

Brazil's Moment in the Sun

Panel Detail:

Wednesday, April 28, 2010 11:00 AM - 12:15 PM

Speakers:

[Jose Alfredo Graca Lima](#), Consulate General of Brazil

[Everaldo Franca](#), CEO, PPS Portfolio Performance Inc.

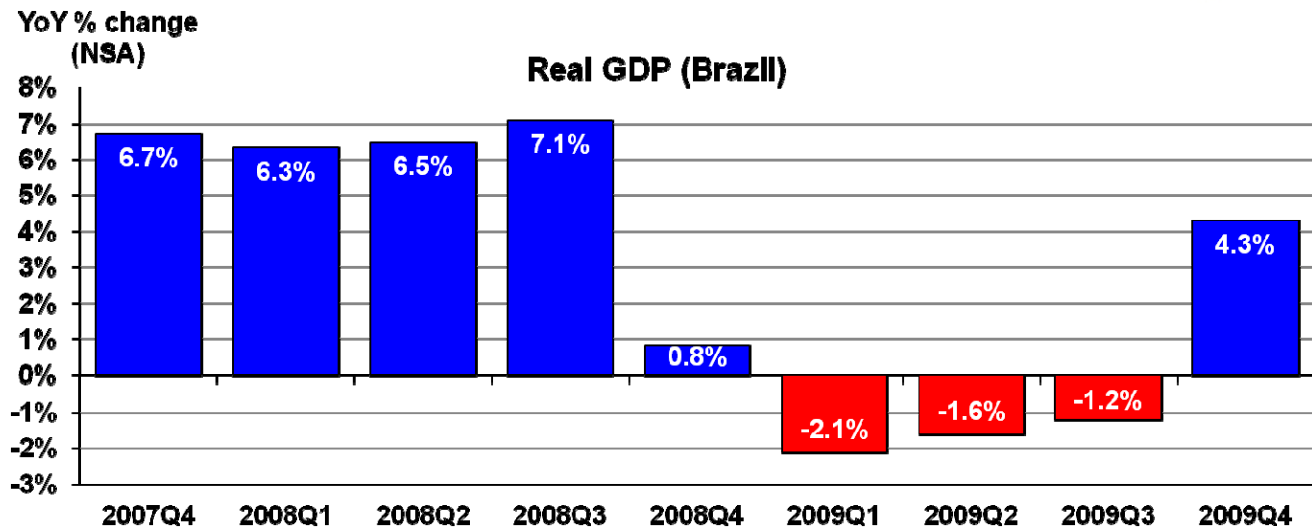
[Jerson Kelman](#), CEO, Light; Partner, BR Investimentos

[Ricardo Weiss](#), Investment Director, Fapes

Moderator:

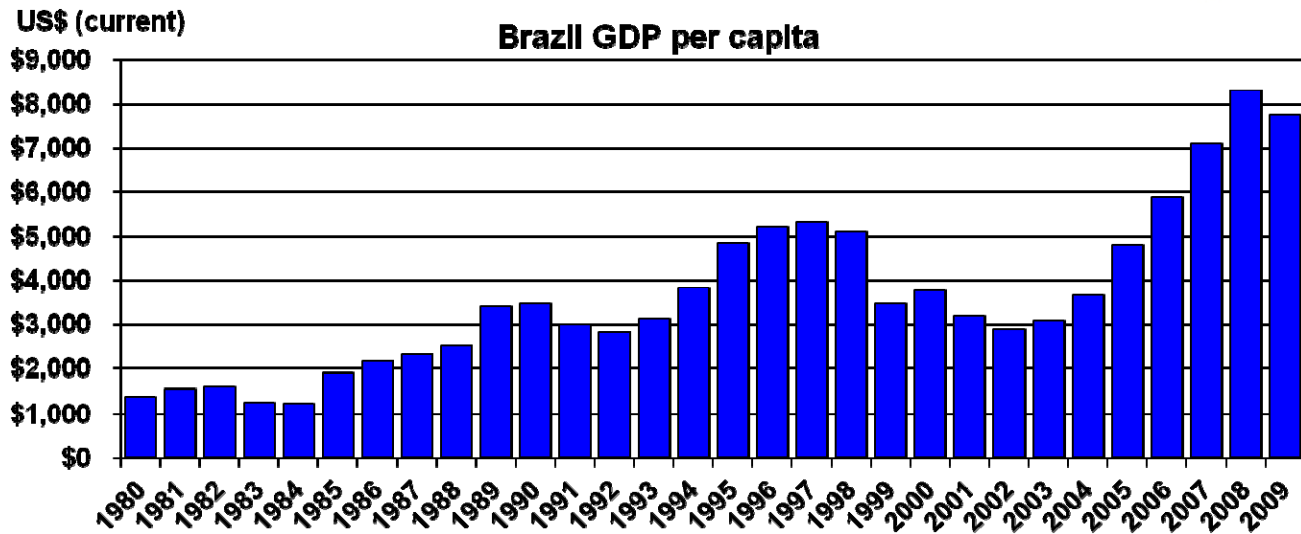
[Vinicius Lummertz](#), Secretary for Foreign Affairs, Government of the State of Santa Catarina, Brazil

Brazil's economy beginning to recover



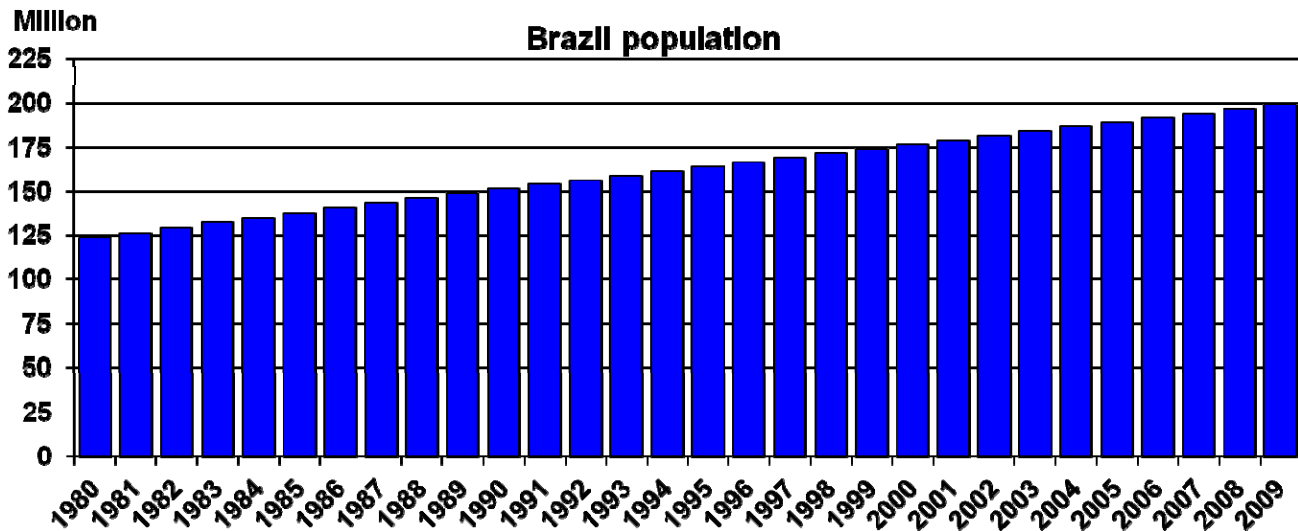
Source: Bloomberg.

Per capita GDP has risen 170% since 2002



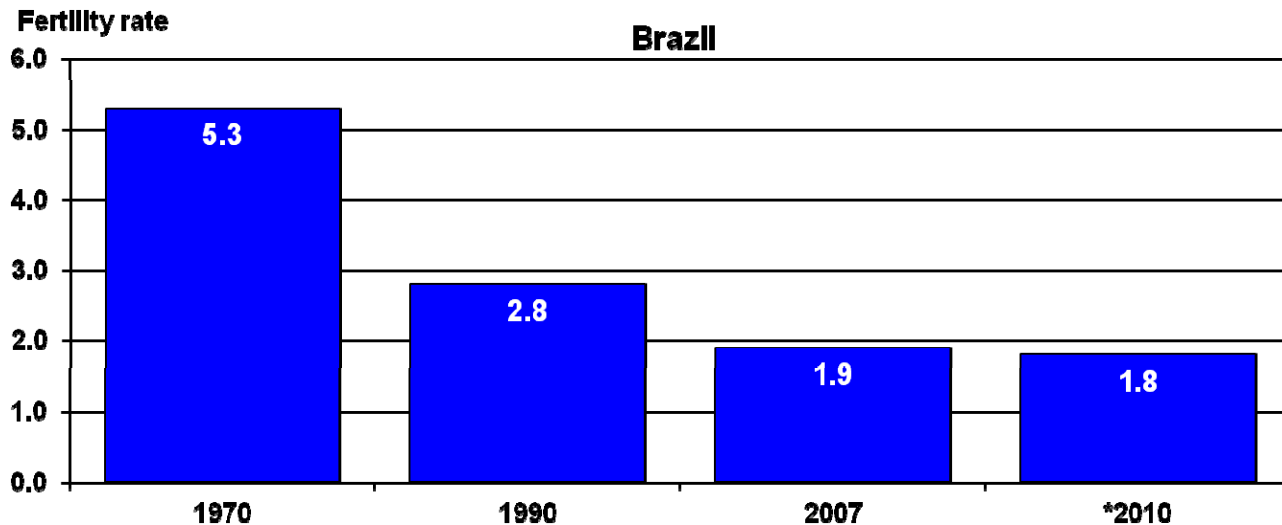
Source: Bloomberg.

Brazil's population approaching 200 million



Source: Bloomberg.

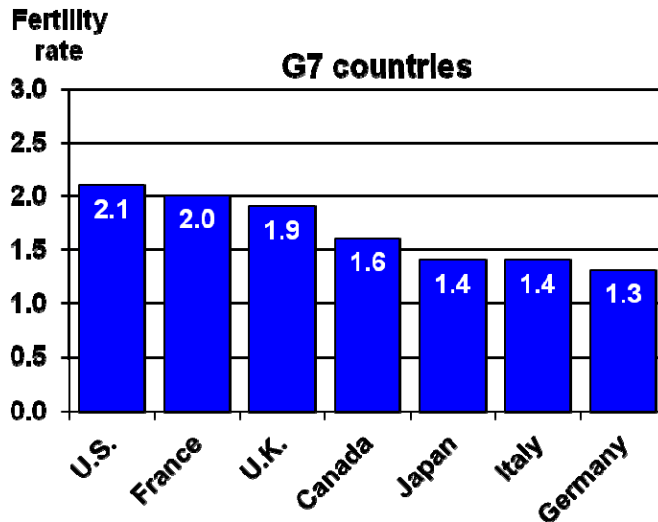
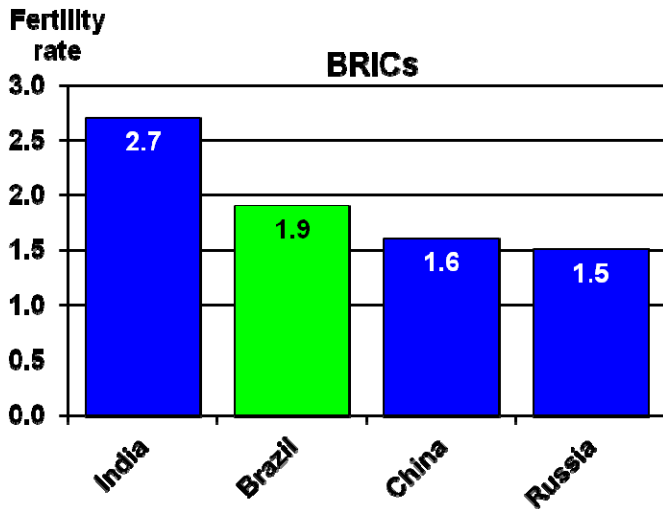
Brazil's fertility rate continues to fall



Source: IBGE.

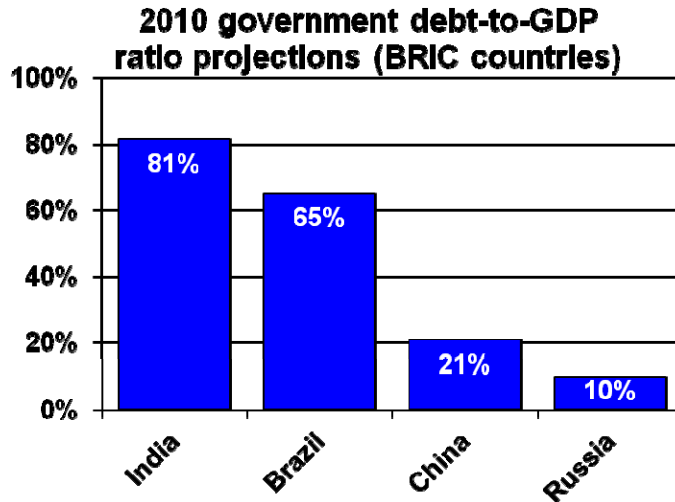
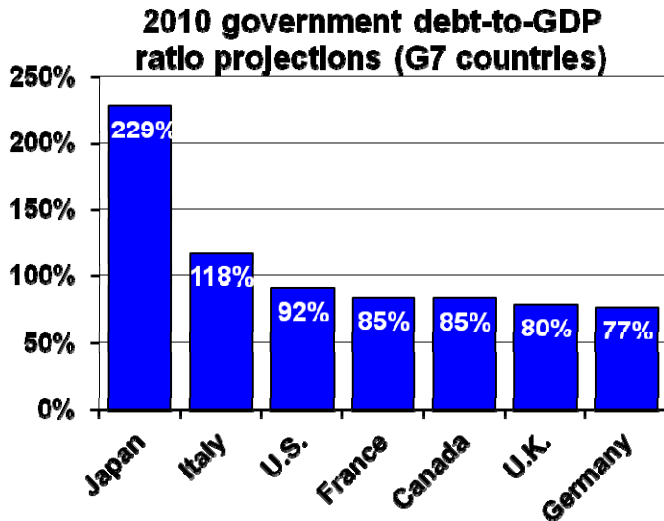
*Projection

Brazil's fertility rate compared to other BRICs and G7 countries



Source: Population Reference Bureau.

