Brazil, India and China – the new leaders of the world economy?

Sector-by-sector analysis

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Brazil, India and China – the new leaders of the world economy?

1. The economic and financial boom of the BICs trio: Brazil, India and China
2. An economic success essentially driven by the BIC's infrastructure requirements
3. Consumption: the BICs' domestic markets are not yet mass markets
4. At present, there are only a few sectors in which the BICs are global players, but clear ambitious for some sectors over the period 2015-2025

China and India have continued to post high GDP growth in the midst of the global crisis...
but their contribution to world GDP remains weak

	Share of world population	Share of world GDP	GDP growth rate in 2009	GDP per capita in USD, 2008	GDP per capita in USD, 2015
India	18%	2.0%	6.8%	2,800	4,000
China	20%	8%	8.7%	6,000	11,000
Brazil	3%	3%	-0.2%	10,500	12,000
Russia	2%	3%	-7.9%	16,000	20,000
United States	5%	24%	-2.6%	47,000	48,000

Source: IMF World Economic Outlook (ppp data)

- Strong GDP growth, but still a weak wealth effect compared to the United States

USD 600bn, 60bn and 10bn:
The respective 2010 ‘Marshall plans’ of China, India and Brazil

Financial windfalls arising from these three countries’ significant forex reserves

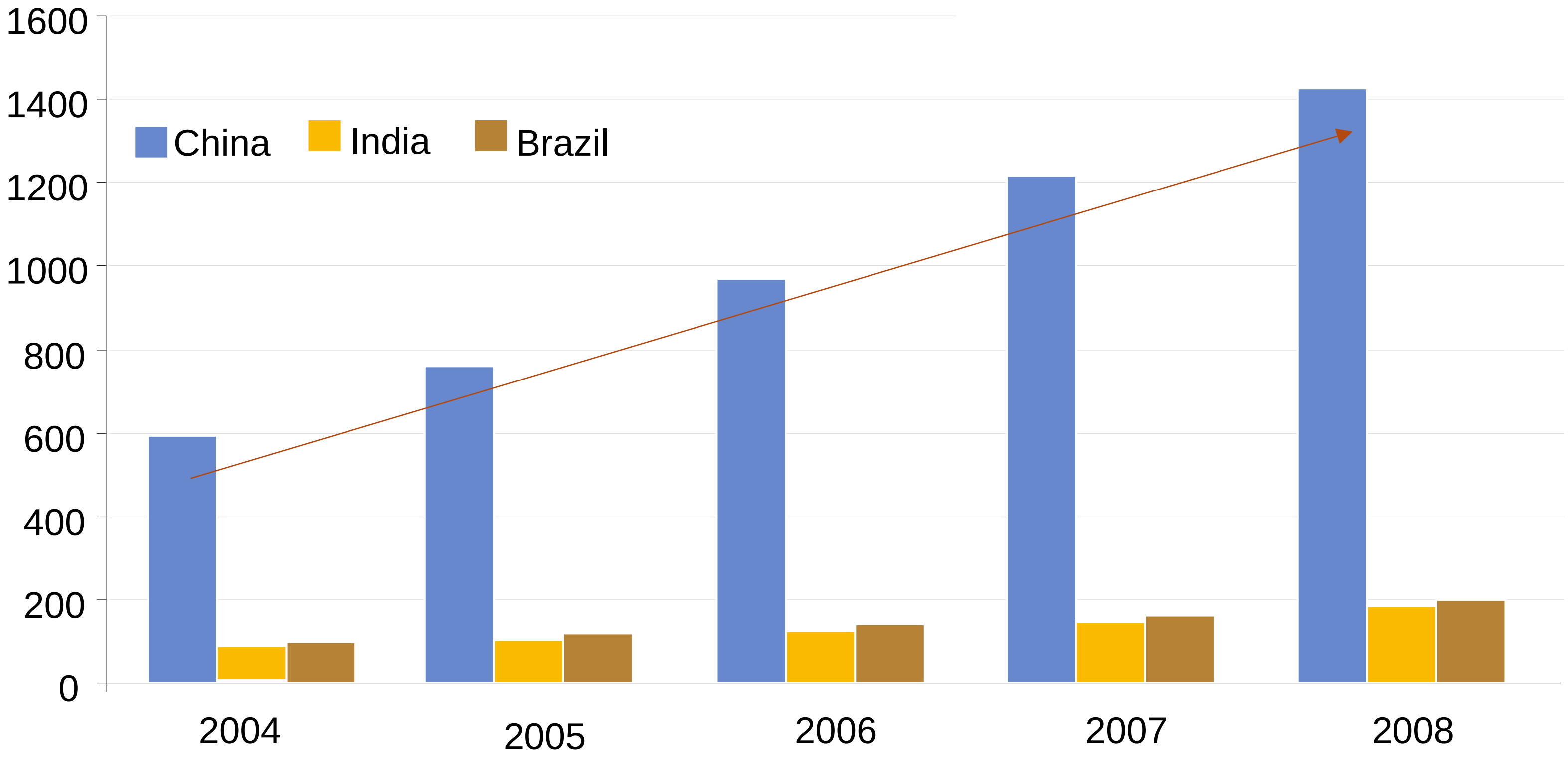
2009	Investment	Consumption	Forex reserves (excl. gold) USDbn
India	5.5%	5%	260
China	16.5%	9%	2,200
Brazil	-12%	3%	240
Russia	-19%	-6%	440
United States	-18.5%	-0.6%	130

