



BUILD ELECTRONICS BETTER

The Current Sentiment of the Global Electronics Manufacturing Supply Chain

Monitoring the Pulse of the Global Electronics Industry

April 2023

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Executive Summary



> Cost pressures are receding

- The majority of respondents are still reporting that labor costs and material costs are rising, but the number of companies experiencing rising costs continues to decline. Only 54% of companies believe material costs will rise in the coming months.
- Both the Material Costs Index and the Labor Costs Index are at the lowest levels since the inception of the survey.

> Industry demand appears to be slowing

- The Backlog Index fell into contraction territory for the second time this year.
- The Orders Index slipped to 105. While this is still in expansionary territory, it is the lowest it has been since the start of the survey.

> Industry expects mixed sector growth in 2023

- A special question this month asked about expectations for sector growth.
- Industry believes the military sector will grow 16% on average this year, followed by the aerospace sector and the communications sector which are both expected to grow by roughly 11%. The medical sector is expected to rise 10%.
- The automotive sector and industrial electronics sector are both expected to rise 5.6%. The consumer electronics sector is expected to decline 3% and the computer sector is expected to decline 7% in 2023.

Current Conditions for the Electronics Supply Chain

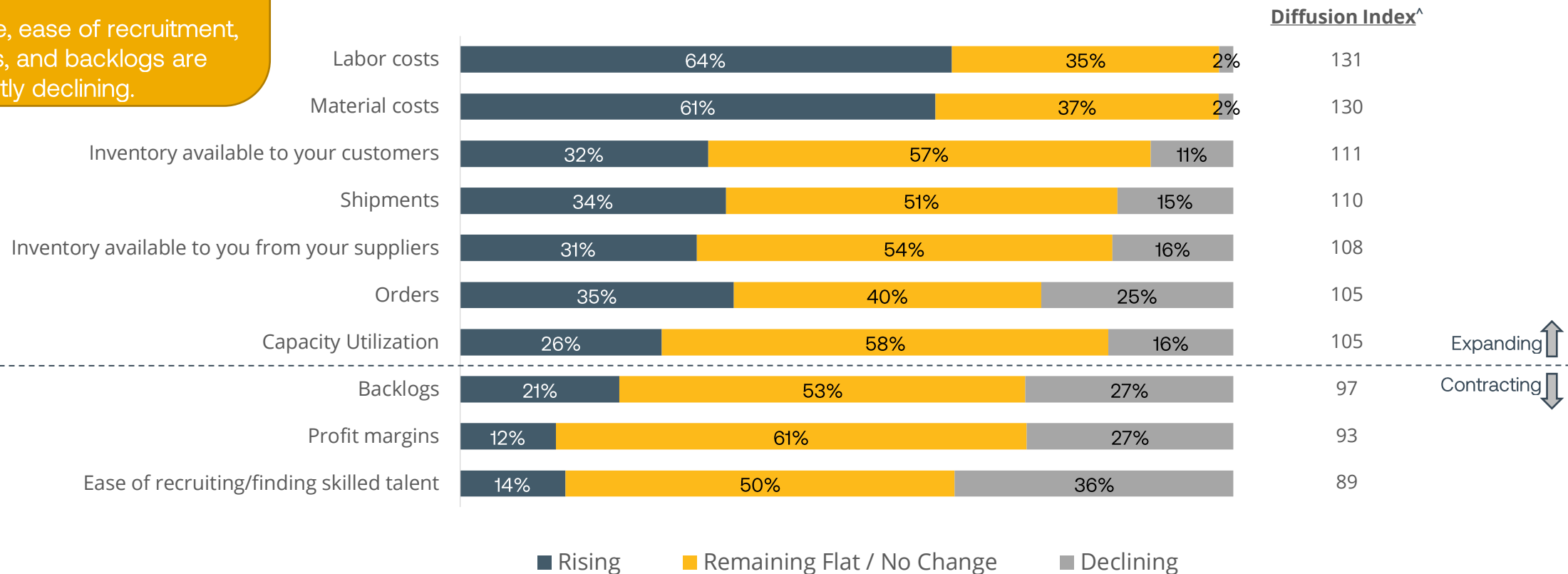


Nearly two-thirds (64%) of electronics manufacturers are currently experiencing rising labor costs, with six-in-ten (61%) reporting rising material costs.

