

MARKET SURVEY

# PHARMACEUTICAL INDUSTRY



Caracas, May, 2016  
Bolivarian Republic of Venezuela



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Survey by **AL&C** Consulting Group  
for the Embassy of India in Caracas- Venezuela

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# PART I

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## PROFILE OF THE BOLIVARIAN REPUBLIC OF VENEZUELA

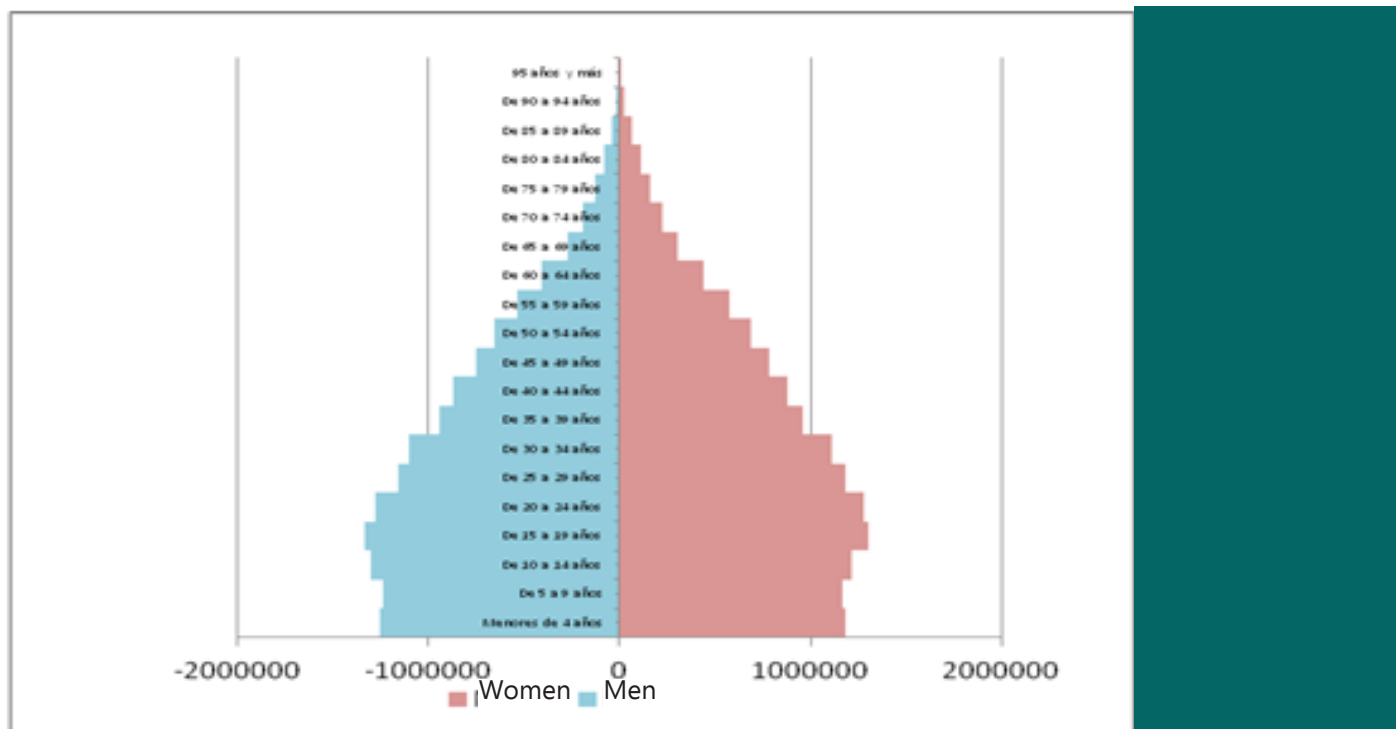
# Bolivarian Republic of Venezuela

Country profile	Bolivarian Republic of Venezuela
Official language	Spanish
Population (2016)	30,851,343 inhabitants
Form of Government	Federal Presidential Republic
Head of State	President, Nicolás Maduro Moros
GDP Per cápita (2016)	12.820 US\$.
Foreign Direct Investment (FDI) (% of GDP) (2015)	1.6% (UN)
Gross Fixed Capital Formation (% GDP) (2015)	20,3%
Public expenditure on education (2015)	6,9% of GDP
Public expenditure on health (2015)	3,4% of GDP
Currency	The official currency is the Bolívar (VEF), with a system of foreign exchange control which has two rates: DIPRO (type: protected change) for essential products 10 Bs/\$ and DICOM (type: complementary change) for all transactions not contained in DIPRO. The floating rate is controlled by the BCV and starts at 206.92 Bs/\$1

## Demography

### Venezuelan population pyramid

Venezuelan population pyramid shows that the bulk of the Venezuelan population is between the ages of 10-24 years old, which results in a young population with aspirations to enter the labor market, after an average of 8.9 years of studies, representing an educated population that almost finish high school and that can become labor for any growing industry or development, also the Venezuelan population has a life expectancy at birth of 74.2 years .



Life expectancy at birth

74.2 years

HDI (ajusted for inequality)

0.612 (UN)

Population density (2015)

33.34 inhabitants per Km2

Mortality at birth

110 (deaths per 100,000 live births) (2015)

Expected years of schooling

14.2 years

Average years of schooling

8.9 years



## Geography

### Location:

Venezuela is a country located at the most northern point of South America, with coasts on the Caribbean Sea and the Atlantic Ocean. It has a land area of 916,445 km<sup>2</sup>. Its borders are: Brazil and Guyana to the East, Colombia and Brazil to the South, Colombia to the West, and the Caribbean Sea and the Atlantic Ocean to the North. Because of its location, Venezuela enjoys a tropical climate with two seasons a rainy one and drought one, with temperatures ranging between 28 ° C.

Venezuela has four well defined regions:

**1.- Central-coastal Region:** Where the capital city, Caracas, is located. It is a region con-

sisting of coasts and is the seat of major cities that have international ports and industrial cities.

**2.- Andes Region:** Formed by Táchira, Mérida and Trujillo states; defined as the country's mountainous zone with agricultural settlements with banana, potatoes and coffee plantations.

**3.- Los Llanos Region (Plain region):** Consisting of plains and rivers and formed by Guárico, Apure, Barinas and Portuguesa states, it is the fertile land of the country for agricultural industry.

**4.- Guyanese massif:** In geological terms, it is the oldest part of the country, consists of large plateaus, and is the region with the largest mineral reserves.



### Attractiveness

There are regulations affecting business efficiency in the country, such as exchange control, which puts the country in the position 182 in the world ranking. In terms of labor freedoms, Venezuela occupies position 181 in the world ranking and in the post 169 worldwide about freedom of business .

