

A green outline map of Brazil is centered on the page. The text 'Pharmaceutical Industry in Brazil' is overlaid on the map in a large, bold, blue font with a white drop shadow.

Pharmaceutical Industry in Brazil

Josimar Henrique da Silva

Vice-President of the Director Council

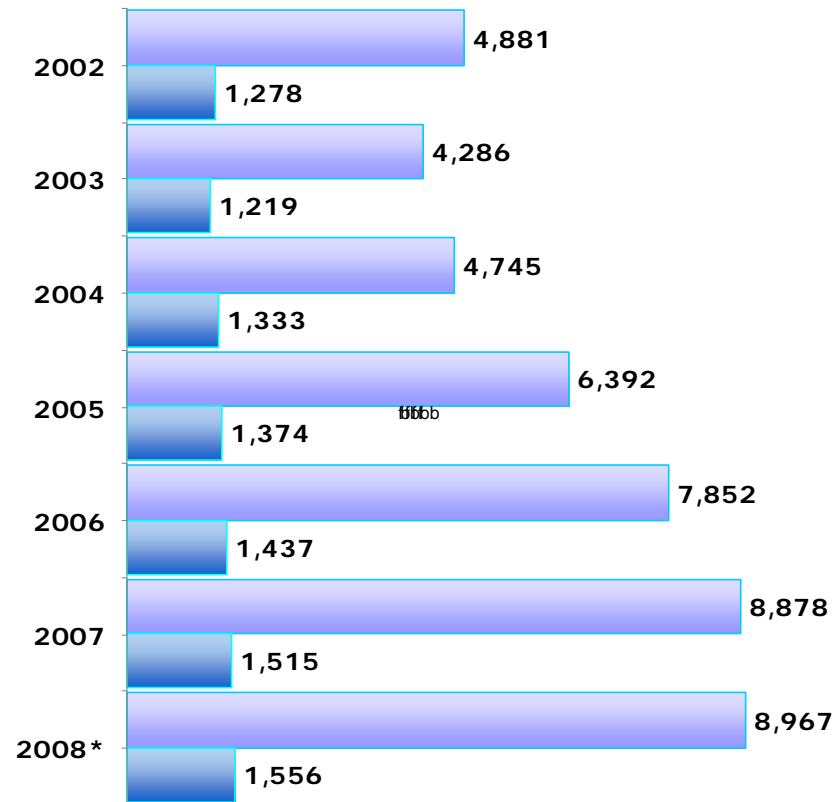
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Global Pharmaceutical Market (12 months - December 2007 – Retail Sales)

Country	Sales 2007 – in Billions of EUR	% of Total Share
North America	161,384	52,86
United States	150,020	49,13
Canada	11,364	3,72
Europe (Top 5)	78,905	25,84
Germany	23,067	7,55
France	21,388	7,00
United Kingdom	12,745	4,17
Italy	11,680	3,83
Spain	10,025	3,28
Japan	42,6999	13,98
Latin America (Top 3)	17,169	5,62
Brazil	8,878	2,91
Mexico	6,332	2,07
Argentina	1,959	0,64
Australia / New Zealand	5,178	1,70
Total	305,335	100,00

Source: IMS Health - World Drug Purchases

Pharmaceutical Industry Total Sales (Drugstore; Pharmacy Channel) Amounts X units



EUR (bi)
Units

Source: IMS Health

(*)Moving average last 12 months – until May 2008

The Sector's Agenda

Access to Medication

Optimization of Governmental budget earmarked for medication; partnerships with the private sector.

Industrial Development

Definition of clear rules and regulations for the economic-sanitary regulatory framework; compliance with intellectual property and its agile enforcement. Industrial policies.

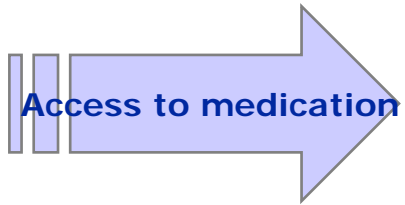
Tax Burden

Cutting taxes down and transferring savings to consumers. Single ICMS tax rate applicable all over the country. Taxation reform.

Regulation of the Economy

Flexibility in price control, mainly in most competitive, non discretionary items (non essential to health).
Cooperation mechanism between industry and Government to increase the population access to medication.

