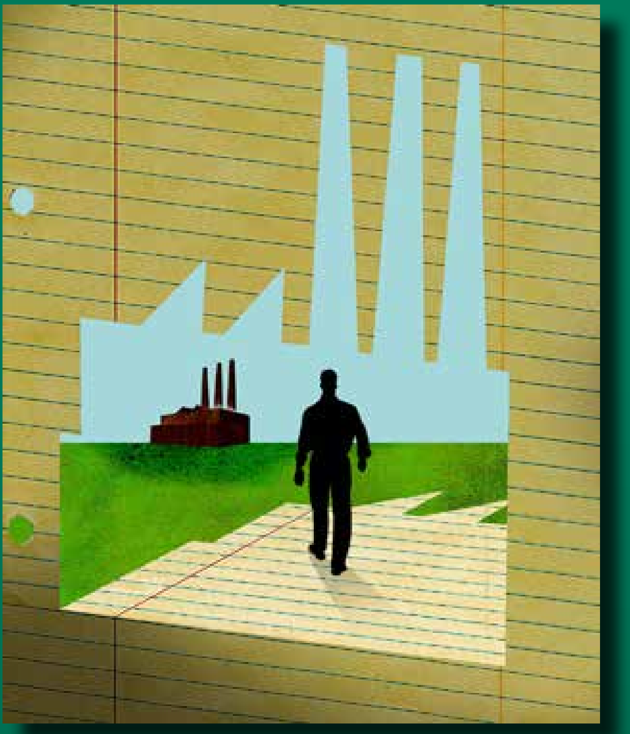
BCG
THE BOSTON CONSULTING GROUP

CII
Confederation of Indian Industry



CII 14TH MANUFACTURING SUMMIT 2015

FUTURE OF INDIAN MANUFACTURING: BRIDGING THE GAP

ADDENDUM TO THE BACKGROUND NOTE

The Boston Consulting Group (BCG) is a global management consulting firm and the world's leading advisor on business strategy. We partner with clients from the private, public, and not-for-profit sectors in all regions to identify their highest-value opportunities, address their most critical challenges, and transform their enterprises. Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients achieve sustainable competitive advantage, build more capable organizations, and secure lasting results. Founded in 1963, BCG is a private company with 82 offices in 46 countries. For more information, please visit bcg.com.

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering industry, Government, and civil society, through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, playing a proactive role in India's development process. Founded in 1895, India's premier business association has over 7400 members, from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 100,000 enterprises from around 250 national and regional sectoral industry bodies. In its 120th year of service to the nation, the CII theme of 'Build India – Invest in Development, A Shared responsibility', reiterates Industry's role as a partner in national development.

With 64 offices, including 9 Centres of Excellence, in India, and 7 overseas offices in Australia, China, Egypt, France, Singapore, UK, and USA, as well as institutional partnerships with 300 counterpart organizations in 106 countries, CII serves as a reference point for Indian industry and the international business community.

NOTE TO THE READERS

The CII-BCG Manufacturing Leadership Survey 2015 was launched to gauge the pulse of industry leaders on the current scenario and future prospects for the Indian manufacturing sector. The survey was hosted online and sent through email to top management of CII member companies in the manufacturing sector.

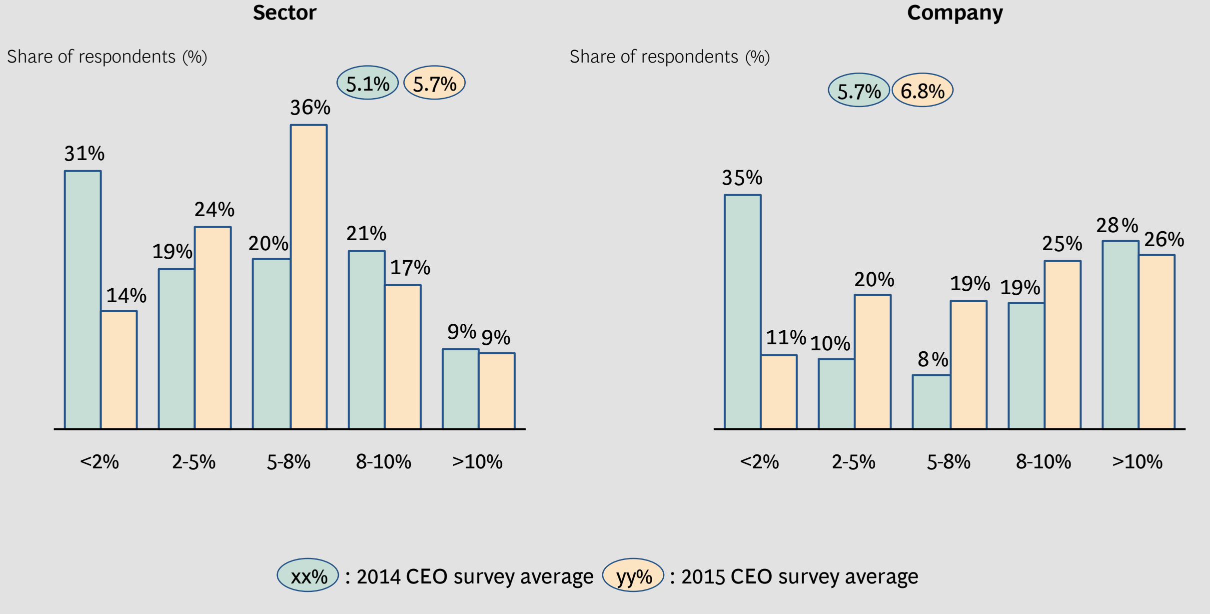
The survey results, complied from 94 responses, have been selectively incorporated in the background note for the summit. We would like to thank all the respondents to the survey for their valuable inputs.

The following pages contain summarised responses for select questions in the survey. The results have been complied from survey responses received and do not necessarily reflect BCG's view on the subject.

Agenda

Companies And Sectors Have Seen Faster Growth Last Year Than the Year Before

What was the growth of your sector and company for the last year?

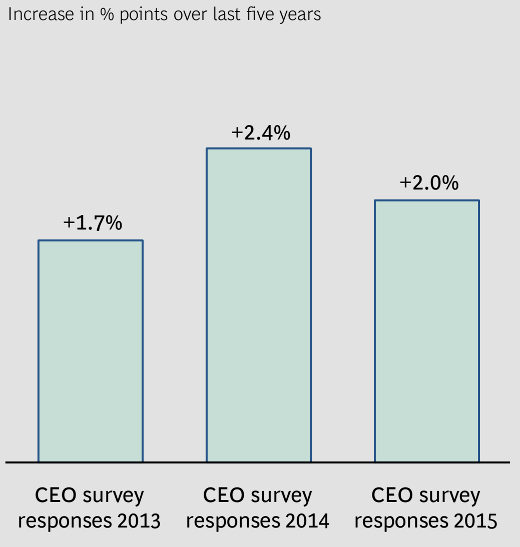


Sources: CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.

