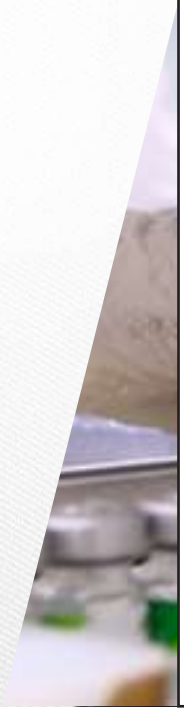
# A NEW APPROACH FOR INDUSTRIAL STRATEGY IN BRAZIL

25 October 2024



MINISTÉRIO DA
GESTÃO E DA INOVAÇÃO
EM SERVIÇOS PÚBLICOS

GOVERNO FEDERAL
BRASIL
UNIÃO E RECONSTRUÇÃO

# Deindustrialization around the world

Not a homogeneous phenomena

# South x North

**Table 1**

Manufacturing VA in GDP (1970–2018; current prices).

| | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|
| South | 13,5 % | 14,2 % | 17,3 % | 17,7 % | 17,9 % | 17,8 % | 17,0 % | 18,7 % | 19,3 % | 20,4 % |
| North | 28,5 % | 26,5 % | 25,2 % | 23,1 % | 21,9 % | 19,7 % | 18,1 % | 15,9 % | 14,6 % | 13,9 % |
| World | 25,9 % | 24,1 % | 23,6 % | 22,2 % | 21,4 % | 19,6 % | 18,1 % | 17,0 % | 16,6 % | 17,0 % |
| by Developing Area | | | | | | | | | | |
| SS Africa | 16,2 % | 18,1 % | 18,3 % | 18,3 % | 16,9 % | 16,7 % | 14,6 % | 13,2 % | 10,3 % | 10,6 % |
| South Asia | 14,1 % | 16,2 % | 17,1 % | 17,1 % | 17,9 % | 18,2 % | 16,7 % | 16,9 % | 17,7 % | 16,2 % |
| S-East Asia | 15,3 % | 16,0 % | 18,5 % | 19,0 % | 23,1 % | 24,1 % | 25,8 % | 25,6 % | 23,2 % | 21,4 % |
| Latin America | 22,7 % | 23,6 % | 21,8 % | 22,5 % | 21,8 % | 18,3 % | 18,0 % | 17,2 % | 15,5 % | 14,2 % |
| MENA | 7,7 % | 7,1 % | 6,7 % | 7,9 % | 9,8 % | 10,5 % | 9,1 % | 8,5 % | 8,5 % | 9,5 % |
| China | na | na | 31,0 % | 27,1 % | 24,5 % | 21,6 % | 20,9 % | 32,1 % | 31,6 % | 29,1 % |

SS Africa : Sub-Saharan Africa; MENA : Middle-East and North Africa. Source: Based on data from UNStats plus author's completion. "na" : no reliable figure available.

# Southeast Asia x Latin America

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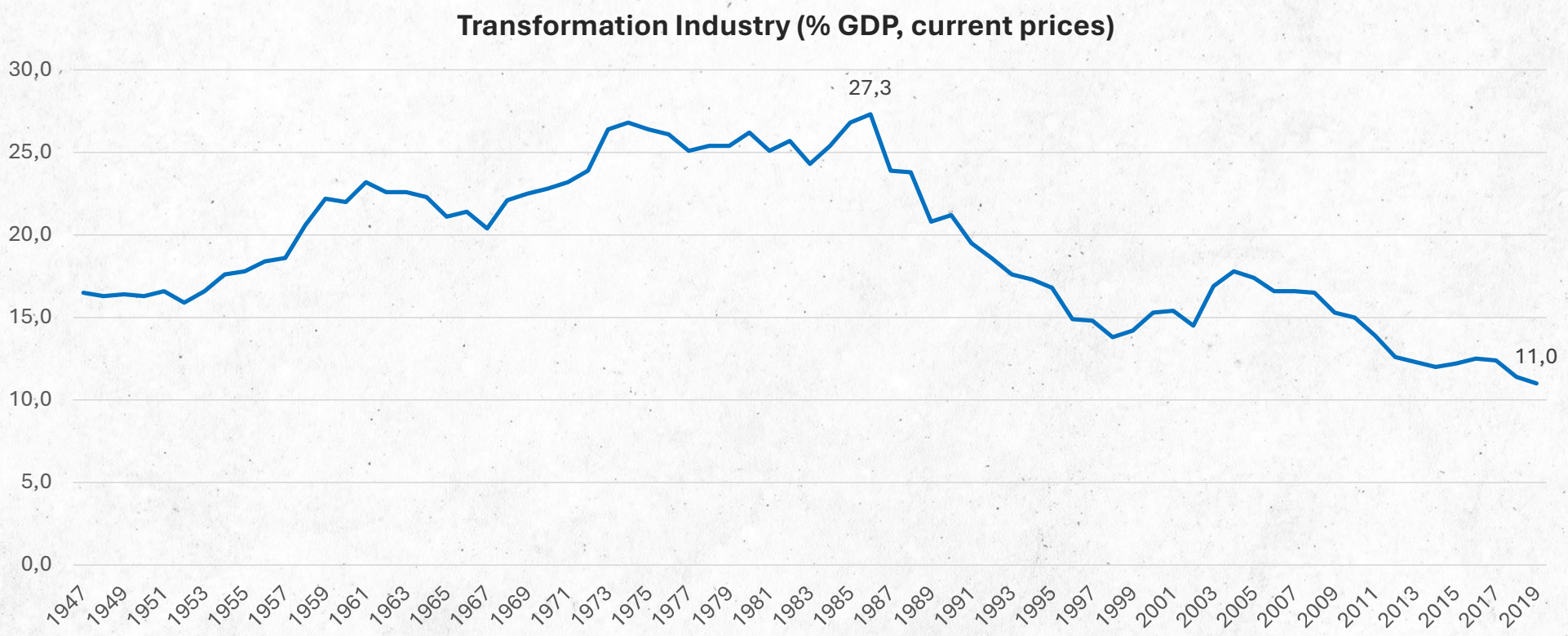
# Deindustrialization in Brazil

