BUILD ELECTRONICS BETTER

The Current Sentiment of the Global Electronics Manufacturing Supply Chain

Monitoring the Pulse of the Global Electronics Industry

December 2021

ipc.org

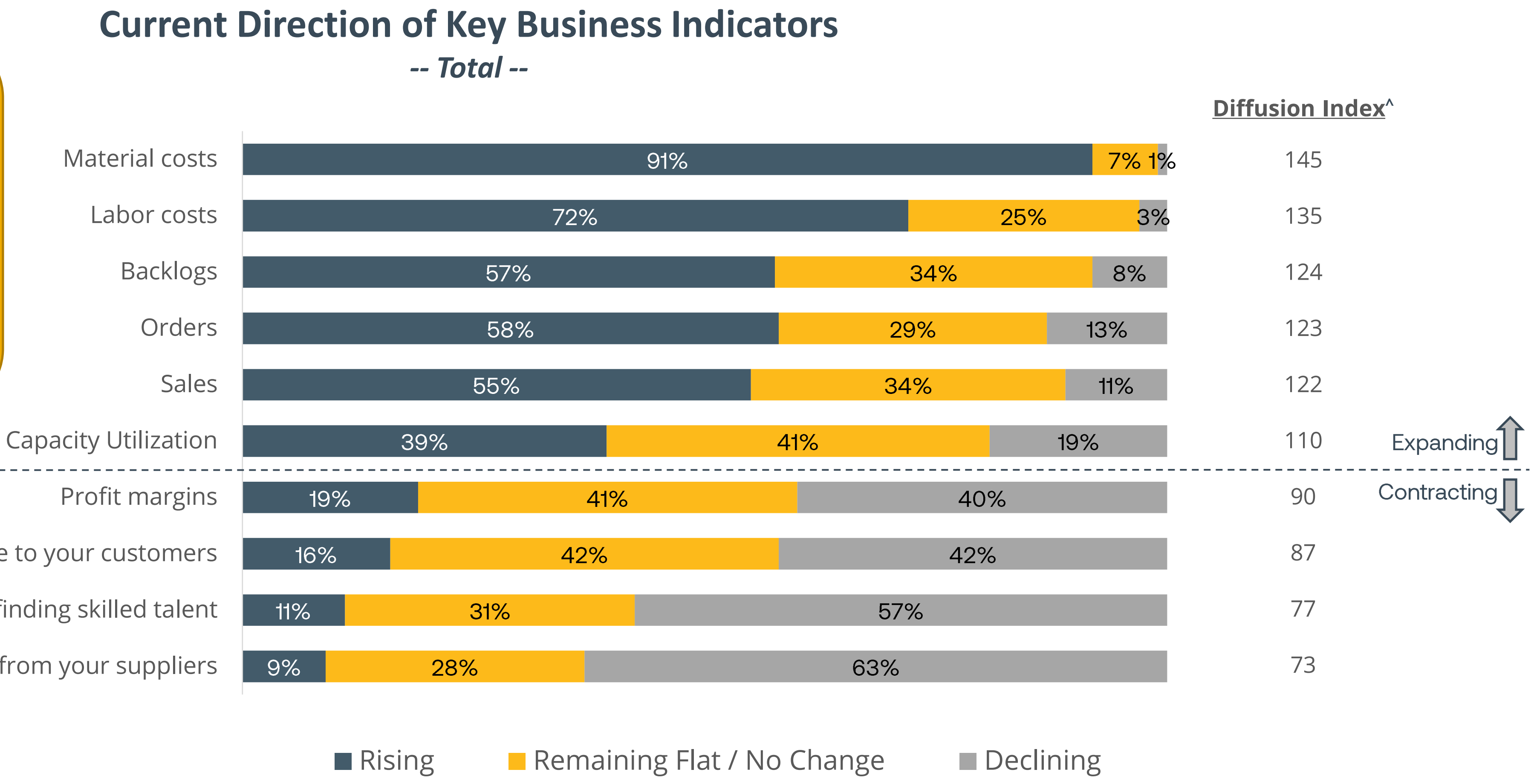
Executive Summary

- Material costs and labor costs continue to be two of the largest issues facing the electronics supply chain.
  - Nine in ten electronics manufacturers report rising material costs and nearly three-fourths reporting rising labor costs.
  - Ease of recruiting workers remains difficult, with 57% reporting it has gotten worse in the last month.
  - While order flow remains positive, higher costs are hurting profit margins. 58% of electronics manufacturers report orders are expanding, but 40% report profit margins are declining and only 19% report profit margins are improving.
- Supply chain disruptions continue to exert significant pressure on electronics manufacturers
  - Both inventories available to customers as well as inventories available from suppliers declined in the last month.
  - While capacity utilization continues to expand, the percent of respondents reporting it is declining as recent sharply.
- Two-Thirds of manufacturers report their government is not invested in the electronic industry's success
  - Only 20% of North American manufacturers agree their government is invested in the success of the electronics manufacturing industry, compared to significantly higher agreement among manufacturers in Europe (38%), APAC (57%), and those operating globally (57%).
  - Similarly, only 13% of manufacturers in North America agree their government is adequately helping the electronics manufacturing industry transition to the factory of the future, whereas a significantly higher 37% of firms in Europe, 41% of global firms, and 50% of firms in APAC feel the same.

Current Conditions for the Electronics Supply Chain Remain Challenging

Nine in ten electronics manufacturers report rising material costs, with nearly three-fourths reporting rising labor costs.

As a result, profit margins and ease of recruitment are currently declining, along with inventories, both available from suppliers and to customers.

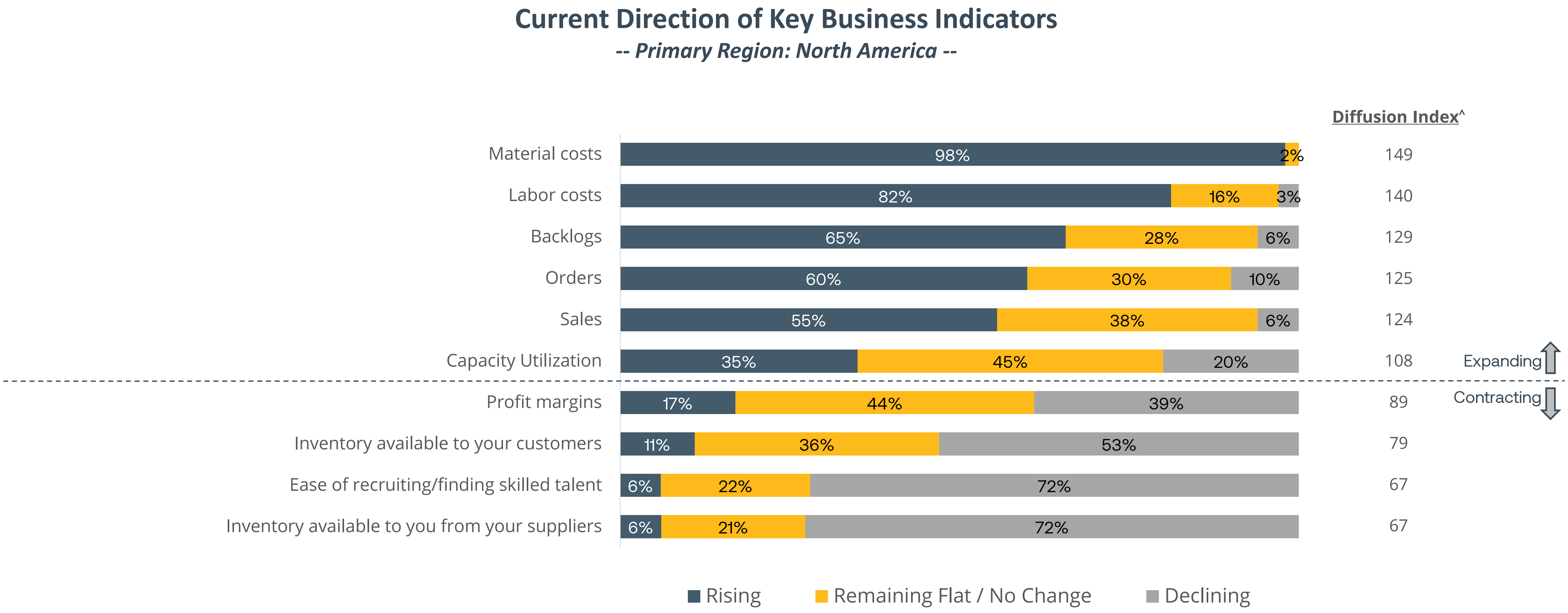


^A diffusion index is a statistical measure used to detect economic turning points.