At the same time, ease of recruitment, profit margins, and backlogs 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



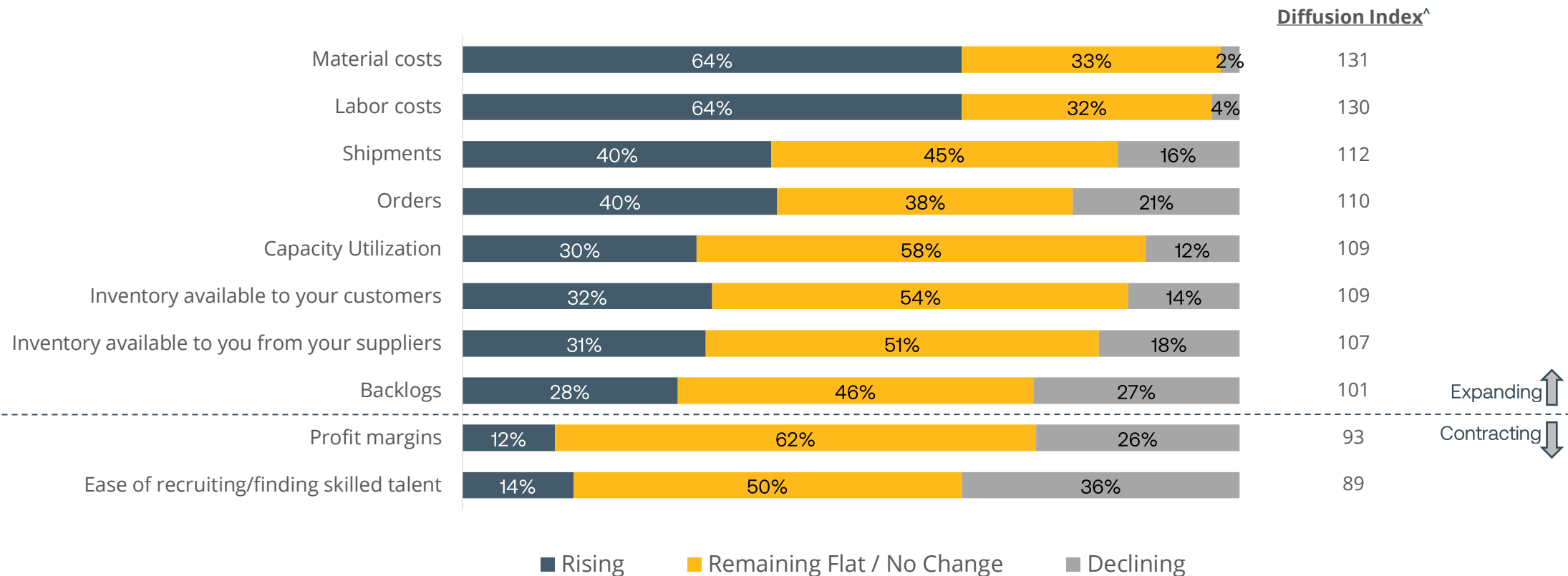
- **Capacity Utilization is declining more so for manufacturers operating Globally when compared to manufacturers primarily operating in both North America and APAC.**
 - 44% of Global manufacturers are currently seeing a decline in capacity utilization, which compares to only 12% in North America and 9% in APAC.
- **At the same time, customer inventory is rising at a faster pace for Global manufacturers vs. European manufacturers.**
 - 63% of firms operating Globally report rising customer inventories, while a significantly lower 20% of firms in Europe are currently experiencing the same.