Severe and premature

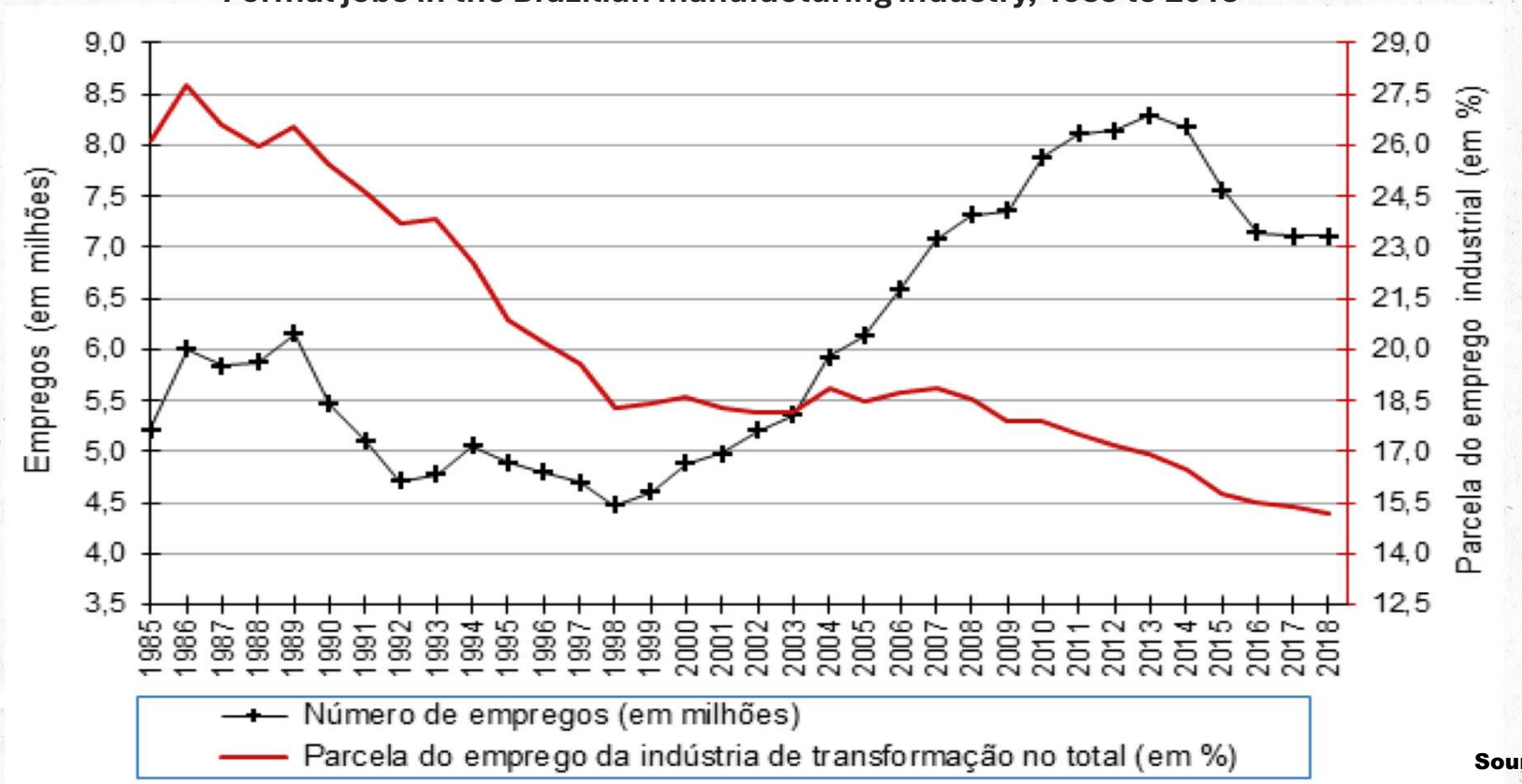
# Decline in industry as **share of GDP**