Doing Business 2016 classification puts the Venezuelan economy at No. 186 among 189 eco-

nomies, taking into account aspects such as: operational aspects regarding the opening of a business, dealing with construction permits, getting electricity, registering property, obtaining credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency.

Venezuelan market is constituted by 30 million inhabitants, is the fifth largest GDP in Latin America, owns the largest proven reserves of crude oil in the world. Regarding to gas reserves, Venezuela possesses the eighth worldwide. Never-

theless, there is need for renewal the national infrastructure (roads, rails, ports), industries and machinery.

## Happiness Index

In addition to the basic economic indices it is important to know how does work the subjective well-being of the population of a country and evaluates the human being's ultimate goal: happiness. Because economic policies should enhance the usefulness of the population defined as the amount of pleasure, satisfaction or happiness of individuals ; to carry out the survey, people's opinion is asked by a series of questions. In this survey, Venezuelan people perceived themselves as a people with high levels of happiness. Venezuela in ranked in the 44th place, above El Salvador, Ecuador and Japan, but below countries such as France, UK, Colombia, Germany, Chile, Uruguay, among others .

## Profitability

According to ECLAC, FDI decreased in 2014 by 80%, from 2,680 million dollar to 320 million dollar. In previous years had happened the opposite, because of the difficulty of repatriation of capital due to exchange controls, foreign companies tried to reinvest in the country in real estate sector. However, it is possible that because of the economic contraction in 2014, foreign companies have decided to back their investment because of reduced profits .

## Marketing Channels

In Venezuela there are six commercial ports, whose customs are authorized to import, export and transit, as well as to provide services of transshipment, cabotage and postal packages :

**1.- Port of Puerto Cabello:** It is Venezuela's main port, located in Carabobo state. It is the sixth largest port in Latin America and the Caribbean. In terms of capacity, has a total regional foreland of 75%: to United States and Canada (20%), the Caribbean (17%), Colombia and Trinidad (15 %), South America East Coast (10%), Central America (8%) and South America West Coast (3%); to other ports in Venezuela, this port foreland is 15% and to the rest of the world 10%.

**2.- Port of La Guaira:** An artificial port located in Vargas state. It has a total of 26 docks, some of them are not operational, and its maximum depth of water is of 9,7 m.

**3.- Port of Guanta:** Located in Anzoátegui state, has 6 docks, and a maximum depth of water of 10,5 m.

**4.- Port of Maracaibo:** Located in Zulia state, has 12 docks, 8 of them remain operational and have a maximum depth of water of 10,97 m.

**5.- Port of Sucre-Cumaná:** Located in Sucre state, has two floating docks for general cargo and vehicles, its maximum depth of water is of 10,4 m.

**6.- Port of Guaranao:** Located in Falcón state. Currently, this port is operating only for refinery and industrial zone products import.

## Regional agreements and trade blocs

- **ALADI (Latin American Integration Association):** Signed by Argentina, Brazil, Bolivia, Colombia, Chile, Cuba, Ecuador, Uruguay, Mexico, Panama, Paraguay, Peru and Venezuela, in which Venezuela signed a Regional Tariff Preference agreement, which decreases the proportion of ad-valorem duties stipulated to the tariff schedule.

- **MERCOSUR (Southern Common Market):** Signed by Argentina, Brazil, Uruguay, Paraguay and Venezuela, where the total elimination of taxes is agreed through the signing of three agreements: "Treaty of Asuncion", "Protocol of Ouro Prieto" and "Olivos Protocol for the settlement of MERCOSUR disputes".

- **ALBA-TCP (Bolivarian Alliance for the Peoples of America- Treaty of the Peoples):** Signed by Venezuela, Cuba, Bolivia, Antigua and Barbuda, Dominica, Ecuador, Granada, Nicaragua, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and as observers: Haiti, Iran and Syria. It is based on the use of hedge funds to reduce socioeconomic differences among its member countries.

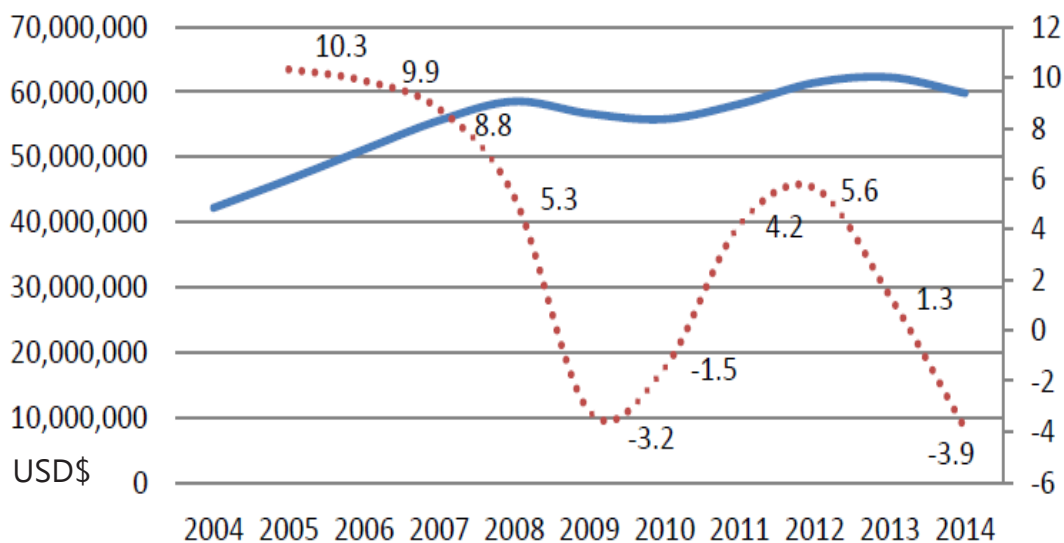
# Economic situation in Venezuela

According to the data submitted by the Venezuelan National Bank (or Banco Central de Venezuela - BCV), Venezuelan economy shows very unstable levels of economic growth, with high rates (8% and 10%) in 2005 and 2007, while a sharp drop occurred in 2010, 2014 and 2015, with levels around -4%. (Chart 1.1)

Despite being an oil economy, the contribution of the oil sector in the country's economy is decreasing, representing only 11% of the Gross Do-