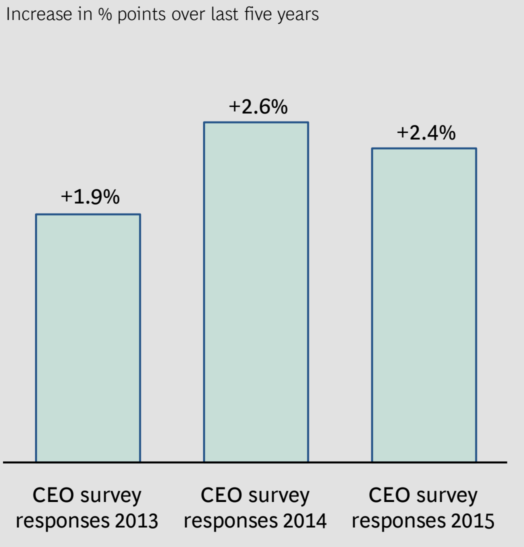
Higher Growth Expected Over Next Five Years Than the Previous Five Years, However Less Optimistic Than Last Year

Do you see stronger growth over the next five years compared to the last five years?

For your sector?



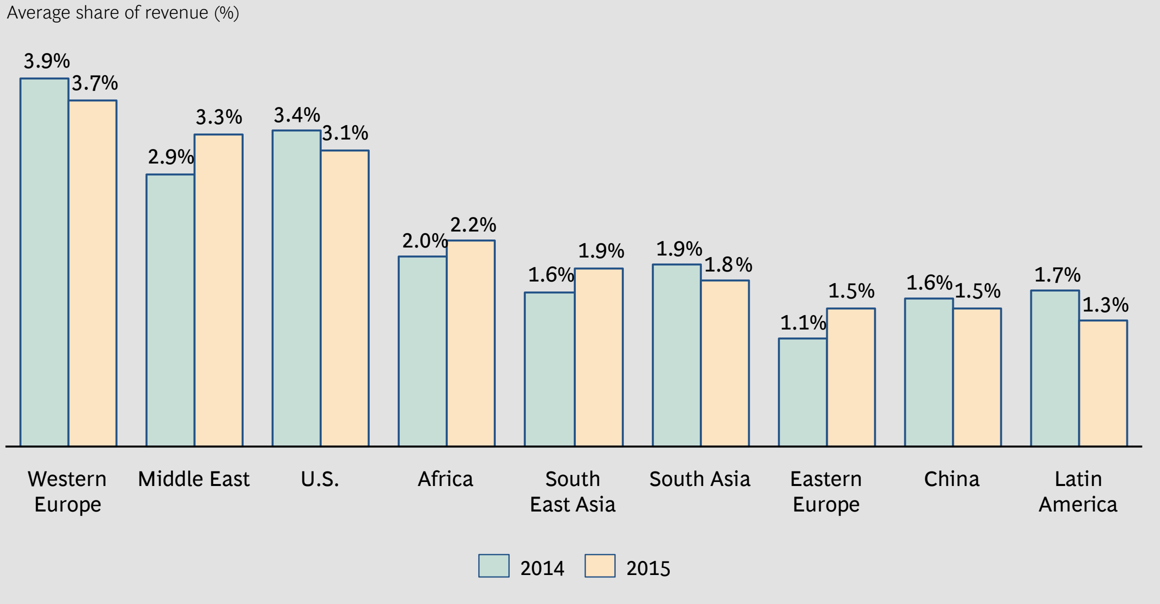
For your company?



Sources: CII-BCG Manufacturing Leadership Survey 2013, CII-BCG Manufacturing Leadership Survey 2014; CII-BCG Manufacturing Leadership Survey 2015.

Top Three Export Destinations for Indian Manufacturing: Western Europe, Middle East and U.S.

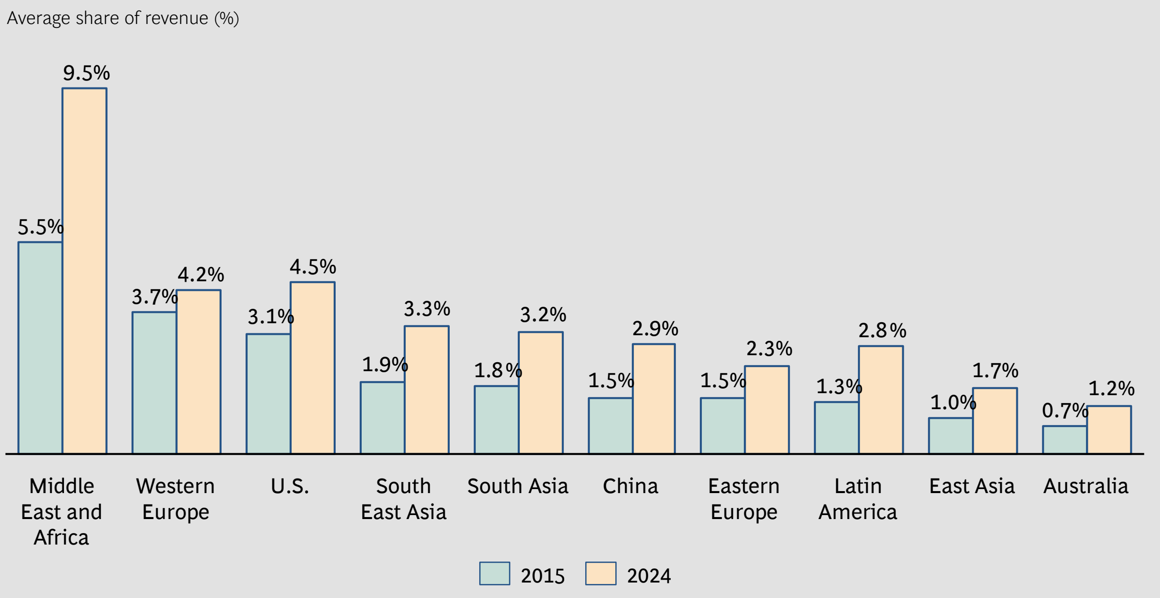
What is your share of revenue coming from the following geographies?



Sources: CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.
Note: Only exporting companies considered.

Companies Aspire to Increase Contribution Of Exports, Especially from Developing Economies

What is your share of revenue coming from the following geographies? (Current Vs Aspiration for 2024)



Source: CII-BCG Manufacturing Leadership Survey 2015.

Agenda

State of the industry

Manufacturing performance

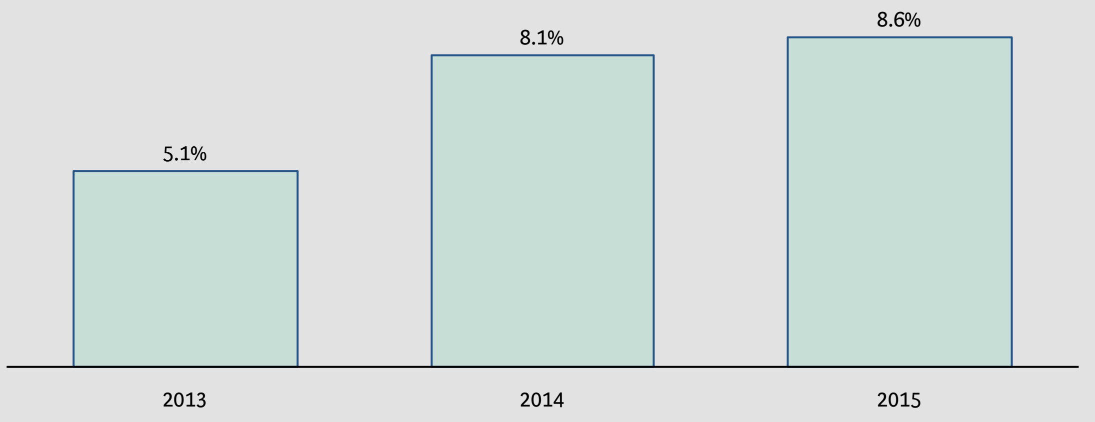
Make in India

Factory of tomorrow

Expectations For Growth in Manufacturing For the Next Five Years Remain High

Given the recent announcements and the Government's intent to drive manufacturing growth, how do you see the manufacturing sector's growth in India over the next five years?

