Brazilian Association for Mechanically Processed Timber

The Fiftieth Session of the International Tropical Timber Council (ITTC)

<u>MARKET DISCUSSION</u>:
DOMESTIC RESOURCES AND DEMAND,
ROLE AND OPPORTUNITIES FOR INCREASED IMPORTS:
TO PROVIDE AN OVERVIEW OF BRAZIL AS AN EMERGING MARKET

YOKOHAMA, NOVEMBER 05th 2014

ABIMCI Brazilian Association for Mechanically Processed Timber

Contents:

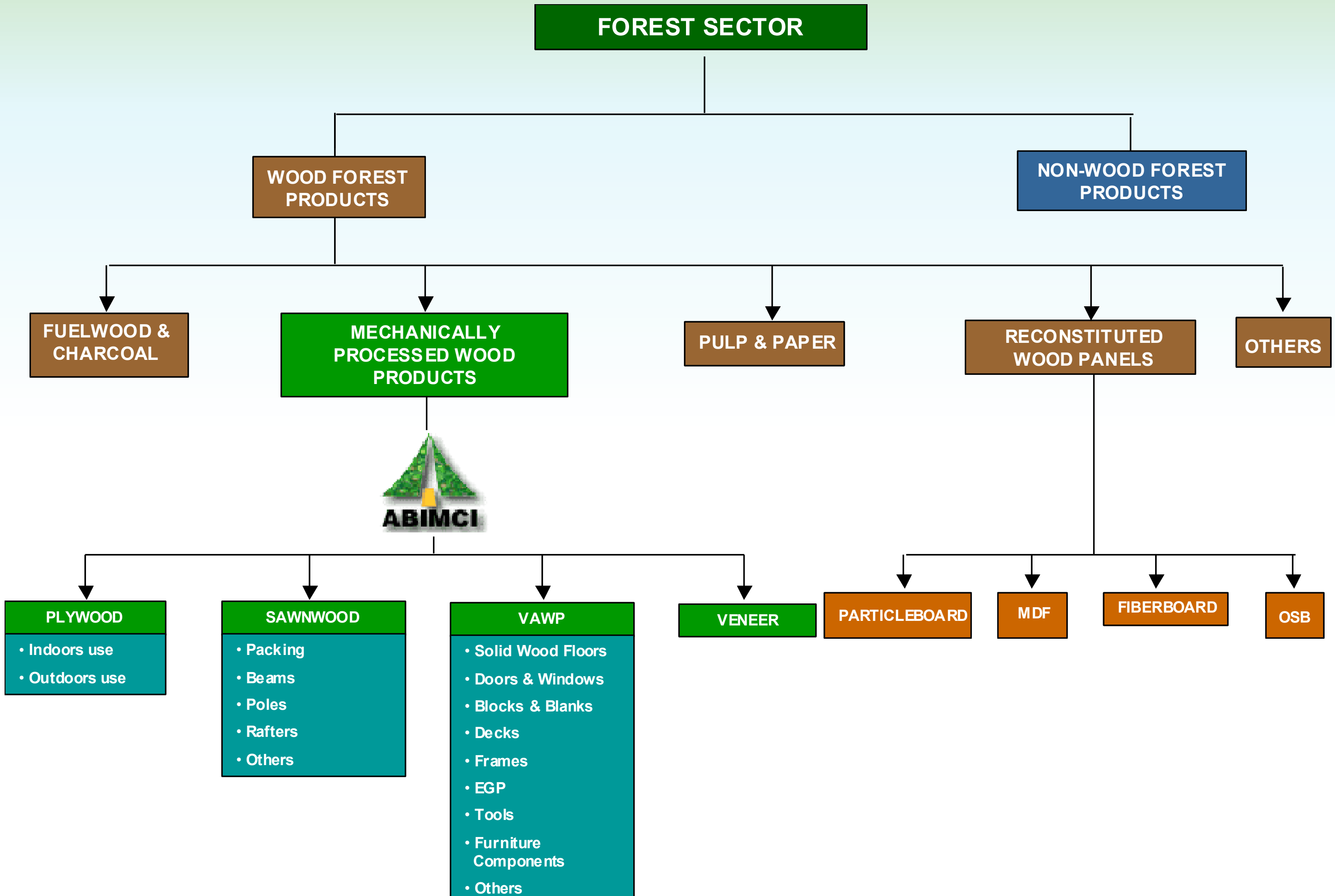
About ABIMCI

ABIMCI – Brazilian Association for Mechanically Processed Timber

- Established in 1972
- Headquarter in Curitiba, Brazil
- Over 100 member companies representing large part of national timber industry
- Market segments: forest producers, companies of timber, plywood, Value-Added Wood Products: door, solid flooring, frame segments, machinery suppliers, others
  - Actions on political, commercial and institutional-related topics, guaranteeing the development and growth of the timber industry
  - Makes the interface between member companies and the government
  - Coordinating certification programmes
  - Solidwood Sector Yearbooks
  - National association managing the Brazilian Technical Norms (ABNT) for timber
  - Maintaining several international operational agreements

About ABIMCI

ABIMCI – Brazilian Association for Mechanically Processed Timber



About ABIMCI

ABIMCI – Brazilian Association for Mechanically Processed Timber

- **MAIN PRODUCTS**
  - **SAWNWOOD**
    - **PINE**
    - **TROPICAL**
  - **PLYWOOD**
    - **PINE**
    - **TROPICAL**
  - **VALUE ADDED PRODUCTS**
    - **MOULDING**
    - **DOORS**
    - **FLOORING**
    - **EGP**
    - **OTHERS**

Brazilian Timber Industry History

- **16th -18th centuries**
  - **Portugal exploits the Brazilwood (*Caesalpinia echinata*) timber for exports**
- **Late 19th – early 20th centuries**
  - **Occupation of State of Sao Paulo**
    - Large tracts of forest converted to coffee plantations
    - Availability of several hardwood species, especially the Peroba (*Aspidosperma polyneuron*)
  - **Occupation of Southern Brazil**
    - Settlement of European immigrants, converting forests for agriculture and pastureland
    - Exploitation of several wood species for domestic and foreign markets, including the Imbuia (*Ocotea porosa*) and the Parana Pine (*Araucaria angustifolia*)
- **Late 20th – early 21st centuries**
  - **Occupation of the Brazilian Amazon**
    - Settlement of Brazilian migrants, with conversion of rainforest to pasture and agriculture
    - Main timber species : Brazilian Chestnut-Tree (*Bertholletia excelsa*),Mahogany (*Swietenia macrophylla*), Ipe (*Tabebuia serratifolia*), Jatoba (*Hymenaea courbaril*)
  - **Establishment of forest plantations across the country**
    - Mainly Pine, Eucalyptus and Teak planted for several uses, including lumber
    - Mostly in the South, Southeast and Central-West regions

Forest Cover in Brazil

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Forest Cover

Forest Cover in Brazil

Forest	Area (Million ha)	% Forest Area	% of Brazil[3]
Natural Forests[1]	**512.1**	**98.5%**	**61.5%**
Primary	476.6	91.7%	57.2%
Regenerated	35.5	6.8%	4.3%
Forest Plantations[2]	**7.6**	**1.5%**	**0.9%**
Total	519.7	100.0%	62.4%

[1] Amazon Forest: 325.5 million ha
[2] Pine and Eucalyptus: 93%
[3] Brazil total area: 832.5 million hectares
Source: FAO (2010); IBA (2014)

Forest Cover

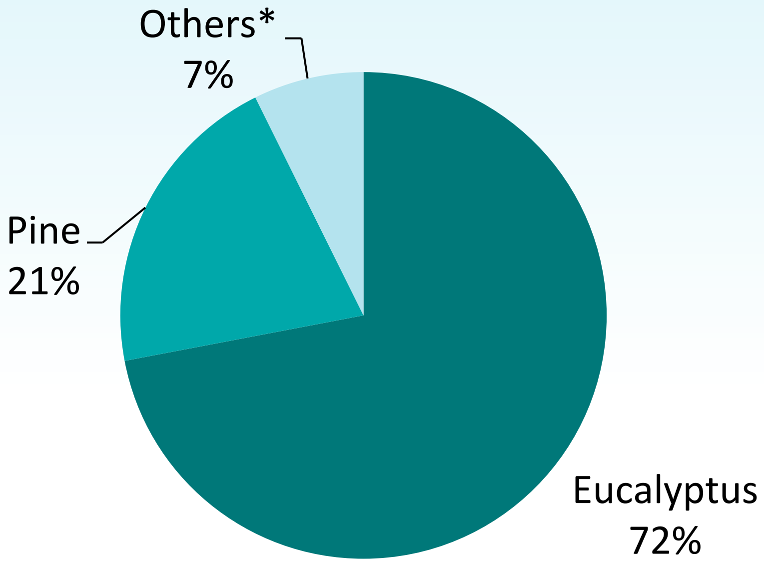
Distribution of Forest Uses in Brazil

Forest Use	Area (Million ha)	%
Production	**37.2**	**7.2%**
Protection	**156.0**	**30.0%**
- Soil and Water	102.5	19.7%
- Biodiversity	53.5	10.3%
Social Services	**135.1**	**25.9%**
Multiple Use	**43.0**	**8.3%**
Unclassified	**148.4**	**28.6%**
Total	**519.7**	**100.0%**

Source: FAO (2010); MMA (2012), IBA (2014), FUNAI (2012)

Forest Cover

Distribution of Planted Areas with Eucalyptus, Pine and Other Species in Brazil (2013)

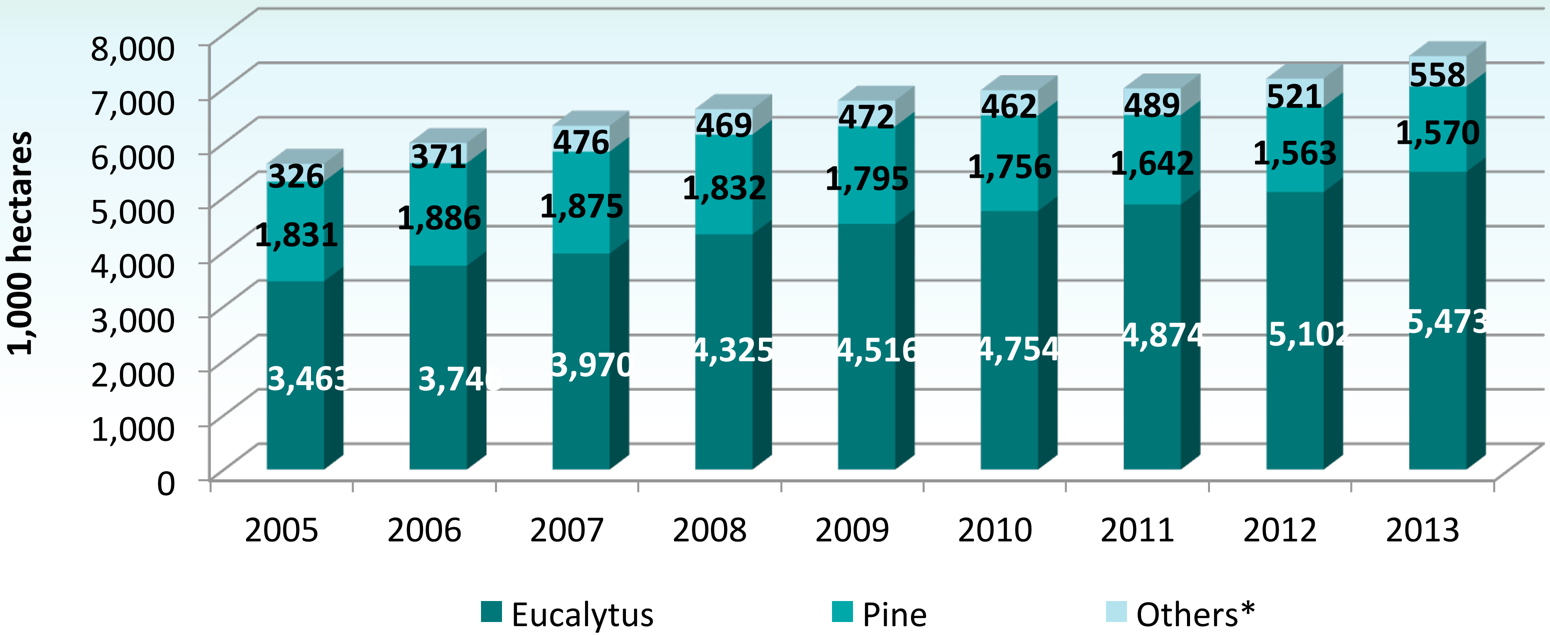


TOTAL: 7,600,974 ha

* Other forest species: mainly Rubber-Tree (*Hevea brasiliensis*), Acacia (*A. mearnsii, A. mangium*), Teak (*Tectona grandis*), Parica (*Schizolobium amazonicum*), Parana-Pine (*Araucaria angustifolia*), Poplar (*Populus* spp.), others.
Source: IBA (2014)

Forest Cover

Planted Areas with Eucalyptus, Pine and Other Species in Brazil (2005-13)

