

**LATN** 

Red Latinoamericana  
de Política Comercial

Rede Latino-Americana  
de Política Comercial

Latin American  
Trade Network

## **Taking the China Challenge: China and the Future of Latin American Economic Development**

Kevin P. Gallagher \*

\* Kevin P. Gallagher is associate professor of international relations at Boston University, faculty fellow at BU's Pardee Center for the Study of the Longer-Run Future, and senior researcher at the Global Development and Environment Institute, Tufts University. He is the co-author of the new book, *The Dragon in the Room: China and the Future of Latin American Industrialization*, Stanford University Press. The author would like to thank Elen Shrethsa for research assistance

Serie**Brief**  
# 58 | Noviembre 2010



## Taking the China Challenge: China and the Future of Latin American Economic Development

Kevin P. Gallagher

Over the past thirty years, both China and nations across Latin America and the Caribbean (LAC) have sought to move away from inward looking economic models and integrate into the world economy. In 1980 the collective economic output of Latin America was seven times larger than China's. Now China's economy is larger than all of the economies in Latin America combined.

In the process of leapfrogging over Latin America and the Caribbean, China has tugged some Latin American economies along with it, but the longer run implications could prove less favorable unless Latin America rises to the challenge and uses China as a Latin America's opportunity.

China's demand for LAC products will only increase into the future. This demand will feed a rapidly industrializing and diversifying economy in China. LAC nations should help stabilize their economies through exporting to China and use that space to follow China's lead in building a diversified economy.

### China's Rise and LAC Development

Over the past decade, China's rise has been of great benefit to LAC. The region's exports to China jumped nine times between 2000 and 2009 in real terms, far outpacing the Latin America's overall export growth. In 2009, Latin American exports to China reached \$41.3 billion (2005 USD), almost 7 percent of all Latin American exports. The pre-financial crisis peak, 2006, for exports to China was \$22.3 billion<sup>1</sup>.

These trends have helped spur economic growth in Latin America not only because China is an export destination, but also because Chinese demand constrains global supply and thus raises the price that Latin Americans receive for exports from other trading partners as well.

However, this windfall has not been widely shared: five countries and a handful of sectors generated just over 80 percent of all regional exports to China. China is in part fueled on iron and copper ores, crude oil, and soybeans from Argentina, Brazil, Chile, Colombia, and Peru. Chinese foreign investment, now totaling over \$30 billion, has flowed in large part to the same countries and sectors.

While much of the attention regarding China and LAC focuses on the LAC region's direct relations with China, relatively less attention has focused on the extent to which Chinese firms compete with LAC firms in the region and in third markets outside of LAC or China. In my book with Roberto Porzecanski, *The Dragon in the Room: China and the Future of Latin American Industrialization*, we found that nearly all of the exports from Latin America and Caribbean are under "threat" from China. Drawing on previous work from the Asian Development Bank, we characterize a "threat," as those products in world markets where China's market share is increasing, while the market share of Latin America and the Caribbean is either decreasing. We found that 92 percent of Latin American manufacturing exports falling under threat from China, representing 39 percent of the region's total exports.

China is not to blame. These trends are largely the result of policies taken by Latin American countries. Many adopted "shock therapy" or the "Washington Consensus." Governments rapidly liberalized trade and investment regimes and reduced the role of the state in economic affairs, often through privatizations that, in a number of cases, went painfully awry.

<sup>1</sup> Unless otherwise noted, all figures in this analysis from Gallagher, Kevin P., and Roberto Porzecanski (2010), *The Dragon in the Room: China and the Future of Latin American Industrialization*, Stanford University Press.

China has taken a more gradual approach to integrating with world markets. In contrast to Latin America, China embarked on a program of economic reform aiming at strategic integration into the world economy by following a “dual track” policy. The policy consisted of liberalizing foreign investment and inflow of imported inputs to selected industries while buttressing those sectors to the point of maturity and nurturing other sectors until they were ready to face competition with imports.<sup>2</sup>

### Taking the China Challenge

China’s demand for LAC products, barring a significant slowdown in the Chinese economy, is likely to last for some time into the future. LAC could capitalize on that opportunity by solidifying a series of stabilization funds, embarking upon a process of ‘self-discovery’ to examine where opportunities for diversification may lie, and taking environmental protection seriously.