Brazil maintains relatively low government debt-to-GDP ratio

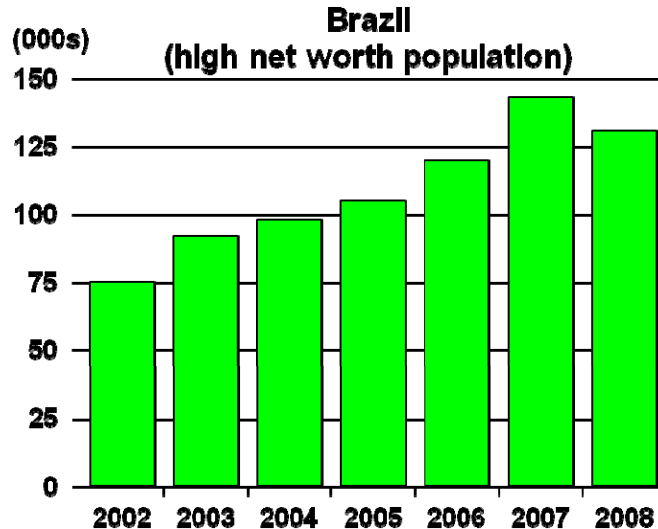
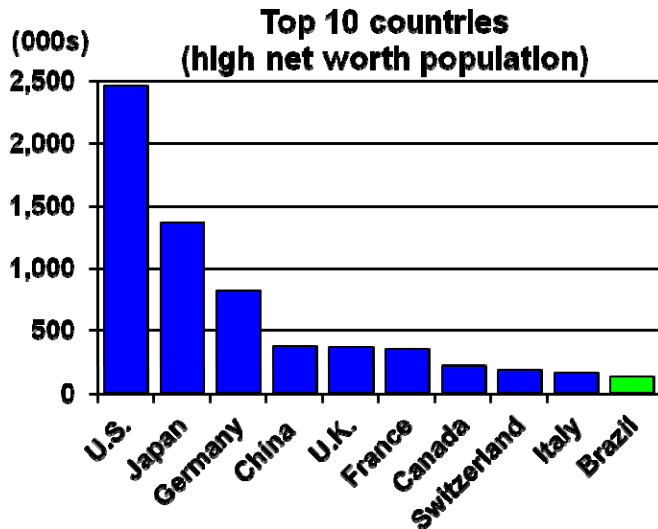


Source: IMF.

Brazil now ranks 10th globally in high net worth individuals



MILKEN INSTITUTE



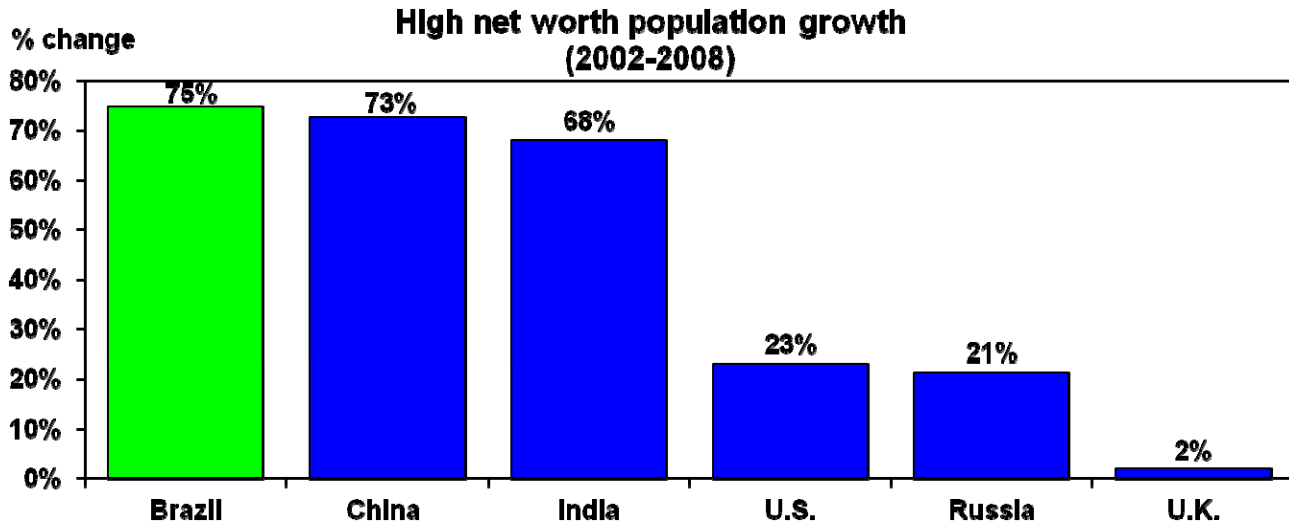
Sources: Merrill Lynch & Cap Gemini.

Note: high net worth defined as having greater than \$1 million in liquid assets

Brazil's growth in high net worth individuals leads other BRIC nations



MILKEN INSTITUTE



Sources: Merrill Lynch & Cap Gemini.

Note: high net worth defined as having greater than \$1 million in liquid assets

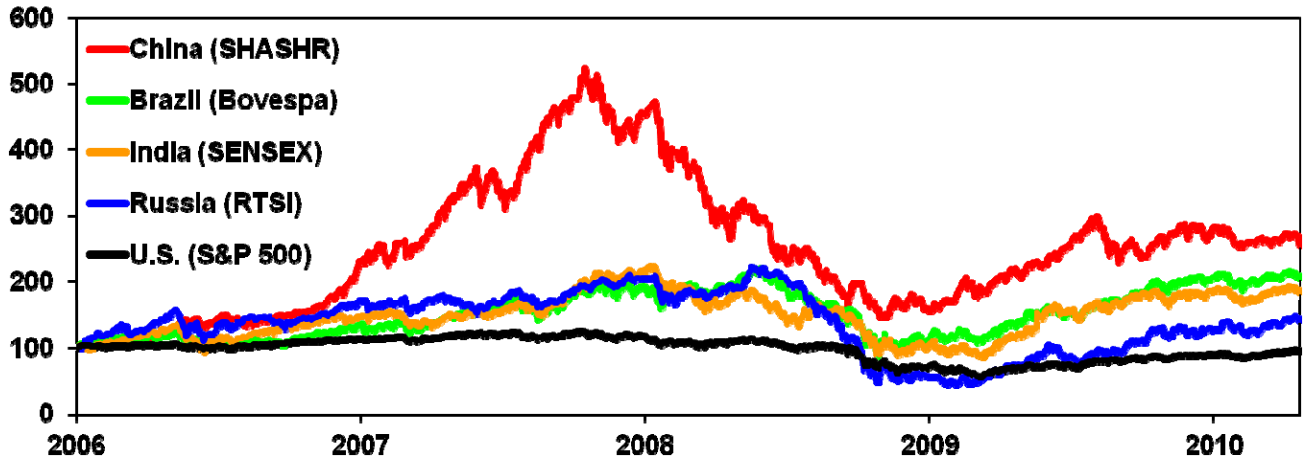
Brazil and other BRIC country stock markets outperforming U.S.



MILKEN INSTITUTE

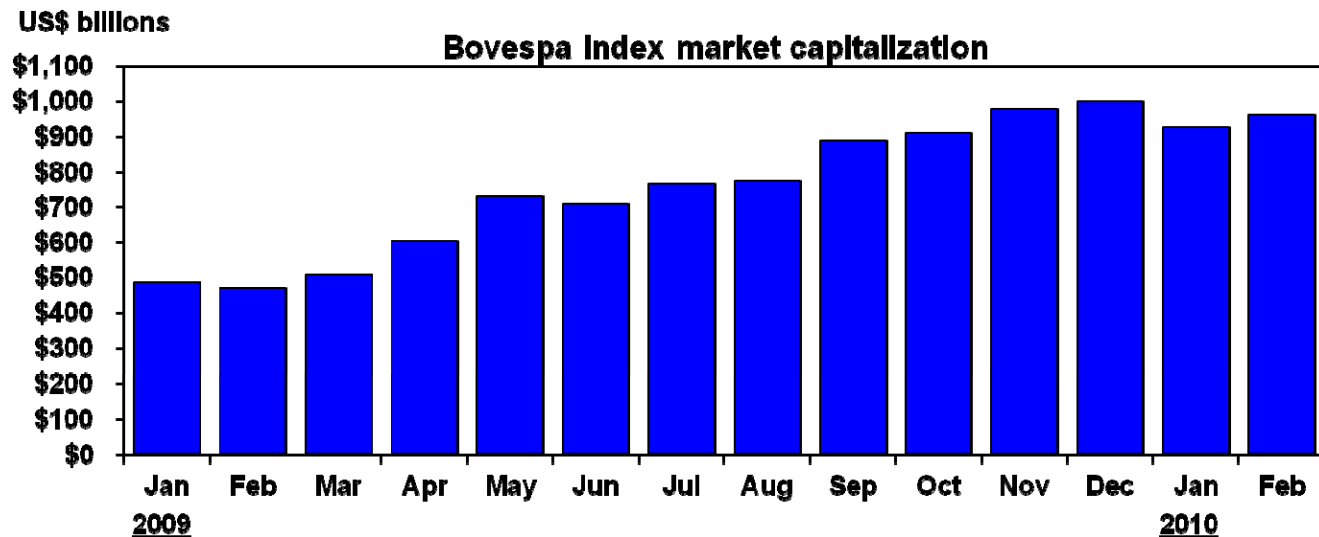
Daily: January 1, 2006 – April 20, 2010

Index value
(2006 = 100)



Source: Bloomberg.

Market capitalization of Brazil's primary stock index beginning to rebound



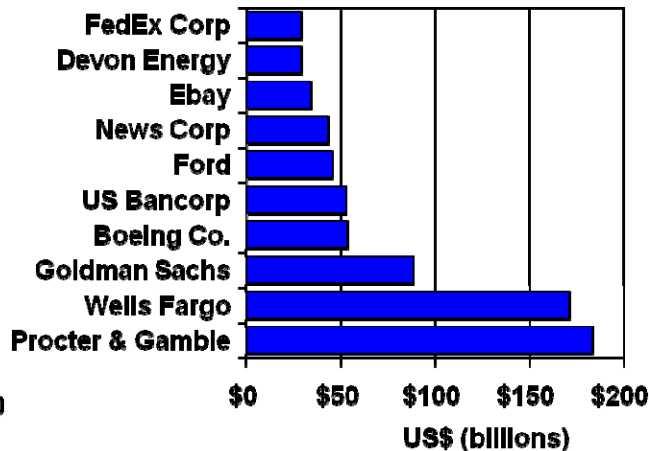
Source: BM&FBOVESPA.

Market capitalization of Brazil's largest firms similar to major U.S. firms

Brazil's top 10 firms by market capitalization



U.S. comparable size firms by market capitalization



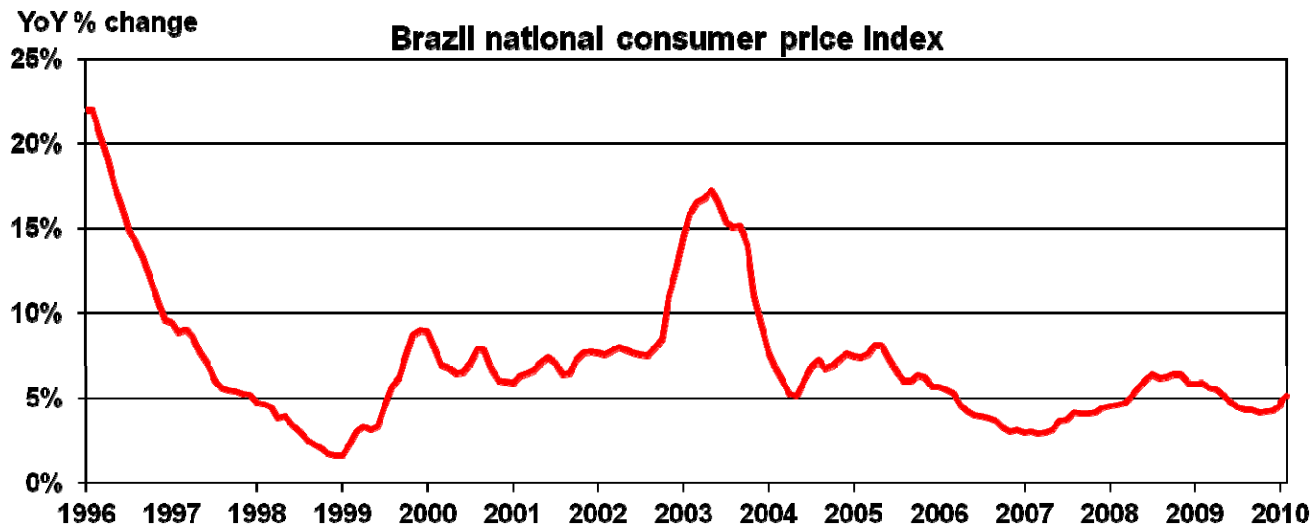
Source: Bloomberg.

Brazil's history of volatile inflation swings

Monthly: January 1996 – March 2010



MILKEN INSTITUTE



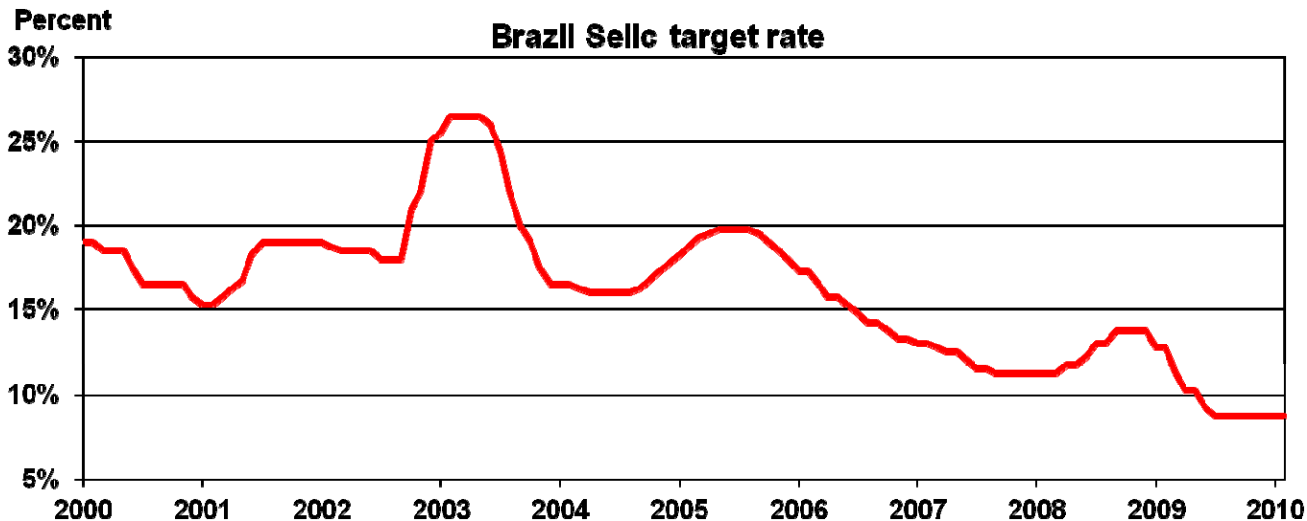
Source: Bloomberg.

