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United States Department of Agriculture

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93rd  
Annual

# Agricultural Outlook Forum

## A New Horizon: The Future of Agriculture

February 23-24, 2017 • Crystal Gateway Marriott Hotel, Arlington, Virginia

Presentation from the USDA Agricultural Outlook Forum 2017

United States Department of Agriculture  
93<sup>rd</sup> Annual Agricultural Outlook Forum  
“A New Horizon: The Future of Agriculture”

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Arlington, Virginia



# Brazilian Agriculture: domestic and external challenges and perspectives

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# Brazil's current economic situation

- Brazil has gone through one year of low growth (2014) and two (2015-2016) of deep recession. Unemployment increased from 7% to 12%. Per capita GDP may have fallen by at least 8% in 2014-2016.
- On the upside, in recent months inflation has been consistently falling and the Central Bank has started an interest rate reduction from 14,25% to possibly less than 10% by the end of 2017 as inflation reaches the target rate of 4.5%.

# Brazil's economic perspectives

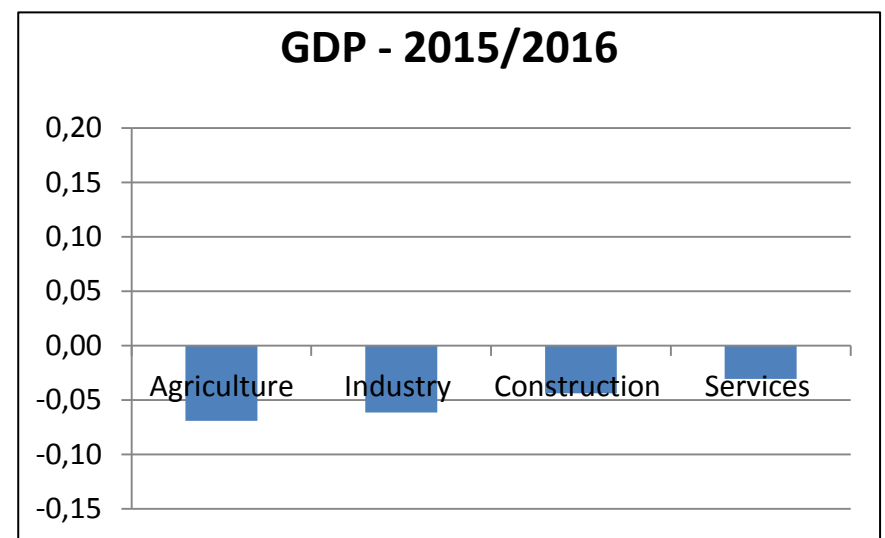
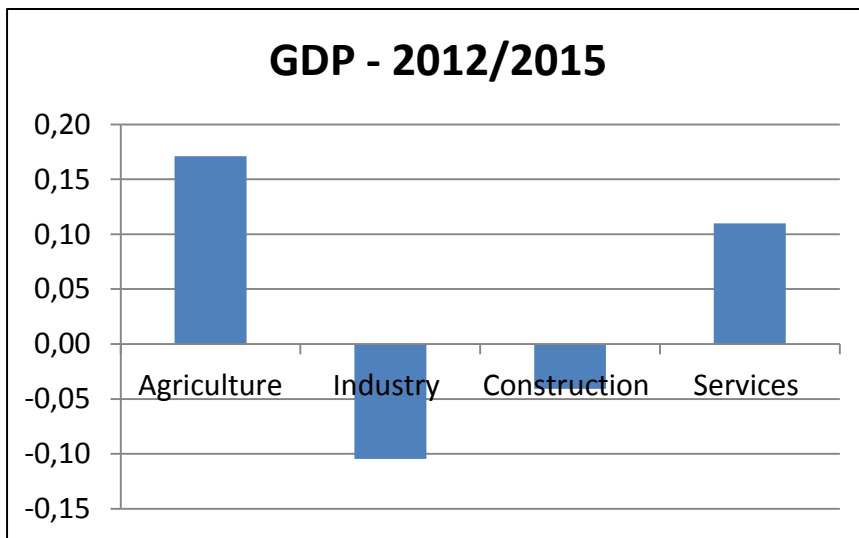
- Full recovery may take several years depending on several difficult reforms: political, fiscal, social security, labor market, etc.
- Congress is examining some of these reforms, some have been approved.
- Implementation may be very difficult and short term effect may well be recessive.
- Fiscal reform needed to assure short-term solvency and long-term growth. Private capital has to be attracted.
  - A ceiling expenditure growth equal to past inflation rate has been established so that total real expenditure is fixed for 10 years. Only reallocation of funds is permitted.

# Brazil's economic perspectives

- When excess capacity is reduced and new infrastructure - airports, ports, roads, highways, and energy (oil, electricity) investments are launched, then a modest recovery may come along for the next two years.
- Short term
  - Interest rate reduction seems assured
  - Lower inflation raises real consumers' income
  - Good agriculture performance
- Microeconomic reforms to increase productivity are being proposed such as changes in the educational system, credit market, simplification in tax system, measures to improve the business environment, etc.

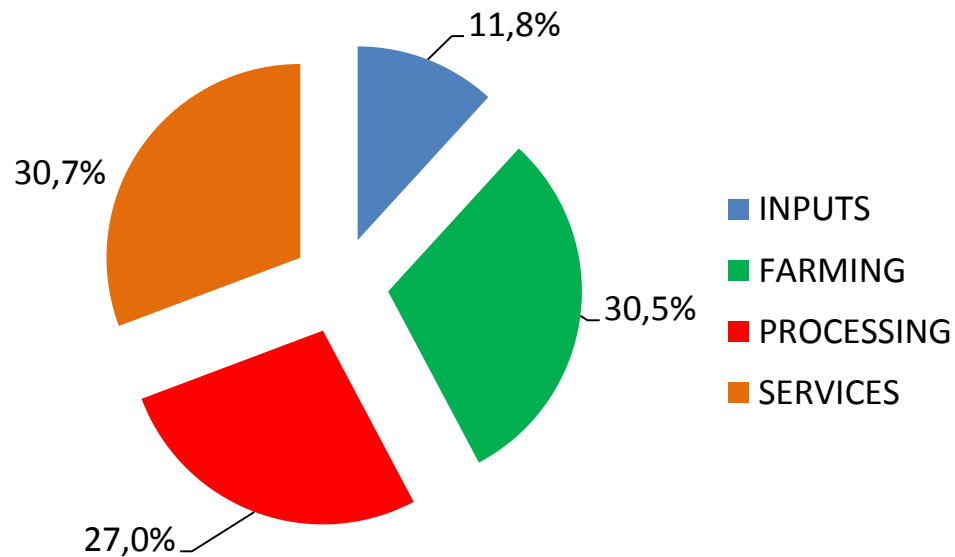
# Agriculture and Agribusiness

- In the short run, agriculture/agribusiness is seen as one of a few sectors that may contribute significantly to short run economic growth. Unfavorable weather conditions (as in 2016) will not help. A 15% - 20% increase in grain production is expected for 2017 after a 10% crop failure in 2016. Results pending on weather conditions.