**Source:** Morceiro (2024). The author harmonizes the series according to the National Accounts System 2010 and corrects for a financial dummy before 1995.

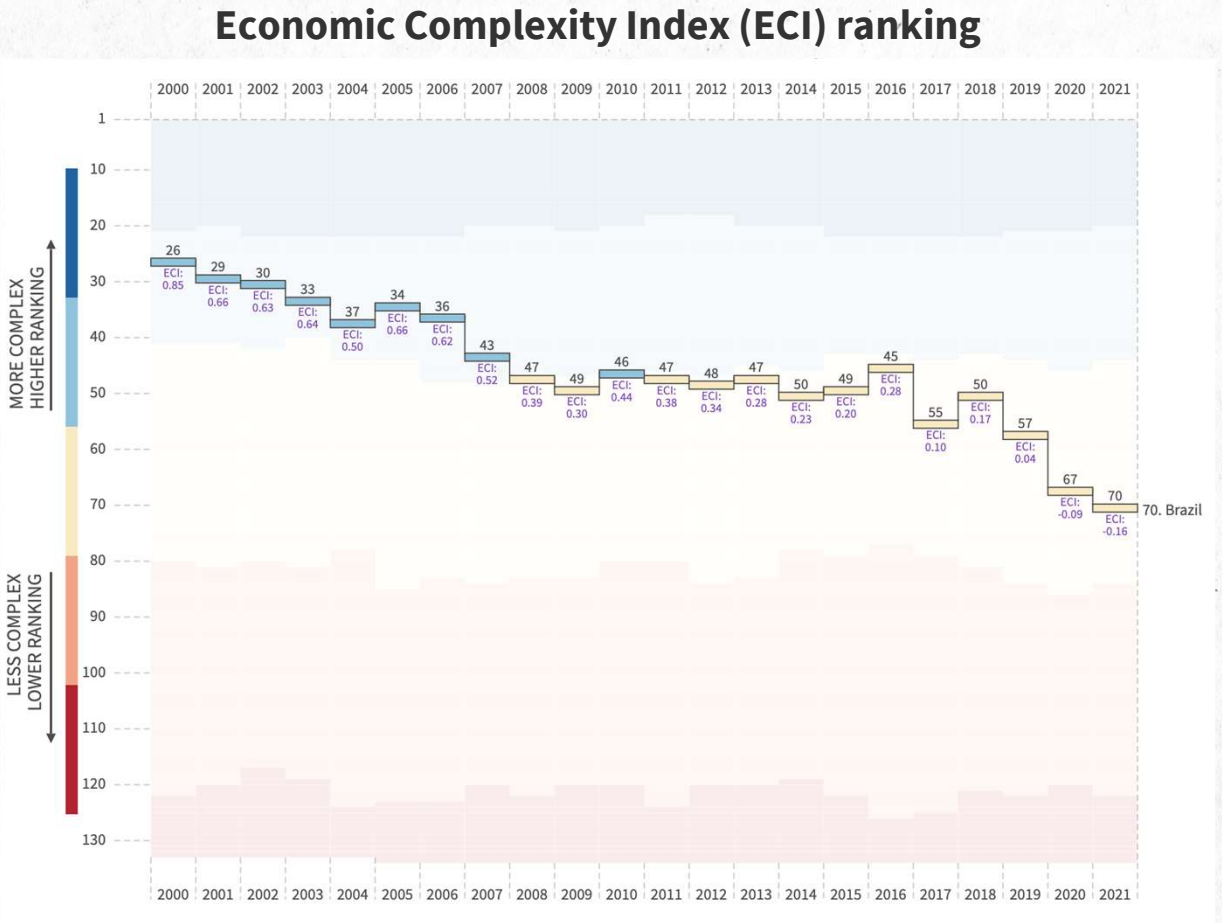
# Decline in **industrial jobs**

**Formal jobs in the Brazilian manufacturing industry, 1985 to 2018**




**Source:** Morceiro (2019)

# Loss of **industrial complexity**




- **70th** of 133 contries
- **Loss of 23** positions in 10 years
- **Loss of 44** positions in 21 years

