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## Increased Export Performance and Competitiveness of Developing Countries: Mainly a China Story?

M. Ataman Aksoy and Francis Ng



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ISSN 1830-1541

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Printed in Italy, July 2014

European University Institute

Badia Fiesolana

I – 50014 San Domenico di Fiesole (FI)

Italy

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## **Abstract**

In manufacturing, developing economies have gained significant market share in both industrial countries and in each other's markets. This development have led many writers to argue that market share increases in industrial countries and expanding south-south trade could possibly drive future world trade. Analyzing the manufacturing import penetration in 5 industrial and 7 large developing countries, we show that during the 2000s, about three quarters of market share increases of all developing are due to China. The evidence also shows that market shares of all other developing countries in the Chinese market have decreased.

## **Keywords**

South-South trade, China's trade, developing country exports, market shares, global export growth



## Introduction\*

One of the important developments during the last couple of decades has been the rapid expansion of manufacturing exports from developing countries to high income industrial, as well as to other developing countries. Developing economies have also gained significant market share in both major industrial countries and in each other's markets during this period (Aksoy and Ng 2013a; 2013b). For five large high income countries (United States, Japan, Canada, Germany, and France) the share of manufacturing imports from developing countries in gross manufacturing output more than doubled from 3.2 percent in 1991/92 to 8.1 percent in 2001/02 and more than tripled to 11.7 percent in 2007/08. For seven large emerging economies (Brazil, India, Korea Republic, Malaysia, Mexico, South Africa, and Turkey) this ratio also rose vigorously, i.e., from 3.0 percent in 1991/92 to 7.1 percent in 2001/02 and 10.9 percent in 2007/08 (see Table 1). These sharp increases were a direct result of both the global trade liberalization process and the increased competitiveness achieved by developing countries in manufacturing activities. These developments have led many institutions and writers to argue that market share increases in industrial countries and expanding south-south trade could possibly drive future world trade at reasonable rates (IMF 2011; OECD 2006; UNCTAD 2002, 2005; and World Bank 2004, 2005, 2007).

In this note, we show that during the 1990s China's market share gains in all markets (industrial and developing) increased at much higher rates than market share increases of all other developing countries.<sup>1</sup> Notwithstanding such growth in China, other developing countries also gained significant market shares in industrial and developing country markets. However, this situation changed during the 2000s, with about three quarters of market share changes of all developing countries in five large industrial country markets and 82 percent of these changes in seven developing country markets are accounted by China. We show that the better performance of other developing countries during the 1990s resulted to a large extent from onetime free trade agreements to a lesser extent from increased competitiveness. We also show that other developing countries have lost market shares in the Chinese market. They include other Asian suppliers providing goods to be assembled in China for export to the rest of the world.

## Data

For this study the gross production data are converted to US dollars at the current average exchange rates to make them consistent with trade data from COMTRADE denominated in US dollars. These are nominal US dollar values that include US dollar inflation and changes in the real exchange rate of local currencies against the US dollar.<sup>2</sup> Gross production is taken from the UNIDO database and checked against other sources for consistency. Import growth in these countries is decomposed into changes due to demand increases and changes due to market share changes. The contribution of demand changes is estimated assuming a constant share of imports in gross domestic output between the two time periods, i.e. the market shares do not change. The market share changes are then

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\* Authors are retired economists from the World Bank. We would like to thank Yilmaz Akyuz, John Baffes, Uri Dadush, Jose Sokol and Tercan Baysan for their useful comments. The errors are ours. For email contact: Ataman.Aksoy@gmail.com or Francis.ng2013@gmail.com.

<sup>1</sup> China accounted for almost 31 percent of manufacturing exports from all developing countries (14 percent of world exports) in 2007/08. This ratio was 18 percent in 2001/02 and only 14 percent in 1991/02. China has an even bigger share of 44 percent in 2007/8 of all developing country manufacturing exports to industrial countries. See (Akyuz 2011; 2012; Athukorala 2011) for China and south-south trade

<sup>2</sup> There is a significant appreciation of the US dollar against the currencies of most the other countries during the late 1990s and depreciation during the 2000s. This appreciation underestimates the domestic production and demand growth in US dollars and overestimates the share of imports, which are denominated in US dollars. Opposite takes place during US dollar depreciations. Thus, nominal US dollar measurement would underestimate real growth during the 1990s and overestimate it during the 2000s.