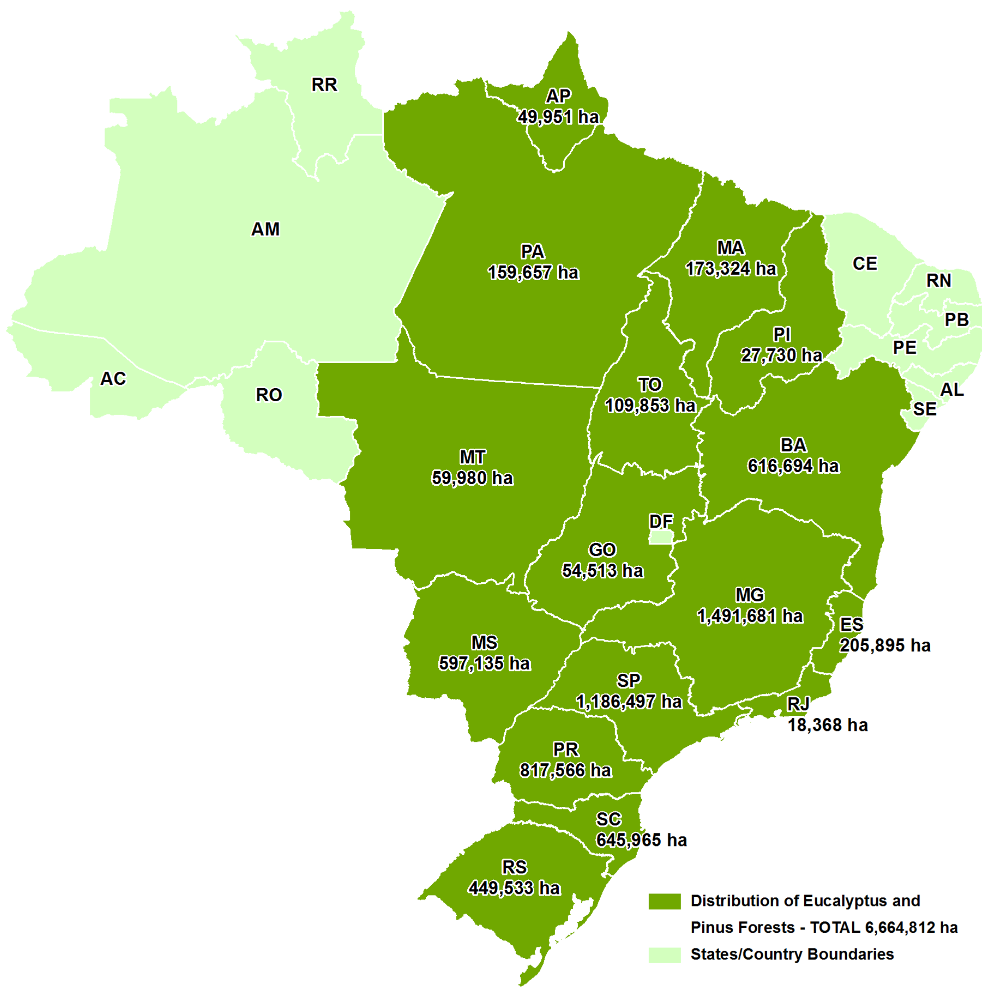


Growth Trend (2005-2013)
Eucalyptus: +5.9% per year
Pine: -1.9% per year
Other Species: +6.9% per year

Source: IBA (2014)

Forest Cover

Distribution of Forest Plantations



Source: IBA (2014)

Other Planted Species

Specie	Uses	Major States with Plantations	Planted Area (2013)	Photo
Paricá	Plywood, veneer, chips, sticks and VAP	PA	87,519 ha	
Teak	Veneer, floorings/decks, furniture and other VAP	MT, PA and TO	88,270 ha	

Source: IBA (2014)

DEFORESTATION

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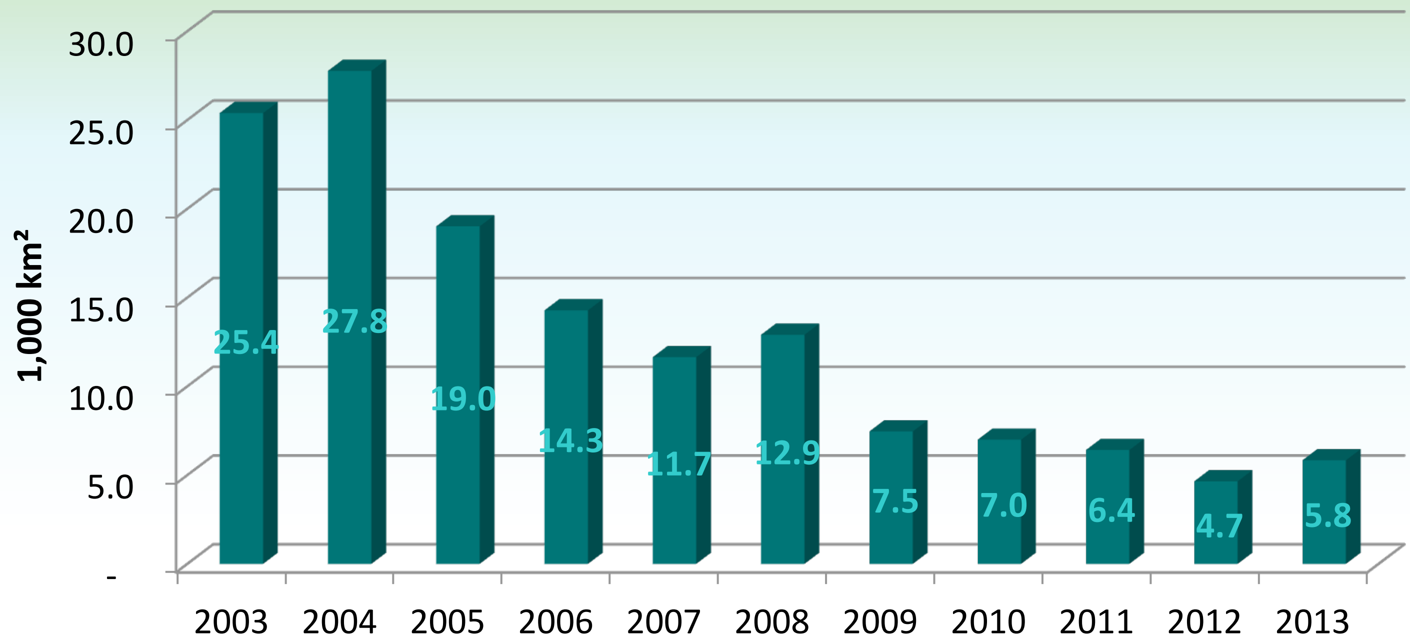
Deforestation

Amazon Deforestation (2003-2013)



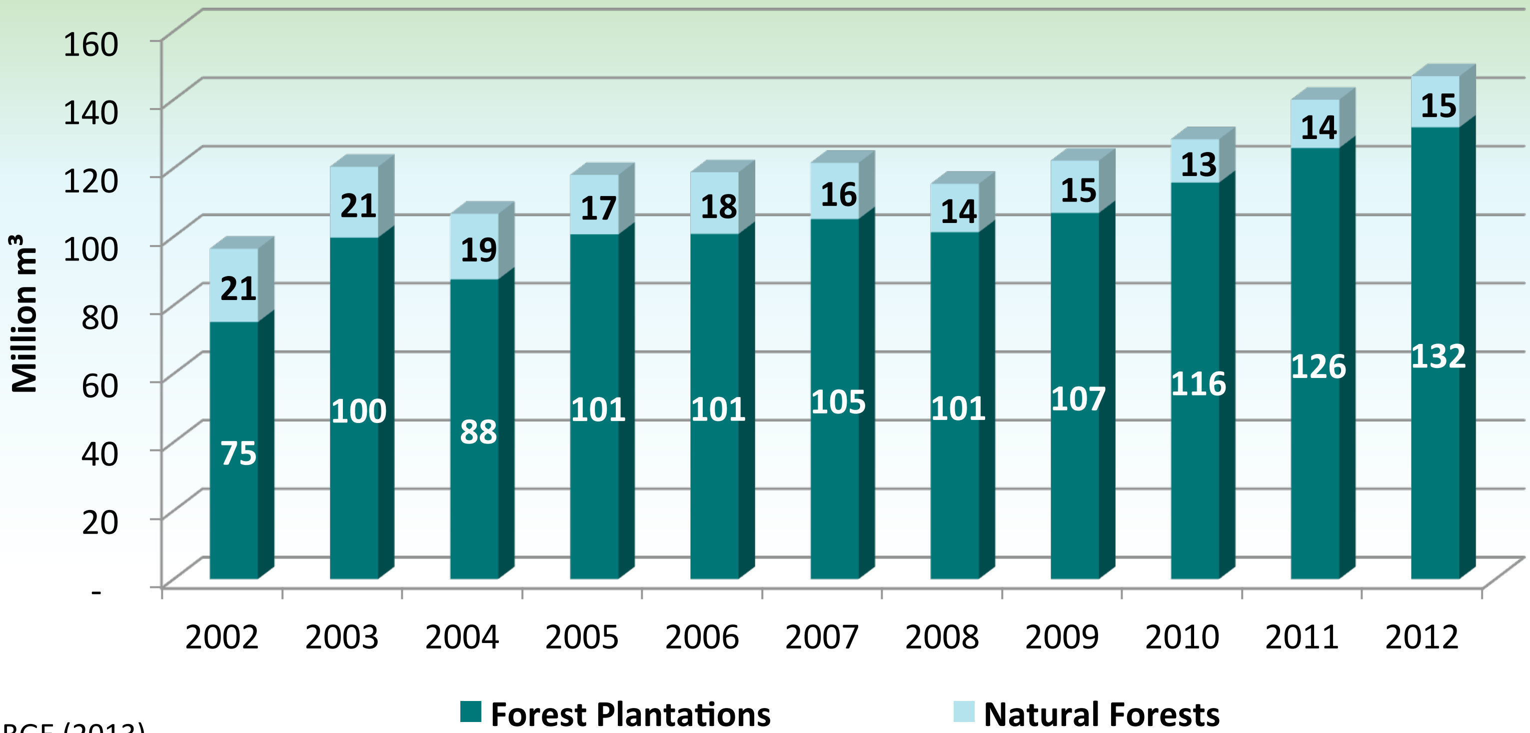
Source: MCTI (2013)

Deforestation Trend (2003-2013)
Reduction of 80% in the
last 10 years

LOG SUPPLY

Log Supply

Industrial Log Supply (2002-2012)



Source: IBGE (2013)

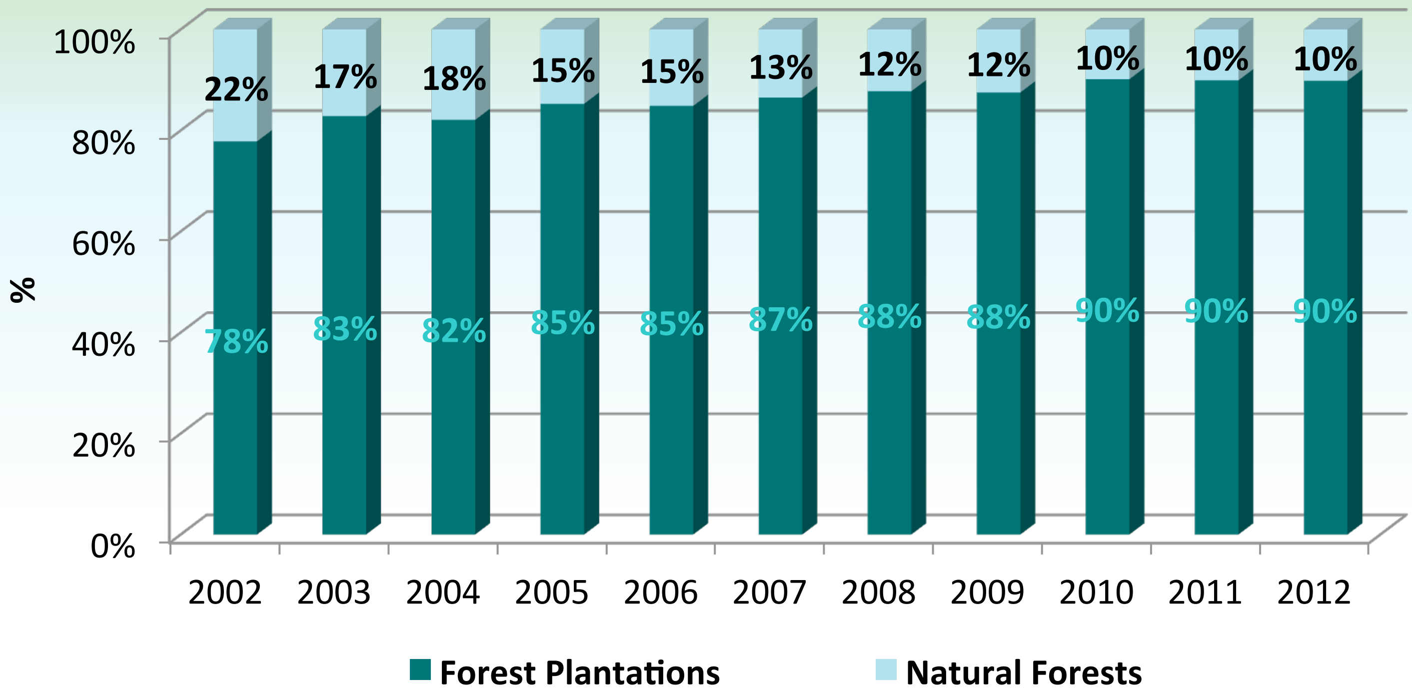
Industrial Log Supply (2002-2012)

- Forest Plantations: +76%

- Natural Forests: -30%

Log Supply

Industrial Log Supply Share (2002-2012)



Source: IBGE (2013)

Perspectives
By 2020 plantations will be responsible for 93-95% of the industrial timber supply.

Socioeconomic Characteristics of the Brazilian Forest Sector

Number of Companies[1] in the Mechanically Processed Timber Industry in Brazil, by Activity (2012)

Business	Number of Companies	% Share
Wood packaging and barrels	1,167	5%
Wooden parts / artifacts (except furniture)	9,983	41%
Pre-manufactured wooden houses	1,199	5%
Wooden frames, moldings and wood parts for industrial and commercial facilities	1,472	6%
Veneer, plywood, chipboard and particleboard	538	2%
Carpentry for civil construction (except furniture)	4,446	18%
Sawmills processing log into sawnwood	4,852	20%
Sawmills without processing log into sawnwood [2]	725	3%
Sub-Total Woodworking Industry	**24,382**	**100%**
Wooden furniture	33,777	100%
Sub-Total Furniture Manufacturing Industry	**33,777**	**100%**
TOTAL	**58,159**	**100%**

[1] Companies with a CNPJ, registered and active in the Board of Trade, which does not necessarily imply being in operation.
[2] Companies that use already use sawnwood as raw material for the production of other byproducts.
Source: IBPT 2013 adapted by STCP.

Number of Direct Formal Jobs in the Brazilian Forest Sector (2011-2012[1])

Segment	Number of Direct Formal Jobs		% Share
	2011	2012*	(2012*)
Forest Production	133,009	138,449	19%
Pulp and Paper	175,122	182,284	25%
Woodworking	202,043	210,307	29%
Furniture	196,647	204,69	28%
TOTAL	706,821	735,73	100%

* STCP´s estimate.
Source: RAIS/MTE, complied by STCP.