Regional Differences in Current Conditions

- **Ease of recruiting/finding skilled talent is declining in North America.**
  - 72% of North American firms report ease of recruiting workers is declining, while a significantly lower 37% of firms in APAC and 43% of those operating globally report the same.
  - Conversely, 35% of firms operating globally report ease of recruiting workers is improving, whereas only 6% of firms in North America and Europe report the same.
  - Among firms in APAC, ease of recruitment is holding steady with 51% indicating no change.
- **In part due to recruitment difficulties, labor costs are rising, especially in North America.**
  - 82% of manufacturers in North America indicate labor costs are rising vs. 59% among firms operating in APAC, where, along with European firms, labor costs are more likely to be holding steady.
- **While material costs are rising industry-wide, they are doing so at a higher rate in North America than other parts of the world.**
  - 98% of North American manufacturers indicate rising material costs compared to 90% in Europe, 88% in APAC, and 78% among global manufacturers.
- **Inventory available to customers is declining at a higher rate in North America, while recovering at a quicker pace in Europe.**
  - 53% of firms in North America are reporting declining inventory available to customers, while only 30% of firms in Europe, 29% of firms in APAC, and 26% of those operating globally are currently experiencing declines.
  - At the same time, 30% of European manufacturers indicate inventory available to customers is rising, with the diffusion index in Europe no longer indicating a state of contraction.

The View From Companies Primarily Operating in North America



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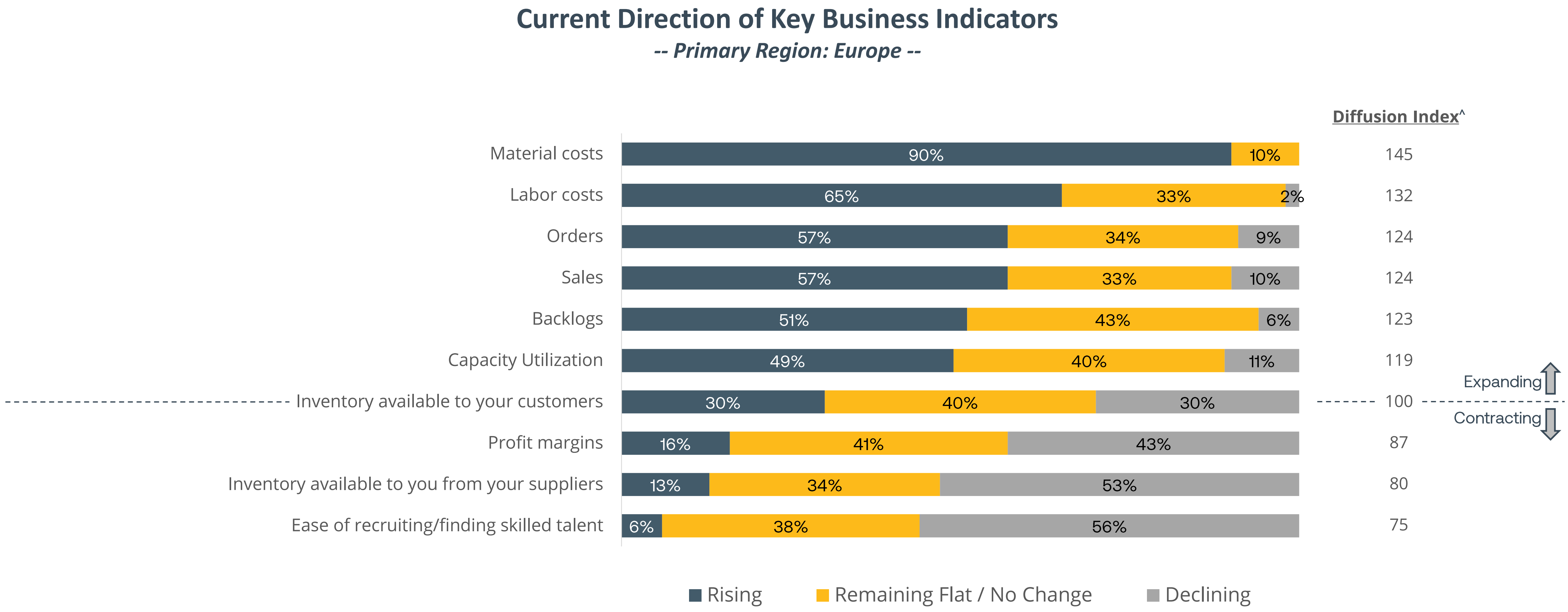
The View From Companies Primarily Operating in Europe



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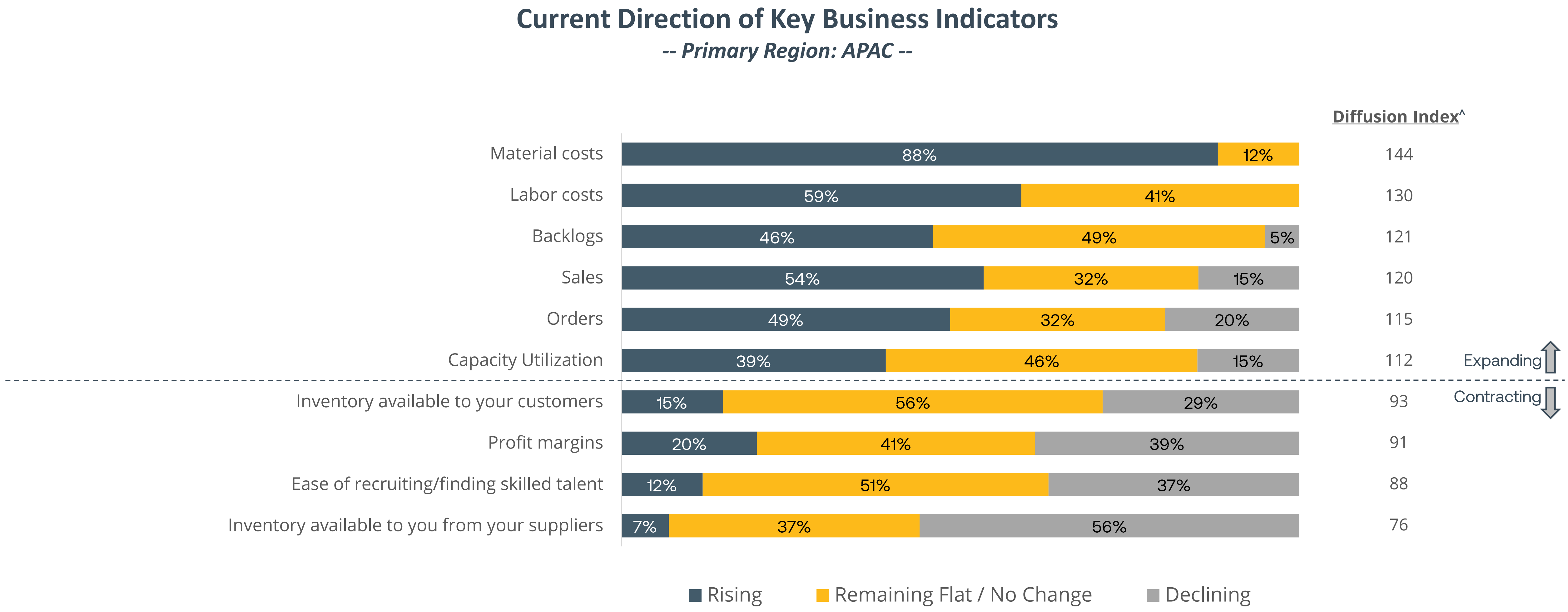
The View From Companies Primarily Operating in APAC



