BRAZILIAN ECONOMY

In numbers

R$ 6.8 trillion
PIB (Gross Domestic Product)
(US$ 1.9 trillion)

US$ 375 billion
International reserves
2019

US$ 240 billion
Exportations
in 2018

US$ 181 billion
Importations
in 2018
BRAZILIAN ECONOMY
In numbers

93.6 million
of employed population
(Mar-May 2018)

R$ 2.3 thousand
Workers average income (US$ 625),
(Mar-May 2018)

R$ 998
National minimum wage, in 2019
(US$ 273)

R$ 32.6 thousand
Income Per Capita
in 2018
(US$ 8.9 thousand)
The importance of Industry contributes with R$ 1.3 trillion to Brazilian economy, with PIB participation of 21.6%.

- 28.7% social security collection
- 34.2% of federal taxes collection (except for social security revenues)
- 67.4% expenditure in research and development of private sector
- 70.8% Brazilian exportations of goods and services

Source: CNI Researches
BEST INTERNATIONAL PRACTICES

Brazil is part of 82 legal instruments of OCDE, which makes it the non-member country with greatest degree of adhesion to instruments.

OCDE instrument percentage used by candidate countries
- Percentage adopted of 249 OECD instruments

<table>
<thead>
<tr>
<th>Instruments that Brazil is already part of</th>
<th>Agriculture</th>
<th>C&amp;T</th>
<th>Trade</th>
<th>Development</th>
<th>Education</th>
<th>Finance and Investments</th>
<th>Governance</th>
<th>Industry and Services</th>
<th>Enviroment</th>
<th>Taxation</th>
</tr>
</thead>
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INVESTMENT OPPORTUNITIES IN BRAZIL
### SECTOR CURRENT SITUATION

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>CURRENT SITUATION</th>
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<tbody>
<tr>
<td>AIRPORTS</td>
<td>22 airports granted (67% total passengers transported)</td>
</tr>
<tr>
<td>HIGHWAYS</td>
<td>9,697 km grants in force (15% total federal highways paved)</td>
</tr>
<tr>
<td>RAILWAYS</td>
<td>Out of 30 thousand km network, 99% is operated by private sector</td>
</tr>
<tr>
<td>PORTS</td>
<td>All port terminals: 254 areas leased in Public Ports and 164 Terminals of Private Use (TUPs)</td>
</tr>
<tr>
<td>ELECTRIC POWER</td>
<td>77% distribution and more than 57% generation of electric power</td>
</tr>
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Source: PPI, ANEEL, ANP, ANAC, Sectoral Ministries and SNIS
ACCELERATED GROWTH OF DEMAND OF INFRASTRUCTURE

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<tr>
<td><strong>Air traffic (million of passengers paid)</strong></td>
<td>113.4</td>
<td>210.7</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Toll highways traffic (million vehicles)</strong></td>
<td>728</td>
<td>1,724</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Trading volume at the ports (million tons)</strong></td>
<td>768</td>
<td>1,117</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Container movement (million TEUs)</strong></td>
<td>7.2</td>
<td>10.4</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Grains harvest (million tons)</strong></td>
<td>144.1</td>
<td>227.8</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Electric Power Consumption Units (million units)</strong></td>
<td>60.5</td>
<td>82.2</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Own preparation with ANAC, ABCR, ANTAQ, MAPA, MDIC and EPE data.
### Infrastructure Investment Opportunities in Brazil Up to 2020

**AEROPORTOS**
- Grant of more than 22 airports to private initiative

**RODOVIAS**
- Grants of more than 9 thousand Km

**FERROVIAS**
- Grant of more than 3 thousand Km + 5 contracts renewal

**ENERGIA**
- Privatization of Eletrobras

**PORTOS**
- Grant of 10 ports terminals
- Codesa Privatization (Companhia Docas do Espírito Santo)

**DESGPRODUCTOS DA PETROBRAS**
- 8 refineries (50% Brazilian refine capability).
- 3 oil pipeline of natural gas (sale of shares)
- 19 oil pipeline of natural gas (shares)
INVESTMENT OPPORTUNITIES IN BRAZIL

BASIC SANITATION

NEED OF INVESTMENTS
Brazil needs to invest around R$ 21 billion every year to universalize the sewage collection and treatment services up to 2033*. *Deadline established by the Basic Sanitation National Plan.

