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The Brazilian Industrial Policy

Fabrio S. Erber

Sponsored by

Inter-American Development Bank
Integration and Trade Sector
Institute for the Integration of Latin American and the Caribbean (INTAL)
THE BRAZILIAN INDUSTRIAL POLICY

FABIO S. ERBER
LAEEBA 2005
INDUSTRIAL POLICY AS A CONVENTION

• CONVENTIONS: TACIT AGREEMENTS BETWEEN DECISION-MAKERS TO ESTABLISH PRIORITIES AMONG PROBLEMS AND SOLUTIONS
• CONVENTIONS: AXIOMATIC CORE AND PROTECTIVE BELT
• COMPETITION BETWEEN CONVENTIONS
• HISTORY MATTERS
• INDUSTRIAL DEVELOPMENT AS PART OF A BROADER DEVELOPMENT CONVENTION
• INDUSTRIAL POLICY AS PART OF A DEVELOPMENT POLICY CONVENTION

• OBJECTIVES: TO ESTABLISH AN INDUSTRIAL STRUCTURE SIMILAR TO THE STRUCTURE OF THE DEVELOPED COUNTRIES
• ACTORS: FEDERAL GOVERNMENT; STATE ENTERPRISES, FOREIGN INVESTMENT AND LOCAL PRIVATE CAPITAL
• INSTRUMENTS:
  – RISK REDUCTION: PROTECTION IN THE INTERNAL MARKET, EXPORT INCENTIVES, LABOR CONTROL
  – COST REDUCTION: FISCAL AND CREDIT INCENTIVES TO INVESTMENT, WAGE POLICY
• RESULTS:
  – MANUFACTURES AS % OF TOTAL EXPORTS: 1960: 2%; 1980: 52%

• RESULTS – INDUSTRIAL STRUCTURE % 1950 1980
  NON-DURABLE CONSUMER GOODS: 73 34
  DURABLE CONSUMER GOODS 3 14
  INTERMEDIARY 20 37
  CAPITAL GOODS 4 15

• RESULTS – INCREASED TECHNOLOGICAL CAPABILITIES BUT FAILURE OF INFORMATICS POLICY
A SHORT HISTORY OF BRAZILIAN IP: THE WANING OF IP

THE CRISIS OF THE EIGHTIES AND EARLY NINETIES: THE DEMISE OF THE DEVELOPMENTAL CONVENTION
- EXTERNAL DEBT
- HYPERINFLATION
- DECLINE OF STATE LEGITIMACY
- FAILURE OF THE INFORMATICS POLICY

BUT STILL:
THE 1988 “BOX OF TOOLS” INDUSTRIAL POLICY:
- MECHANISMS OF SECTOR AND GOVERNMENT COORDINATION
- FISCAL INCENTIVES FOR INNOVATION
- IMPORT TARIFF RATIONALIZATION

THE 1992 “TWEEZER POLICY”:
- COMPETITION PRESSURES: TRADE LIBERALIZATION
- COMPETITIVE COMPENSATION: CREDIT AND FISCAL INCENTIVES

• THE NEW DEVELOPMENT CONVENTION: PRICE STABILITY AND “RIGHT INSTITUTIONS” – THE WASHINGTON CONSENSUS:
  – INERTIAL INFLATION AND MONETARY REFORM; 1991-94
  – FOREIGN EXCHANGE RATE PRICE ANCHOR: 1995-98

• LIBERAL REFORMS

• RESULTS:
  – MACROECONOMIC INSTABILITY
  – SLOW AND UNSTABLE INDUSTRIAL GROWTH: 1.4% PER YEAR

• THE CONFLICT BETWEEN RADICAL AND REFORMIST LIBERALS AS REGARDS IP – HISTORY MATTERS BUT ONLY AD HOC MEASURES
THE PRESENT INDUSTRY, TECHNOLOGY AND FOREIGN TRADE POLICY – THE POLITICAL CONTEXT

• NEW GOVERNMENT AND NO GROWTH IN 2003 – LEGITIMACY

• TRADITIONAL COMMITMENT OF THE MAIN GOVERNMENT PARTY TO INDUSTRIAL POLICY
THE PRESENT IP – STRUCTURAL ISSUES

BRAZILIAN AND WORLD EXPORTS AND TECHNOLOGY INTENSIVENESS – 2003 - %

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<th>BRAZIL</th>
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SOURCE: IPEA
THE PRESENT INDUSTRIAL POLICY – STRUCTURAL ISSUES

INNOVATION AND MANUFACTURES FOREIGN TRADE – 2003

MANUFACTURES: 53.5% OF EXPORTS AND 74.6% OF IMPORTS

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>EXPORTS (%)</th>
<th>IMPORTS (%)</th>
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<td>WORLD HIGH GROWTH 1996/01</td>
<td>12.3</td>
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<td>WORLD NEGATIVE GROWTH</td>
<td>46.0</td>
<td>23.5</td>
<td>87.6</td>
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SOURCE: IEDI
THE PRESENT IP – STRUCTURAL ISSUES