Number of Direct Formal Jobs in the Mechanically Processed Timber Industry in Brazil by Segment (2008-2012[1])

Segment	Number of Direct Jobs				
	2008	2009	2010	2011	2012[1]
Wood packaging and barrels	13,326	12,481	13,994	15,009	15,623
Wooden parts / craftwork (except furniture)	28,237	26,509	27,16	27,139	28,249
Veneer, plywood, chipboard and particleboard	45,089	39,491	42,045	41,208	42,893
Carpentry for civil construction (except furniture)	31,735	31,261	33,565	33,472	34,841
Sawnwood	87,929	83,114	87,586	85,215	88,7
Wooden furniture	171,218	172,74	188,178	196,647	204,69
TOTAL	**377,534**	**365,596**	**392,528**	**398,69**	**414,996**
Annual Growth (%)	**-3.8%**	**-3.2%**	**7.4%**	**1.6%**	**4.1%**

[1] STCP´s estimates
Source: RAIS/MTE (2013) compiled by STCP.

Socioeconomic Indicators for the Forest-based Industry and Mechanically Processed Timber Industry (2011 and 2012)

Indicator	2011		2012	
	Forest-based Industry	Mechanically Processed Timber Industry	Forest-based Industry	Mechanically Processed Timber Industry
Gross Forest Production Value (GFPV)	US$ 37.3 billion (1.51% of Brazilian GDP)	US$ 8.1 billion (0.33% of Brazilian GDP)	US$ 33.1 billion (1.47% of Brazilian GDP)	US$ 7.3 billion (0.32% of Brazilian GDP)
Number of Companies	--	--	81,200	58,200 (72% of Forest Sector)
Number of Direct Jobs[2]	706,821 (1.5% of the total jobs in Brazil)	398,690 (0.86% of the total jobs in Brazil)	735,730 (1.6% of the total jobs in Brazil)	414,996 (0.88% of the total jobs in Brazil)
Brazilian Exports[3]	US$ 9.6 billion (3.74% of total Brazilian exports)	US$ 1.73 billion (0.68% of total Brazilian exports)	US$ 9.0 billion (3.72% of total Brazilian exports)	US$ 1.66 billion (0.69% of total Brazilian exports)
Trade Surplus	US$ 7.5 billion (24.3% of Brazilian's total)	US$ 1.67 billion (5.6% of Brazilian's total)	US$ 6.9 billion (35.4% of Brazilian's total)	US$ 1.57 billion (8.1% of Brazilian's total)

[1] The number of companies refer to 2012 data. [2] RAIS: Annual Social Information Report (*Relação Anual de Informações Sociais*) / Ministry of Labor. [3] Includes wood furniture.
Source: ABRAF, MET, SECEX, STCP Database and others.

Brazilian Forest Policy

Reasons for Constraining Forest Development …

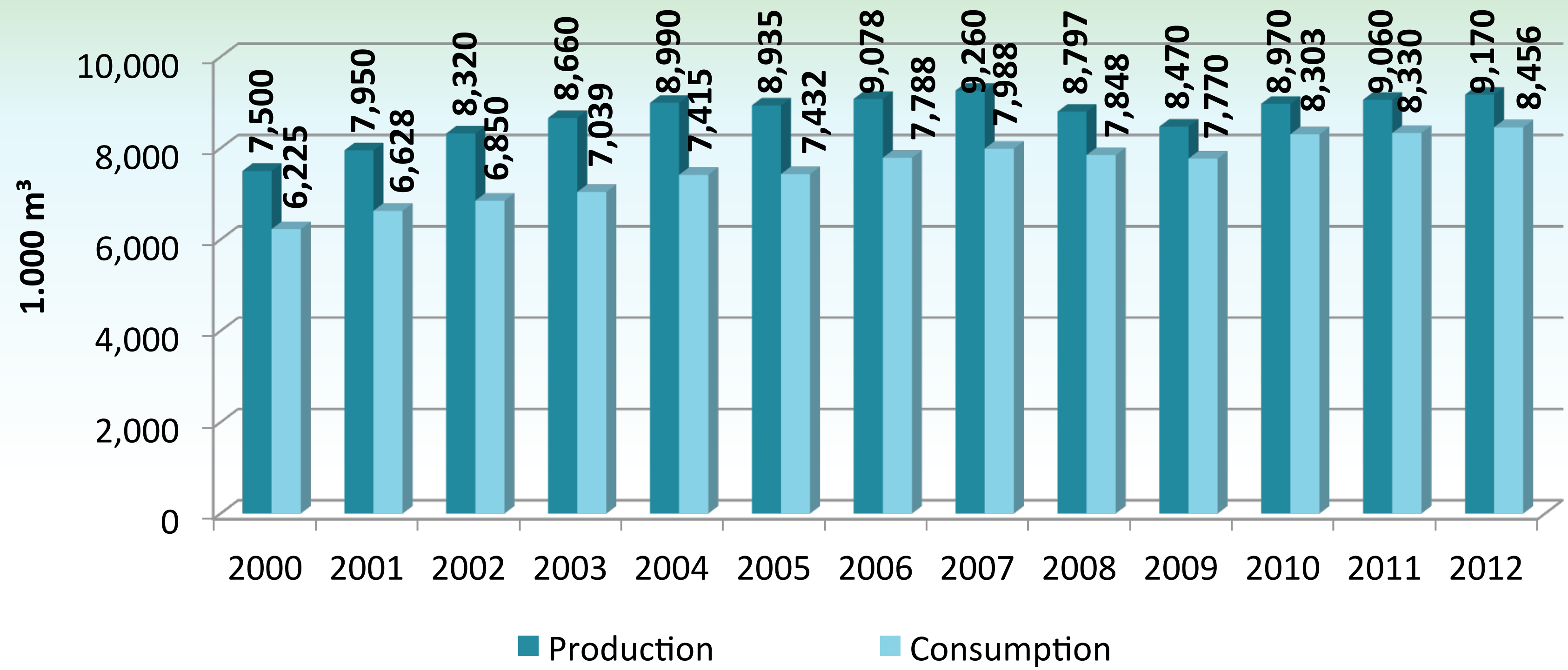
- Macroeconomic indicators (FX rate, economic growth, others)
- Restrictive legislation (environmental, industrial, labor, others)
- Sector's production chain networking (*capilaridade*)
- Certification (forest and chain of custody)
- Institutional bureaucracy and delays (forests management plans, public forest management, others)
- *"Custo Brasil"* (Brazil's Cost)
- Logistics bottleneck
- Faulty infra-structure
- High transaction costs
- Seasonal rainfall patterns
- Lack of institutional interests
- Tariff and quota on imports of Brazilian pine plywood

… for some Advancements

- ABIMCI's coordinated actions and requests to government:
- Quality certifying programs as well as legal origin certifications
- Work force training
- Seminars and shows
- Tax reductions
- Forest plantation long term policies
- Native forests utilization
- International agreements
- Isolated actions taken by the government:
- Tax exemptions and return of a percentage of paid taxes after goods effectively exported.
- Promotion through apex/camex programs

Market

Brazilian PINE SAWNWOOD Production and Consumption



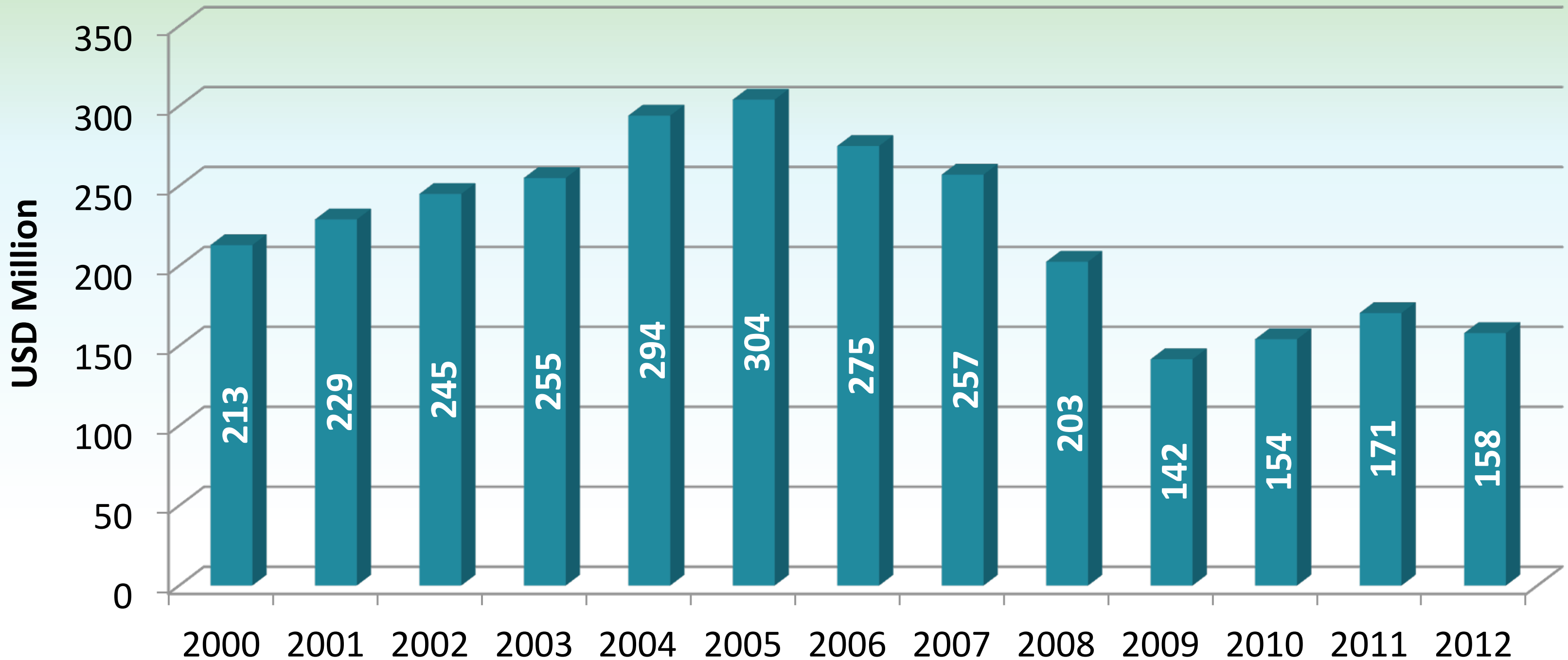
Source: ABIMCI (2013)

Pine Sawnwood Production and Consumption Trends

Production: +1.7% per year

Consumption: +2.6% per year

Brazilian PINE SAWNWOOD Exports (Value)

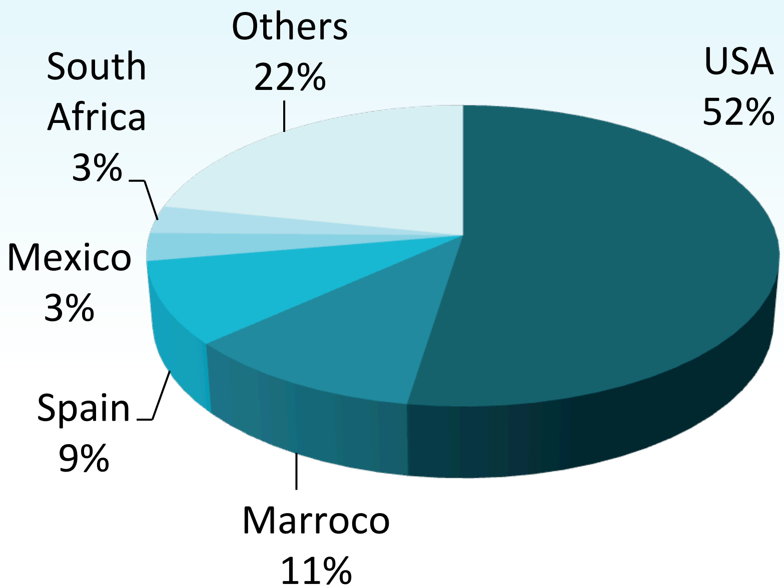


Source: ABIMCI (2013)

Pine Sawnwood Exports (Value)
-2.5% per year

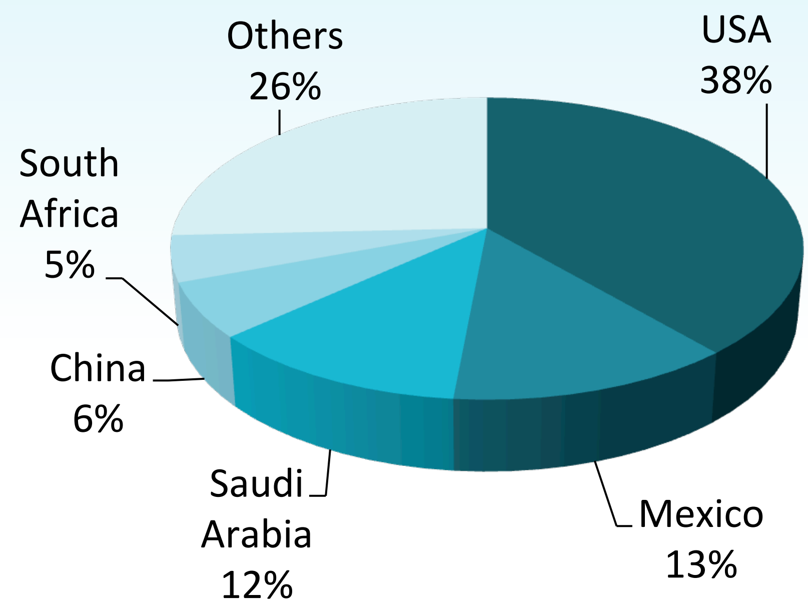
Brazilian PINE SAWNWOOD Exports by Country (Value)

2008



USD 203 million

2012



USD 158 million

Source: ABIMCI (2013)