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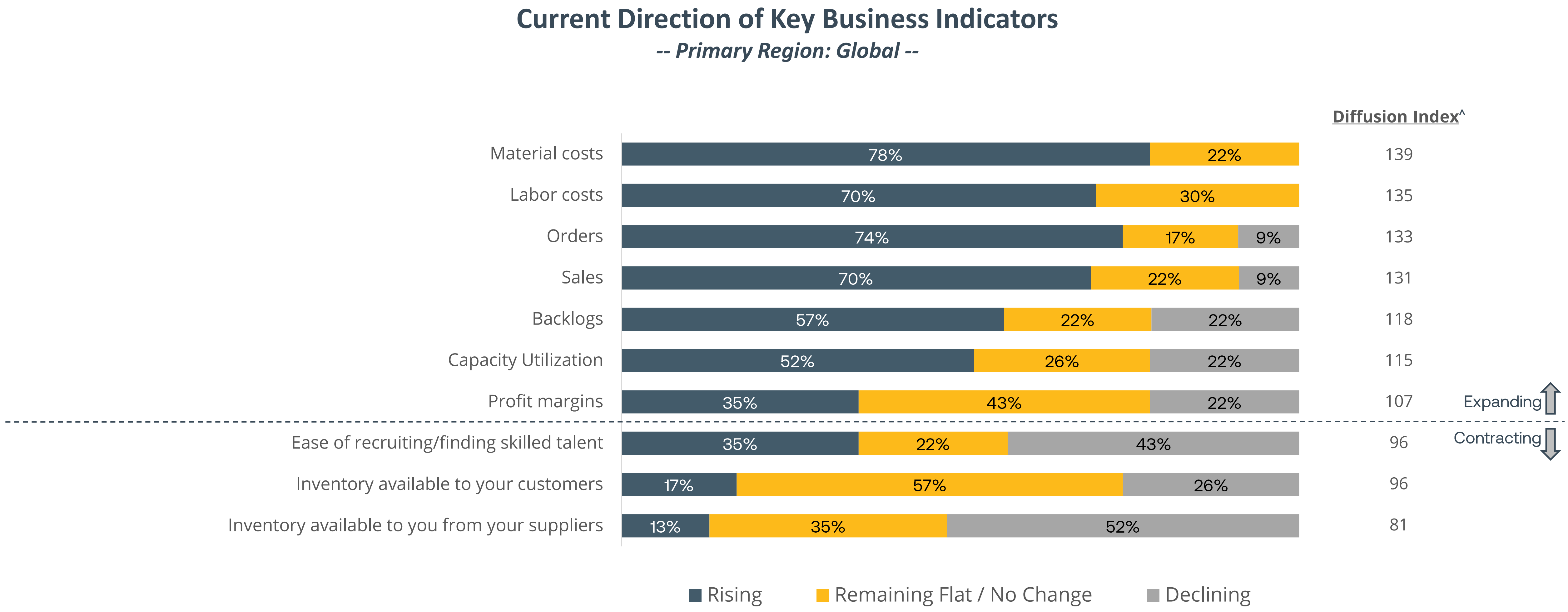
The View From Companies Primarily Operating Globally



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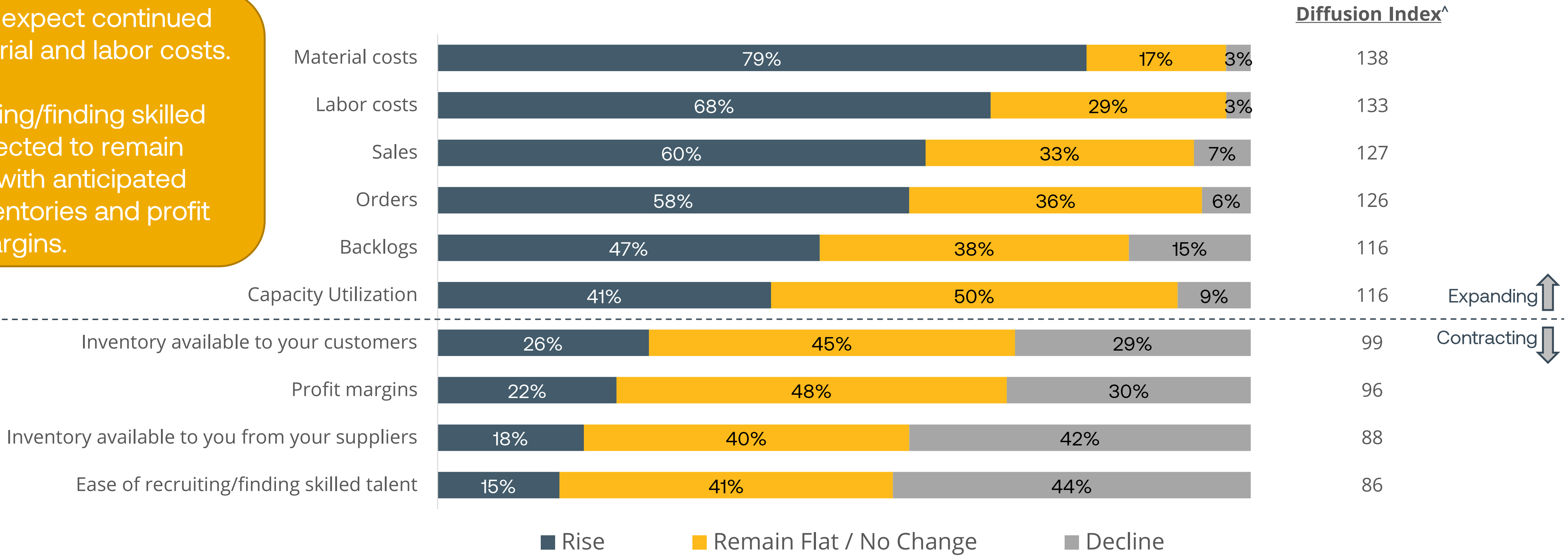
The Outlook for the Next 6 Months is Little Changed

Manufacturers expect continued increase in material and labor costs.

Ease of recruiting/finding skilled talent is expected to remain challenging, with anticipated declines in inventories and profit margins.