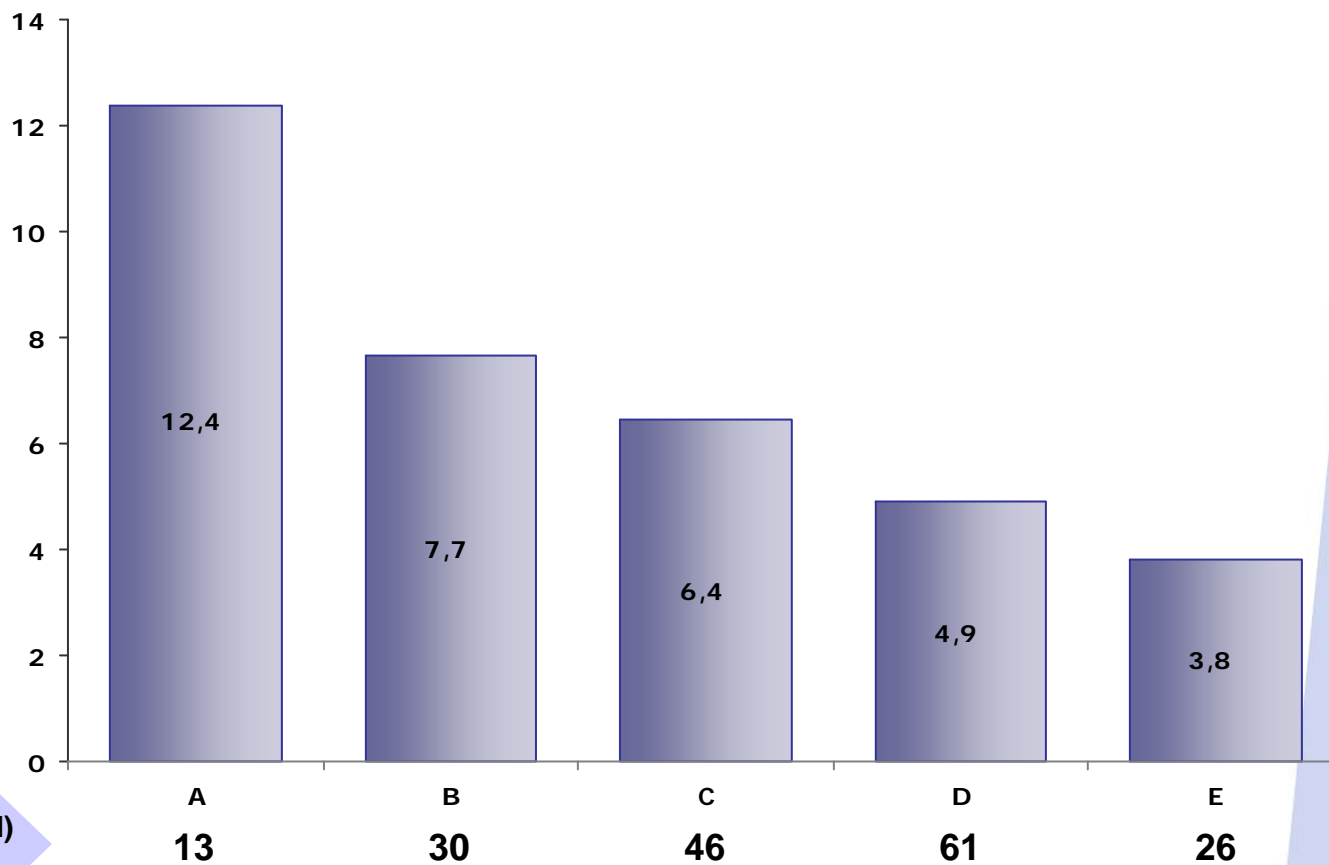
The Sector's Agenda



Lower-income social strata with restricted access to medication

EUR per capita
per month)