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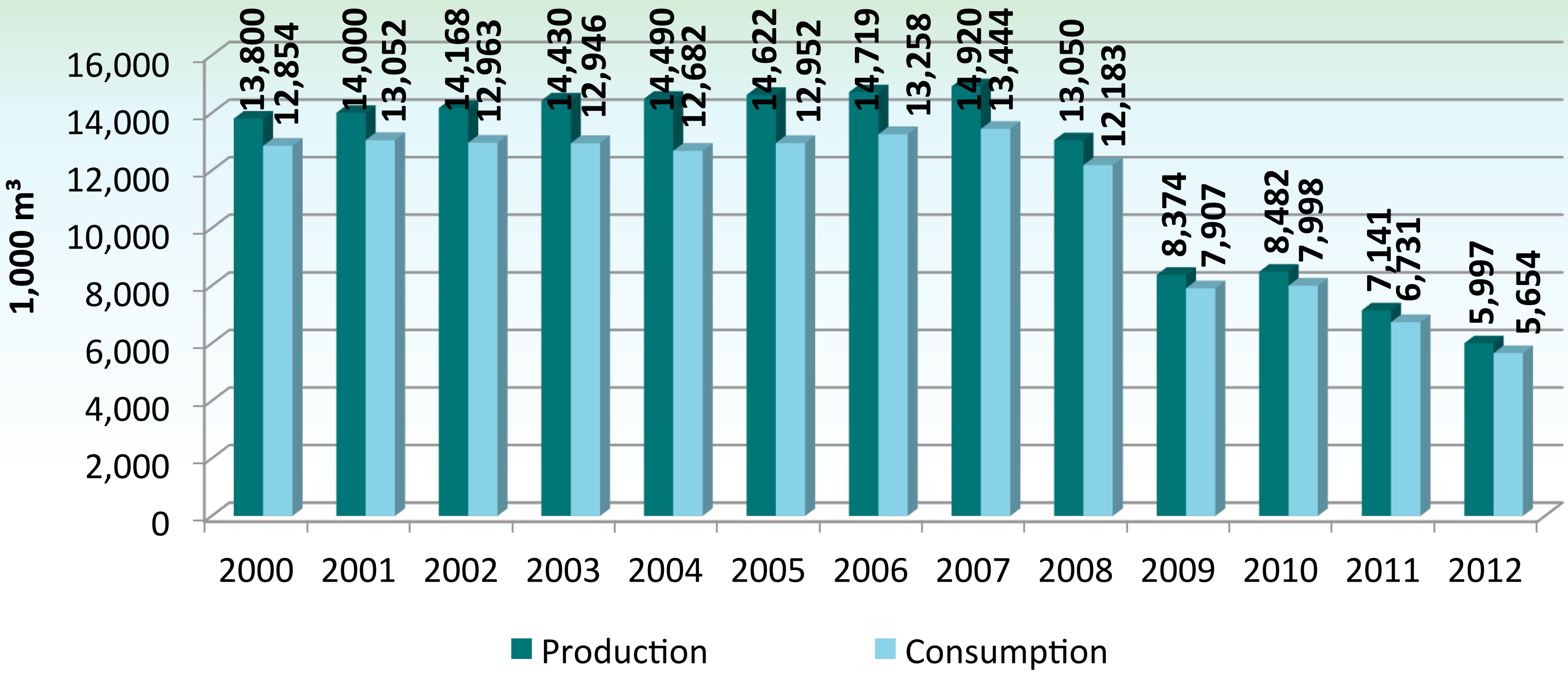
Market

Brazilian TROPICAL SAWNWOOD Production and Consumption



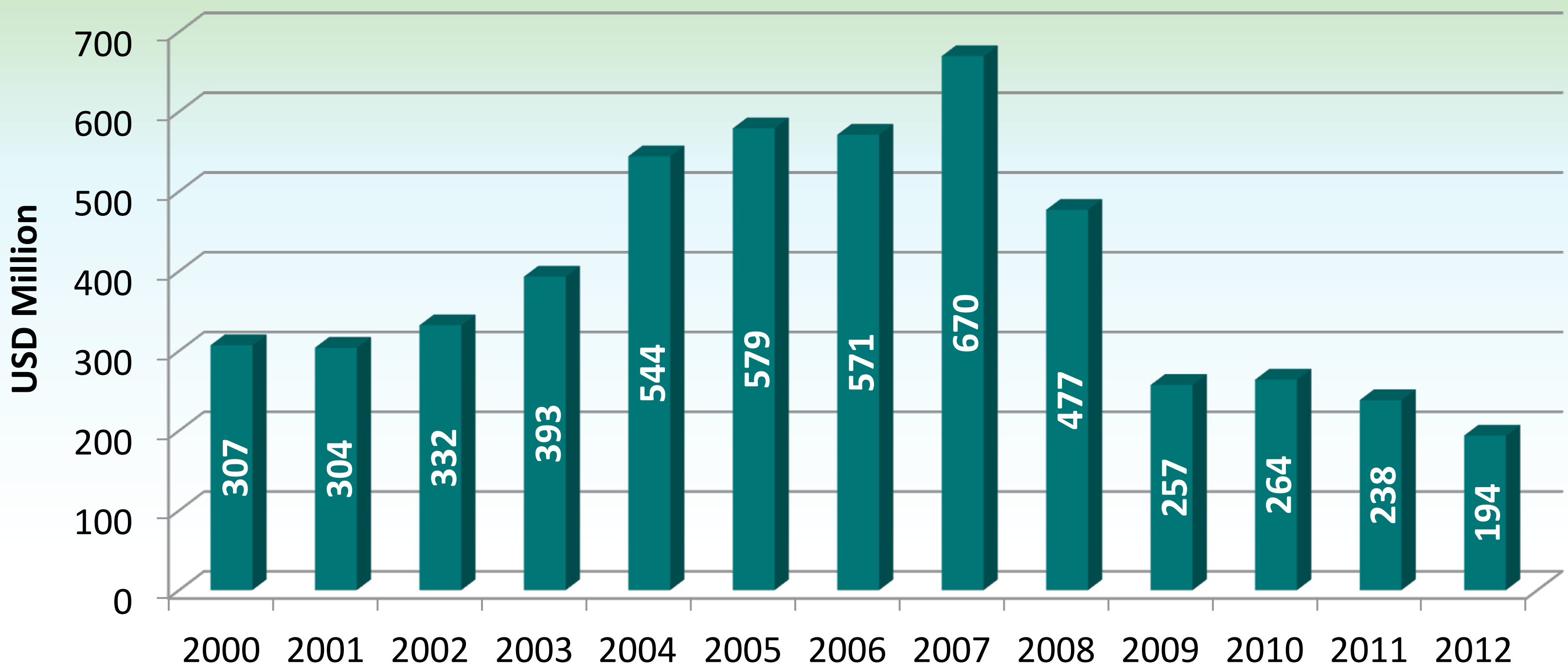
Source: ABIMCI (2013)

Tropical Sawnwood Production and Consumption Trends

Production: -6.7% per year

Consumption: -6.6% per year

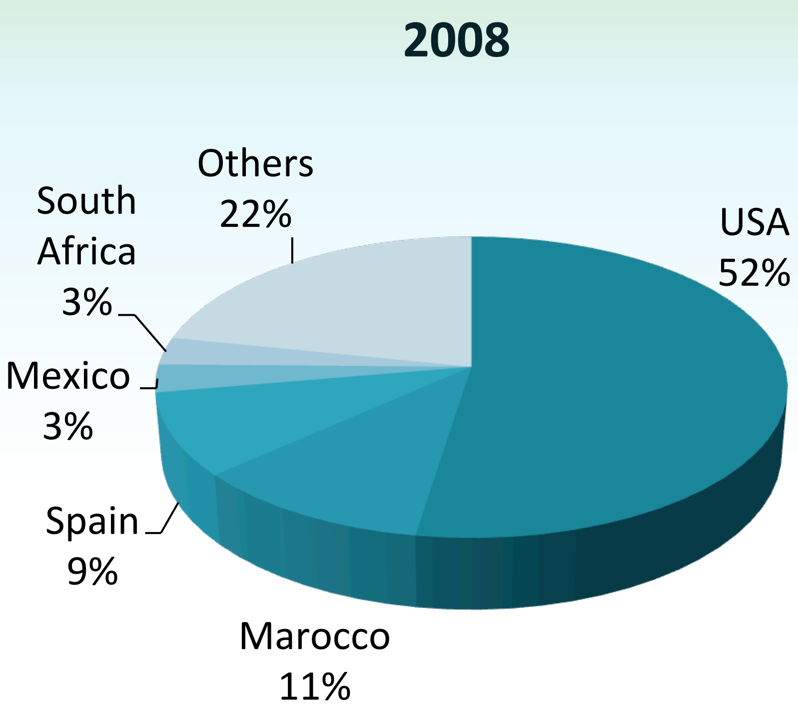
Brazilian TROPICAL SAWNWOOD Exports (Value)



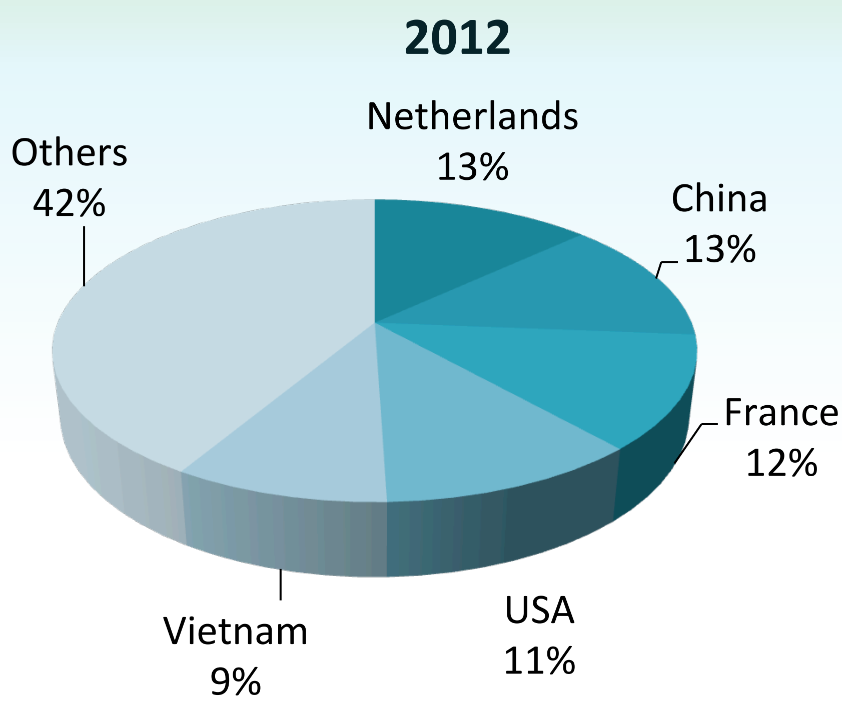
Source: ABIMCI (2013)

Tropical Sawnwood Exports Trend (Value)
-3.8% per year

Brazilian TROPICAL SAWNWOOD Exports by Country (Value)



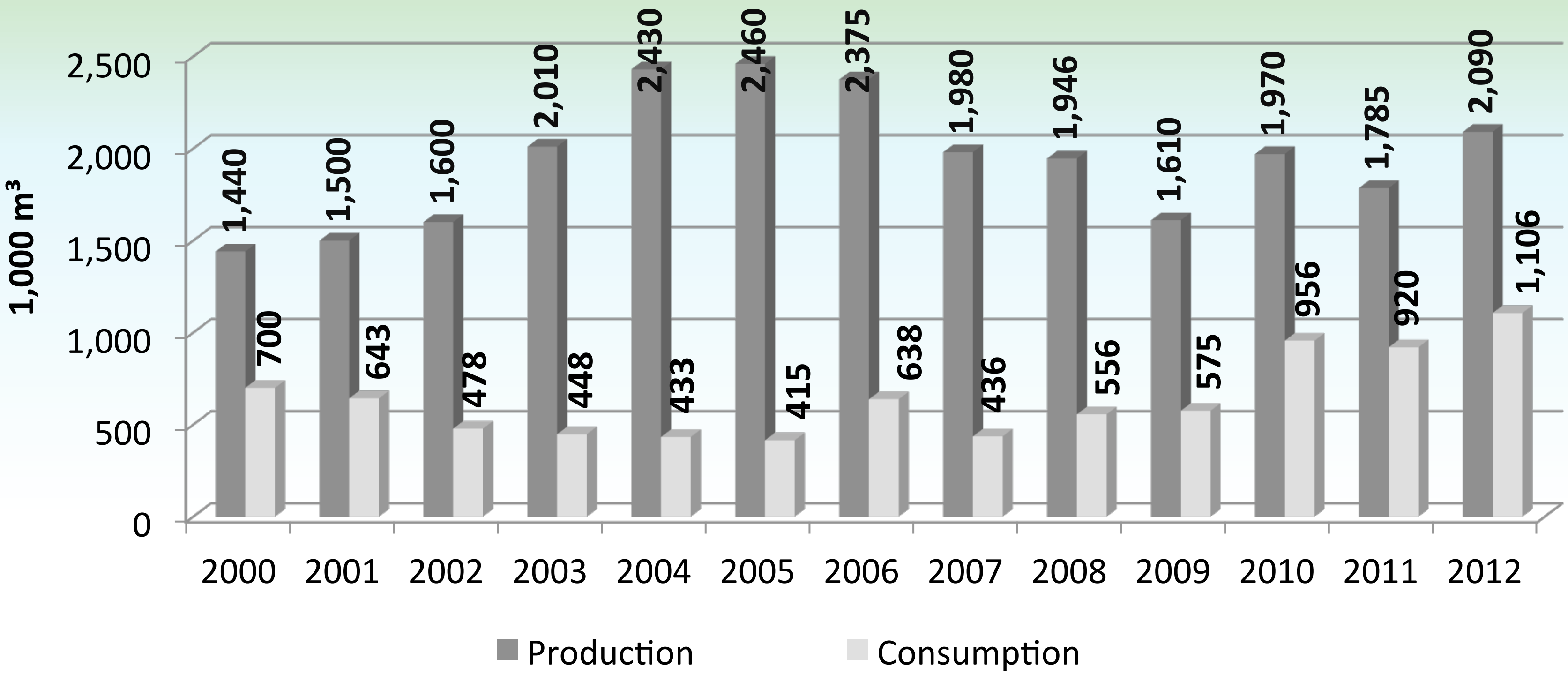
USD 477 million



USD 194 million

Source: ABIMCI (2013)

Brazilian PINE PLYWOOD Production and Consumption



Source: ABIMCI (2013)

Pine Plywood Production and Consumption Trends
<u>Production</u>: +3.2% per year
<u>Consumption</u>: +3.9% per year