Anticipated Direction of Key Business Indicators – Next Six Months

-- Total --



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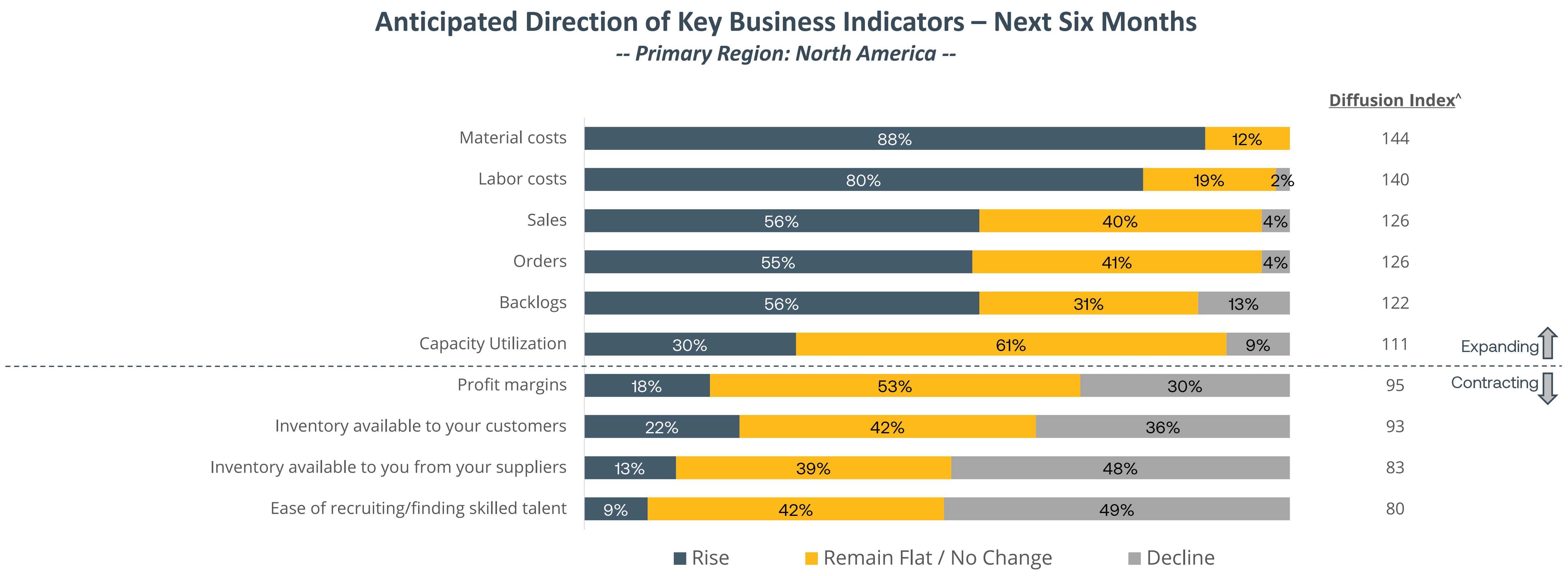
Regional Differences in the Outlook

- **Expectations for rising backlogs are more pronounced in North America.**
  - 56% of North American manufacturers expect backlogs to rise in the next six months, compared to only 28% among firms in Europe where 60% of firms expect backlogs to remain flat.
- **Manufacturers operating globally and firms in APAC anticipate ease of recruiting to improve compared to both North America and Europe.**
  - 30% of global manufacturers and 21% of manufacturers in APAC expect ease of recruiting to rise in the next six months, while only 9% of manufactures in North America and 4% of manufacturers in Europe anticipate the same.
- **As recruitment issues persist, a larger number of North American firms expect labor costs to rise compared to Europe.**
  - 80% of North American firms anticipate rising labor costs in the next six months, compared to only 55% among firms in Europe where 41% are expecting labor costs to remain flat.
- **Expectations for rising capacity utilization are more pronounced among manufacturers operating globally and those located in APAC.**
  - 57% of global manufacturers, along with 55% of APAC manufacturers, expect capacity utilization to rise in the next six months, compared to only 30% among firms in North America.
- **A higher share of firms in North America expect material costs to rise in the coming months compared to firms in Europe.**
  - 88% of North American manufacturers expect material costs to rise in the near future, which compares to a significantly lower 67% in Europe. Instead, European firms are more likely to indicate materials costs will remain stable (31%), while firms in APAC are more likely anticipating further decline (7%).
- **Expectations for declining inventory available to customers is more pronounced in North America compared to Europe.**
  - 36% of North American manufacturers expect inventory available to customers to decline, while a significantly lower 13% of firms in Europe anticipate the same.

The View From Companies Primarily Operating in North America



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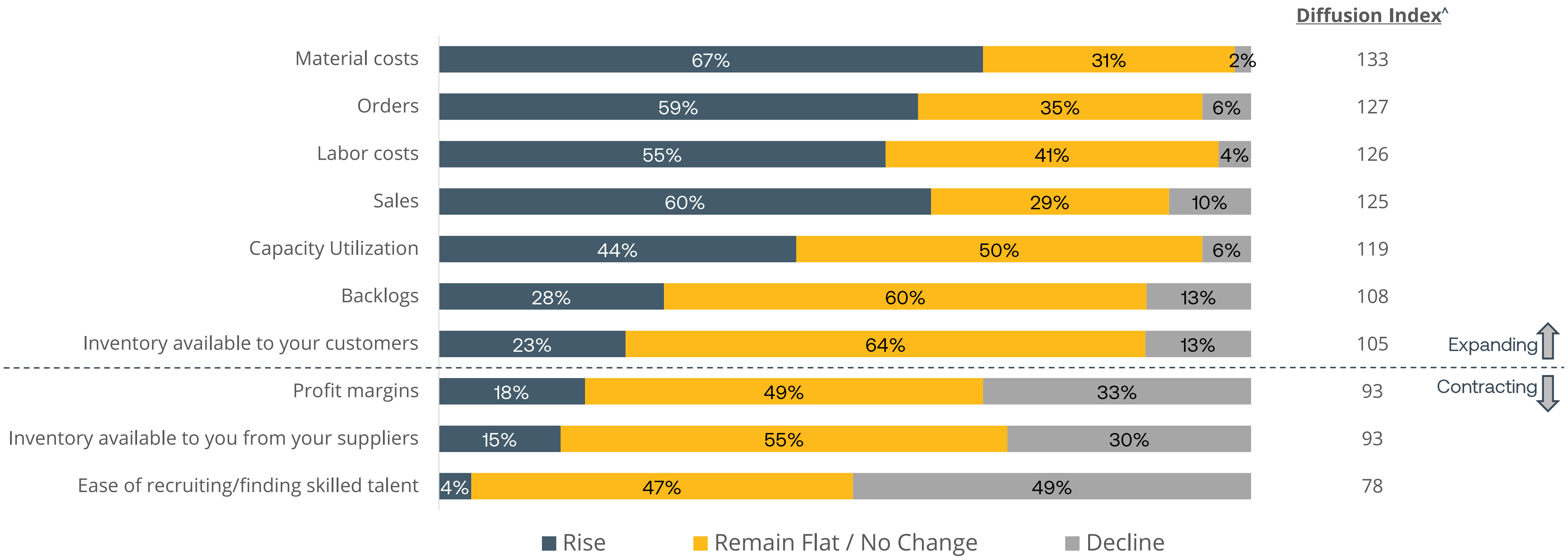
The View From Companies Primarily Operating in Europe

Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: Europe --



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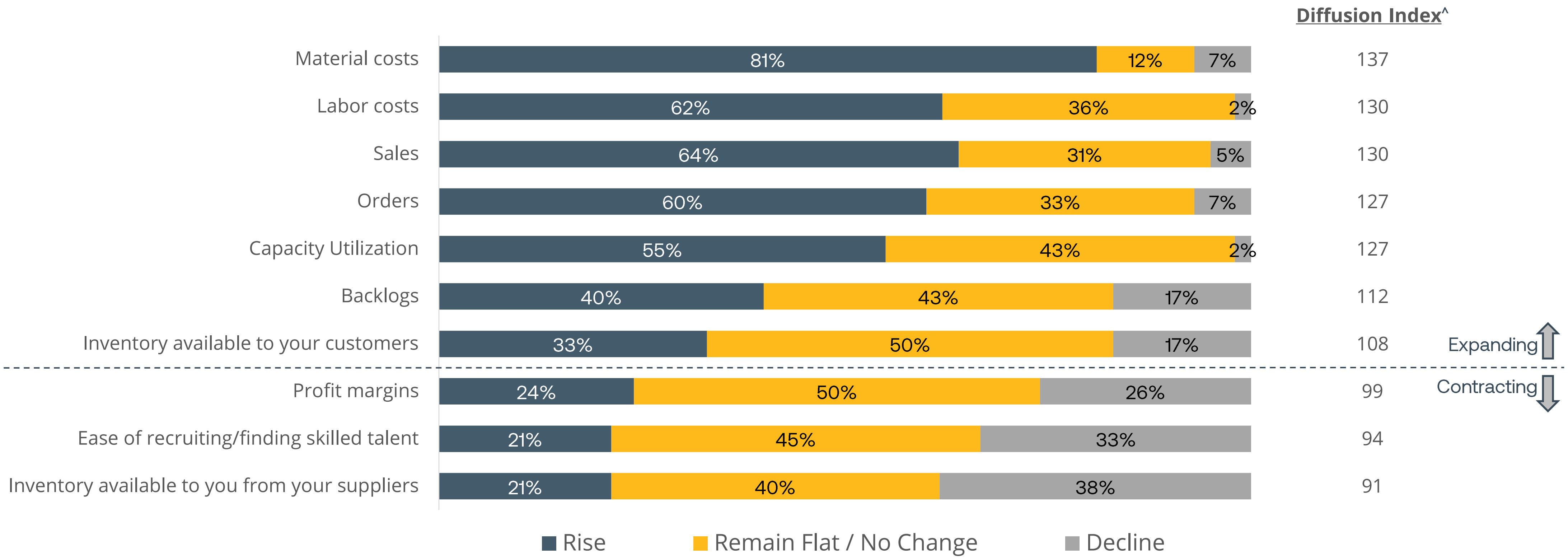
The View From Companies Primarily Operating in APAC

Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: APAC --



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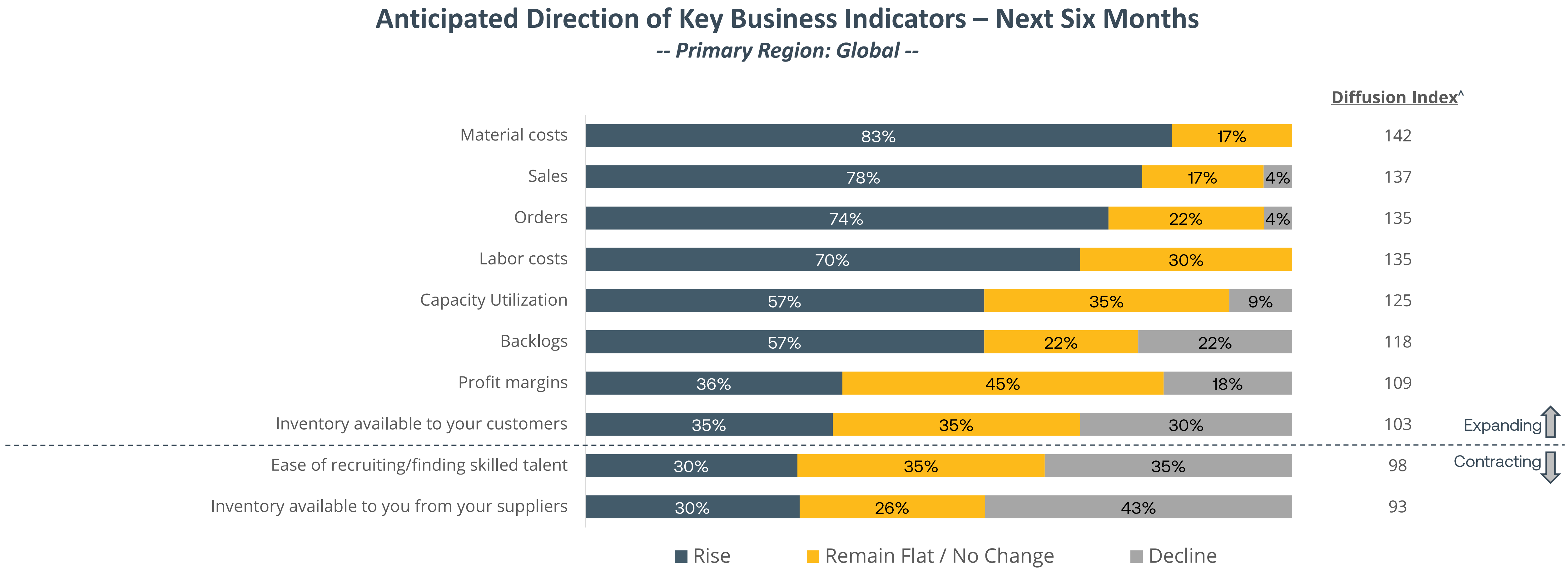
The View From Companies Primarily Operating Globally



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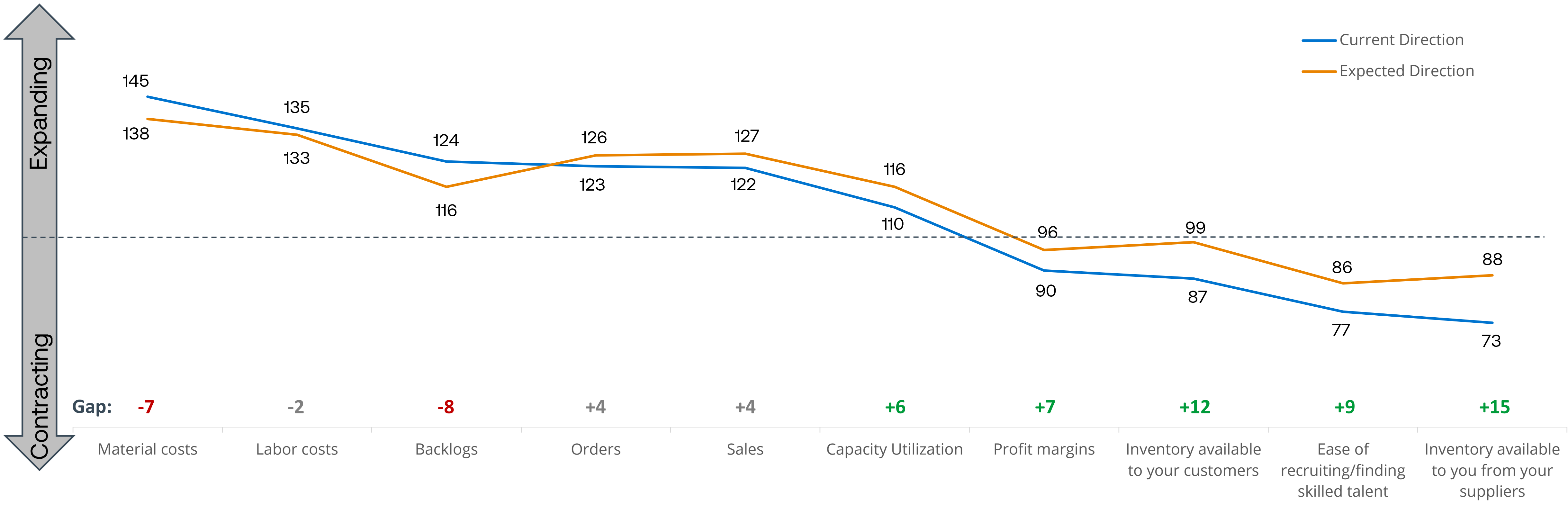
Labor Costs, Orders, and Sales Expected to Remain Relatively Stable

Manufacturers expect to see declines in backlogs and material costs in the next six months, while inventories, ease of recruitment, profit margins, and capacity utilization are expected to see some level of improvement.