The View From Companies Primarily Operating in North America



Current Direction of Key Business Indicators

-- Primary Region: North America --

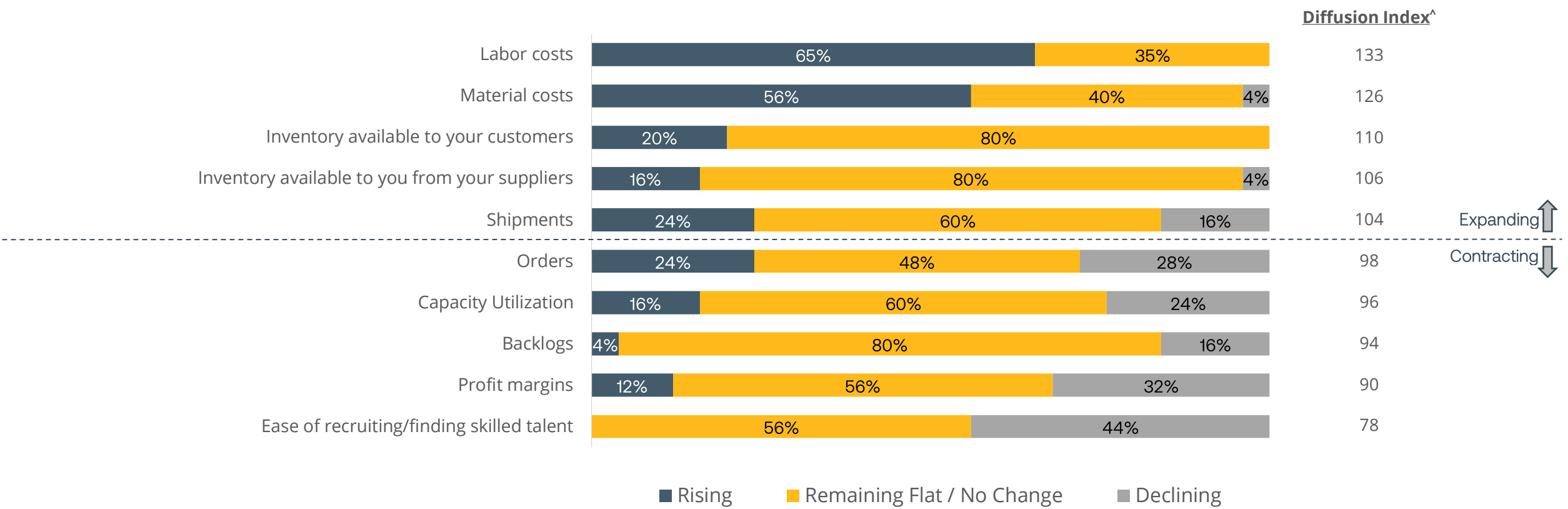


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The View From Companies Primarily Operating in Europe



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



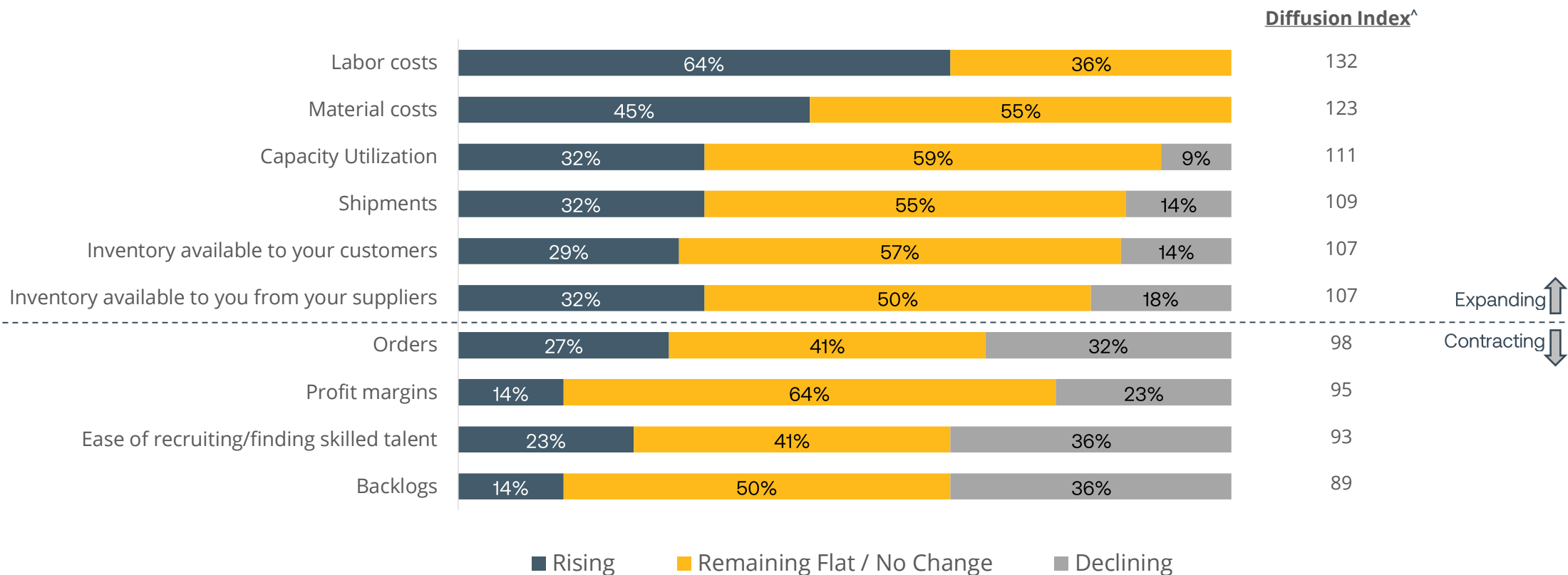
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The View From Companies Primarily Operating in APAC



