



***Industrie(s) de défense :
enjeux de marché, défis statistiques.***

Brazil's ambitions to strengthen its defense industry: present situation and opportunities for international cooperation.

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Universidade
Federal
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Summary

- **Logistic Defense Base**
- **Brazil's ambitions?**
- **Present situation!**
- **Opportunities?**

Logistic Defense Base

LOGISTIC DEFENSE BASE (LDB)

Is the aggregate of human, technological and material capabilities needed to develop and sustain the military expression of effective power, but is also deeply involved in the development of a country's industrial capability and competitiveness as a whole.

COMPONENTS OF THE LOGISTIC DEFENSE BASE

The LDB is made up of nine components that have distinct aspects but interact strongly:

- Defense industrial infrastructure;
- RDT&E (innovation) infrastructure;
- Logistic support infrastructure;
- Defense technological intelligence infrastructure;
- Defense financing infrastructure;
- Defense mobilization infrastructure;
- Defense products sale (export) infrastructure;
- LDB, procurement and R&D management infrastructure;
- and
- Regulatory framework for the LDB.



**LDB
GOVERNANCE**

BRAZIL'S AMBITIONS

(Brazilian strategies)



➤ For Power use.

- People and Politics Dimension
- Vital political aims
- **Soft** x **Hard** Power

➤ For Power development

- Brazilian Defense Logistics Policies

BRAZIL'S AMBITIONS?

PEOPLE AND POLITICS DIMENSION

- **BRAZIL (AND SOUTH AMERICA, FOR THAT MATTER) HAS BEEN RELATIVELY FREE FROM WARS AND VIOLENT CONFLICTS FOR QUITE A LONG TIME.**
- **THE COUNTRY HAS ALWAYS PRIORITIZED NEGOTIATION AND INTERNATIONAL ARBITRATION TO SETTLE DIFFERENCES WITH OTHER NATIONS.**
- **AS A CONSEQUENCE, BRAZILIAN SOCIETY DOES NOT HAVE A PERCEPTION OF THE EXISTENCE OF FOREIGN THREATS.**

BRAZIL'S AMBITIONS? PEOPLE AND POLITICS DIMENSION

CONCLUSION

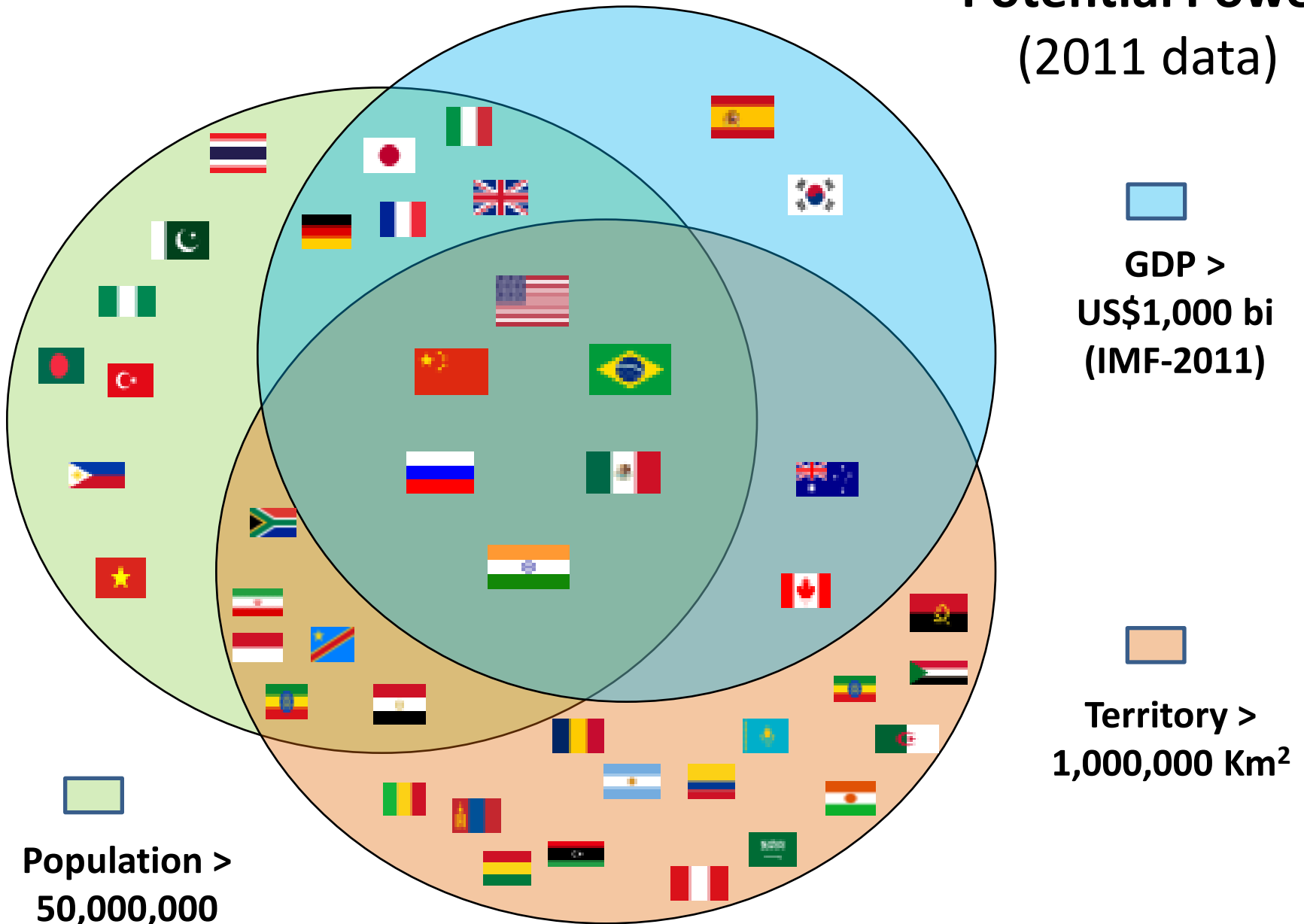
**DEFENSE IS NOT YET A
VERY IMPORTANT
SUBJECT IN THE
NATIONAL AGENDA.**

**BRAZIL'S AMBITIONS?
PEOPLE AND POLITICS DIMENSION**

**ON THE OTHER
HAND...**

BRAZIL AND THE WORLD

Potential Power (2011 data)