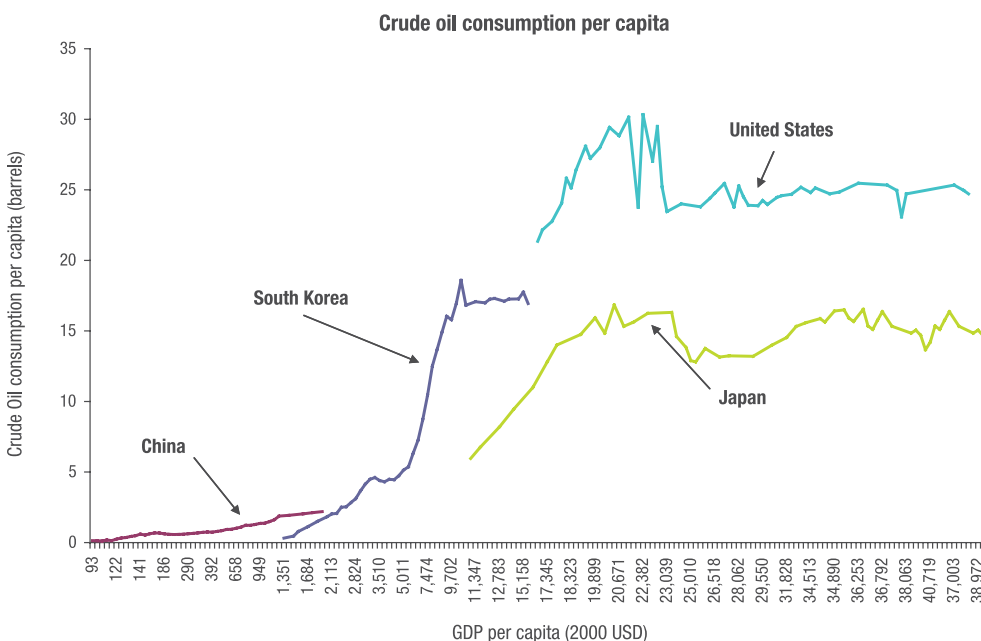
#### *Chinese demand for LAC products*

The main benefit of China’s rise for LAC has been China’s increasing demand for LAC commodities. China has become a new export destination for LAC products. In addition, China’s demand for the basket of goods that LAC offers the world in general has boosted global prices for many of those goods and thus has indirectly helped LAC export as well. Will that demand last?

Predicting that far into the future is beyond any economic modeling available. Anything could happen, including the discovery or invention of new products that could substitute for LAC exports. With those caveats in mind, it seems that China will have interest in LAC’s four core commodity exports to China for a significant period into the future. In tables 1-4, I compare annual income levels and per capita consumption of crude oil, iron ore, copper, and soybeans with the consumption patterns of between China, South Korea and Japan—as well as with the United States in some cases.

Such a juxtaposition allows us to examine how China’s consumption of key LAC commodities compares with the consumption path of other East Asian middle and high income nations, and the USA. By this admittedly crude measure, in three out of the four cases China has quite some time before, its markets became saturated with these key LAC commodities.