Current Direction of Key Business Indicators

-- Primary Region: APAC --



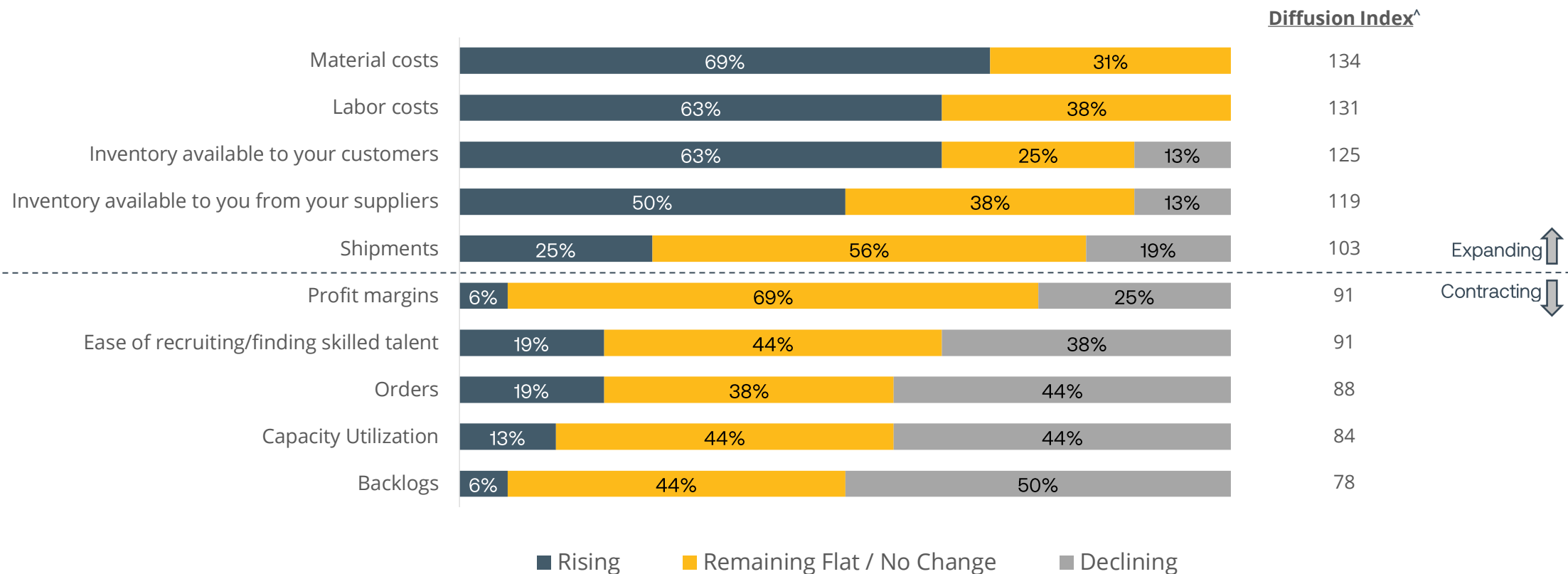
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The View From Companies Primarily Operating Globally



Current Direction of Key Business Indicators

-- Primary Region: Global --



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The Outlook for the Next 6 Months

