



BUILD ELECTRONICS BETTER

The Current Sentiment of the Global Electronics Manufacturing Supply Chain

Monitoring the Pulse of the Global Electronics Industry

November 2022

ipc.org →

Executive Summary



> Industry sentiment remains largely unchanged in November

- The Orders Index fell three points but remains in expansionary territory. This is consistent with slowing, but still solid demand. The Backlog Index also fell two points, but likewise remains solid. With weaker incoming orders, companies have been able to work backlog levels down in recent months.
- The Capacity Utilization Index declined three points and the Capacity Utilization Outlook Index fell another point. Both indexes remain in expansionary territory but suggest some manufacturers are reducing production schedules in the face of a weaker demand

> Industry continues to face high costs and this month's data suggests mixed cost pressures

- After rising last month, the Materials Cost Index dropped two points last month to tie the low of October 2022, suggesting input costs are easing. The Materials Cost Outlook Index fell three points suggesting industry expects material costs to continue to ease.
- The Labor Cost Index rose three points last month to tie the index high from July 2022, suggesting labor costs remain elevated. This is consistent with recent wage data suggesting inflationary pressures remain strong.

Current Conditions for the Electronics Supply Chain

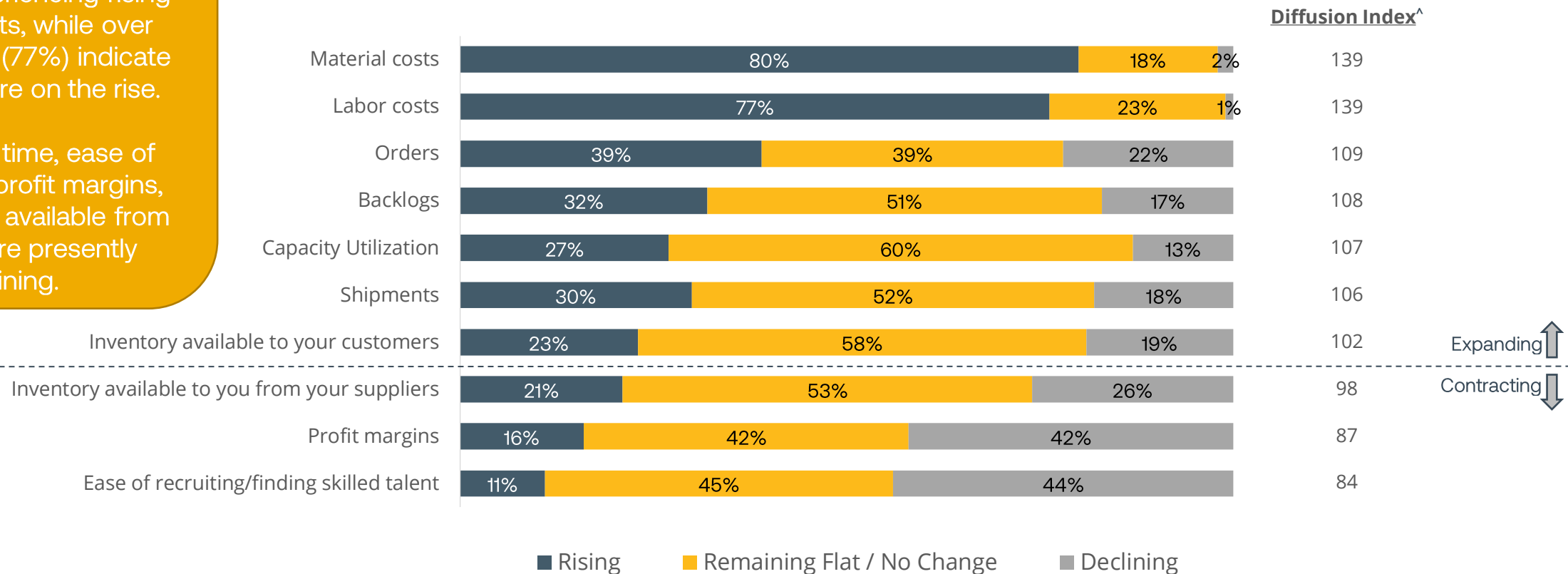


Four-fifths (80%) of electronics manufacturers are currently experiencing rising material costs, while over three-fourths (77%) indicate labor costs are on the rise.

At the same time, ease of recruitment, profit margins, and inventory available from suppliers are presently declining.

Current Direction of Key Business Indicators

-- Total --



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

Regional Differences in Current Conditions



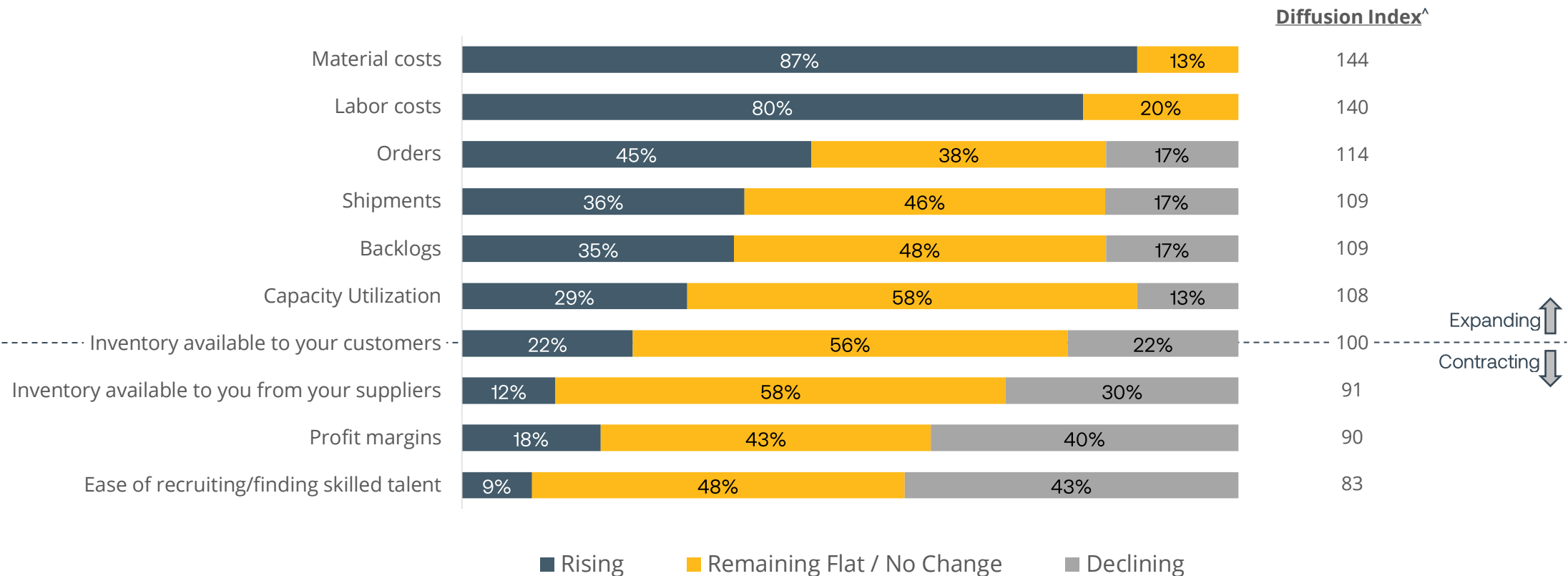
- **Material costs are rising at a higher rate in North America and Europe vs. in APAC and among firms operating globally.**
 - While 87% of North American manufacturers and 86% of European manufacturers indicate material costs are rising, only 63% of manufacturers in APAC and 57% of those operating globally indicate the same.
 - Concurrently, 11% of APAC manufacturers report declining material costs, which compares to no (0%) reported decline across all other markets.
 - Among Global firms, material costs are more likely to be holding steady, with 43% reporting no change vs. 13% in North America and 14% in Europe.
- **Supplier inventory is rising more so for manufacturers who operate globally vs. those in North America.**
 - Among Global firms, 40% report supplier inventory is currently rising, while at the same time, only 12% of firms in North America report the same.

