

THE 'NEW GEOGRAPHY' OF INTERNATIONAL TRADE "HOW THE EMERGING MARKETS ARE RAPIDLY CHANGING GLOBAL TRADE"

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INTRODUCTION





The world is undergoing a rapid transformation that is quickly reshaping the global economic landscape. From the industrial revolution until the first few years of this century, the developed economies have dominated trade flows and trade relations. During this period the emerging economies always relied upon their larger and much richer brethren as the destination for almost all of their exports. In just the past few years, however, these economies have found a new and rapidly growing group of customers: each other. While this 'new geography' of world trade is a further sign of a shift in global power away from the United States and other developed nations, this brave new world promises to be a positive force for global prosperity in the years and decades to follow.



THE RAPID INTEGRATION OF THE SOUTH



With the exception of the emerging market crisis of the late 1990s, emerging market (or South-South) trade¹ in goods has been expanding faster than North-North trade (trade between the wealthy or developed nations) since the early 1990s. Interestingly, it grew more slowly than North-North trade during the 1980s, mostly as a consequence of slower economic growth throughout much of the developing world. Starting in 2003, however, South-South trade really took off when it more than quadrupled from under \$1 trillion then to \$4.6 trillion by 2008.²



After averaging a very respectable 8% rate of growth during the 1990s, South-South annual trade revved up to 24 percent growth during the first nine years of the 21st century (31% annual growth from 2003-2008). In an unprecedented decade in modern world history, the developing countries increased their share of world trade from 6.9 percent in 1999 to 18.2 percent by 2008.³ This is remarkable considering that North-North trade growth had averaged a very robust 8% over the same period.⁴ What's even more im-

^{2/} Unless otherwise noted, trade figures are exclusive of trade in services.

¹⁷ As of 2009, the IMF classified 149 nations as developing or emerging markets. As in much of the trade literature, we use the terms "South-South" and 'developing" or "emerging" interchangeably.

³⁷ We choose to focus on 2008 as the final year in our paper for two reasons. Firstly, our IMF bilateral trade data was only available until 2008. Secondly, given the unusual severity of the global recession, many of the 2009 trade figures demonstrated large aberrations from trend.

^{4/} This rise is more than just a Chinese phenomenon. In fact, the South-South's share of world trade would have more than doubled over this same period (6% to 15%) if Chinese trade was excluded.





Does this imply that South-

South trade has reached a critical level where it is sufficiently large enough for economic decoupling, or the phenomenon where the developing world is big enough and integrated sufficiently to grow without the macroeconomic support of the developed economies?⁶ Not necessarily. The recent economic crisis has shown that globalisation has inextricably linked the developed and developing economies through many channels besides trade flows. Nevertheless, intra-south trade has just now reached a critical level where the developing world is capable of showing a greater degree of resiliency, regardless of what is transpiring in the rich economies. This has clearly been evident with the relatively strong performances in much of the emerging markets over the past two years.



^{5/} This assumes annualised trade growth of 12% and 6% for the South and North respectively, between now and 2028.
^{6/} See SIEMS January 2010 monthly, "Decoupling Revisited: Can the BRICs go it on Their Own?"

In an unprecedented decade in modern world history, the developing countries increased their share of world trade from 6.9 percent in 1999 to 18.2 percent by 2008.



Not coincidentally, the South-South trade surge occurred simultaneously with the region's significantly faster growth at the beginning of the decade. Interestingly, from 1980 until 2000, the emerging markets did not enjoy any economic growth advantage over the rich developed countries. This changed abruptly at the turn of the century when the South clocked in an average annual growth advantage of 5 While China is well known for trading primarily with the world's rich nations, its share of trade (both imports and exports) with the developing world has doubled from 15 to 30 percent over the past decade.

percent. The first decade of this century might have been a 'lost' one for much of the 'North' but it was not for the emerging markets.

What about trade among the four largest emerging economies, Brazil, Russia, India and China (the BRICs)? With the exception of Russia, the BRIC countries have significantly increased their share of exports and imports from the emerging markets in recent years. Over half of Brazil's imports now come from the south, up from about a third in 1998. A third of India's exports went to the emerging markets in 1998; today it is a half and rising. Its import share from the south has risen 20% over the past decade. While China is well known for trading primarily with the world's rich nations, its share of trade (both imports and exports) with the developing world has doubled from 15 to 30 percent over the past decade. This is, very simply, an extraordinary pace of regional trade integration and its momentum is clearly in place.

Despite their sizes, however, the BRICs are currently doing little trade among themselves. At \$158 billion in 2008, intra-BRIC trade represented a very small fraction of total South-South trade. But its growth has accelerated in recent years, having stood at only \$15.3 billion as recently as 2000. While intra-BRIC trade is relatively small now, it clearly has the potential to become much larger.