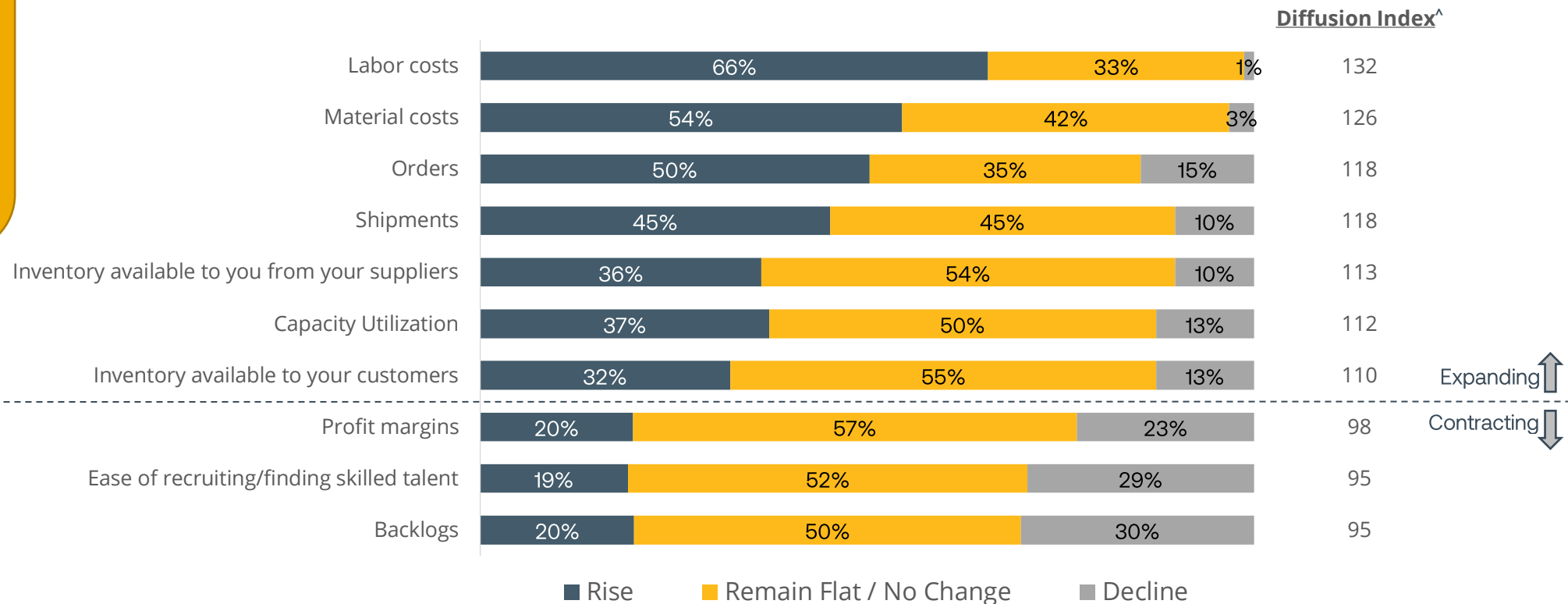


Over the next six months, electronics manufacturers expect to see continued increase in both labor and material costs.

Meanwhile, backlogs, ease of recruitment, and profit margins are expected to contract.

Anticipated Direction of Key Business Indicators – Next Six Months

-- Total --



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Regional Differences in The Outlook



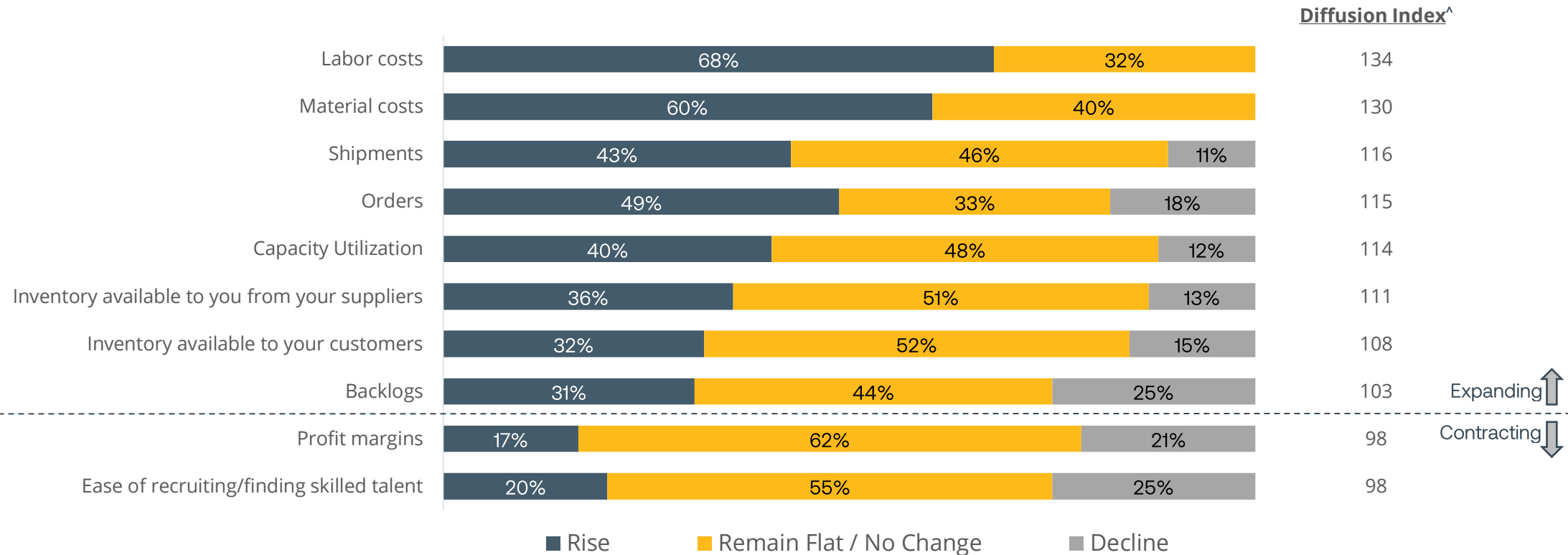
- **Ease of recruitment is expected to improve more so for firms operating Globally vs. those operating primarily in Europe.**
 - Nearly two-fifths (38%) of Global firms expect ease of recruitment to improve in the next six months, while only 4% of European manufacturers share in the same outlook.
- **Material costs are expected to decline at a faster pace in APAC when compared to North America.**
 - 13% of manufacturers operating in APAC anticipate declining material costs, which compares to 0% of firms in North America anticipating a decline over the next six months.