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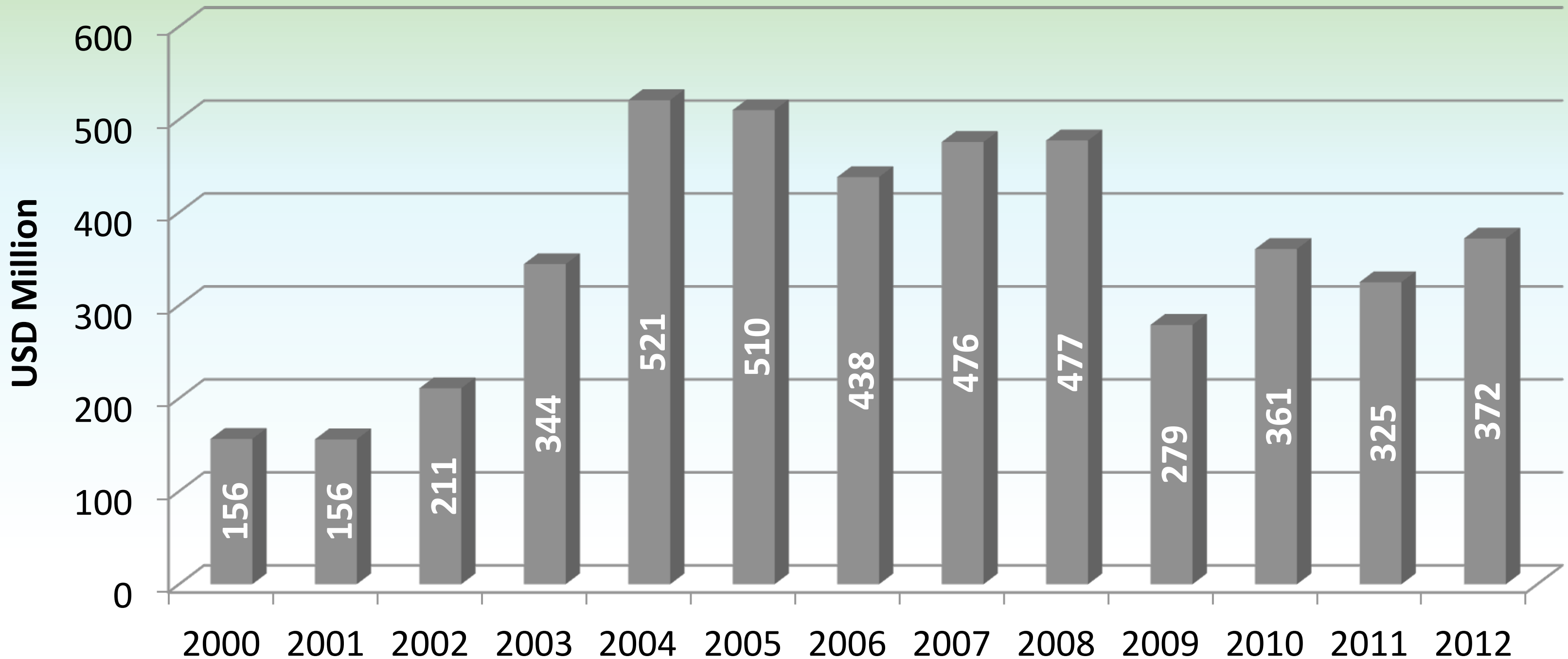
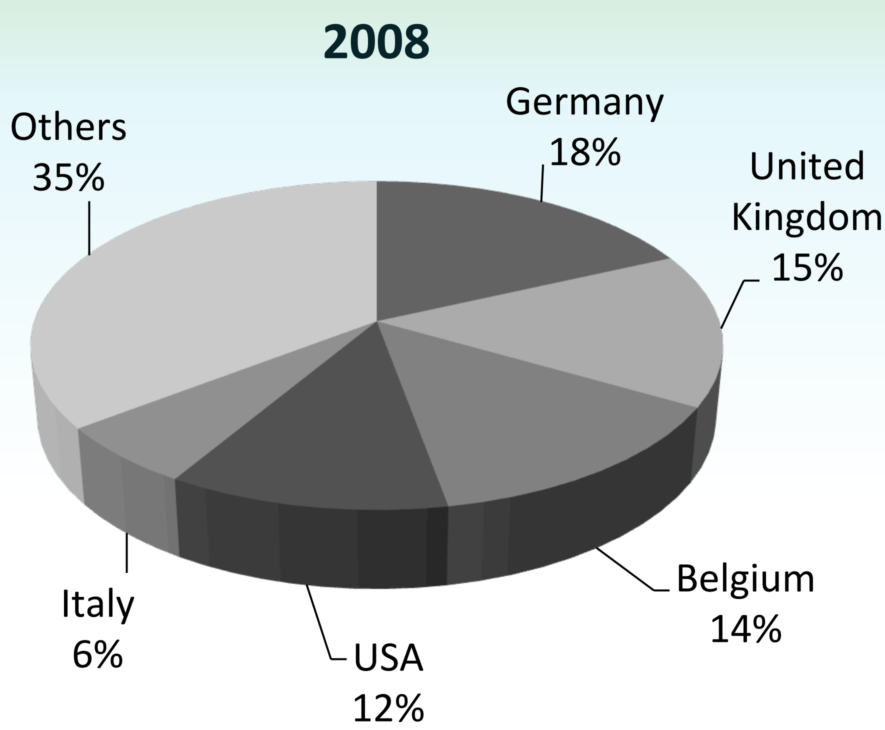
Brazilian PINE PLYWOOD Exports (Value)



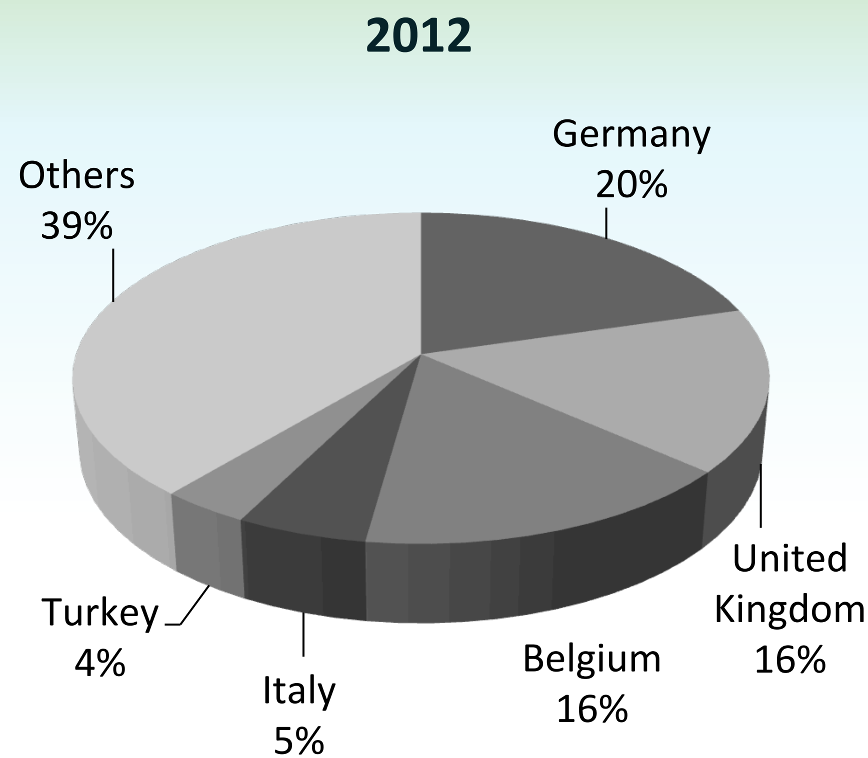
Source: ABIMCI (2013)

Pine Plywood Exports Trend (Value)
+7.5% per year

Brazilian PINE PLYWOOD Exports by Country (Value)



USD 477 million



USD 372 million

Source: ABIMCI (2013)

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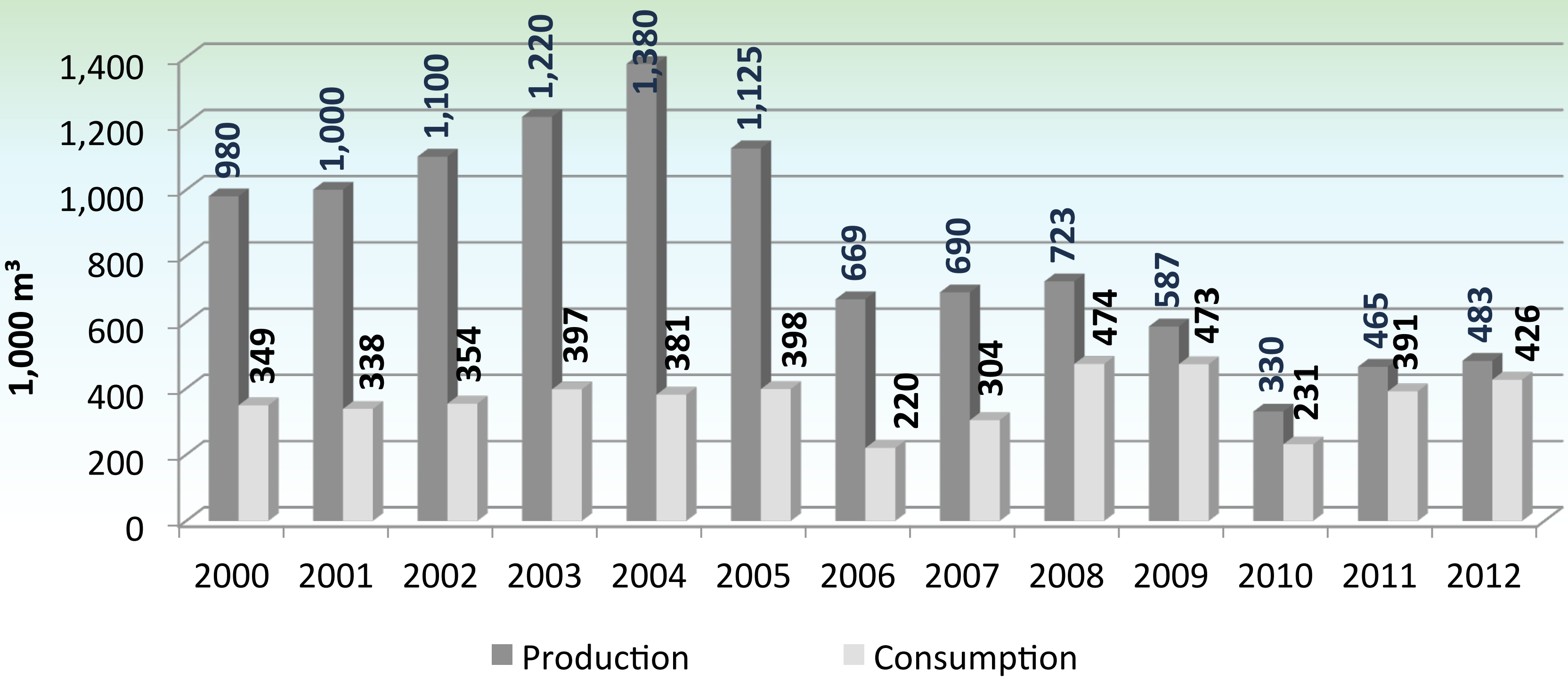
Market

Brazilian TROPICAL PLYWOOD Production and Consumption



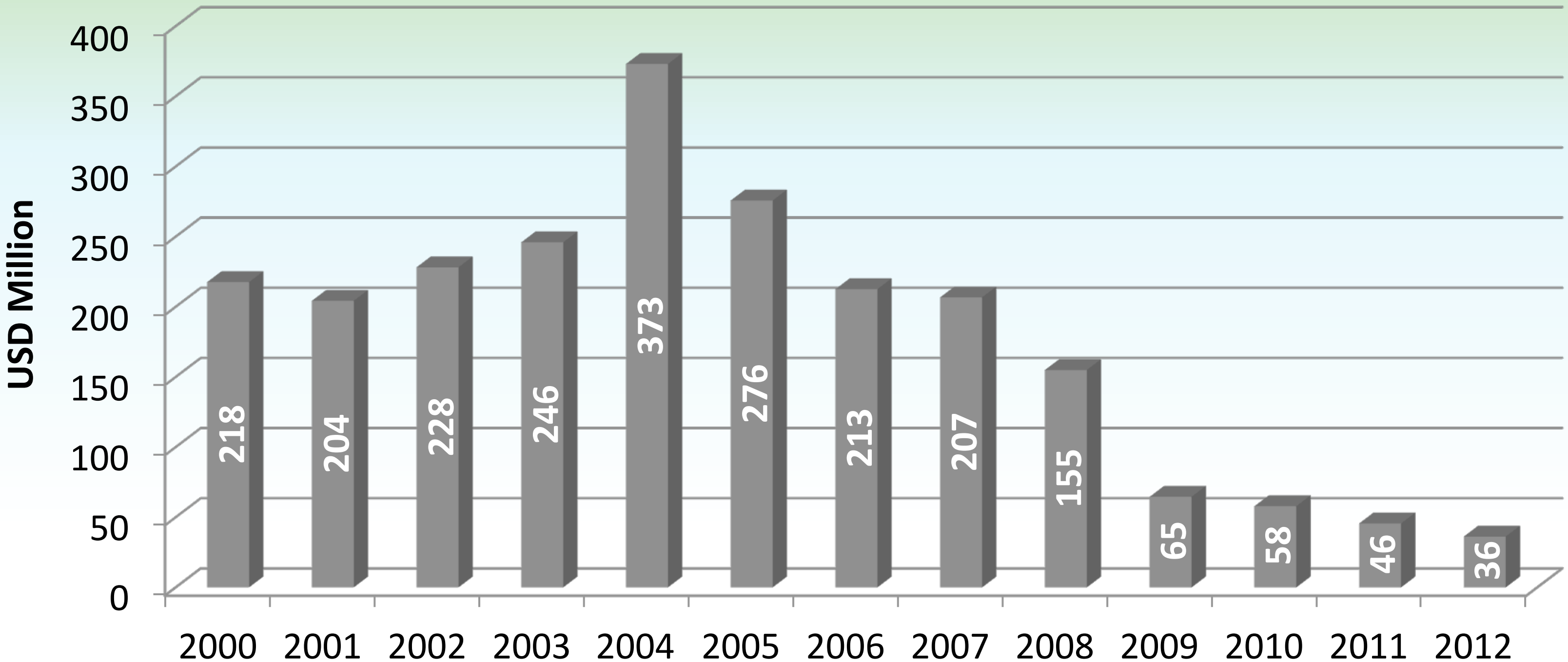
Source: ABIMCI (2013)

Tropical Plywood Production and Consumption Trends

Production: -5.7% per year

Consumption: +1.7% per year

Brazilian TROPICAL PLYWOOD Exports (Value)