Total Market



Total Population I (M)
 $\Sigma = 177M$

The Sector's Agenda



Access to medication

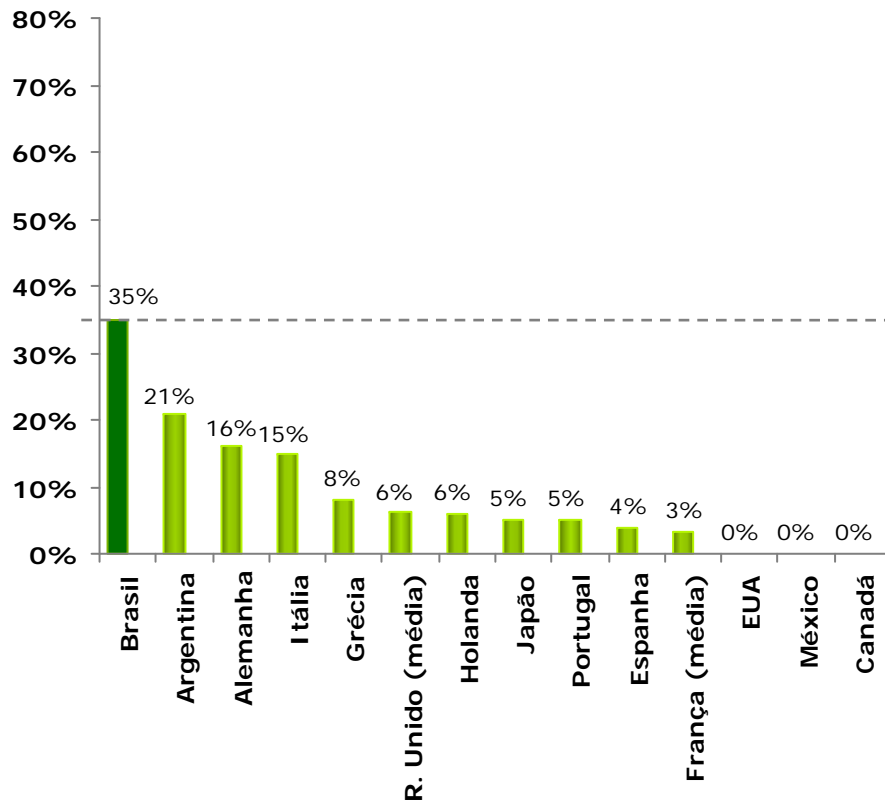


Government Expenditure

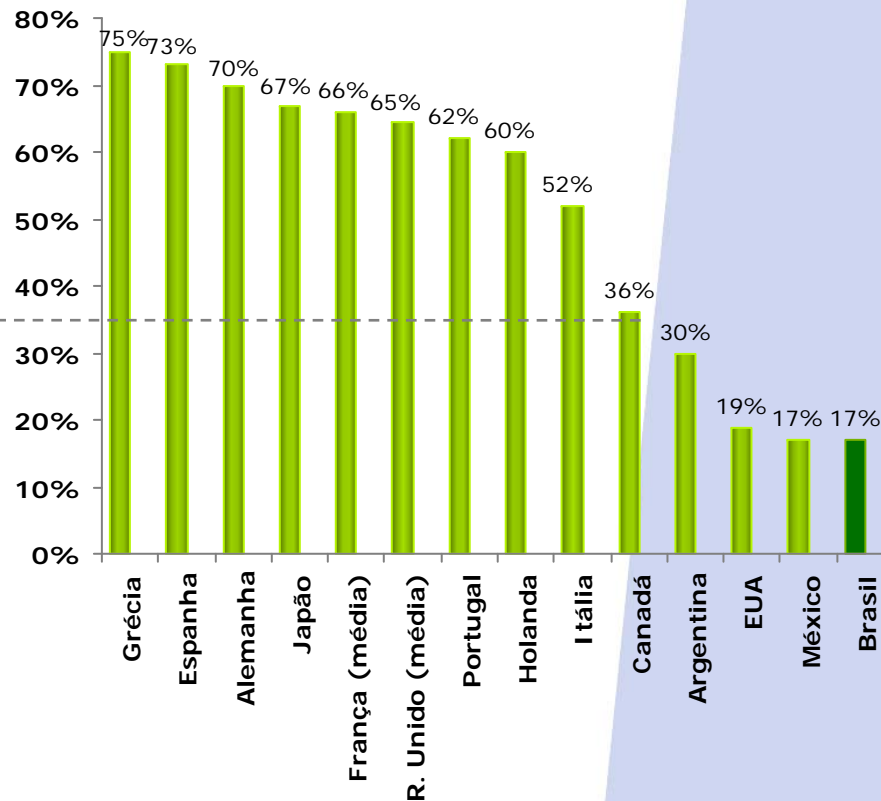
Among the reference countries, Brazil is the only one that spends less with medication than its taxation income.

