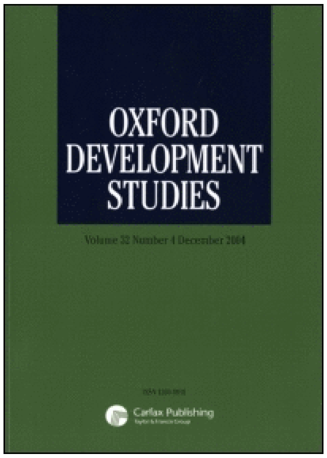

Oxford Development Studies
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713439972

What a Difference a Few Years Makes: China and the Competitiveness of Mexican Exports

Kevin P. Gallagher; Roberto Porzecanski

Online Publication Date: 01 June 2007
To cite this Article: Gallagher, Kevin P. and Porzecanski, Roberto (2007) 'What a Difference a Few Years Makes: China and the Competitiveness of Mexican Exports', Oxford Development Studies, 35:2, 219 - 223
To link to this article: DOI: 10.1080/13600810701322058
URL: http://dx.doi.org/10.1080/13600810701322058

Oxford Development Studies,
Vol. 35, No. 2, June 2007

COMMENTARY

What a Difference a Few Years Makes: China and the Competitiveness of Mexican Exports

KEVIN P. GALLAGHER* & ROBERTO PORZECANSKI

1. Introduction

Politicians and the general public have shown great concern about the growing strength of the Chinese economy. In a recent pioneering article in this journal, Lall & Weiss (2005a) examined whether such concerns were justified in Latin America. The authors evaluated the competitive impact of exports from the People's Republic of China on Latin America and the Caribbean (LAC) by comparing changes in their relative market share in both the world and US markets between 1990 and 2002. They found that few Latin American economies actually had export profiles similar enough to China to be threatened by China, with the two exceptions of Mexico and Costa Rica. For those countries, they found that China's threat was more of a perception than a reality (Lall & Weiss, 2005a).

Lall and Weiss's work calls for continued analysis in the case of Mexico. In the introduction to their paper, Lall & Weiss (2005a) argued that "our paper is thus a preliminary mapping that may offer insights for further, more detailed exploration". Moreover, Lall and Weiss's analysis was conducted just 1 year after China entered the World Trade Organization (WTO). In this note, we reproduce and complement their analysis by looking exclusively at the case of Mexico in light of China's accession to the WTO in 2001. Our main aim was to evaluate whether or not Lall and Weiss's findings on Mexico hold true when the examination is extended to include the period following China's accession to the WTO. We found that in just 2 years, the vast majority of Mexico's non-oil exports are now under "threat" as defined by Lall and Weiss.

2. Summary of Lall and Weiss's Findings

Lall and Weiss looked at the evolution of Mexico's and China's import shares in both the world and US markets. They defined a scenario in which Latin America faces a "direct competitive threat" as one in which China's market share is increasing and the Latin

*Kevin P. Gallagher, Department of International Relations, Boston University, 156 Bay State Road, Boston, MA 02215, USA. E-mail: kpg@bu.edu. Roberto Porzecanski, Global Development and Environment Institute, Tufts University, USA.

ISSN 1360-0818 print/ISSN 1469-9966 online/07/020219-5

DOI: 10.1080/13600810701322058

American share is decreasing. Latin America faces a "partial threat" when both Latin America's and China's market share are increasing, but China's share is increasing more quickly. Working at the three-digit SITC level, these authors showed that while in 1990 24% of Mexican exports to the USA were under some sort of threat, the percentage of exports in the same category in 2002 had decreased to 11%. The result implied that Mexico need not worry excessively about China's increased export competitiveness.