With the clear potential to become a much larger share of global economic activity over the next quarter century, just how large could intra-BRIC trade become? To forecast its potential size, we utilised a gravity model (see the appendix for a technical discussion of the model) that relates trade flows between countries to a set of factors, including GDP,



institutional variables (like property rights and non-tariff barriers) and regional trade agreements. After making some conservative assumptions about each BRIC country's economic growth potential over the next two decades⁷, we estimate that:

Intra-BRIC trade is projected to grow 12% a year, reaching \$1 trillion by 2030.⁸

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- At 14% a year, Chinese-Indian bilateral trade is expected to grow the fastest, reaching \$450 billion by 2030. This is 50% larger than current US-Chinese bilateral trade.
- The next two largest bilateral trade flows will be China-Brazil and China-Russia both projected to reach \$200 billion by 2030. This is currently equal in size to bilateral trade between the United States and Japan.



f the estimation methodology

At \$54 and \$50 billion in 2008, China-Russia and China-India, respectively, were by far the largest bilateral trading partners among the BRICs. What is driving the latter's faster projected trade growth are the much higher economic growth rates expected out of India and the greater level of global

^{7/} We assume average annual economic growth, measured in purchasing power parity units (or PPP) of 8.6%, 7%, 4.5%, and 4% for China, India, Brazil and Russia respectively. While these forecasts may initially seem quite generous, measured at current exchange rates these average growth rates would be significantly smaller.

^{er} Although tariff and non-tariff trade barriers are expected to continue falling among the BRIC countries, we have not assumed this in modelling our economic projections for intra-BRIC trade growth.



trade integration expected in that nation's economy in the coming decades (discussed in the next section).

China's rapid trade integration with the developing world has made it the top trading country with many in recent years:

- In 2009 China replaced the United States to become the largest trading partner with Brazil.
- In 2009 China dislodged the United States as India's second largest trading partner (after the UAE).
- In 2005 China became Vietnam's largest trading partner.
- Just ten years after establishing diplomatic and trade relations, China has overtaken the US, Japan, Germany and the UK to become South Africa's largest trading partner.⁹



South-South trade integration is seen as complementary to North-South trade as southern markets, with their high growth potential, may offer attractive export opportunities. While North-North trade grew by 8% annually over the past decade, North-South trade grew by almost twice that rate over the same period (by 15%).¹⁰ The United States, the world's largest trading economy, is indicative of how quickly the developed world is increasing its trade with the south.

^{9/} According to the latest figures from South Africa's Department of Trade and Industry.

¹⁰/ A marked acceleration from the 8% averaged over the preceding decade (1990-1999).





For the first time in its history, in 2006, the United States imported more goods from developing countries than the from developed world. US export share to developing countries rose from 31 percent in 1999 to 41 percent in 2008. These markets will become even more critical for the developed world as the rapidly growing middle classes in these markets begin coveting western luxury goods and services in greater quantities.

South-South trade integration is seen as complementary to North-South trade as southern markets, with their high growth potential, may offer attractive export opportunities.

- The developing countries are now the destination for nearly half of Japan's exports and one-third of the EU's.
- China became Korea's largest trading partner in 2007 and Japan's largest in 2006.
- In 2009 China replaced Japan as Australia's long-time largest trading partner.
- In early 2010 China became Saudi Arabia's largest oil customer, replacing the United States which had held that position for decades.



Should Russia Join the WTO?

After 16 long years of negotiations, Russia stands a decent chance of joining the World Trade Organisation (WTO) this year. So why is it taking so long and what are the likely implications for the Russian economy of membership?

The WTO was founded in 1995 and is the successor to the General Agreement on Tariffs and Trade (GATT), established shortly after the end of the Second World War. The WTO's primary goal is to liberalise world trade by eliminating or reducing import duties and non-tariff barriers.

While it usually takes between five and seven years of negotiations to join the trade organisation, Russia first applied for membership in 1993. Russia is now the largest country outside the WTO. What has made the process so lengthy is that to join Russia needs to get the approval of all WTO members. Over the years negotiating members often criticised Russia for supporting and protecting its automobile and agrarian sectors. Rules for membership have also become more stringent over the past decade. The Chinese, for example, who joined relatively late in 2001, took 15 years to negotiate its entry.

As a WTO member, Russia will have easier access to foreign markets. It is estimated that Russia now loses up to \$2.5 billion annually from trade barriers in foreign markets. Another positive aspect of membership is participation in the development and reform of international trade rules. Currently Russia is penalised by not participating. Longer term, membership will benefit Russia as more open competition with foreign companies will force Russian producers to be more productive

and innovate. Like China and India before it, WTO membership will accelerate Russia's integration into the global economy.