R$ 300 BILLION
Is the overall investment needed (Currently, the country invests only half the value needed)

POTENTIAL MARKET

99 million
Brazilian citizens do not have access to sewage collection

35 million
Brazilian citizens do not have access to water supply

R$ 300 BILLION
Is the overall investment needed (Currently, the country invests only half the value needed)
INVESTMENT OPPORTUNITIES IN BRAZIL

PRIVATE PARTICIPATION IN THE SECTOR OF BASIC SANITATION

103 PRIVATE COMPANIES which serve 164 cities and 9% consumer market

6% COMPANIES are private and accounts for 20% investments in the sector

SANITATION NEW LEGAL LANDMARK

New law which is moving in the National Congress will bring more legal safety and will propitiate increase in private initiative participation in the sector.

THE NEW LAW FORECASTS:

• Competition in the sector, by requiring bidding to new contracting.
• Criteria for cities to join in regions so to receive the services;
• National references standards by National Water Agency (ANA)
Brazil counts on 7,359 oil and natural gas wells, being:

- **6,648** onshore wells
- **711** marine wells

PRÉ-SAL accounts for 55% national production

32 national and foreign companies operate in the sector of Oil & Gas in Brazil

Fields operated by Petrobras produce, yearly, more than 94% of oil and natural gas

In 2017, requirement of Petrobras being sole operator of PRÉ-SAL fields was revoked by Law.
OIL & GAS
PRÉ-SAL & ONSHORE WELLS

Biddings already carried out

2017 Collection of R$ 10 billion
2018 Collection of R$ 18 billion
2019 Collection of R$ 84 billion with auctions of oil and gas exploitation areas

Next biddings

2020 7th Round of Production Share Biddings and 17th Round of Bidding of Blocks
2021 8th Round of Production Share Biddings and 18th Round of Bidding of Blocks

INVESTMENT OPPORTUNITIES IN BRAZIL
BRAZIL HAS THE 8TH GREATEST CONSUMER MARKET OF THE WORLD

APPARENT CONSUMPTION* (IN US$ BILLION)

(*) Families, companies and governments consumptions
Source: World Bank
BRAZILIAN FAMILIES CONSUMPTION IS THE 7TH LARGEST IN THE WORLD

FAMILIES CONSUMPTION* (IN US$ BILLION)

(*) Value of all goods and services consumed by families (as cars, household appliances, food, etc)
Source: World Bank
The CNI represents the Brazilian industrial sector and operates for a favorable environment to business and the competitiveness increase of the country. Some action fronts:

- Increase the industries productivity and the competitiveness of Brazilian economy
- Foster the associative development of the industries
- Improve the infrastructure conditions in the country
- Encourage innovative vocation of productive sector
- Internationalize Brazilian companies
- Mitigate legal uncertainty which affects the business environment
- Propitiate, via SENAI, labor qualification for several segments
- Propitiate, via SESI, health and safety to the workers
700,000
Industrial companies enrolled

150
Prioritary collegiate (with 150 representatives)

27
State federations

14
Thematic councils

1,280
Industrial Unions

200
CEOs MEI – Entrepreneurial Mobilization for Innovation

69
Sector organizations (FNI - Industry National Forum)
86 partners in 47 COUNTRIES
CNI ENTREPRENEURIAL MECHANISMS FOCUSED ON STRATEGIC MARKETS
A STRONG AND INNOVATIVE INDUSTRY
Entrepreneurial leaders Group committed to the innovation agenda

Liaison between the entrepreneurial sector, government and academy

WHAT IS

MOBILIZAÇÃO EMPRESARIAL PELA INOVAÇÃO

coordinated by CNI
EMBRAPRII
refundable resources leveraging the private investment

802 Projects supported

R$1.34 bi in companies' projects in P&D

566 Partners companies

32% Participation EMBRAPII

49.7% Participation Companies

18.3% Participation EMBRAPII Units

288 Intellectual Property Requests (341 projects completed)
20 editions carried out, being 10 abroad

166 institutions visited in Brazil and abroad

It connects the Brazilian industry to the most important world innovation centers

531 participants from 229 organizations

Immersion program in ecosystems of innovation

Fonte: Diretoria de Inovação, 2019.
Since its creation, in 1942, it has already trained more than 76 million workers in 28 industry areas.

SENAI is the largest private complex of professional education and technological services of Latin America.