estimated as the difference between the actual import growth rate and the import growth rate under a constant market share assumption. The definition of industrial countries is based on the traditional IMF definition that includes the EU15, United States, Canada, Japan, Australia, New Zealand, Iceland, Norway, and Switzerland. Developing countries include all countries in the world except 23 industrial ones. The 1991/92, 2000/01, and 2007/08 periods are used as benchmarks to estimate growth rates and import shares. Two year averages are used to minimize the annual fluctuations in output and trade. The 2007/08 year is used as the final year both due to data availability, and more importantly, because it was the last year prior to the 2009 global financial crisis. An analysis of the impacts of that crisis on trade values would require a separate study.

## **Results**

- Market share change rates of other developing countries decelerated during the 2000s while the high rates for China did not change.
- The deceleration in market share changes of non-China developing countries have been significant, i.e., from 8.0 percent p.a. to 3.0 percent p.a. in industrial markets and from 7.0 percent p.a. to only 2.4 percent p.a. in developing country markets.
- China's market share increases were around 14 p.a. in industrial country markets and around 18 p.a. in developing markets during both periods (Table 1).
- The deceleration of market share changes of other developing countries and the increase in China's contribution was not caused by the acceleration of market share increases of China; they were caused by the deceleration in market share increases of all other developing countries.

During the first period only around 38 percent of market share changes were accounted by China in the markets of five industrial countries and 35 percent of the market share changes in developing countries. During the 2000s the contribution of China versus all other developing countries increased to a level where 82 percent of market share gains of developing countries in the seven developing country markets and 73 percent of market share changes in industrial countries markets were accounted by China. If these countries are taken as representative, about three quarters of market share increases of developing countries are accounted by China alone. As pointed out above this has been caused primarily by the deceleration of market share increases by non-China developing countries.

**Table 1: Manufacturing Imports from Developing Countries with and without China**

Reporter	Share of Imports in Gross Output (%)			Market Share Change (% .p.a.)	
	1991/92	2001/02	2007/08	1991/92-2001/02	2001/02-2007/08
<b>Five industrial countries</b>					
Share of imports from all developing countries	3.2	8.1	11.7	9.8	6.3
Developing countries w/o China	2.6	5.7	6.7	8.1	2.6
China	0.6	2.4	5.0	15.5	13.2
Share of China in import share change		0.38	0.73	..	..
<b>Seven developing countries</b>					
Share of imports from all developing countries	3.0	7.3	11.1	9.3	7.1
Developing countries w/o China	2.7	5.5	6.2	7.7	2.1
China	0.3	1.8	4.9	18.9	17.7
Share of China in import share change		0.35	0.82	..	..

Note: The data are based on 2-year averages of 1991-92, 2001-02, and 2007-08.

Sources: Based on UN COMTRADE Statistics (trade data) and UNIDO database (production data).

The reasons for the deceleration in market share gains of non-China developing countries are varied. In industrial country markets the deceleration of other developing country market share change rates are related in part to free trade agreements (FTA) signed in the 1990s. NAFTA was signed between USA, Canada, and Mexico, which led to an initial spurt in the imports of the USA and Canada from Mexico. Similarly for France and Germany, the inclusion of Eastern European countries and Turkey into free trade arrangements during the 1990s also led to a spurt in imports from these countries, which are classified as developing. If we separate the impact of these FTA countries on market share changes of developing countries, the differences between the two periods become clearer (Table 2).

About a third of market share gains of developing countries during the 1990s resulted from one-off gains generated from FTAs. These increases were not maintained during the 2000s where both the FTA and other developing countries did little to increase their shares. Their contributions declined to about 12 plus percent p.a. during the 2000s. Therefore, the performance of 1990s was not representative for these countries.

**Table 2: Decomposition of Changing Manufactured Import Shares in Industrial Countries**

Contribution from	Change in Import Share (%)	
	1991/92-2001/02	2001/02-2007/08
FTAs	30.8	12.9
China	36.9	73.0
All other developing countries	32.3	14.9

Note: Data are based on 2-year averages of 1991-92, 2001-02, and 2007-08.

Sources: Based on UN COMTRADE Statistics (trade data) and UNIDO database (production data).