BRAZIL'S AMBITIONS?

PEOPLE AND POLITICS DIMENSION

- THERE IS A GROWING AWARENESS THAT THE COUNTRY CANNOT REMAIN A **POPULATIONAL, TERRITORIAL AND ECONOMIC GIANT AND A MILITARY DWARF.....**
- THE BRAZILIAN GOVERNMENT HAS CONSISTENTLY MANIFESTED AN INTEREST IN INCREASING THE COUNTRY PARTICIPATION IN INTERNATIONAL DECISION FORUMS.
- BRAZILIAN COMPANIES HAVE STARTED A MOVEMENT TO INVEST ABROAD (PETROBRAS, VALE, EMBRAER, AMBEV, ODEBRECHT, ETC.).
- BRAZILIAN ACADEMIA IS INCREASINGLY BECOMING INTERESTED IN DEFENSE.

BRAZIL'S AMBITIONS?

PEOPLE AND POLITICS DIMENSION

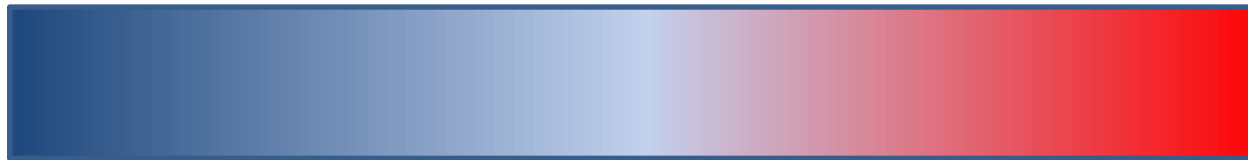
- **IN 1999 THE DEFENSE SECTOR WAS REFORMED, WITH THE CREATION OF THE MINISTRY OF DEFENSE, UNDER CIVILIAN AUTHORITY.**
- **THIS WAS AN IMPORTANT STEP, CONSIDERING THE HISTORICAL INVOLVEMENT OF THE MILITARY IN BRAZILIAN POLITICS, WHICH HAS CREATED DIFICULTY FOR POLITICIANS TO ADDRESS DEFENSE MATTERS.**
- **FINALLY, IN 2008 THE NATIONAL DEFENSE STRATEGY WAS ANNOUNCED (THIS DOCUMENT MAY BE CONSIDERED A TURNING POINT IN THE PREVIOUS SITUATION).**

Vital Political aims

- ✓ BRAZIL HAS PRACTICALLY GUARANTEED IN-HOUSE ENERGY, FOOD AND WATER SECURITY.
- ✓ IN THIS SITUATION, TOTAL SOVEREIGNTY OVER ITS JURISDICTIONAL TERRITORY AND ECONOMIC EXPLOITATION AREAS (BLUE AMAZON) CAN BE CONSIDERED A PRIORITY **(HIGHLY CONSENSUAL)**.
- ✓ THE CREATION AND MAINTENANCE OF A PEACE AND PROSPERITY ZONE IN ITS GEOPOLITICAL SPACE (SOUTH AMERICA AND SOUTH ATLANTIC ENVIRONMENT) IS ALSO VERY IMPORTANT.
- ✓ BRAZILIAN STRATEGY IS CLEARLY BASED ON DETERRENCE WITH PARTICIPATION OF AND TOTAL COOPERATION WITH ITS NEIGHBORS.

BRAZIL'S USE OF SOFT AND HARD POWER

SOFT
POWER



HARD
POWER

**OTHER
AIMS**

**SOVEREIGNTY
AIMS**

BRAZILIAN AMBITIONS?

NATIONAL DEFENSE STRATEGY (NDS)

- **ONE OF THE THREE AXES AROUND WHICH THE NDS IS ORGANIZED IS THE “RESTRUCTURING OF THE DEFENSE INDUSTRY, TO ASSURE THAT THE NEEDS OF THE ARMED FORCES WILL BE COVERED BY TECHNOLOGIES UNDER TOTAL BRAZILIAN DOMAIN”.**

BRAZILIAN AMBITIONS?

NATIONAL DEFENSE STRATEGY (NDS)

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**SYNTHESIS OF A
POLICY THAT IS
CONSENSUAL.**

BRAZIL'S AMBITIONS?

BRAZILIAN DEFENSE POLICIES

- **Policy and Guidelines for Industrial, Commercial and Technological Offset (PDCICT, 2002);**
- **Guidelines on Industrial, Technological and Foreign Trade Policy (DPITCE, 2003);**
- **Policy on Science, Technology and Innovation for Defense (PCTID, 2004)**
- **National Defense Policy (PDN, 2005);**
- **National Defense Industry Policy (PNID, 2005);**
- **Action Plan for Science, Technology and Innovation for National Development (PACTI, 2007);**
- **National Defense Strategy (END, 2008);**
- **Productive Development Policy (PDP, 2008);**
- **Greater Brazil Plan (PBM, 2011-2014)**
- **National ICT Policy 2012-2015 (ENCTI, 2012)**

BRAZIL'S AMBITIONS?

