0		0		0		0		0		0		0	
		MI	0		-2		0		0		0		0		0		2	
		MA	-2		-2		0		0		0		0		0		0	
	Malaysia	Total	-1	MA	*-11*	MA	0	MA	1	MA	0	MA	1	MA	1	MA	*7*	MA
	(ON)	AG	0		0		0		0		0		0		0		0	
		MI	2		0		0		0		0		0		0		2	
		MA	-4		-11		0		1		0		0		1		4	
	Japan	Total	-8	MA	*-20*	MA	1	MA	1	MA	1	MA	1	MA	2	MA	*6*	MA
	(CN)	AG	0		0		0		0		0		0		0		0	
		MI	0		0		0		0		0		0		0		0	
		MA	-9		-19		1		1		1		1		2		5	
	Philippines	Total	-13	MA	*-27*	MA	0	MA	2	MA	0	MA	0	MA	1	MA	*11*	MA
	(ON)	AG	-1		-1		0		0		0		0		0		0	
		MI	1		0		0		0		0		0		0		1	
		MA	-13		-26		0		2		0		0		0		10	
	China	Total	-1	MA	*-5*	MA	0	MA	0	MA	*1*	MA	0	MA	1	MA	1	MA
	(CC)	AG	0		0		0		0		0		0		0		0	
		MI	0		0		0		0		0		0		0		0	
		MA	-1		-5		0		0		1		0		1		1	
	Norway	Total	-3	MI	*-4*	MI	0	MA	-2	MI	*1*	AG	0	MA	0	MA	1	MI
	(ON)	AG	0		0		0		0		0		0		0		0	
		MI	-4		-3		0		-2		0		0		0		0	
		MA	1		-1		0		0		0		0		0		0	
	Ecuador	Total	-3	MI	*-9*	MI	1	MA	0	AG	*2*	AG	0	AG	0	AG	1	MI
	(OC)	AG	0		-4		0		0		2		0		0		0	
		MI	-4		-4		-1		0		0		0		0		1	
		MA	1		-1		2		0		0		0		0		0	
	Israel	Total	-13	MA	*-23*	MA	1	MI	1	MI	*4*	MI	1	AG	0	MA	2	MI
	(ON)	AG	0		0		0		0		0		0		0		0	
		MI	0		0		0		0		0		0		0		0	
		MA	-13		-22		1		1		4		1		0		2	
	Bolivia	Total	-2	MI	*-3*	MA	*1*	AG	-1	MI	0	AG	0	MA	0	MA	0	MI
	(CP)	AG	1		0		1		0		0		0		0		0	
		MI	-1		-1		-1		0		0		0		0		0	
		MA	-1		-2		1		0		0		0		0		0	
	Peru	Total	-4	MI	*-4*	MI	*1*	MA	-2	MI	0	AG	0	MI	0	AG	1	MI
	(OC)	AG	-1		-1		0		0		0		0		0		0	
		MI	-1		-2		0		0		0		0		0		1	
		MA	0		-1		1		0		0		0		0		0	
	Colombia	Total	-5	MI	*-12*	MI	*6*	MA	0	AG	0	AG	0	MA	1	MI	0	MA
	(OC)	AG	-2		-2		0		0		0		0		0		0	
		MI	-6		-7		0		0		0		0		1		0	
		MA	3		-3		6		0		0		0		0		0	
	Trinidad T.	Total	-6	MI	*-8*	MI	*1*	MA	0	MI	0	ALL	0	MA	0	MA	0	MI
	(CC)	AG	0		0		0		0		0		0		0		0	
		MI	-5		-4		0		0		0		0		0		0	

EXPORTS TO ASIA

EXPORTS TO CIS

EXPORTS TO CSC

Table A10. Selected economies' GEO contribution shares to change in total exports, 2002-2007 (current prices) *(continued)*
(Percentage)