# Agribusiness (2015): 21% of Brazil GDP

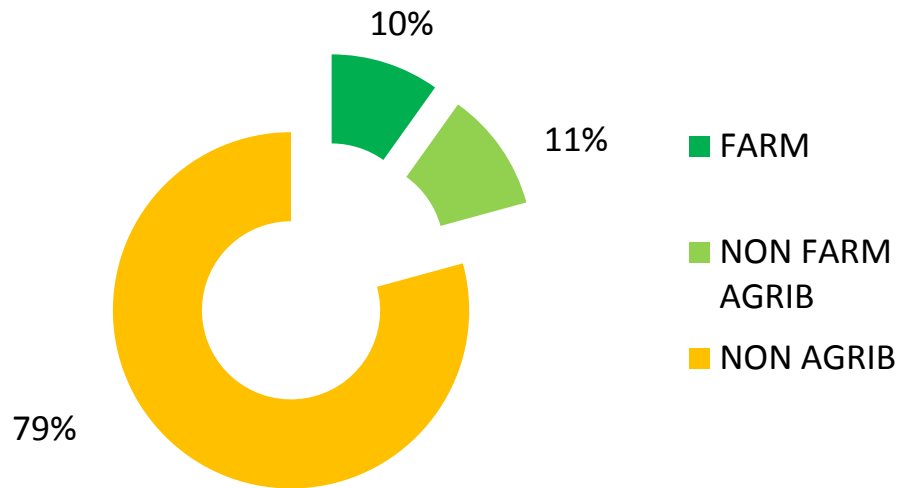
Agribusiness  
GDP composition



Source: CEPEA



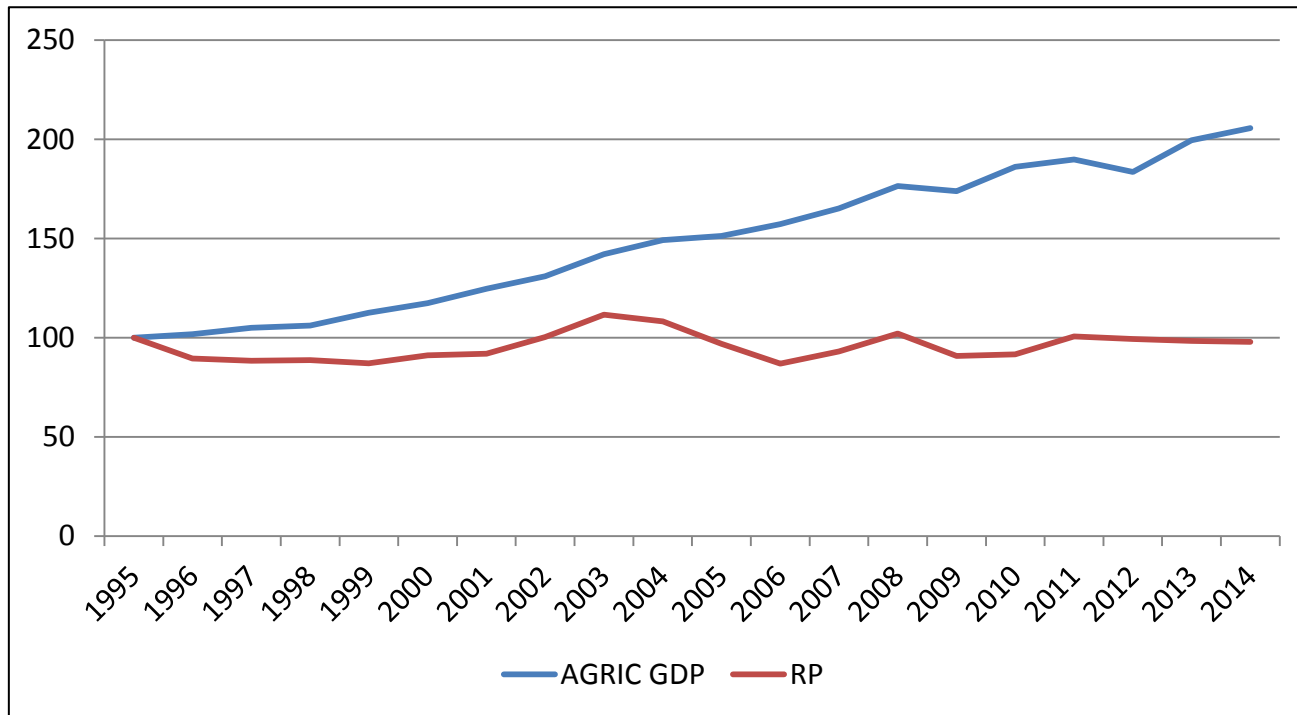
# Agribusiness: 21% of total employment



Farm jobs: 48% of agribusiness jobs

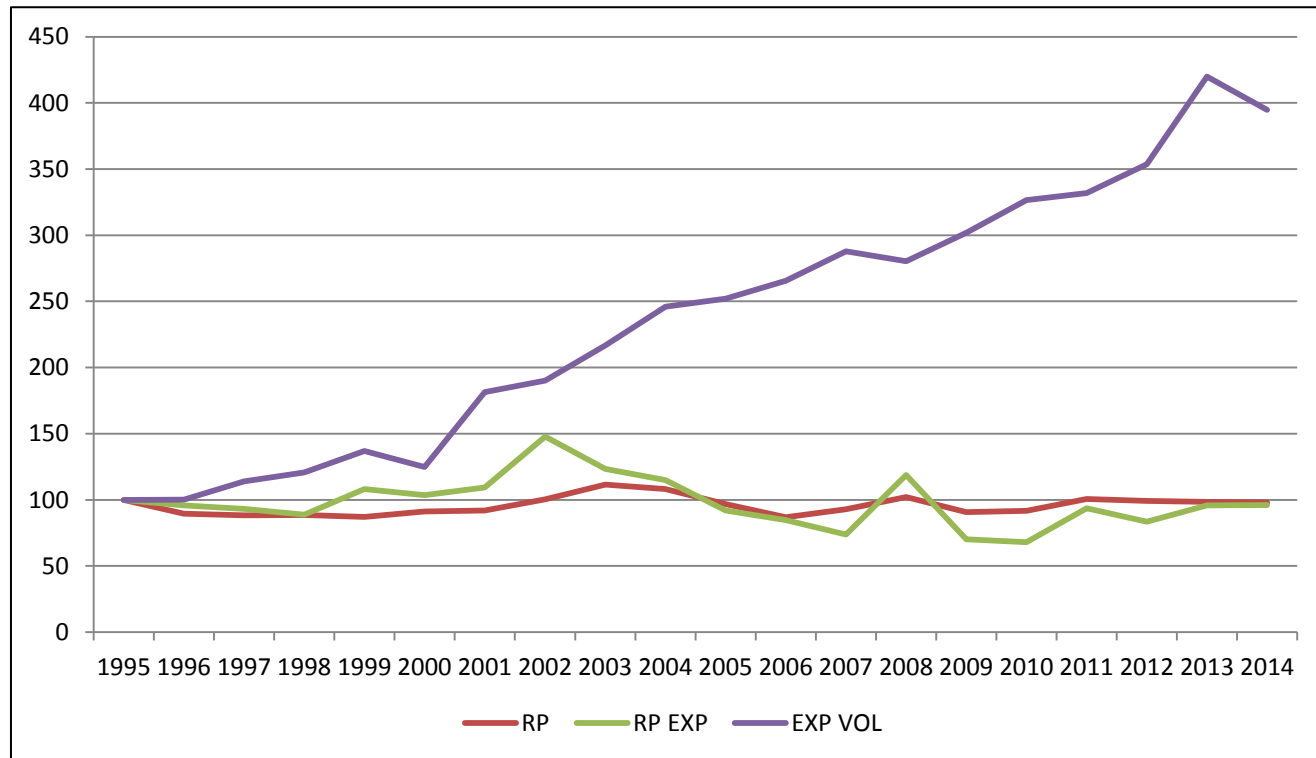
Source: IBGE/PNAD; CEPEA