BRAZILIAN DEFENSE POLICIES

MAIN OBJECTIVES FOR THE LOGISTIC DEFENSE BASE

- **SUPPLY OF INNOVATIVE DEFENSE PRODUCTS WITH FULL BRAZILIAN TECHNOLOGY DOMAIN AND LONG-TERM INDEPENDENCE FROM FOREIGN SUPPLIERS (PDCICT, DPITCE, PCTID, PDN, PNID, END, PDP, PBM, PACTI, ENCTI).**
- **DEFENSE INDUSTRY COMPETIVINESS (PDCICT, DPITCE, PCTID, PDN, PBM, PNID, END, PDP)**
- **CREATION OF EMPLOYEMENT AND INCOME (PDCICT, DPITCE, PCTID, END, PDP, PBM, PACTI, ENCTI).**
- **SOUTH AMERICAN DEFENSE INDUSTRY INTEGRATION (PDN, END, PDP, DPITCE).**
- **QUALIFICATION AND SUSTAINMENT OF THE DEFENSE INDUSTRY (PDCICT, DPITCE, PCTID, PDN, PNID, END, PDP, PBM, PACTI, ENCTI).**

BRAZIL'S AMBITIONS?

PEOPLE AND POLITICS DIMENSION

**IT'S FAIR TO SAY THAT WE
LIVE IN A TRANSITIONAL
SITUATION LEADING TO
GREATER CONCERN AND
INVESTMENT IN DEFENSE.**

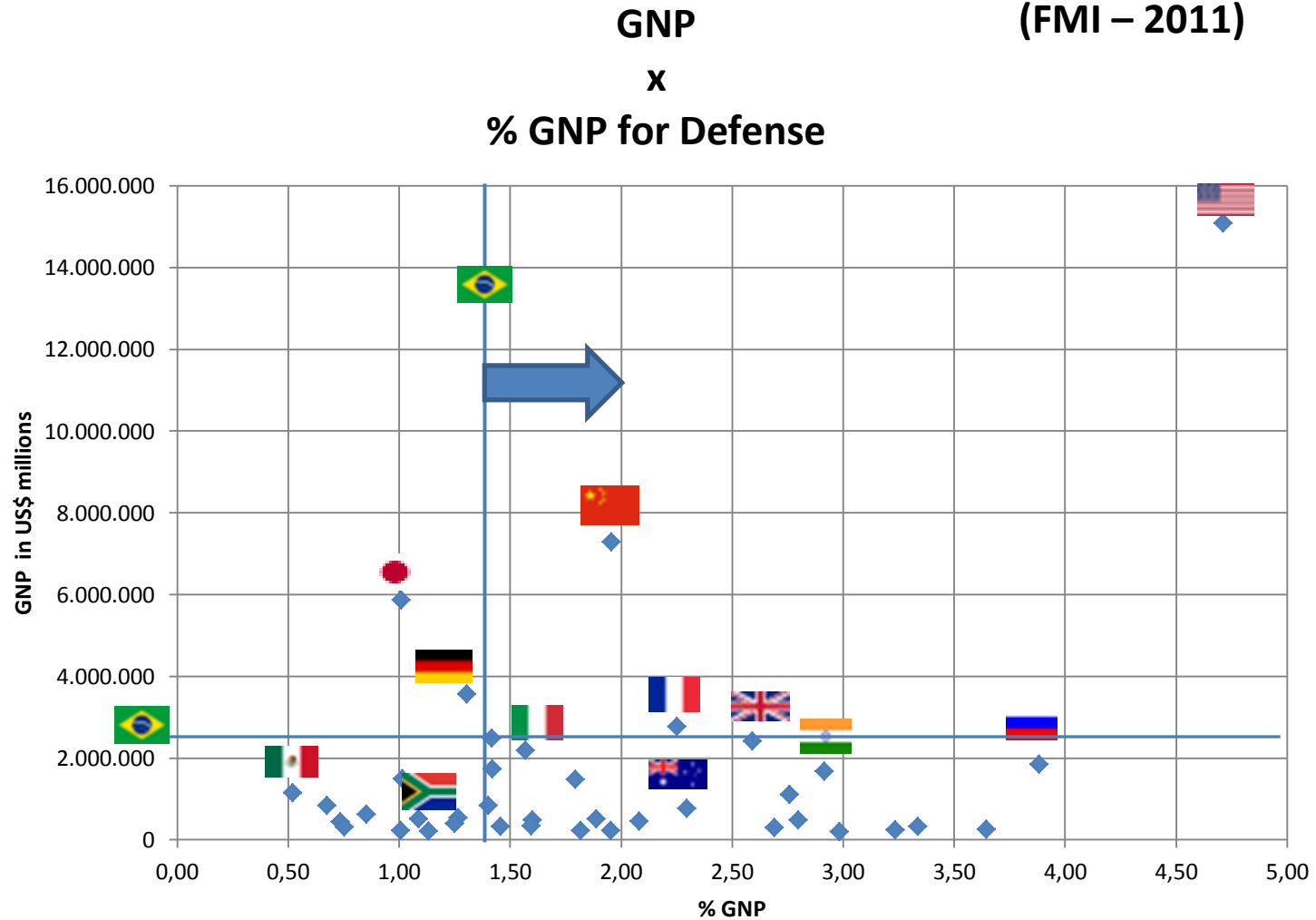
Present Situation



- **Defense budget and investments**
- **Other sources for defense financing**
- **Logistic defense base**
- **Defense logistic governance**
 - ✓ **Regulations**
 - ✓ **Institutions**