In addition, in a previous version of this study, these authors identified the product lines that were most threatened by China and the lines that were most threatening to China in 2002 in the US market. Among the most threatened Mexican exports, they listed "Vegetables, fresh, chilled, frozen/pres." (SITC 054), "Petroleum products, refined" (SITC 334), "Paper and paperboard" (SITC 641), "Inorganic chemical elements, oxides" (SITC 522) and "Iron and steel bars, rods, angles, shapes" (SITC 673). On the other hand, the categories in which Mexican exports were most challenging to China's competitive position were "Passenger motor cars, for transport" (SITC 781), "Crude petroleum and oils obtained from bituminous minerals" (SITC 333), "Television receivers" (SITC 761), "Outer garments, men's, of textile fabric" (SITC 842) and "Under garments, knitted or crocheted" (SITC 673) (Lall & Weiss, 2005b).

3. Our Study

Following Lall and Weiss's methodology, we looked at changes between 1997 and 2004 in Mexican export performance in its largest market, the USA, to which 89% of its exports were destined in 2004. We examined 289 export sectors at the three-digit SITC Rev. 2 product classification. As in Lall and Weiss, sectors in which Mexico is decreasing its share of US imports or experiencing a growing share, but where China's share is growing more quickly, are sectors where Mexico is experiencing "direct" or "partial" threat from China, respectively.

4. Description of Data

As in Lall and Weiss's study, the results that follow were obtained from the United Nations Commodity Trade Statistics Database—constructed following the SITC Rev. 2 product classification. The "Share of US imports" data (and the percentage point changes derived from those shares) were calculated based on import data reported by the USA in CIF, (value including Cost, Insurance and freight) values. Mexico's share of US imports is calculated based on figures reported in US current dollars.

5. Our Results

Our results show that just a few more years of penetration by Chinese goods in global markets may be having a significant impact on Mexico. We calculated the average market share for each sector in Mexico and China for 1997 and the average for the post-China WTO accession years, 2002–04. We found 41% of Mexican exports to be under direct threat from China, and an additional 30% to be under partial threat. In sum, over the period 1997–2004, 71% of Mexican exports to the USA were under some sort of threat by China, as compared to 11% found by Lall and Weiss for 2002, and 24% for 1990.

Table 1. Competitiveness of Mexico's "threatened" sectors, 1997–2004

Sector	Mexico		China	
	1997 Share (%)	Percentage point change (1997–2004)	1997 Share (%)	Percentage point change (1997–2004)
Crude petroleum and oils obtained from bituminous minerals	14.6	−1.6	0.8	−0.7
Television receivers	69.3	−23.9	0.0	13.2
Passenger motor vehicles (excluding buses)	11.1	−2.1	0.0	0.1
Men's and boys' outerwear, textile fabrics not knitted or crocheted	17.1	2.8	11.5	0.2
Under − garments, knitted or crocheted	15.9	−4.7	3.6	3.7

Source: Authors calculations based on COMTRADE (United Nations Statistics Division, 2006).

Moreover, we found that three of the five sectors identified by Lall and Weiss in which Mexico was challenging China's competitive position are now sectors in which Mexico is under threat by China. The category of "television receivers" is the most dramatic, losing 24 percentage points of its market share (while China gained 13). This is a highly significant sector, not only because on average (2002–04) it represented almost 5% of Mexican exports—television receivers generated a trade surplus of close to 6 billion dollars for Mexico[1]—but also because it is a "high technology" product, as classified by Lall (2000), and has the promise of technology spillovers.

Table 2 shows the competitiveness in 2004 of Mexico's top 15 exports (which represent over 60% of all Mexican exports) to the USA. In all but three of these sectors, Mexico is under some kind of threat. Two of the sectors where Mexico is still gaining competitiveness relative to China are automotive in nature: lorries and piston engines. These are sectors in which China has not yet gained the technological capacity to export. Moreover, Mexico enjoys close proximity to the US market, and benefits from preferences under the North American Free Trade Agreement.

6. Conclusions

Expanding on Lall and Weiss's analysis, this paper has examined the relative competitiveness of Mexican exports in the US economy after China's accession to the WTO. We have analyzed the extent to which Mexican exports have penetrated US markets in recent years, and juxtaposed such an analysis with the performance of China. We found that the impact of China's impressive export performance is not only very significant, but is also likely to be inducing dramatic changes in the market shares of its competitors. Lall and Weiss found that just over 11% of Mexico's exports were under "threat" from China in 2002. Using a different base year and incorporating the 2 years following China's WTO accessions, we found that over 70% of Mexico's exports to the USA are under threat. Moreover, the vast majority of Mexico's traditionally most dynamic exports are under threat, including many of the sectors, such as electronics, that had become mainstays of the Mexican economy.