# Output of agriculture doubled from 1995/2014 with no trend in relative prices



Source: IBGE, author's calculations

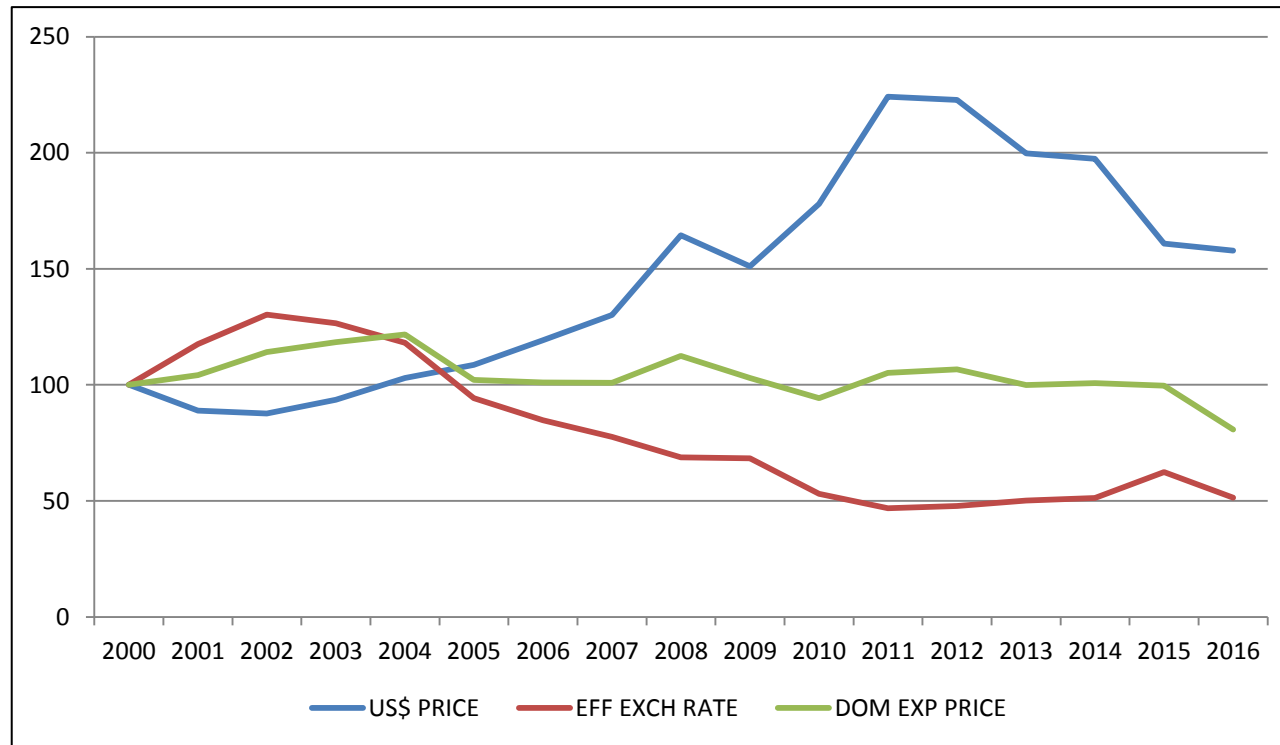
# Volume of exports from agriculture increased fourfold from 1995 to 2014



Source: IBGE, author's calculations

Exports domestic relative price decreased somewhat during the commodity boom as exchange rate appreciated significantly.