- China holds 30% of the world’s forex reserves

Chinese industrial exports have more than doubled in 5 years

In 2008, these were more than USD 1.4 trillion, or 7 times greater than for India or Brazil

Exports, all industries, in USD billions



China is increasingly attracting capital

China: inward investment is 5 times greater than outward investment

Billions of USD	**Foreign direct investment**			
	Inward		**Outward**	
	2000	2008	2000	2008
Brazil	33	45	2	20
India	4	42	1	17
China	41	108	7	22
USA	314	316	143	312

Source: UNCTAD

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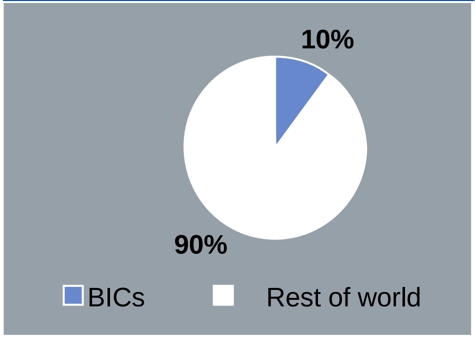
Construction in the BICs
Investment rising three-fold between 2003 and 2014

USD billions	Construction 2003	Construction 2008	Construction, average annual growth 2003-2008	GDP, average annual growth, in USD 2009-2014	Construction, average annual growth 2009-2014	Construction 2014
Brazil	64	102	9.7%	5.4%	3.5%	125
India	110	238	16.7%	7.9%	10%	425
China	314	629	14.9%	11.4%	11%	1 150
United States	888	965	1.7%	3.2%	1.5%	1 050

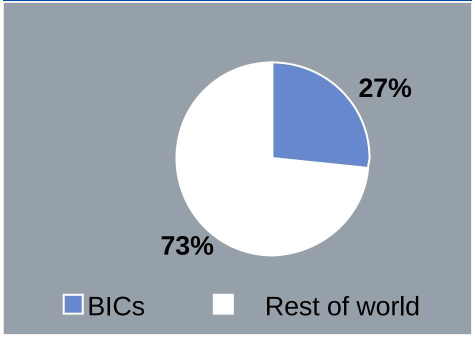
- In 2015, Chinese construction expenditure will exceed US construction expenditure
- Between 2003 and 2008: construction expenditure rose by a factor of 1.9
- Between 2009 and 2014 it will rise by a factor of 1.7

