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Growing US Manufacturing

Policy Roadmap

MEMPHIS, NOVEMBER 9TH 2017

Introduction



- Principal at The Boston Consulting Group
- Focused on Apparel and Operations
- Prior to BCG:
 - David's Bridal: Head of Supply Chain & International Expansion
 - Save-a-Lot: Head of Inventory Management & Demand Planning
 - Booz & Company: Management Consultant

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THE BOSTON CONSULTING GROUP

- Global management consulting firm
- World's leading advisor in business strategy
- 85 offices across 48 countries
- Our focus: address our client's most critical challenges and transform their enterprises

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Study conducted to identify current barriers to increase manufacturing activities in the US and policies to help overcome these challenges

Agenda

US Manufacturing



Review trends indicating there is an opportunity today

Opportunities



Determine potential for re-shoring manufacturing

Challenges



Assess major barriers for re-shoring

Solutions

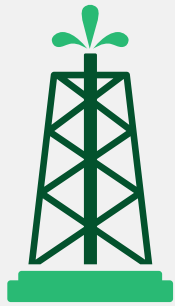


Discuss potential solutions to address challenges

US Manufacturing



Several macro trends have contributed to increasing US manufacturing competitiveness



Low domestic energy costs

Significant U.S. advantage in industrial energy costs favors energy-intensive manufacturing



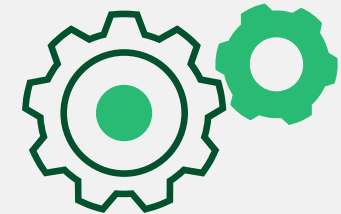
Need for responsiveness to customers

Shortened supply chain appeals to companies with need to be responsive to customers (e.g. fast fashion)



Desire to reduce supply chain costs and risks

Bulky and low value density products are costly to ship and lengthy supply chains require additional inventory



Increasing levels of automation

More advanced technology benefits products that can be made more competitively with additional capital

Many companies are already exploring automation



Factory in Mexico
(laser cutting and automated gluing)