Direction of Key Business Indicators – Diffusion Index^

-- Total --



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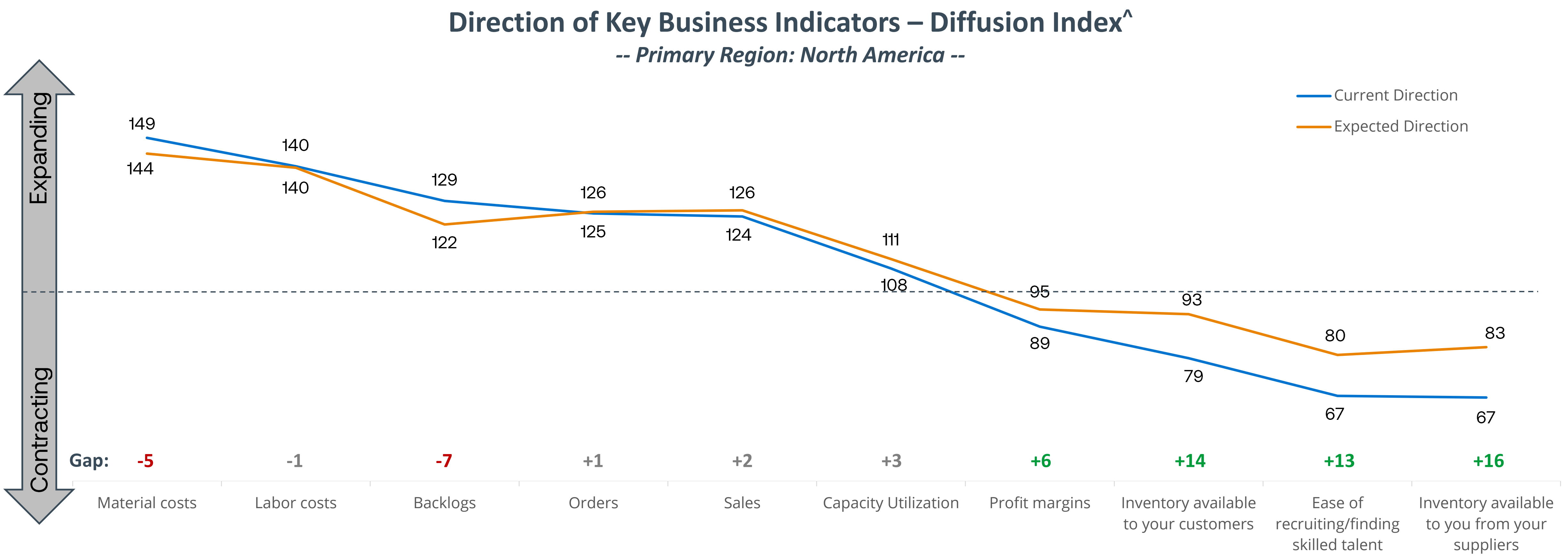
The View From Companies Primarily Operating in North America



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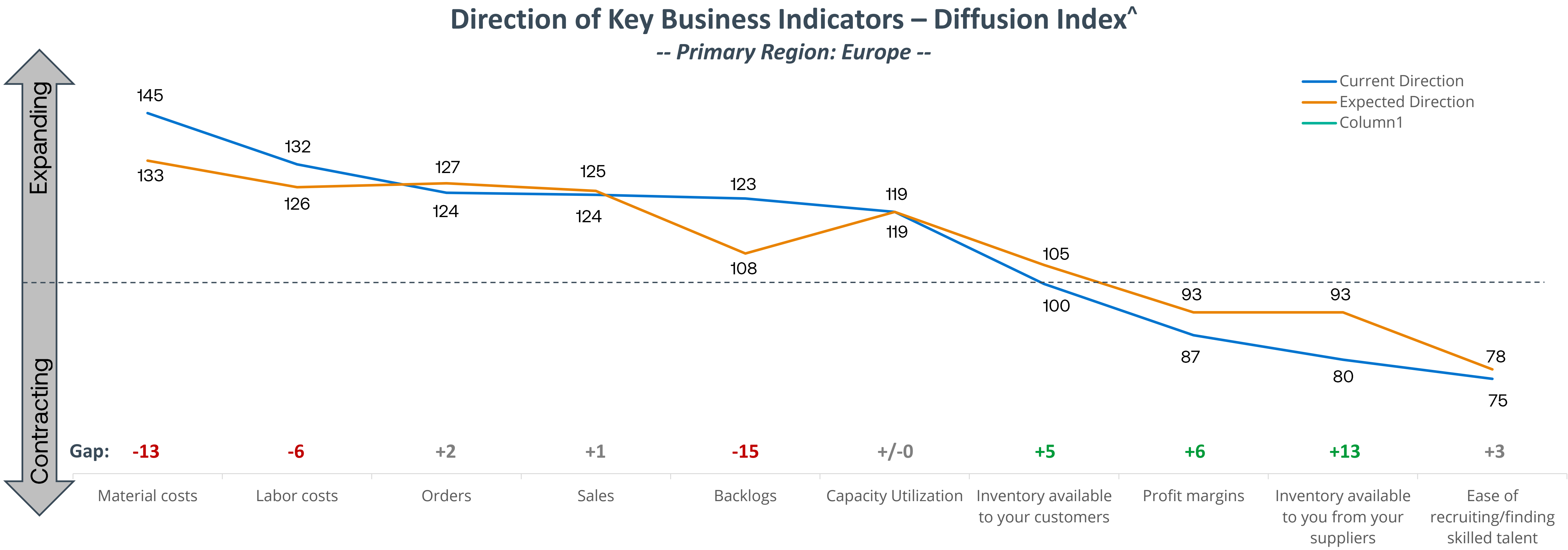
The View From Companies Primarily Operating in Europe



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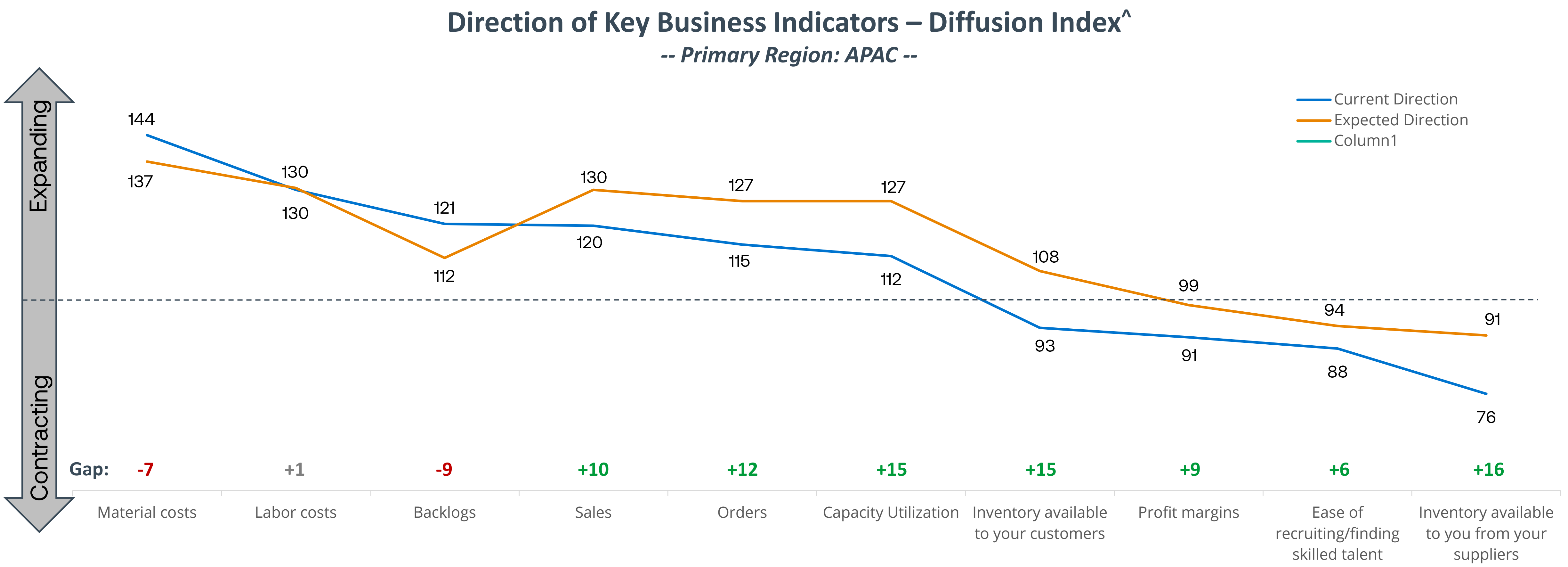
The View From Companies Primarily Operating in APAC