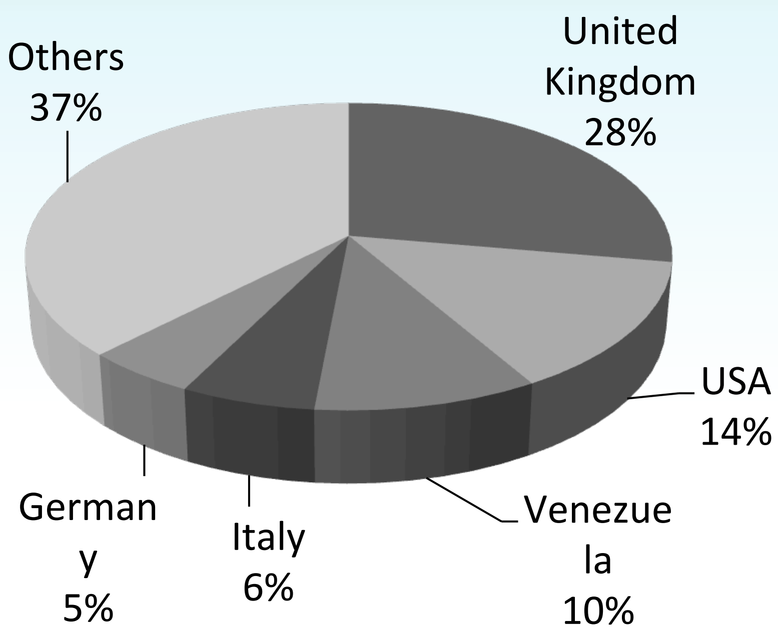


Source: ABIMCI (2013)

Tropical Plywood Exports Trend (Value)
-13.9% per year

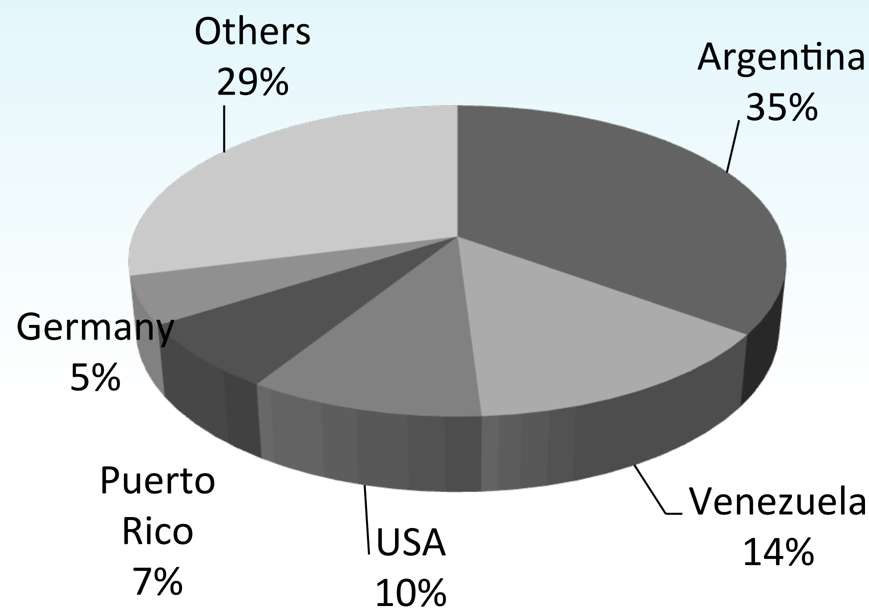
Brazilian TROPICAL PLYWOOD Exports by Country (Value)

2008



USD 155 million

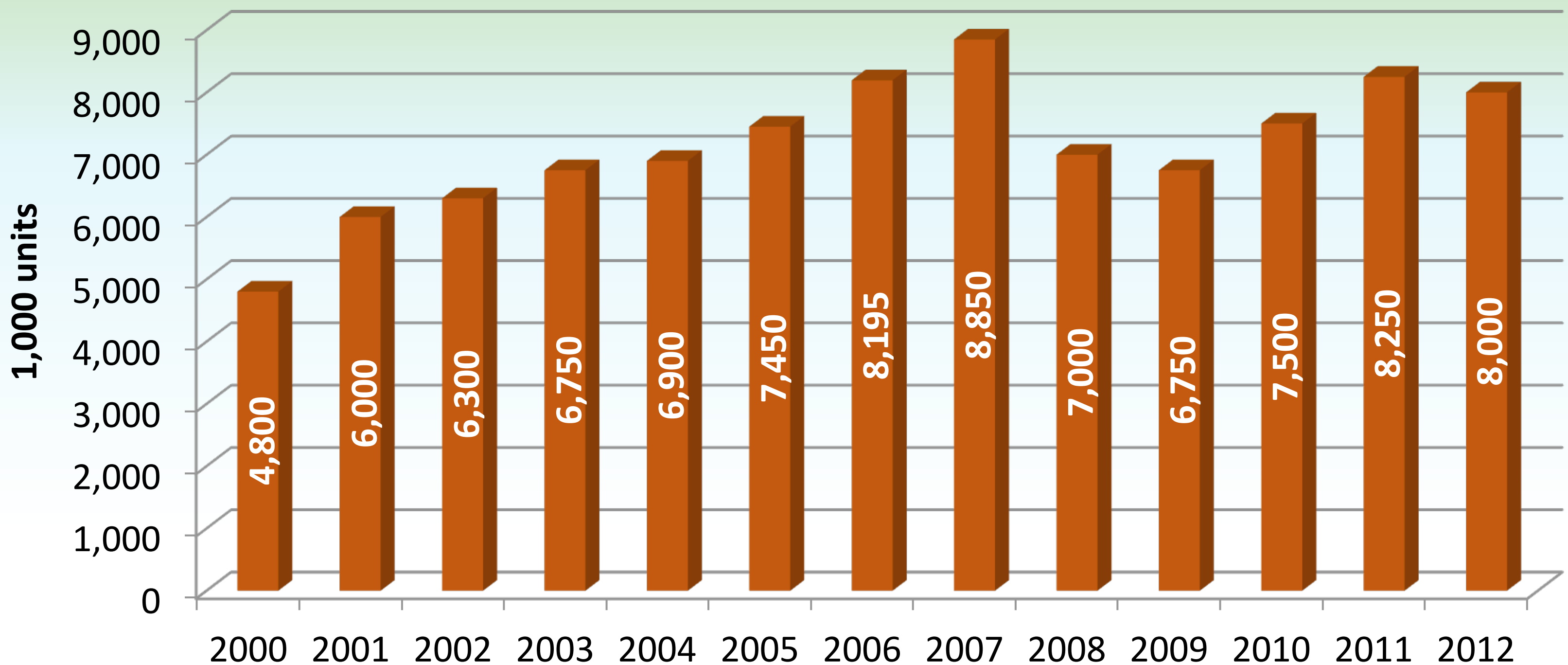
2012



USD 36 million

Source: ABIMCI (2013)

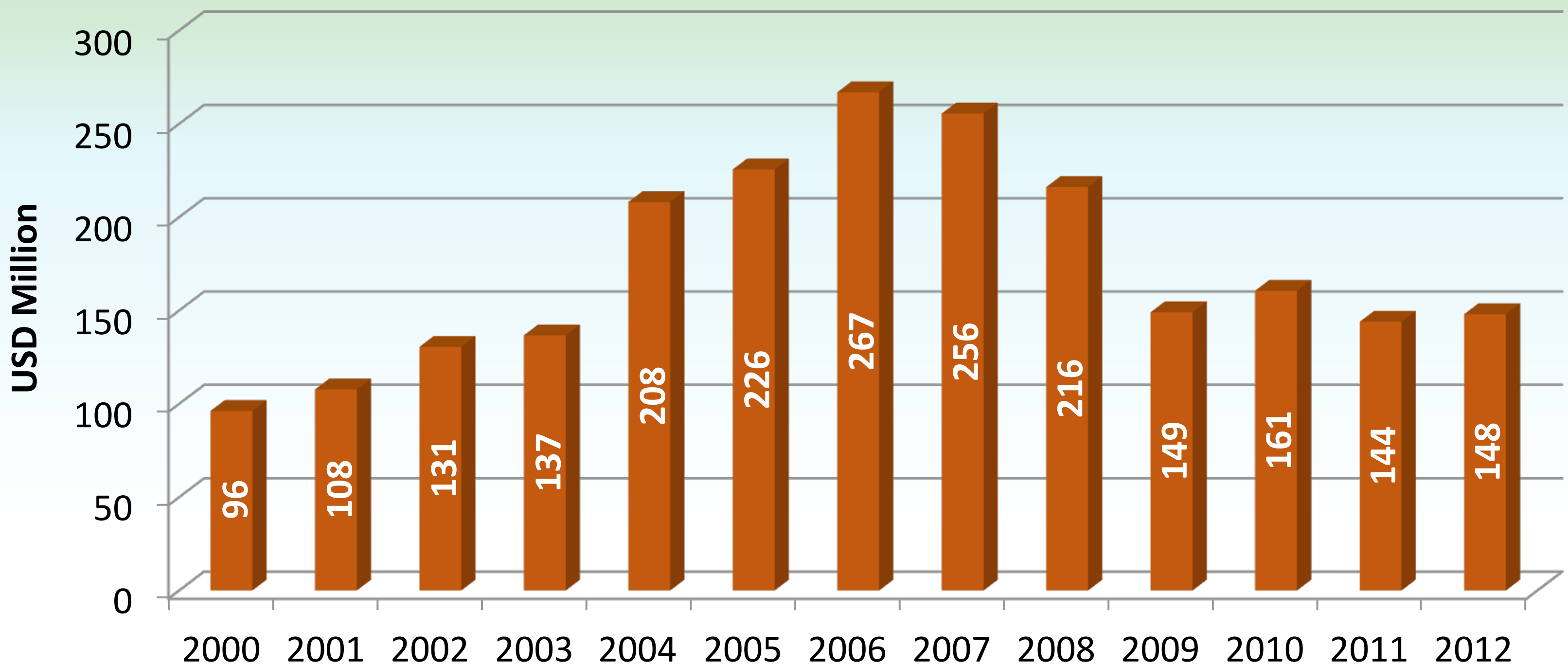
Brazilian WOOD DOORS Production



Source: ABIMCI (2013)

Wood Doors Production Trend
+4.3% per year

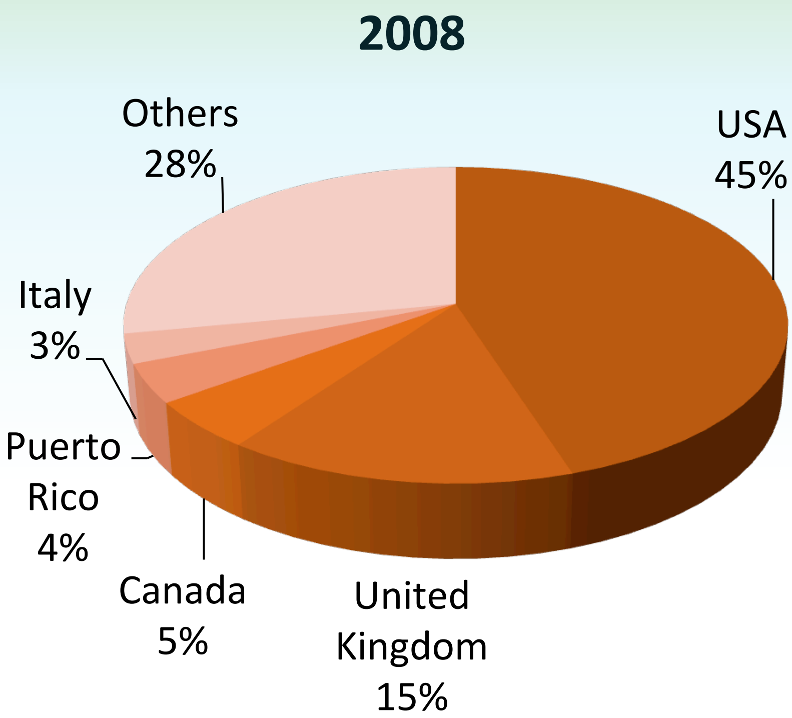
Brazilian WOOD DOORS Exports



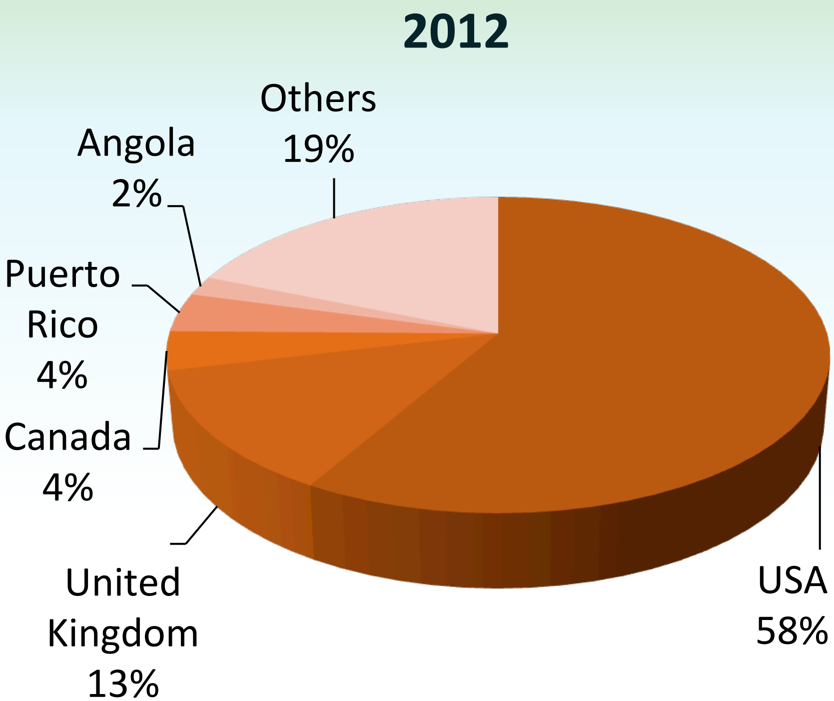
Source: ABIMCI (2013)

Wood Doors Export Trend
+3.7% per year

Brazilian WOOD DOORS Exports by Country (Value)