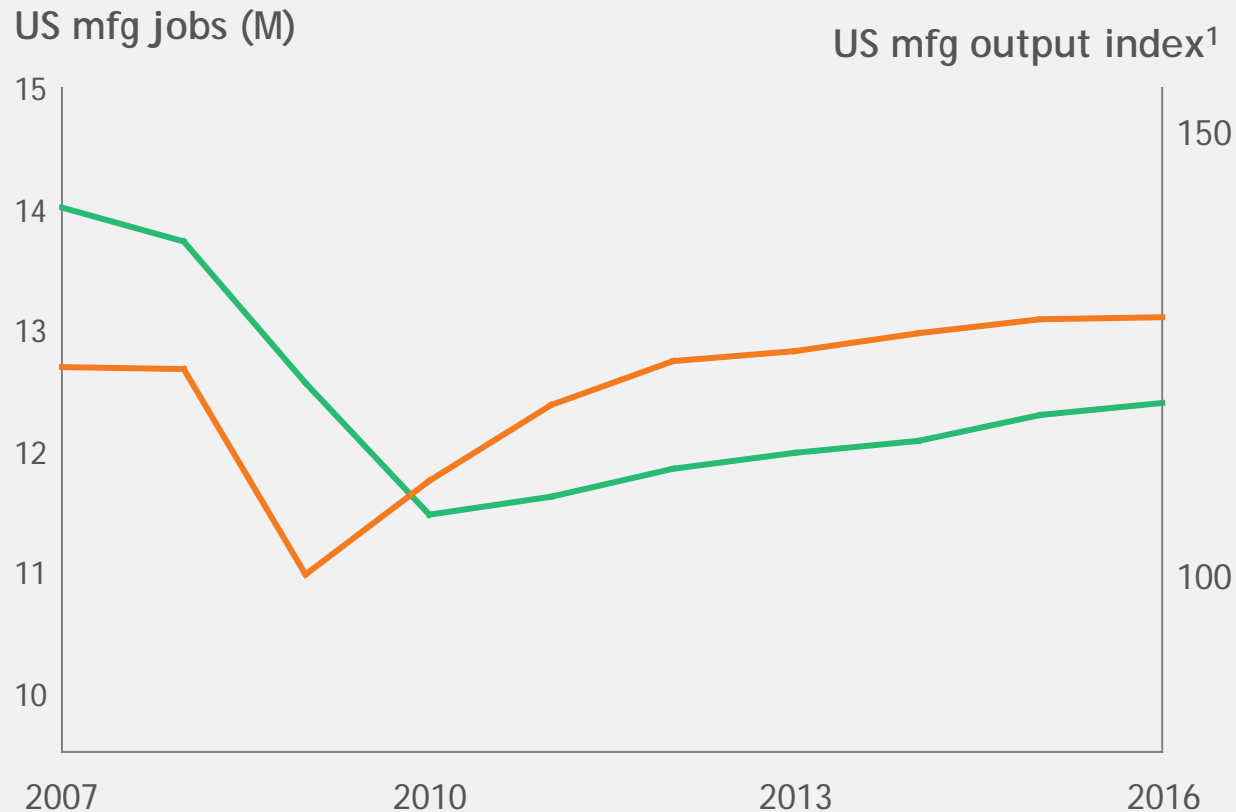
Flex

(high-tech manufacturing company known for producing Fitbit activity trackers and Lenovo servers)



Speed Factory in Germany
Plans to open factory in Atlanta

US manufacturing has been growing



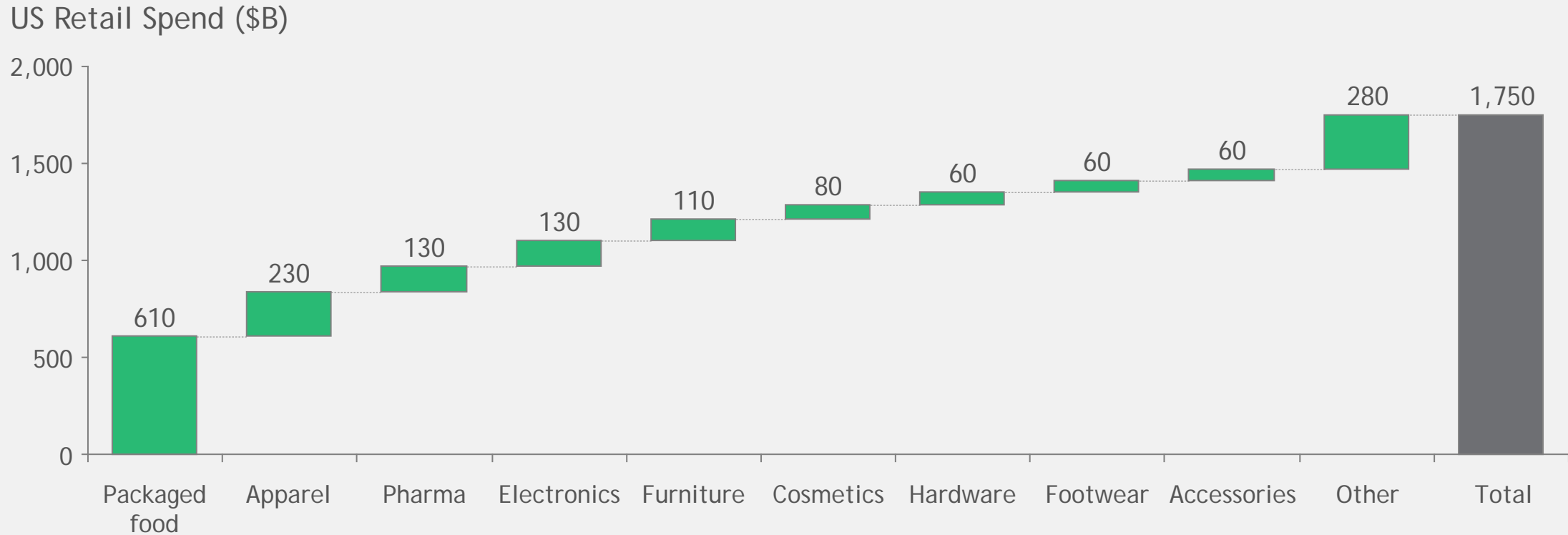
Experts predict that 3.5M new manufacturing jobs will be created in the next decade

1. Index reflects real output of US manufacturing sector, where Index 2009 = 100.
Source: US Bureau of Labor Statistics, Federal Reserve, World Economic Forum,