Brazil is the only country that spends less with medication than its taxation income from medication

Income from taxation on medication

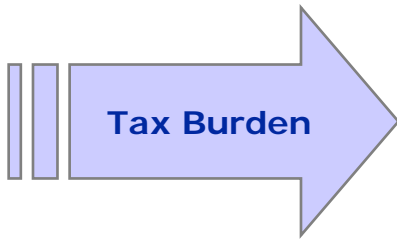


Expenditure with medication (% of total market)



Note: For Germany and Italy it was considered the total taxation income from pharmaceutical sales, including government expenditure. For the remaining countries, it was used the same taxes as in medication. In cases where there are different tariffs (France, for instance: 5.4% for non-reimbursed drugs and 2.1% for reimbursed ones; UK, 7.5% for non-reimbursed drugs, 0% for reimbursed drugs; and Sweden: 25% for non-reimbursed drugs and 0% for reimbursed ones, it was used an average of the tax amounts.

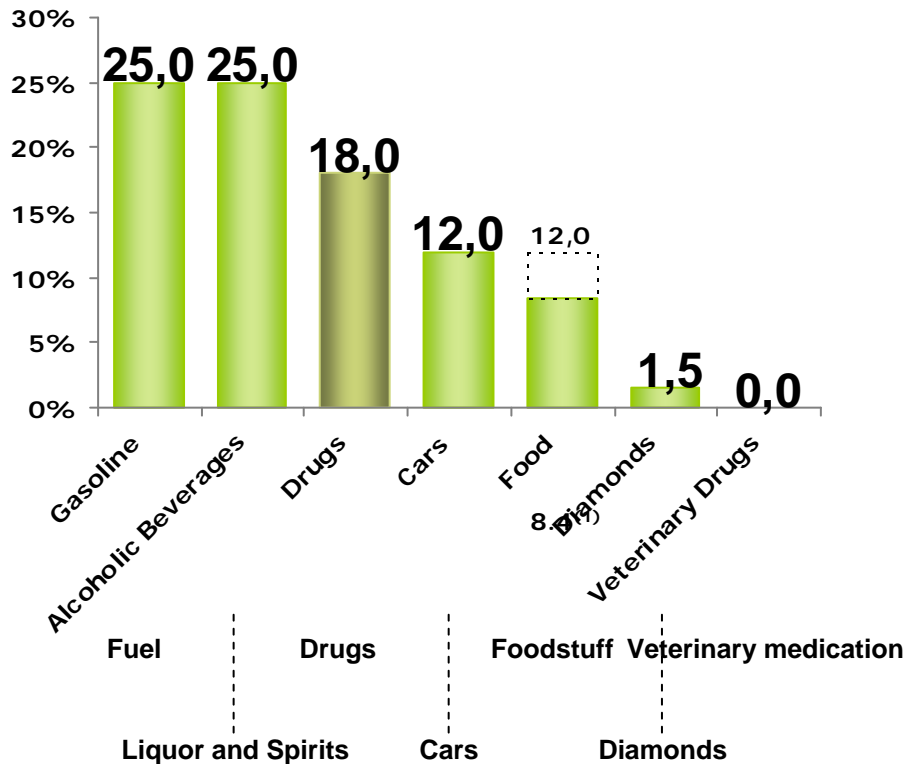
The Sector's Agenda



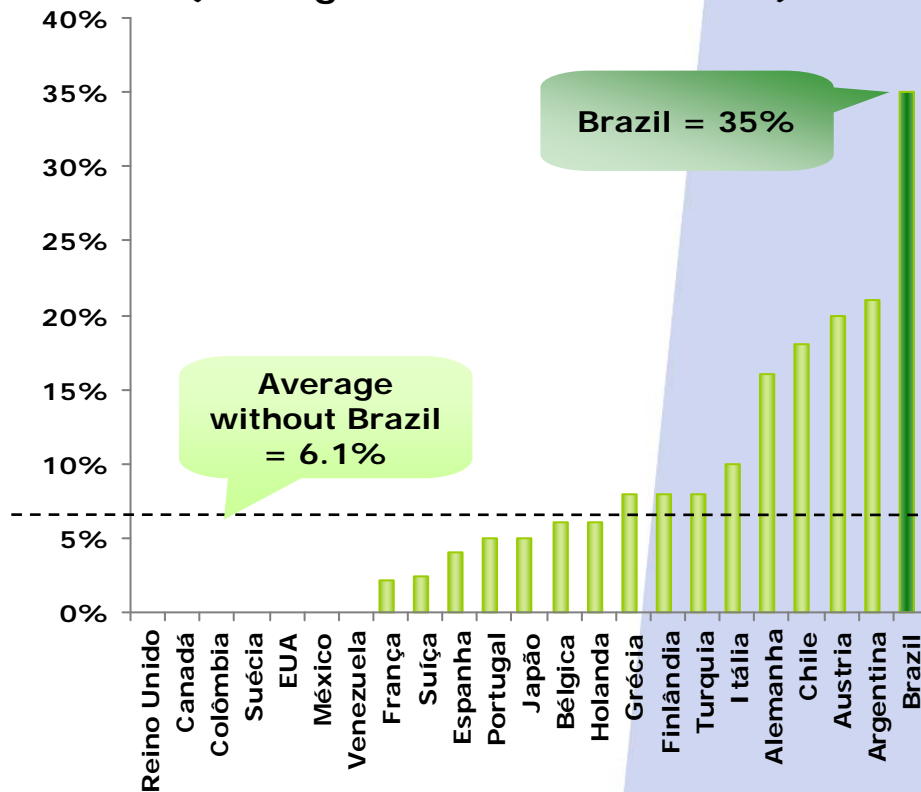
Brazil has the highest tax burden among reference countries.

Taxes levied on medication in Brazil are far beyond other reference countries

ICMS Tax on some products in the state of São Paulo



Taxes on medication in some countries (Average tax burden for Brazil)



Three possible alternatives:

- ICMS exemption with transfer to consumers
- Single ICMS tax rate throughout the country
- Tax collection at the beginning of the chain