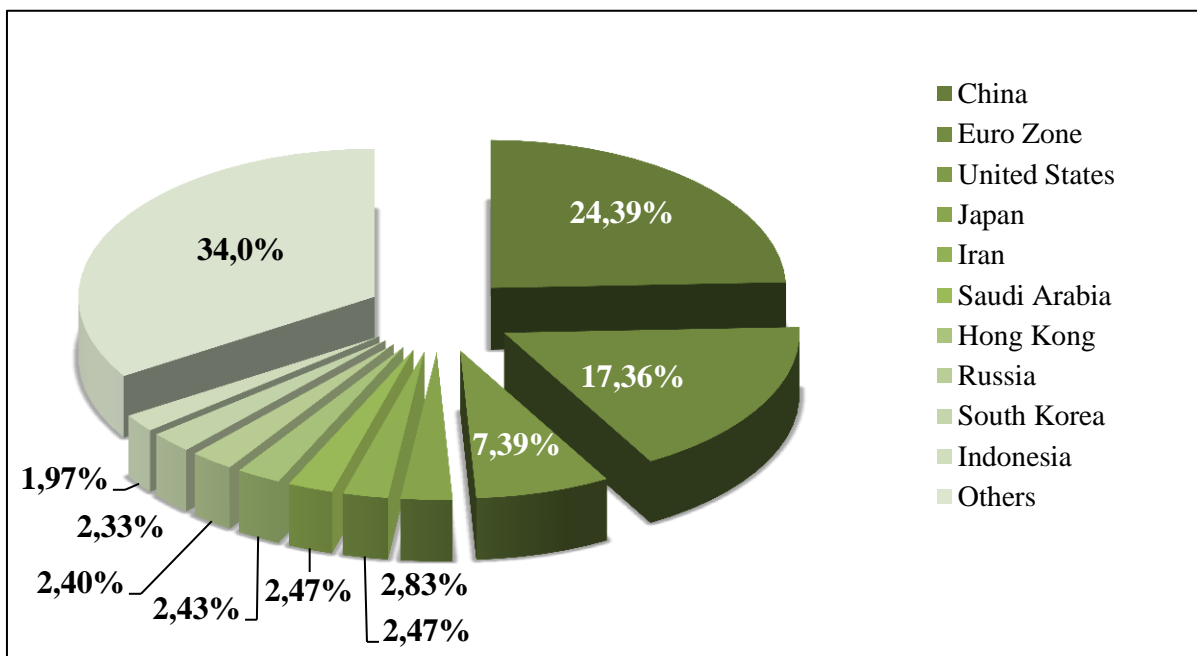
# Domestic agricultural exports prices are more stable than international prices because of exchange rate compensating movements



Source: IMF, IPEADATA, CEPEA

Recent fall in international price plus appreciation of the domestic currency may lead to lower farm output prices, but probably resilience will prevail.