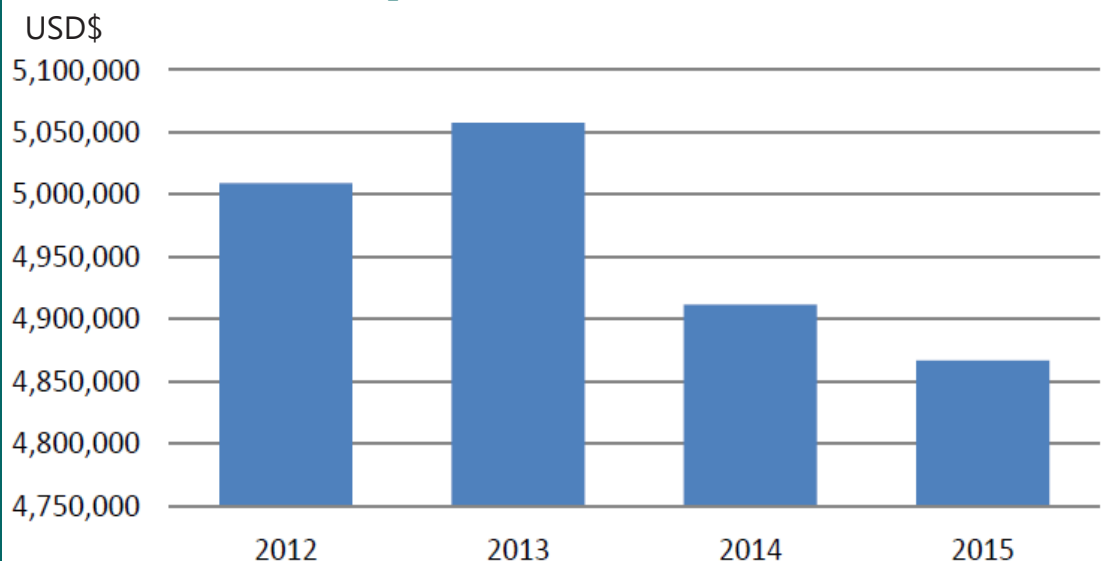
mestic Product (GDP), which is a worrying situation because this is the only productive sector participating in international trade, and which contributes 98% of income in foreign currency. (Chart 1.2)

**Chart 1.1**  
**GDP: Constant Prices (USD\$), 2004-2014**



Venezuelan economy shows very unstable levels of economic growth, with high rates in 2005 and 2007, while a sharp drop occurred in 2010, 2014 and 2015, with levels around -4%.

**Chart 1.2**  
**Oil sector production, USD, 2012-2015**

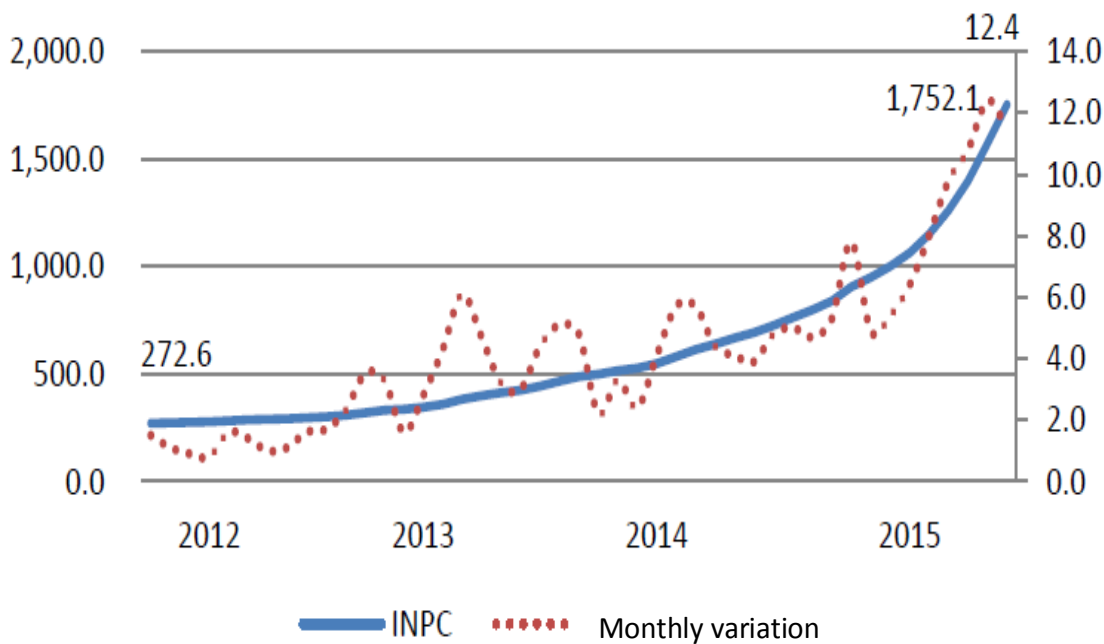


Despite being an oil economy, the contribution of the oil sector is becoming less to the national productive apparatus, representing only 11% of the Gross Domestic Product

The variation of prices is changing exponentially: prices are six times higher in the period between 2012 and 2015. Inflation in 2015 was 200%. In 2016, inflation rate is projected 600%. A month-on-month variation of 10% will represent an annual inflation rate of 313%. (Chart 1.3)

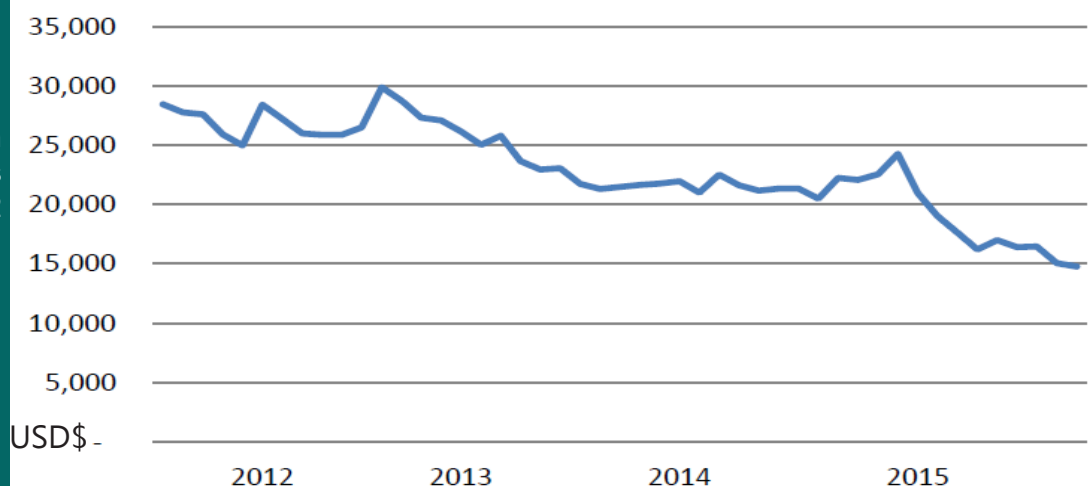
In the same period, international reserves have fallen to less than half, reaching levels as low as those of 12 years ago. This creates a strong pressure on their external balances. (Chart 1.4)

Chart 1.3  
Price index, 2012-2015.  
2007=100



The variation of prices is changing exponentially: prices are six times higher in the period between 2012 and 2015.