The effect of China in market share changes is more dramatic in the markets of the seven large developing countries. China increased its market shares by around 18 percent p.a. during both periods. Non-China developing countries increased their market shares by about 7 percent p.a. during the

1990s, which decreased sharply to 2.4 p.a. during the 2000s. This latter rate is similar to their market share gains achieved in the markets of five industrial countries. However, this deceleration was not true for all groups of countries. Middle East, South Asia, Eastern Europe, and Sub Saharan Africa countries did not experience a deceleration. One reason could be that these countries' exports constituted a very small part of the imports of the seven developing countries thus high rates of market share increases could be due to their very small initial shares.

It is possible to separate the countries into three groups: developing countries in Latin America, countries in East Asia, and others. We separated East Asian countries into the high income four, namely South Korea, Singapore, Hong Kong, and Taiwan, versus all other East Asian countries (Table 3).

East Asian countries even excluding China accounted for more than half the imports of the 7 countries throughout this period. They also had the highest growth rates in their shares during the 1990s. This growth rates were reversed during the 2000s. The countries whose exports showed most deceleration were the countries in East Asia and Latin America. In East Asia, not only did their share of growth decelerate; their import shares actually decreased by about 1 percent p.a.

**Table 3: Manufacturing Import Shares of 7 Developing Countries from Various Developing Country Groups**

Country Group	Share of Imports In Gross Output (in %)			Change in Import Share (% p.a.)	
	1991/92	2001/02	2007/08	1991/92- 2001/02	2001/02- 2007/08
All developing countries w/o China	2.7	5.5	6.2	7.7	2.1
East Asia w/o China	1.5	3.5	3.3	8.7	-1.0
Other East Asia w/o China	0.4	1.4	1.3	15	-1.7
High income East Asia	1.2	2.1	2.0	5.9	-0.6
Latin America	0.4	0.7	0.7	5.9	0.6
All other developing countries w/o China	0.8	1.3	2.2	5.2	9.1

Note: Data are based on 2-year averages of 1991-92, 2001-02, and 2007-08.

Sources: Based on UN COMTRADE Statistics (trade data) and UNIDO database (production data).

Given the dramatic increase in China's export shares in especially in other major developing countries, a question on whether other developing countries have managed to gain significant market shares in the Chinese market emerges. Alternatively, other Asian countries might have been selling thorough China where China became the final assembly point. The answer to both hypotheses is no. While the market share of all other developing countries as a percentage of production of China increased marginally during the 1990s, it decreased significantly during the 2000s (Table 4). Thus while China was increasing its market share at about 18 percent p.a. in the markets of developing countries, these developing countries were losing market share in the Chinese market. Furthermore, all groups of countries were losing import market shares in China.

**Table 4: China's Manufacturing Import Share from Developing Countries**

Reporter	Share of Imports in Gross Output (in %)			Market Share Change (% p.a.)	
	1991/92	2001/02	2007/08	1991/92-2001/02	2001/02-2007/08
China	8.1	10.2	7.7	2.6	-6.1

Note: Data is based on 2-year averages of 1991-92, 2001-02, and 2007-08.

Sources: Based on UN COMTRADE Statistics (trade data) and UNIDO database (production data).

Part of the explanation could be that China's gross production increased at rates even higher than its growth in trade, i.e., at about 31 percent p.a. during the 2000s. Both exports and imports to and from the rest of the world decreased as a share of demand (and output) during this period. China's share of exports to the rest of the world as a percentage of gross output increased from 16.2 in 1991/2 to 24.2 percent 2001/02, and then decreased to 21.4 percent in 2007/08. Its share of imports in total production increased from 15.7 percent in 1991/92 to 19.5 percent in 2001/02, but decreased to 12.2 percent in 2007/08. Thus the dramatic increase in production was not led by international trade where its imports and exports are distributed equally between the industrial and developing countries, but by an expansion in domestic demand, as well as by import substitution.

In sum, developing countries have gained significant market shares in both industrial and other developing country markets throughout 1990s and 2000s. However, China accounts for 82 percent of market share gains of developing countries in the markets of our seven large developing countries and 73 percent of market share increases in 5 industrial country markets during the 2000s. Therefore, recent increases in the industrial capabilities and competitiveness of developing countries can be considered predominantly a China affair.

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