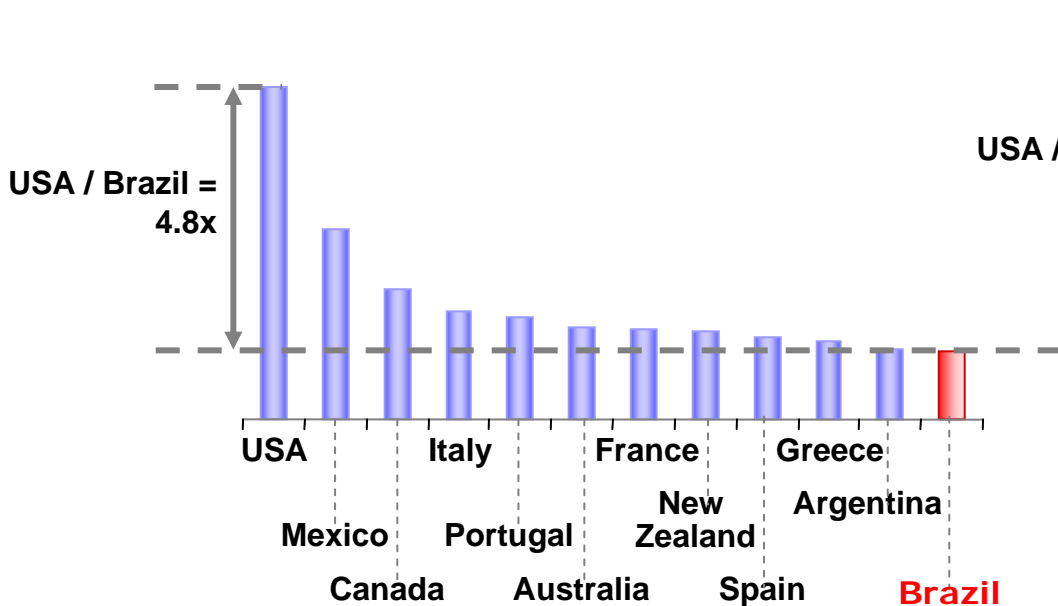
(1) Average



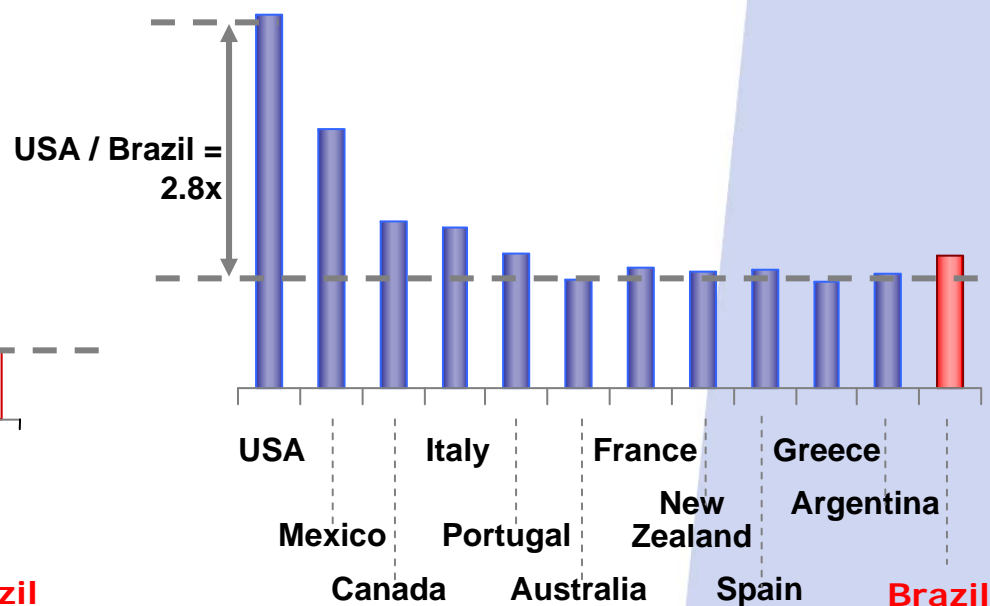
Brazil manufactures medication at low-cost, by this efficiency is not transferred to consumers



Manufacturer's price



Retail prices



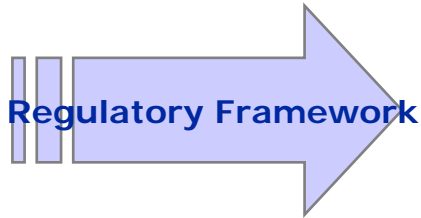
Note: Medication: Effexor, Prozac, Zoloft, Generic Fluoxetin, Lexotan, Rivotril, Celebra, Vioxx, Voltaren, Amoxicillin, Viagra, Cialis, Lipitor, AdalateNorvasc; prices as per exchange rate in June 2004



The Sector's Agenda



Definition of clear rules and regulations for the economic-sanitary regulatory framework; compliance with intellectual property and its agile enforcement. Industrial policies.



Research-related regulatory issues: Conep, Inpi, Anvisa.

Definition of price readjustment.

Rules for launching new products.

Medication registration: Uniformity of criteria, terms and tax rates.

Patent analysis and awarding: Anvisa's agreement, terms and data protection.

Transfer prices: Alignment with international rules (OECD).