**Source:** Growth Lab, Harvard

# Premature **deindustrialization**

**Manufacturing peak and trough (in % of GDP) at constant 2010 prices**

| | Países | Pico no PIB (em %) | Ano | PIB per capita em PPC de 2017 | Mínima no PIB (em %) | Ano | PIB per capita em PPC de 2017 | Variação (em %) |
|---|---|---|---|---|---|---|---|---|
| 1º | Austrália | 16,5 | 1970 | 23,5 | 5,9 | 2017 | 50,5 | -64,2 |
| 2º | Reino Unido | 17,4 | 1970 | 18,3 | 9,1 | 2016 | 43,2 | -47,7 |
| 3º | Brasil | 22,3 | 1976 | 10,3 | 12,5 | 2016 | 15,3 | -43,9 |
| 4º | Canadá | 16,2 | 2000 | 40,6 | 10,5 | 2017 | 47,6 | -35,2 |
| 5º | Alemanha | 29,5 | 1970 | 23,5 | 19,5 | 2009 | 42,8 | -33,9 |
| 6º | Argentina | 24,6 | 1973 | 14,9 | 17,1 | 2002 | 13,4 | -30,5 |
| 7º | Rússia | 19,9 | 1990 | 22,6 | 14,3 | 2009 | 24,0 | -28,1 |
| 8º | Filipinas | 28,6 | 1974 | 3,7 | 20,8 | 2009 | 5,5 | -27,3 |
| 9º | Espanha | 17,4 | 1978 | 19,0 | 12,9 | 2012 | 33,9 | -25,9 |
| 10º | França | 13,3 | 1971 | 20,9 | 11,2 | 1993 | 32,2 | -15,8 |

Fonte: ONU (The National Accounts Main Aggregates Database), IBGE e The Conference Board.

**Source:** Morceiro e Tessarin (2023)

# Drivers of Brazilian **premature deindustrialization**

## Domestic issues

- The 1980 external debt crisis
- Rapid and abrupt trade liberalization
- Unfavourable macroeconomic policies, characterized by high interest rates and an appreciated FX rate
- Commodity boom in the 2000s and relative prices
- ‘Cost’ disease and the difficulties in increasing productivity