Country	Product	GEO		NA		CSC		EUR		CIS		AFR		MEA		ASI	
	MA	-2		-3		1		0		0		0		0		0	
USA	Total	-11	MA	*-24*	MA	*4*	MA	1	MA	2	MA	1	MA	2	MA	3	MA
(CN)	AG	-1		-1		0		0		0		0		0		0	
	MI	-1		-1		0		0		0		0		0		0	
	MA	-9		-21		4		1		1		1		2		3	
Costa Rica	Total	-17	MA	*-28*	MA	*9*	MA	1	AG	0	AG	0	MA	0	MA	1	MA
(ON)	AG	-5		-7		1		1		0		0		0		0	
	MI	-1		0		0		0		0		0		0		0	
	MA	-11		-20		9		0		0		0		0		1	
Jamaica	Total	-18	MI	*-22*	MI	*2*	MA	-1	MI	0	MI	1	MI	0	ALL	1	MI
(ON)	AG	-3		-3		0		0		0		0		0		0	
	MI	-14		-15		0		-1		0		1		0		1	
	MA	-2		-4		2		0		0		0		0		0	
Guatemala	Total	-35	MA	*-45*	MA	*9*	MA	0	AG	1	AG	0	AG	1	AG	0	AG
(ON)	AG	-3		-6		1		0		1		0		1		0	
	MI	-2		-2		0		0		0		0		0		0	
	MA	-18		-26		8		0		0		0		0		0	
Mexico	Total	-53	MA	*-55*	MA	*2*	MA	0	MA	0	MA	0	MA	0	MA	0	MA
(ON)	AG	-2		-2		0		0		0		0		0		0	
	MI	-4		-4		0		0		0		0		0		0	
	MA	-47		-48		2		0		0		0		0		0	
Canada	Total	-55	MA	*-57*	MA	*0*	MA	0	MA	0	MA	0	AG	0	MA	0	MI
(CN)	AG	-4		-4		0		0		0		0		0		0	
	MI	-8		-9		0		0		0		0		0		0	
	MA	-37		-38		0		0		0		0		0		0	
Iceland	Total	-1	MI	*-4*	AG	0	MA	*1*	AG	1	AG	1	AG	0	MA	0	AG
(ON)	AG	-1		-3		0		1		0		0		0		0	
	MI	-1		0		0		-1		0		0		0		0	
	MA	0		-1		0		0		0		0		0		0	

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Note: Total GEO effects also include effects from non-specified areas which are not shown in this table.

Legend:
CC: Consistent Confirmed Performer CP: Consistent Partial Performer CS: Consistent Slow
OC: Occasional Confirmed Performer OP: Occasional Partial Performer OS: Occasional Slow Performer
CN: Consistent Non-Performer ON: Occasional Non-Performer

Grey cells indicate the region with the maximum "shift" of exports.
Grey figures indicate the region with the least "shift" in exports.
Bold and italic GEO figures indicate positive GEO effects.

Table A11. Selected economies' COMPO contribution shares to change in total exports, 1996-2002 (current prices) (Percentage)

CAT	Country	Product	Share in 1996	Share in 2002	2002/1996	Main X 2002	TOTAL		COMPO	
Effects in Agriculture										
OS	Paraguay	Total	100	100	-9	AG	100	AG	*200*	AG
		AG	82	85	-7		58		206	
		MI	1	1	-15		1		-1	
		MA	17	15	-22		40		-6	
OS	Nicaragua	Total	100	100	-15	AG	100	MA	*93*	AG
		AG	64	69	-8		35		100	
		MI	2	5	185		-19		-1	
		MA	33	20	-49		109		-7	
ON	Uruguay	Total	100	100	-22	AG	100	AG	*59*	AG
		AG	62	61	-23		64		65	
		MI	2	1	-44		3		-1	
		MA	36	36	-22		35		-5	
OS	Barbados	Total	100	100	-13	MA	100	AG	*49*	AG
		AG	38	31	-29		82		67	
		MI	14	23	47		-49		-7	
		MA	48	44	-21		78		-11	
OS	Jamaica	Total	100	100	-20	MI	100	MA	*7*	AG
		AG	24	22	-24		29		28	
		MI	50	67	7		-17		-17	
		MA	26	9	-71		94		-4	
ON	EU (27)	Total	100	100	17	MA	100	MA	-1	AG
		AG	11	10	*-2*		-2		-16	
		MI	5	6	24		8		2	
		MA	80	83	20		94		14	
ON	Indonesia	Total	100	100	19	MA	100	MA	-2	AG
		AG	17	16	*10*		9		-21	
		MI	32	30	12		19		11	
		MA	51	54	25		69		8	
OS	Malaysia	Total	100	100	20	MA	100	MA	-2	AG
		AG	14	10	-16		-11		-16	
		MI	9	9	23		11		3	
		MA	76	80	26		99		11	
OC	Albania	Total	100	100	*61*	MA	100	MA	-3	AG
		AG	20	10	-22		-7		-8	
		MI	15	5	-42		-10		2	
		MA	65	81	102		108		3	
OC	Turkey	Total	100	100	*56*	MA	100	MA	-4	AG
		AG	21	11	-21		-8		-9	
		MI	4	4	44		3		0	
		MA	74	83	75		98		4	
OC	India	Total	100	100	*47*	MA	100	MA	-5	AG
		AG	21	13	-7		-3		-10	
		MI	5	8	123		13		1	
		MA	72	74	52		80		5	
ON	Canada	Total	100	100	*25*	MA	100	MA	-6	AG
		AG	16	13	*0*		0		-15	
		MI	17	17	28		19		4	
		MA	62	63	27		68		8	
OC	Seychelles	Total	100	100	*64*	MI	100	MI	-6	AG
		AG	30	12	-36		-17		-11	
		MI	22	88	558		193		2	
		MA	48	0	-100		-76		2	
CP	Ukraine	Total	100	100	*25*	MA	100	MA	-8	AG
		AG	20	15	-7		-6		-19	