Opportunities



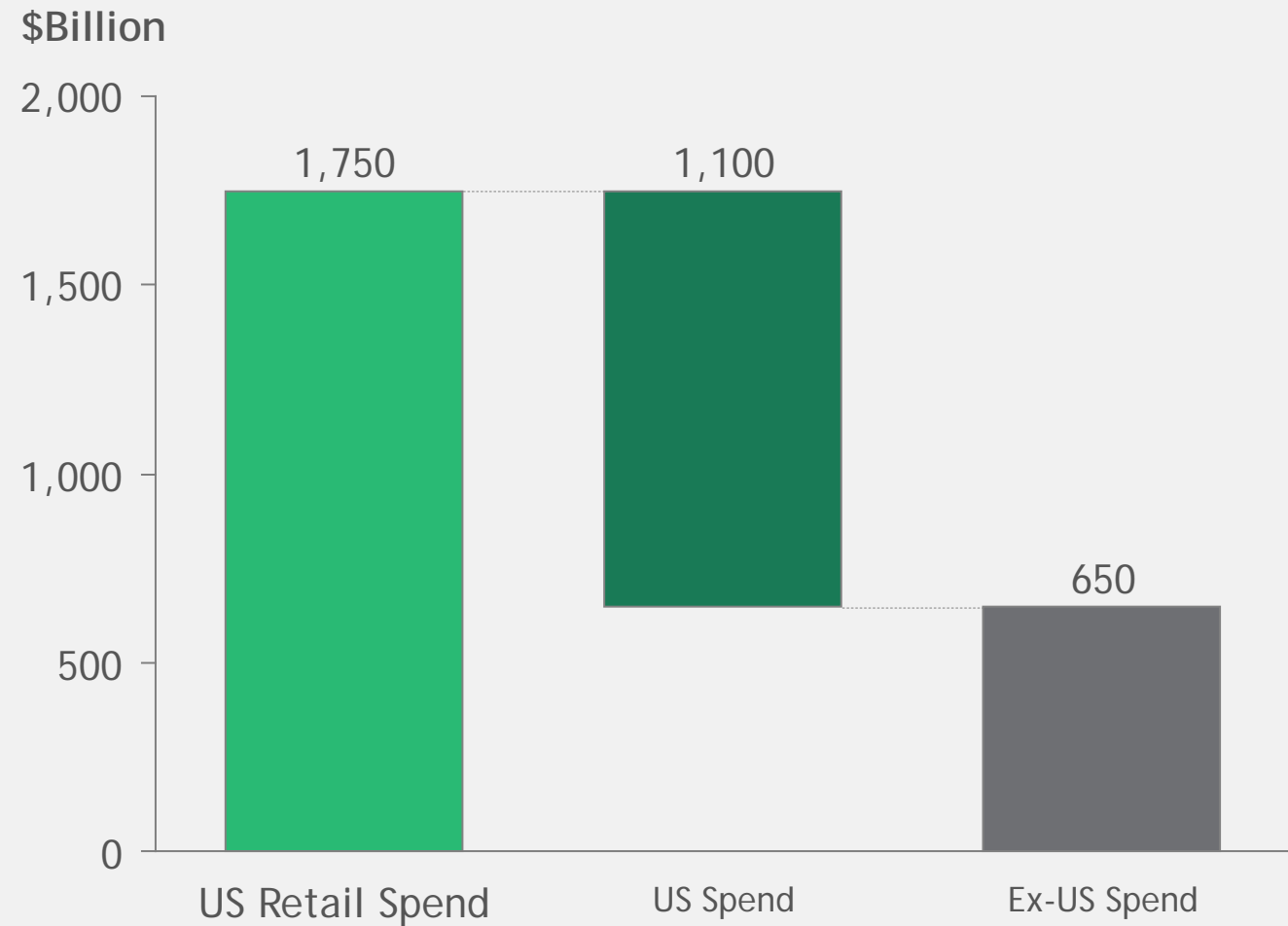
US retail spend is approximately \$1.8T



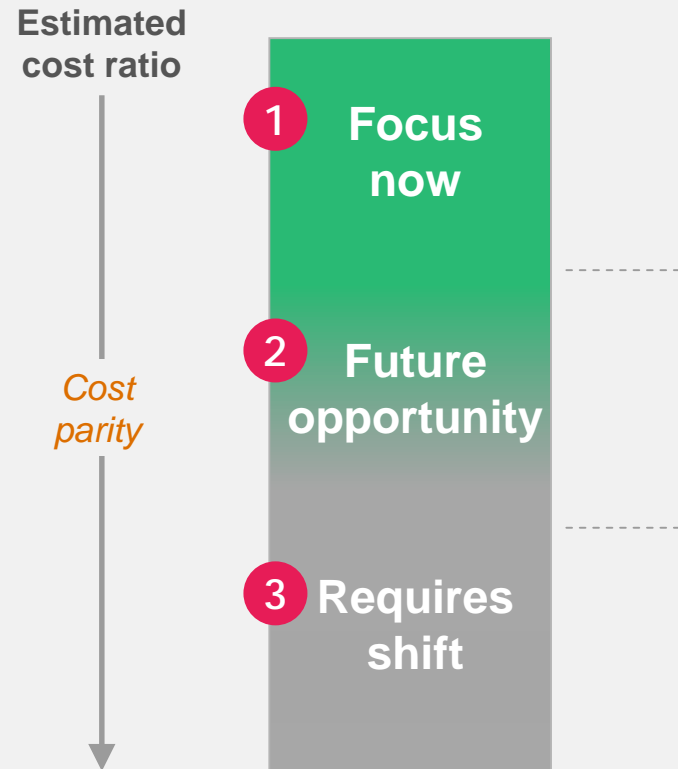
Note: excludes motor vehicles, gas stations,
Source: United States Economic Census; Estimated Annual Purchases by kinds of Business

35-40% of products in these categories are estimated to be sourced internationally