The economic impact of WTO membership will vary widely from sector to sector. The Russian chemical and steel sectors are anticipating large benefits, because member states will have to reduce or eliminate their anti-dumping duties protecting their own markets. WTO membership for Russia is long overdue. The sooner Russia joins the better.

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The sectors competing head on with foreign producers, like mechanical engineering, agriculture and financial services, strongly oppose accession to the WTO due to likely consolidation in their industries. That said, WTO membership for Russia is long overdue. The sooner Russia joins the better.



INDIA AND CHINA: A TRADE PRIMER



Since China and India are likely to be the lead players in reshaping the new geography of international trade (China, of course, already is) in the coming years and decades, they warrant some special attention.

1ST OBSERVATION:

China is already significantly integrated into the global economy, in fact more than what its economic fundamentals would predict. India, however, is 'under' integrated relative to her size and has much 'catch-up' potential in the coming years and decades.

China began earnestly opening up to world trade around the mid-1980s. Since 1990 its share in global trade has risen almost continuously. Over the past decade, China is already significantly integrated into the global economy, in fact more than what its economic fundamentals would predict. India, however, is 'under' integrated relative to her size and has much 'catch-up' potential in the coming years and decades.

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China's exports grew by an annualised 23% in dollar terms, more than twice as fast as world trade. According to the Economist, if it continued to expand at this pace, China might capture around one-quarter of world exports within ten years. That would exceed America's 18% share of world exports in the early 1950s (its 10 percent share in 2009 equals that achieved by Japan at its peak in 1986).¹¹ While its market share will probably continue rising over the short and medium term, China's export growth is highly likely to begin slowing over the next decade as demand in the developed countries remains subdued.

11/ China's share of world trade hit approximately 10% in 2009 because its exports fell less sharply than those of other countries.





We found that China's 'trade intensity', is higher than its economic size would normally indicate. China's current share in world trade is almost 10%, while its share of world output is 7%. Its share of trade to GDP has doubled over the past decade and now hovers around 60% of GDP post-crisis. With respect to its trading links to the world, China is remarkably well integrated, both regionally and multilaterally. In January 2010, the China-ASEAN¹² Free Trade Act (the largest of its kind) became operational. It is expected to significantly increase bilateral trade volumes with the major Southeast Asian economies.

The discrepancy in trade integration between India and China could not be greater. India, very simply, is not integrated with the rest of the world



12/ Association of SouthEast Asian Nations.





and is poorly integrated relative to its economic fundamentals. For example, India accounts for 2.2% of world output, but only 1.5% of world trade.

India's share of world trade hovered around one-half of one percent until it began opening up its economy during 1990s. India's trade-weighted tariff averaged 100% in 1991 (and 35% in 1999), but has fallen below 10% since then. It is important to note that it has witnessed a real acceleration in trade openness since about 2003. Since the turn of the century, its share of trade relative to GDP has doubled from 20% to 40%. This recent rise in India's openness and share of world trade could only be the beginning of a very long catch-up period of globalisation as India increases its share of world output and trade in the coming years.





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2ND OBSERVATION:

China has very quickly become a high-tech exporter. India's service trade has been growing rapidly in its deregulated sectors.

Conventional wisdom has it that China is largely a big exporter of cheap goods. China's export machine, however, has been China has very quickly become a high-tech exporter. India's service trade has been growing rapidly in its deregulated sectors.

quickly climbing the technological ladder. Since the mid-1990s, China has increasingly specialised in high-tech goods and competitiveness measures indicate that China increasingly acts as a direct competitor of the developed economies. Based on the Balassa Index of revealed comparative advantage (Balassa, 1964), China's comparative advantage is now clearly in the high-tech sector (although it still holds a competitive position in low-tech goods). Recent evidence¹³ finds that China's export basket has switched towards high-tech exports and that the share of high-tech goods China exports is now significantly higher than would be expected given its income level (see Bussiere and Mehl, 2008).



13/ See Rodick (2006) and Schott (2007).



India's comparative advantage, however, remains in the medium and in particular, the low-tech sectors. For India, low-tech goods account for more than half of India's exports (down from about 70% ten years ago), while high-tech goods account for only 5%. Interestingly, with the exception of pharmaceuticals, India exports little in the way of high-tech goods.

But what about services? In India services account for 54% of its GDP (very high for a developing economy). There are two items of interest here. First, China's role in trade in services has grown bigger than that of India's. In 2008, China's world share of service trade was 4.2% compared to India's 2.6%. Naturally China's sheer size and growth advantages help explain some of this difference.

Second, India's trade in services has been growing rapidly since the turn of the century, particularly in the deregulated sectors such as IT and IT-enabled services. Today services account for about 37% of India's exports, compared to only 9% for China. Only a decade ago, India's and China's shares were roughly equal, which suggests that India's specialisation in services is actually rising sharply over time and so will its share of world service trade.