The View From Companies Primarily Operating in North America



Current Direction of Key Business Indicators

-- Primary Region: North America --

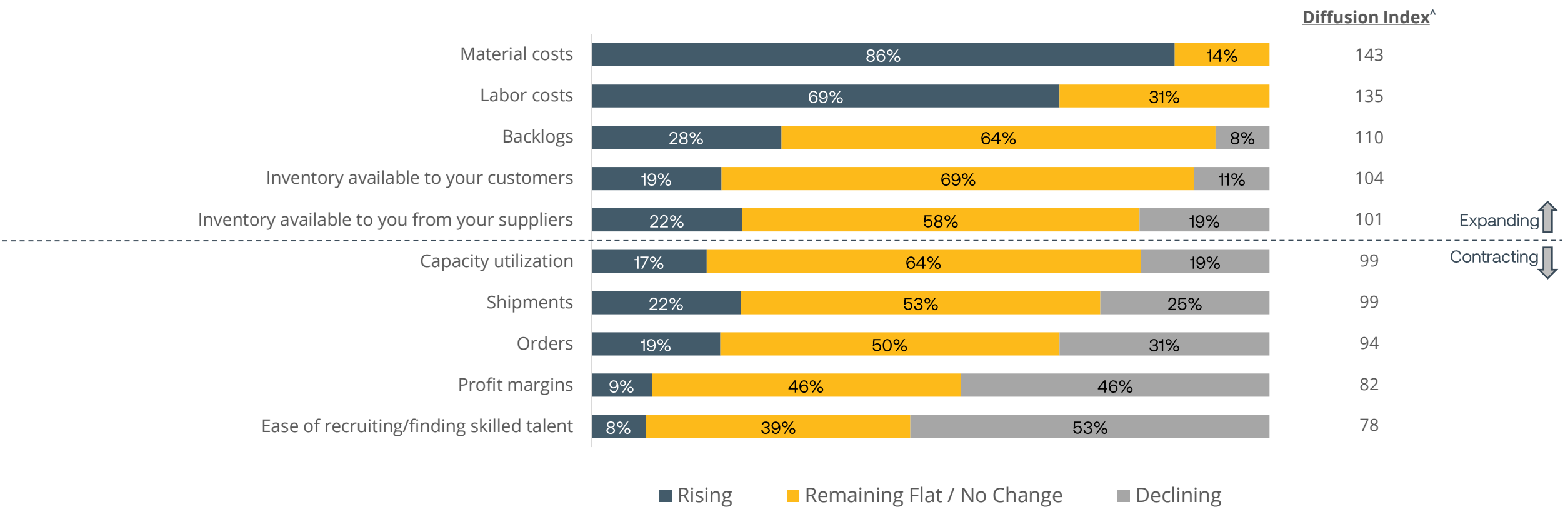


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The View From Companies Primarily Operating in Europe



Current Direction of Key Business Indicators -- Primary Region: Europe --



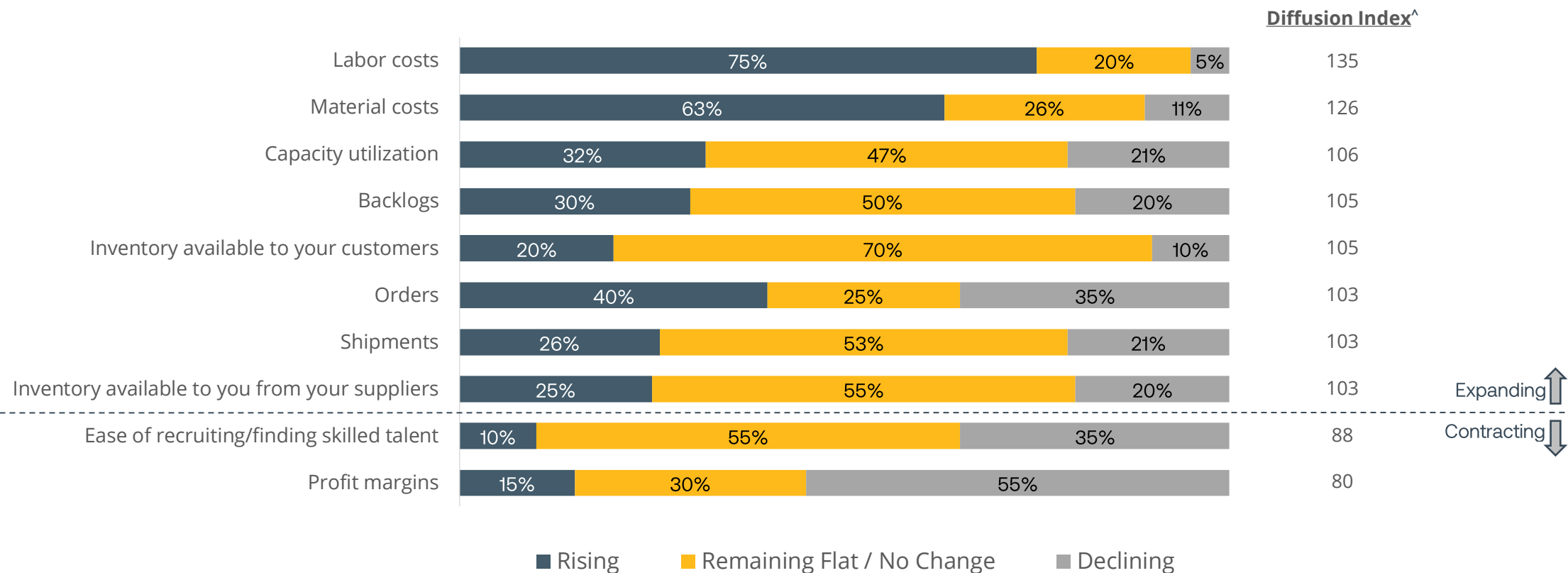
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The View From Companies Primarily Operating in APAC