Brazil has yet to tighten post-recession

Monthly: January 2000 – March 2010



MILKEN INSTITUTE

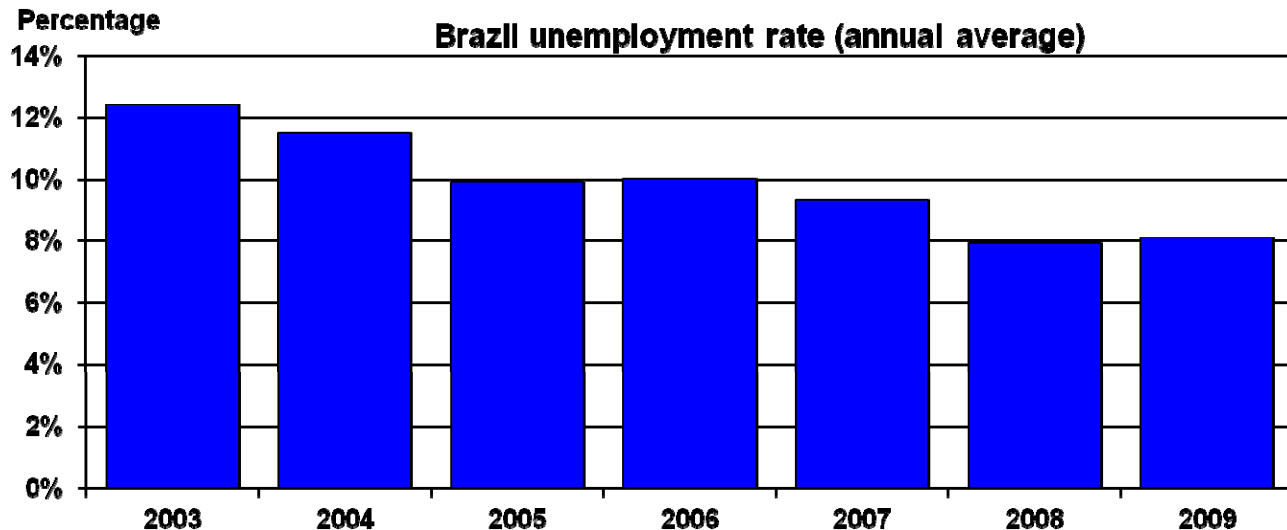


Source: Bloomberg.

Unemployment in Brazil has fallen gradually over the last six years

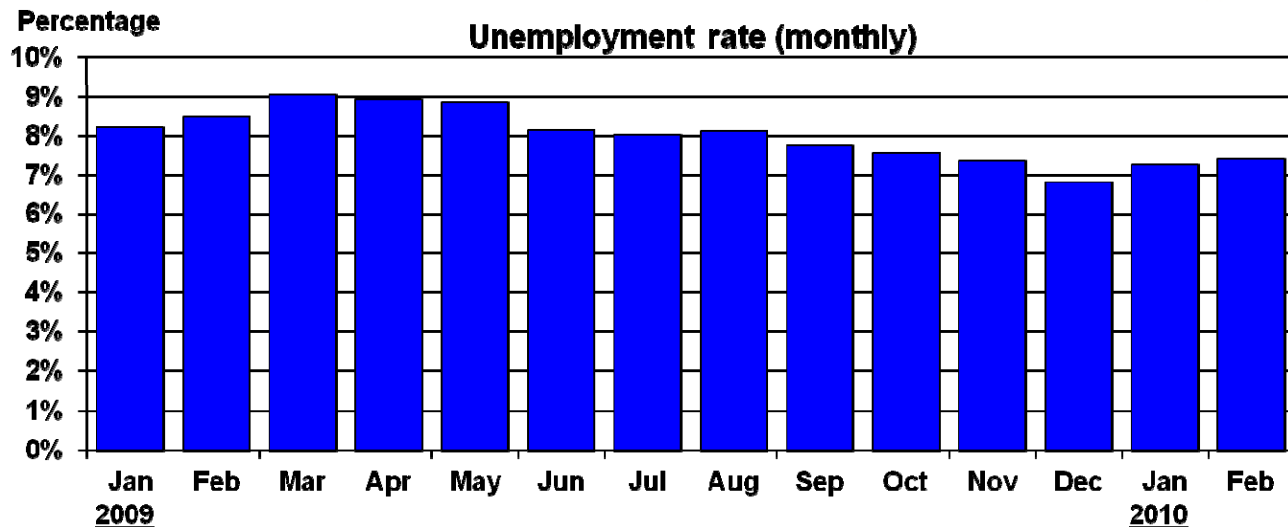


MILKEN INSTITUTE



Source: IBGE.

Brazil's unemployment rate peaked at 9% in recent recession

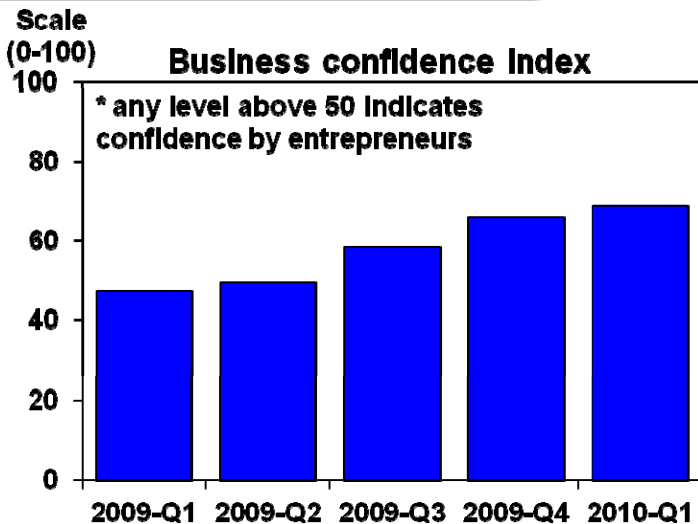
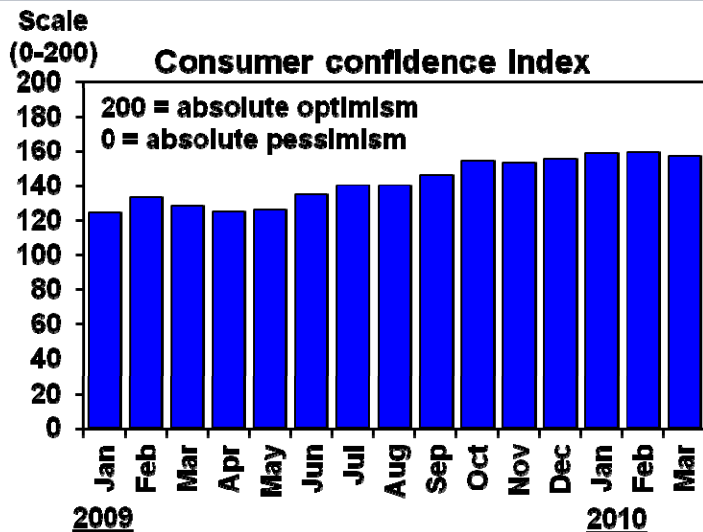


Source: IBGE.

Both consumer and business confidence on the rebound in Brazil



MILKEN INSTITUTE



Sources: Fecomercio SP, CNI.

China and U.S. are top destinations for Brazil's exports



MILKEN INSTITUTE

US\$ billions

2009 Brazil exports (top 10 destination countries)

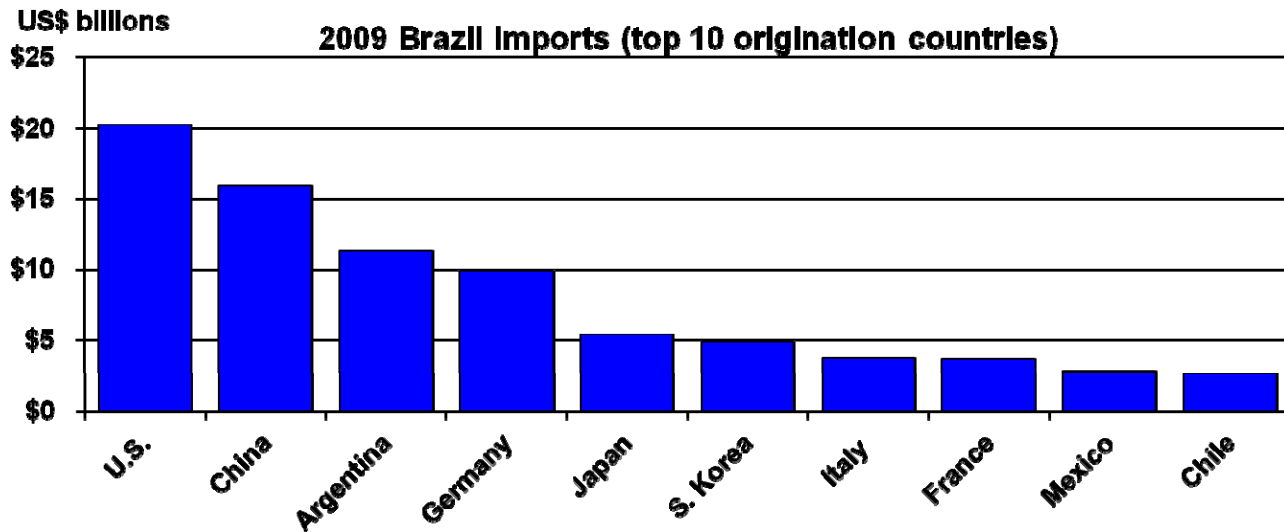


Source: MDIC/Secex.

Brazil serves as major export market for U.S. and China



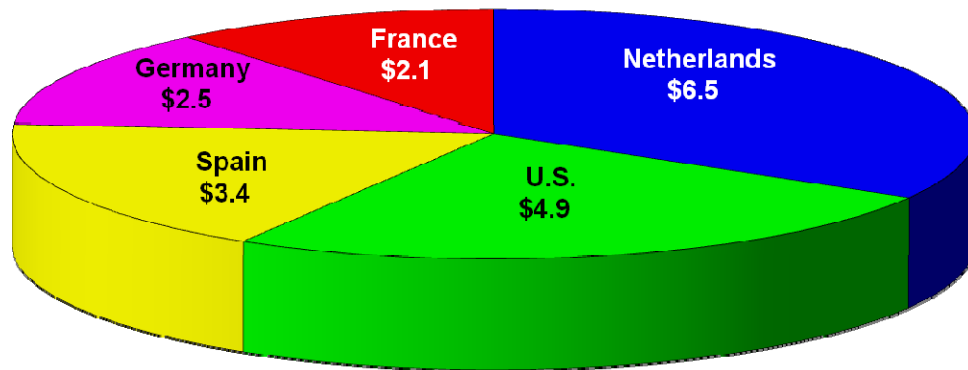
MILKEN INSTITUTE



Source: MDIC/Secex.

Netherlands and U.S. lead foreign direct investment (FDI) in Brazil

Brazil 2009
Top 5 FDI equity capital inflows by country of origin
(US\$ billions)



Source: Banco Central do Brasil.

Argentina is top Latin American destination for Brazil's exports

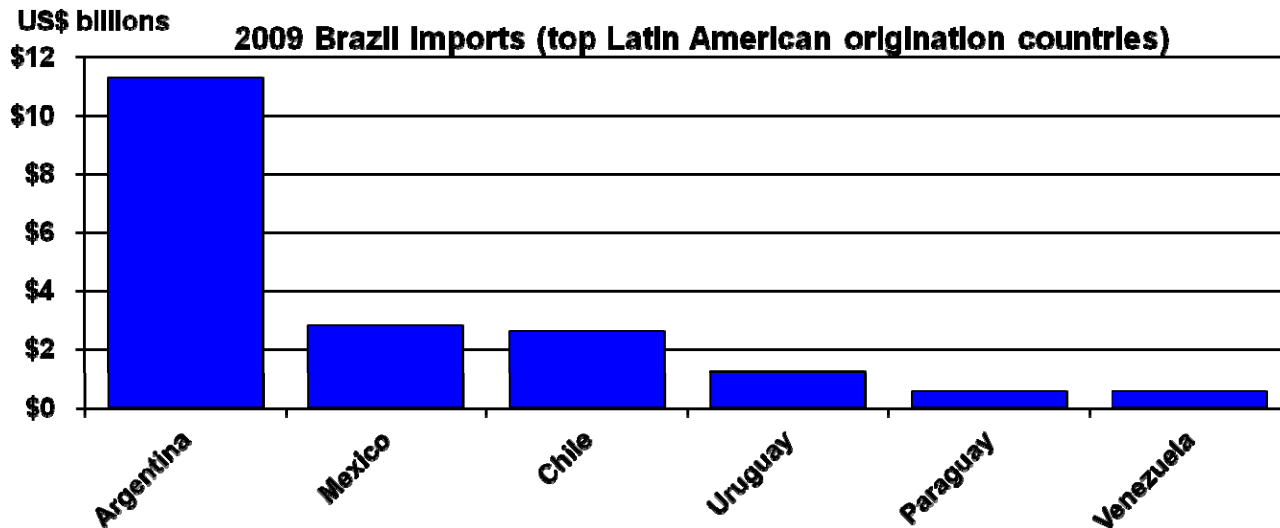


MILKEN INSTITUTE



Source: MDIC/Secex.