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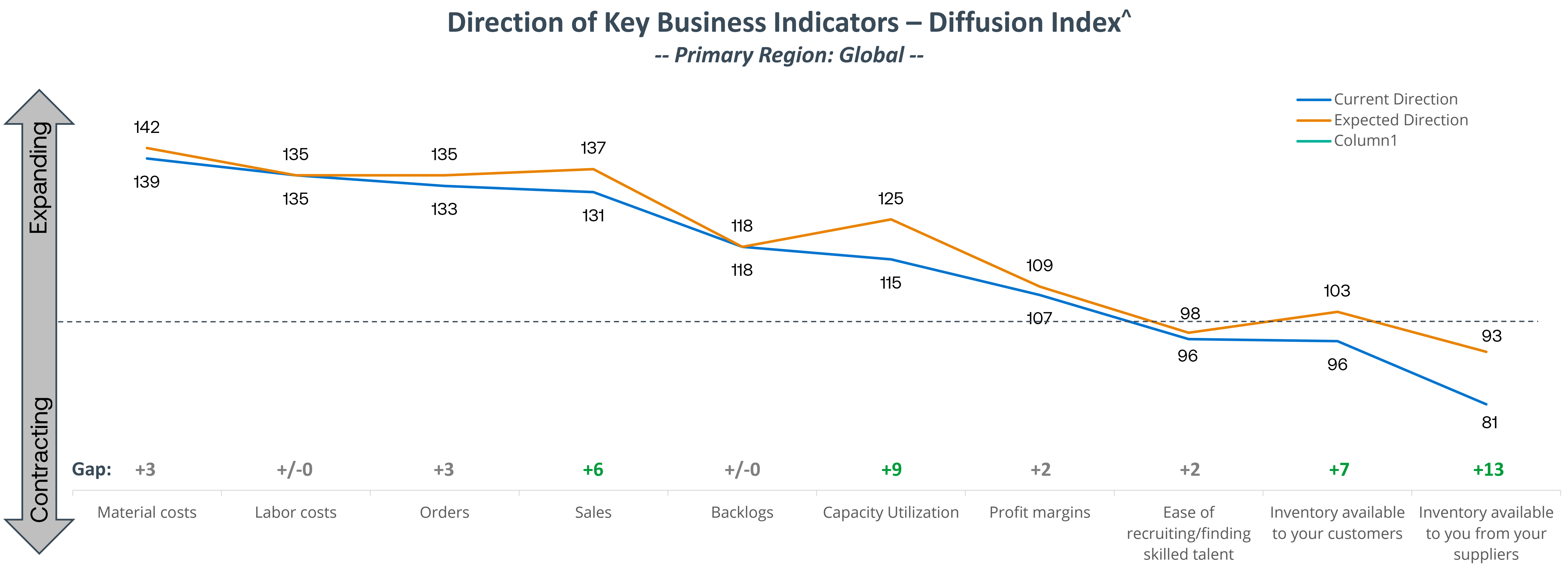
The View From Companies Primarily Operating Globally



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November 2021 Special Questions

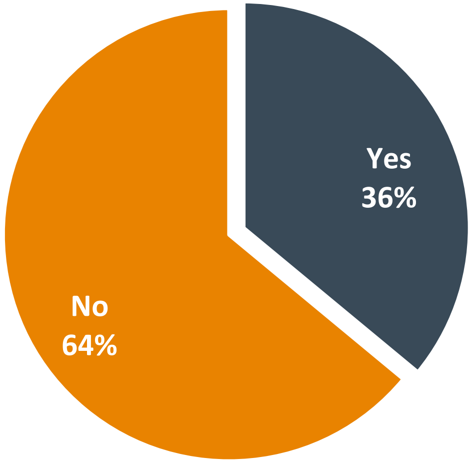
Two-Thirds of Manufacturers Feel Their Government is Not Invested in the Industry's Success

Further, seven in ten do not feel their government is adequately helping the industry transition to the factory of the future.

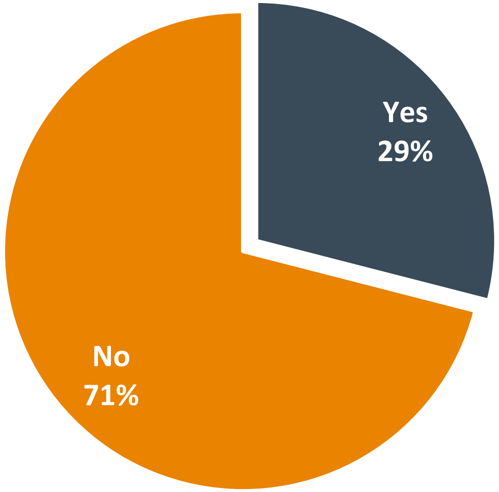
Government Support

-- Total --

Government is Invested in the Success of the Electronics Manufacturing Industry



Government is Adequately Helping the Electronics Manufacturing Industry Transition to the Factory of the Future



Regional Differences in Government Support

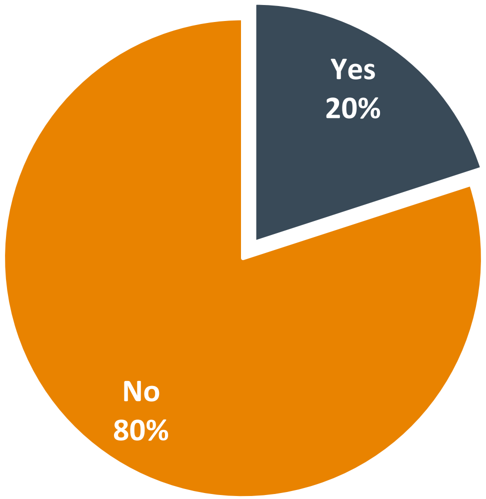
- **Perceived government support of the electronics manufacturing industry is lower in North America vs. other parts of the world.**
  - Only 20% of North American manufacturers agree their government is invested in the success of the electronics manufacturing industry, compared to significantly higher agreement among manufacturers in Europe (38%), APAC (57%), and those operating globally (57%).
  - Similarly, only 13% of manufacturers in North America agree their government is adequately helping the electronics manufacturing industry transition to the factory of the future, whereas a significantly higher 37% of firms in Europe, 41% of global firms, and 50% of firms in APAC feel the same.