# Brazil's main exports destinations



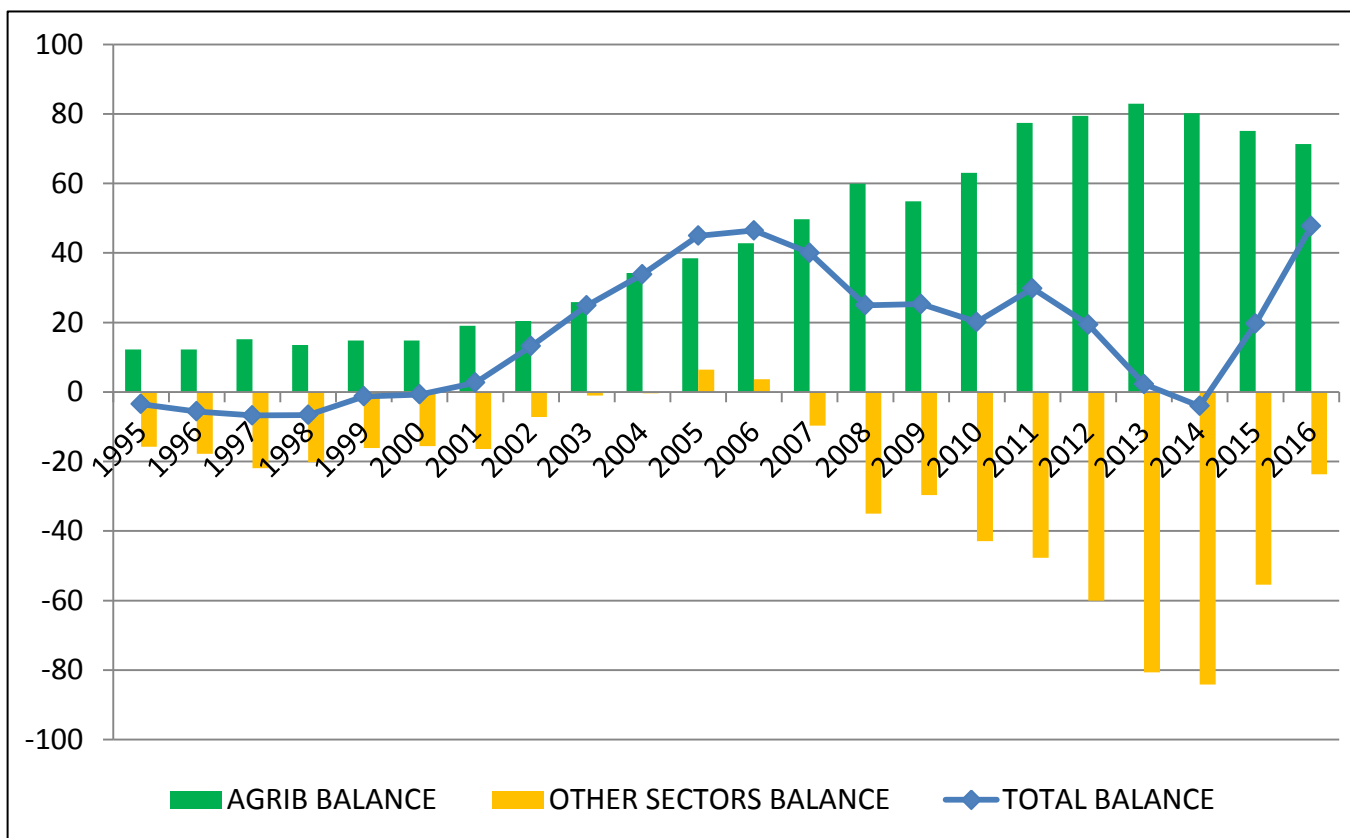
Source: MDIC, CEPEA

## Threats:

China slowdown accelerates

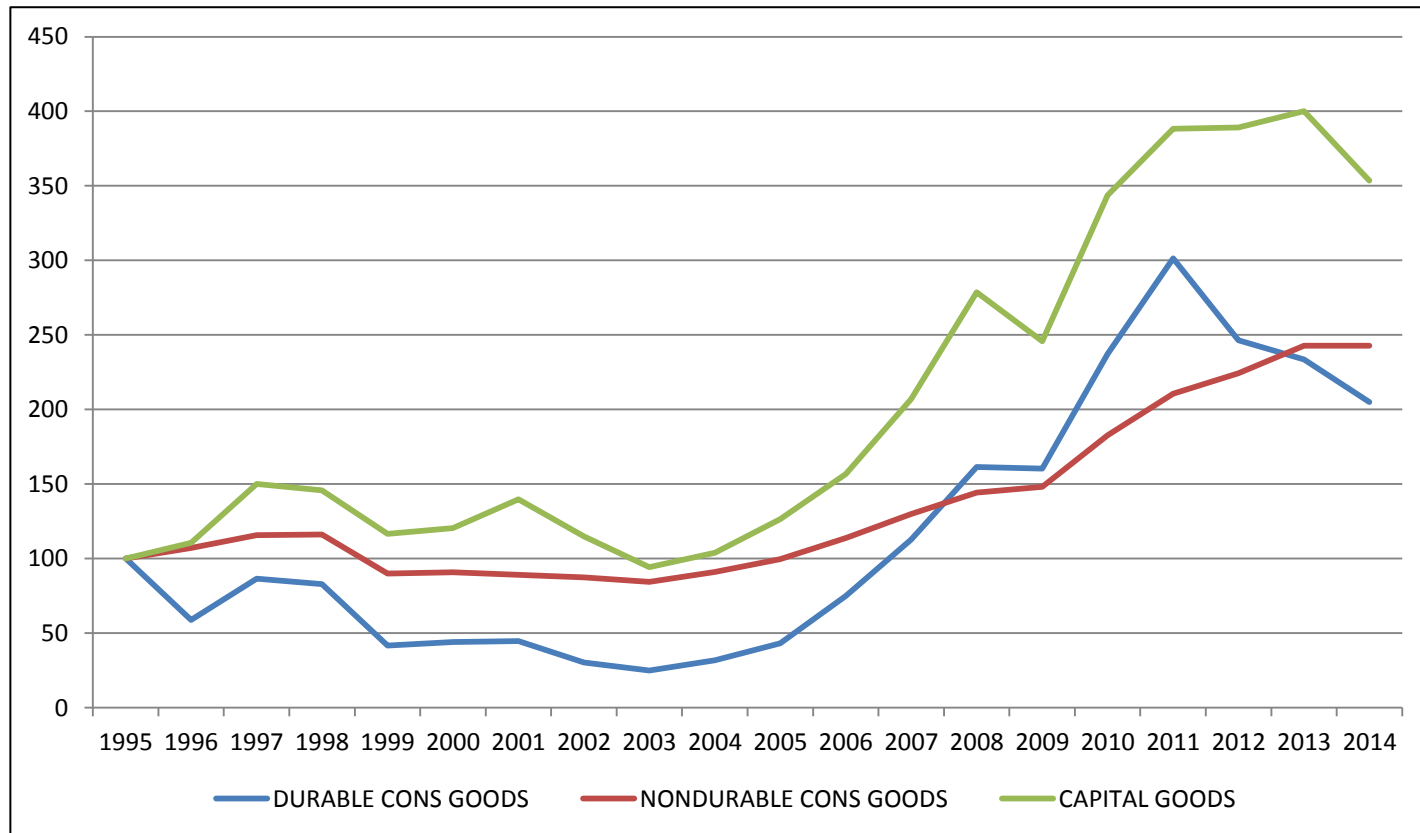
Uncertainty about Euro Zone and US domestic and external policies

# Agribusiness exports supplied Brazil with large amounts of cheap dollars: External Bonanza



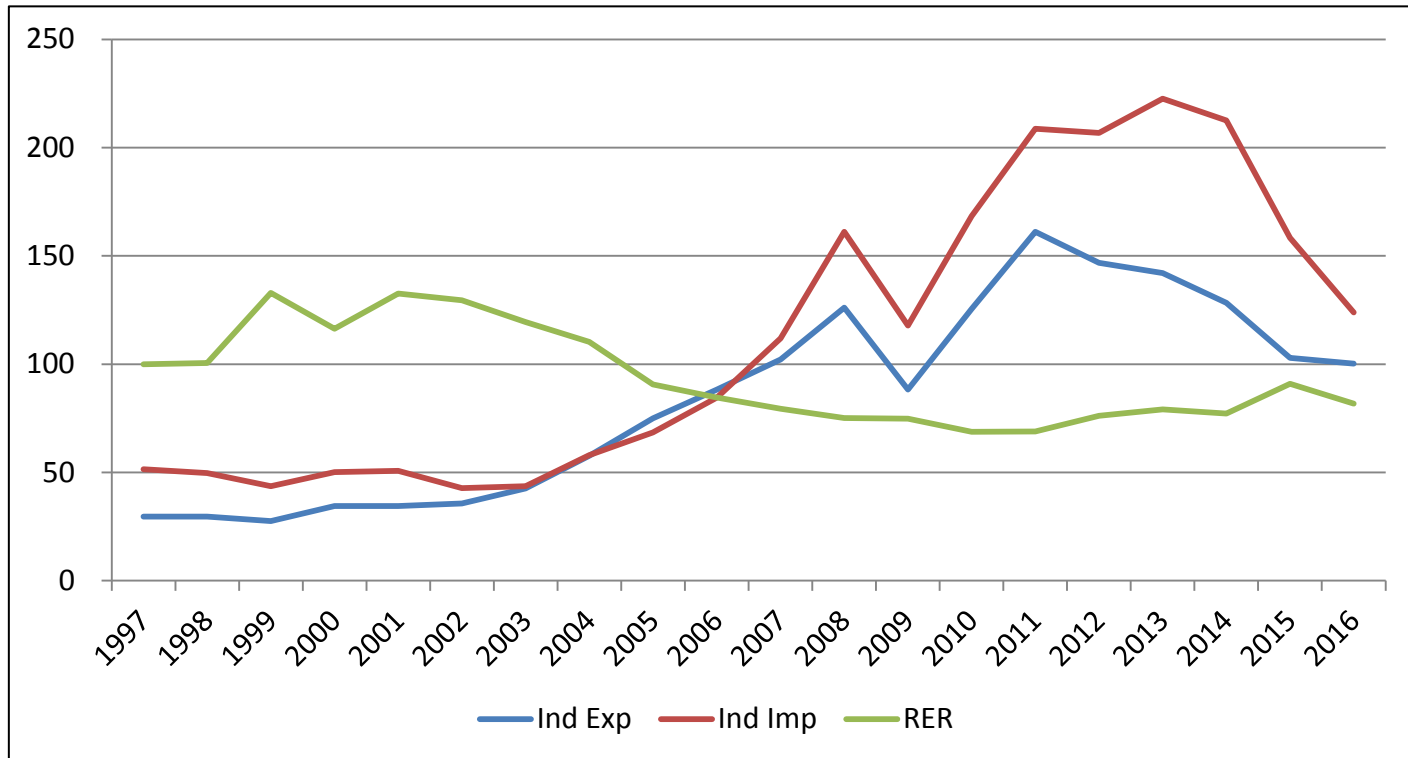
Source: MDIC,MAPA

Brazil was able to import large amounts of both consumer goods (that controlled inflation) and intermediary and capital goods (that induced economic growth) during the commodity boom