Except for 5 countries, effect in Agriculture is mostly negative in all countries and LDCs.

Table A11. Selected economies' COMPO contribution shares to change in total exports, 1996-2002 (current prices) *(continued)*
(Percentage)

CAT	Country	Product	Share in 1996	Share in 2002	2002/1996	Main X 2002	TOTAL		COMPO	
		MI	13	18	77		39		3	
		MA	66	66	24		65		8	
ON	USA	Total	100	100	11	MA	100	MA	-9	AG
		AG	13	10	-16		-19		-27	
		MI	4	4	-3		-1		2	
		MA	78	82	18		123		21	
OC	Guatemala	Total	100	100	*105*	MA	100	MA	-13	AG
		AG	66	30	-7		-4		-15	
		MI	4	5	147		5		0	
		MA	31	51	243		71		1	
ON	Pakistan	Total	100	100	6	MA	100	MA	-14	AG
		AG	15	12	-15		-34		-55	
		MI	1	2	130		20		1	
		MA	84	85	8		109		40	
ON	Suriname	Total	100	100	10	MI	100	MI	-15	AG
		AG	23	19	-11		-25		-55	
		MI	69	80	26		184		46	
		MA	2	1	-8		-1		0	
OP	Peru	Total	100	100	*32*	MI	100	MI	-15	AG
		AG	31	25	*9*		9		-22	
		MI	44	39	17		23		9	
		MA	14	16	52		23		1	
CP	Thailand	Total	100	100	*22*	MA	100	MA	-17	AG
		AG	25	18	-11		-13		-26	
		MI	2	4	98		10		1	
		MA	71	75	28		89		10	
OC	Costa Rica	Total	100	100	*89*	MA	100	MA	-18	AG
		AG	72	35	-9		-7		-19	
		MI	2	2	68		2		0	
		MA	25	63	373		106		1	
CP	Bolivia	Total	100	100	*26*	MI	100	MI	-21	AG
		AG	38	34	*11*		17		-34	
		MI	45	44	21		36		11	
		MA	16	16	25		15		2	
OP	Serbia &	Total	100	100	*24*	MA	100	MA	-22	AG
		AG	32	27	*4*		6		-32	
		MI	17	16	14		10		5	
		MA	49	57	44		92		6	
CP	Brazil	Total	100	100	*26*	MA	100	MA	-22	AG
		AG	34	32	*20*		25		-30	
		MI	11	14	58		24		3	
		MA	53	52	24		48		6	
OS	Chile	Total	100	100	18	MI	100	AG	-32	AG
		AG	37	36	*15*		30		-48	
		MI	45	40	5		12		16	
		MA	13	15	39		28		2	
ON	Colombia	Total	100	100	12	MA	100	MA	-38	AG
		AG	32	25	-15		-40		-64	
		MI	37	37	12		39		20	
		MA	29	38	43		109		8	
ON	Australia	Total	100	100	8	MI	100	MI	-59	AG
		AG	29	26	-5		-18		-85	
		MI	35	40	23		98		28	
		MA	27	24	-1		-4		10	
OS	Iceland	Total	100	100	18	AG	100	MI	-97	AG
		AG	77	65	*0*		-1		-103	
		MI	11	20	117		72		4	
		MA	11	14	43		28		2	

Table A11. Selected economies' COMPO contribution shares to change in total exports, 1996-2002 (current prices) *(continued)*
(Percentage)