Retail Spend Sourcing



Manufacturing cost analysis shows a \$250+ Billion reshoring opportunity in next 5-10 years



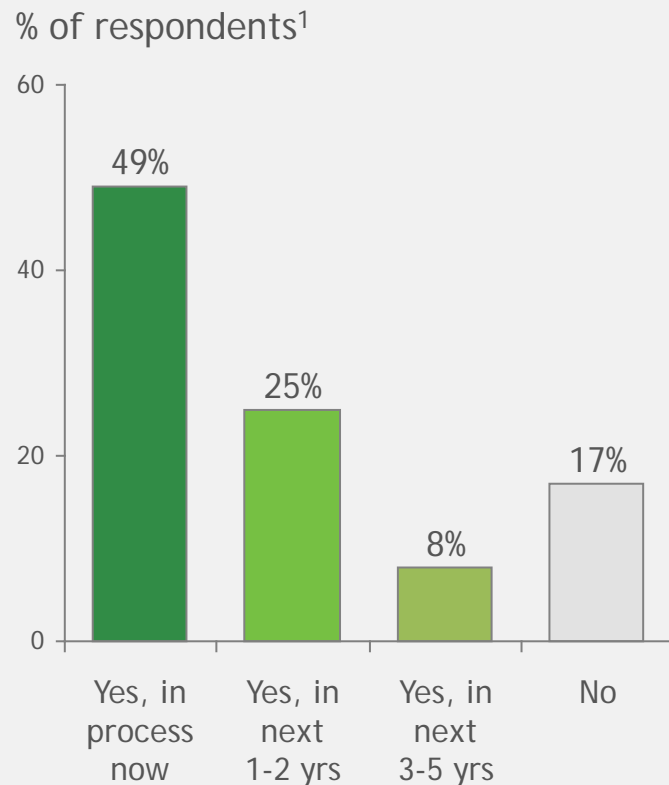
Example Categories

- Furniture
 - Sporting goods
 - Cookware
-
- Small appliances
 - Patio/outdoor furniture
 - Bicycles
-
- Electronics
 - Textiles