Source: FUNCEX/IPEADATA

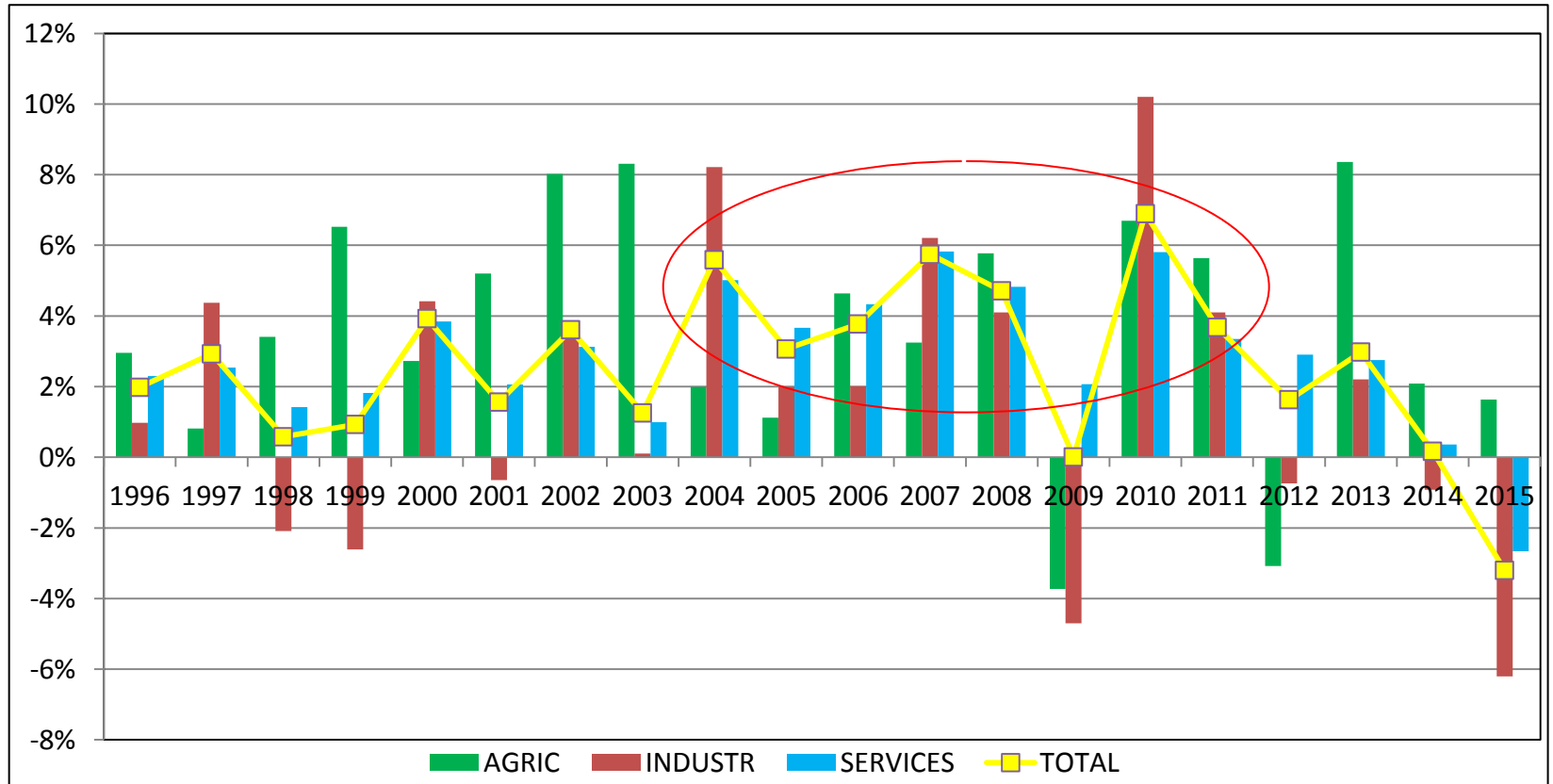
Contrary to what happened with agribusiness, industrial exports lagged behind imports as industry exchange rate appreciated