Growth expected over the next five years[1]



Sources: CII-BCG Manufacturing Leadership Survey 2013, CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.
[1]Average of growth expected by the respondents.

Translation of Vision Into Policies Remains One of the Top Challenges Over the Next Five Years

What do you foresee as the biggest challenge for manufacturing growth in India over the next five years? (Top three)

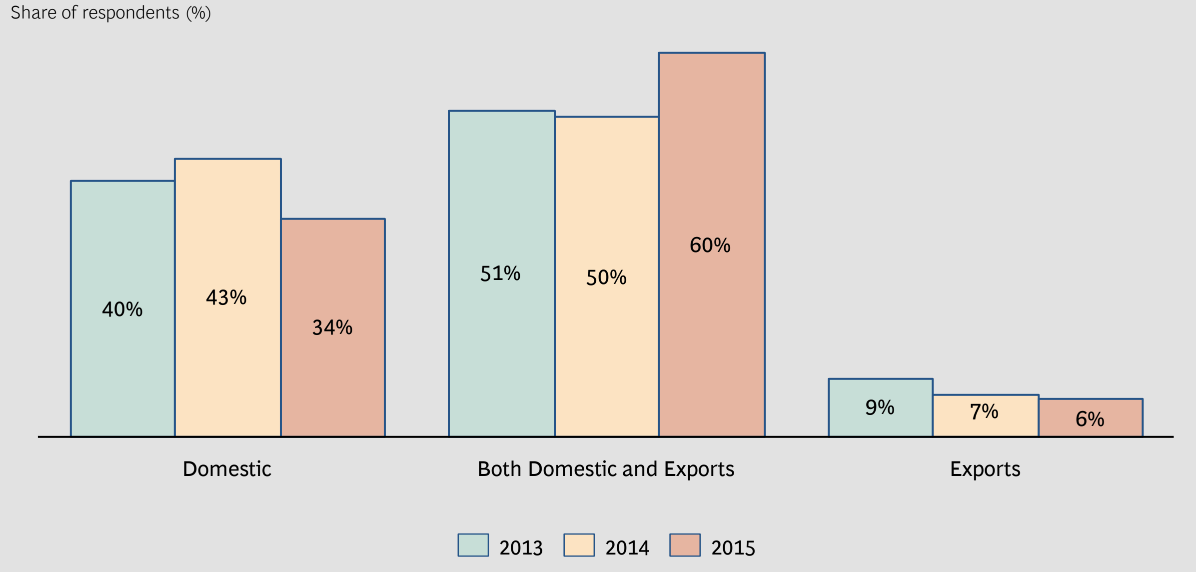
Concern	2015		
	Rank	Survey responses (in %)[1]	
Inability of bureaucracy to implement policies appropriately	1	25	+9%
Infrastructural constraints	2	19	+2%
Lack of translation of vision of the Centre into the right policies	3	15	+3%
High cost of capital	4	8	-4%
Demand slowdown	5	7	0%
Low/no innovation	6	7	-3%
Unstable polity	7	6	0%
Currency fluctuations	8	4	-3%
Rising labor costs	9	4	-4%
Manufacturing overcapacity	11	2	-3%
Others	10	3	+1%

xx change over survey results in 2014

Sources: CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.
[1]Percentage of responses identifying the concern to be one among the top three concerns.

Larger Portion of Respondents Expect Exports to Make A Greater Contribution As Compared to Domestic Demand

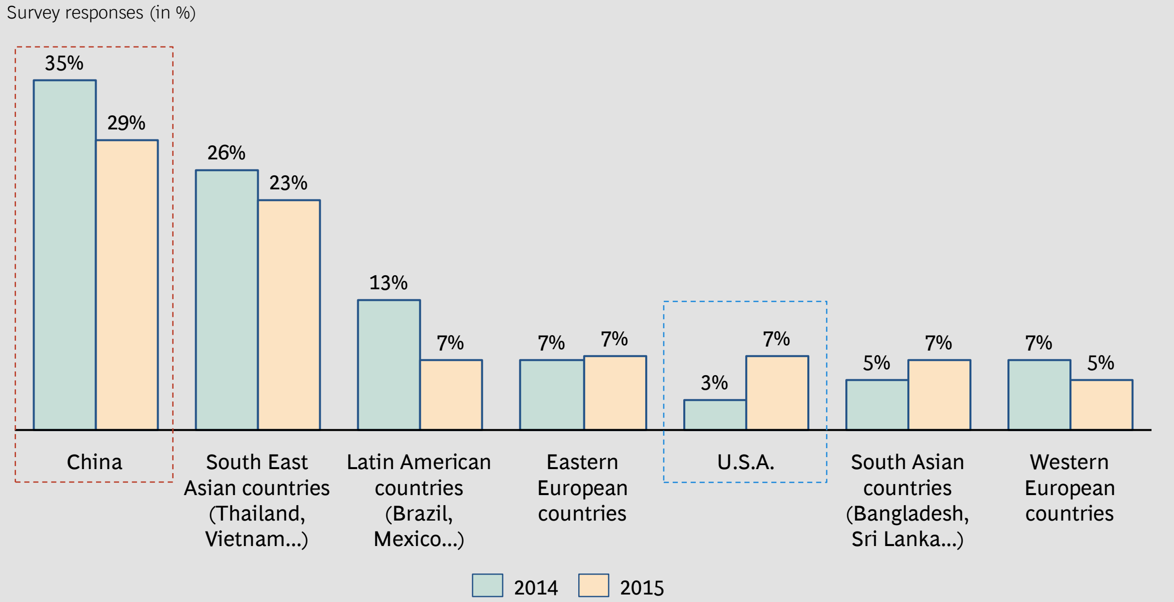
What would be the key demand-side driver for manufacturing growth in India for the next five years?



Sources: CII-BCG Manufacturing Leadership Survey 2013, CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.