• LABOR PRODUCTIVITY COMPARED TO USA: 1980: 35%; 2002: 255
• USPO BRAZILIAN PATENTS 1999/2002 YEAR AVERAGE: 99 – 0,06%
• INNOVATION IN THE BRAZILIAN INDUSTRY – 1998-2000
  – 31% OF FIRMS INTRODUCED INNOVATIONS
  – ONLY 1.7% OF FIRMS (1199) INTRODUCED PRODUCT INNOVATION AND PRODUCT DIFFERENTIATION
  – INNOVATION EXPENDITURES IN % (2000):
    • MACHINERY: 52%
    • INTERNAL R&D: 17%
    • R&D CONTRACTED OUT: 3%
    • OTHER KNOWLEDGE: 5%
    • TRAINING: 23%
  – INNOVATION IS RELATED TO SIZE OF FIRM
➢ WORLD SHARE OF SCIENTIFIC PAPERS: 1981: 0,44% 2002: 1,55%
THE PRESENT IP POLICY

CONVENTION

THE PRESENT POLICY

COMBINES INDUSTRIAL, INNOVATION AND FOREIGN TRADE POLICIES
THE AXIS OF THE PRESENT IP POLICY

– HORIZONTAL:
  • STRENGTHENING THE NATIONAL SYSTEM OF INNOVATION
  • REDUCTION OF THE COST OF EXPORT
  • REDUCTION OF THE COST OF INVESTMENT
  • SIZE DIMENSION

– VERTICAL:
  • CAPITAL GOODS
  • SOFTWARE
  • INTEGRATED CIRCUITS
  • PHARMACEUTICAL

– NEW TECHNOLOGIES:
  • BIOTECH
  • NANOTECH
THE PRESENT IP POLICY: INSTRUMENTS OF THE HORIZONTAL AXIS

• STRENGTHENING THE NATIONAL SYSTEM OF INNOVATION
  – FISCAL AND CREDIT INCENTIVES TO INTRA-MUROS AND CONTRACTED OUT EXPENDITURES
  – JOINT PRIVATE AND STATE BANKS (BNDES AND FINEP) VENTURE CAPITAL FUNDS
  – MODERNIZATION OF INTELECTUAL PROPERTY AND METROLOGY GOVERNMENT INSTITUTIONS

• REDUCTION OF EXPORT COSTS
  – APEX: BRAZILIAN AGENCY FOR EXPORT PROMOTION
  – BUREUCRATIC Deregulation
  – EXPORT CREDIT BY BNDES
THE PRESENT IP POLICY:
HORIZONTAL AXIS INSTRUMENTS

• REDUCING THE COST OF INVESTMENT:
  – REDUCTION OF TAXES ON LOCAL AND IMPORTED CAPITAL GOODS
  – REDUCTION OF JURISDICTIONAL UNCERTAINTY OF CREDIT LENDERS
  – DEREGULATION OF PROCEDURES FOR OPENING AND CLOSING UP FIRMS
  – CAPITAL MARKET REGULATION: PROTECTION OF MINORITY SHAREHOLDERS AND BNDES-BACKED FUNDS

• SIZE DIMENSION:
  – INCREASING ACCESS OF SME TO CREDIT
  – CLUSTER-ORIENTED POLICIES
  – M&A OF LARGE ENTERPRISES
THE PRESENT IP POLICY:
INSTRUMENTS OF THE VERTICAL AND
NEW TECHNOLOGIES AXIS

• SPECIFIC LINES OF CREDIT AND RISK-CAPITAL OF BNDES
  AND FINEP FOR INVESTMENTS ON INNOVATION,
  PRODUCTION CAPACITY, M&A AND EXPORTS
• NEGOTIATION WITH FOREIGN INVESTORS FOR IC
• PUBLIC LABS FOR PHARMACEUTICALS
• REGULATION OF PHARMACEUTICALS BY ANVISA (THE
  BRAZILIAN FDA)
• LOCAL PURCHASE OF CAPITAL GOODS AND SHIPS BY
  PETROBRAS WITH BNDES CREDIT
• INSTITUTIONAL MECHANISMS FOR ELABORATION OF
  BIOTECH AND NANOTECH POLICIES
• ADDITIONAL GRANTS FOR BIOTECH AND NANOTECH
  NETWORKING AND RESEARCH
THE PRESENT IP POLICY: COORDINATION

• GENERAL:
  – NATIONAL COUNCIL FOR INDUSTRIAL DEVELOPMENT: GOVERNMENT, ENTREPRENEURS AND TRADE UNIONS
  – BRAZILIAN AGENCY FOR INDUSTRIAL DEVELOPMENT

• SECTORS AND NEW TECHNOLOGIES:
  – COMPETITIVENESS FORA OF THE MINISTRY OF INDUSTRIAL DEVELOPMENT – GOVERNMENT AND ENTERPRISES
THE PRESENT IP POLICY: PROBLEMS

• MACROECONOMIC CONVENTION: PRICE STABILITY
  – DEMAND MUST GROW SLOWLY
  – VERY HIGH INTEREST RATES
  – OVERVALUED EXCHANGE RATE
  – FISCAL POLICY ORIENTED TOWARDS PRIMARY SURPLUS

• HUMAN RESOURCES

• LOGISTICS

• INCIPIENT COORDINATION OF IP