Current Direction of Key Business Indicators

-- Primary Region: APAC --

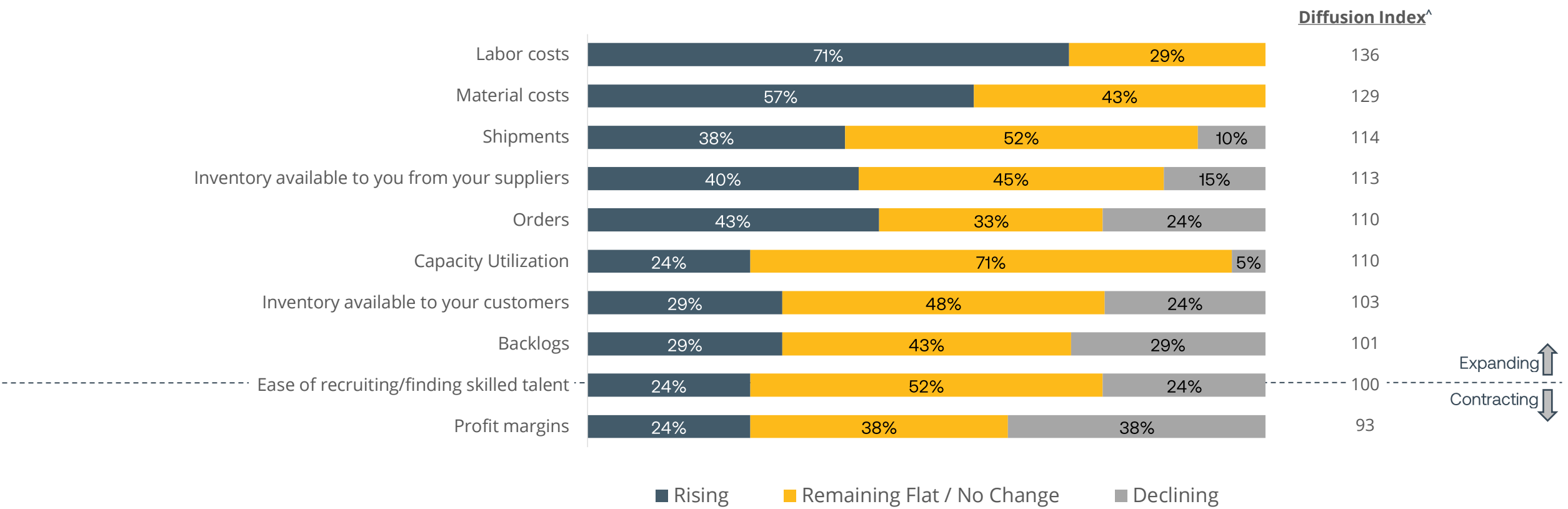


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The View From Companies Primarily Operating Globally



Current Direction of Key Business Indicators
-- Primary Region: Global --



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The Outlook for the Next 6 Months: Continued Challenging Conditions

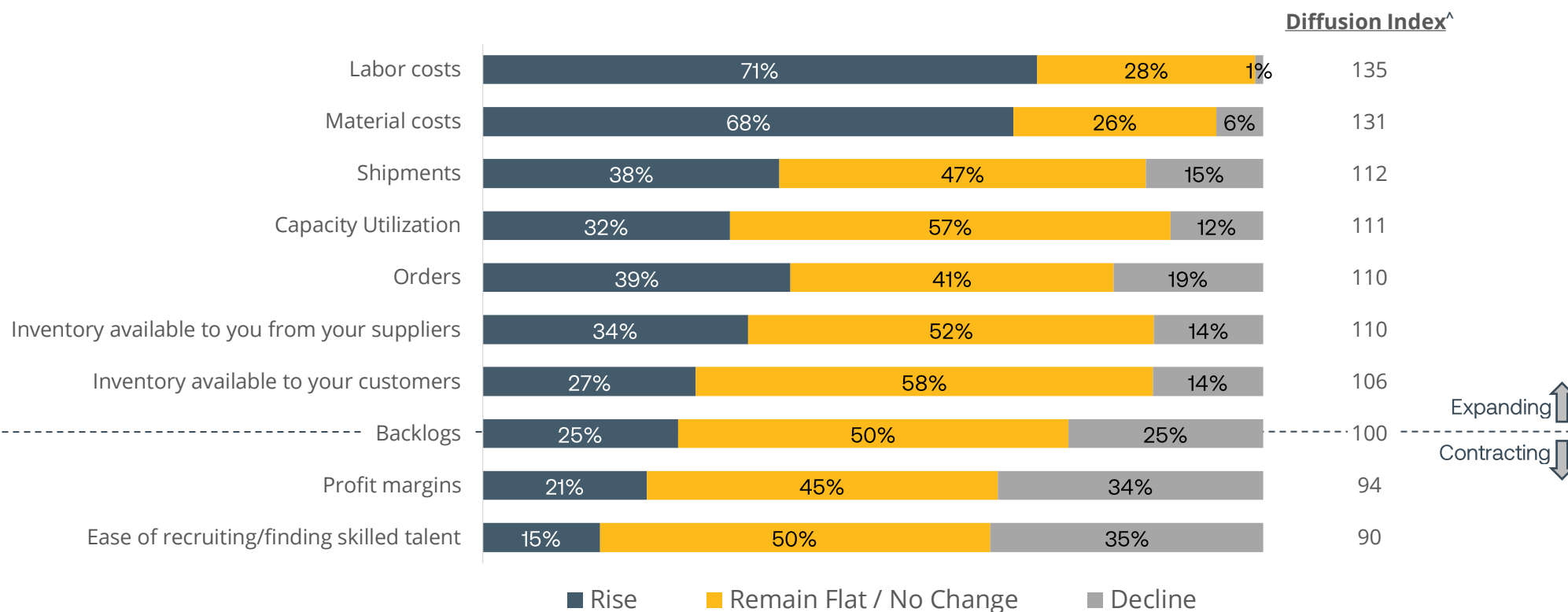


Over the next six months, manufacturers expect to see continued increase in both labor and material costs, although to a somewhat lesser extent.