China Seen As Less of A Competitor In Export Markets Than Before

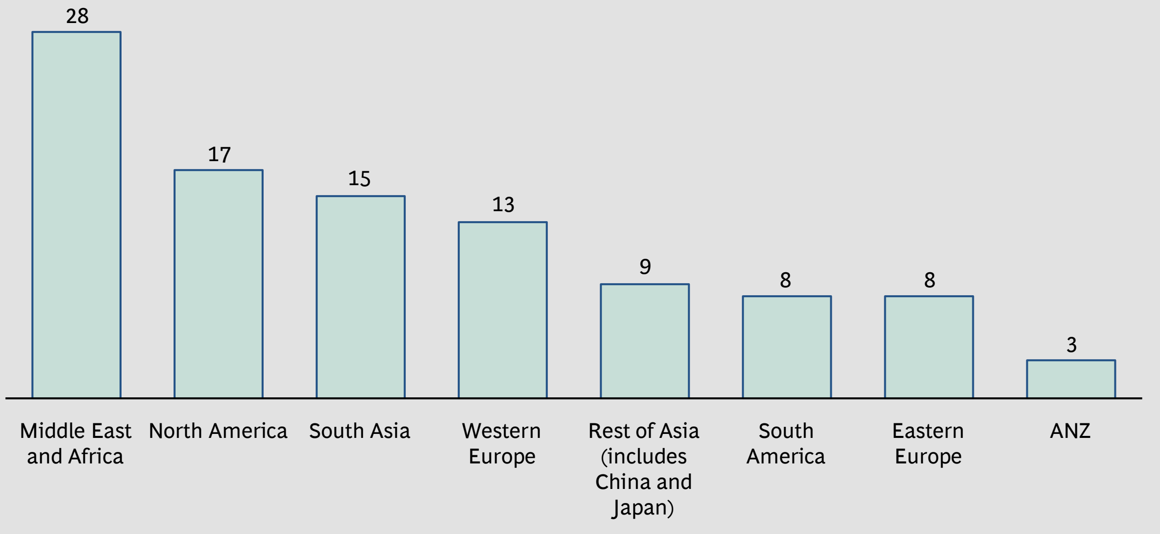
Which countries will be our biggest competitors in the export markets, between now and 2020? (select top three)



Sources: CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.

Middle East And Africa, North America, South Asia identified as Key Geographies to Drive Exports

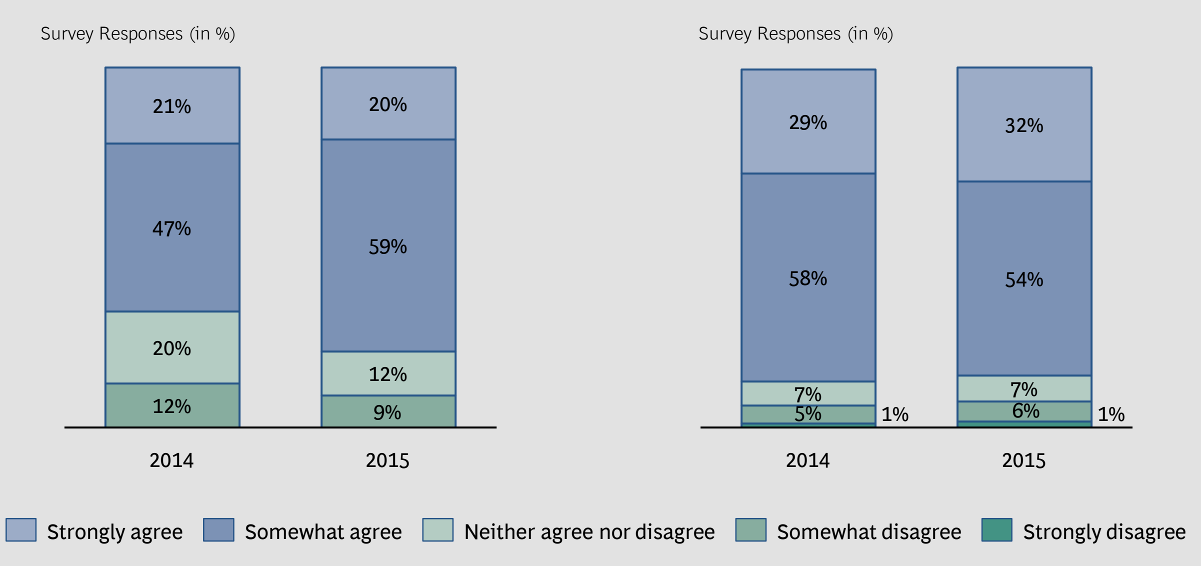
What are the key geographies[1] to drive exports in, over the next five years (select top two)?



Source: CII-BCG Manufacturing Leadership Survey 2015.
[1]Identified as either Top one or Top two geography.

Indian Manufacturers Getting Better At Both Product And Process Innovation

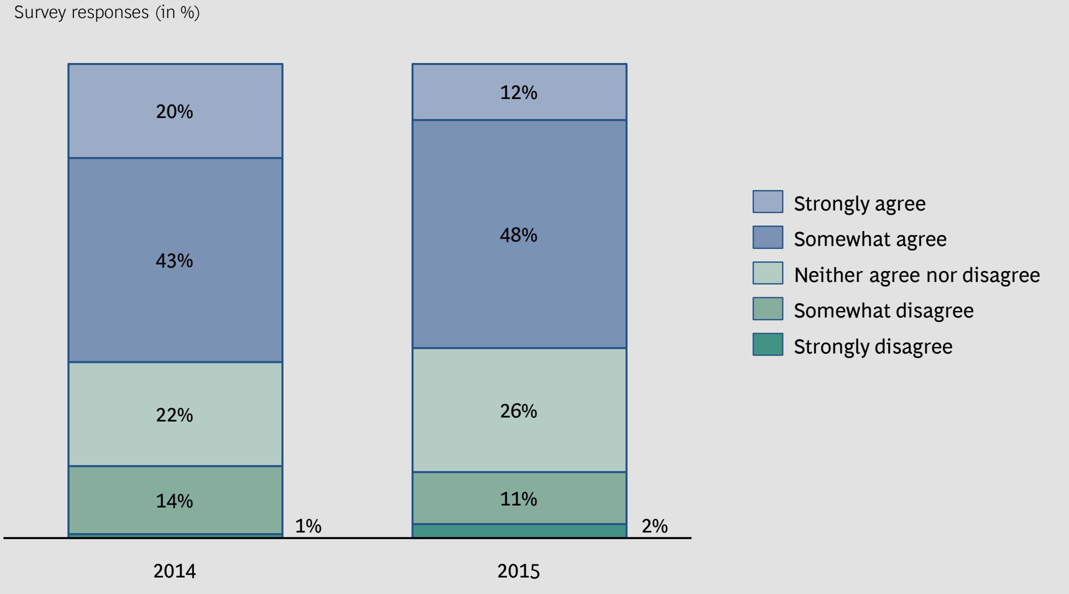
On average, do you see Indian manufacturing companies getting better at innovation?



Sources: CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015; BCG analysis.

Attracting Talent Continues To Be Moderately Challenging For Indian Manufacturing

On average, do you see Indian manufacturing companies getting better at attracting top talent?



Sources: CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.