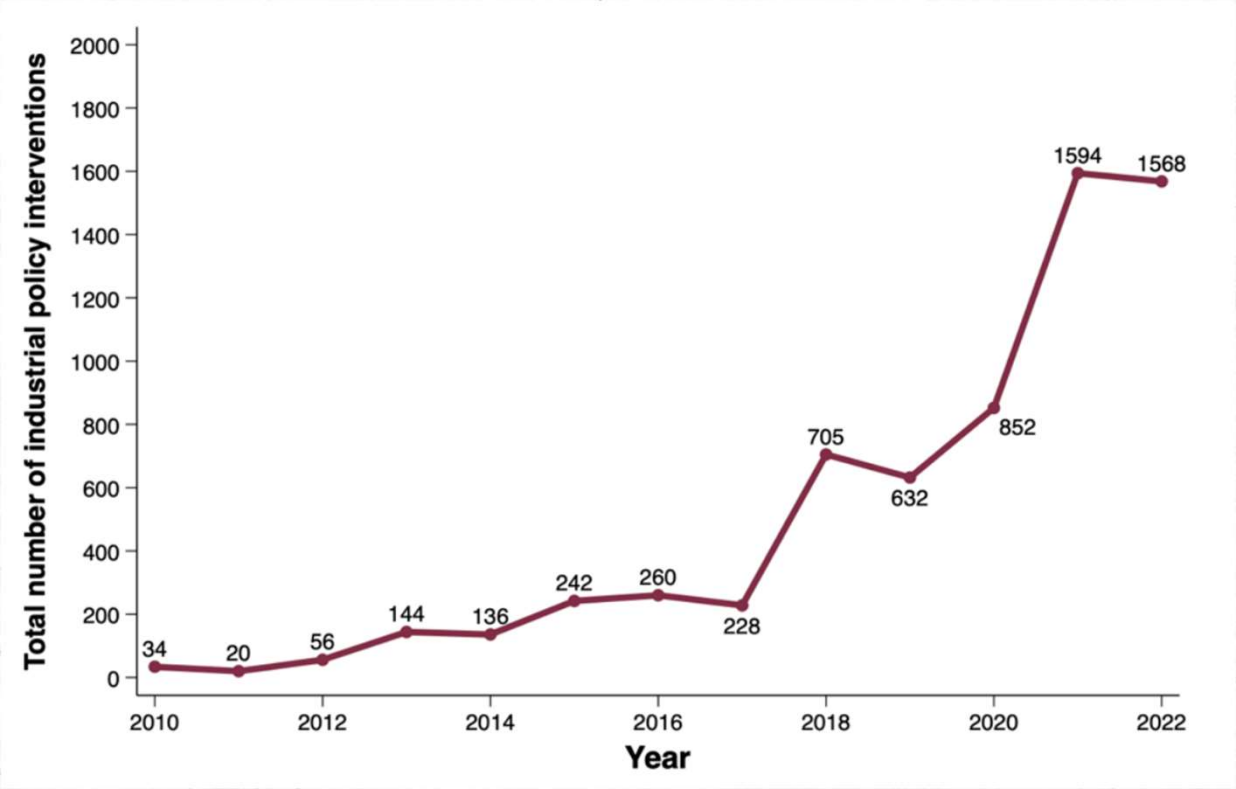
## Global trends

- Multinational corporations, GVCs and off-shoring of less complex industrial activities
- China and Southest Asia’s industrial growth, with low labor costs and fiercer competition
- M&A, capital concentration and higher entry barriers
- Rebirth of industrial policy, specially in developed countries

# The rebirth of industrial policy worldwide

Unashamed

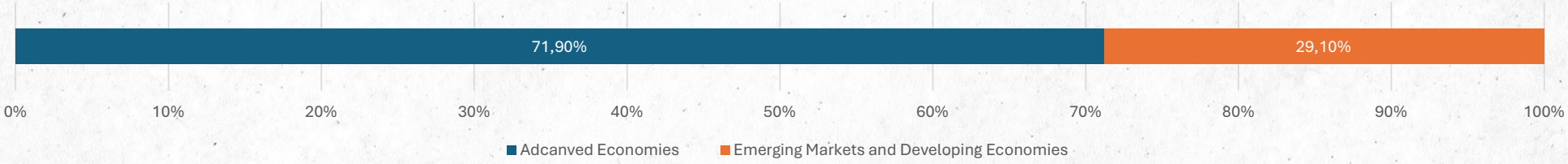
# Growing use of industrial policies **in the world**

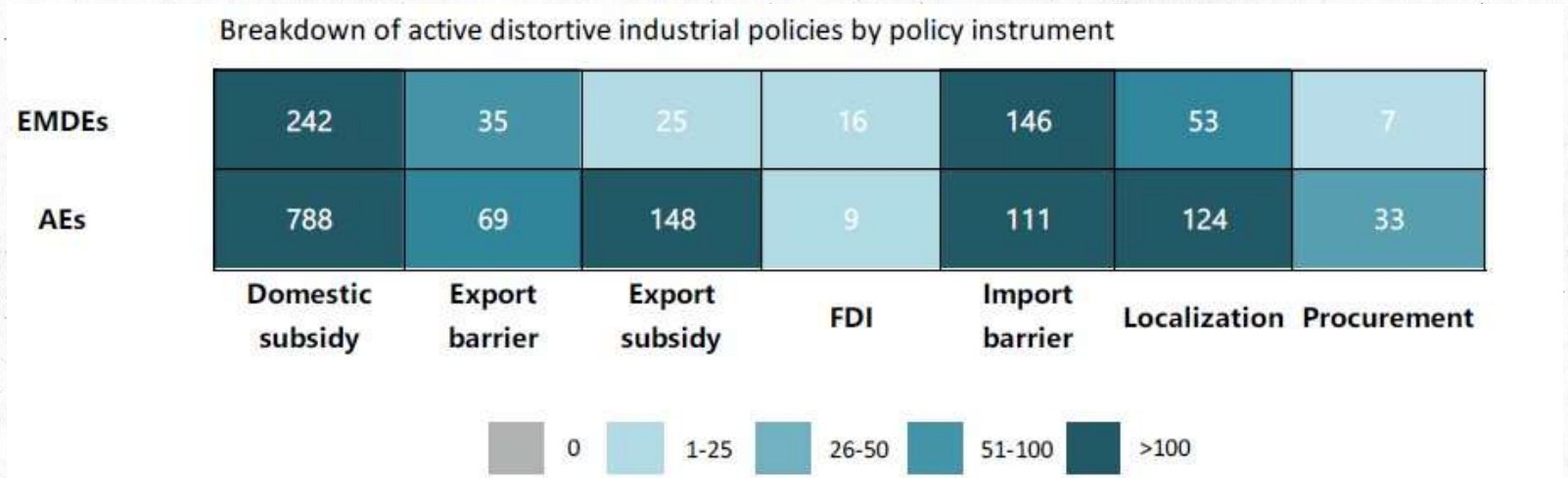



**Source:** Juhász, Lane and Rodrik (2023).

# Advanced Economies **leading the change**

**71.9%** of all industrial policy measures were taken by developed countries




**Source:** Evenett, S., Jakubik, A., Martín, F. and Ruta, M., 2024. The return of industrial policy in data. *The World Economy*, *47*(7), pp.2762-2788. IMF WP