While inventory available from suppliers is expected to improve, ease of recruiting/finding skilled talent and profit margins are likely to remain challenging.

Anticipated Direction of Key Business Indicators – Next Six Months

-- Total --



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Regional Differences in The Outlook



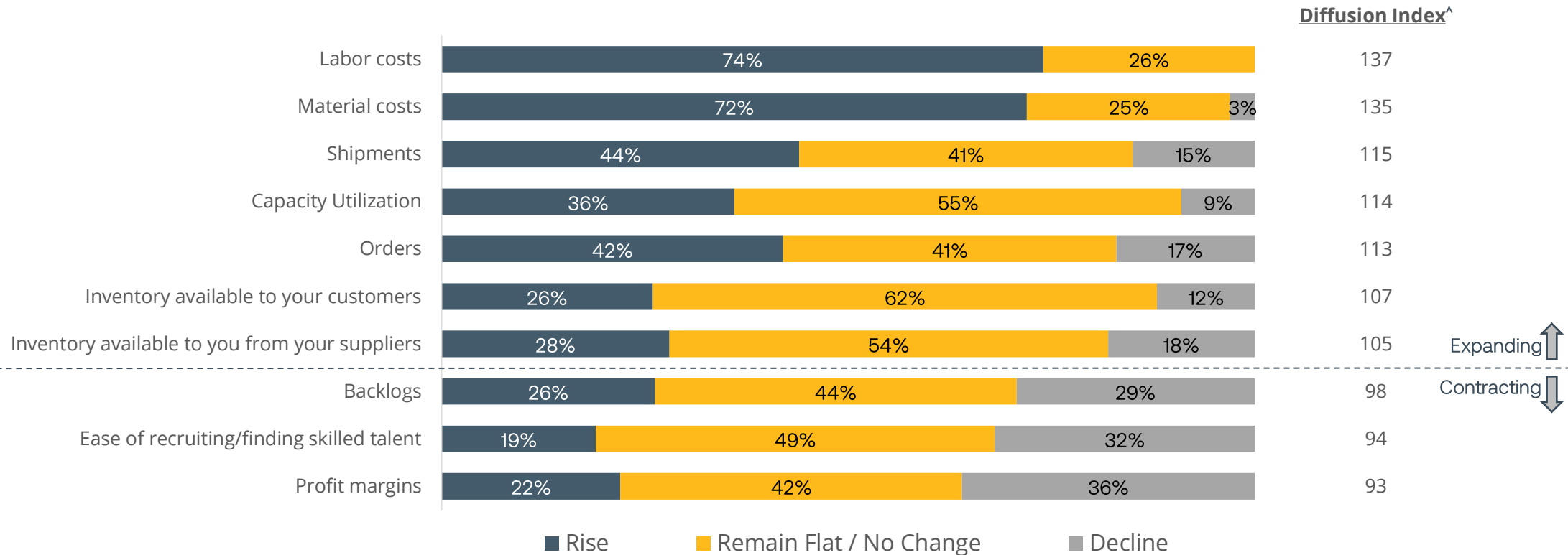
- **Ease of recruitment is expected to improve among firms in APAC and North America, as well as for those operating globally, when compared to European firms.**
 - While manufacturers operating in APAC (20%), North America (19%), and Globally (19%) expect ease of recruitment to improve over the next six months, no (0%) firms in Europe are expecting the same.
- **Material costs are expected to rise more so for firms operating in Europe and North America vs. Global firms.**
 - 78% of European manufacturers, along with 72% of manufacturers in North America, anticipate rising material costs, which is significantly higher than the 43% of Global firms who are expect to see an increase.
- **Firms in APAC expect customer inventory to improve more so in the next six months than do firms in North America or Europe.**
 - While 58% of manufacturers in APAC expect improved conditions surrounding customer inventories, only 26% of North American and 17% of European manufacturers are anticipating improvements.

The View From Companies Primarily Operating in North America



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: North America --



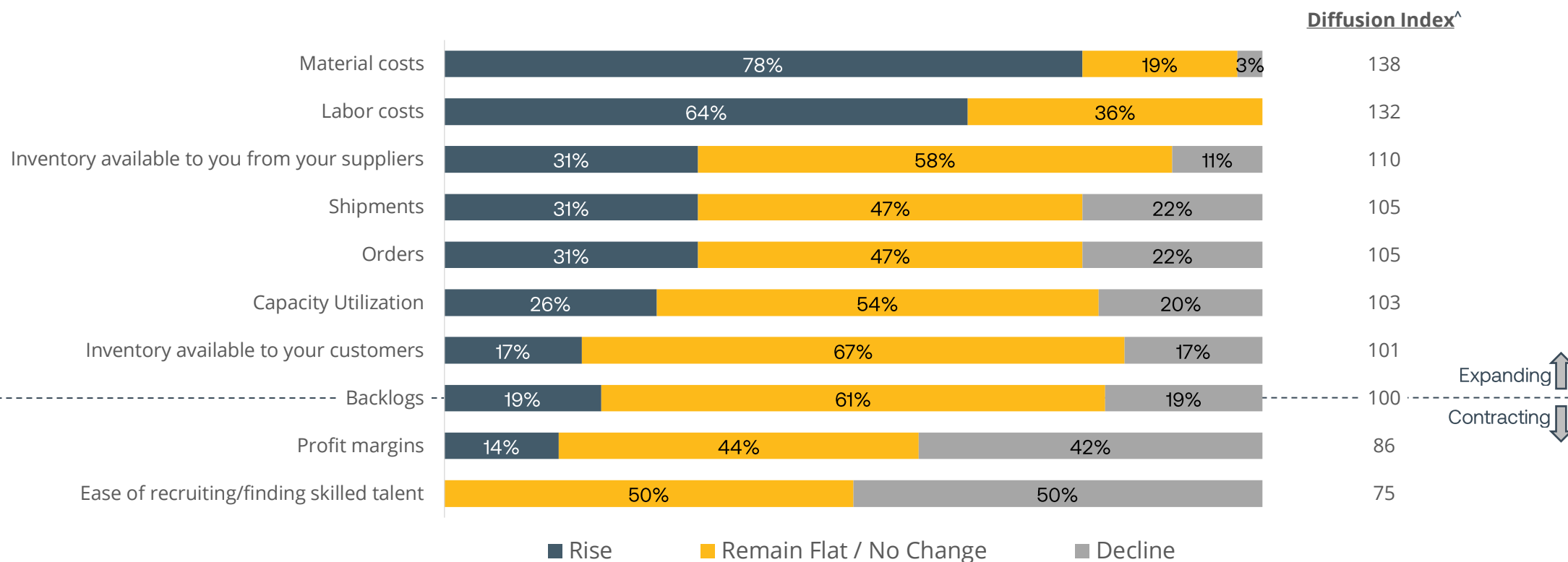
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The View From Companies Primarily Operating in Europe