The View From Companies Primarily Operating in North America



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: North America --



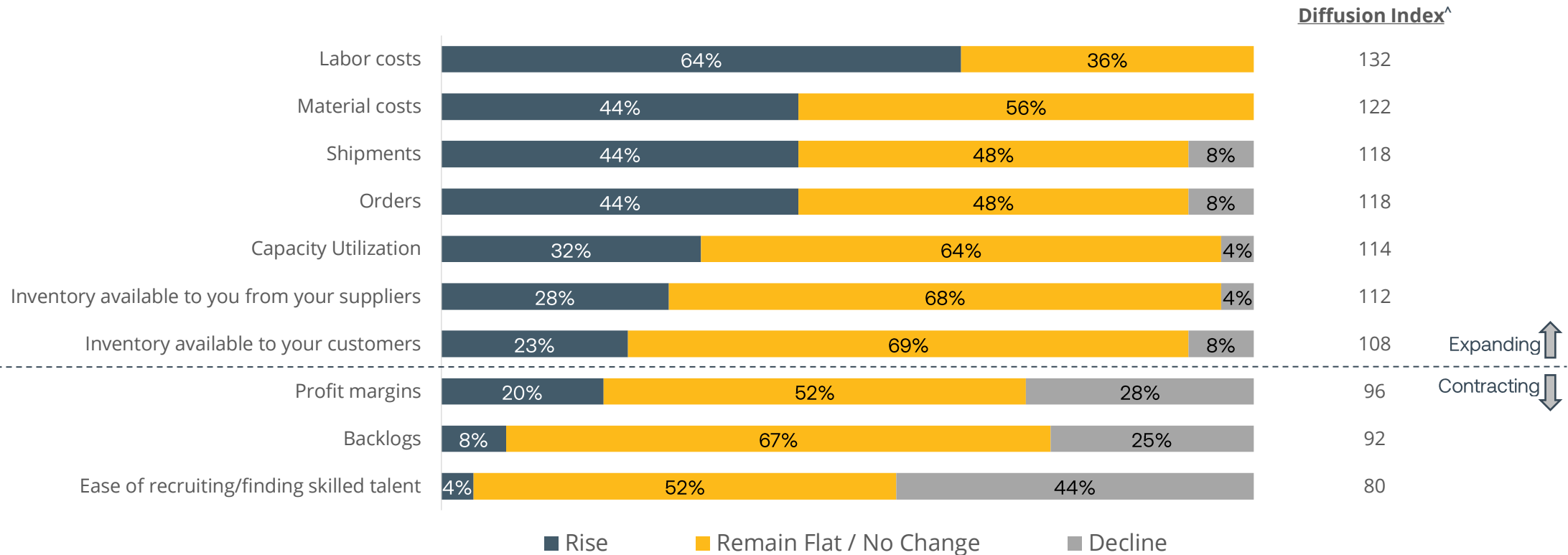
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The View From Companies Primarily Operating in Europe



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: Europe --



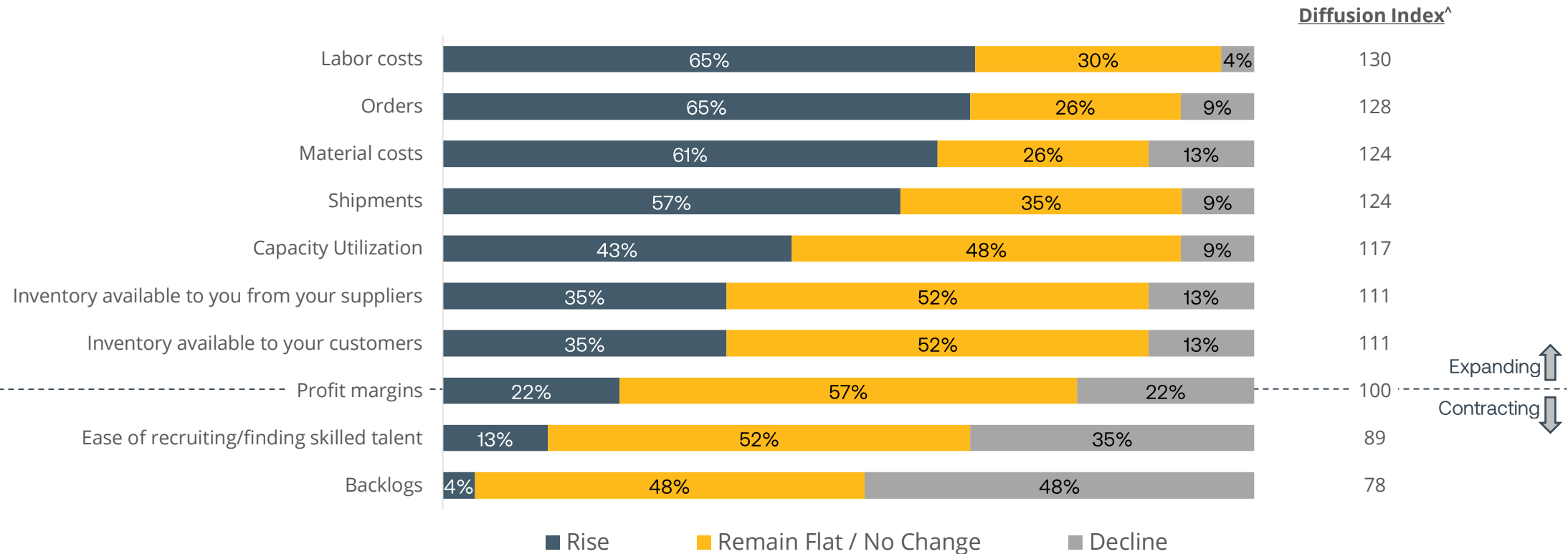
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The View From Companies Primarily Operating in APAC