# The risk of **lagging behind**

- Difference of state capacities
  - Data, Planning and Coordination
  - Financial resources
- Power imbalances in Multilateral System
- New alliances leaving only supporting roles for EMs (except China and India)
- Unequal impacts of climate change

# Difference in **pocket sizes**

**US:** USD 1.9 trillion

- Operation Warp Speed: USD 12.4 billion
- Infrastructure Investment and Jobs Act (IIJA): USD 547–715 billion
- Inflation Reduction Act (IRA): USD 392 billion - USD 1.2 trillion
- CHIPS and Science Act: USD 280 billion

**UK:** USD 1.7 trillion

**EU:** USD 1.6 trillion

**China:** USD 1.9 trillion

**Comparing:**

# Structural change in Brazil

Digital, Green and Inclusive

# Return of development **as an agenda**

| Social needs | Reforms for long-term growth | Back to global stage | Structural change |
|---|---|---|---|
| • Sharp decline in severe food insecurity<br>• Reduction of extreme poverty<br>• Consumption boost | • New fiscal regime – fiscal space for public investment<br>• VAT Reform | • Mercosur presidency<br>• G20 presidency<br>• COP30 host<br>• BRICS presidency | • Ecological Transformation<br>• New Industrial Policy<br>• State Transformation |

# New industrial policy - **NIB**

- **Participatory design and governance** through CNDI (National Council of Industrial Development)
- Mission-based industrial policy: Providing solution to **societal needs**
- **Supply and Demand**-based instruments

# NIB's **missions**

| | |
|---|---|
| **#1** | Sustainable and digital **agro-industrial chain**s for food, nutritional and energy security |
| **#2** | **Resilient Health Economic-Industrial Complex (HEIC)** to reduce the vulnerabilities of the SUS and expand access to health |
| **#3** | Sustainable infrastructure, sanitation, housing and mobility for productive integration and **well-being in cities** |
| **#4** | **Digital transformation** of the industry to increase productivity |
| **#5** | **Bioeconomy, decarbonization, and energy transition** and security to ensure resources for future generations |
| **#6** | Technologies of interest to **national sovereignty and defense** |

# Mission 1

## Priority sectors*

- Precision Agriculture Equipment
- Agricultural Machinery
- Biofertilizers

## Main initiatives*

**Credit and Grants**: USD 70.2 million

**Business Environment**

- Rationalize port fees, improve the guarantee system
- Regulatory convergence with the main markets for brazilian exported products
- Digital platform for production control and traceability

**Public Procurement:** strenghening food procurement programms (PAA and PNAE)

* Preliminar

# Mission 2

## Priority sectors

- Medicines and biological active ingredients
- Vaccines, blood products and advanced therapies
- Medical devices

## Main initiatives

**Public Investment: USD 1.56 billion**

- Production of viral and bacterial vaccines, including two new Butantan Institute factories
- Hemobrás plant – the largest blood derivatives plant in LA

**Direct Credit: USD 1.95 billion** (2023-2024)

**Public Procurement:**

- Improvement in PDP (*Parcerias para o Desenvolvimento Produtivo*)
- Creation of PDIL (*Parcerias para o Desenvolvimento e Inovação Local*)
- Preference Margin for medical drugs in public procurement

# Mission 3

## Priority sectors*

- Electromobility
- Battery production chain
- Digital and low-carbon construction
- Metro rail industry

## Main initiatives*

**Public Investment**: USD 3.07 billion in medium and high-capacity urban public transport systems

**Business environment**:

- Improve regulation for natural gas
- National Program for Sustainable Aviation Fuel (SAF) + raising the ethanol blend in gasoline to 30%.