Chart 1.4  
International Reserves USD, 2012-2015



International reserves have fallen to less than half, reaching levels as low as those of 12 years ago

The growth of external debt adds to the drop in international reserves, makes that the current coverage be less than 10%. That means the amount of the international reserves only pays 10% of the total external debt. By beginning of 2016, the country already had a trade deficit of 24 billion dollars. (Chart 1.5)

Venezuelan external debt is divided in two sectors: government owes 83%, and private sector owes the remaining 17%. At the same time, this is related to 25% of short term debts (less than

a year) and 75% of long term debts. Public and private commercial credits represent 19% of the external debt, while most are concentrated in bonds and other forms of loans.

As to the position of the reserve assets, Venezuela has decided to concentrate 70% in monetary gold, and this assets has had the same behavior as of international reserves. It has fallen almost by half: from twenty-one billion in 2011 to eleven and a half billion in 2015. Although public operations regarding monetary gold have not been made. The fall is evident in the Venezuelan

Chart 1.5

Relation between external debt and International Reserves, 2012-2015

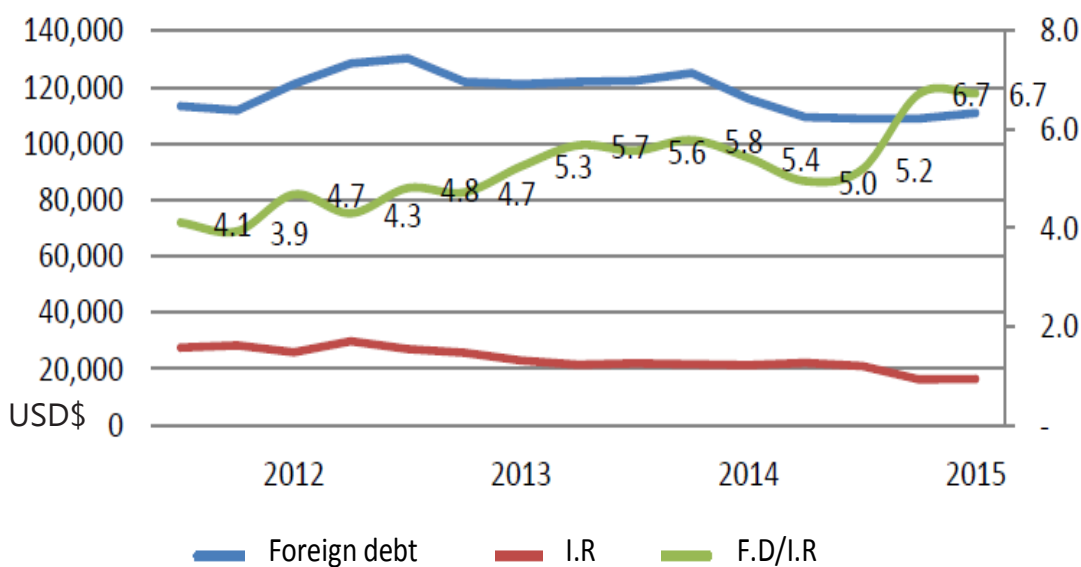
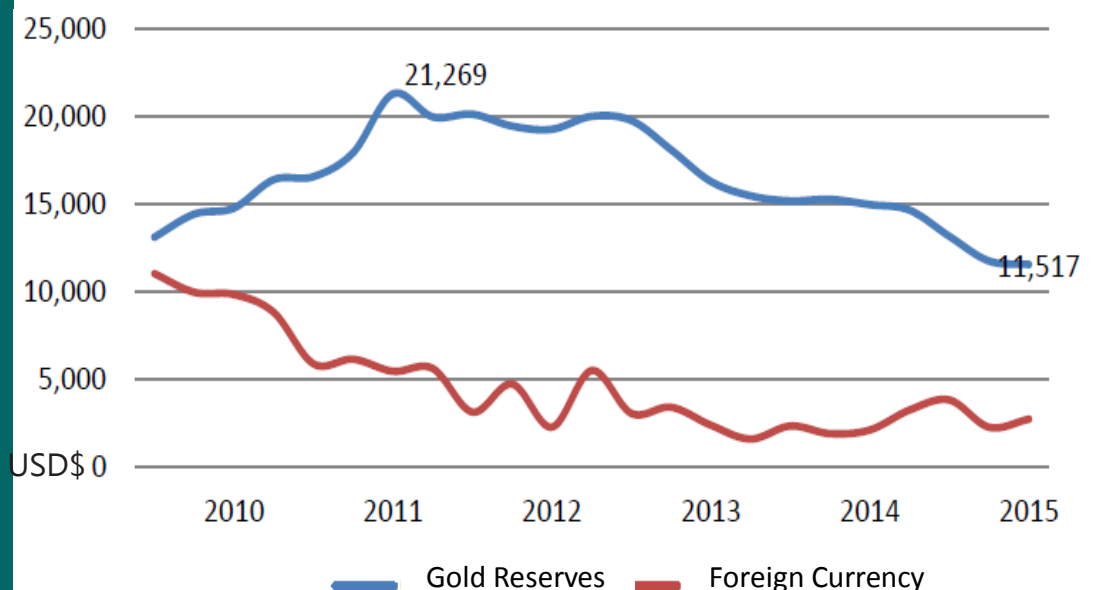