Brazil is a major export market for Latin American countries such as Argentina



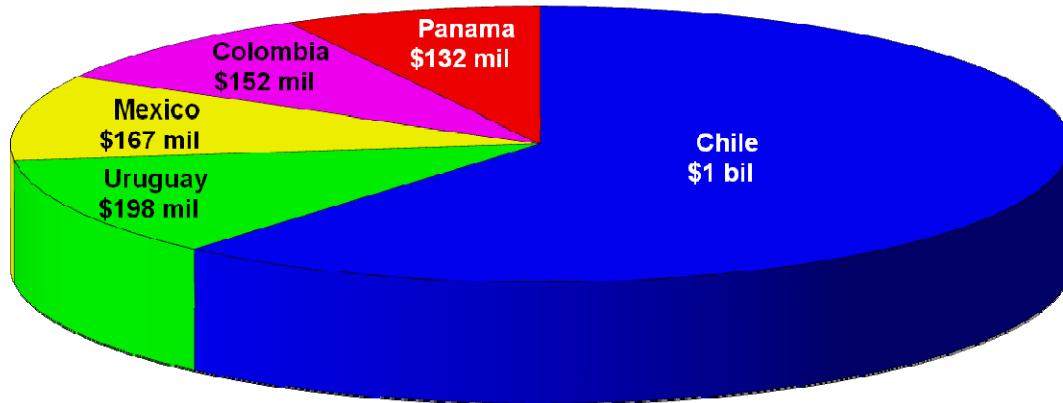
Source: MDIC/Secex.

Chile makes up majority of Latin America foreign direct investment (FDI) in Brazil



MILKEN INSTITUTE

Brazil 2009
Top 5 Latin America FDI equity capital inflows by country of origin (US\$)

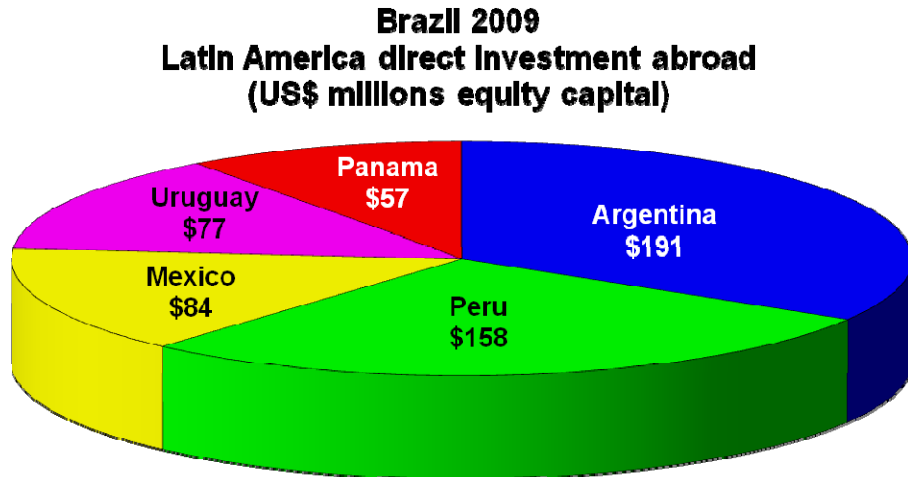


Source: Banco Central do Brasil.

Brazil's direct investment in Latin America goes primarily to Argentina and Peru



MILKEN INSTITUTE

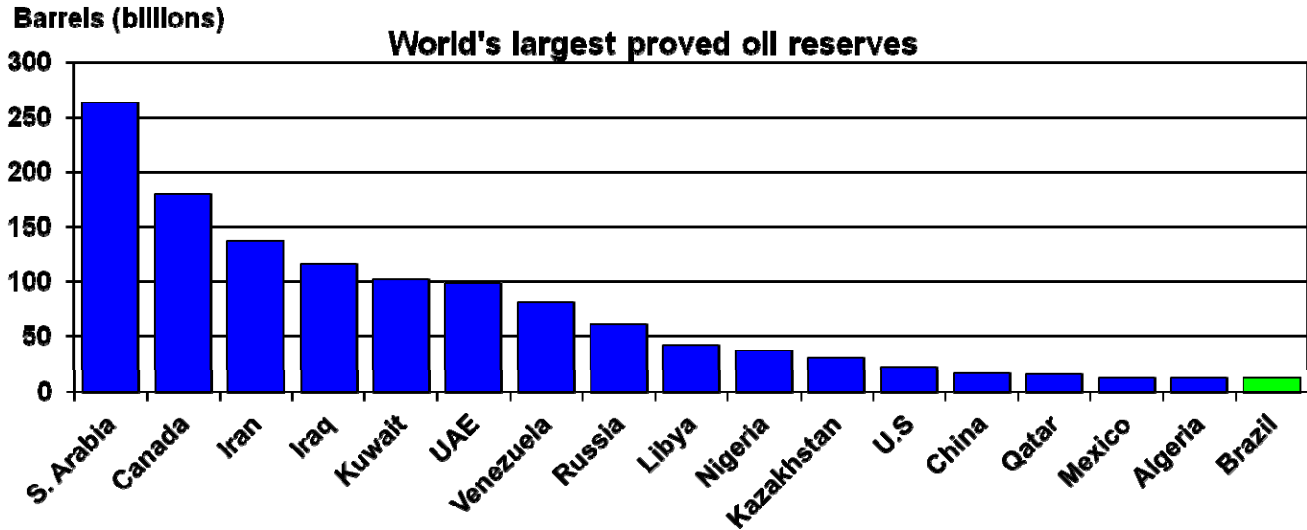


Source: Banco Central do Brasil.

Brazil holds the 17th largest proved oil reserves in the world

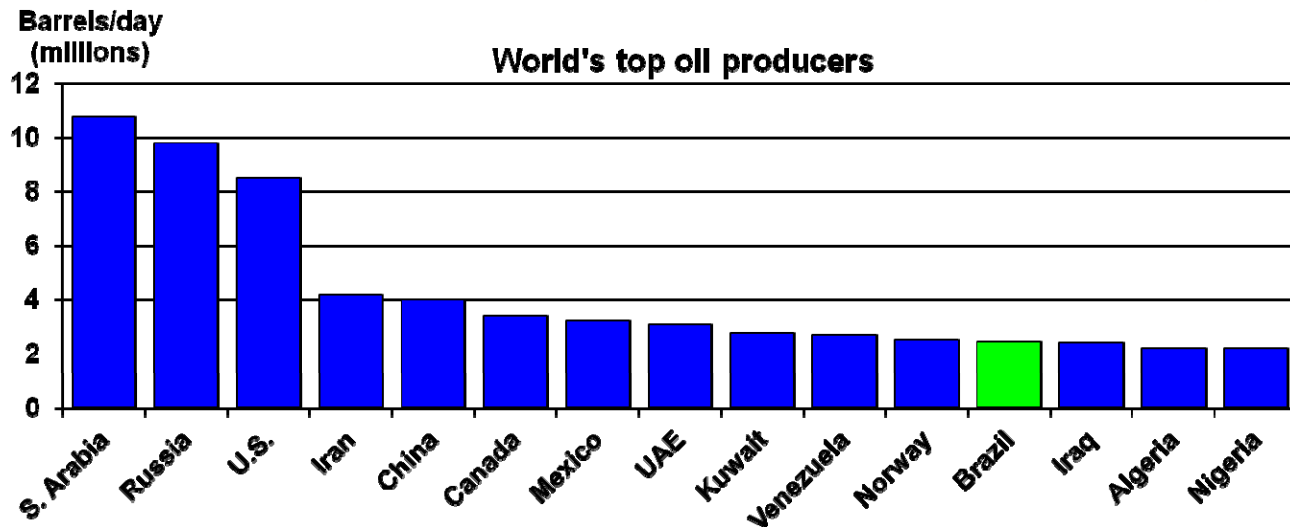


MILKEN INSTITUTE



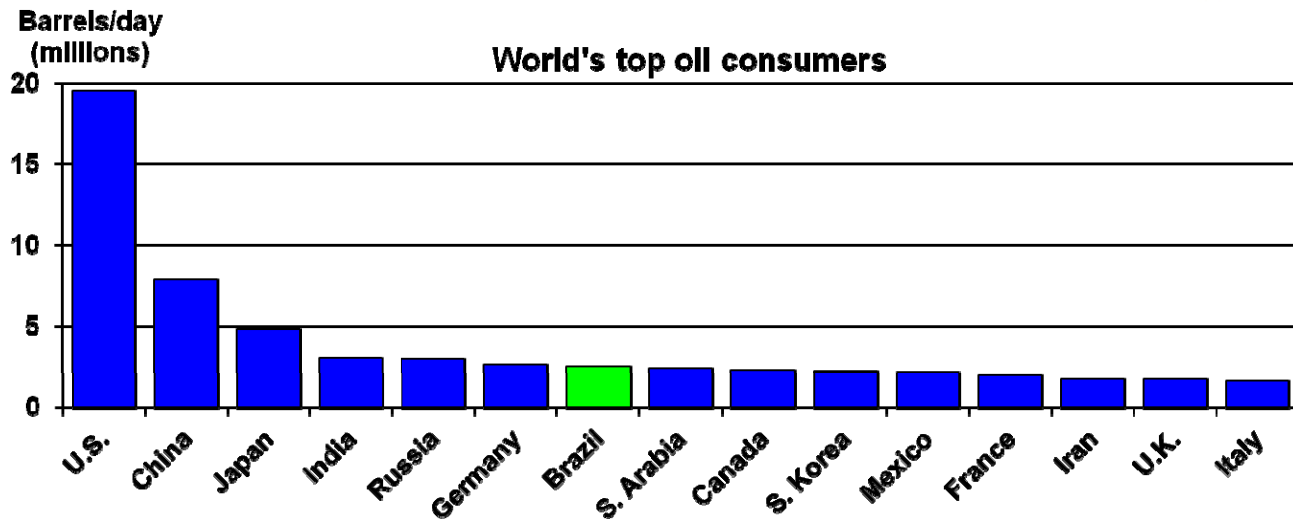
Source: EIA.
*as of 2008

Brazil is the 12th largest oil producer in the world



Source: EIA.
*as of 2008

Brazil is the 7th largest oil consumer in the world

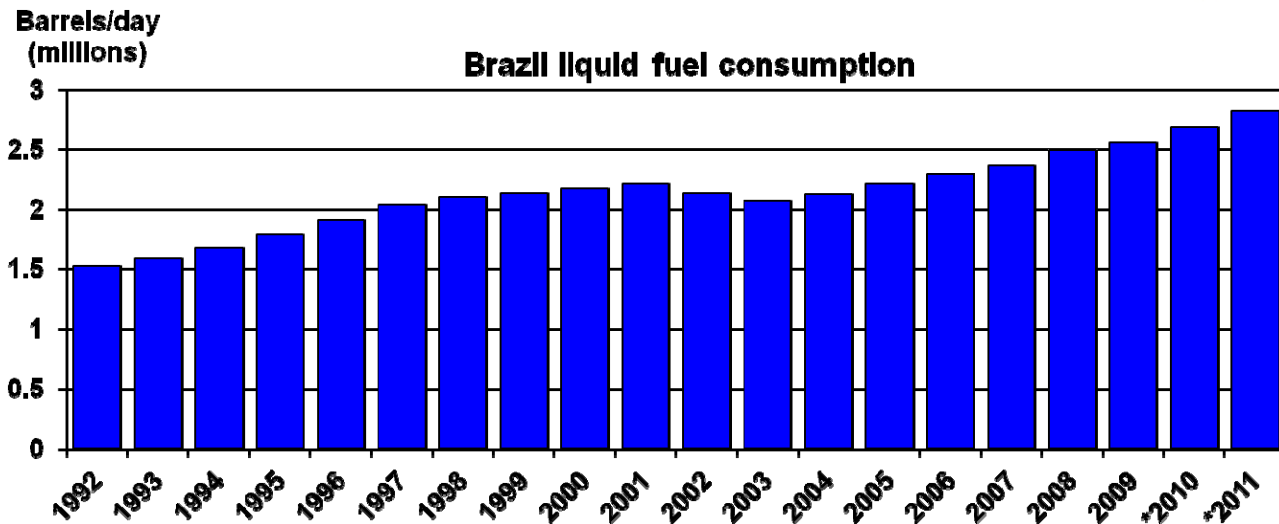


Source: EIA, as of 2008.

Liquid fuel consumption has risen rapidly in Brazil



MILKEN INSTITUTE



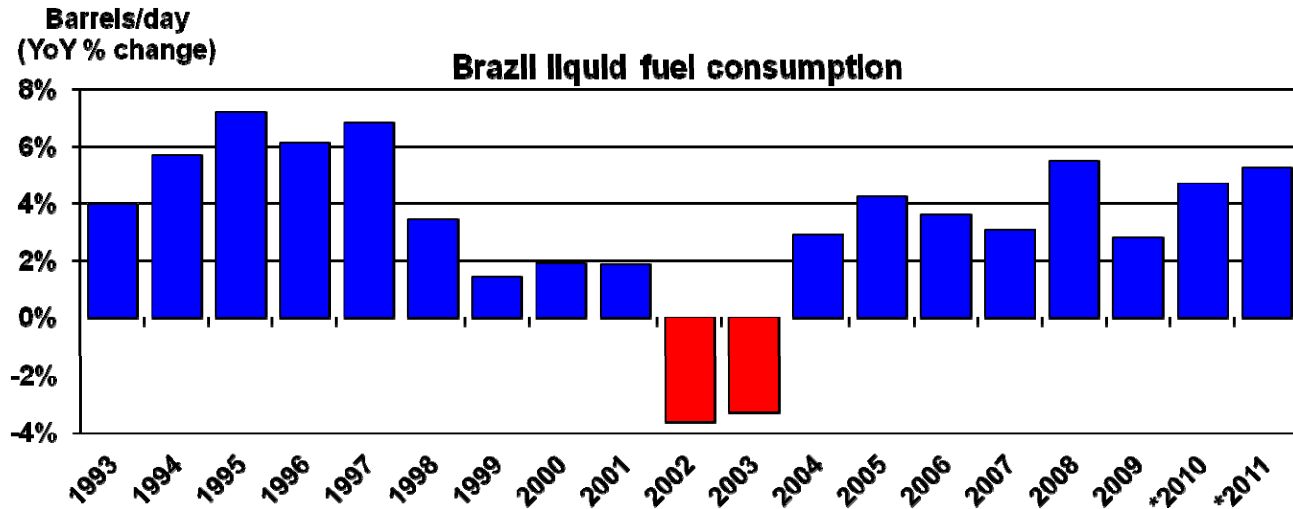
Source: EIA.