Source: IPEADATA

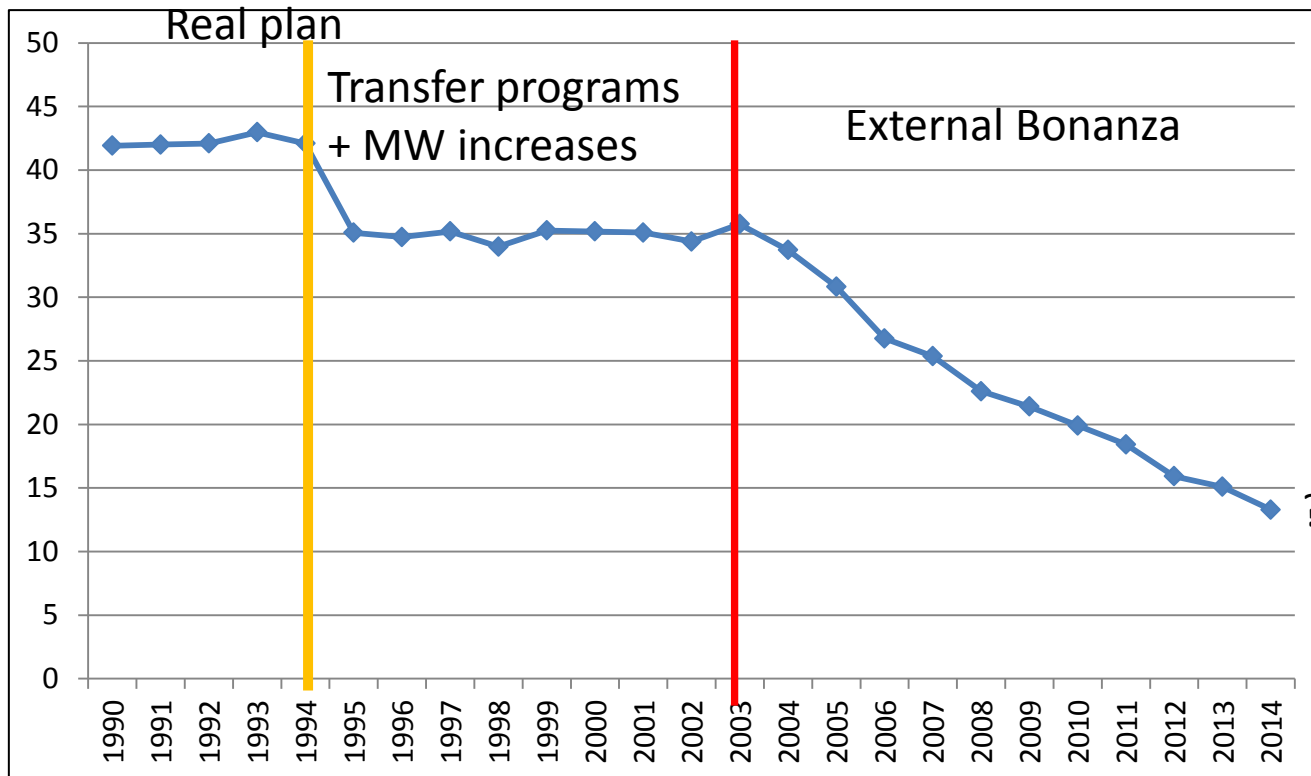


# The commodity boom in Brazil (GDP growth)



Source: IBGE

# Poverty line- Brazil

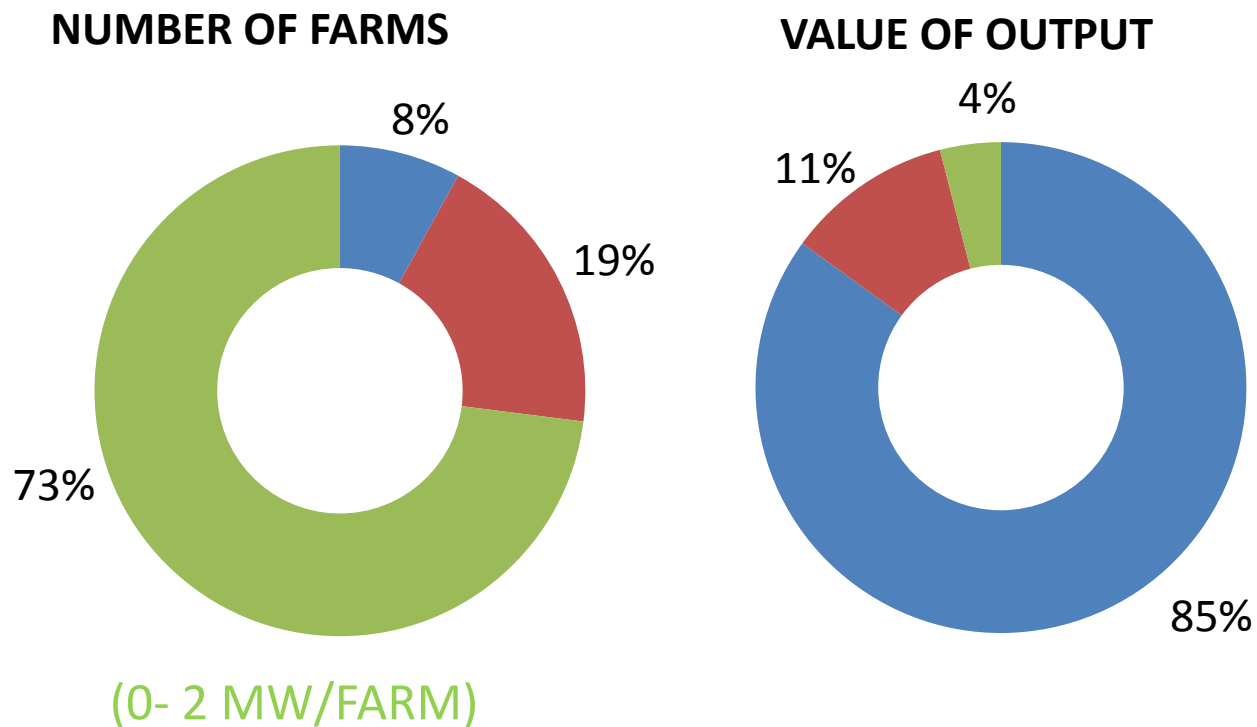


Source: IBGE, IPEADATA

Income transfer programs plus MW rises became very effective in reducing poverty with controlled inflation and during the External Bonanza