Chart 1.6

Reserve assets (gold and foreign currency), 2010-2015





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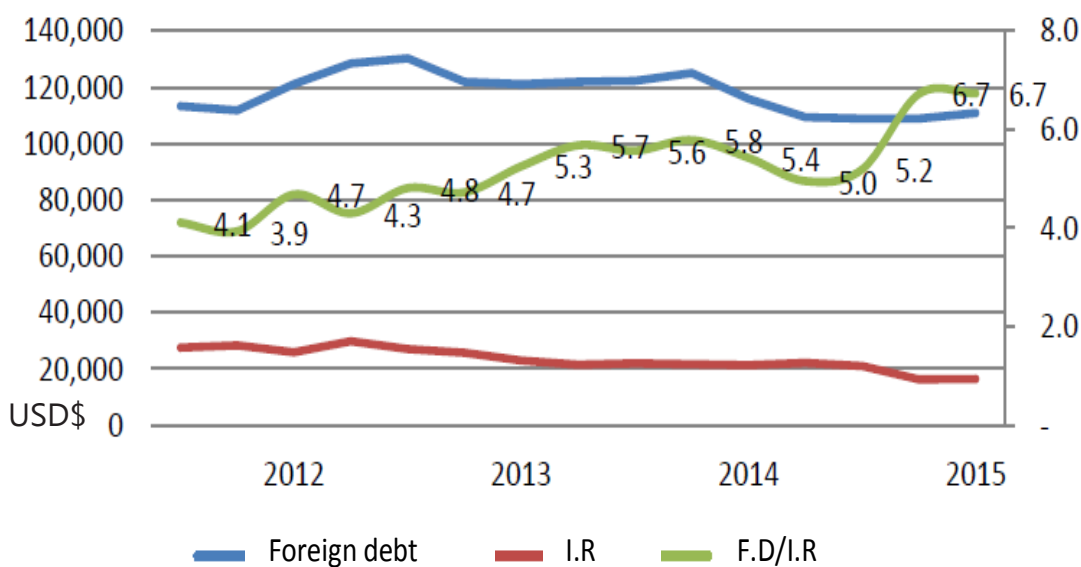
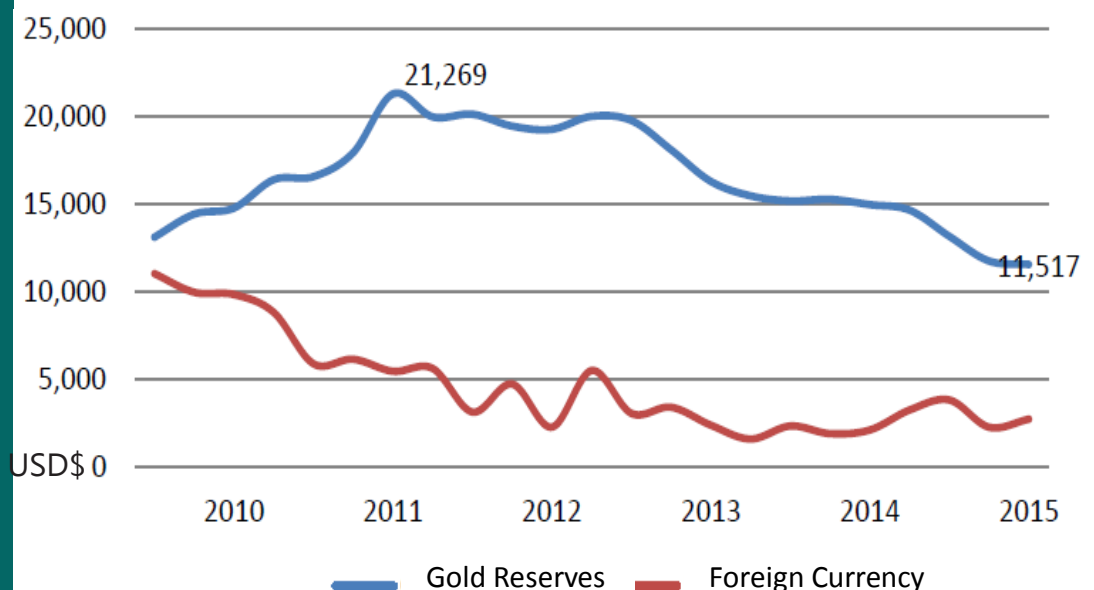


Chart 1.6

Reserve assets (gold and foreign currency), 2010-2015





## PART II

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### PHARMACEUTICAL INDUSTRY IN THE BOLIVARIAN REPUBLIC OF VENEZUELA

# Pharmaceutical market in Venezuela

According to CAVEME (Cámara Venezolana de Medicamentos or Venezuelan Chamber of Medicines), Mexico, Brazil, Venezuela, Argentina and Colombia have the biggest pharmaceutical markets in Latin America, representing 3,778 million of units related to 446 million of people.

Particularly, Venezuela is a country with a high dependence of its pharmaceutical sector on imports of raw material, intermediate goods and finished products. The total supply of medicines is represented by 45% of imported products and 55% by local assembly. The current estimated value of the Venezuelan pharmaceutical market in May 2015 (12 months) was 11.7 US billion dollars. (See Annex A)

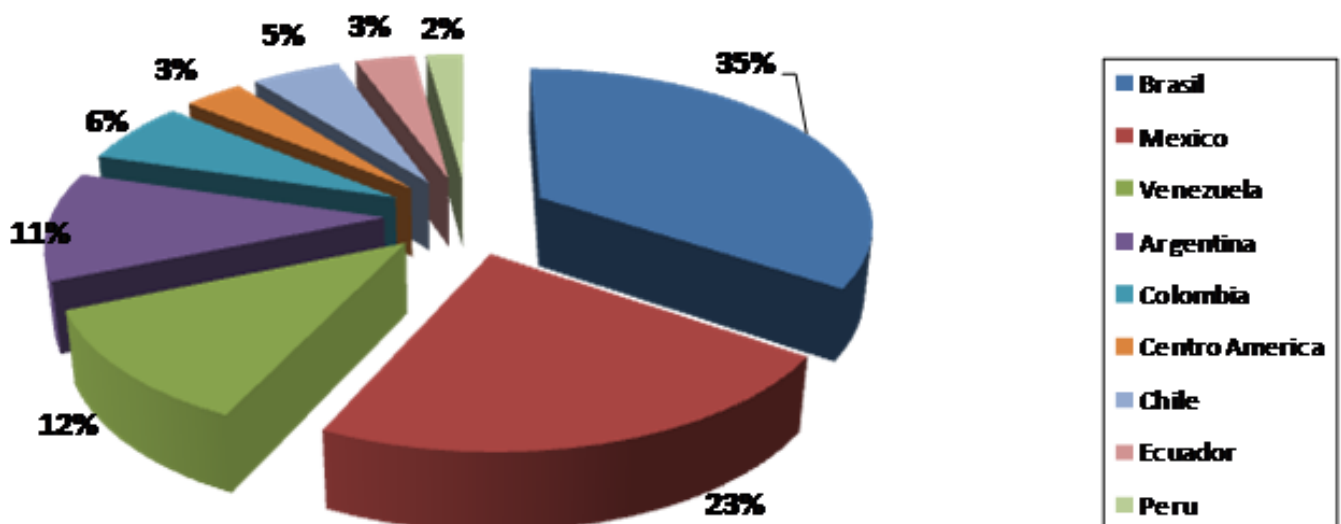
Venezuelan pharmaceutical market has an increasing demand, due to political, social and economic factors. Natural factors are present because the ageing of the population, tighter controls by state institutions, increasing prices because of inflation and a greater coverage of the population according to public policies. Regarding social and political factors, National Government authorities owed the pharmaceutical sector between 3.5 and 4 billion dollars, according to industry estimates. In consequence, the default disrupts the supply of products in the domestic market. The debt is focused among the companies of the three most important pharmaceutical

national associations of the industry: Venezuelan Chamber of Medicines (CAVEME), Chamber of Pharmaceutical Industry (CIFAR) and the National Chamber of Generic Drugs and Allied Workers (Canamega).