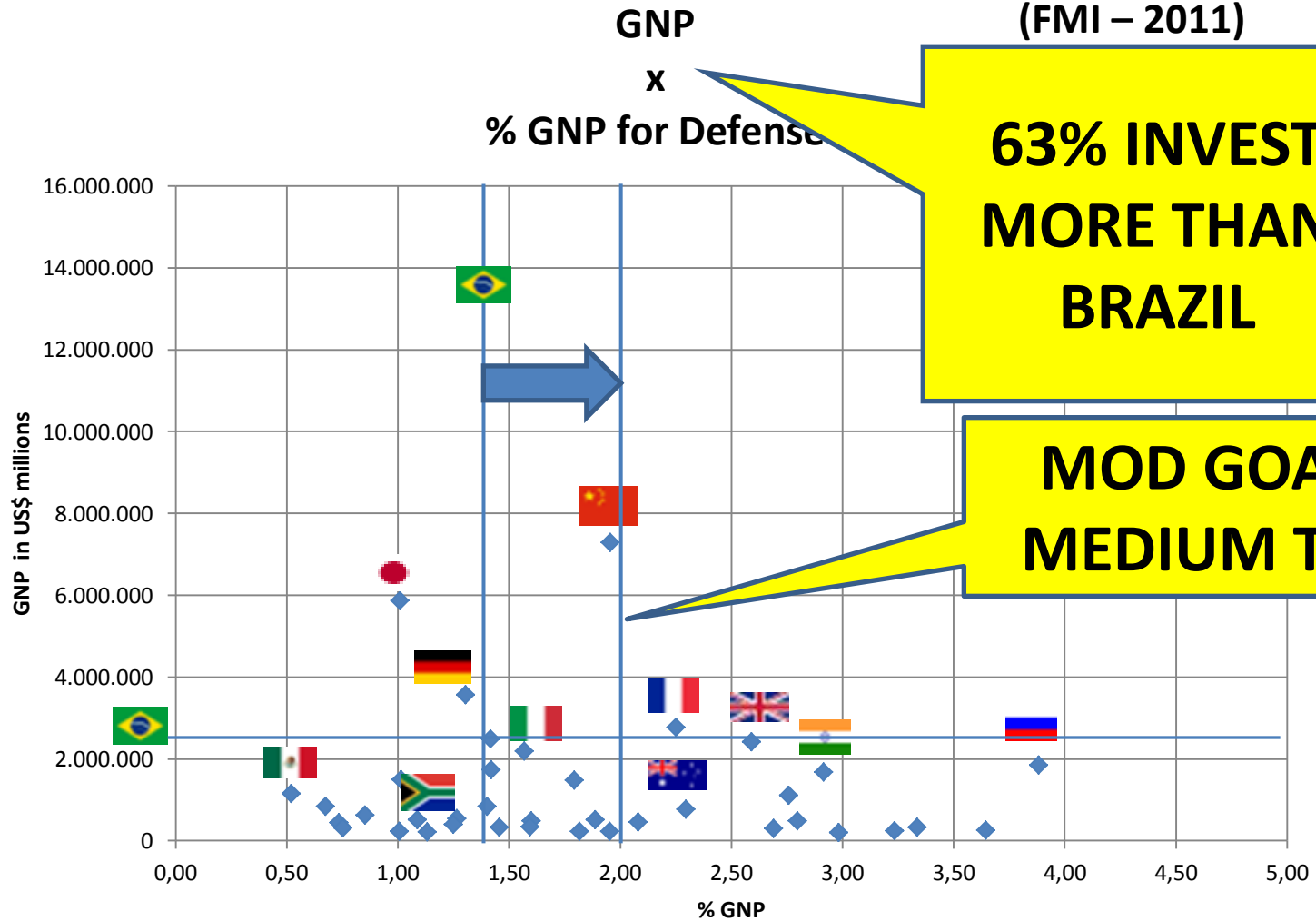
DEFENSE BUDGET

COUNTRIES WITH GNP > 200 US\$ BI
(SIPRI – 2011)
(FMI – 2011)



