
Industrial Policy - Observation & Suggestion -

August 28, 2017

Nippon Steel & Sumitomo Metal Corporation

Overview

Brazilian Economy

◆ Japanese Foreign Direct Investment (FDI) in Brazil

- More than 450 Japanese companies are operating in Brazil.
- Japan ranks 6th as a foreign investor in Brazil
- Brazil is in the 10th position as a destination of Japanese FDI.

From “Joint Report by the Brazilian National Confederation of Industry - CNI and the Japan Business Federation- Keidanren” (September 1, 2015)

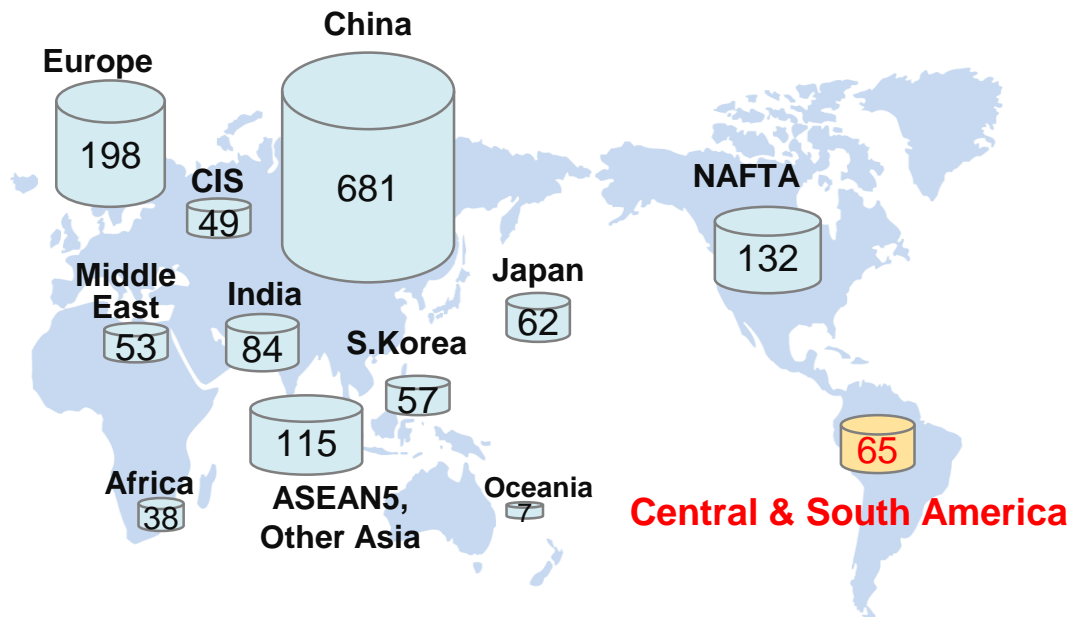
◆ Prospective

- Brazilian GDP: 1.7% growth in 2018, 2% in 2019 (IMF)
- Japanese FDI in Brazil is expected to continue growing.
- Development of business environment will further facilitate FDI from Japan.

Steel Market in Brazil: Growth Potential

◆ Even in the downside phase, steel demand in Brazil is still very large in the worldwide market.

Steel Demand by Area (2016CY)