CAT	Country	Product	Share in 1996	Share in 2002	2002/1996	Main X 2002	TOTAL		COMPO	
OS	Argentina	Total	100	100	8	AG	100	MI	-140	AG
		AG	56	47	-9		-60		-163	
		MI	14	21	60		105		11	
		MA	30	30	9		35		11	
ON	South Africa	Total	100	100	2	MA	100	MA	-153	AG
		AG	14	13	-5		-36		-185	
		MI	24	27	13		186		92	
		MA	41	45	13		313		72	
ON	Kenya	Total	100	100	6	AG	100	MI	-216	AG
		AG	64	54	-10		-105		-238	
		MI	10	19	111		173		10	
		MA	26	26	5		20		13	
ON	Ecuador	Total	100	100	3	AG	100	MI	-324	AG
		AG	53	49	-4		-73		-399	
		MI	37	41	16		190		77	
		MA	8	9	23		58		8	
ON	New	Total	100	100	2	AG	100	MA	-670	AG
		AG	61	59	*-2*		-58		-724	
		MI	7	6	-12		-41		22	
		MA	30	30	2		36		46	
Effects in Fuels and Mining										
CP	Russian	Total	100	100	*21*	MI	100	MI	*12*	MI
		AG	8	8	29		11		-8	
		MI	58	62	*29*		82		18	
		MA	30	25	1		1		4	
OP	Norway	Total	100	100	*22*	MI	100	MI	*9*	MI
		AG	9	7	0		0		-10	
		MI	62	67	*32*		90		19	
		MA	23	21	14		15		3	
OC	Algeria	Total	100	100	*69*	MI	100	MI	*9*	MI
		AG	1	0	-67		-1		0	
		MI	94	97	*76*		103		9	
		MA	5	2	-19		-1		0	
CC	Trinidad T.	Total	100	100	*51*	MI	100	MI	*5*	MI
		AG	8	7	18		3		-4	
		MI	51	60	*80*		79		6	
		MA	41	33	22		18		2	
CP	Egypt	Total	100	100	*33*	MA	100	MA	*3*	MI
		AG	15	17	50		22		-10	
		MI	54	34	-17		-27		11	
		MA	32	42	76		72		3	
CC	Kazakhstan	Total	100	100	*64*	MI	100	MI	*1*	MI
		AG	15	6	-32		-8		-5	
		MI	53	76	*136*		112		5	
		MA	32	15	-24		-12		2	
CC	Azerbaijan	Total	100	100	*243*	MI	100	MI	*1*	MI
		AG	13	4	15		1		-1	
		MI	68	90	*356*		99		2	
		MA	20	5	-17		-1		0	
OC	LDCs	Total	100	100	*51*	MI	100	MI	-9	MI
		AG	29	20	7		4		-13	
		MI	33	41	*88*		57		4	
		MA	28	35	87		48		2	
Effects in Manufactures										
ON	Singapore	Total	100	100	0	MA	100	MA	*1745*	MA
		AG	4	3	-40		-		-867	
		MI	11	9	-21		-		598	
		MA	83	85	1		1005		2107	

Table A11. Selected economies' COMPO contribution shares to change in total exports, 1996-2002 (current prices) *(continued)*
(Percentage)

CAT	Country	Product	Share in 1996	Share in 2002	2002/1996	Main X 2002	TOTAL		COMPO	
ON	Japan	Total	100	100	1	MA	100	MI	*171*	MA
		AG	1	1	3		2		-17	
		MI	2	2	7		8		7	
		MA	95	93	-1		-37		200	
ON	Switzerland	Total	100	100	15	MA	100	MA	*14*	MA
		AG	4	3	-5		-1		-5	
		MI	3	6	152		26		1	
		MA	94	91	12		75		19	
CP	Korea	Total	100	100	*25*	MA	100	MA	*7*	MA
		AG	3	2	-12		-2		-3	
		MI	4	5	73		11		1	
		MA	89	92	*29*		104		11	
OP	Tunisia	Total	100	100	*25*	MA	100	MA	*5*	MA
		AG	8	7	8		3		-8	
		MI	12	11	13		6		3	
		MA	80	82	*27*		89		10	
OC	Israel	Total	100	100	*43*	MA	100	MA	*3*	MA
		AG	7	4	-10		-2		-4	
		MI	2	3	155		6		0	
		MA	91	92	*45*		95		6	
OC	Mexico	Total	100	100	*68*	MA	100	MA	*2*	MA
		AG	8	6	23		3		-3	
		MI	14	10	21		4		1	
		MA	78	84	*81*		93		3	
CC	China	Total	100	100	*116*	MA	100	MA	*1*	MA
		AG	10	6	26		2		-2	
		MI	6	4	57		3		0	
		MA	84	90	*130*		95		2	
OC	Philippines	Total	100	100	*72*	MA	100	MA	*0*	MA
		AG	11	6	-13		-2		-4	
		MI	5	3	-10		-1		0	
		MA	83	91	*89*		103		4	
	World	Total	100	100	20	MA				
		AG	12	9	-3					
		MI	12	13	27					
		MA	74	75	23					