Agenda

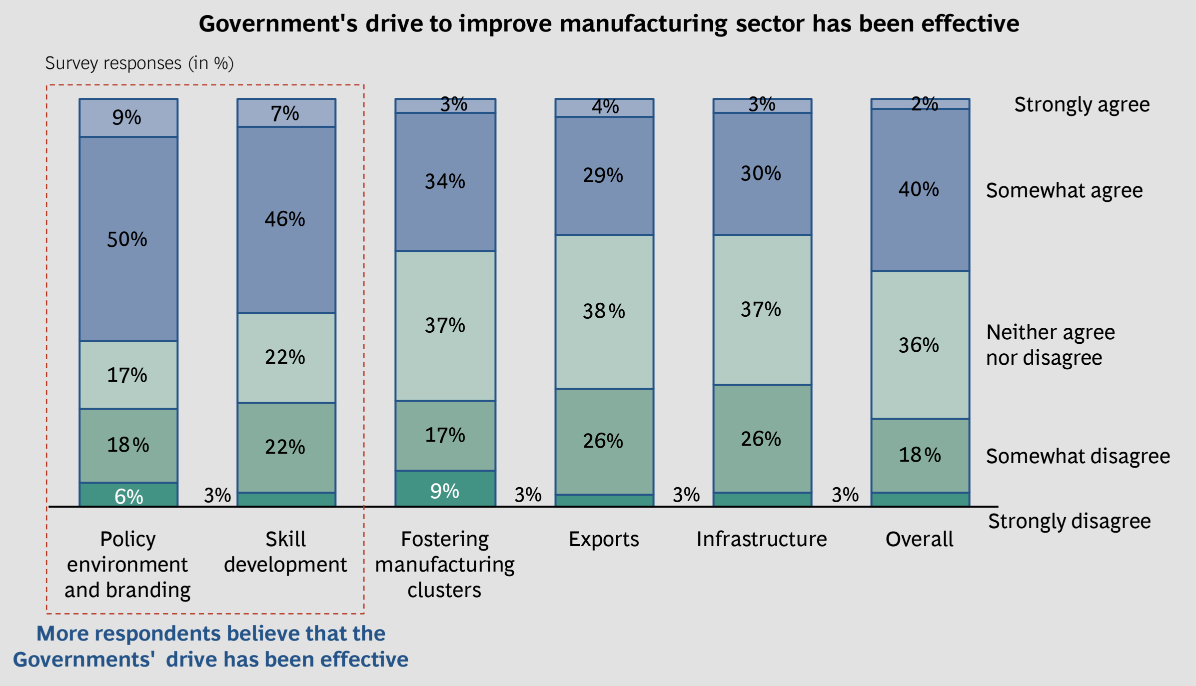
State of the industry

Manufacturing performance

Make in India

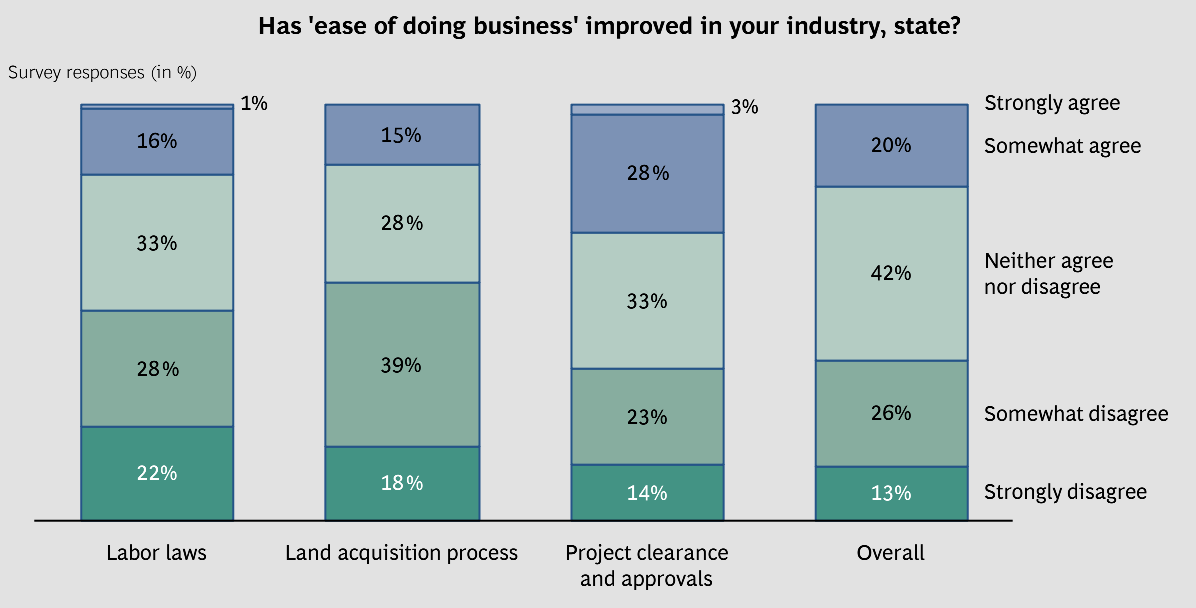
Factory of tomorrow

Government's Drive Seen as Effective in Improving Policy Environment and Skill Development, But Less So in Infrastructure and Exports



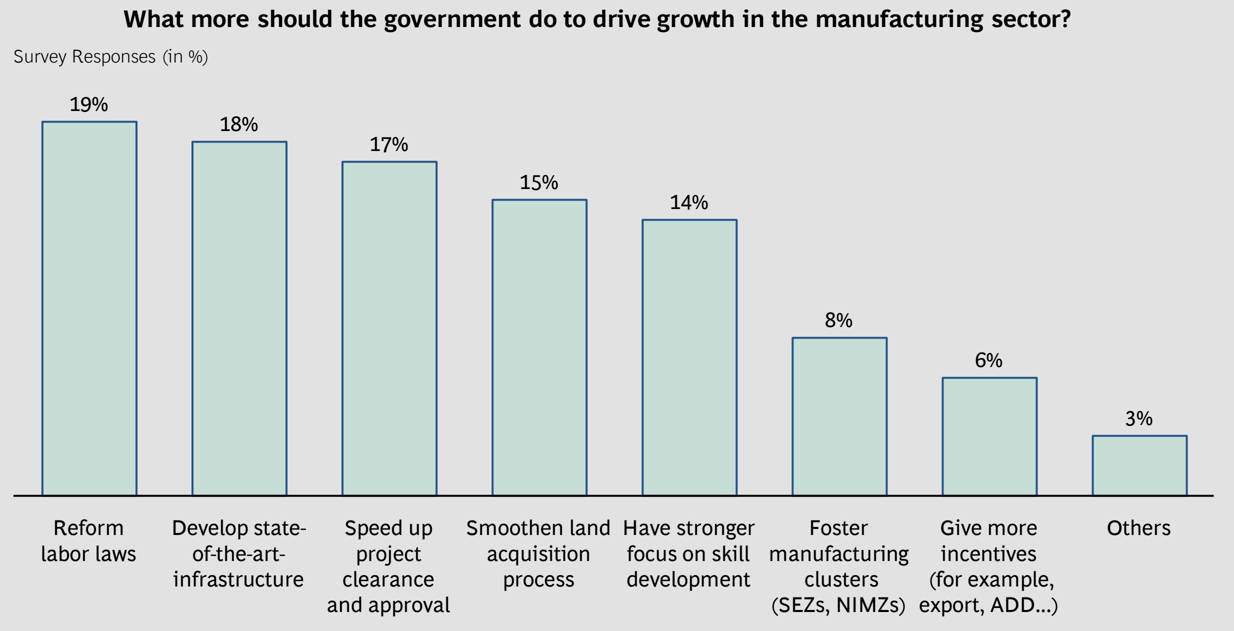
Source: CII-BCG Manufacturing Leadership Survey 2015.