This study, juxtaposed with Lall and Weiss, should be a powerful warning to policy-makers and international observers not to be complacent about global competitiveness:

Table 2. Competitiveness of Mexico's top 15 (non-oil) exports, 1997–2004

	Mexico		China	
Sector	1997 Share (%)	Percentage point change (1997–2004)	1997 Share (%)	Percentage point change (1997–2004)
Passenger motor vehicles (excluding buses)	11.1	−2.1	0.0	0.1
Automatic data processing machines and units thereof	6.9	3.6	4.6	36.5
Telecommunication equipment, parts and accessories	17.1	−0.7	11.8	12.4
Motor vehicle parts and accessories	14.4	2.7	0.9	3.2
Television receivers	69.3	−23.9	1.2	13.2
Lorries and special purposes motor vehicles	29.6	10.6	0.0	0.0
Equipment for distribution of electricity	64.3	−6.5	6.6	7.1
Electrical machinery and apparatus	16.3	4.3	9.3	12.2
Electrics for making and breaking electrical circuits	20.3	8.3	6.7	5.5
Furniture and parts thereof	16.4	−2.3	14.4	27.0
Internal combustion piston engines and parts thereof	17.0	3.8	0.3	0.8
Vegetables, fresh or simply preserved; roots and tubers	56.4	−5.4	1.3	1.0
Manufactures of base metal	12.3	5.4	10.7	14.9
Parts and accessories for machines electronics	5.3	−1.2	8.1	23.4
Rotating electrical plant	33.2	−1.0	4.8	4.8

Source: Authors' calculations based on COMTRADE (United Nations Statistics Division, 2006).

the dynamism of international markets creates a volatile competitive environment that can reverse or even wipe out apparently well-established trends (such as Mexico's television receiver industry) in short periods of time.

This follow-up study opens up several avenues for future research. A careful econometric study of the determinants of changes in Mexico, and China's revealed comparative advantage in the US market, is in order. Such a study would include independent variables such as exchange and tariff rates, transport, and industrial and development policies adopted in Mexico or China. Alternatively, firm-level case studies could be conducted on "threatened" sectors to examine qualitatively whether these findings hold. Two studies have been conducted on Mexico's high technology electronics sector. Both found that Mexico is losing a great deal of exports and investment to China in this sector (Dussel Peters, 2005; Gallagher & Zarsky, 2007).

Note

[1] These figures are averages for 2002, 2003 and 2004. They depict television receivers' share of total Mexican exports, and the trade balance with the USA in television receivers. In both cases, figures were calculated from data reported by Mexico, in CIF values, to COMTRADE. In order to calculate averages, the data were converted to 2000 US dollars, based on the consumer price index reported by the Bureau of Labor Statistics, US Department of Labor.

References

Dussel Peters, E. (2005) *Economic Opportunities and Challenges posed by China for Mexico and Central America*, DIE (German Development Institute).

Gallagher, K. P. & Zarsky, L. (2007) *The Enclave Economy: Foreign Investment and Sustainable Development in Mexico's Silicon Valley* (Cambridge, MA: The MIT Press).

Lall, S. (2000) The technological structure and performance of developing country manufactured exports, 1985–98, *Oxford Development Studies*, 28, pp. 337–369.

Lall, S. & Weiss, J. (2005a) People's Republic of China's competitive threat to Latin America: an analysis for 1990–2002, *Oxford Development Studies*, 33, pp. 163–194.

Lall, S. & Weiss, J. (2005b) *People's Republic of China's Competitive Threat to Latin America: An Analysis for 1990–2002*, Asian Development Bank Institute.

United Nations Statistics Division (2006) *UN Commodity Trade Statistics Database*, UN COMTRADE.