Over 10 years, the BICs' share has tripled

Construction expenditure 2003



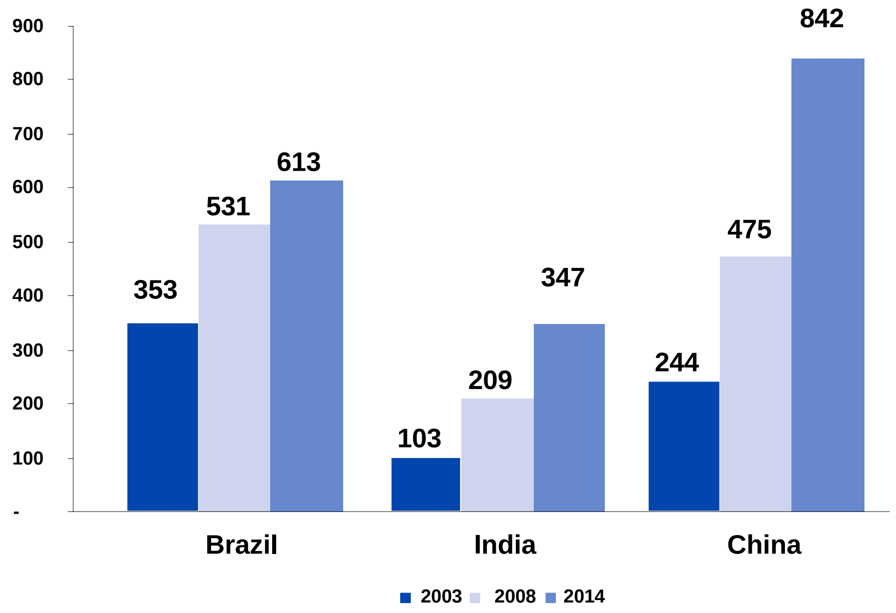
Construction expenditure 2014

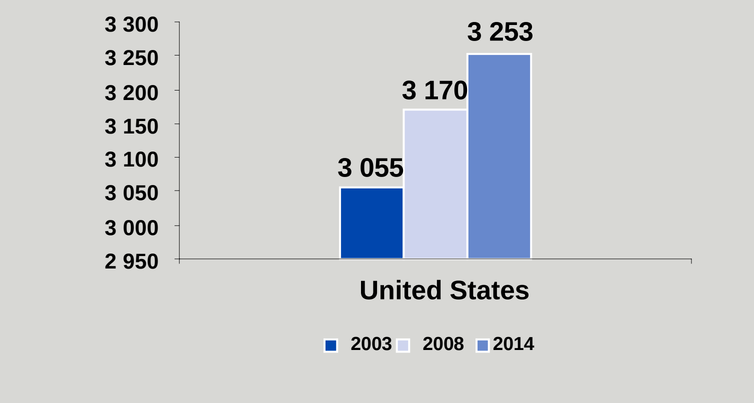


Source: IHS Global Insight Inc, IMF, Euler Hermes

Construction in the BICs
Still high housing requirements

Expenditure per capita in USD





- BIC construction expenditure is sustained by increasing urbanisation and domestic requirements, significantly behind the US figures

Source: IHS Global Insight Inc, IMF, Euler Hermes

Leading domestic construction firms

Brazil	Camargo Correa, Tubos e Conexões
India	HCC (Hindustan Construction Company)
China	China State Construction Engineering Corporation (CSCEC), China Railway Construction Corp (CRCC), Zhejiang Construction Investment Group Corporation (ZCIGC), China Gezhouba Group Corp (CGGC) Zhejiang Hangxiao Steel Structure

Rail transport in the BICs
Chinese plans for investing USD 300bn over 3 years!

Massive development requirements in transport and freight

	Rail network (km of railways)	Rail equipment (m per 1000 inhabitants)	Outlook
Brazil	30,000	158	▪ By 2020, investments of around USD 20bn, aiming to build an additional 10,000 km of railways ▪ Symbolic project: high-speed line between São Paulo and Rio de Janeiro (approximate cost: USD 20bn)
India	63,200	53	▪ Annual investment 2010: around USD 9bn ▪ Continuation of this effort in coming years ▪ Symbolic project: construction of a dedicated freight corridor between Delhi and Mumbai
China	86,000	65	▪ Yearly investment of around USD 100bn from 2009 to 2011 (in the framework of the government stimulus package), with the aim of achieving 110,000 km of railways (+28% on 2009) ▪ Thereafter, annual investment of USD 60bn to 2020, for an additional 41,000 km of railways
United States	226,000	742	