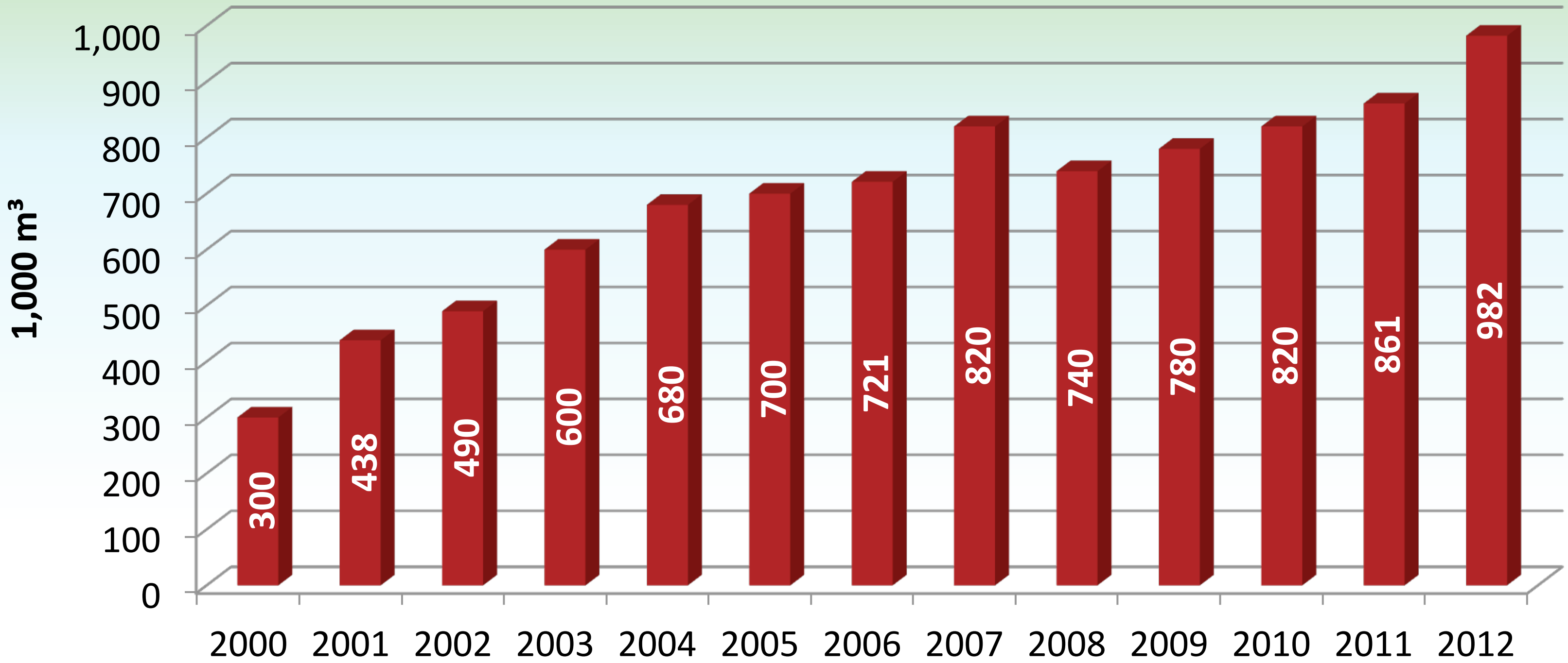
USD 216 million



USD 148 million

Source: ABIMCI (2013)

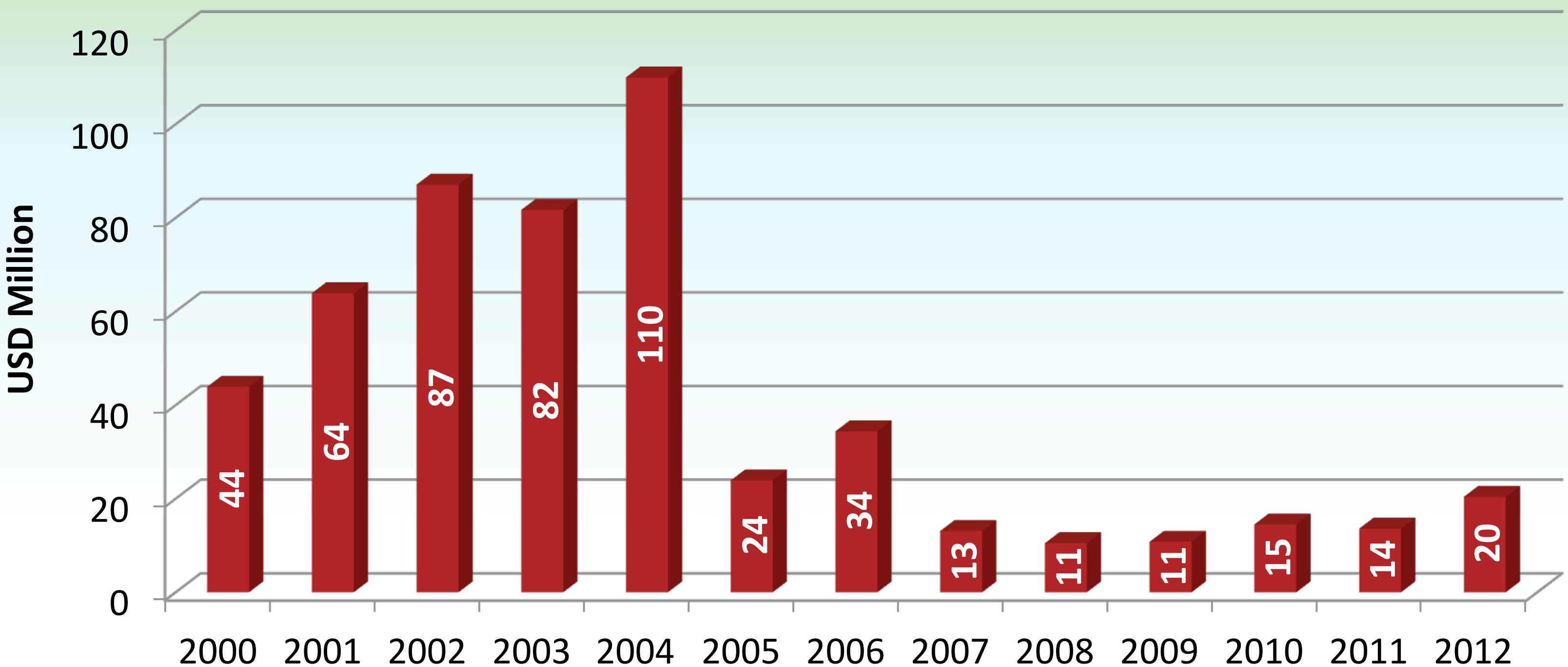
Brazilian WOOD FRAMES AND MOLDINGS Production



Source: ABIMCI (2013)

Wood Frames Production Trend
+10.4% per year

Brazilian WOOD FRAMES AND MOLDINGS Exports (Value)

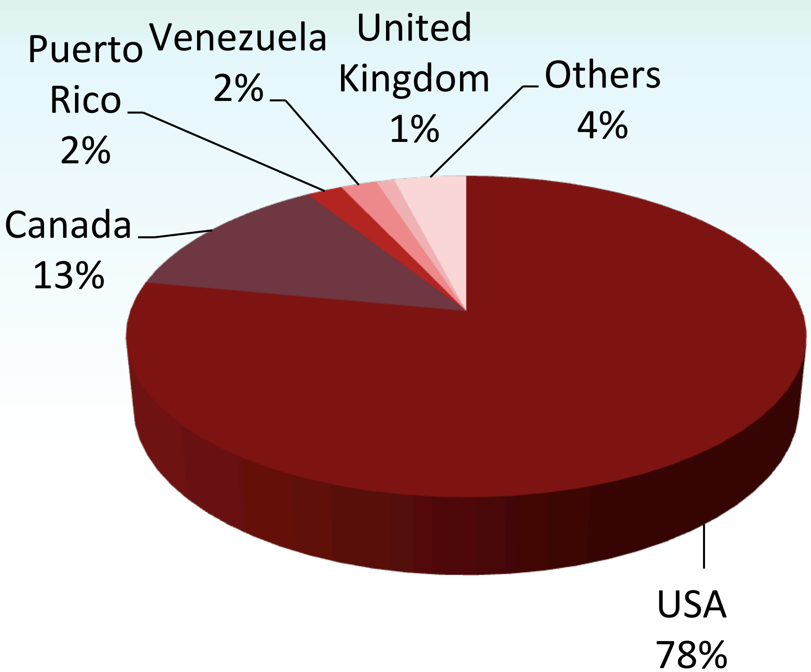


Source: ABIMCI (2013)

Wood Frames and Mouldings Export Trend
-6.2% per year

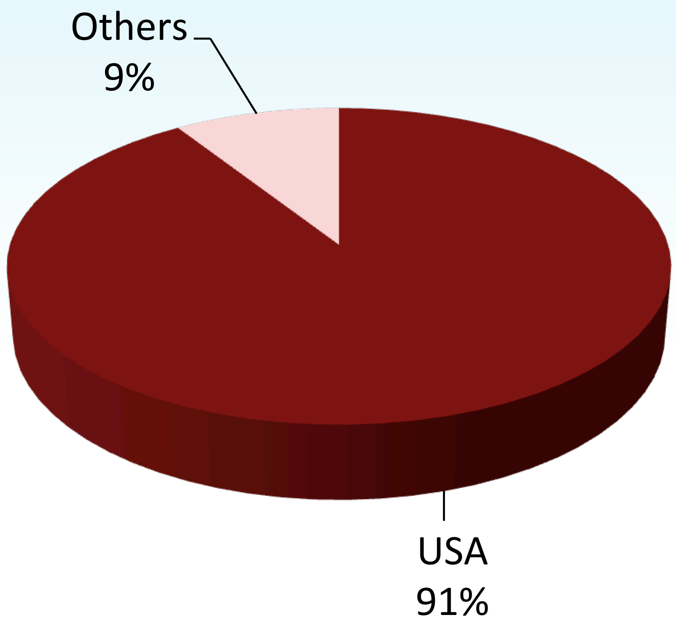
Brazilian WOOD FRAMES AND MOLDINGS Exports by Country (Value)

2008



USD 11 million

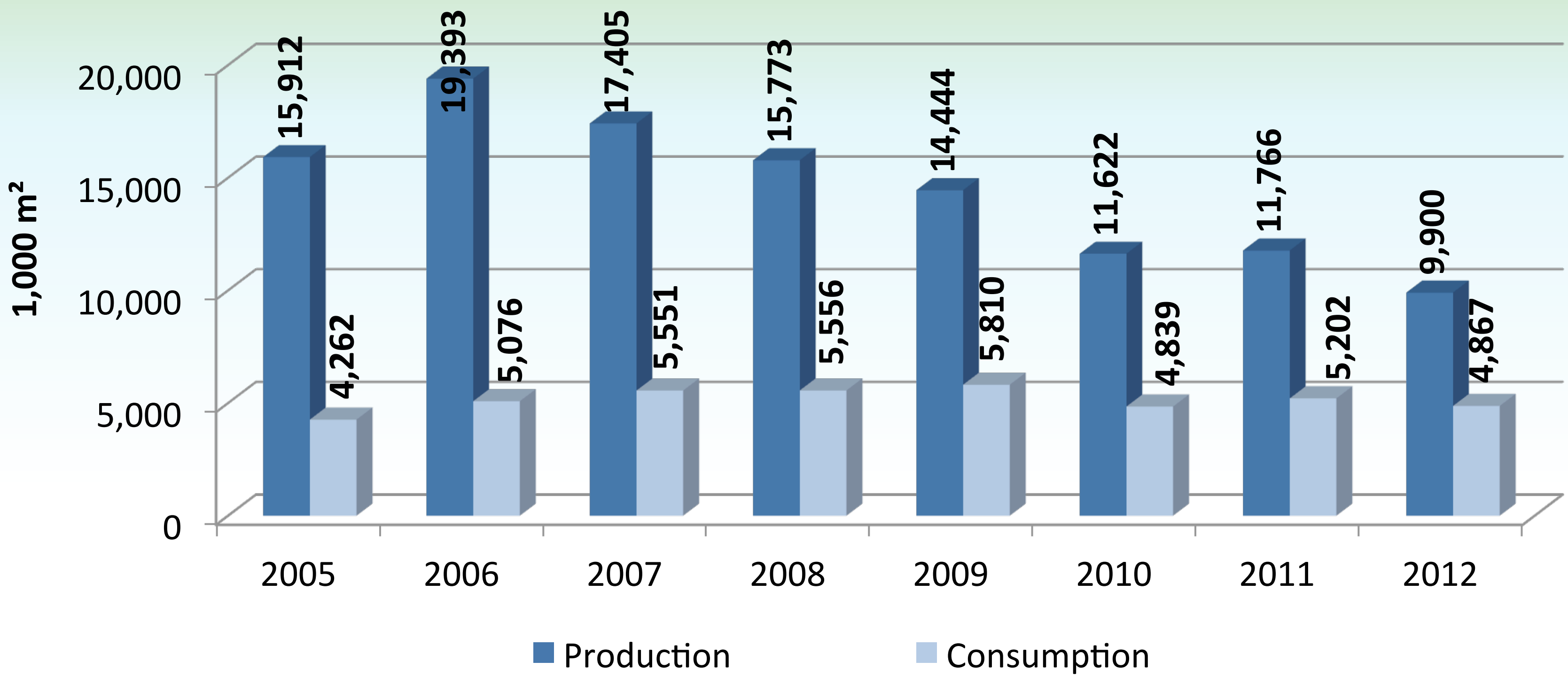
2012



USD 20 million

Source: ABIMCI (2013)

Brazilian Solid WOOD FLOORING Production and Consumption



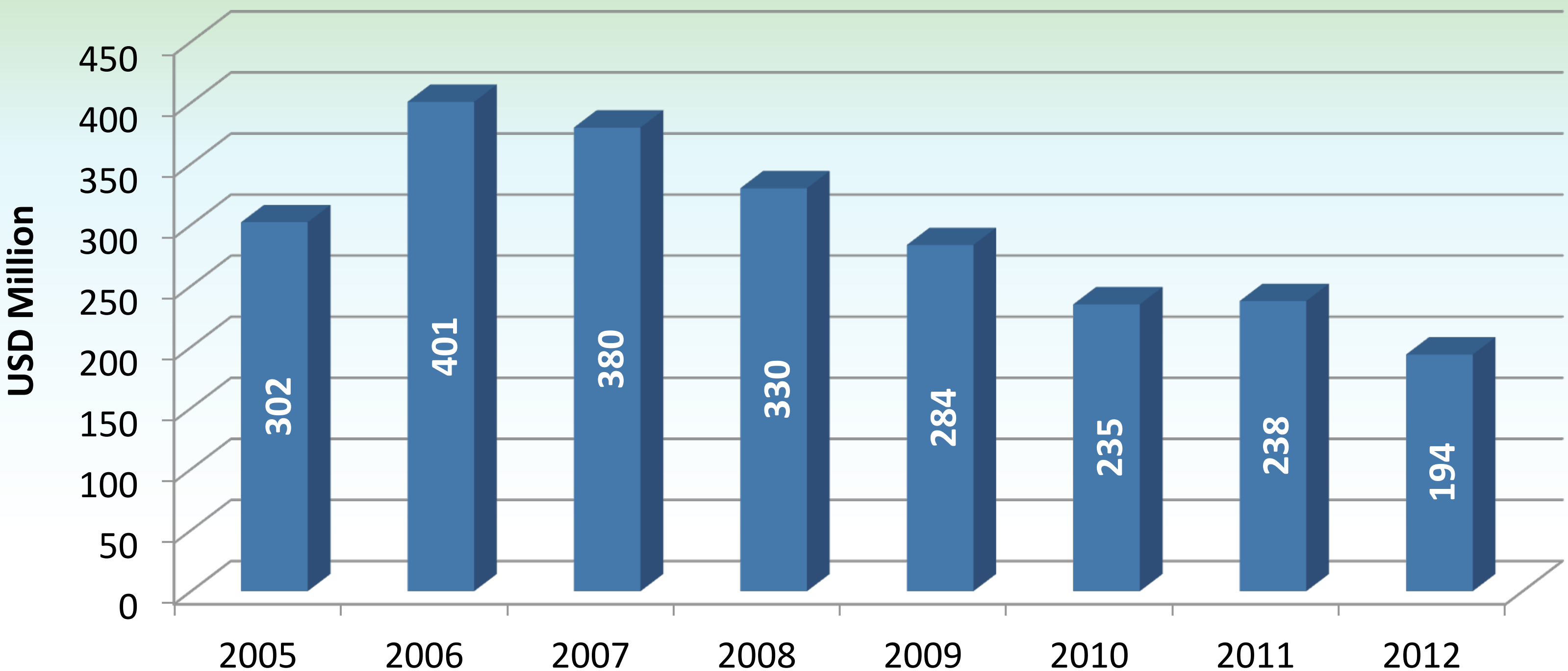
Source: ABIMCI (2013)