**Table 1**

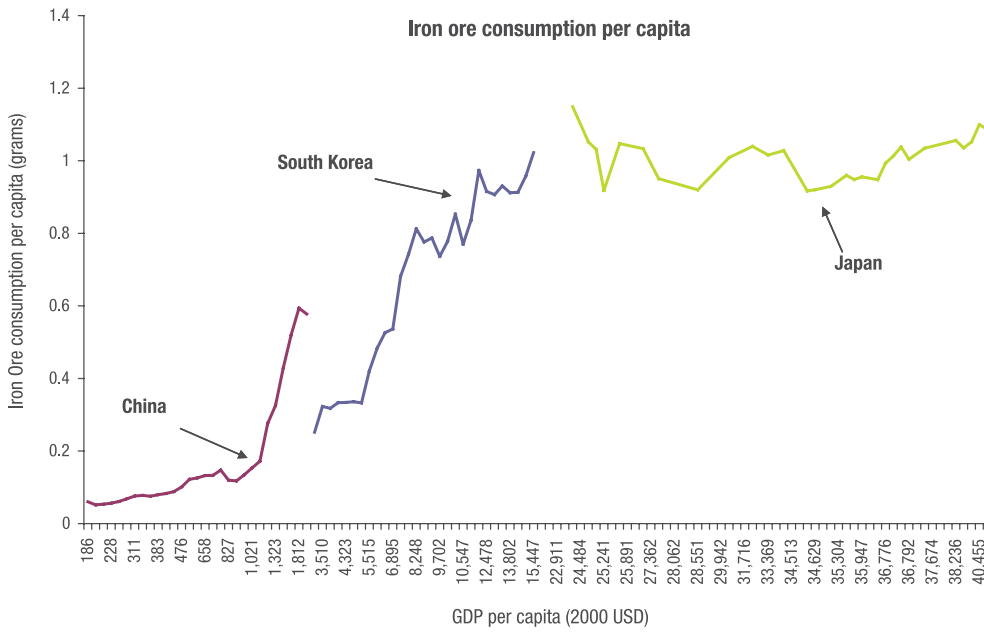


<sup>2</sup> For a useful introduction to the Chinese economy see Naughton, Barry (2007) *The Chinese Economy*, Cambridge, MIT Press.



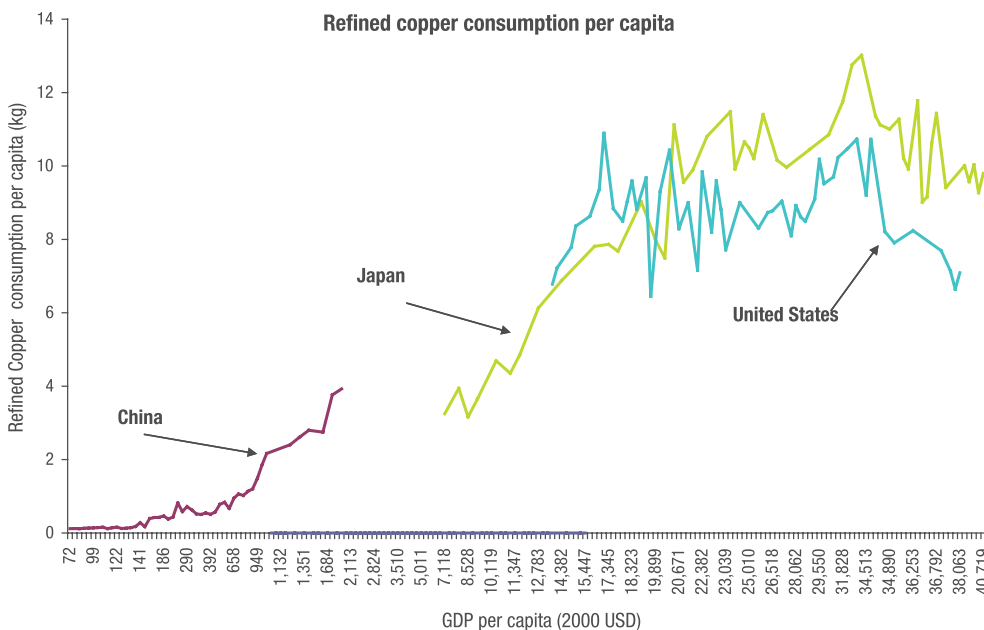
In terms of oil consumption, South Korea and Japan's consumption of crude oil has peaked at approximately 15 barrels of oil per person. For South Korea that peak came at \$10,000 GDP/capita, for Japan at \$18,000. If the Chinese annual consumption growth rate of crude oil from 1960 to 2008 continues at its historical pace, China will hit the East Asian plateau in 46 years. If the growth rate is one quarter of the historical rate, China will reach that level of oil consumption in 183 years.