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: Europe --



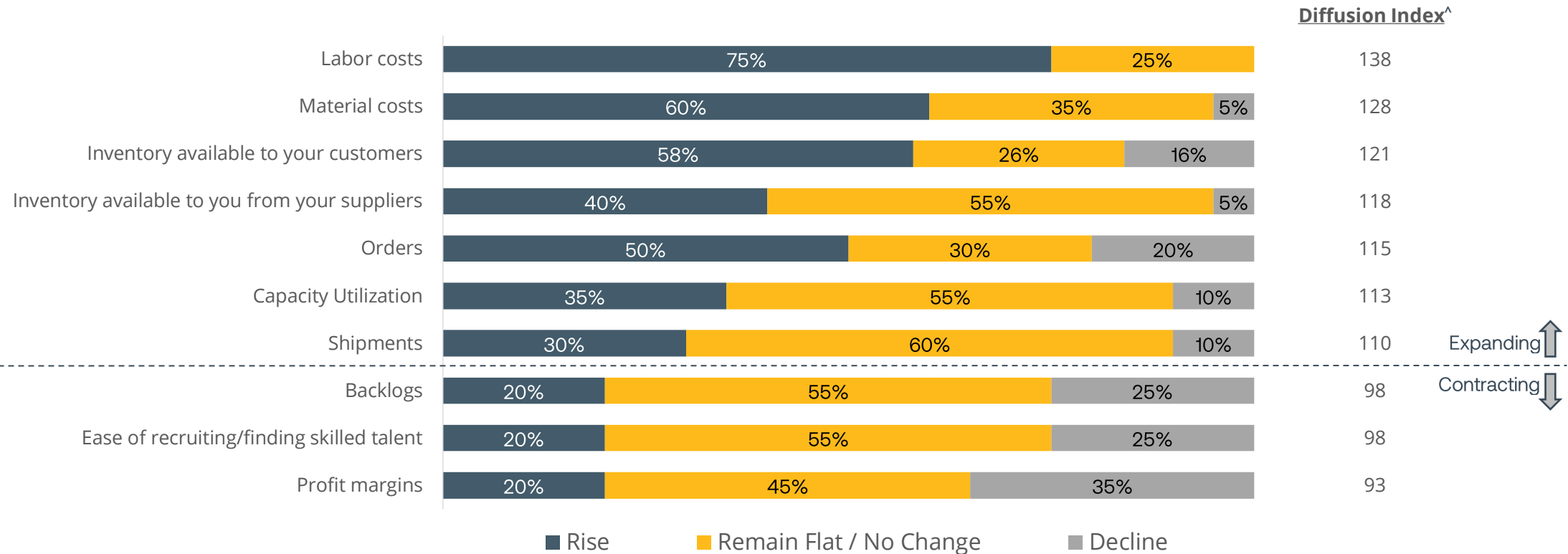
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The View From Companies Primarily Operating in APAC



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: APAC --



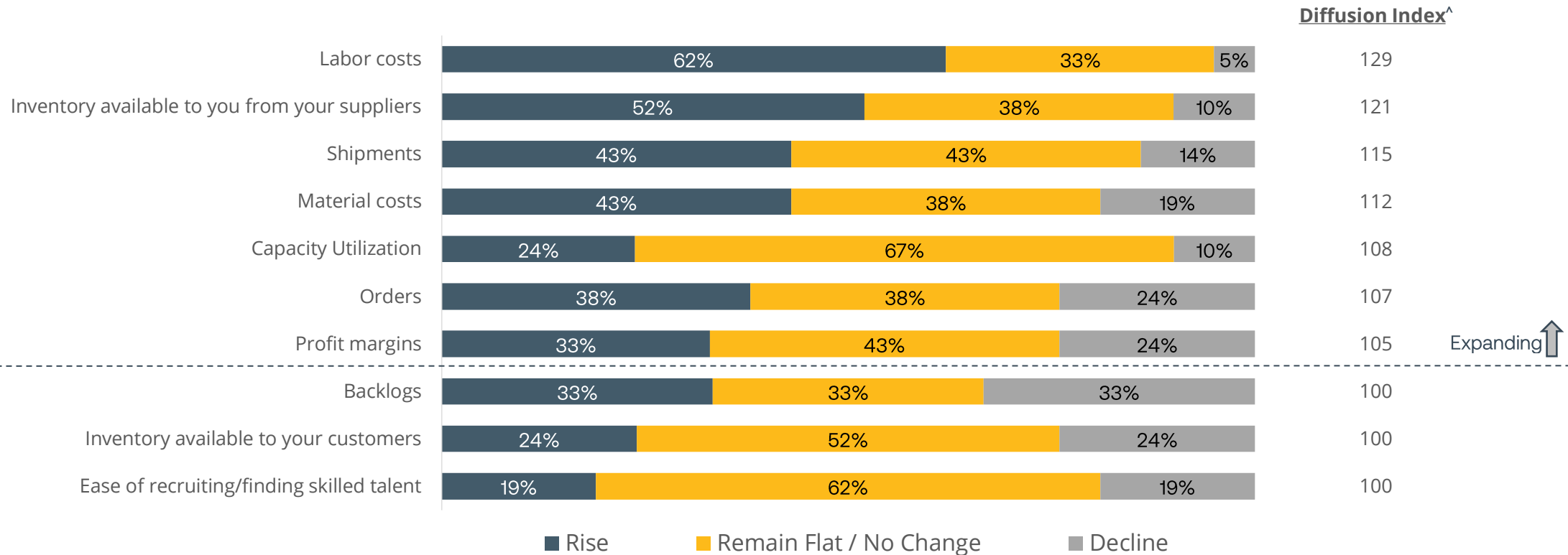
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The View From Companies Primarily Operating Globally