Steel Demand World Total 1,515MMT

1	China	681
2	USA	92
3	India	84
4	Japan	62
5	S. Korea	57
6	Germany	40
7	Russia	38
8	Turkey	34
9	Mexico	25
10	Italy	24

11 Brazil 18

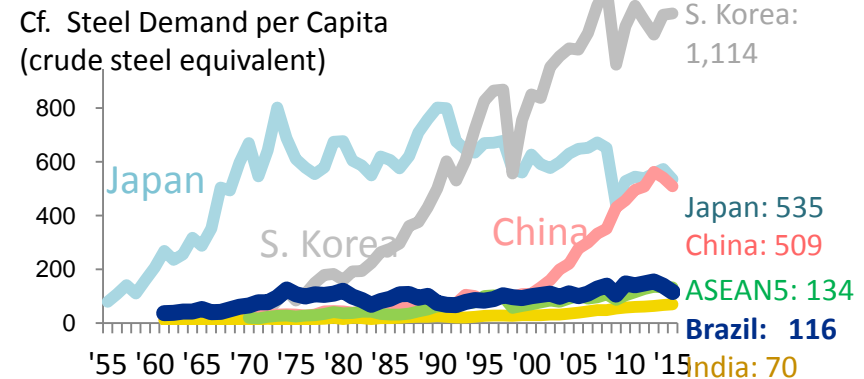
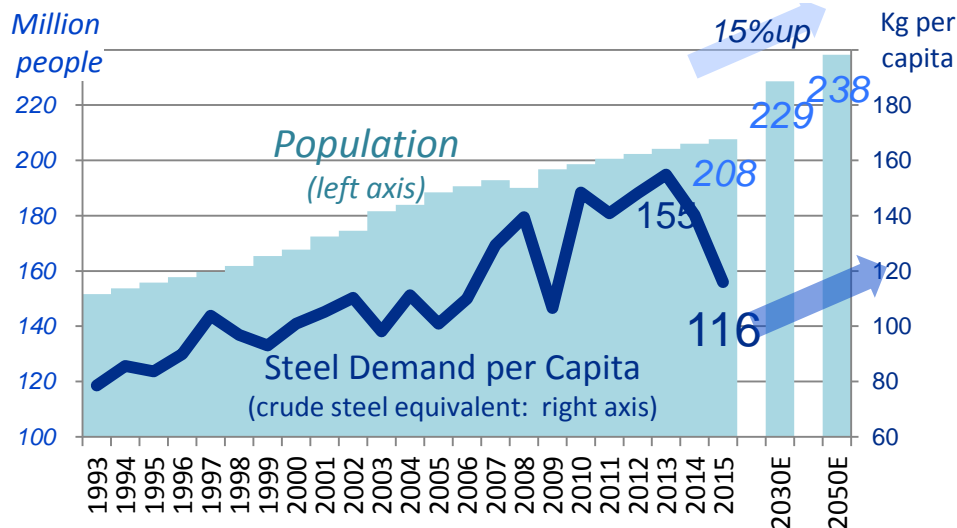
2017 Forecast
→ 18.4 mil ton
(Source: IABr)

(Source: World Steel Association)

Steel Market in Brazil: Growth Potential

- Steel demand per capita is still at a low level.
 - Population is increasing.
- ▼
- Huge potential for steel demand increase.

Steel Demand per Capita and Population in Brazil



(Source: World Steel Association)

Global Business Development of Nippon Steel & Sumitomo Metal Corporation

Who we are.

Crude steel production Mil. MT/year

2000CY World 849

2007CY World 1,346

2016CY World 1,630

1	Nippon Steel	28.4
2	POSCO	27.7
3	Arbed	24.1
4	LMN	22.4
5	Usinor	21.0
6	Corus	20.0
7	ThyssenKrupp	17.7
8	Baosteel	17.7
9	NKK	16.0
10	Riva	15.6

	ArcelorMittal	116.4
	Nippon Steel	35.7
	JFE	34.0
	POSCO	31.1
	Baosteel	17.7
	TATA	26.5
	Angang	23.6
	Shagang	22.9
	Tangshan Steel	23.3
	U.S. Steel	23.2

	ArcelorMittal	95.5
	Baowu Steel	63.8
	Nippon Steel & Sumitomo Metal	46.5
	Hebei Steel	46.2
	POSCO	41.2
	Shagang	33.3
	Ansteel	33.2
	JFE	30.3
	Shougang	26.8
	TATA	24.5

11	Kawasaki Steel	13.0
12	Sumitomo Metal	11.6

	Sumitomo Metal	11.6
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21	Bethlehem	9.1
24	LTV	7.4
34	Iskor	5.5

	TATA	
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JV Partner



Strategic Alliance Partner

(Source: World Steel Association)