* Projections

Liquid fuel consumption forecast to rise roughly 5% per annum in 2010 and 2011



MILKEN INSTITUTE



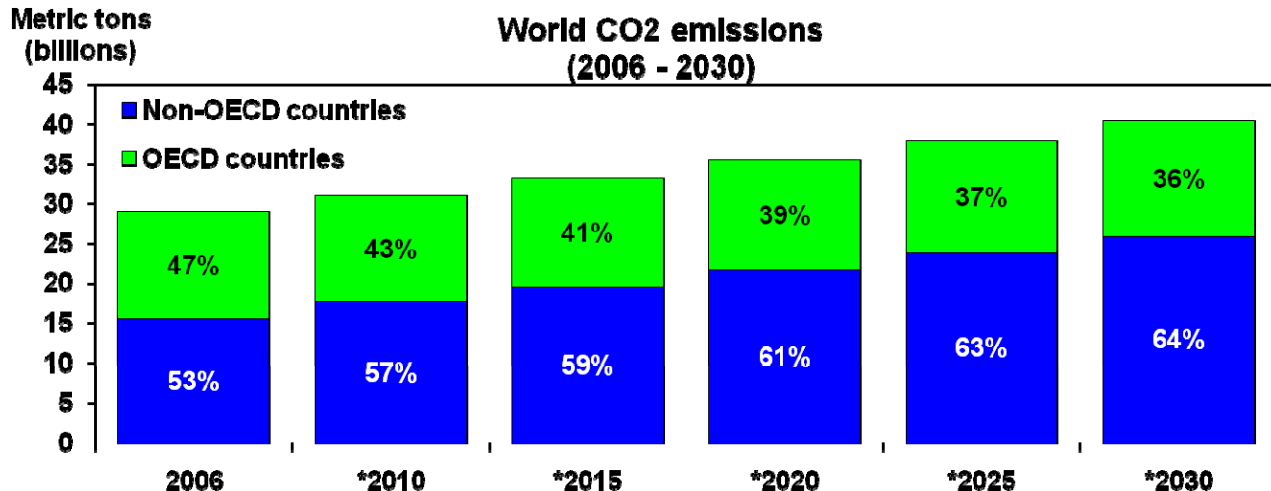
Source: EIA.

* Projections

Global carbon dioxide (CO₂) emissions shifting towards emerging markets



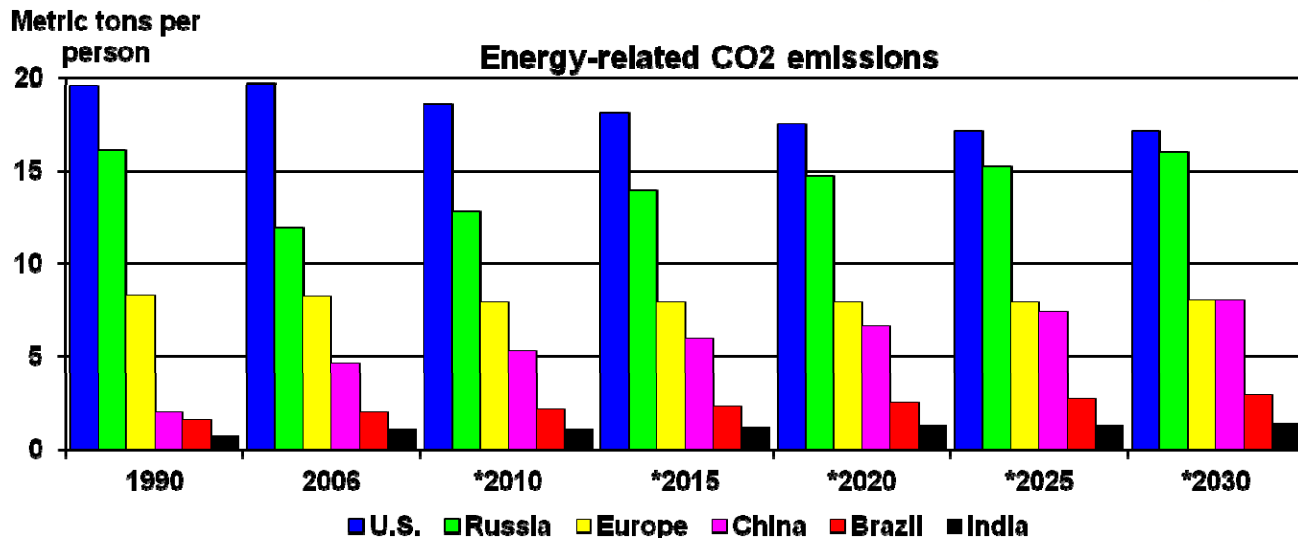
MILKEN INSTITUTE



Source: EIA.

*Projections

Brazil's energy-related carbon dioxide (CO₂) emissions are relatively low

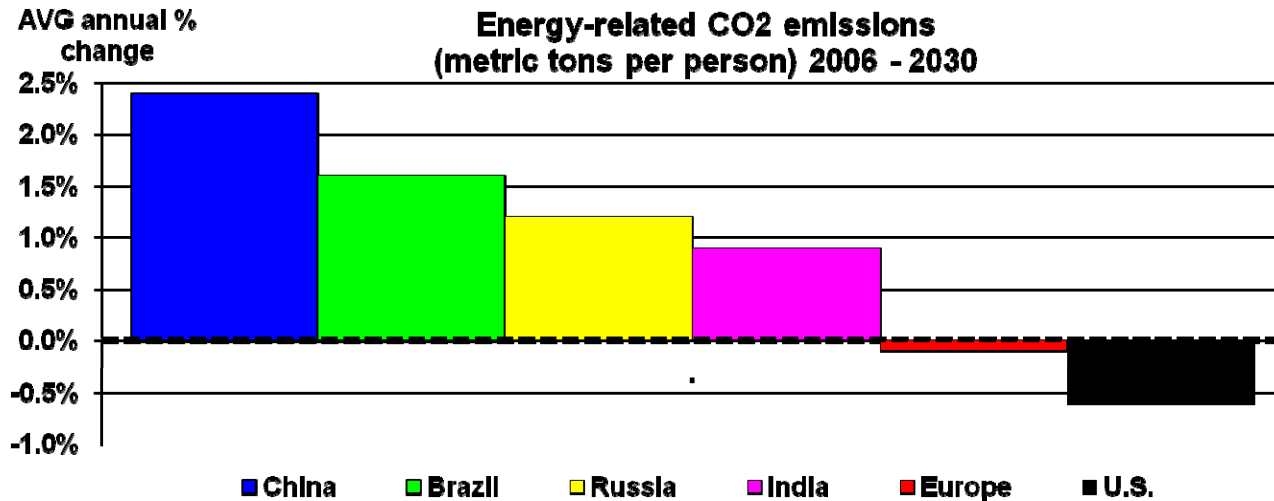


Source: EIA.
*Projections

BRIC country energy-related carbon dioxide (CO₂) emissions are forecast to rise



MILKEN INSTITUTE

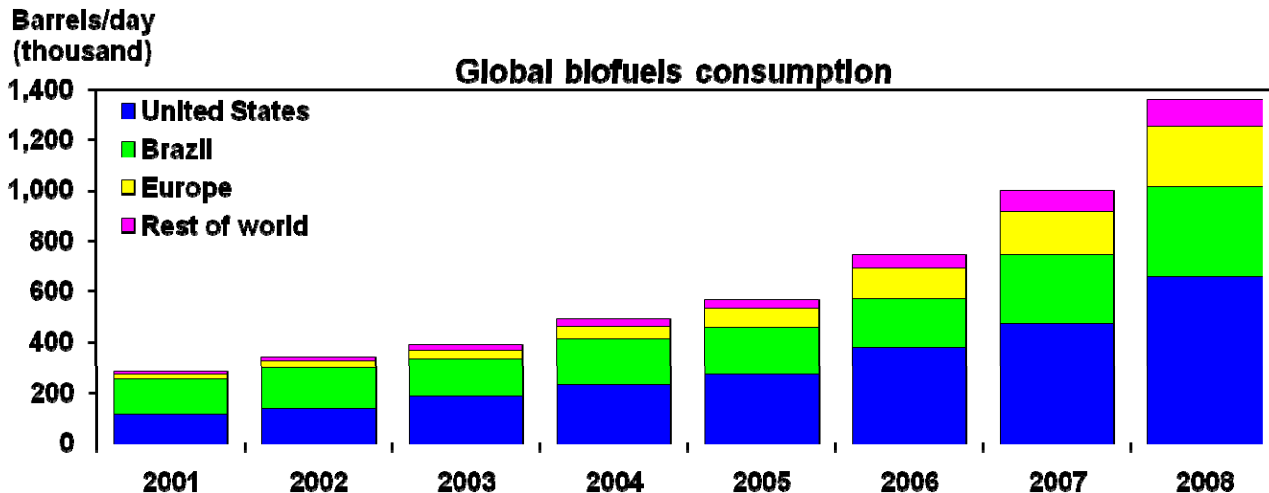


Source: EIA.

U.S. and Brazil are world leaders in biofuels consumption

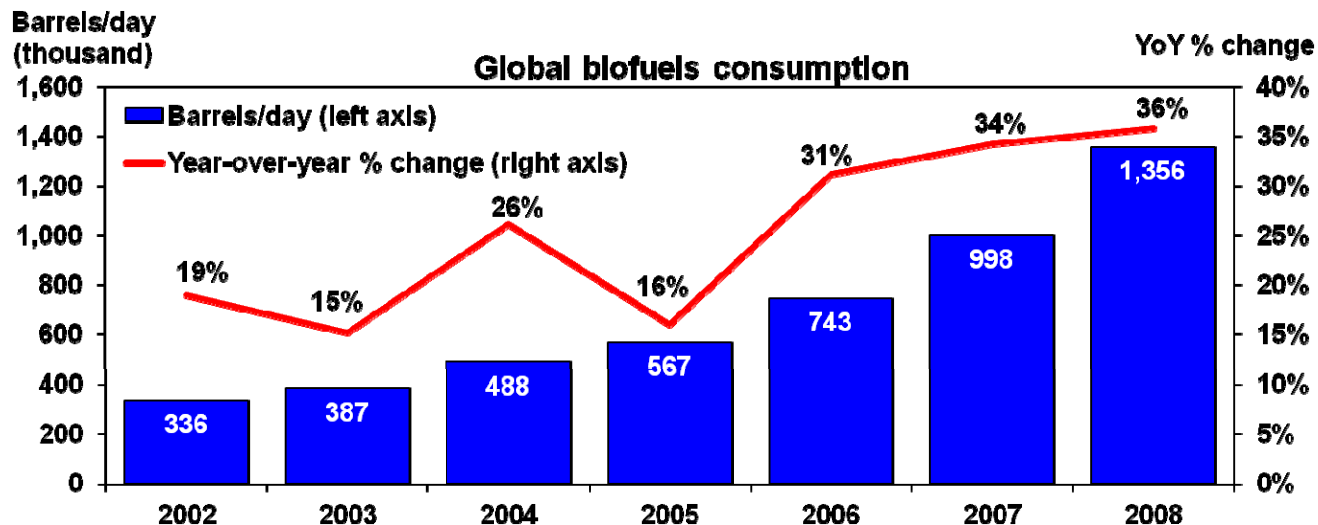


MILKEN INSTITUTE



Source: EIA.

Global biofuels consumption has risen dramatically

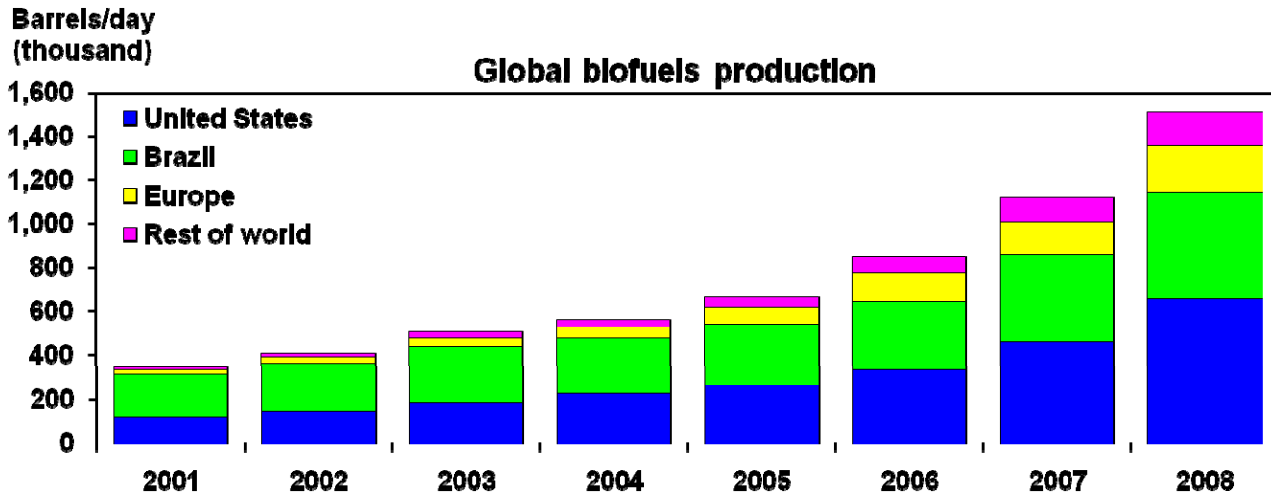


Source: EIA.