The View From Companies Primarily Operating in North America

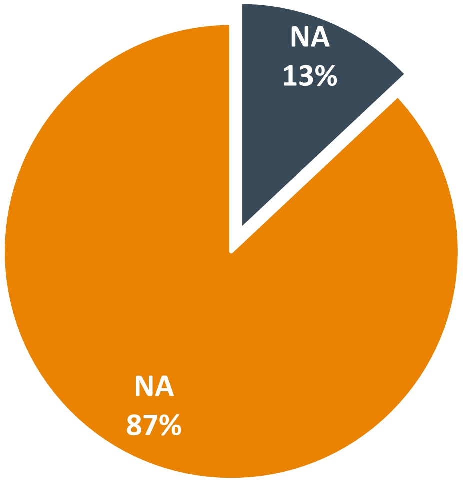
Government Support

-- Primary Region: North America --

Government is Invested in the Success of the Electronics Manufacturing Industry



Government is Adequately Helping the Electronics Manufacturing Industry Transition to the Factory of the Future

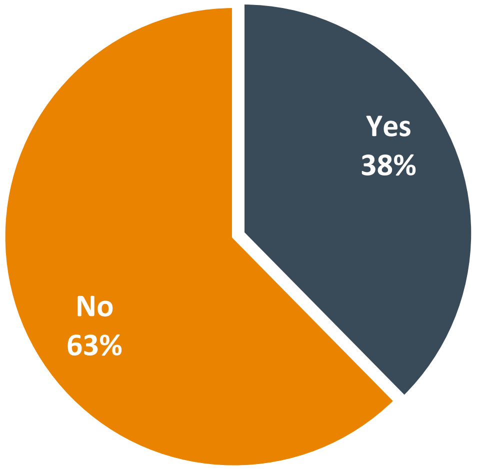


The View From Companies Primarily Operating in Europe

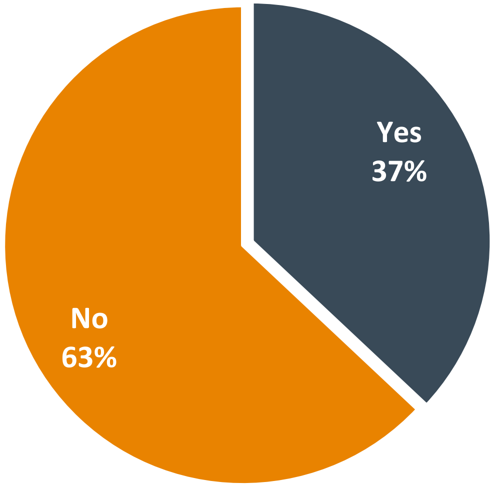
Government Support

-- Primary Region: Europe --

Government is Invested in the Success of the Electronics Manufacturing Industry



Government is Adequately Helping the Electronics Manufacturing Industry Transition to the Factory of the Future

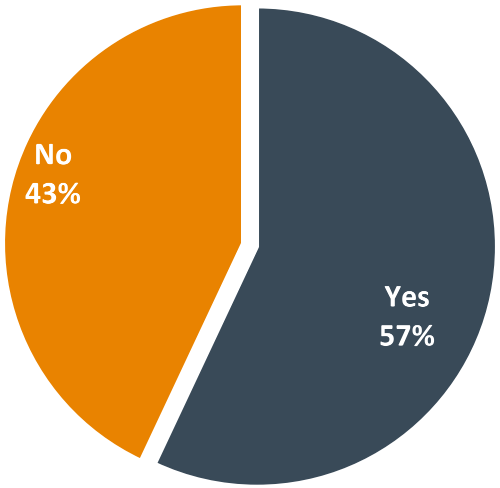


The View From Companies Primarily Operating in APAC

Government Support

-- Primary Region: APAC --

Government is Invested in the Success of the Electronics Manufacturing Industry



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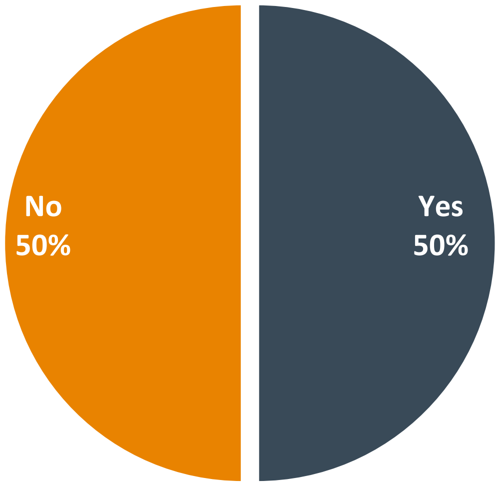
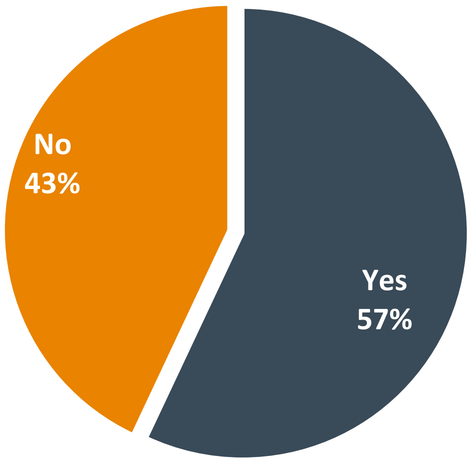


The View From Companies Primarily Operating Globally

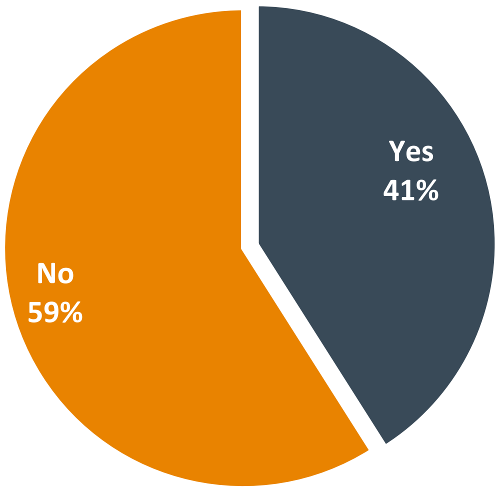
Government Support

-- Primary Region: Global --

Government is Invested in the Success of the Electronics Manufacturing Industry



Government is Adequately Helping the Electronics Manufacturing Industry Transition to the Factory of the Future



Current Conditions Diffusion Indices

Month-to-Month Comparisons

	September 2021	October 2021	November 2021
Material costs	144	144	145
Labor costs	133	136	135
Orders	127	124	123
Backlogs	125	122	124
Sales	124	123	122
Capacity utilization	114	115	110
Profit margins	96	91	90
Inventory available to your customers	89	92	87
Ease of recruiting/finding skilled talent	77	80	77
Inventory available to you from your suppliers	73	78	73

△+5 points or more vs. previous month

△-5 points or more vs. previous month

Outlook Diffusion Indices

Month-to-Month Comparisons

	September 2021	October 2021	November 2021
Material costs	136	139	138
Labor costs	131	135	133
Orders	126	128	126
Backlogs	112	116	116
Sales	128	129	127
Capacity utilization	119	118	116
Profit margins	103	100	96
Inventory available to your customers	100	100	99
Ease of recruiting/finding skilled talent	91	88	86
Inventory available to you from your suppliers	95	92	88

△+5 points or more vs. previous month

△-5 points or more vs. previous month

Methodology

> Each month, IPC surveys executives in the electronics manufacturing sector across the globe with the goal of assessing the current state of the industry.

> The results contained herein are based upon the findings of IPC's The Current State of Electronics Manufacturing Survey, which was fielded between the dates of November 5 to November 17, 2021.

Questions? Please contact:

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