* Preliminar

# Mission 4

| Priority sectors | Main initiatives |
| --- | --- |
| • Semiconductor<br>• Industrial robots<br>• Advanced digital products and services (Cloud Computing, Digital Platforms, Audiovisual Industry, Gaming Industry) | **Direct Credit +Grants:** USD 17.7 billion<br>**Business environment:** accelerated depreciation (USD 300 million)<br>**Public Procurement:** Preference Margin for TICs in public procurement |

# Mission 5

## Priority sectors*

- Bioenergy
- Equipment for generating renewable energy
- Cosmetics

## Main initiatives*

**Directed credit and grants** to bioproducts and bio-inputs, biofuels, green hydrogen, carbon capture, energy storage, renewable energies and strategic minerals

**Business environment:**

- Green Seal and Amazon Seal programs
- Improve regulation and harmonize legislation for reverse logistics, carbon markets, and intellectual property
- Train innovation agents from Amazon region's ecosystem

**Public Procurement:**

- Solar energy in the federal housing program (MCMV)
- Preference margin and local content requirements in PV panels and wind turbines.

* Preliminar

# Mission 6

| Priority sectors* |
| --- |
| • Nuclear energy<br>• Communication and sensing systems<br>• Propulsion systems<br>• Autonomous and remotely controlled vehicles |

| Main initiatives* |
| --- |
| **Credits and Grants** for technological content projects from Strategic Defense Companies<br>**Business environment:**<br>• Export Support System,<br>• Regulation of patent applications of national defense interest<br>**Public procurement:** USD 9.26 billion in Strategic Defense Projects<br>**Public investment** in the NB4 Maximum Biological Containment Lab and Brazilian Multipurpose Nuclear Reactor |

# Directed **Loans**

**USD 60 bn**

available for financing until 2026

| **37 bn** | **13 bn** | **8 bn** | **2 bn** |
|---|---|---|---|
| more productivity | more innovation | more exports | greener |

BNDES

Finep
INOVAÇÃO E PESQUISA

EMBRAPII

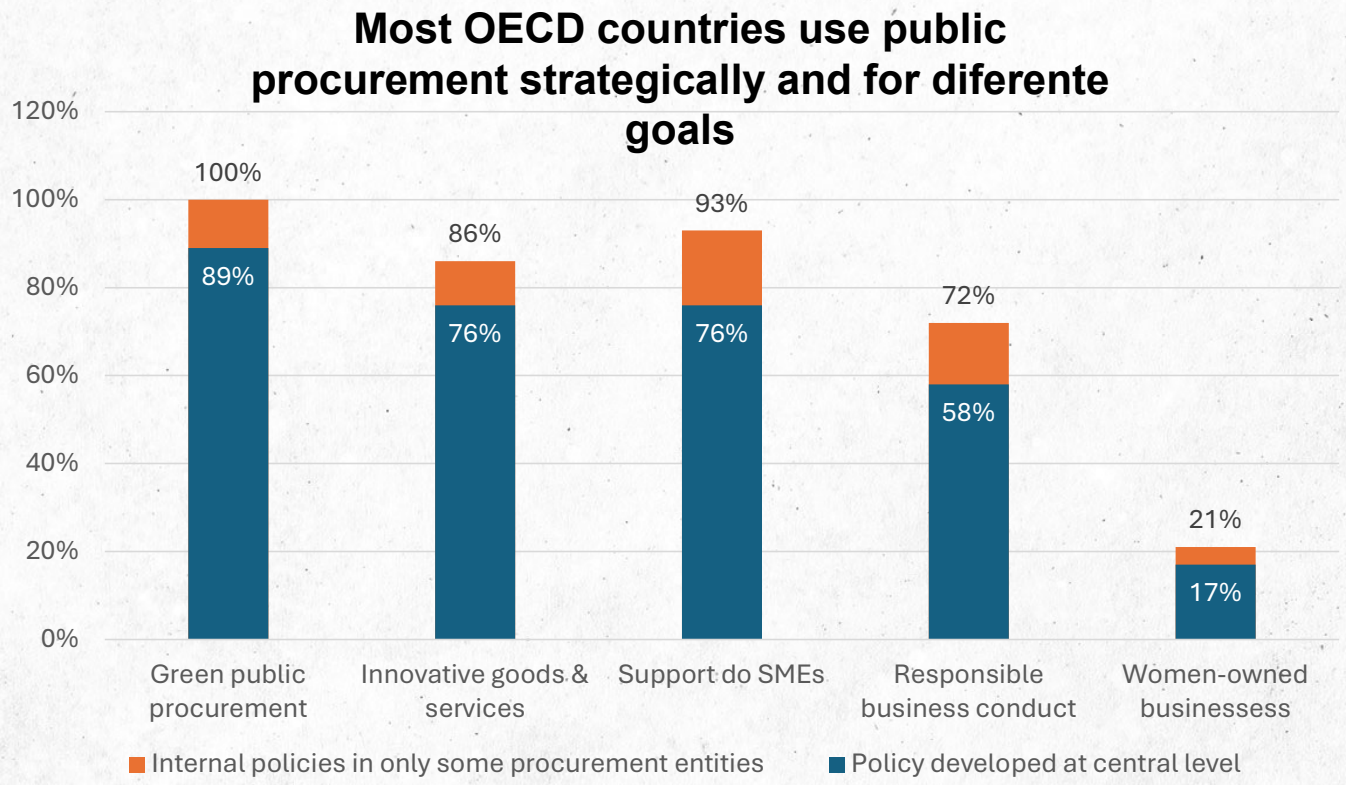
| **Instruments** |
|---|
| Loans w/ special conditions |
| Equity |
| Grants and non-refundable resources |