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Note: Total COMPO effects also include effects from non-specified products which are not shown in this table.

Legend:
CC: Consistent Confirmed Performer CP: Consistent Partial Performer CS: Consistent Slow
OC: Occasional Confirmed Performer OP: Occasional Partial Performer OS: Occasional Slow Performer
CN: Consistent Non-Performer ON: Occasional Non-Performer

Grey cells indicate the positive Compo effects.
Bold and italic figures indicate growth rates which are higher than the "World" growth rate for the sector.

Table A12. Selected economies' COMPO contribution shares to change in total exports, 2002-2007 (current prices)
(Percentage)

CAT	Country	Product	Share in 2002	Share in 2007	2007/ 2002	Main 2007	Total		COMPO	
Effects in Agriculture										
OC	Paraguay	Total	100	100	*194*	AG	100	AG	-11	AG
		AG	85	85	*195*		85		-10	
		MI	1	1	163		1		1	
		MA	15	13	172		13		-1	
OS	Nicaragua	Total	100	100	114	AG	100	AG	-13	AG
		AG	69	77	*138*		84		-14	
		MI	5	3	18		1		5	
		MA	20	12	34		6		-3	
OC	Uruguay	Total	100	100	*142*	AG	100	AG	-14	AG
		AG	61	64	*151*		65		-10	
		MI	1	5	865		8		1	
		MA	36	30	97		25		-4	
ON	New	Total	100	100	88	AG	100	AG	-15	AG
		AG	59	59	88		59		-16	
		MI	6	9	198		13		8	
		MA	30	28	72		25		-6	
Effects in Fuels and Mining										
ON	Seychelles	Total	100	100	58	AG	100	AG	*179*	MI
		AG	12	55	643		130		-5	
		MI	88	43	-23		-35		184	
		MA	0	2	...		5		0	
ON	Jamaica	Total	100	100	74	MI	100	MI	*98*	MI
		AG	22	17	29		9		-7	
		MI	67	76	99		89		108	
		MA	9	6	18		2		-2	
ON	Norway	Total	100	100	*129*	MI	100	MI	*57*	MI
		AG	7	6	72		4		-1	
		MI	67	73	149		77		62	
		MA	21	18	92		15		-3	
ON	Algeria	Total	100	100	*220*	MI	100	MI	*53*	MI
		AG	0	0	84		0		0	
		MI	97	98	222		98		53	
		MA	2	1	67		1		0	
OC	Suriname	Total	100	100	*199*	MI	100	MI	*46*	MI
		AG	19	19	199		19		-2	
		MI	80	80	199		80		48	
		MA	1	1	199		1		0	
ON	Australia	Total	100	100	*117*	MI	100	MI	*30*	MI
		AG	26	17	46		10		-5	
		MI	40	55	201		68		41	
		MA	24	19	71		15		-3	
CP	Russian	Total	100	100	*231*	MI	100	MI	*29*	MI
		AG	8	7	169		6		-1	
		MI	62	73	*284*		77		33	
		MA	25	19	162		17		-2	
CC	Azerbaijan	Total	100	100	*384*	MI	100	MI	*28*	MI
		AG	4	5	487		5		0	
		MI	90	88	*373*		87		28	
		MA	5	4	276		3		0	
ON	Indonesia	Total	100	100	99	MA	100	MI	*23*	MI
		AG	16	21	164		26		-4	
		MI	30	36	144		43		36	
		MA	54	42	56		30		-9	
CC	Trinidad T.	Total	100	100	*289*	MI	100	MI	*23*	MI

Positive COMPO effects are only in the Fuels and Mining sector. Even countries which are not oil exporters benefited from the strong fuel import demand.