U.S. and Brazil are world leaders in biofuels production

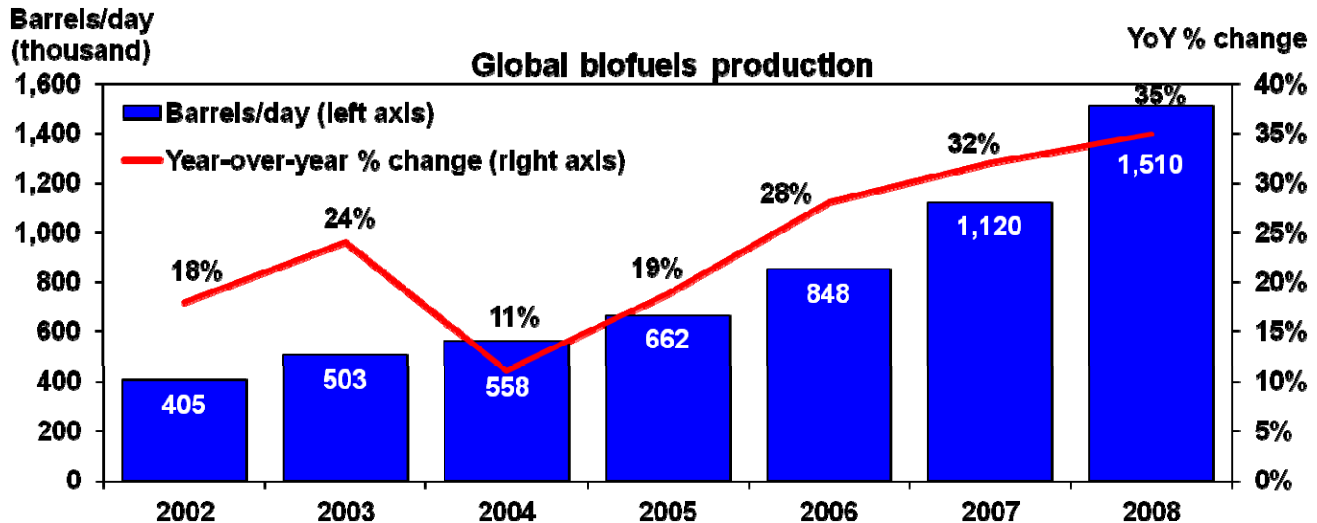


MILKEN INSTITUTE



Source: EIA.

Global biofuels production has risen dramatically

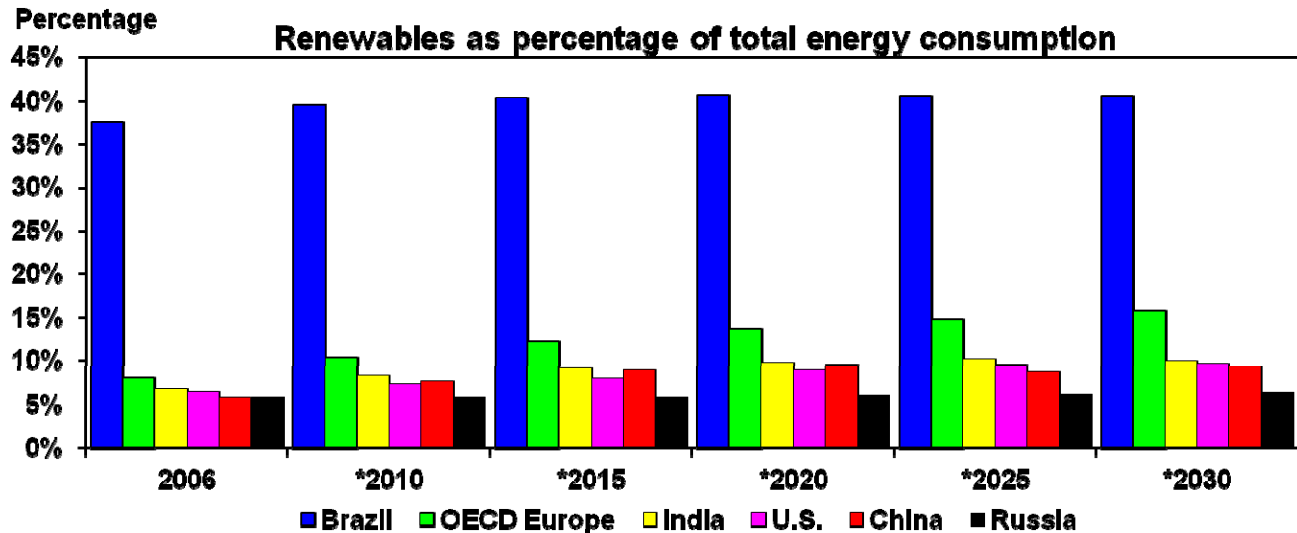


Source: EIA.

Renewables make up close to 40% of Brazil's total energy consumption



MILKEN INSTITUTE



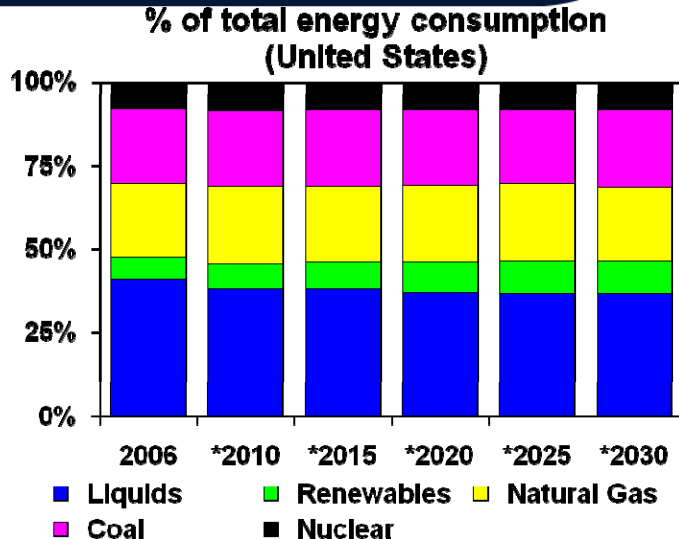
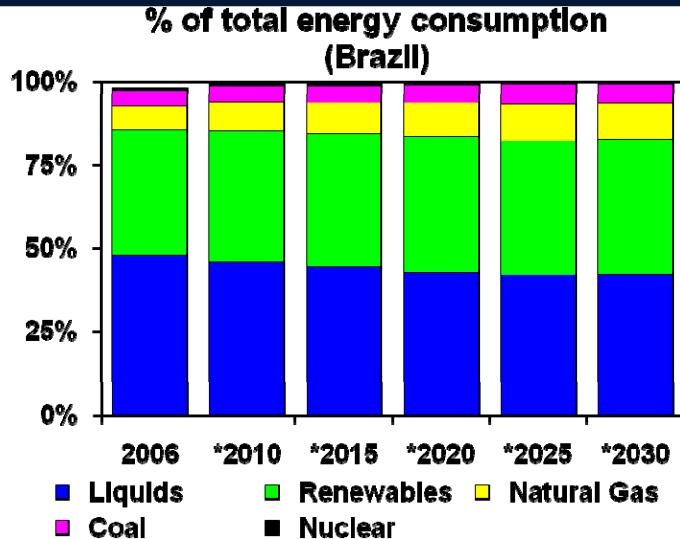
Source: EIA.

*Projections

Renewables make up far greater portion of total energy consumption in Brazil vs. U.S.



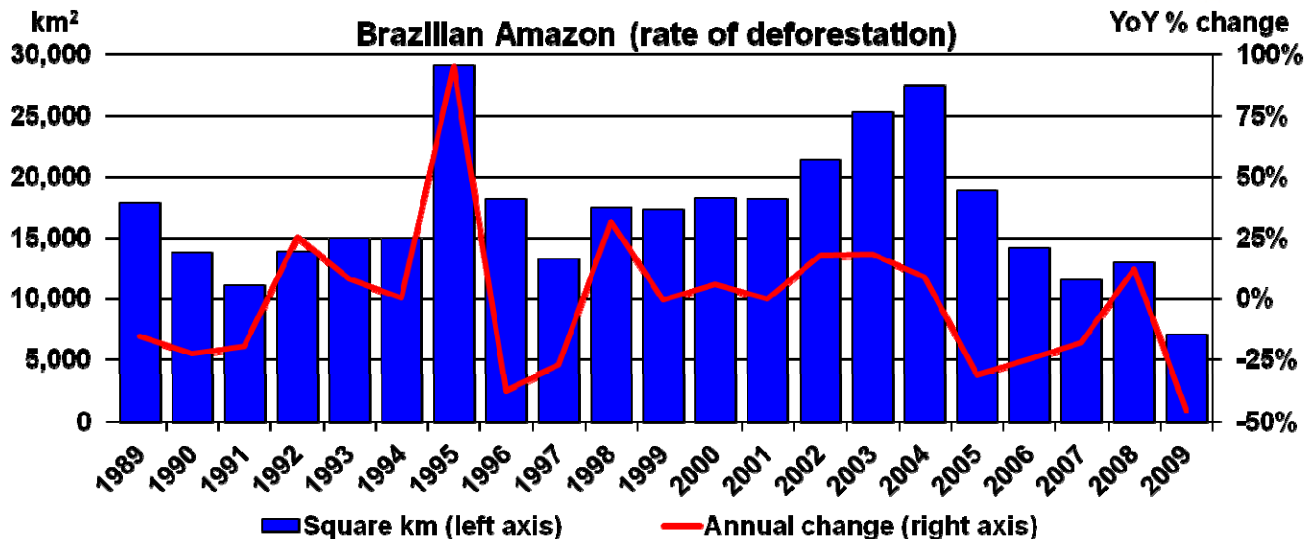
MILKEN INSTITUTE



Source: EIA.

*Projections

Rate of deforestation steadily declining

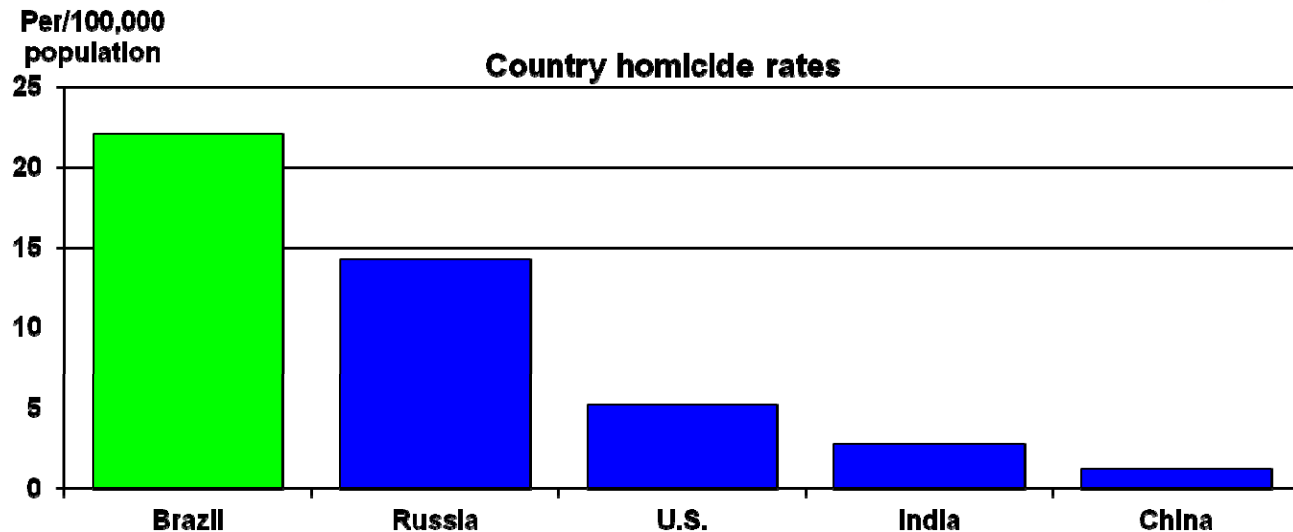


Source: INPE.

Violence still plagues Brazil

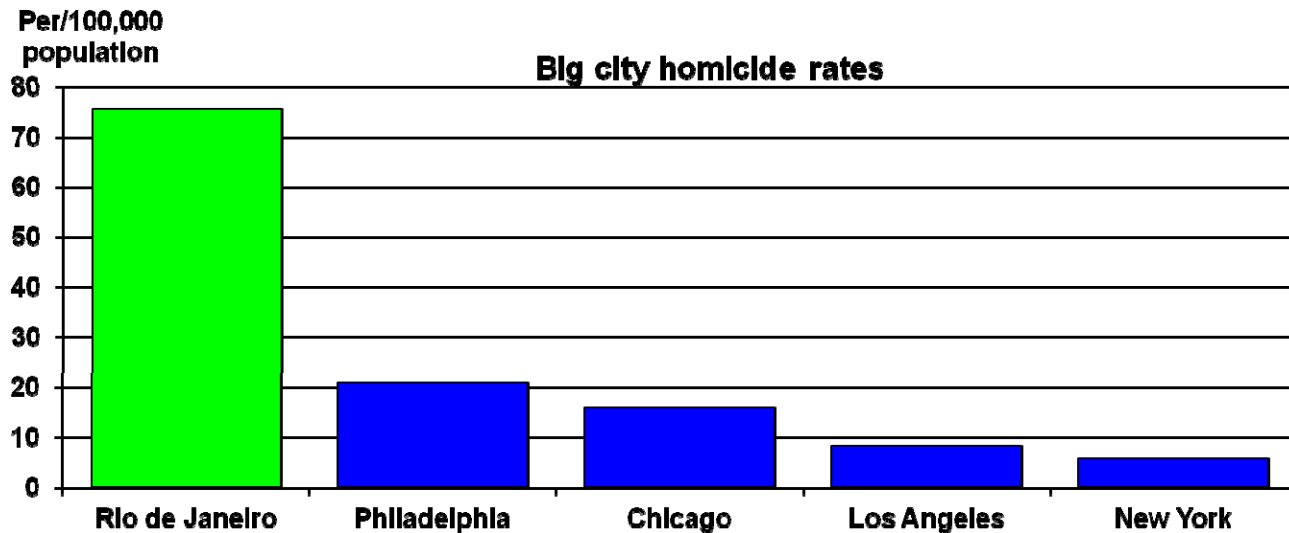


MILKEN INSTITUTE



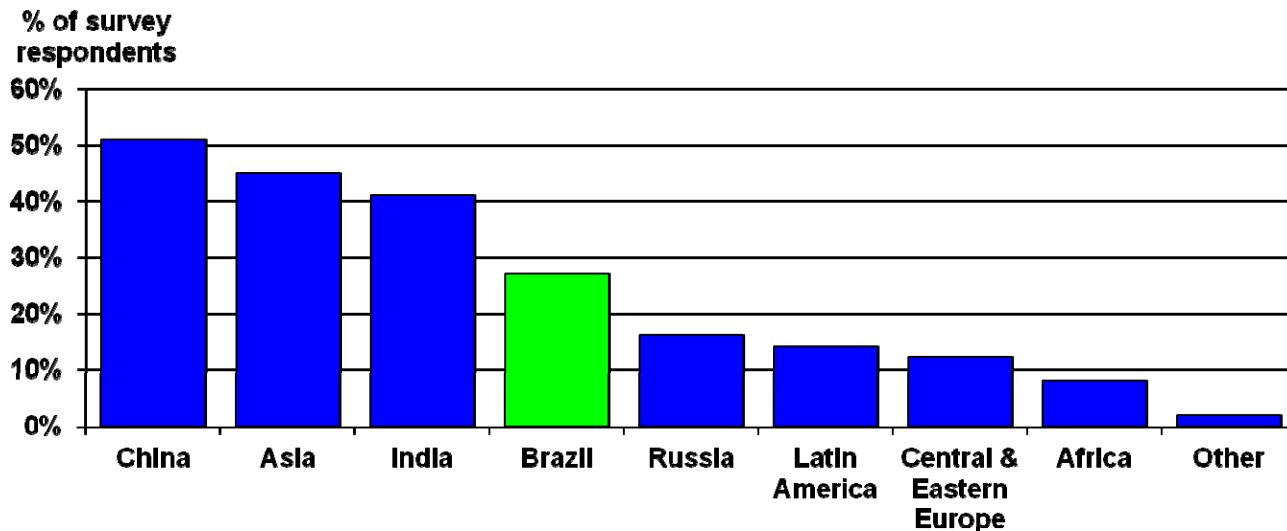
Source: UNODC.