Sources: Business Monitor International, Euler Hermes estimates

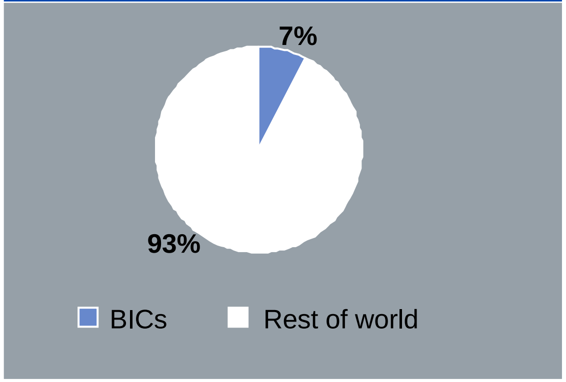
Information and Communications Technology (ICT) in the BICs
Investment rising 5-fold between 2003 and 2014

USD billions	ICT 2003	ICT 2008	Average annual ICT growth 2003-2008	Average annual GDP growth 2009 / 2014	Average annual ICT growth 2009-2014	ICT 2014
Brazil	32	93	24%	5.4%	7%	140
India	23	85	30%	7.9%	15.5%	200
China	121	327	22%	11.4%	12%	650
United States	829	1 061	5%	3.2%	3.5%	1,300

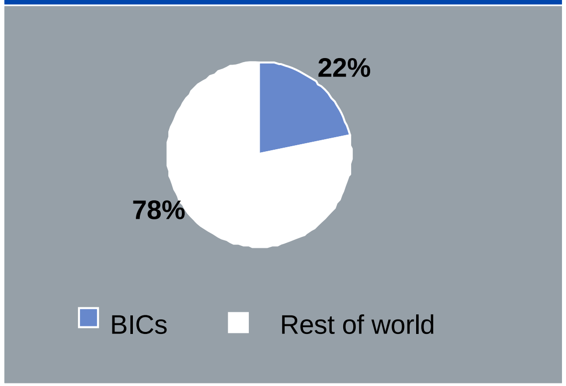
- The BICs will spend USD 1 trillion on ICT in 2014, nearly double the amount spent in 2008 (USD 504bn), approaching the US total, driven by India and China, whose market will catch up with the US by 2025
- Despite strong growth, the BICs are slow in catching up with the United States

Within 10 years, the emerging country share of ICT expenditure has tripled

ICT expenditure, 2003



ICT expenditure, 2014



Source: OECD, IMF, Euler Hermes

Chemicals in the BICs
Growing 3 times faster than in the United States

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A sustainable rate of growth, buoyed by industrialisation in the BICs

USD billions	Market size **in 2000**	Market size **in 2008**	Forecast market size in **2015**	Forecast annual average growth rate **2008-2015**	**Remarks**
Brazil	50	80	120	6%	Dynamic activity by local subsidiaries of foreign chemicals multinationals
India	60	90	150	8%	Accelerating expansion of Indian infrastructures
China	135	210	400	10%	China is preponderant on the Asian market
United States	250	350	420	3%	The golden age of the US chemicals industry is under threat

Sources: BASF, Deutsche Bank, Business Monitor International, Cefic, Euler Hermes

Chemical production:
China and the United States
neck and neck by 2015

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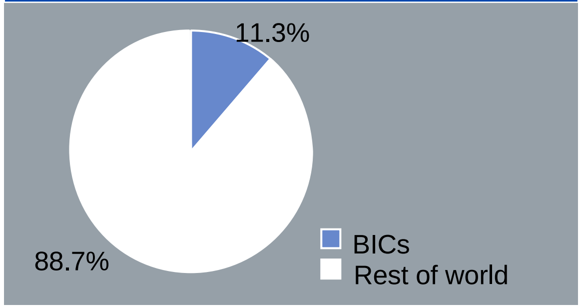
Automobiles in the BICs
China the biggest world market, but not yet a mass market