*according to the International Labor Organization (ILO)
2,310,643 enrollment in professional education

1,334,971 laboratory tests performed

19,749 companies serviced in technical and technological services

587 fixed units

457 mobile units, of which 2 school boats

189 service laboratories

26,220 own employee
Since they started to operate, the institutes have already delivered more than **320 projects**, including FLATFISH, submarine-robot that inspects petroleum in deep waters.
SENAI INSTITUTES OF TECHNOLOGY

1.2 mil experts and consultants located in industrial great density regions

TÉCNICAS DE PRODUÇÃO: 58

TOTAL

AC Wood and furniture
BA Food and beverage
PR Food and refrigeration
PR Construction industry
PR Wood and furniture
PR Environment and chemistry
PR Metal-mechanic
PR Paper and pulp
PR Information technology
SC Food and beverage
RJ Environment
SC Automation and ICT
SC Energy efficiency
SC Logistics in production
SC Ceramics
SC Textile, clothing and design
GO Automation
GO Food and beverage
DF Construction industry
MT Food and beverage
CE Electro metal-mechanic
CE Renewable energies
RN Oil and gas
PB Textiles and clothing
PB Leather and footwear
PB Industrial automation
PE Automotive and metal-mechanic
PE Environment
BA Food and beverage
BA Construction industry
BA Electro-electronic
BA Electro metal-mechanic
BA Chemistry
BA Environment
MG Food and beverage
MG Automotive
MG Metal-mechanic
BA Chemistry
PE Environment
ES Metal-mechanic
RJ Environment
RJ Welding
RJ Simulation automation
DN CETIQT – Textile and clothing
SP Food and beverage
SP Construction industry
SP Leather and shoes
SP Energy
SP Electronics
SP Environment
SP Metal-mechanic
SP Textile and clothing
RS Food and beverage
RS Footwear and industrial logistics
RS Leather and environment
RS Wood and furniture
RS Mechatronics
RS Oil, gas and energy

INSTITUTOS DE TECNOLOGIA

1.2 mil especialistas e consultores localizados nas regiões industriais de grande densidade.

TÉCNICAS DE PRODUÇÃO: 58

TOTAL

AC Móveis e móveis de madeira
BA Alimentos e bebidas
PR Refrigeração e climatização
PR Construção e edificação
PR Madeira e madeira de construção
PR Ambiente e química
PR Metal-mecânica
PR Papel e papelaria
PR Tecnologia da informação
SC Alimentos e bebidas
RJ Meio ambiente
SC Automação e comunicação digital
SC Eficiência energética
SC Logística e produção
SC Cerâmica
SC Textil, vestuário e design
GO Automação
GO Alimentos e bebidas
DF Engenharia civil
MT Alimentos e bebidas
CE Metal-mecânica
CE Energia renovável
RN Gás e petróleo
PB Textil e vestuário
PB Calçado e calçadão
PB Automação e mecanização
PE Meio ambiente
BA Alimentos e bebidas
BA Construção e edificação
BA Eletrônica e eletricidade
BA Metal-mecânica
BA Química
BA Meio ambiente
MG Alimentos e bebidas
MG Automóveis
MG Metal-mecânica
BA Química
PE Meio ambiente
ES Metal-mecânica
RJ Meio ambiente
RJ Soldadura
RJ Automação e mecanização
DN CETIQT – Textil e vestuário
SP Alimentos e bebidas
SP Construção e edificação
SP Calçado e calçadão
SP Energia
SP Eletrônica
SP Meio ambiente
SP Metal-mecânica
SP Textil e vestuário
RS Alimentos e bebidas
RS Calçado e calçadão
RS Ninho e equipamentos
RS Couro e meio ambiente
RS Madeira e madeira de construção
RS Mechatronica
RS Gás e petróleo
Created in 1946, SESI serves industries and workers in occupational safety and health (OSH) management, and in promoting the health and education of workers, their dependents and communities.
SESI Numbers

1,171,852 enrollment in basic and continuing education
3,549,065 people benefiting from occupational health and safety services
989,216 applied vaccines

501 schools
114 healthy living units
553 mobile unitis

35,967 own employee
3,019 Interns
Sesi Benchmark in Occupational Health and Safety

8 centers of innovation in OHS in Brazil

International Partners:

- Stanford University
- Johns Hopkins University
- University of Leeds
- University of Minnesota
- Finnish Institute of Occupational Health
- TNO

Financiers

Thematic and sectoral SESI networks

Industrial demands in emerging themes

Strategic Actions in OHS

International and national partnerships

- Ergonomics
- Management of absenteeism and rehabilitation
- Psychosocial Factors Management
- Occupational Hygiene
- Intelligence and Management in OHS
- Longevity and Productivity
- Metrics to Health
- Technologies for Safety and Health