新日鐵住金

NIPPON STEEL & SUMITOMO METAL

High Grade Steel Strategy

Holding **27,000** patents in **70** countries



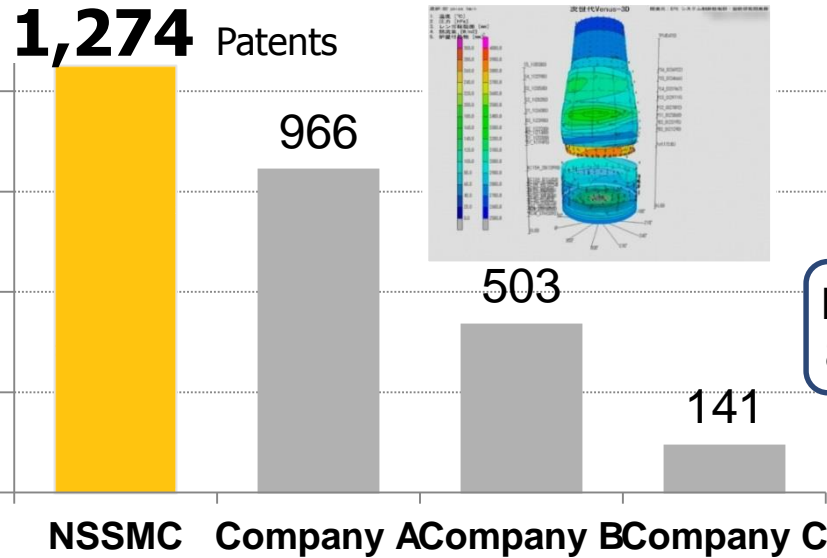
R&E Center
Futtsu



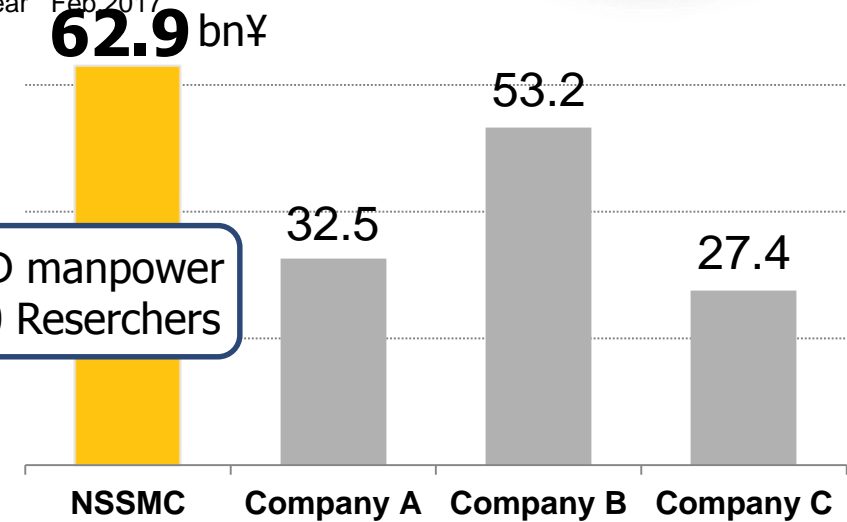
Amagasaki R&D
Center



NSSMC Named a Clarivate Analytics
(former Thomson Reuters) Top 100 Global
Innovator in 2016 for Fifth Consecutive
Year Feb 2017

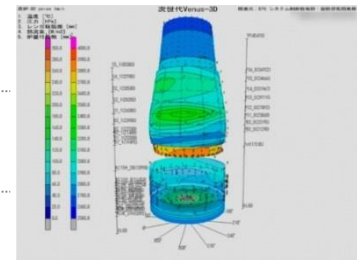


International Patent Application Published : 2010-2014



R&D Expense (2014)