Violence in Rio de Janeiro still high



Source: UNODC.

Which emerging markets present best opportunity in current financial climate?



Source: Preqin February 2010 Private Equity Investor Survey.

World Bank Ease of Doing Business Index

Annual ranking (1 = best)



MILKEN INSTITUTE

	2010 Global Rank	2009 Global Rank	2008 Global Rank
United States	4 th	4 th	3 rd
United Kingdom	5 th	6 th	6 th
Japan	15 th	13 th	12 th
Germany	25 th	27 th	20 th
France	31 st	31 st	31 st
Italy	78 th	74 th	53 rd
China	89 th	86 th	90 th
Russia	120 th	118 th	106 th
Brazil	129 th	127 th	122 nd
India	133 rd	132 nd	120 th

Source: World Bank Ease of Doing Business Index.

Transparency International Corruption Perceptions Index

Annual ranking (1 = least corrupt)

	2009 Global Rank	2008 Global Rank	2007 Global Rank
Germany	14 th	14 th	16 th
United Kingdom	17 th	16 th	12 th
Japan	17 th	18 th	17 th
United States	19 th	18 th	20 th
France	24 th	23 rd	19 th
Italy	63 rd	55 th	41 st
Brazil	75 th	80 th	72 nd
China	79 th	72 nd	72 nd
India	84 th	85 th	72 nd
Russia	146 th	147 th	143 rd

Source: Transparency International Corruption Perceptions Index.

World Economic Forum Global Competitiveness Index

Annual ranking (1 = best)



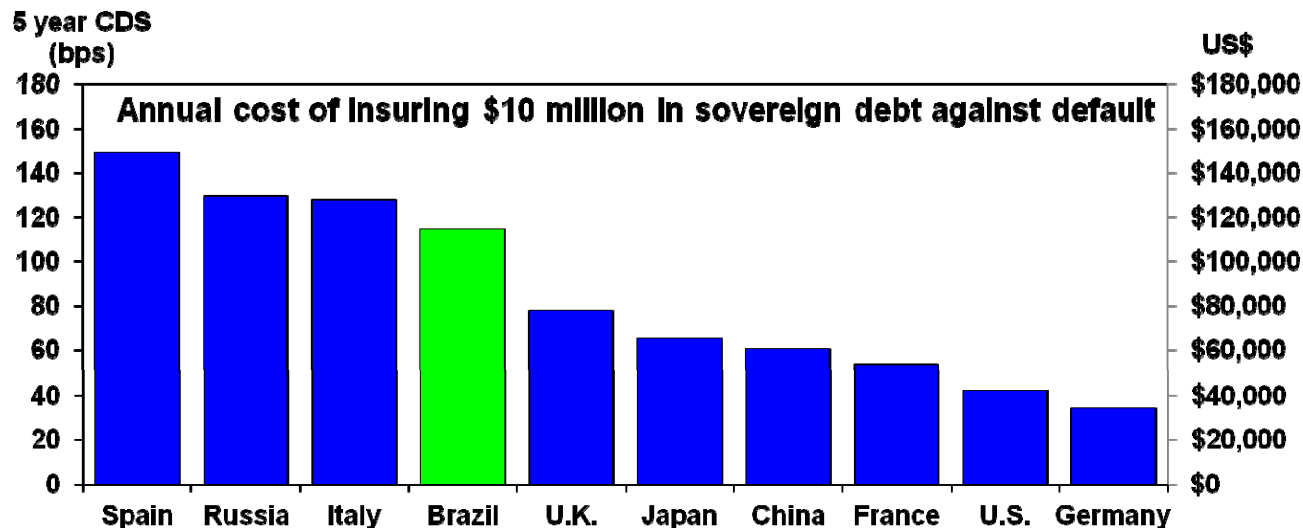
MILKEN INSTITUTE

	2009 – 2010 Rank	2008 – 2009 Rank	2007 – 2008 Rank
United States	2 nd	1 st	1 st
Germany	7 th	7 th	5 th
Japan	8 th	9 th	8 th
United Kingdom	13 th	12 th	9 th
France	16 th	18 th	18 th
China	29 th	30 th	34 th
Italy	48 th	49 th	46 th
India	49 th	50 th	48 th
Brazil	56 th	64 th	72 nd
Russia	63 rd	51 st	58 th

Source: World Economic Forum Global Competitiveness Index.

Assessing sovereign debt risk with credit default swap (CDS) spreads

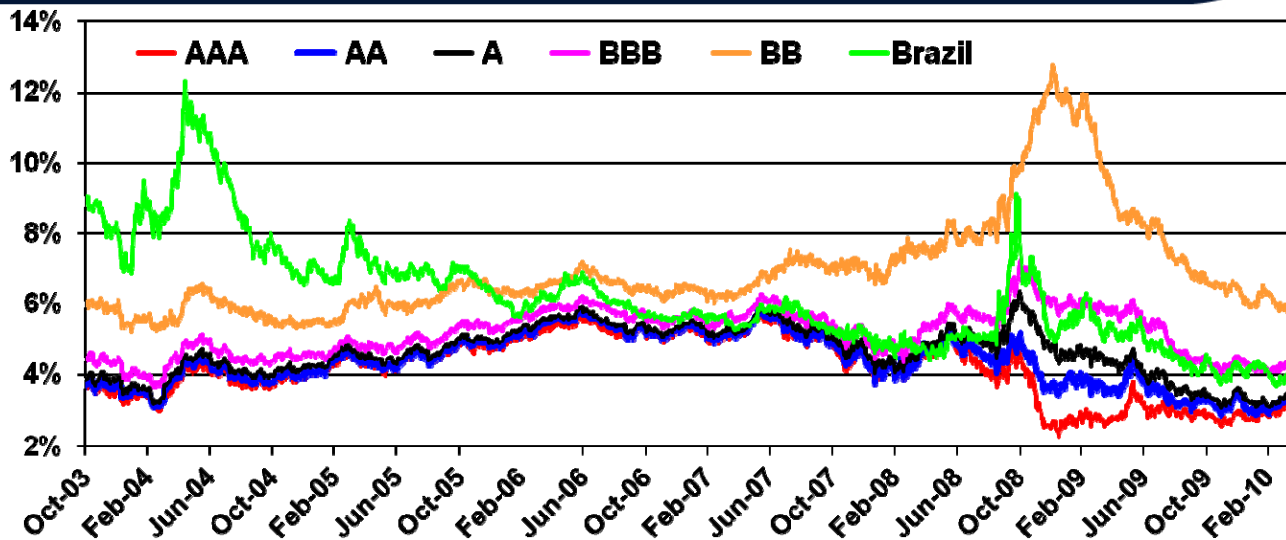
End of day price: April 16, 2010



Source: Bloomberg.

Brazil x U.S. Industrials: 5-year ratings

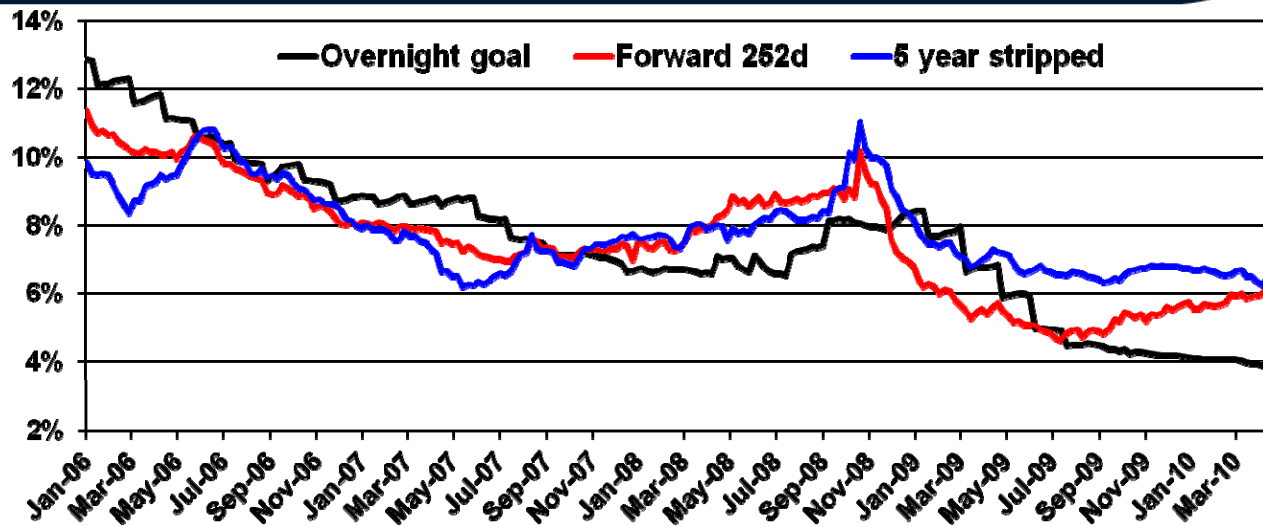
Daily: October 31, 2003 – April 14, 2010



Source: FAPES, BNDES Pension Fund.

Brazil real interest rates

Weekly: January 6, 2006 – April 16, 2010



Source: FAPES, BNDES Pension Fund.

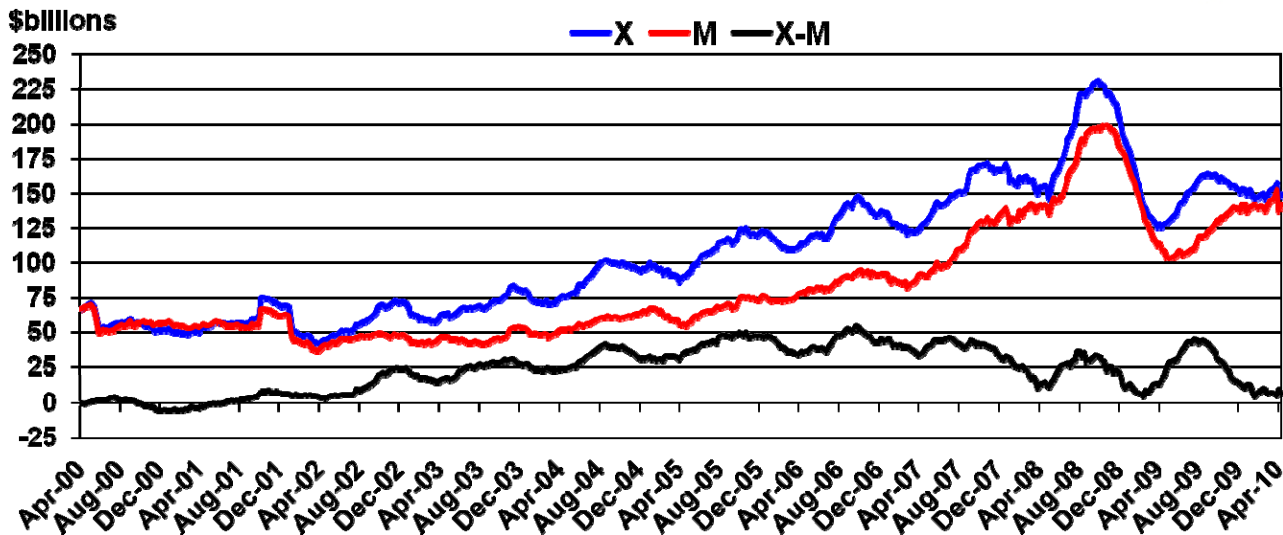
Brazil: strengths and issues to improve

- Central Bank
- BNDES – Brazilian Development Bank
- Credit/GDP 2002-10 24% to 45%, 70% in 2014
- V-shaped recovery
- Domestic demand
- Declining real interest rate
- Embi+ Brazil all time low
- Investment grade (2008)
- Reserves all time high
- Quality of government investment, expenses and revenues
- High tax burden
- Infrastructure
- Levels of savings and investment
- Current account levels
- Evolution of pension and tax reforms

Source: FAPES, BNDES Pension Fund.

Current account by trade balance

Weekly: April 2, 2000 – April 11, 2010



Source: FAPES, BNDES Pension Fund.