Foreign exchange allocation to industry and the high percentage of devaluation that currently exist, among other factors, are the main challenges facing the pharmaceutical industry in the country.

Current considerations indicate that the pharmaceutical sector of Venezuela has the capacity to produce 70% of needed drugs in order to meet the domestic market demand. However, one aspect that hinders the increase in productivity in the sector, is that prices of essential drugs have not changed in the last 14 years, thus generating a stagnant sector.

In this sense, the socio-demographic change favours chronic therapies and quality of life, as the increase in units is now the main factor of growth as a result they have not increased the prices of drugs in a long time therefore there is a low penetration of generic products so that growth is given by higher value products, and this is still a market for mature products, where innovation is valued and channel national pharmacies is growing faster than the rest from the market.



## PART III

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### PHARMACEUTICAL ACTIVITIES SECTOR IN VENEZUELA

# Dynamic of the pharmaceutical market in Venezuela

Venezuela has a potential market for drug sales, driven by its social security system, with absorption capacity of expensive biotech drugs and to produce at lower labor costs, and then export products to the Southern Common Market (MERCOSUR).

Venezuelan political and social system has increased health expenditure to sustain subsidized medicines for the elderly, patients with HIV, social works, provisions for public hospitals, unlike budget cuts adopted in Europe, which generated losses of profitability for the pharmaceutical industry.

Thus, despite the social and political situation in Venezuela, this market represents a niche market for expansion plans in distribution, rather than local manufacturing or research and development.

## Venezuelan market trends

- Local laboratories capitalized growth by focusing on branded and generic products.
- Chronic therapies in Venezuela have been increasing their presence over the past 10 years, because the stimulus is given by the cardio-metabolic, gastrointestinal and respiratory diseases.
- The Venezuelan pharmaceutical market shows an annual compound growth of 32% in bolivars, while in units trend remains upward with an annual compound growth of 7%.
- New products show the highest growth rate followed by renewed.
- Andes, Oriente and Zulia / Falcón regions show the highest growth in the market.
- In a scenario of control prices, market growth will be around 23-24% annually.

## Venezuelan pharmaceutical market conjuncture: year 2016

### I. Alarming shortage of medicines, reagents and supplies

During 2013 and 2014, there were alarming levels of shortages, reporting failures from 37% to 50%. This situation has not improved in 2016.

The shortage has affected 1,200 drugs, whose prices were regulated since 2003 to treat infectious diseases, hypertension, diabetes, thyroid, psychotropic substances and cancer drugs. Also disappeared high-cost medications provided by the Venezuelan Institute of Social Security (IVSS) and the Ministry of Popular Power for Health (MPPS) for people with chronic conditions and health problems as oncologic, hematologic, and heart diseases; hypertension, diabetes and HIV.

### II. Deterioration of essential programs and services

In recent years, vaccinations were reduced nationwide, while maternal and infant mortality have increased; diseases by parasites and vectors have spread. On several occasions, was suspended the supply of treatments and interventions for people with chronic conditions and decreased the poor availability of means for early diagnosis.

### III. Poor medical assistance for population in remote areas

There are many serious problems to provide medical care to people in remote areas. Some states have extreme difficulties in providing food and medical supplies, air transportation services and river ambulances, as well as availability of medical centers. The few existing centers provide poor quality care and face a lack of medical and surgical equipment and drugs.

### IV. High dependence on imports

84% of medicines and supplies are imported, because no progress has been made in strengthening domestic production. Current policies have increased dependence on imports and, due to the shortage of foreign exchange, in recent years the Ministry of Popular Power for Health (MPPS) has been increasing the use of international agreements to supply medical services, medicines, supplies, materials, vaccines, reagents and equipment. The need to increase local production of medicines has been repeatedly highlighted by the Executive.

## Legal aspects of the pharmaceutical sector in Venezuela

In Venezuela, the right to health reached more progressive and coverage thank to National Constitution of year 1999, becoming a fundamental right for all persons, under the same rules governing the right to life and personal integrity, guaranteed by the State in a universal, free, fair and comprehensive way.

To guarantee the right to health, the Constitution of the Bolivarian Republic of Venezuela (1999) gives the State the duty to:

- a) create and exercise stewardship of a national public health system, which comes from the integration of all public health services, in addition to social security services;
- b) manage the system across sectors and in a decentralized and participatory manner;
- c) give priority to health promotion and disease prevention;
- d) ensure prompt treatment and quality rehabilitation;
- e) ensure health budget that allows compliance with the objectives of health policy;
- f) promote and develop a national policy for training professionals and technicians, in coordination with universities and research centers, as well as push the national industry for the production of supplies for health.

Currently, Venezuela has the Medicines Act (Official Gazette No. 37.006 dated August 3rd, 2000), which regulates all actions aimed to provide medicines to the entire population of Venezuela, and including particularly, the local production of medicines. This law aims to ensure the supply of essential and generic drugs in health facilities accross national territory.

The Medicines Act, considers drugs in generic name, those that correspond to the International Nonproprietary Name (INN) of the active drug that comprise them; that have the same pharmaceutical form and a formulation or composition equivalent in active principle, with the same or similar action or therapeutic efficacy in similar conditions.

Nationally, generic drugs should have a lower cost than the brand name drug. The public sector bodies must acquire generic name drugs un-

less there are none available in the market.

An important aspect to consider, is that the Act states that the National Executive shall ensure the production of essential drugs in generic name, either through the laboratories installed in the country, or by agreements signed between individuals and the State or international agreements which State's policies have been made, sustained on the premises of social equity and quality.

Likewise, this Act stresses that could be exported pharmaceuticals products from laboratories and houses of representation that meet the legal requirements in the terms of the national legislation.

This Act stands out the production of essential drugs for the treatment of major diseases registered in the country, identified by the authorities in charge. In the same way, the policy focuses on generic drugs whose associated costs are significantly lower than those of drugs called brand name. It is highlighted the importance given by the Act to manufacture these drugs in the local market.

## National government strategy in 2016

One sector of great interest to the national government is called "pharmaceutical engine," which is referred to in the Economic Agenda of the government of Venezuela, which through investment and the creation of alliances, will be a key element to satisfy the needs of the population. The aim of that "pharmaceutical engine" is to boost the pharmaceutical sector in the country, through strategic partnerships to increase local production of medicines, implementing a plan of investment for the sector, ranging from the strengthening of national production to the criteria for additional purchases.

Currently, National Government is working on the initial stage, consisting of the registration of a drug stores net (public and private), in order to determine productive capacity and which are those medicines that can be manufactured in the country.

One of the alliances being established by the

Government, was with Dr. Reddy's, an Indian company, which is providing drugs, but having in mind the real goal to produce from and in the country.