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: Global --

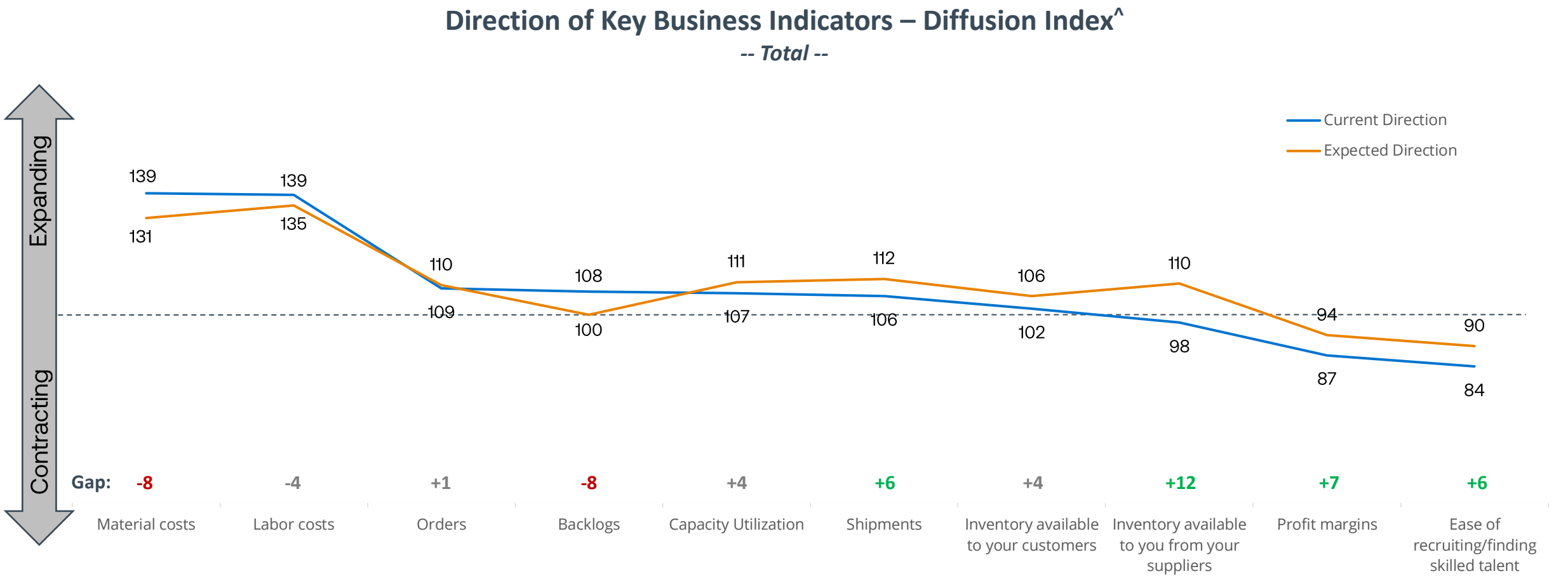


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Labor Costs, Orders, Capacity Utilization, and Inventory Available to Customers are Expected to Remain Relatively Stable Over the Next Six Months



Manufacturers anticipate material costs and backlogs will decline, while expecting to see improvement as it relates to inventory available from suppliers, profit margins, shipments, and ease of recruiting talent.



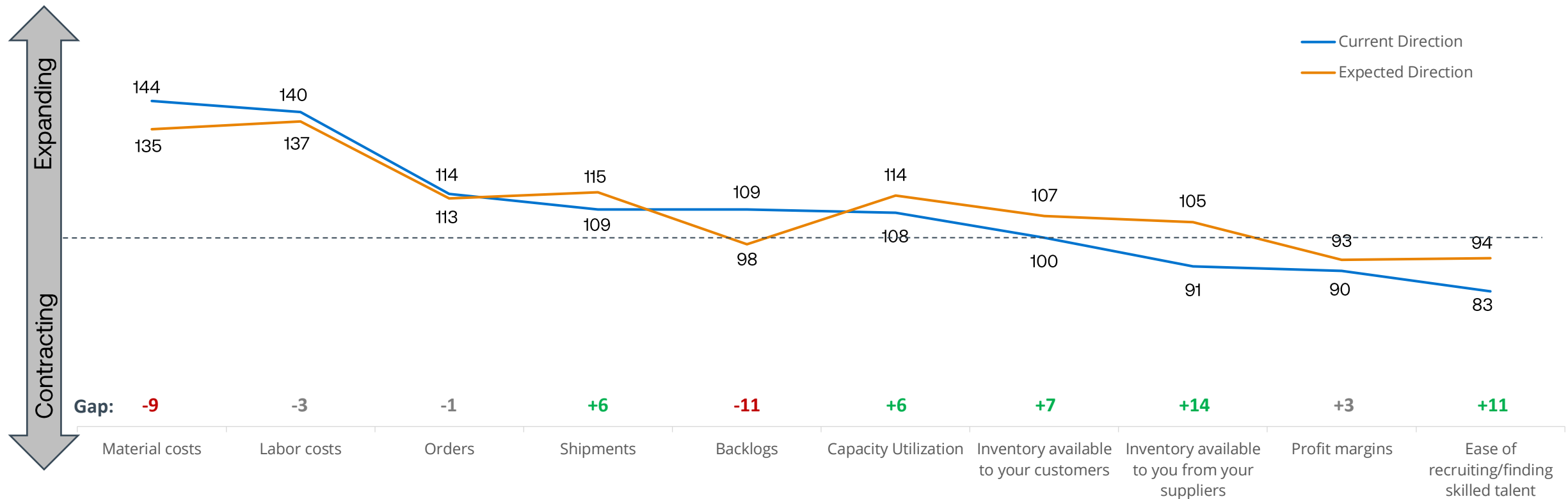
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The View From Companies Primarily Operating in North America