Table A12. Selected economies' COMPO contribution shares to change in total exports, 2002-2007 (current prices) *(continued)*
(Percentage)

CAT	Country	Product	Share in 2002	Share in 2007	2007/ 2002	Main 2007	Total		COMPO	
		AG	7	3	53		1		-1	
		MI	60	69	*344*		72		25	
		MA	33	28	235		27		-2	
CC	Kazakhstan	Total	100	100	*394*	MI	100	MI	*22*	MI
		AG	6	3	164		3		0	
		MI	76	84	*449*		86		23	
		MA	15	11	255		10		-1	
OC	LDCs	Total	100	100	*155*	MI	100	MI	*21*	MI
		AG	20	13	57		7		-3	
		MI	41	64	*296*		79		28	
		MA	35	22	65		15		-3	
OC	Colombia	Total	100	100	*152*	MA	100	MA	*21*	MI
		AG	25	20	101		16		-4	
		MI	37	39	165		40		29	
		MA	38	39	162		40		-4	
OC	Ecuador	Total	100	100	*174*	MI	100	MI	*21*	MI
		AG	49	31	71		20		-7	
		MI	41	61	*305*		72		28	
		MA	9	8	130		7		-1	
CP	Bolivia	Total	100	100	*251*	MI	100	MI	*16*	MI
		AG	34	16	70		9		-3	
		MI	44	74	*498*		86		21	
		MA	16	7	52		3		-1	
ON	Barbados	Total	100	100	86	MA	100	MA	*15*	MI
		AG	31	19	13		5		-9	
		MI	23	32	158		43		32	
		MA	44	49	106		54		-8	
ON	South Africa	Total	100	100	*135*	MA	100	MI	*14*	MI
		AG	13	8	52		5		-2	
		MI	27	39	*241*		48		24	
		MA	45	46	137		46		-5	
OC	Peru	Total	100	100	*262*	MI	100	MI	*13*	MI
		AG	25	15	114		11		-2	
		MI	39	58	*437*		65		18	
		MA	16	12	165		10		-1	
OC	Chile	Total	100	100	*276*	MI	100	MI	*13*	MI
		AG	36	20	108		14		-3	
		MI	40	64	*499*		72		17	
		MA	15	10	135		8		-1	
CP	Egypt	Total	100	100	*244*	MI	100	MI	*11*	MI
		AG	17	10	102		7		-2	
		MI	34	61	*531*		73		17	
		MA	42	28	131		22		-3	
ON	Canada	Total	100	100	66	MA	100	MI	*8*	MI
		AG	13	12	49		10		-5	
		MI	17	29	187		48		31	
		MA	63	54	42		40		-15	
ON	Argentina	Total	100	100	*117*	AG	100	AG	*7*	MI
		AG	47	52	137		55		-10	
		MI	21	15	53		10		21	
		MA	30	31	120		31		-4	
ON	Kenya	Total	100	100	93	AG	100	AG	*7*	MI
		AG	54	55	98		57		-14	
		MI	19	6	-39		-8		25	
		MA	26	37	176		49		-5	
ON	Iceland	Total	100	100	114	AG	100	MA	*5*	MI
		AG	65	44	43		25		-14	
		MI	20	29	208		36		21	

Table A12. Selected economies' COMPO contribution shares to change in total exports, 2002-2007 (current prices) *(continued)*
(Percentage)