Only 20 Percent Feel That Ease Of Doing Business Has Improved



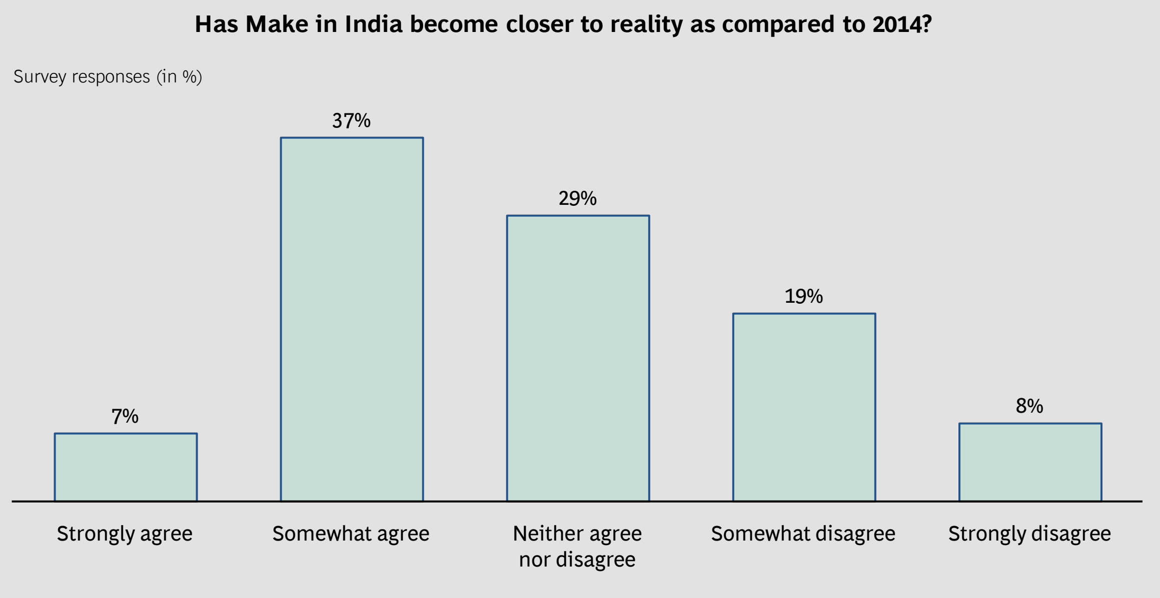
Source: CII-BCG Manufacturing Leadership Survey 2015.

Labor Law Reform and Infrastructure are the Top Two Issues that the Industry Wants the Government to Focus More On



Source: CII-BCG Manufacturing Leadership Survey 2015.

About 45 Percent Executives Surveyed Think Make-in-India has been Closer to Reality In 2015 as Compared to 2014



Source: CII-BCG Manufacturing Leadership Survey 2015.

Agenda

State of the industry

Manufacturing performance

Make in India

Factory of tomorrow

Technology Will be Increasingly Used to Drive Competitive Advantage

What elements of the manufacturing factory and supply chain have seen the most change due to technological advancements over the last five years (FY 11-15)?

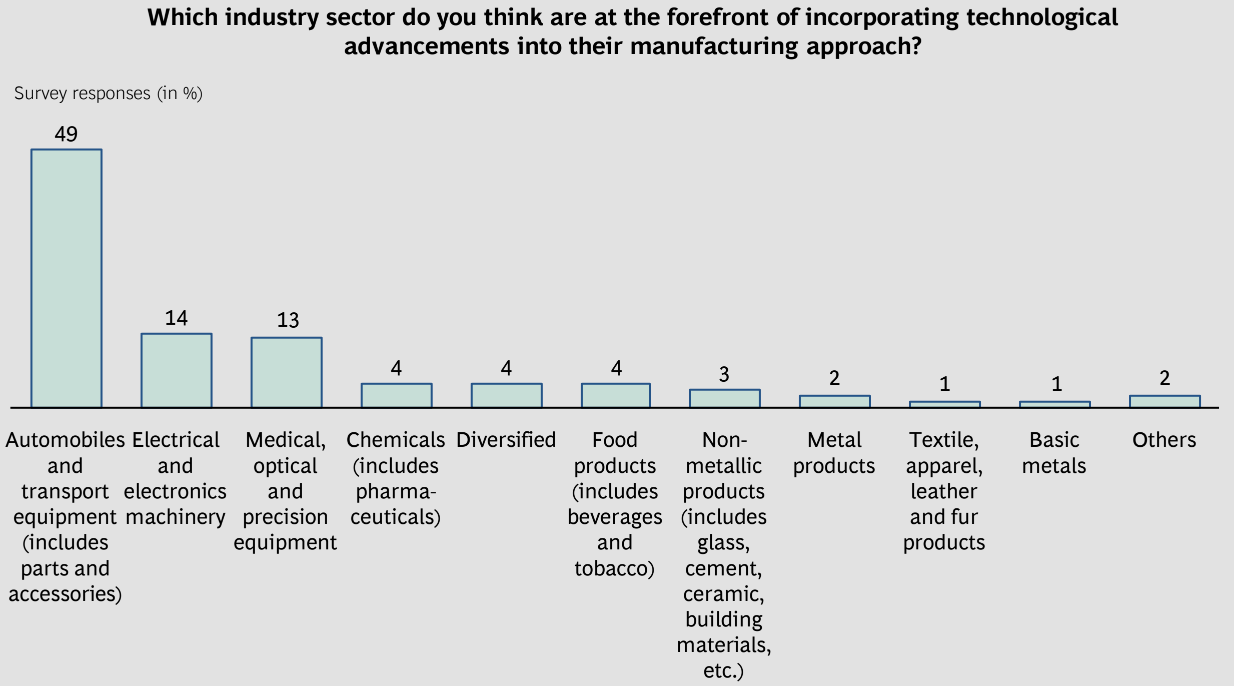
% of respondents	Element
72%	• Improvement in product quality
68%	• Productivity improvement
46%	• Improvement in product delivery
43%	• Shortening of product development life cycle
39%	• Real time manufacturing and stock management based on demand
34%	• Innovation in general (across the value chain)
30%	• Procurement

What elements of the manufacturing factory and supply chain will see the most change due to technological advancements over the next five years (FY 16-20)?

% of respondents		Element
75%	41%	• Innovation in general (across the value chain)
58%	-10%	• Productivity improvement
57%	-15%	• Improvement in product quality
55%	12%	• Shortening of product development life cycle
52%	13%	• Real time manufacturing and stock management based on demand
46%	0%	• Improvement in product delivery
23%	-8%	• Procurement

Sources: CII-BCG Manufacturing Leadership Survey 2015; BCG analysis.