CONCLUSION



A new phase of globalisation is now under way. This one is being driven by the developing countries and it is reshaping the global landscape at the fastest pace since the Gilded Age¹⁴ of the late nineteenth century.

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The rapid economic integration of the South, which really only started about five years ago, means that the developing world, especially the big emerging markets of China, India and Brazil, are increasingly relying on each other more, and less on the developed economies of the West. The radical shift in trading patterns is already being felt in the political arena. The developing economies have refused to sign into the WTO's Doha multinational round and are signing their own free trade agreements among themselves.

And in an ironic turnabout in philosophies that seemed impossible to envision just a few years ago, it is the big emerging market economies these days that are the most comfortable with globalisation, and it is they that are urging the West not to give up on free trade!

^{14/} The Gilded Age, or the last three decades of the 19th century, witness an enormous growth in global trade.





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TECHNICAL APPENDIX

We utilised a standard 'gravity' model for our paper, which provided the forecasts for bilateral trade volumes between any of the 42 countries, and also determined whether a particular nation was trading at below or above its 'potential' with another nation based upon its underlying economic fundamentals.

We applied a two-step regression to isolate unobserved heterogeneity effects, which has been followed by Cheng and Wall (2005), Bussiere and Schnatz (2006) and others. The regression was specified as follows:

$$\begin{split} \text{Inexport} = \alpha + \beta_1 & \text{In GDP}_{\text{Origin}} + \beta_2 & \text{In GDP}_{\text{Destination}} \\ & + (\beta_3 & \text{Institutional variables}_{\text{Origin}} + \beta_4 & \text{Institutional variables}_{\text{Destination}}) \\ & + (\beta_5 & \text{Free Trade Agreements}) \end{split}$$

Where:

Export - Value of exports from the origin country to the destination country (in log form). **GDP**_{origin} - GDP of the origin country

GDP_{Destination} - GDP of the destination country

Institutional variables - (Government size, property rights, ability to own a foreign or domestic bank account and non-tariff barriers).

Free Trade Agreements - (FTAD, free trade agreements with all developed countries; FTAU, free trade agreements with all underdeveloped countries; FTAM, free trade agreements between developed and underdeveloped countries).

The coefficient estimate for GDP Origin was 0.914, implying that for every 1% increase in the GDP of the origin country, the value of the origin country exports increased by 0.914% (i.e. almost one for one). The coefficient estimate for GDPDestination was 0.719 indicating a 0.72% increase in the origin country's exports for every 1% increase in the origin country's GDP.

Smaller government, greater protecting of property rights, the ability to own a foreign or domestic bank account and lower non-tariff barriers in the origin country were found to unambiguously increase its exports.

Free trade agreements between the developed countries (FTAD) and undeveloped countries (FTAU) were not found to be statistically significant (i.e. they have no material impact on trade volume). Free trade agreements between developing and developed economies (FTAM) were found to be negative, indicating these treaties actually had a negative impact on trade volumes.



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DATA:

The data runs in annual five-year from 1985 until 2000, then annually from 2000 to 2007 (covering a total of 11 years). The sample consists of 42 countries (30 OECD countries and 15 developing countries including the BRICs). This amounts to approximately 1,700 bilateral trade relationships and 19,000 observations. Trade data are from the International Monetary Fund's Direction of Trade Statistics (IMF DOTS); they are expressed in US dollars. GDP data come from the IMF World Economic Outlook database.

The institutional variables (government size, property rights, ability to own a foreign bank account and non-tariff barriers) were provided by the Frazier Institute's Economic Freedom of the World Report.

The Free Trade Agreements dummy variables are based on the WTO database. FTAD includes EEA, CER, NAFTA; FTAU includes AFTA Bangkok Agreements and SAPTA; FTAM includes APEC, EC-Egypt (effective 9/3/2004), EC-Mexico (effective 7/25/2000), EFTA-Egypt (effective 7/17/2007), EFTA-Mexico (effective 7/25/2001), Egypt-Turkey (effective 10/5/2007) and Japan-Mexico (effective 3/31/2005).

Note: Please see the authors for more details on the regression results.



REFERENCES

Balassa, B. (1964), "Trade Liberalization and 'revealed' comparative advantage" Manchester School, 33, pp. 99-123.

RESEARCH / MARCH, 2010

Bussiere, M and Mehl, A. (2008). "China's and India's Roles in Global Trade and Finance – Twin Titans for the New Millennium?", European Central Bank, Occasional Paper Series No. 80. January.

Rodrick, D., "What's so special about China's exports?", NBER Working Paper No. 11947, January 2006.

Schott, P. (2008), "The relative sophistication of Chinese exports", Economic Policy. Vol. 23. pp. 5-49.



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