This agreement adds to other international agreements on health, already established with other nations like Brazil, Nicaragua and Cuba to increase the production of drugs, as well as, to ensure the arrival and distribution of medicines in the country.

Nationally, companies Genéricos de Venezuela (GenVen) and Laboratorios Leti, have joined to the proposal made by the Executive.

The current strategy of the Executive states that the pharmaceutical engine should also aim at creating an export route for drugs, which allows to the country to obtain its own currencies to expand its production capacity.

In addition, the Venezuelan State has a plant named Autonomous Service of Pharmaceutical Products (SEFAR), a company with the rank of Sector Office attached to the Office of the Minister of Popular Power for Health, created in 1993. At that time, the Executive offered to Alba Mem-

bers access to syrups, antibiotics and ARVs for free, and Venezuela will cover 65% of imports of drugs for the treatment of out patients.

## SEFAR responsibilities are:

- Produce medicines for sale at below market prices.
- Manage the purchase and sale of semi-finished or finished medicines, or any other supply required for the provision of health services.
- Supply drugs to government agencies that require them.
- Plan, organize, coordinate and control the production of essential drugs.
- Coordinate with national or international agencies, public or private, linked to the processes of production and marketing of medicines, all matters relating to the production techniques and analysis, as well as conducting operations trade with those institutions or organizations.
- Promote awareness campaigns of the benefits of the consumption of essential drugs.
- Consolidate human, technical and financial resources to enable the operation of the SEFAR.

## SEFAR production by type of generic drugs. Production by type of generic drugs

Produced medicines	Amount (units)
Oral saline solution	1,553,081
Carbamazepine (200mg/tab)	501,200
Chloroquine diphosphate 250mg/tab	142,800
Acetaminophen 500 mg/tab	4,858,580
Alpha methyldopa 500mg/cap.	455,600
Isoniazid 100mg/tab	154,840
Isoniazid 300mg/tab	369,600



- Administer and manage the equipment and resources allocated to it and produced by it, in fulfilling its objectives.
- Run social programs linked with the aims of the SEFAR.
- Carry out any other activities requested by laws, regulations and other provisions issued by the National Executive.

Institutional projection for fiscal execution in 2015 was based in a project: "Production and distribution of essential drugs and other supplies to satisfy health needs of the Venezuelan population". To this end, there was design a schedule to produce 20,550.000 generic drugs, whose availability is now limited in the domestic market; as well as to strength the system of distribution of medicines, medical supplies and surgical equipment to achieve effectively the provision of the National Public System Health.

## Management obstacles.

- Lack of raw materials for drugs manufacturing, due to the supplier company had delays in acquiring foreign exchange for import.
- Failures in some machinery and equipment due to lack of preventive and corrective maintenance, because their parts and supplies are imported or belong to old equipment, which hinders their acquisition.
- Some machinery and equipments of the production line, have fulfilled its useful life and now is required to replaced them.



## PART V

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### OPPORTUNITIES FOR INDIAN COMPANIES IN PHARMACY INDUSTRY OF VENEZUELA

# Possible areas of investment for India

The fundamental basis of the investment for the production of Pharmaceutical Chemistry in Venezuela is diverse, but the most part are focused on: products import of the country and some productive partnerships that can be done.

## 1. Import of raw materials and finished products

As for imported products in order of importance they are:

### List of categories of pharmaceutical products of largest demand in Venezuela, in order of importance

1. Non-steroidal anti rheumatics

14. Antacids Flatulence Carmineos

2. Non-narcotic analgesics and antipyretics

15. Regulatory preparations for cholesterol and triglycerides

3. Antiulcer

16. Beta-blocking agents alone

4. Broad spectrum penicillins

17. Antimigraine

5. Antihistamines

18. Other Antiemetics including folic acid alone

6. Contraceptive systemic hormones

19. Corticosteroids alone

7. Infant food

20. Platelet aggregation inhibitors

8. Angiotensin II Antagonist alone

21. Calcium antagonists alone

9. Expectorants influenza/ anti inflammatories

22. Micro relaxants Central Activity

10. Expectorants

23. Vitamin B1 and Associations

11. Topical Nasal preparations

24. Angiotensin II Antagonists combined

12. Products for Erectile Dysfunction

25. ACE inhibitors alone

13. Antiepileptic

26. Antitussives

## List of categories of pharmaceutical products of largest demand in Venezuela, in order of importance (cont.)

27. Antidiarrheal Microorganisms

28. Cephalosporins

29. Oral restorer of electrolyte

30. Biguanide antidiabetic

31. Stomatological preparations

32. Fluoroquinolones

33. Macrolides and similar minerals

34. Vitamin C Included Minerals Association

35. Dermatological antifungals

36. Tricomonicidas

37. Systemic antifungals

38. Multivitamins with minerals

39. Gastroprokinetic

40. Diabetics

41. Anthelmintics

42. Antispasmodic / Analgesics combined

43. Emollients and protectors

44. Medicines for constipation

45. Antirheumatic and topical analgesics

46. Topical Corticosteroids Associates

47. Gynecological antifungal

48. Iron + Associations

49. Calcium

50. Pharyngeal decongestant

The investment opportunities must be associated, in principle, to the list of products and therefore a specialized approach should be the guideline for initiating concrete actions.

- Medical equipment and materials (Hypodermic needles, collecting bags of different uses, adhesives, anesthetics, antiseptics, catheters, surgical instruments, dressings, among others.)

- Reagents for clinical laboratory, blood bank, various tests, Elisa test, disposable supplies, chemical reagents, scales, glassware equipment and other materials.

- Dental and oral health equipment, sets of instruments for exodontia, instruments dental surgery, instruments for periodontics, instruments for orthodontics, among many other varieties in several fields.

## 2. Restructuring of the SEFAR plant

Another important element is the possibility to undertake a joint action with the producer drugs state company SEFAR, to develop a restructuring process of the plant, in order to make this signature or the resulting one from the Joint Venture, in the main supplier of pharmaceutical products of the Venezuelan state. SEFAR is located in Caracas. It is true that SEFAR can produce certain volumes but it is also clear that the plant needs a technological upgrade, which enhances its capabilities and develops a powerful diversification of products.

## 3. Strengthen the production of generic drugs

## 4. Development of new production lines drugs

Venezuelan laboratories working in the production area are mainly oriented to blood chemistry, therapeutic fluids, gastrointestinal solid forms, antibiotics and antacids. It emphasizes that the activities for development and production of drugs is in a phase of evolution, because the industry in Venezuela has only a certain capacity to formulate and synthesis basic drugs per rudimentary nature. The total active drugs are acquired through imports due to the absence of a pharmaceutical and chemical industry base.