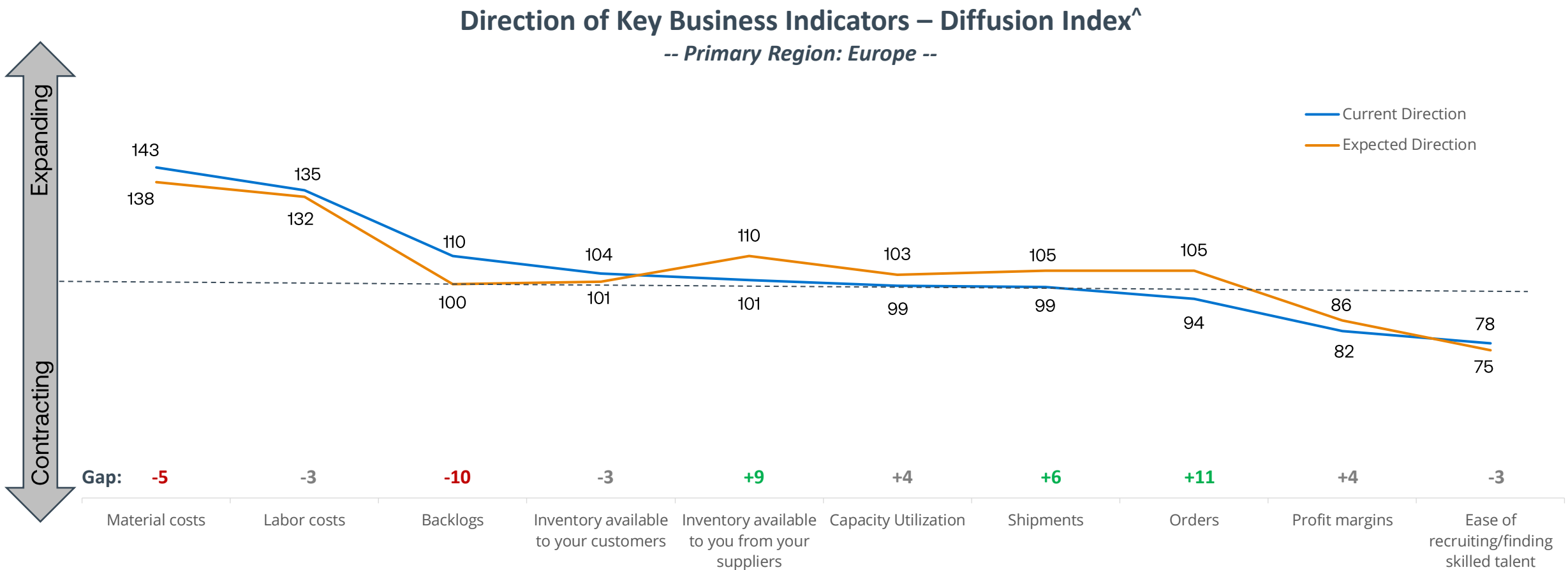
Direction of Key Business Indicators – Diffusion Index[^]

-- Primary Region: North America --



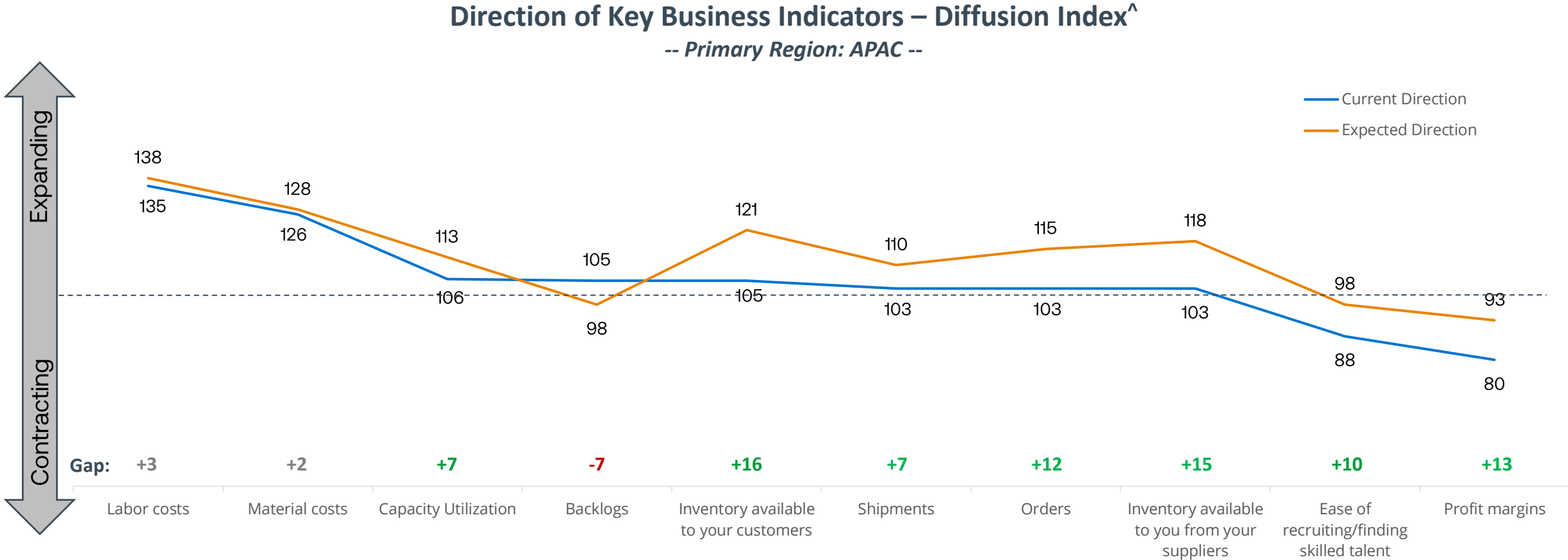
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The View From Companies Primarily Operating in Europe