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: APAC --



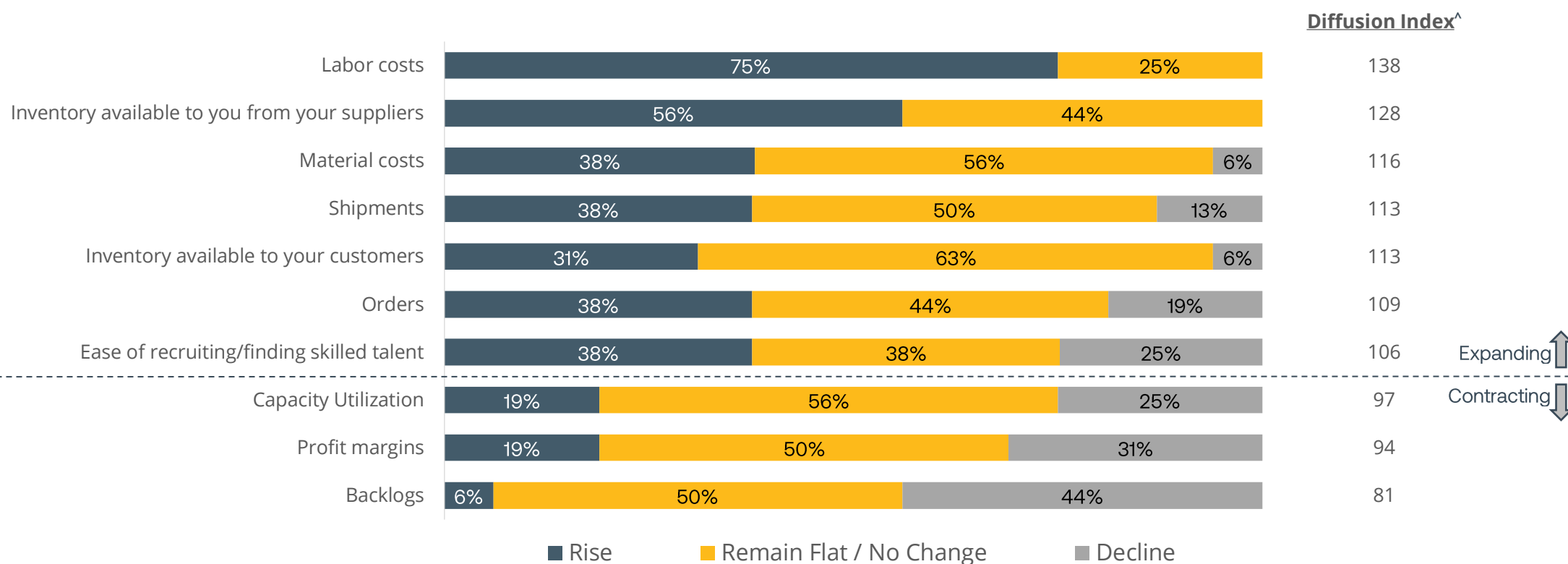
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The View From Companies Primarily Operating Globally