## Final Considerations

Laboratories in Venezuela conducted little research on new pharmaceutical products, due to many factors, such as poor or weak research culture, the lack of substantial financing for high-impact investments, the lack of a solid knowledge updated on drugs, the lack of integration of institutions linked to the national innovation system, little or non-existent governmental involvement in this process, low investment capacity of universities, and little technological and innovative capacity of the chemical and metallurgical industry of capital goods in the country.

Laboratories in Venezuela do not work with defined lines of research, but only on researches about specific mixture of compounds and changes in the presentation of medicines, ranging from the type of presentation (ointment, injection, capsules, suspension, etc.) to the color, taste, smell and packaging.

However, the universities in the country (mainly the Central University of Venezuela and the University of Los Andes), have extensive experience developing products from the isolation of plant components for drug development, clinical and

preclinical studies and formulation of medicines for the cure of parasitic diseases, what can serve as a basis for innovation of new drugs.

Thus, the profitability of the pharmaceutical sector in Venezuela is significant because it presents the same characteristics of the sector in Latin America (except Brazil), so any impact that generates a greater productivity will allow to satisfy the growing demand in the domestic market, and then open new possibilities in international markets, mainly in Latin America.

It is important to highlight that, given the industrial structure that Venezuela has, the best investment option would be under partnerships schemes, with the already installed industrial structures, and thus proceed to invest focused on modernization and maintenance of production lines, which will reduce the costs for the investor, and promotes options for better granting credits and financial stability, because they are already industrial structures, positioned in the country, with experience on trade, distribution, marketing and export.



## ANNEXES

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- Venezuela medicines imports (year 2014)

# Venezuela drugs imports (2014)

All Medicines imports (Item 3004), Venezuela - World		2014 (January to December)		
		Measures		
Tariff code	Country	Gross kg	Net kg	FOB US\$
3004000000 MEDICINES (EXCEPT PRODUCTS OF ITEMS 30.02, 30.05 & 30.06): MIXED OR UNMIXED PRODUCTS, PREPARED FOR THERAPEUTIC OR PROPHYLACTIC USES, (including those of transdermal administration) OR AC	Total:	28,279,690.24	25,691,216.58	1,960,078,703.65
	GERMANY	1,509,572.85	1,292,103.80	199,313,799.61
	BRAZIL	1,744,495.28	1,485,721.88	191,574,688.58
	CUBA	2,410,399.20	2,318,666.95	185,054,037.73
	FRANCE	1,003,243.40	873,756.39	176,936,963.95
	MEXICO	8,798,445.05	8,317,140.15	159,402,615.77
	UNITED STATES	1,039,283.27	911,713.73	128,699,531.88
	ITALY	405,508.83	342,525.46	115,102,086.30
	COLOMBIA	6,178,811.87	5,626,103.50	100,331,452.11
	SWITZERLAND	168,167.42	138,722.57	78,011,575.26
	ARGENTINA	740,686.64	653,110.52	73,048,358.32
	UNITED KINGDOM	111,648.27	94,800.67	66,342,045.82
	URUGUAY	189,976.91	170,356.22	64,333,486.58
	SPAIN	522,840.88	461,156.80	61,087,666.49
	INDIA	943,655.10	825,660.91	49,369,183.53
	PUERTO RICO	152,656.43	127,666.25	40,402,614.74
	CHILE	204,997.31	116,383.95	25,825,922.09
	BELGIUM	78,286.12	66,987.03	25,675,070.41
	SWEDEN	61,144.18	54,446.05	24,265,323.92

3004000000 MEDICINES (EXCEPT PRODUCTS OF ITEMS 30.02, 30.05 ó 30.06): MIXED OR UNMIXED PRODUCTS, PREPARED FOR THERAPEUTIC OR PROPHYLACTIC USES, (including those of transdermal administration) or AC	HOLLAND	45,742.01	32,640.58	21,881,042.26
	SINGAPORE	24,886.92	19,930.11	20,211,547.29
	ECUADOR	82,460.00	76,269.83	16,361,863.79
	IRELAND	35,304.33	30,805.79	16,233,848.49
	COSTA RICA	246,546.41	217,642.47	14,942,584.25
	DENMARK	33,975.10	30,126.54	13,277,977.34
	PANAMA	102,890.60	92,345.34	13,202,490.66
	AUSTRIA	31,879.26	26,001.72	10,210,538.67
	DOMINICAN REPUBLIC	103,285.31	90,301.09	8,879,588.78
	CANADA	76,325.26	64,752.09	7,671,849.48
	FINLAND	6,164.61	5,551.94	6,994,007.79
	JAPAN	54,764.98	46,133.57	6,502,380.92
	PERU	228,267.95	215,325.03	5,186,090.09
	REPUBLIC OF KOREA	21,292.30	17,983.79	4,788,604.45
	GUATEMALA	21,915.50	18,039.96	4,368,035.13
	PARAGUAY	20,964.14	19,680.96	4,342,860.00
	NORWAY	41,868.10	38,029.79	3,447,587.23
	POLAND	5,887.50	5,313.24	3,072,416.48
	EL SALVADOR	722,023.00	671,727.26	2,822,956.20
	CHINA	54,500.52	48,443.01	2,159,553.54
	TAIWAN	18,865.90	15,328.88	1,670,204.34
	PORTUGAL	6,042.00	5,437.30	1,354,796.81
	AUSTRALIA	1,878.00	1,646.36	860,522.50
	HONG KONG	111.00	91.44	817,600.00

3004000000 MEDICINES (EXCEPT PRODUCTS OF ITEMS 30.02, 30.05 ó 30.06): MIXED OR UNMIXED PRODUCTS, PREPARED FOR THERAPEUTIC OR PROPHYLACTIC USES, (including those of transdermal administration) OR AC	BELIZE	1,068.00	961.20	794,391.00
	TURKEY	3,671.86	3,188.20	697,619.93
	ISRAEL	229.50	158.00	647,057.10
	EGYPT	4,838.58	4,354.73	560,278.40
	SOUTH AFRICA	8,587.00	7,806.20	343,724.34
	HUNGARY	388.00	270.20	231,828.80
	PEOPLE'S REPUBLIC OF KOREA	1,674.00	1,430.00	201,000.00
	MALAYSIA	2,464.58	2,218.12	136,246.16
	LUXEMBOURG	555.00	431.62	125,297.67
	GREECE	1,434.00	1,066.93	94,549.84
	ASCENSION ISLAND	1,320.00	1,188.00	80,000.00
	SLOVENIA	1,075.00	967.50	63,177.48
	PHILIPPINES	380.00	304.00	33,254.72
	NEW ZELAND	160.01	134.46	24,178,50
	BANGLADESH	185.00	166.50	8,730.13