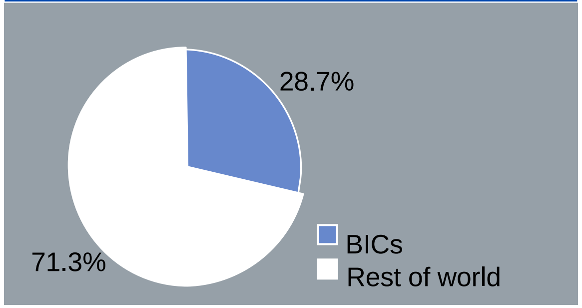
A very low equipment penetration rate in the BICs

	Share of world population 2008	Per capita equipment penetration rate, 2008	Annual rate of growth 2000-2008	Market size in 2009 millions of units	Market size in 2015 millions of units	Annual rate of growth 2009-2015	Remarks
Brazil	3%	13%	2.4%	2.5	4	9%	Has again become an attractive growth market
India	18%	1%	11.1%	1.4	2.5	11%	A still small market, but growing on the basis of a new super low-cost model
China	20%	3%	20.9%	14	24	10%	Strong growth but still not yet a mass market
United States	5%	82%	1.4%	10.5	15	6%	Simply in the process of catching up after the crisis of 2008-2009, the US market traditionally fluctuates at around 16 million vehicles

Automobile production in 2005



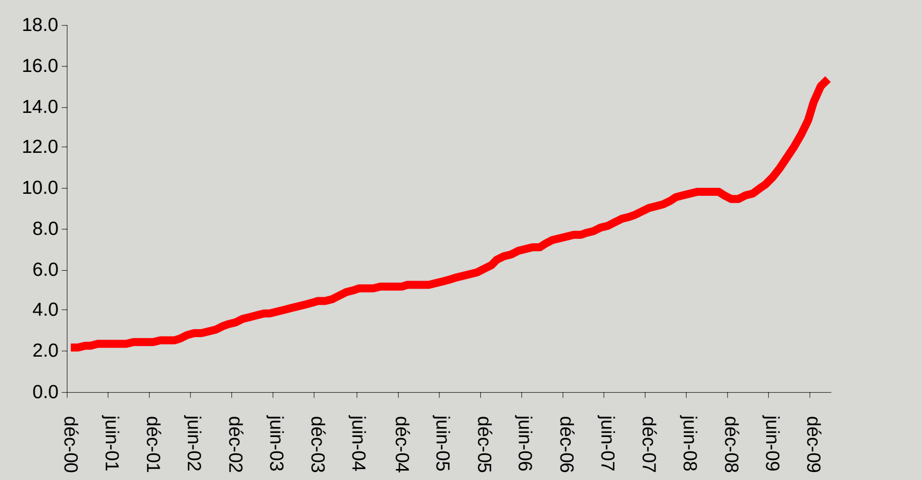
Automobile production in 2009



- Brazil, India and China: in 5 years, automobile production has gone from 10% of world output to more than 25%, in response to strong local demand

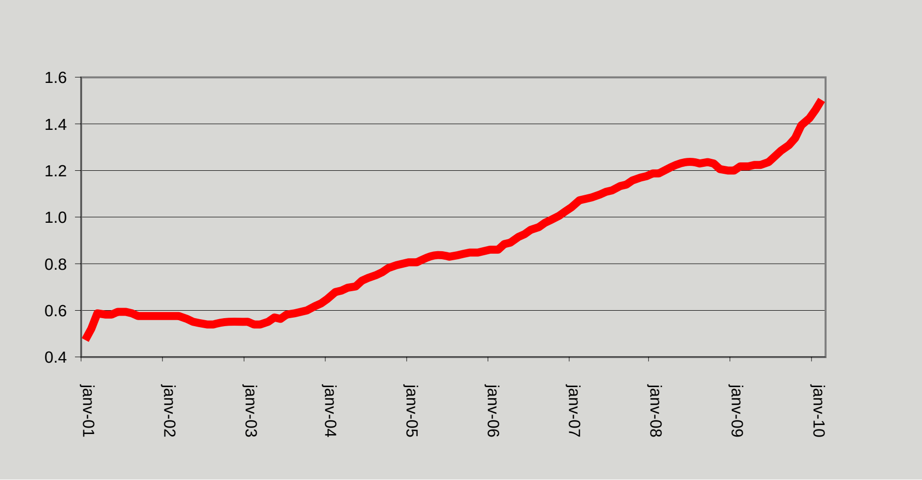
Automobiles in the BICs
The Chinese market is 10 times bigger than the Indian market