**Table 2**



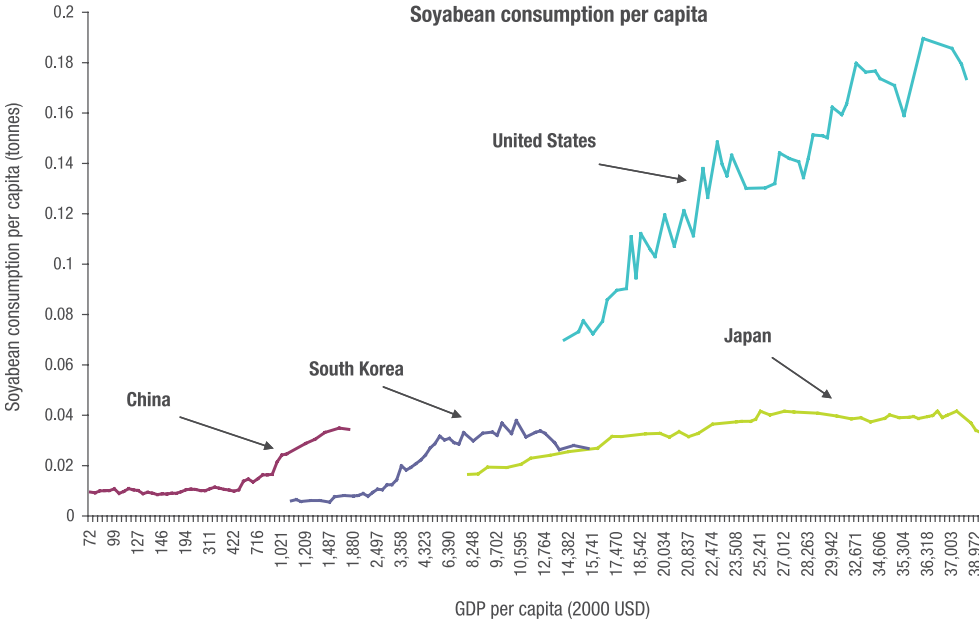
By these calculations, it appears that China will demand significant amounts of iron ore for some time as well. This could be good news for nations such as Brazil, which accounts for 65 percent of all Chinese imports of iron ore. If China consumes at its historical rate it will reach Japan's level of consumption in 50 years, if China consumes one quarter of the historical average they will not reach Japan's levels for over 190 years.

**Table 3**



For copper there is no data available for South Korea, but here we can also see that China seems to generally be following the path of Japan but wouldn't reach Japanese levels for 70 years or more.

**Table 4**



The case of soybeans is the most interesting because, compared to fellow East Asian nations anyway, China seems to have met the same level of soy consumption as its neighbors but at a much lower level of GDP per capita. If this is the case, Chinese demand for soybeans may not last so far into the future. However, neither South Korea nor Japan has a significant livestock industry that needs soy as a feedstock. China has begun such a sector. Therefore the better comparison may be the United States, where the majority for soy is in its feed sector.

This exercise is by no means the last word on the subject. However, if the Chinese economy continues to grow it is not implausible to predict that demand for at least crude oil, iron, copper, and probably even soybeans will sustain for many years to come.

### ***Using China to help with stabilization***

If China does maintain its appetite for Latin American commodities, the consequences may not all be beneficial. China could accentuate Latin America's (over) reliance on commodities exports and jeopardize the region's capabilities for diversifying its export basket toward manufactures and modern services, and cause long-lasting social and environmental effects as well. Economists also express concern that China's tug on the LAC export basket will inflict the region with Dutch disease, where primary commodity-dependent countries do not develop strongly because they are victims of a "resource curse." Nations overly dependent on commodities have been shown to deindustrialize because discoveries of such resources and their subsequent export raise the value of a nation's currency and make manufactured and agricultural goods as well as services less competitive, eventually increasing imports, decreasing exports, creating balance-of-payments problems, and leading to poor economic performance.

In the past few years we have witnessed significant currency appreciation across Latin America, though it is not clear that such appreciation has been due to commodities prices or other factors. In terms of competitiveness however, it is fairly clear



that China is outcompeting Latin America in world manufactures and services exports. China has become the most competitive manufactures exporter in the world, measured by the China share of manufactures in total world manufactures exports. Reliance on commodities can accentuate employment and environmental problems as well. For example, between 1995 and 2009, Brazilian soy production quadrupled, in part due to the fact that approximately half all Brazilian soy exports went to China. At the same time, employment in the soy sector shrank as cultivation became highly mechanized. Moreover, increased demand for soy has been linked to the deforestation of some 528,000 square kilometers in the Brazilian Amazon. Such deforestation has threatened the livelihoods of many indigenous Brazilians and contributed to accentuating global climate change.

A number of LAC nations have put in place 'stabilization' funds however, that effectively tax export commodities when prices are high in order to stabilize the economy when prices are low or when a nation is experiencing a downturn. Of the stabilization funds that exist in the region, Chile's stands out. To take full advantage of China's appetite for LAC commodities, more nations in the region should put in place programs like Chile's.

Chile's government revenues have grown in recent years, in large part due to higher copper revenues. The share of copper revenues in government revenue was 2.4 percent from 1999 to 2002, but leapt between 12.6 and 17.6 percent in 2004. The state-owned copper company CODELCO accounted for 75 percent of government revenues from copper in 2004. Chile's copper funds have for several years been in part appropriated into the Copper Stabilization Fund, established in 1986 to isolate public spending from the variation of copper prices and to conduct counter-cyclical macroeconomic policy.