FX rate January 2024: 4.92 BRL/USD

# Demand-side **instruments**

- Review of international agreements to ensure the **right to use the state's purchasing power**
  - Withdrawn offer to join the WTO's GPA (Government Procurement Agreement)
  - Changed offers in negotiations with Singapore, EFTA and the EU
- Public Procurement National **Strategy**
- Interministerial **Commission** on Public Procurement for Sustainable Development (CICS)
  - Margins of preference
  - Technological, industrial and commercial offsets
  - Pre-commercial procurement

# Strategic Public Procurement in **OECD Countries**




**Source**: Strømsnes, Presentation to DFØs Procurement Conference, Oct 2023

**And have been doing it for a long time...**

**Buy American Act** requires preference for goods made in US since **1933**

# Brazilian experience with **strategic public procurement**

**PAA (Food Procurement Program):** acquires the production of 200,000 family farmers to provide access to food for people facing food insecurity

**PNAE (National School Feeding Program):** provides meals to **44 million students** annually across Brazil's **5,568 municipalities**

- At least **30%** of the procured food comes from family farms.
- Preference margin of 30% for **organic products** on every procurement of the program
- At least **50%** of the value procured from individual rural families must be procured from **women**

**Productive Development Partnerships (PDPs):** requires technology transfer to Brazilian public institutions in exchange of multi-annual supply contracts of strategic products

**Few but noticeble pre-commercial procurement:**

- Fiocruz-AstraZeneca **COVID Vaccine** - by August 2021, 74.8% of the vaccines used were produced locally
- **Embraer C-390** – secured supply contracts with Portugal, Hungary, Austria, Netherlands, Czech Republic and South Korea

# Experience with **local content requirements**

**On public credit**

- BNDES
- Regional development funds

**On oil exploration concession contracts**

- The national oil agency (ANP) requires minimun local content levels in platforms and equipments for oil exploration in Brazilian shores

# Preference margins

| | Produced in Brazil | Developed in Brazil |
|---|---|---|
| Buses | 10% | |
| Railway equipment | 10% | |
| PV Systems | 10% | |
| Heavy construction machinery | 10% | |
| Medicine | 5% | 10% |
| ICT | 10% | 10% |

In 2023, the share of these sectors on Federal Government procurement was

**48%**

# **National Strategy** of Public Procurement

| Problems | | | |
|---|---|---|---|
| Underutilization of the State possibilities and opportunities as a major buyer | Focus on the lowest price biddings | Risk Aversion Culture | • Fear of the control bodies;<br>• Results for society of lower prices biddings are overestimated;<br>• Bidding contractors lack flexibility and feel unsecure to innovate; |
| | | Lack of coordination among public bodies | • Public procurement policy is not used as a tool to support strategic policies;<br>• There is still a vision to be build on what it is expected in terms the public procurement policy;<br>• Examples: Industrial policy, Environmental policy, Educational policy, Health policy. |
| | | Lack of State Capacities | • Need for capacitation and motivation of procurement agents<br>• Need for clear methodology to define best public value<br>• Systems designed to prevent corruption and not to provide strategic data |

# **Major Goal:** increase strategic use of public procurement

| Production |
| --- |
| Increase the country industrialization level |
| Embed innovation in the procurement process as a tool for solving government problems |
| Strengthen MSMEs |
| Increase the national businesses competitiveness |
| Increase local and regional supply |

| Environmental and Social |
| --- |
| Deliver environmental benefits in contracts, including working towards reducing GHG emissions. |
| Fight deforestation |
| Inclusion opportunities especially for women, black, indigenous, disabled, and rural communities |
| Create employment opportunities particularly for those in vulnerability |
| Create opportunities for entrepreneurs and business creation, strengthening MSMEs |
| Fight income inequality |
| Increase of socially and environmentally sustainable goods and services in government procurement |
| Integrate economy in public procurement |

# @gestaogovbr

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