Note: 13 week X 4 moving average

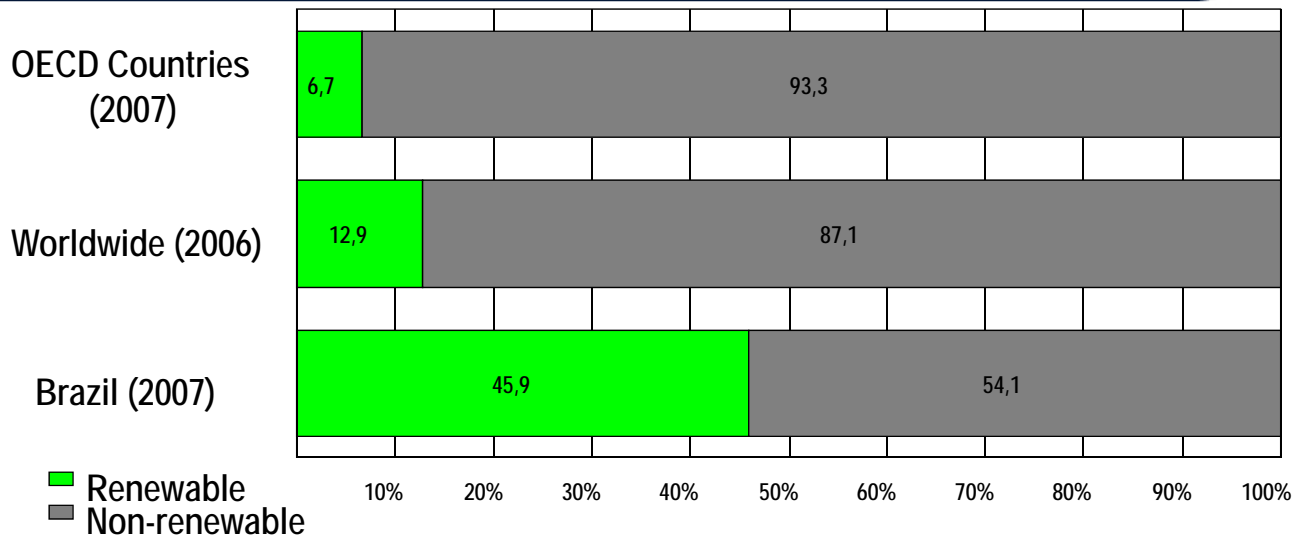
Investments

	R\$ billions		Growth/Year (%)
	2005-2008	2010-2013	
Oil & Gas	\$156	\$295	13,5
Mining	\$53	\$52	-0,6
Steel	\$28	\$44	9,7
Petrochemical	\$19	\$36	13,3
Vehicles	\$23	\$32	7,1
Electronics	\$15	\$21	7,3
Pulp & Paper	\$17	\$19	2,5
Industry	\$311	\$499	9,9

	R\$ billions		Growth/Year (%)
	2005-2008	2010-2013	
Energy Utilities	\$68	\$92	6,3
Telecom	\$66	\$67	0,2
Water & Sanitation	\$22	\$39	12,1
Railway	\$16	\$29	12,7
Roads	\$23	\$33	7,8
Ports	\$5	\$14	24,8
Infrastructure	\$199	\$274	6,5

Source: FAPES, BNDES Pension Fund.
US\$1,00 = R\$1,80.

Brazilian energy source is renewable



Source: BR Investimentos.

Brazil power sector at glance (2008)

Installed capacity

104 GW

74% is hydro

Peak demand

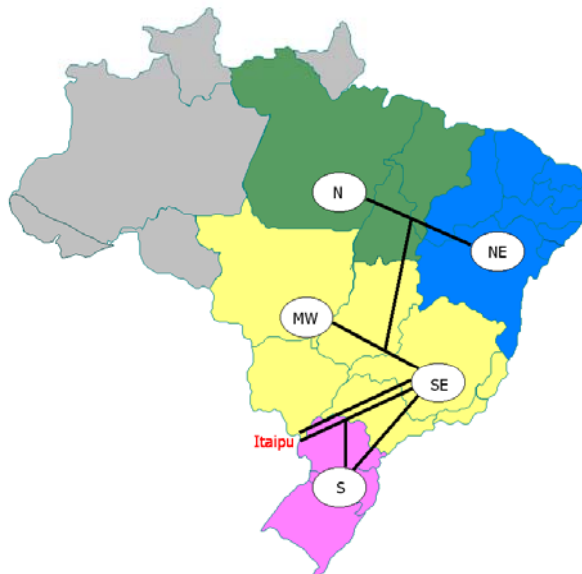
64 GW

(comparable to England or Italy)

Average production

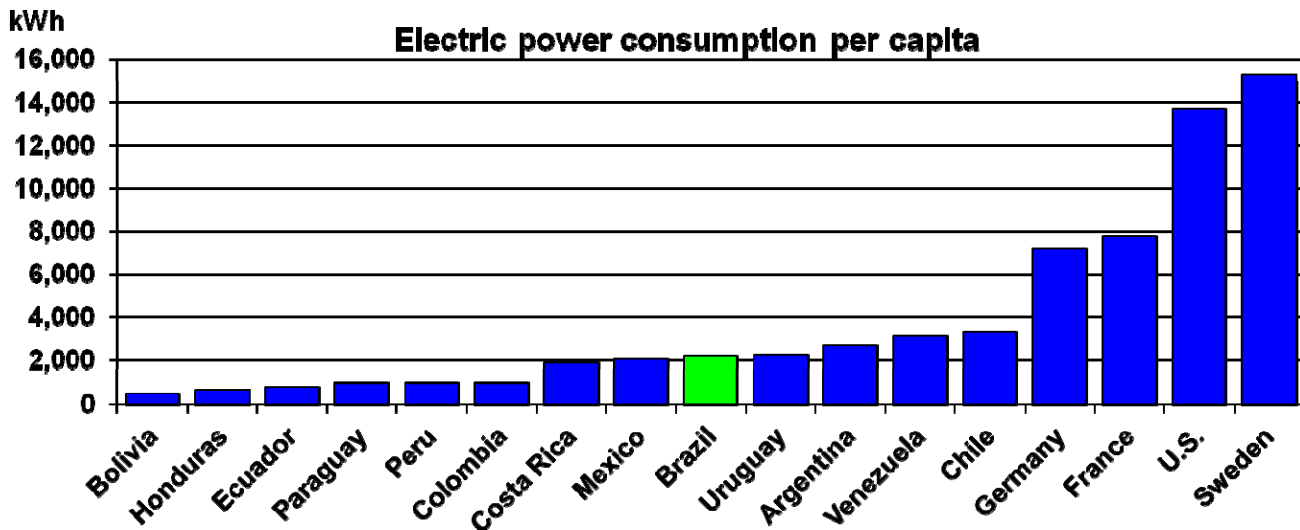
51GW X 8760 h/y = 447 TWh/y

90% is hydro



Source: BR Investimentos.

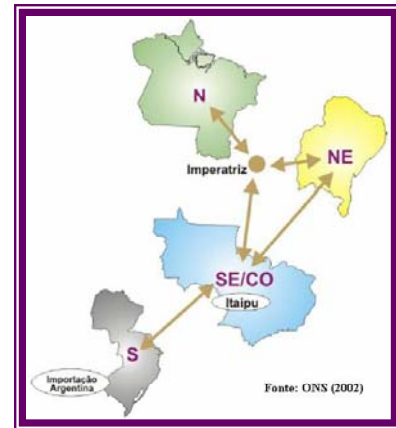
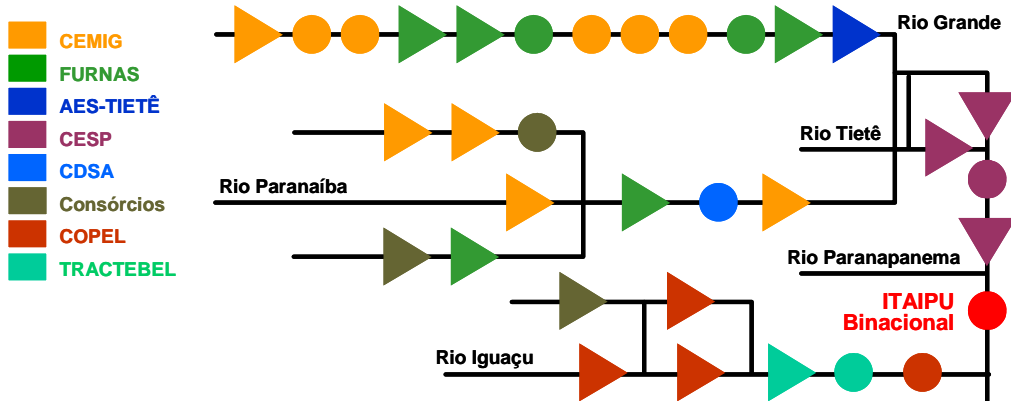
Per capita consumption of electricity



Source: World Bank, 2007.

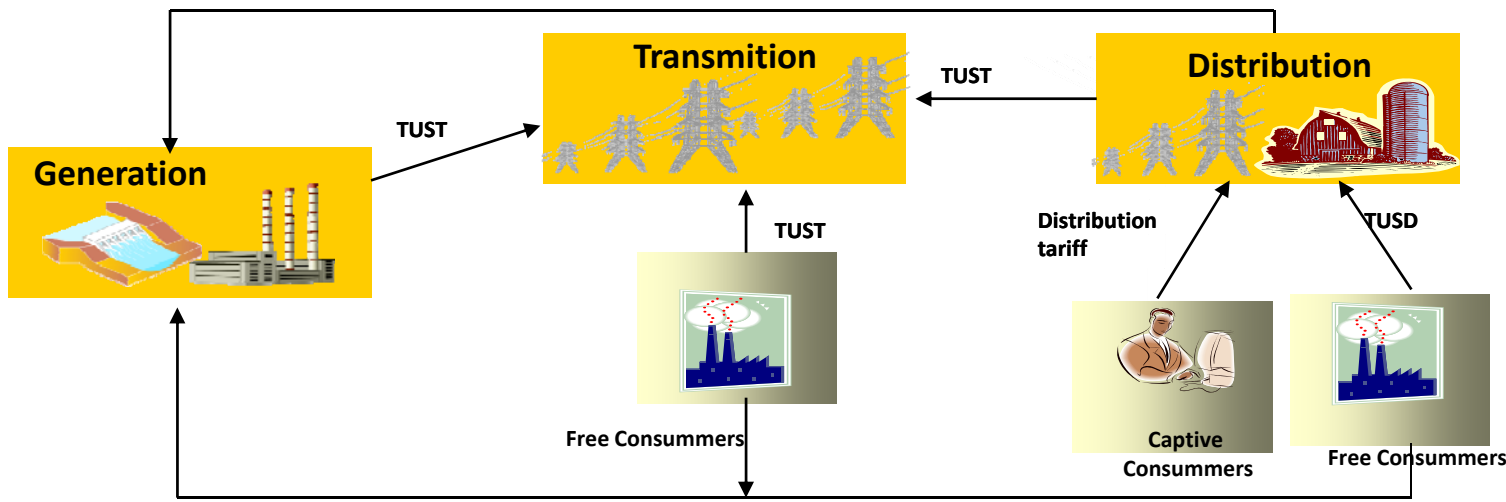
Centralized dispatch

- To take advantage of hydrological diversity, energy is transported through long distances.
- Power plants in the same river basin are owned by different companies.



Source: BR Investimentos.

Long term power purchase agreements (PPAs)



PPA (energy)

TUSD - Distribution network charge + taxes
TUST - Distribution network charge + taxes
Distribution Tariff = Energy + TUSD
PPA - Power Purchase Agreement

Source: BR Investimentos.

Results of recent auctions of energy (competition for the market, rather than in the market)



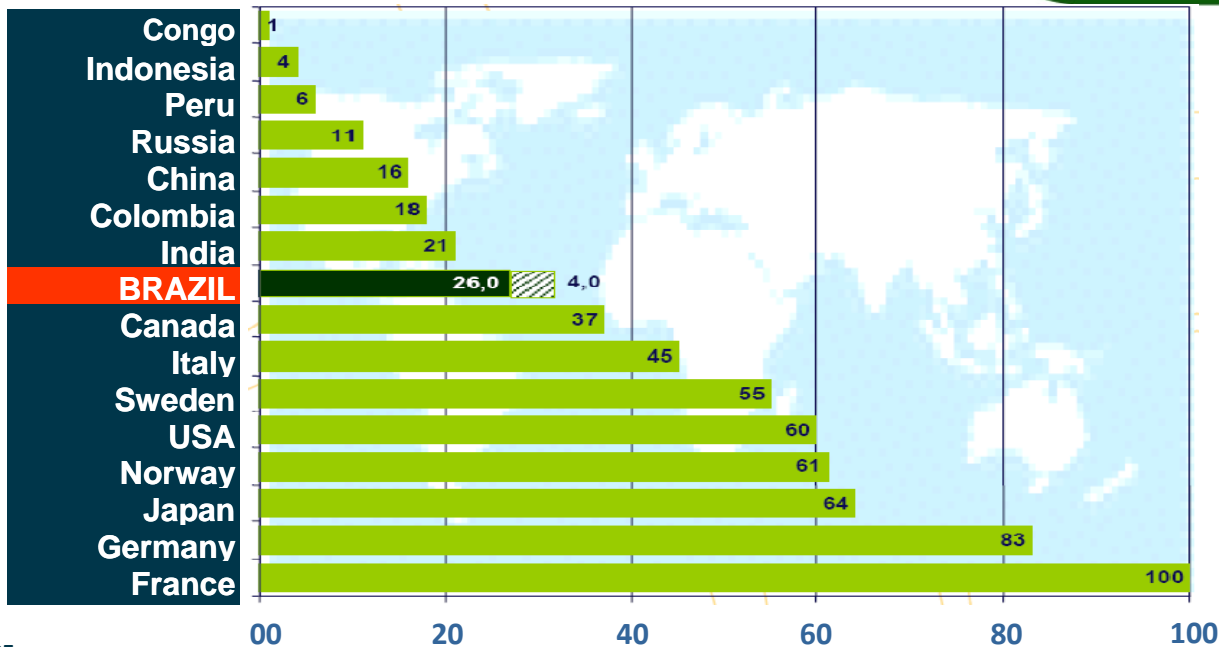
Sales: ~ 150 TWh/year

37% Hydro e 67% Thermal

(natural gas, oil and coal)

Total value: ~ US\$ 110 billion

Did Brazil run out of sites to build new hydro plants?



Source: EPE

Hydropower plants in the Amazon river basin



MILKEN INSTITUTE

THE MADEIRA RIVER PROJECT



What would be the alternative?

Source: BR Investimentos.