CAT	Country	Product	Share in 2002	Share in 2007	2007/ 2002	Main 2007	Total		COMPO	
		MA	14	27	310		38		-2	
CP	Ukraine	Total	100	100	*174*	MA	100	MA	*4*	MI
		AG	15	14	154		13		-2	
		MI	18	11	76		8		12	
		MA	66	72	200		76		-6	
OC	Serbia &	Total	100	100	*326*	MA	100	MA	*1*	MI
		AG	27	20	208		17		-2	
		MI	16	13	*252*		12		6	
		MA	57	67	396		69		-3	
Effects in Manufactures										
CP	Brazil	Total	100	100	*166*	MA	100	MA	0	MA
		AG	32	30	152		29		-5	
		MI	14	20	291		24		10	
		MA	52	47	*143*		44		-5	
ON	Tunisia	Total	100	100	*119*	MA	100	MA	-2	MA
		AG	7	10	210		12		-1	
		MI	11	20	289		27		11	
		MA	82	71	89		61		-11	
OC	Singapore	Total	100	100	*139*	MA	100	MA	-3	MA
		AG	3	2	76		1		0	
		MI	9	15	320		20		8	
		MA	85	77	*119*		72		-10	
OC	India	Total	100	100	*195*	MA	100	MA	-4	MA
		AG	13	11	145		10		-2	
		MI	8	24	825		33		5	
		MA	74	64	*152*		58		-6	
CC	China	Total	100	100	*274*	MA	100	MA	-4	MA
		AG	6	3	107		2		0	
		MI	4	3	209		3		2	
		MA	90	93	*288*		94		-5	
ON	Mexico	Total	100	100	69	MA	100	MA	-4	MA
		AG	6	6	75		6		-2	
		MI	10	18	209		30		17	
		MA	84	75	51		62		-20	
OC	Albania	Total	100	100	*215*	MA	100	MA	-5	MA
		AG	10	9	184		8		-1	
		MI	5	14	726		18		3	
		MA	81	71	*173*		65		-6	
ON	Malaysia	Total	100	100	87	MA	100	MA	-5	MA
		AG	10	12	125		14		-3	
		MI	9	16	212		23		13	
		MA	80	71	67		61		-15	
OC	Turkey	Total	100	100	*197*	MA	100	MA	-6	MA
		AG	11	10	168		9		-1	
		MI	4	7	467		9		2	
		MA	83	81	*191*		80		-7	
CP	Korea	Total	100	100	*129*	MA	100	MA	-7	MA
		AG	2	2	63		1		0	
		MI	5	9	290		12		5	
		MA	92	89	*122*		87		-12	
ON	EU (27)	Total	100	100	102	MA	100	MA	-9	MA
		AG	10	9	93		9		-2	
		MI	6	9	214		12		7	
		MA	83	80	95		77		-13	
ON	Switzerland	Total	100	100	87	MA	100	MA	-10	MA
		AG	3	3	124		4		-1	
		MI	6	6	94		6		8	
		MA	91	90	85		89		-17	

Table A12. Selected economies' COMPO contribution shares to change in total exports, 2002-2007 (current prices) *(continued)*
(Percentage)

CAT	Country	Product	Share in 2002	Share in 2007	2007/ 2002	Main 2007	Total		COMPO	
CP	Thailand	Total	100	100	*126*	MA	100	MA	-10	MA
		AG	18	16	101		15		-3	
		MI	4	6	271		8		4	
		MA	75	76	*129*		77		-10	
ON	Israel	Total	100	100	84	MA	100	MA	-15	MA
		AG	4	4	78		4		-1	
		MI	3	5	172		6		4	
		MA	92	89	78		86		-18	
ON	Pakistan	Total	100	100	80	MA	100	MA	-18	MA
		AG	12	13	94		14		-4	
		MI	2	7	467		12		3	
		MA	85	80	69		73		-17	
ON	USA	Total	100	100	68	MA	100	MA	-18	MA
		AG	10	10	65		10		-3	
		MI	4	7	241		13		6	
		MA	82	78	59		72		-20	
ON	Guatemala	Total	100	100	66	MA	100	AG	-20	MA
		AG	30	41	129		58		-11	
		MI	5	9	231		16		8	
		MA	51	50	61		48		-13	
ON	Japan	Total	100	100	71	MA	100	MA	-20	MA
		AG	1	1	69		1		0	
		MI	2	4	288		7		3	
		MA	93	90	65		85		-21	
ON	Costa Rica	Total	100	100	78	MA	100	MA	-21	MA
		AG	35	33	69		31		-11	
		MI	2	2	119		3		3	
		MA	63	65	82		66		-13	
ON	Philippines	Total	100	100	43	MA	100	MA	-30	MA
		AG	6	6	54		7		-3	
		MI	3	8	314		19		7	
		MA	91	85	34		71		-34	
	World	Total	100	100	116	MA				
		AG	9	8	92					
		MI	13	20	236					
		MA	75	70	100					

Source: Authors' calculation based on WTO Statistics and the United Nations Comtrade database.

Note: Total COMPO effects also include effects from non-specified products which are not shown in this table.

Legend:
CC: Consistent Confirmed Performer CP: Consistent Partial Performer CS: Consistent Slow
OC: Occasional Confirmed Performer OP: Occasional Partial Performer OS: Occasional Slow Performer
CN: Consistent Non-Performer ON: Occasional Non-Performer

Grey cells indicate the positive Compo effects.
Bold and italic figures indicate growth rates which are higher than the "World" growth rate for the sector.