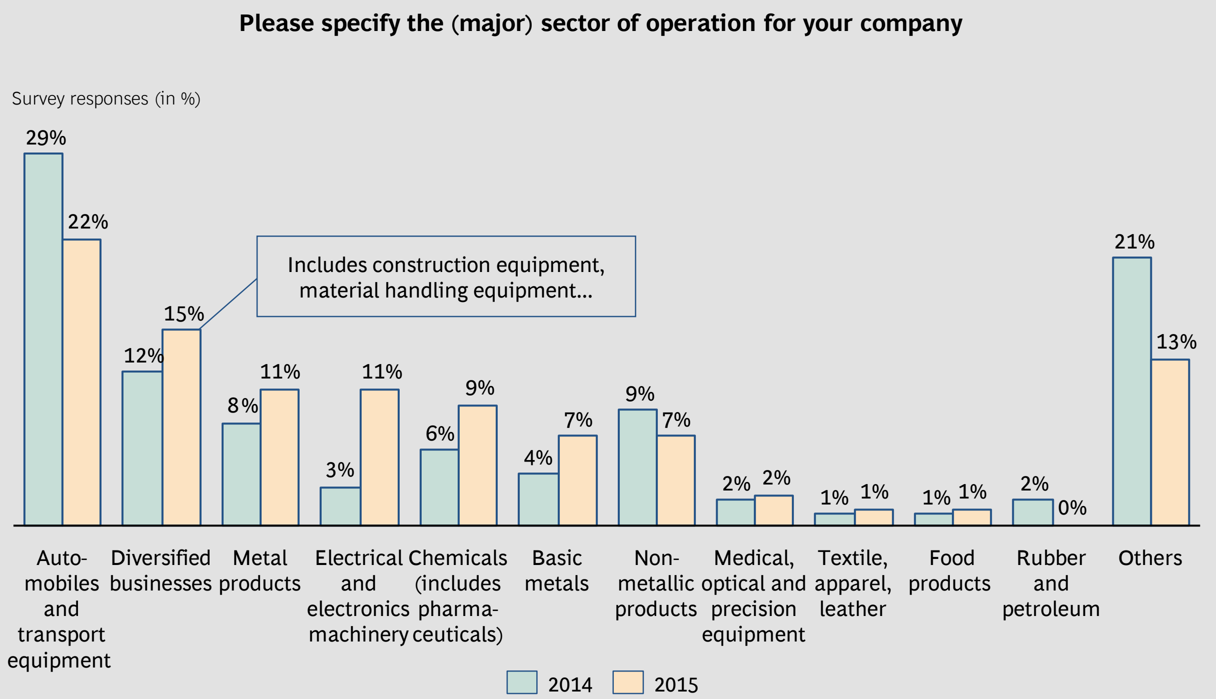
Automobiles, Electrical Machinery and Medical Equipment at the Forefront of Incorporating Technological Advancements



Sources: CII-BCG Manufacturing Leadership Survey 2015; BCG analysis.

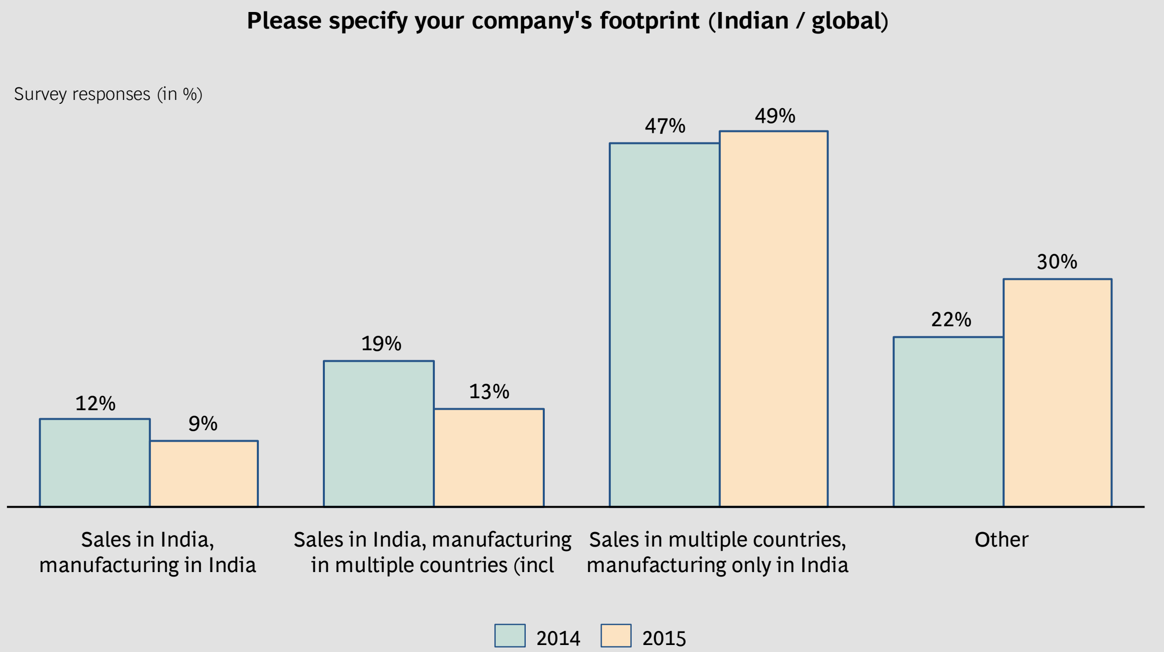
Appendix—Respondent profiles

Respondents Spread Across all Industries Including Diversified Businesses



Sources: CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.

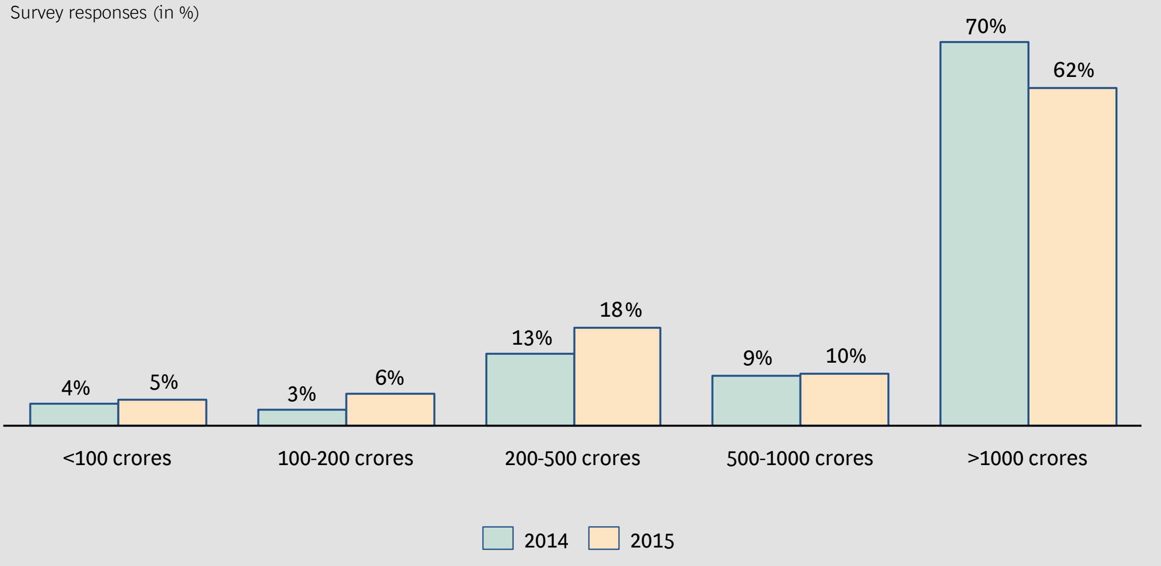
Most Respondents Having a Global Footprint while Manufacturing only in India



Sources: CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.