Solid Wood Flooring Production and Consumption Trends

Production: -6.6% per year

Consumption: +1.9% per year

Brazilian Solid WOOD FLOORING Exports (Value)



Source: ABIMCI (2013)

Solid Wood Flooring Exports (Value)
+10.4% per year

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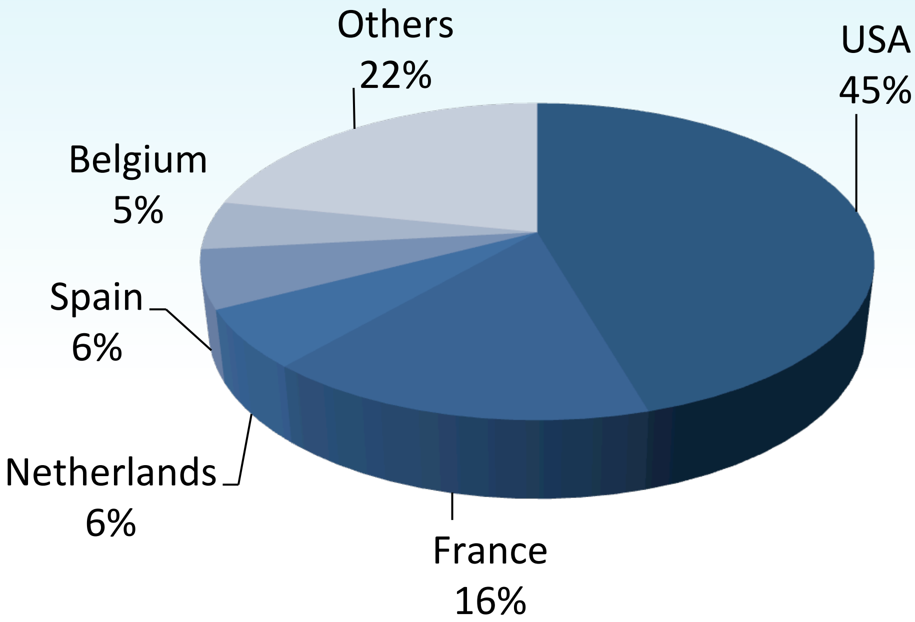
Market

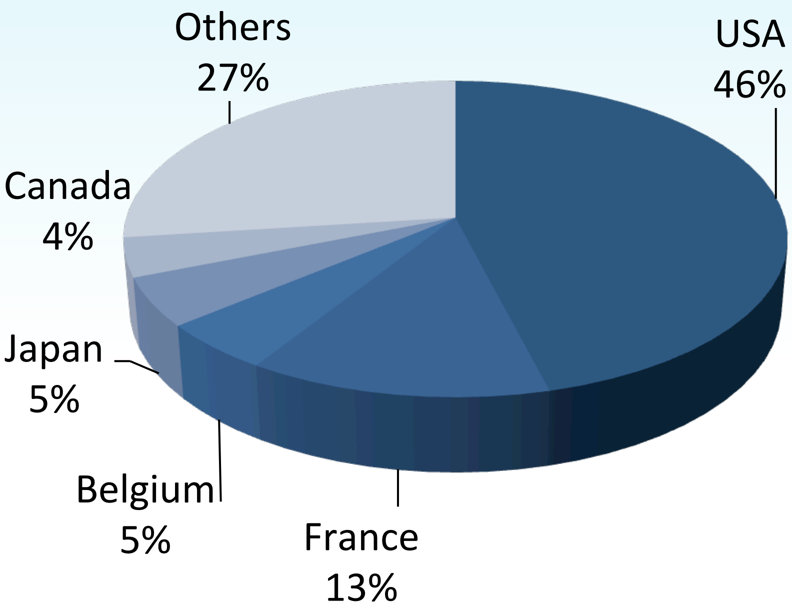
Brazilian Solid WOOD FLOORING Exports by Country (Value)

2008



USD 330 million

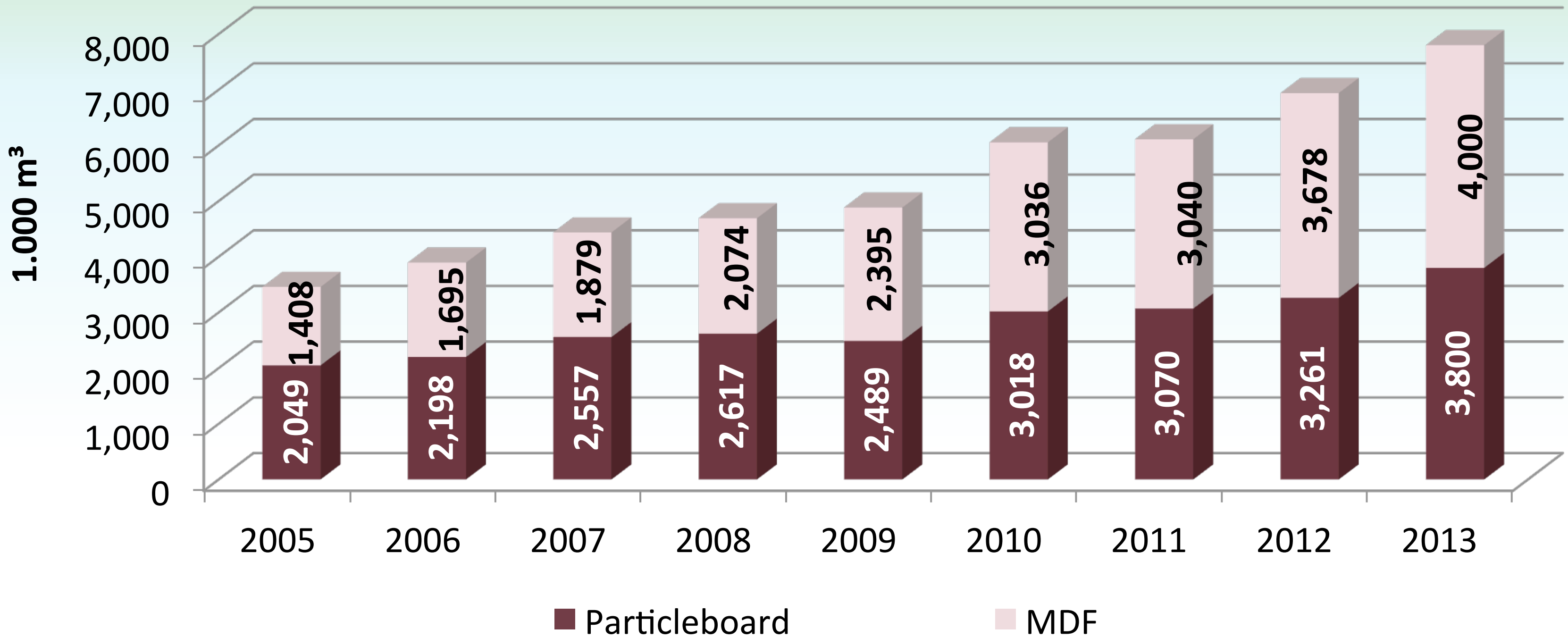
2012



USD 194 million

Source: ABIMCI (2013)

Brazilian RECONSTITUTED-WOOD PANEL Production



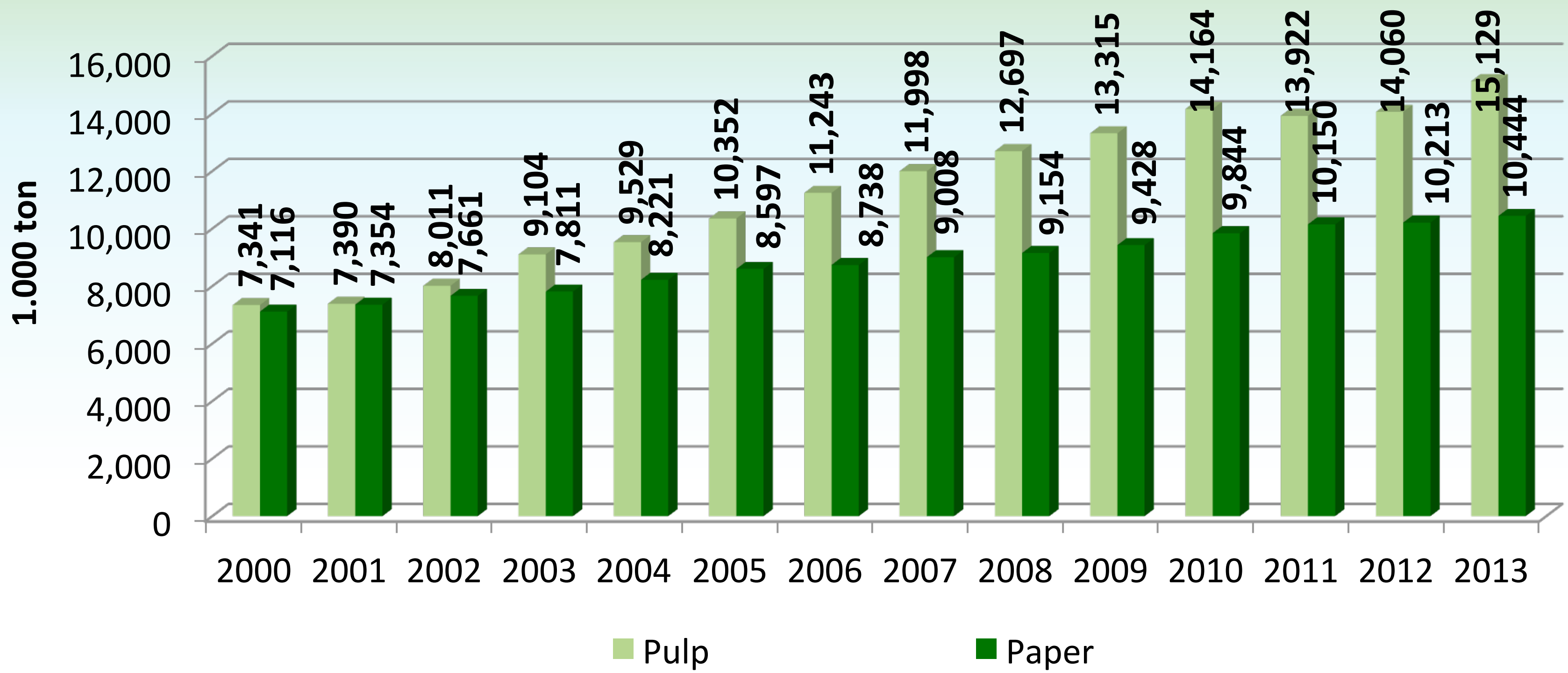
Source: IBA (2014)

Brazilian Wood Panels Production Trend

MDF: +21.6% per year

Particleboard: +10.4% per year

Brazilian PULP AND PAPER Production



Source: FAO (2014)

Brazilian Pulp and Paper Production Trends

<u>Pulp</u>: +5.7% per year

<u>Paper</u>: +3.0% per year

Opportunities and Threats

Major Opportunities and Threats for the Mechanically Processed Timber Industry

Opportunities	Threats
• Growth of domestic wood consuming market, sustained by civil construction	• High production costs (increasing price of raw materials, inputs, labor, and other costs)
• Availability of credit lines for civil construction (wooden houses) and furniture	• Competition from Asian countries, especially China, in the international market
• Gradual recovery of the US market / construction	• Rising interest rates in Brazil
• Depreciation of BRL against the US Dollar	• Access to raw material from natural forests - bureaucracy in approving management plans
• Greater involvement of class associations for promotion of the Sector as a whole (ABIMCI)	• Logistic barriers, rising production /transport costs, and reducing production scale and profits
• Strengthening control by in natural forests by environmental agencies (timber/legal origin)	• Rise of transportation cost as result of high price of diesel fuel and poor infrastructure logistics
• Reduction of tax burden (IPI) for furniture, wood panels and veneers	• Difficulty in obtaining adequate raw material for processing, specially from natural forests
• Search for new industrial developments (larger scale, new technologies, others)	• High tax burden with rigid, inefficient tax system
• Sector adjustment to adapt to demands from domestic and international markets	• Complexity of legal instruments for production and trade of forest products

Source: Prepared by STCP.

Perspectives 2015-2016

- **Increasing exports of solid wood products (also due to quality/certification programs):**
  - Pine Plywood
  - Wood Frames and Moldings
  - Wood Doors

- **EUTR – FLEGT developments**

- **Growing domestic demand for wood products:**
  - Pine Sawnwood
  - Pine Plywood
  - Tropical Plywood
  - Wood Panels
  - Pulp and Paper

Perspectives 2015-2016

- **Development of the wood frame system: increasing utilization in civil construction. Committee:**
  - Standardization
  - Raw material
  - Financing
  - Labor
  - Marketing

- **Brazilian Housing Deficit (according to ABIMCI):**
  - About 5.8 million units (2013)
  - Expected 20 million (2030)
  - 40% preference for houses
  - Growing banking financing
  - Positive perspective in housing finance (?)

THANK YOU!

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