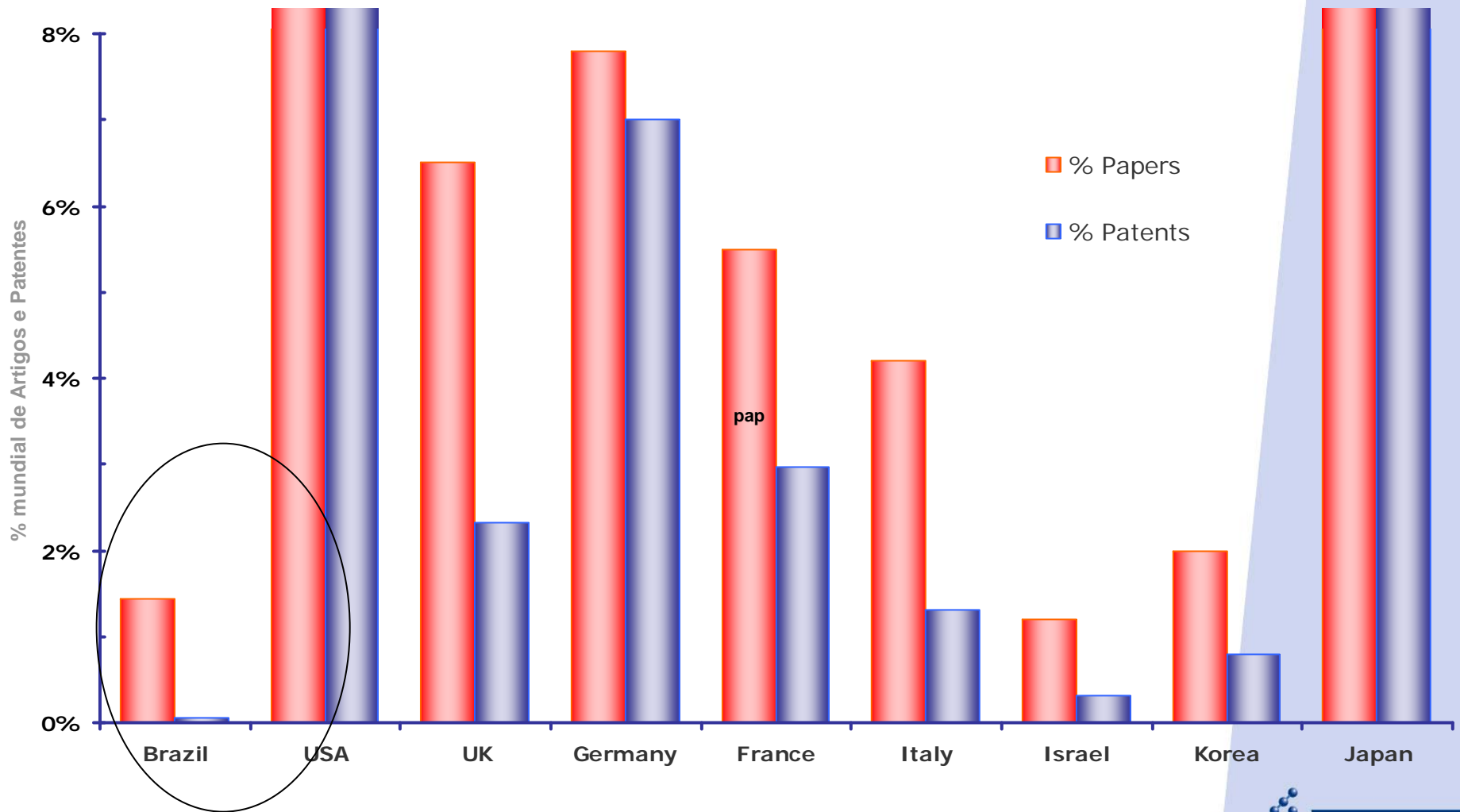
10 Largest Universities (Per number of PhDs)