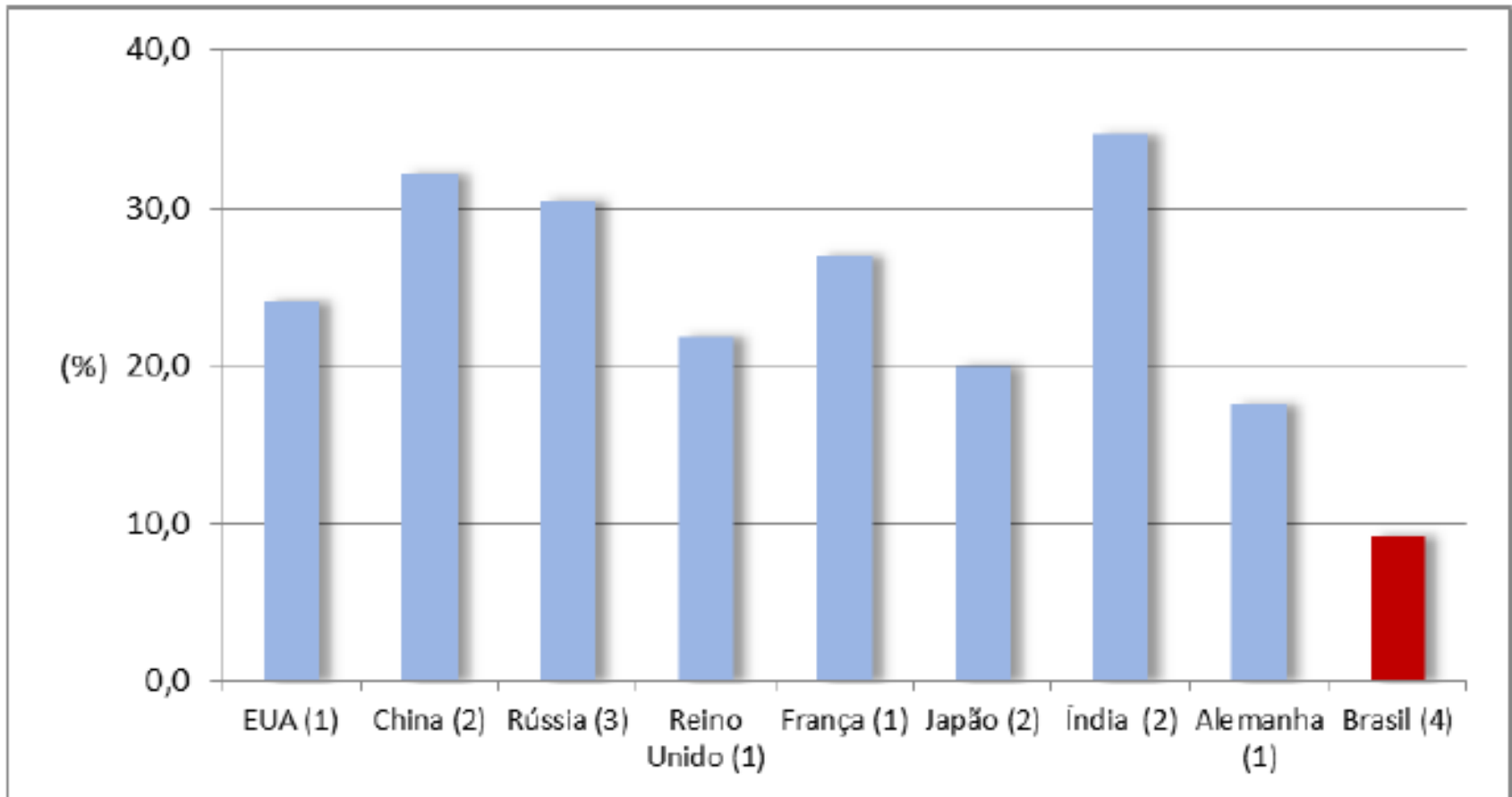
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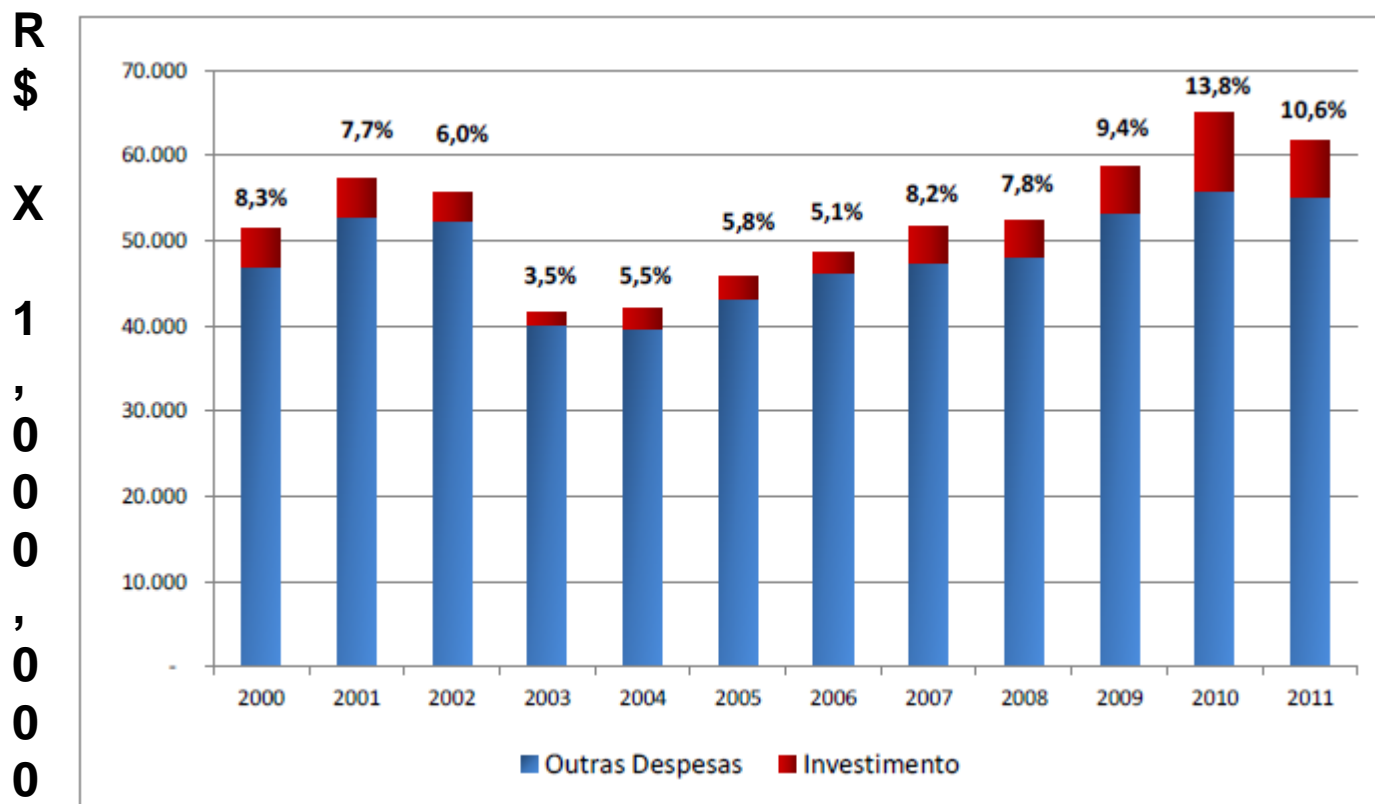
DEFENSE BUDGET AND INVESTMENTS