R&D manpower
800 Reserchers



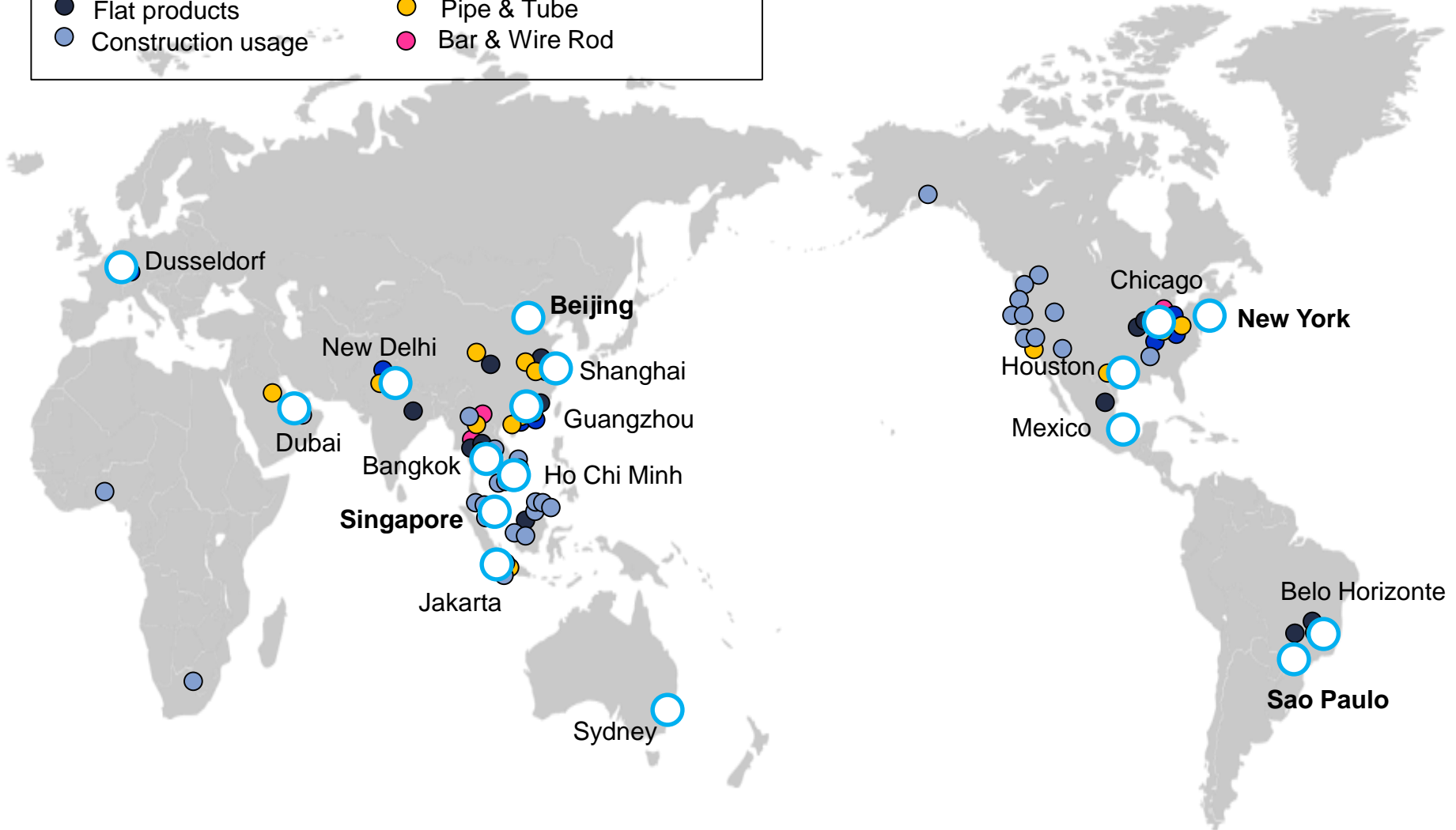
NSSMC's global supply network

- Various products, countries and partners

	Integrated steel works	Automotive			Constructi on, packaging	Railway parts	Energy
		Steel sheet	Pipes & tubes, bars & wires	Crank-shafts			
China		●	●	●	●		●
ASEAN		●	●		●		●
India		●	●	●			
USA		●	●	●	●	●	●
Mexico		●	●				
Brazil	●	●					●
Middle East, Africa					●		●

Major Manufacturing & Sales Bases of NSSMC

- | | |
|----------------------|---|
| ○ Overseas Office | ● Railway, Automotive & Machinery parts |
| ● Flat products | ● Pipe & Tube |
| ● Construction usage | ● Bar & Wire Rod |



Nippon Steel & Sumitomo Metal Corporation in Brazil

NSSMC's Business Bases in Brazil



USIMINAS - History

- ◆ **1956** President of Brazil requested Japan to assist constructing integrated steelworks in MG.
- ◆ **1957** Japan and Brazil signed the agreement for the joint establishment of a steel company.
(This year is the 60th anniversary.)
- ◆ **1958** USIMINAS was established as a joint venture between Japan and Brazil.
 - Equity share: Japan Group 40%, Brazilian Government Group 38%
 - Construction: Directed by an assigned director of Yawata Steel (now NSSMC)
 - Construction assistance: 518 people were dispatched from Japanese steel companies.
(Companies integrated into NSSMC accounted for 90%, 466 people)

USIMINAS - History

- ◆ **1966 onwards** NSSMC has continued 48-years Technical Assistance to USIMINAS.
- ◆ **1999** USIMINAS and NSSMC established JV (UNIGAL) producing galvanized steel sheets. NSSMC has licensed related technology.
 - No.1 CGL: Start-up in Oct. 2000, Annual capacity 480,000 tons
 - No.2 CGL: Start-up in May 2011, Annual capacity 550,000 tons
- ◆ NSSMC has licensed the most advanced technologies related to high grade heavy plate (CLC) to USIMINAS, as the first licensee in the world.