Doctoral Papers Presented

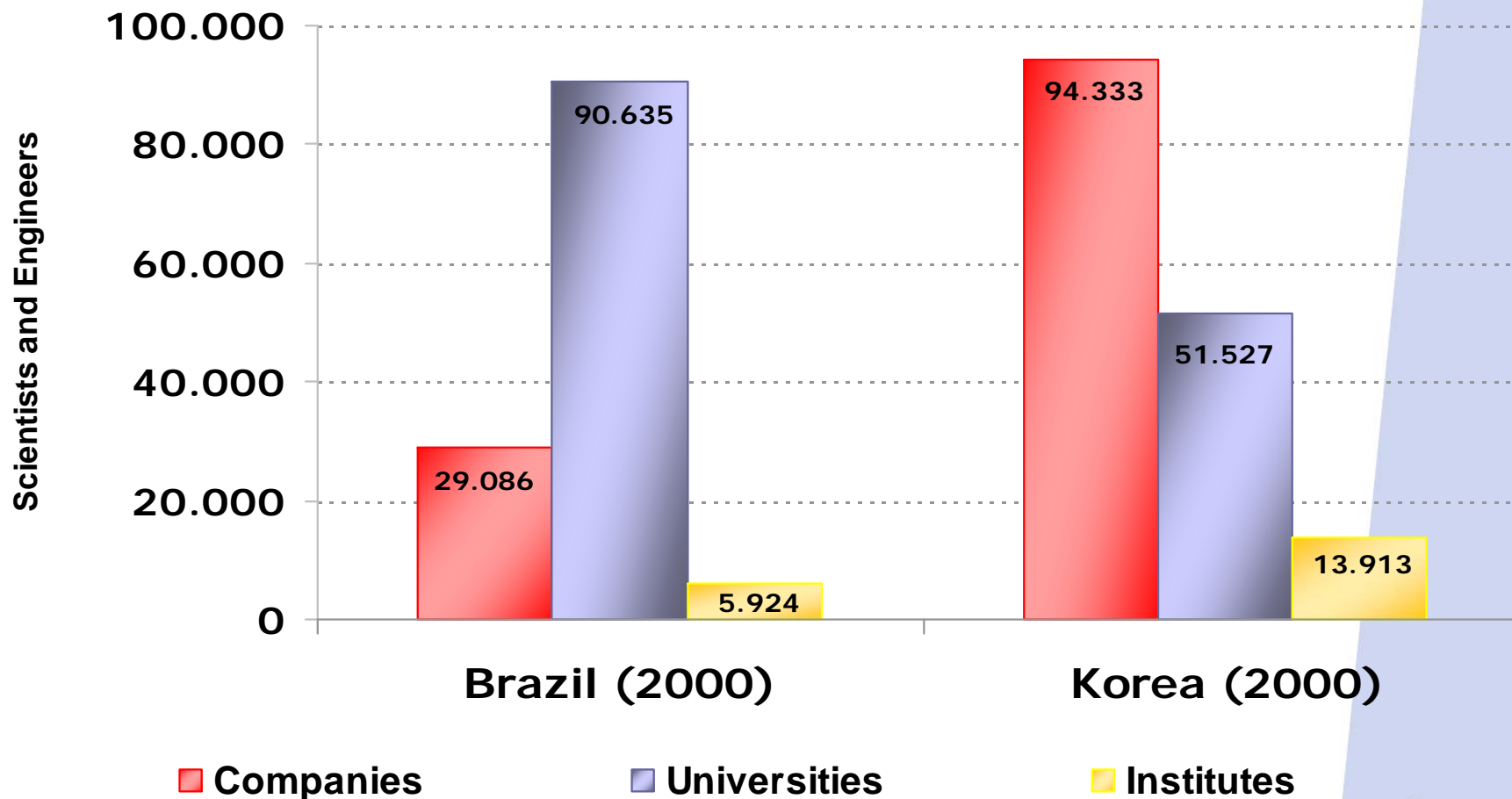
1.	Universidade de São Paulo - USP	2,180
2.	Universidade da Califórnia, Berkeley	767
3.	Universidade de Campinas – UNICAMP	747
4.	Universidade New Southeastern	675
5.	Universidade do Texas, Austin	674
6.	Universidade do Estado de São Paulo - UNESP	663
7.	Universidade do Wisconsin, Madison	653
8.	Universidade Federal do Rio de Janeiro - UFRJ	643
9.	Universidade do Illinois, Urbana Campus	618
10.	Universidade de Michigan	615

Adapted from Brito Cruz, 2005

Scientific Papers and Patents



Brazil and Korea: Scientists and Engineers



Source: Br 1996: Anpei, INEP; Br 2000: MCT, Inep; Korea: <http://www.most.go.kr/>

Research in Phytotherapy

- 20 big and medium sized companies produce phytotherapeutic medicines (Under ANVISA standards edict - RDC 48 and attachments);
- Gross sales US\$ 550 mi;
- Estimated US\$ 1 bi in 2010.

Amazon:

20% of all sweet water in the planet

35% of vegetables superior species

There are 220 thousand new living organisms already catalogued in the country.

Why do we have such good scientific production and so few patents/products ?

- Lack of investments
- Gap between University and Industry
- Lack of articulated structure
- Lack of political decision-making
- Lack of legal assurance

The Sector's Agenda



Definition of clear rules and regulations for the economic-sanitary regulatory framework; compliance with intellectual property and its agile enforcement. Industrial policies.

The Sector's Agenda



Regulation of the Economy

Flexibility in price control, mainly in most competitive, non discretionary items (non essential to health).

Cooperation mechanism between industry and Government to increase the population access to medication.



Price Access and Control Initiatives

Price Control is not the ideal mechanism to discipline the market and control disbursements.

It is inefficient to expand access.

Other government initiatives have proven ineffective to expand access.

Topic:

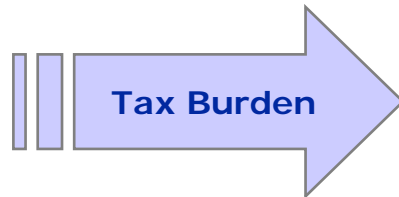
Main Challenges:



Optimization of Government budget earmarked for medication; partnerships with the private sector.



Definition of clear rules and regulations for the economic-sanitary regulatory framework; compliance with intellectual property and its agile enforcement. Industrial policies.



Cutting taxes down and transferring savings to consumers.
Single ICMS tax rate applicable all over the country.
Taxation reform.



Flexibility in price control, mainly in most competitive, non discretionary items (non essential to health).
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