New vehicle registrations in China, in millions of units



- China: the market will soon exceed **20 million units**
- **Chinese automakers** are growing and steadily increasing their market share (**33%**): Brilliance, BYD, Geely

New vehicle registrations in India, in millions of units



- India: a market still only a tenth the size of the Chinese market
- In a few years, market growth to 4.5m units, more on a basis of **super low cost** models (base prices of $2,000 to $3,000)
- India's auto industry is still small, accounting for **16% of the market, with Tata, Bajaj and Mahindra**

Pharmaceuticals in the BICs
A still embryonic sector

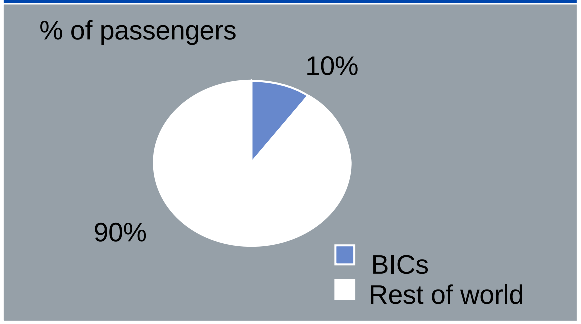
	Country share of world population	Pharmaceutical penetration rate, 2008 (measured as per capita consumption)	Average growth over period **2000-2015**	Pharmaceutical market size in 2015 USD billions **(forecast)**
Brazil	3%	94 $	17%	50
India	18%	8 $	18%	50
China	21%	19 $	26%	130
United States	5%	947 $	5%	330

Sources: EFPIA, Business Monitor International, PhRMA, Euler Hermes

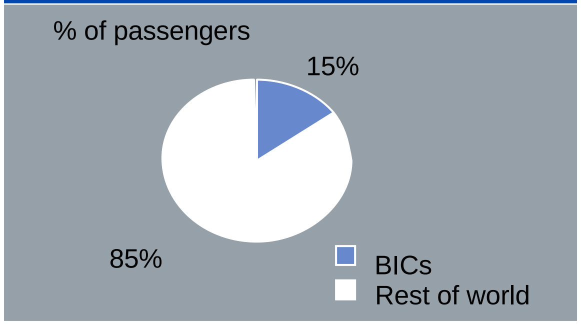
- A lack of health care infrastructure, in the absence of health insurance systems in the BICs
- A financial cost that is still difficult to bear

Air transport in the BICs
Continued strong growth, 6 times faster than the North American market

World air traffic in 2005



World air traffic in 2009



Sources: ICAO, IATA and Euler Hermes estimates

5% increase in market share between 2005 and 2009

	Domestic air traffic in 2009 (millions of passengers)	Number of domestic passengers, per 100 inhabitants	Forecast growth in air traffic over the next 5 years
Brazil	44	23	+13%
India	45	4	+12%
China	230	17	+12%
United States	703	232	+2%

Sources: Airbus, GOL, Euler Hermes estimates

Number of passengers in 2015 (millions)		
Brazil	China	India
80	400	80

Air transport in the BICs
Growth will require investment of USD 650bn over the next 20 years

More than two-thirds of investment is concentrated in China

	New commercial aircraft requirements over period 2009-2028 (units)	Share of world requirements over period 2009-2028	Total Investment (billions of USD)
Brazil	550	2%	70
India	1100	5%	140
China	3300	14%	440
BICs	**4,950**	**21%**	**650**

Sources: Airbus, Boeing, Euler Hermes estimates

China's future energy problems?