(BUDGET PERCENTAGES APPLIED TO INVESTMENTS IN 2009)



Source: Marcos José Barbieri Ferreira (LabA&D/UNICAMP)

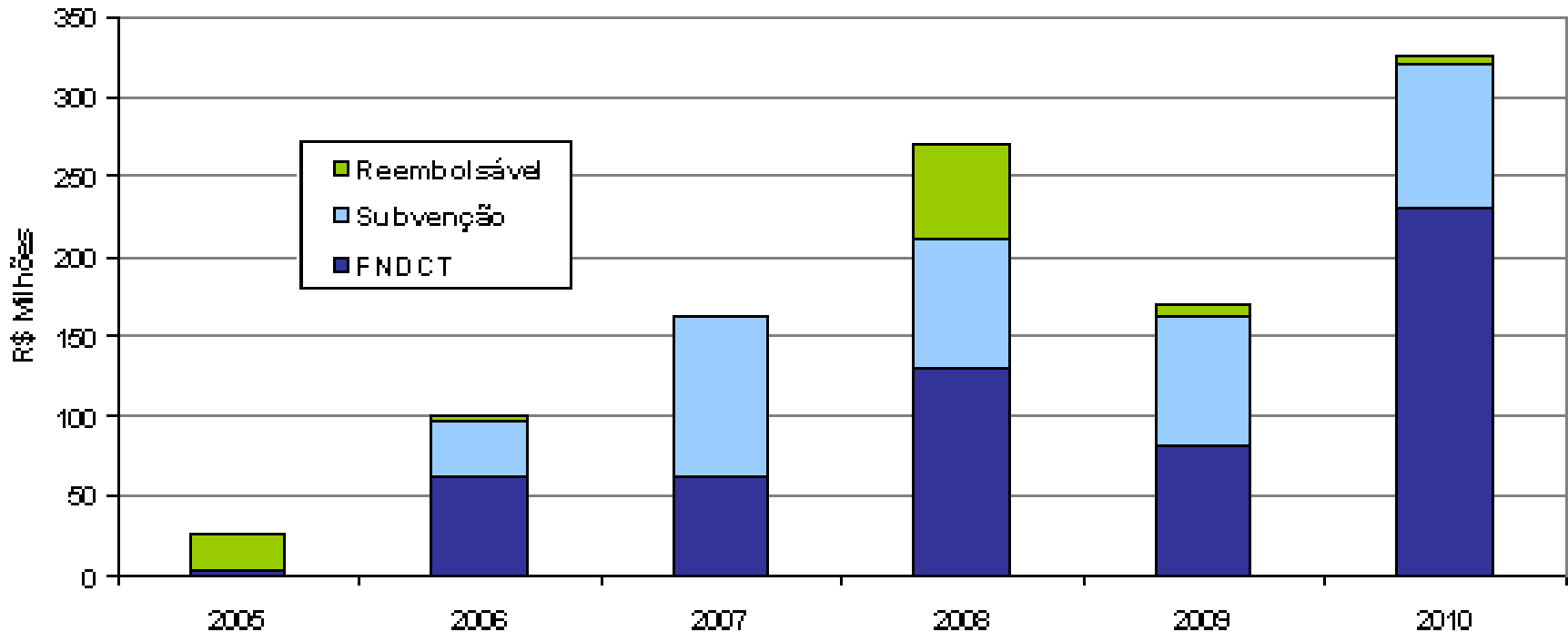
DEFENSE BUDGET AND INVESTMENTS (TOTALS AND PERCENTAGES)



Source: Marcos José Barbieri Ferreira (LabA&D/UNICAMP)

OTHER SOURCES OF FINANCING

- **FINEP investments in defense (in R\$ millions)**



Source: Financiadora de Estudos e Projetos (FINEP)

OTHER SOURCES OF FINANCING

INOVA EMPRESA - DEFESA E AEROESPACIAL

Financing: R\$ 2.9 billion (Demand was 13 billion)

Period: 2013-1014

Products:

- **Unmanned and ballistic vehicles**
- **Sensors and command and control**
- **Space propulsion, satellites and space platforms**
- **Technological platforms for more efficient aircraft**
- **New materials**

Proposals: 285 companies (77 approved. Many foreign owned). List of approved proposals may be found at:

http://www.defesa.uff.br/images/Textos/Simposios/VIENABED/RESULTADO_SELECAO_EMPRESAS_LIDERES_APOS_RECursos_INOVA_AERODEFESA.pdf

BRAZILIAN LOGISTIC DEFENSE BASE

- **FEW COMPANIES. MOSTLY SMALL AND MEDIUM SIZE (SME).**
- **TECHNOLOGY DOMINATED MOSTLY BY SME.**
- **LARGE BUSINESS GROUPS FROM OTHER SECTORS ENTERING THE DEFENSE SECTOR SEEKING TO OBTAIN BIG CONTRACTS.**
- **EMBRAER EMERGES AS THE MAIN BRAZILIAN DEFENSE PLAYER IN THE SHORT TERM.**

BRAZILIAN LOGISTIC DEFENSE BASE

BIGGEST BRAZILIAN PLAYERS (WITH DEFENSE INDUSTRIAL CAPACITY):

- **EMBRAER:** HARPIA (UAV), BRADAR (SENSORS), ATECH (COMMAND AND CONTROL), SAVIS (COMMAND AND CONTROL).
- **ODEBRECHT:** MECTRON (MISSILES), ICN (SUBMARINES).
- **SINERGY:** AEQ (BOMBS, EXPLOSIVES), EISA (WARSHIPS), DIGEX (AIRCRAFT MAINTENANCE), MAUÁ (SHIPS).