# Looking inside agriculture: high income concentration and poverty

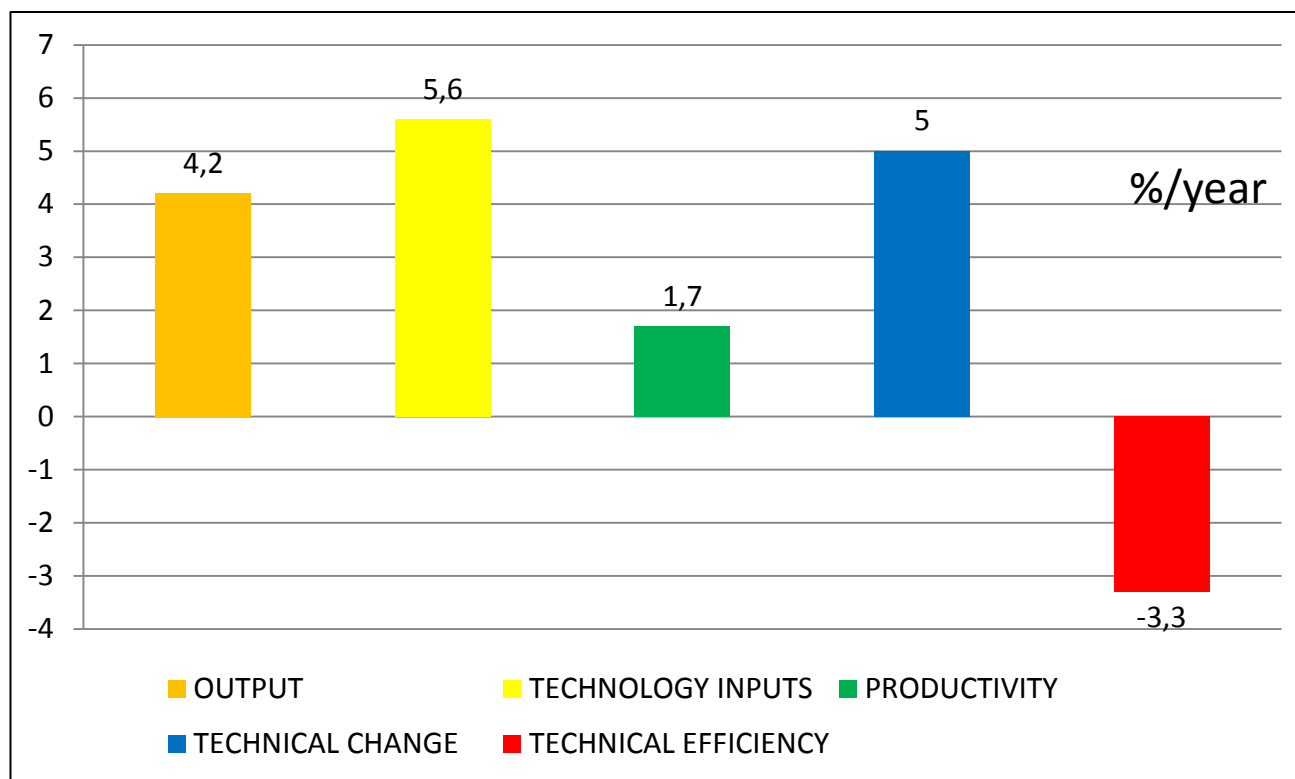


Source: Alves (2010)

73% of the 5.2 mi. farmers are very poor  
(Value of output is highly concentrated)

# Farm technology potential is high, but technology use is low for most farmers

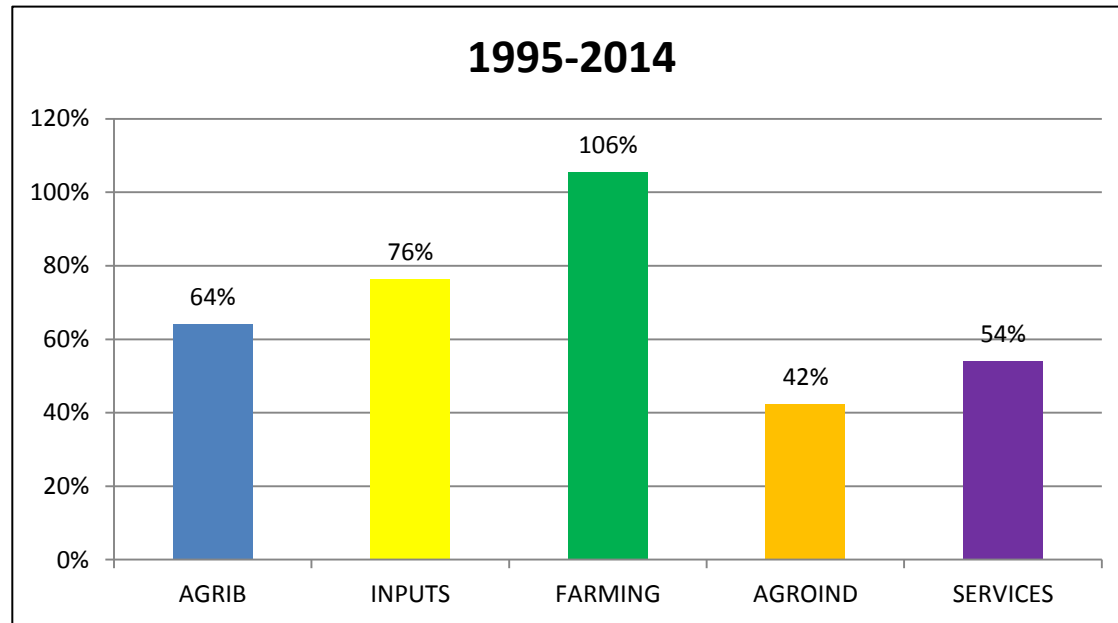
## 1985-2006



Source: Helfand, Magalhães, Rada

Public & private investment in R&D has been kept at reasonable levels, but extension lagged behind. Modern farmers count on private extension. Better infrastructure would help.

# Agribusiness GDP growth



Source: CEPEA

Farm and inputs segments grow at faster rates

# Agriculture: Priorities

- Maintain support to public science and technology to assure continuity of technical change
- 8% of the farmers producing 85% of output using top technology are connected to external markets and do most of trade and financing with multinational agribusiness inputs and processing firms
  - China, for instance, is entering the inputs markets and may intensify input/output trade with Brazil, a major supplier of commodities and consumer of agrochemicals. China's infrastructure investments in Brazil go in the same direction

# Agriculture: Priorities

- Domestically Brazil is working on helping small farmers (reducing rural poverty)
  - Subsidized rural credit directed to family farmers and medium sized farmers – credit rate to be reduced as the general target rate falls
  - Raising small/low income farmers' productivity ; attention to extension programs with focus on technology and on management techniques plus income transfers programs

# Agriculture: Priorities

- Adjustments to climate changes, global warming, environment
  - ABC Plan (Low Carbon Agriculture Plan): rural credit program for recovery of degraded pasture lands, crop-livestock-forest integration, no-till farming, animal residual treatment
  - Rural Environmental Register (CAR) –farm’s account of geo-referenced environment aspects, pre-condition to access to official credit
  - Agricultural zoning to mitigate climatic risk for rural credit and insurance programs
- Intensified control of pest incidence and pesticide use and food security,
  - Quality and high sanitary standards are also necessary condition to access to higher income international markets



# Agriculture: Priorities

- On the external front, government works on trade agreements to obtain access of higher value products to richer and/or faster growing markets to circumvent food quality barriers

# Final comments

- Major threats:
  - Uncertainty related to new trade configuration after changes in USA government and Europe
  - China may slowdown somewhat but income gap in China is still high so, in sum, demand may remain reasonably strong
  - US interest rate increases, US exchange appreciation coupled with a devaluation in the Brazil's domestic market
- Unless world market demand falls drastically, Brazilian agriculture probably will remain viable and competitive.



THANKS