In 2006, Chile's Fiscal Responsibility Law created two new sovereign funds: the Pension Reserve Fund (PRF) and the Economic and Social Stabilization Fund (ESSF). While the purpose of the PRF is to support the sustainability of Chile's old-age and disability pensions, the purpose of the ESSF is to enable Chile's government to conduct counter-cyclical macroeconomic policy. According to Chile's Ministry of Finance, the ESSF was created to finance fiscal deficits during periods of weak growth and/or low copper prices and to pay down public debt. This helps to ensure long-term financing for social programs. The ESSF was initially capitalized with US\$ 2.58 billion, most of which (US\$ 2.56 billion) came from the Copper Stabilization Fund that the ESSF replaced.

As a result, in years when Chile has a fiscal surplus, the Fiscal Responsibility Law establishes that after contributions to the PRF (which have to be between 0.2 and 0.5% of GDP) and the five year (2006-2010) capitalization of Chile's Central Bank (in an amount that is the difference between the capitalization of the PRF and the effective fiscal surplus, with an upper limit of 0.5% of GDP) all remaining fiscal surplus must be paid into the ESSF. However, repayments of public debt and advanced payments into the ESSF during the previous year can be subtracted from this contribution.

By December 31st, 2008, the ESSF was worth more than US\$ 20 billion. As a result, in 2008, Chile became a net creditor for the first time in its history. In terms of the performance of the ESSF, in 2008 the investments made by the ESSF showed a return of 7.63%. The annualized net return accumulated from March of 2007, when the ESSF started operating, has been of 9.47%.

### ***Self-discovery***

We know that economic growth and a diversified economy go hand in hand. It is important to underscore 'diversity' because past analyses have focused on moving away from primary commodity production rather than building upon and diversifying alongside commodity production. LAC needs to see to it that the proper environmental provisions are put in place so that LAC can maintain its foothold in commodities markets for years to come. LAC also needs to re-focus on the competitiveness of products beyond primary commodities.

Diversification strategies will take different forms in different LAC countries. In contrast with the past, it will be more important for LAC countries to put in place a process of industrial policy, as opposed to policies themselves. Past attempts at industrialization in the region had a one-size-fits-all approach: industrialize in all sectors at all costs. New more nuanced approaches to industrial policy emphasize the need to put in place a process whereby policy-makers (embedded within the private sector) can 'self-discover' the binding constraints to economic growth in a particular economy. After such a 'diagnostic' approach is in place, then the policy process can commence.<sup>3</sup>

China embarked on a program of economic reform aiming at strategic integration into the world economy by following a "dual track" policy. The policy consisted of liberalizing FDI and inflow of imported inputs to selected industries while buttressing those sectors to the point of maturity and nurturing other sectors until they were ready to face competition with imports.

Such an approach stands in stark contrast to Latin America. The region experimented with industrial policy during its Import Substituting Industrialization period (roughly 1940 to 1980). The approach was a modest success at best. The policy did help industrialize nations like Brazil, Mexico, Argentina and others in the region. Yet, with a few exceptions many of the firms within those industries were extremely inefficient by global standards because there was too much a focus on domestic markets. What is more, Latin American industrial policy was financed largely by debt, in contrast to export revenue and savings in the Chinese case.

### ***Environmental protection***

China serving as an increasing source of demand for LAC products could have a heavy toll on the environment. The environment is not something to preserve solely for altruistic reasons. Indeed, a stable environment will be necessary to sustain the ability of LAC to produce commodities for years to come. Moreover, Chinese demand will create pressure to design new infrastructure projects, such as highways through the Amazon in order to get iron, cattle, and soy to Pacific ports. Such projects will need to take the environment into account. Nations like Mexico serve as an example of what can happen when the environment is ignored. According to official Mexican statistics, the economic costs of environmental degradation have equaled 10 percent of GDP per annum since 1985.

Invigorating and expanding stabilization funds with export revenue from China and elsewhere, coupled with an innovative approach to industrialization could form part of a strategy where China is an opportunity for the future of Latin American development. A business-as-usual approach could be dangerous. Over-reliance on primary commodities could cause macro-economic, employment, and environmental problems in the longer run. What's more, China is already swiftly out-competing Latin America in world manufacturing markets. As China has shown, nations can conduct economic reforms to great benefit. Latin America could follow suit.

---

<sup>3</sup> See Hausman, Ricardo and Dani Rodrik (2002), *Economic Development as Self-discovery*. Cambridge: National Bureau of Economic Research, Working Paper No. 8952.