BRAZILIAN LOGISTIC DEFENSE BASE

BIGGEST FOREIGN PLAYERS (WITH INSTALLED INDUSTRIAL CAPACITIES):

- **EADS:** HELIBRAS (HELICOPTERS), EQUATORIAL (AEROSPACE), ASTRIUM (SATELLITE IMAGES)
- **ELBIT:** AEL (ELECTRONICS), ARES (ELECTRO-OPTICS)
- **THALES:** OMNISYS (SENSORS, ELECTRONICS).
- **DCNS:** ICN (SUBMARINES)

DEFENSE LOGISTIC GOVERNANCE

- Regulation
- Institutions

REGULATION

BRAZILIAN CONSTITUTION:

Equal rights to any company established in Brazil, regardless of the capital origin, with a few exceptions (defense was not an exception until 2012).

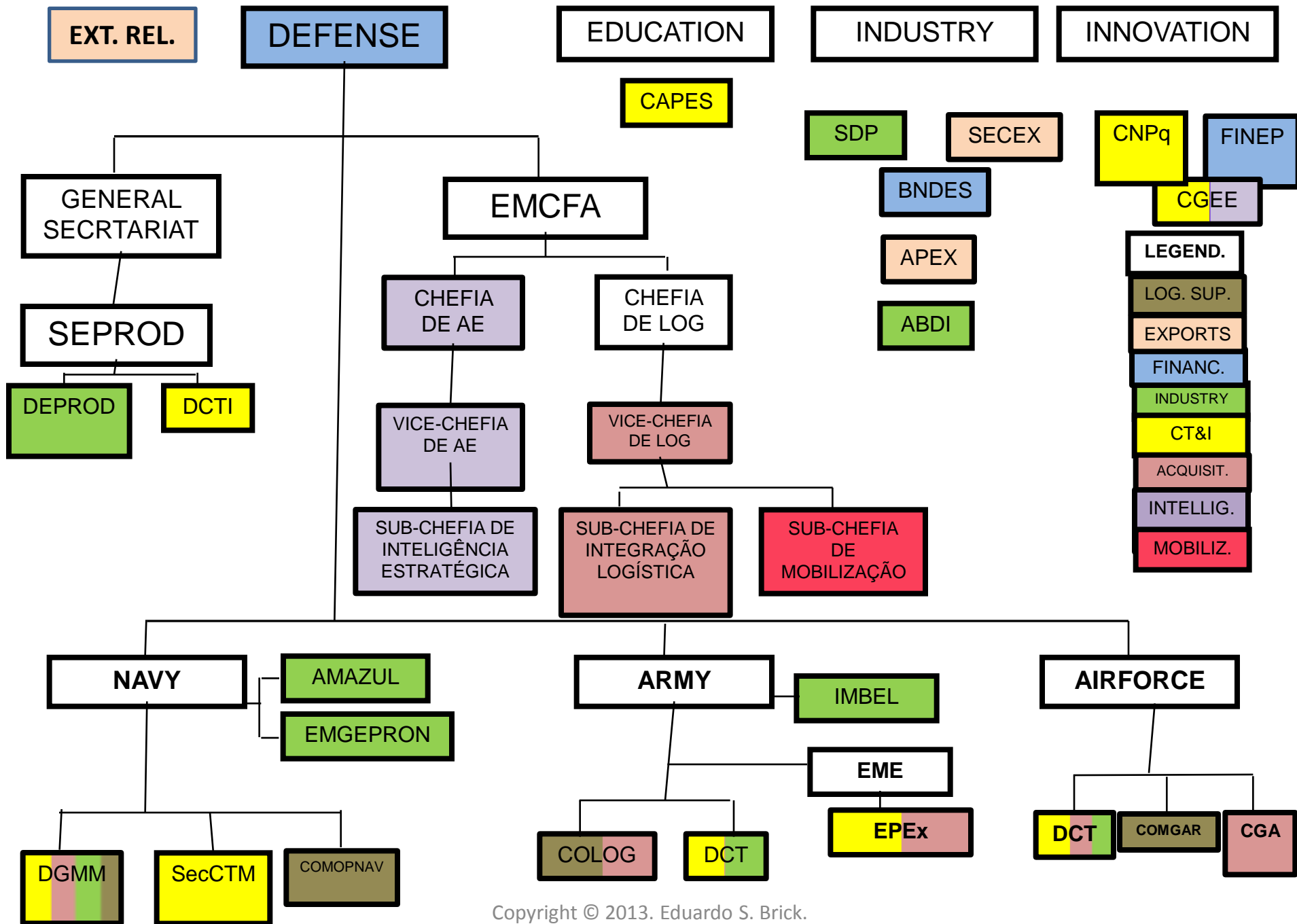
VERY RECENT REGULATION

LAW 12,598, March 22, 2012:

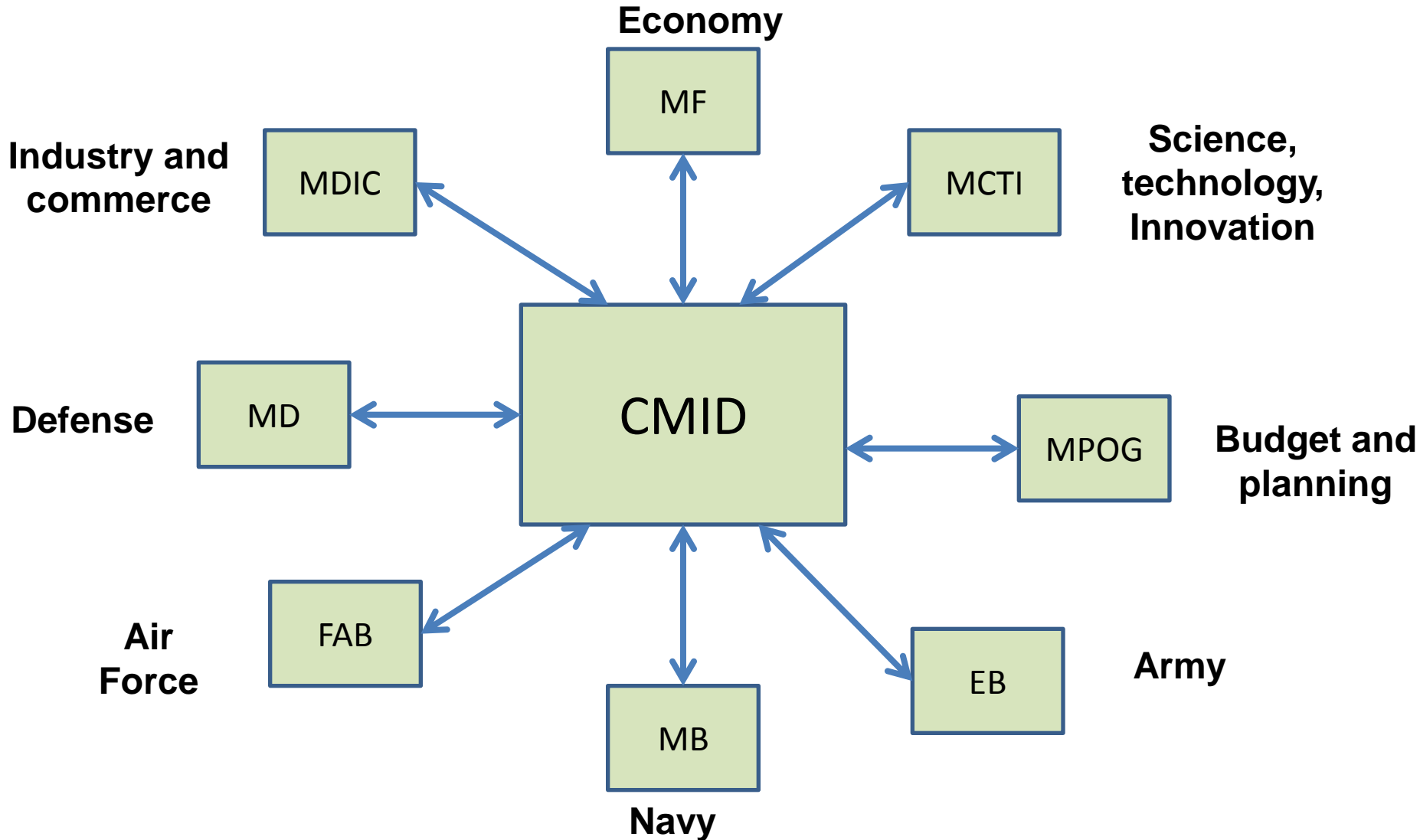
- **Defines Defense Strategic Products (PED – Produto Estratégico de Defesa) and Strategic Defense Companies (EED – Empresas Estratégica de Defesa).**
- **Exempts temporally defense products acquisitions from certain taxes.**
- **Acquisitions may be directed to EED only.**

DECREE 7,970, March 28, 2013:

- **Regulates Law 12,598 and creates the CMID (Mixed Defense Industry Commission)**
- **Rules for defense procurement, tax exemptions, classification of a company as EED, financing of EEDs.**



COMISSÃO MISTA DA INDÚSTRIA DE DEFESA (MIXED DEFENSE INDUSTRY COMMISSION)



Opportunities



Future scenarios?:

- ✓ **Decreasing defense budgets?**
- ✓ **Cost escalation (Augustine Law?)**
- ✓ **Defense industry globalization?**
- ✓ **Regional defense industry champions (instead of nationals)?**
- ✓ **Relaxation (or increase) of dual use products export controls?**
- ✓ **Willingness to establish real strategic cooperation?**

Opportunities?

- **Exports of complex components used in defense products (Restrictions on the export of sensitive items is the great problem that must be solved).**
- **Investment in industrial facilities for local production and/or for local design and R&D (Interaction with Universities and S&T institutes is the big challenge).**

Opportunities?

- **Combined development with market sharing for the products developed.**
- **Offsets based on real technology transfer and/or opening of national and/or international markets to Brazilian defense products.**

Opportunities?

Conclusion

Strategic and reliable partnerships with technology, investments and market sharing, and the insertion of the Brazilian LDB in the international LDB, seems to be the key for success in the medium and long runs, both for Brazil and its partners.

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**END OF THE PRESENTATION.
THANK YOU FOR YOUR ATTENTION**

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