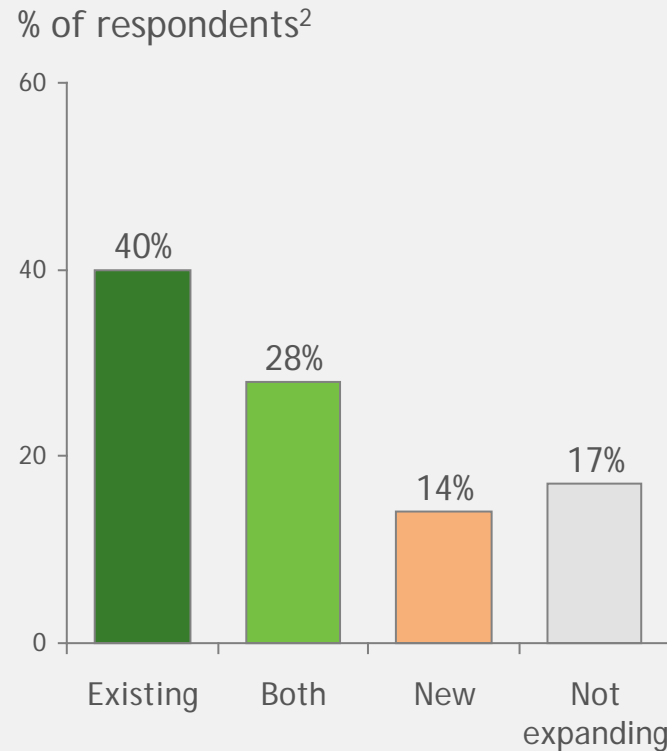
Challenges

Most US manufacturers are expanding in the US - in addition to or instead of international expansion

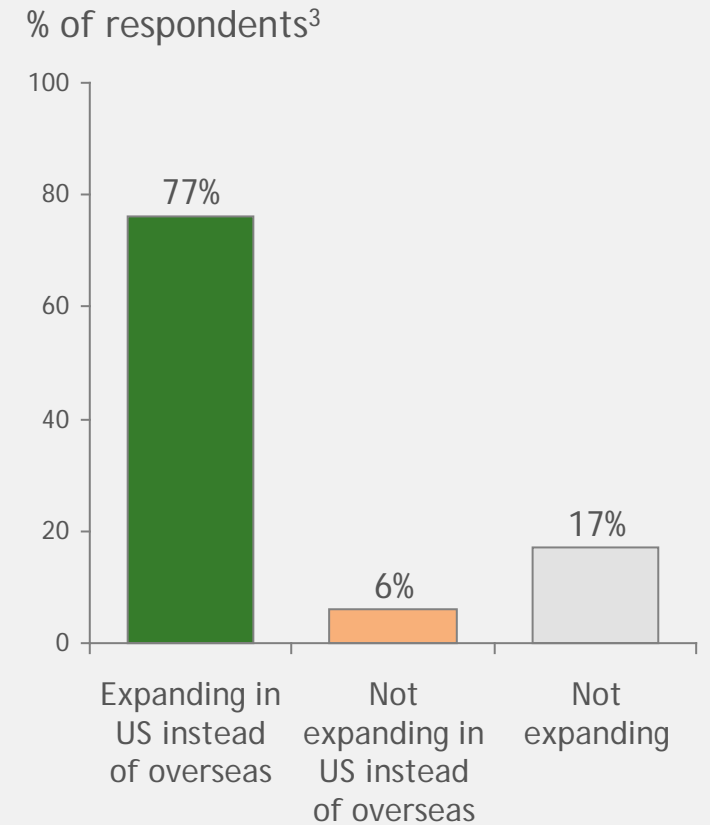
Most respondents are expanding mfg in the US



~2/3s of respondents plan to leverage existing plants



Most suppliers expanding in US instead of overseas



1. Question: Are you planning on expanding manufacturing capacity in the US (check one)? 2. Question: Are you expanding at a new or existing location? 3. Question: Are you expanding in the US instead of overseas?; 99 respondents total

However, significant barriers to re-shoring manufacturing



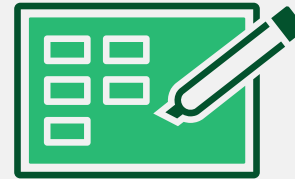
A

Workforce



B

Coordination
& Financing



C

Regulation



D

Tax & Trade

A Workforce

Lack available, cost-effective, qualified workforce

"I recently opened a plant in the southeast, but one of my primary constraints is the ability to find qualified welders. I specifically targeted a location closer to an urban center to ensure a steady labor supply, however I believe I have hired all of the available skilled tradesman in the area"

COO, home furnishings manufacturer

B Coordination & Financing

Key inputs for suppliers/assemblers not available domestically

Lack of coordination in supporting manufacturers select sites

"I'm missing the raw materials to re-shore more of my products. There are no competitive domestic suppliers of the specific woven cotton material that I need. There are foreign firms that could expand to the US to do this, but they have no incentive, so why take the risk."