Respondents Across Various Company Sizes with Majority from Businesses of more than 1,000 Crores Revenue

What is the size of your company's India operations? (in terms of annual turnover in Rs. Crore)



Sources: CII-BCG Manufacturing Leadership Survey 2014, CII-BCG Manufacturing Leadership Survey 2015.

ACKNOWLEDGEMENTS

Abraham Stephanos
Managing Director, Tata Steel Processing And Distribution Ltd.

Aditya Bansal
General Manager, CEAT Ltd.

Ajay Kumar Tannu
Executive Director, OMR Bagla Automotive Systems India Ltd.

Alok Taparia
Assistant Vice President, Hindusthan National Glass & Industries Ltd.

Anil Bali
Vice President, Deki Electronics Ltd.

Anil Goel
Chairman, Duroshox Pvt Ltd.

Anirudh Narayan Mathur
Executive – Managing Director Office, Daikin Air Conditioning India Pvt. Ltd.

Antony Cherukara
Vice President, Kirloskar Oil Engines Ltd.

Ashish Bharatram
Managing Director, SRF Ltd.

Ashish Vaishnav
General Manager - Cooling Business, Thermax Ltd.

Ashwani Bhardwaj
Managing Director, Hubergroup India Pvt Ltd.

B. S. Shinde
Senior Assistant General Manager (EA To Joint Managing Director, Kay Bouvet Engineering Ltd.)

Bhaskar Bhat
Managing Director, Titan Company Ltd.

Blaise Costabir
Managing Director, Gmi Zarhak Moulders Pvt Ltd.

Channabasappa Mugali
Assistant Manager, Business Planning, Harita Fehrer Ltd.

D. V. Ranganath
Vice President (Materials), Bajaj Auto Ltd.

Deepak Desai
Assistant General Manager- Sourcing And Vendor Development, Godrej & Boyce Mfg Co Ltd.

Devarajan Mohan
Joint Managing Director, Cavinkare Pvt Ltd.

D. K. Sharma
Executive Vice President & Business Head, Godrej & Boyce Mfg.Co.Ltd.

Farhad Forbes
Director, Forbes Marshall Pvt Ltd.

Firdose Vandrevala
Execuve Vice Chairman, Essar Steel Ltd.

Galla Vijay Naidu
Chief Executive Officer, Mangal Industries Ltd.

H. A. Dumasia
Vice President - Manufacturing, Godrej & Boyce Mfg Co.

Hakimuddin Ali
Managing Director, Calderys India Refractories Ltd.

Ishan Mehta
Executive Vice President - HR, Escorts Ltd.

J Ardeshir
Group Chief Executive Officer, Forbes Marshall Pvt Ltd.

Jaikrishna B.
President (Group HR), Amara Raja Batteries Ltd.

Jamshyd Godrej
Chairman & Managing Director, Godrej & Boyce Mfg. Co. Ltd.

Jatender Mehta
Managing Director, Omax Auto Ltd.

K. Vaidyanathan
Chief Operating Officer, Heg Ltd.

K. Srinivasan
Managing Director, Carborundum Universal Ltd.

Koji Tsuyuguchi
Executive Vice President (Tech & Tss), Trl Krosaki Refractories Ltd.

M. M. Singh
Executive Advisor, Maruti Suzuki India Ltd.

M. R. Shankar
Head Of Purchasing, Akzo Nobel India Ltd.

Milon K. Nag
Chairman And Managing Director, K. K. Nag Pvt. Ltd.

Gyanesh Chaudhary
Chief Executive Officer And Managing Director, Vikram Solar Pvt. Ltd.

N.N. Shukla
President - Operations, Bhawani Industries Pvt. Ltd.

R Mukundan
Chief Executive Officer, Tata Chemicals Ltd.

N Sukumar
Senior Vice President - Supply Chain, Reliance Industries Ltd.

N. V. Venkatasubramanian
Chief Executive Officer, L&T Valves Ltd.

N. Sriram
President And Director, Endress+Hauser(India) Automation Instrumentation Pvt Ltd.

Nadir Godrej
Managing Director, Godrej Industries Ltd.

Neeraj Sarda
Director, Sarda Metals & Alloys Ltd.

Nikhil Sawhney
Managing Director, Triveni Turbine Ltd.

P Ramnath
Chief Executive Officer, Sterlite Copper.

Prasad B. S. V.
Senior Vice President, Biocon Ltd.

Pratik Kumar
Chief Executive Officer, Wipro Infra Engineering Ltd.

R Kannan
Head CPM, Hinduja Group Ltd.

Raghuraman
Marketing, Brandix India Apparel City.

Rajesh Alreja
Associate Vice President, Godrej & Boyce Mfg. Co. Ltd.

Rajesh Mohata
Chief Marketing And Commercial Officer, Vedanta Ltd.

Rajesh Shah
Co-Chairman And Managing Director, Mukand Ltd.

Ramesh Datla
Managing Director, Elico Ltd.

Ranganath N. K.
Managing Director, Grundfos Pumps India Pvt. Ltd.

Robin Banerjee
Managing Director, Caprihans India Ltd.

S Sandilya
Chairman, Eicher Motors Ltd.

Sanjay Budhia
Managing Director, Patton International Ltd.

Saroja Vivekanand
Managing Director, Visaka Industries Ltd.

Shankar Krishnan Group
Head - Strategy, Shapoorji Pallonji Group.

Shashikumar Nair
Head - HR/Admin., Pae Ltd.

Sudhir Bhalerao
General Manager - Manufacturing, Voltas Ltd.

Sudhir Mehta
Chairman And Managing Director, Pinnacle Industries Ltd.

Sumit Mazumder
Chairman And Managing Director, Til Ltd.

Suresh K. V.
President, Zf India Pvt Ltd.

T Vinod Kumar
Chief Financial Officer, Kirloskar Oil Engines Ltd.

Umesh Asaikar
Executive Director And Chief Executive Officer, Deepak Nitrite Ltd.

Vijay Kalra
Chief Of Manufacturing Operations - Automotive Division, Mahindra & Mahindra Ltd.

Vikram Pandit
Executive Vice President, Praj Industries Ltd.

Vipin Sondhi
Managing Director & Chief Operating Officer, Jcb India Ltd.

For information or permission to reprint, please contact BCG at:
Email: bcg-info@bcg.com
Fax: +91 226749 7001, attention BCG/Permissions
Mail: BCG/Permissions
The Boston Consulting Group (India) Private Limited
Nariman Bhavan
14th Floor,
227, Nariman Point,
Mumbai 400 021
India

For information or permission to reprint, please contact Confederation of Indian Industry at:
Email: ciiwr@cii.in Web: www.cii.in
Tel: +91 22 24931790
Fax: +91 22 24939463/ 24945831
Mail: Confederation of Indian Industry
Western Region
105, Kakad Chambers
1st floor,
132, Dr Annie Besant Road,
Worli,
Mumbai – 400 018
India

To find the latest BCG content and register to receive e-alerts on this topic or others, please visit bcgperspective.com.

Follow bcg.perspectives on Facebook and Twitter.

9/2015

BCG
THE BOSTON CONSULTING GROUP

CII
Confederation of Indian Industry