<Ipatinga Works>

- Capacity: Crude Steel 5 million ton /year
Blast Furnace x 3 (885m³ x 2, 3162m³ x 1)
- Products: Heavy Plate, Hot Rolled Steel, Cold Rolled Steel, Hot Dipped Galvanized Steel

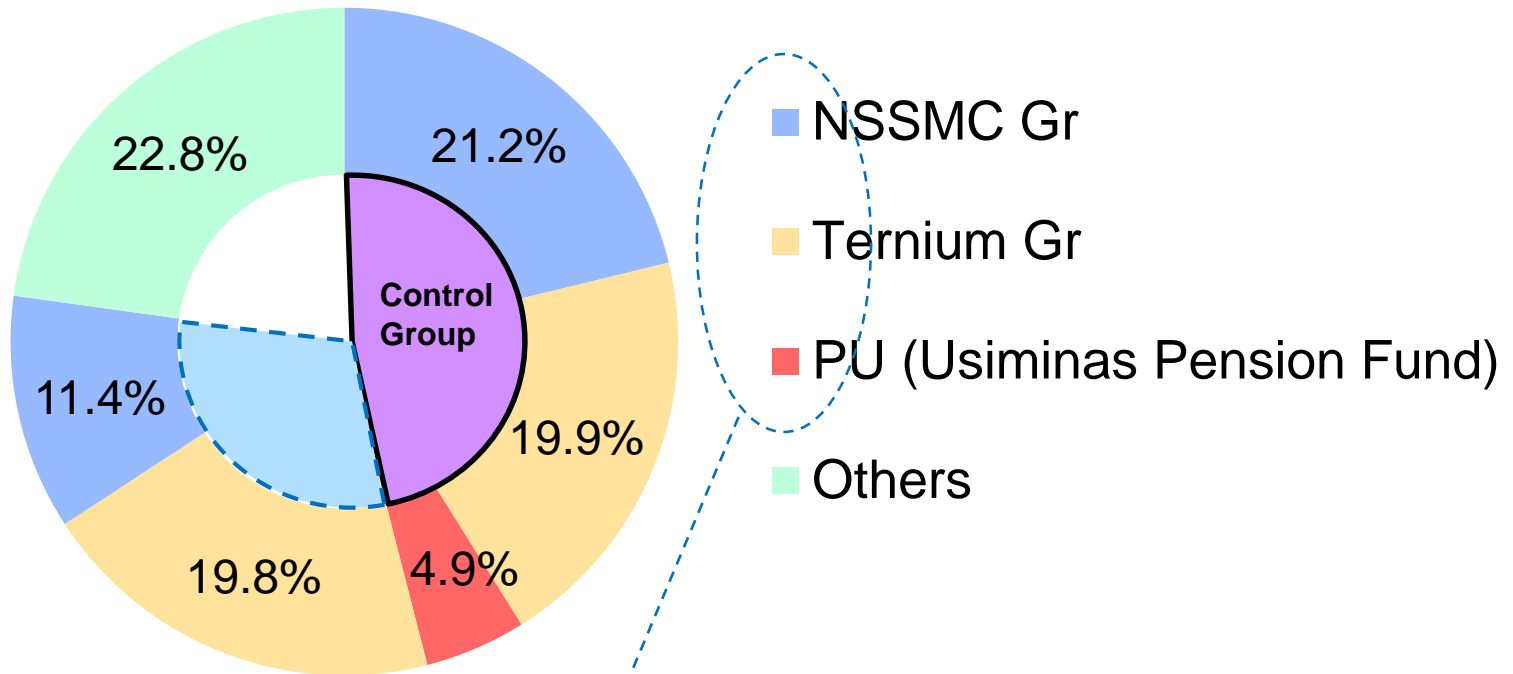


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- Products: Hot Rolled Steel, Cold Rolled Steel

● 2012 Ternium joined a control group of USIMINAS

Shareholding of ordinary shares as of July 2017



These 3 entities form a control group of Usiminas.

Observation & Suggestion

Observation – Areas for Consideration

- 1. Protection of Legitimate Expectation of Investors (e.g. Fair Competition)**
- 2. Predictable and Timely Administrative Remedies and Actions**
- 3. Timely Legal Remedies (“*Justice delayed is justice denied.*”)**

EPA: Expected to provide following mechanisms

- 1. Fair and equal treatment of FDI**
- 2. Bilateral mechanism for governmental and business community representatives to discuss issues on how to improve the business environments in Brazil and Japan**
- 3. Bilateral mechanism for FDI to convey its concerns about the business environment to the host state**