CEO, apparel manufacturer

Regulation

Complexity of local, state, and federal manufacturing regulation

Regulations not targeted to firm size or industry hinders growth

"I avoided growing my company past 50 people because I would instantly be hit with compliance requirements (e.g. ACA reporting) that would be unsustainable for my business."

CEO, outdoor furniture company

D Tax & Trade

Many raw materials and components cheaper to source overseas

Out of date US tax system - highest rate and worldwide taxation

"I would be better off importing finished products. TV components have a higher import tariff rate (5%) than finished TVs (3.9%). With no American producers of LCD panels, I have to import components and pay the 5% tariff. In such a low margin business, 5% is a lot to deal with."

COO, electronics assembler

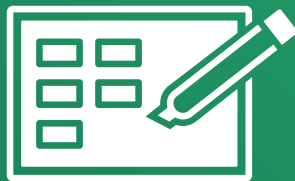
Solutions



Workforce



Coordination
& Financing



Regulation



Tax & Trade

10

Policies to help
overcome these
challenges

A Workforce

Key Lever

- 1 Build vocational training programs linked to local industry
- 2 Reduce burden on private industry to train and up-skill workers
- 3 Rebrand US manufacturing to attract new workers and drive demand of domestic products

Examples

Dow Chemical worked with community colleges on "Fast START" to train new employees, providing career path for workers and talent pipeline for Dow

60% of Germany's youth enjoys state/supplier-funded dual training model, where trainees split time in vocational school and firm apprenticeship

Manufacturers in Yakima, WA launched a talent attraction campaign highlighting "live and work" opportunities and trained local leaders to act as host ambassadors

B Coordination & Financing

Key Lever

Examples

4 Encourage growth of key component ecosystems to help close supply chain gaps

Florida targets specific, high-value industries with "Qualified Target Industry Tax Refund"

5 Facilitate private / public cooperation to promote manufacturing clusters

French suppliers created "Cosmetic Valley" cluster and later partnered with the government to advance the industry & provide support for smaller suppliers

c Regulatory

Key Lever

- 6 Harmonize regulations across different levels of government and address areas of federal overlap

- 7 Streamline compliance requirements for criticality and business size

Examples

EPA determined in 2011 that it did not need to duplicate inspections for leaking dairy tanks, because USDA and FDA already doing so

Exemption from Sarbanes-Oxley regulations for firms with > \$75M market cap saved ~\$400M since 2007

D Tax & Trade

Key Lever

8 Create globally competitive tax environment

9 Expand and protect tax deductions that foster manufacturing investment

10 Reconcile US component/finished good tariffs

Examples

US corporate tax rate of 35% is above OECD average of 25%; Federal government has proposed measures to make US more globally competitive

South Carolina's Job Development and Retraining credits reimburse companies for investing in training and upskilling

The tariff on steel as a raw commodity is higher than the tariff on steel-derived products, thus disadvantaging US manufacturing

Different entities to collaborate to drive policy changes

Key Policy Levers	Retailers	Suppliers	State /Local Government	Federal Government
1 <i>Build vocational training programs linked to local industry</i>		●	●	
2 <i>Reduce burden on private industry to train and up-skill workers</i>		●	●	●
3 <i>Rebrand US manufacturing to attract new workers</i>	●	●	●	●
<hr/>				
4 <i>Encourage growth of key component ecosystems to help close supply chain gaps</i>		●	●	●
5 <i>Facilitate private / public cooperation to promote manufacturing clusters</i>	●	●	●	●
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6 <i>Harmonize regulations across different levels of government and address areas of federal overlap</i>		●	●	●
7 <i>Streamline compliance requirements</i>			●	●
<hr/>				
8 <i>Create globally competitive tax environment</i>			●	●
9 <i>Expand and protect tax deductions</i>			●	●
10 <i>Reconcile US component/finished good tariffs</i>				●



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THANK YOU

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