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

The View From Companies Primarily Operating in APAC



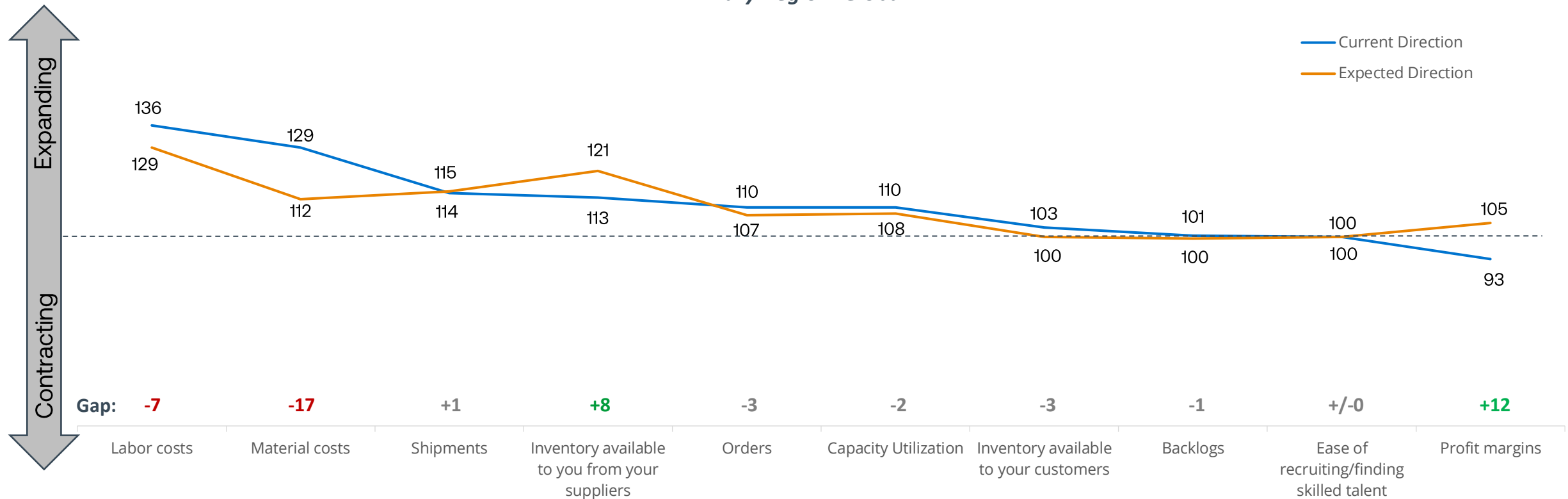
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The View From Companies Primarily Operating Globally



Direction of Key Business Indicators – Diffusion Index[^]

-- Primary Region: Global --



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Appendix

Current Conditions Diffusion Indices

Month-to-Month Comparisons



| | October 2021 | November 2021 | December 2021 | January 2022 | February 2022 | March 2022 | April 2022 | May 2022 | June 2022 | July 2022 | August 2022 | September 2022 | October 2022 | November 2022 |
|------------------------------------------------|--------------|---------------|---------------|--------------|---------------|------------|------------|----------|-----------|-----------|-------------|----------------|--------------|---------------|
| Material costs | 144 | 144 | 145 | 145 | 143 | 142 | 146 | 145 | 146 | 144 | 142 | 139 | 141 | 139 |
| Labor costs | 133 | 136 | 135 | 137 | 138 | 138 | 134 | 138 | 137 | 139 | 138 | 136 | 136 | 139 |
| Orders | 127 | 124 | 123 | 123 | 120 | 124 | 121 | 119 | 118 | 115 | 112 | 109 | 112 | 109 |
| Backlogs | 125 | 122 | 124 | 124 | 122 | 119 | 114 | 120 | 119 | 114 | 111 | 107 | 110 | 108 |
| Shipments^ | -- | -- | -- | 117 | 112 | 115 | 115 | 114 | 114 | 111 | 110 | 112 | 111 | 106 |
| Capacity utilization | 114 | 115 | 110 | 114 | 111 | 113 | 114 | 110 | 104 | 107 | 110 | 109 | 110 | 107 |
| Profit margins | 96 | 91 | 90 | 87 | 82 | 86 | 85 | 89 | 85 | 84 | 86 | 86 | 89 | 87 |
| Inventory available to your customers | 89 | 92 | 87 | 91 | 88 | 109 | 94 | 94 | 91 | 96 | 102 | 106 | 101 | 102 |
| Ease of recruiting/finding skilled talent | 77 | 80 | 77 | 78 | 80 | 78 | 79 | 81 | 79 | 80 | 85 | 85 | 84 | 84 |
| Inventory available to you from your suppliers | 73 | 78 | 73 | 77 | 78 | 78 | 83 | 79 | 82 | 86 | 94 | 96 | 99 | 98 |

^Added January 2022

Δ+5 points or more vs. previous month

Δ-5 points or more vs. previous month

Outlook Diffusion Indices

Month-to-Month Comparisons



| | October 2021 | November 2021 | December 2021 | January 2022 | February 2022 | March 2022 | April 2022 | May 2022 | June 2022 | July 2022 | August 2022 | September 2022 | October 2022 | November 2022 |
|------------------------------------------------|--------------|---------------|---------------|--------------|---------------|------------|------------|----------|-----------|-----------|-------------|----------------|--------------|---------------|
| Material costs | 136 | 139 | 138 | 139 | 142 | 139 | 140 | 138 | 140 | 138 | 136 | 131 | 134 | 131 |
| Labor costs | 131 | 135 | 133 | 133 | 137 | 136 | 135 | 134 | 135 | 139 | 136 | 134 | 136 | 135 |
| Orders | 126 | 128 | 126 | 125 | 121 | 123 | 121 | 122 | 119 | 120 | 117 | 113 | 108 | 110 |
| Backlogs | 112 | 116 | 116 | 120 | 113 | 110 | 109 | 114 | 112 | 103 | 104 | 99 | 100 | 100 |
| Shipments^ | -- | -- | -- | 120 | 119 | 121 | 117 | 119 | 115 | 120 | 117 | 116 | 114 | 112 |
| Capacity utilization | 119 | 118 | 116 | 118 | 118 | 116 | 116 | 116 | 112 | 115 | 114 | 117 | 112 | 111 |
| Profit margins | 103 | 100 | 96 | 92 | 94 | 97 | 94 | 97 | 90 | 92 | 95 | 93 | 95 | 94 |
| Inventory available to your customers | 100 | 100 | 99 | 97 | 99 | 103 | 101 | 100 | 102 | 105 | 107 | 111 | 114 | 106 |
| Ease of recruiting/finding skilled talent | 91 | 88 | 86 | 82 | 87 | 86 | 88 | 86 | 90 | 88 | 88 | 92 | 86 | 90 |
| Inventory available to you from your suppliers | 95 | 92 | 88 | 90 | 93 | 94 | 93 | 92 | 92 | 102 | 104 | 107 | 108 | 110 |

^Added January 2022

Δ+5 points or more vs. previous month

Δ-5 points or more vs. previous month

- > 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 October 13 to October 31, 2022.



Questions? Please contact:

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