Sharply increasing oil demand from China and India, both small producers

Thousands of barrels/day	2004		2009		Annual rate of growth 2004/2009		2015		Annual rate of growth 2009/2015	
	Production	Consumption	Prod.	Cons.	Prod.	Cons.	Prod.	Cons.	Prod.	Cons.
Brazil	1,477	2,100	1,950	2,500	6%	4%	3,100	2,900	10%	2%
India	698	2,400	690	3,100	0%	6%	900	4,000	5%	5%
China	3,486	6,500	3,789	8,300	2%	6%	3,900	10,900	1%	5%
United States	5,225	20,700	5,044	18,800	-1%	-2%	5,800	20,100	2%	1%

Sources: Business Monitor International, Euler Hermes

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Electric and electronic capital goods in the BICs
China's world dominance

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Trade balance (USD billions)	2004	2008	Remarks
Brazil	-5.3	-13.1	Despite its efforts to grow its IT sector, and its privileged relationship with Argentina, Brazil imports massively from China
India	-6.7	-9.8	Despite its growing exports of electrical and electronic goods, India is not covering its own requirements
China	-10.6	62.3	China is the only country generating a major surplus in its balance of trade in electrical and electronic goods. This sector well epitomises the description often given to the country as 'the world's factory'
United States	-65.9	-100.5	The US deficit continues to deepen, with the continued transfer of production of electronic goods. The major supplier of these goods is China, which accounts for a third of US imports

Source: International Trade Center

- China is incontestably a major global player in the world trade in electrical and electronic goods, both with the developed countries (and notably the US) and with the other countries over which it enjoys a considerable lead

Chemicals in the BICs
A trade balance still largely in deficit without any of global players

A sector hungry for capital and R&D, still dominated by western groups

Trade balance (USD billions)	2004	2008	Remarks on the evolution of trade balances
Brazil	-5.7	-8	Brazil benefits from the solid presence of subsidiaries of major foreign chemical groups
India	-2.1	-18.5	Collapse in export market share of the Indian chemical industry despite the importance of the Indian petrochemical producer Reliance Group
China	-29.8	-24.3	Despite its massive investment in capacities, China is not yet managing to meet all its requirements
United States	-8.4	-8.4	By comparison with the scale of its throughput, the trade deficit of the US chemical sector seems quite low

Source: International Trade Centre

China's trade surplus is for now driven by component manufacturers, but its automakers have big ambitions for 2015/2020

USD billions	2004	2008	Remarks
Brazil	5.2	1.8	A market driven by domestic consumption, but no local actor
India	1.6	2.8	Some subcontractors, and a determination to grow on the part of a few conglomerates such as TATA, which also took over Jaguar and Land Rover in 2008
China	-1.3	12.4	The surplus arises from component and tyre manufacturers (e.g., China's GITI, which exports to 140 countries), but automakers also show a real determination to expand – e.g., Geely, which, in acquiring Volvo, gains a distribution network in Europe and the US, or similarly BYD, which has announced that it will soon enter the US and European markets. We also expect similar moves on the part of Brilliance, the current Chinese number one
United States	-121.2	-87.2	The apparent improvement in the US trade balance arises solely from the collapse in the US domestic market

Aeronautics in the BICs
Brazil, bolstered by its own aeronautics industry with aircraft manufacturer Embraer, is already a global player

	Trade balance 2004 (USD billions)	Trade balance 2008 (USD billions)	Remarks
Brazil	+2.4	+3.0	An established player in the global aeronautics market, Brazil has continued to base its expansion on world demand
India	-1.5	-10.7	
China	-4.5	-8.5	China and India have massively increased imports from foreign suppliers in response to strong growth in domestic demand **For the Chinese state, a priority**
United States	25.6	50.3	Thanks to its powerful aeronautics industry, the US has benefited largely from the strong growth in world air transport

Source: International Trade Centre

Sector-by-sector approach
Few global players, but major ambitions identified for 2015-2025

Sector	Producer country	Consumer country	Global presence	Remarks	Global player
Information & Communications Technology	China India	China India Brazil	✔	Global and competitive players China: IT goods India: IT services	Yes for China
Automobiles	China Brazil	China Brazil		Structuring underway, with Chinese determination to become develop global players	China towards 2015-2020
Aeronautics	Brazil	China Brazil India	✔	Strong industry presence in the case of Brazil. China has the means to develop its own industry	Yes for Brazil China towards 2020
Chemicals	China	China India Brazil		State-owned Chinese players, but also private businesses	China towards 2015
Pharmaceuticals	India	Brazil		India’s independent generics manufacturers seeing slower growth	Not before 2025

Thank you for your attention

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