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: Global --

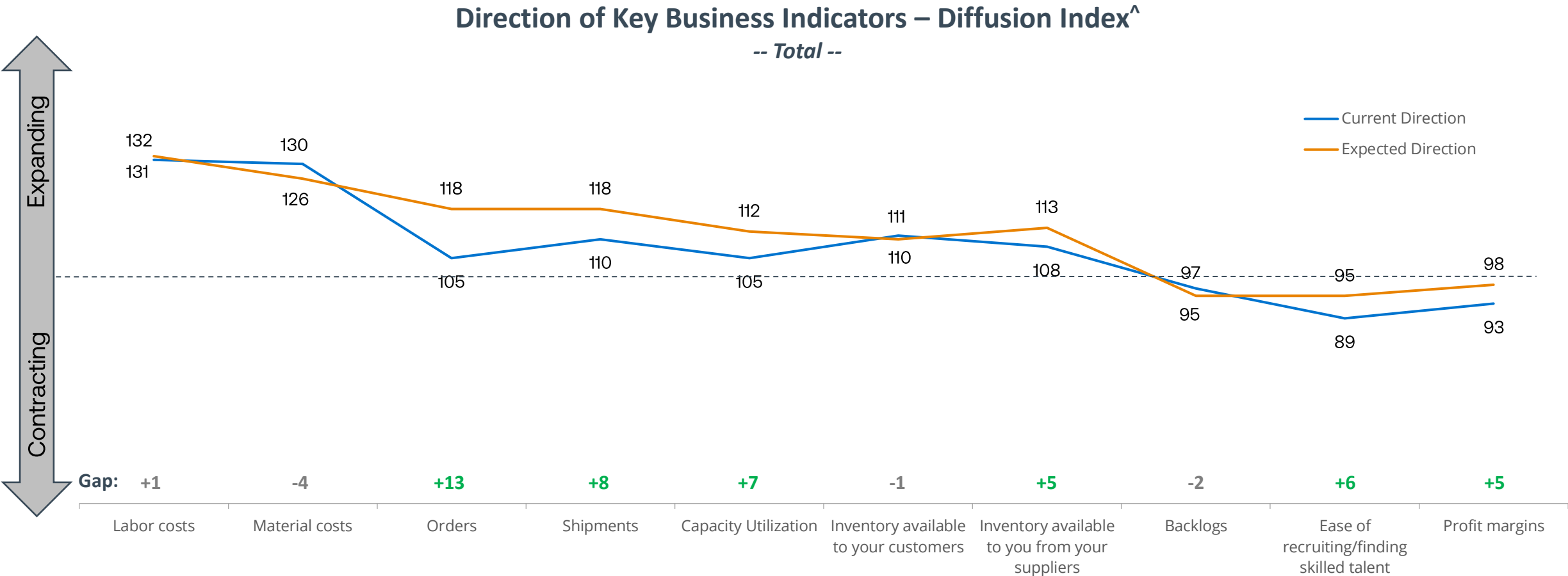


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Orders, Shipments, Capacity Utilization, Ease of Recruiting, Supplier Inventory, and Profit Margins Expected to Rise in the Next Six Months

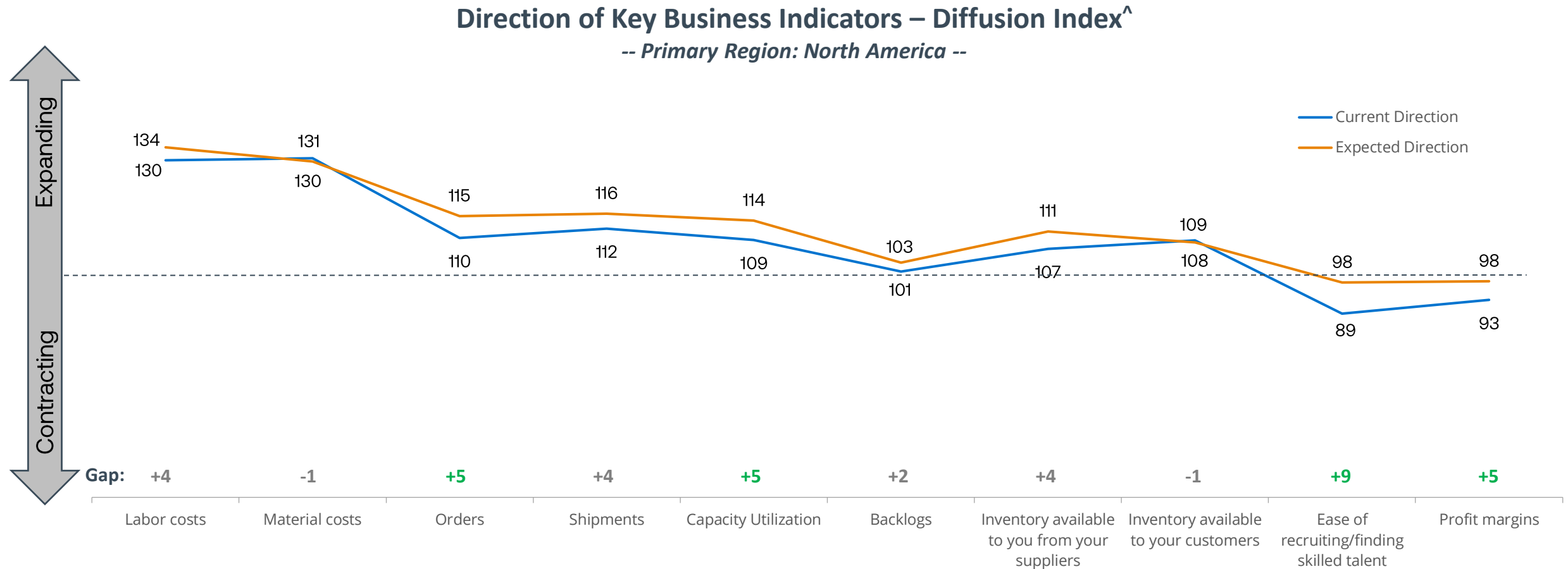


At the same time, labor costs, material costs, customer inventory, and backlogs are expected to remain relatively stable.



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The View From Companies Primarily Operating in North America

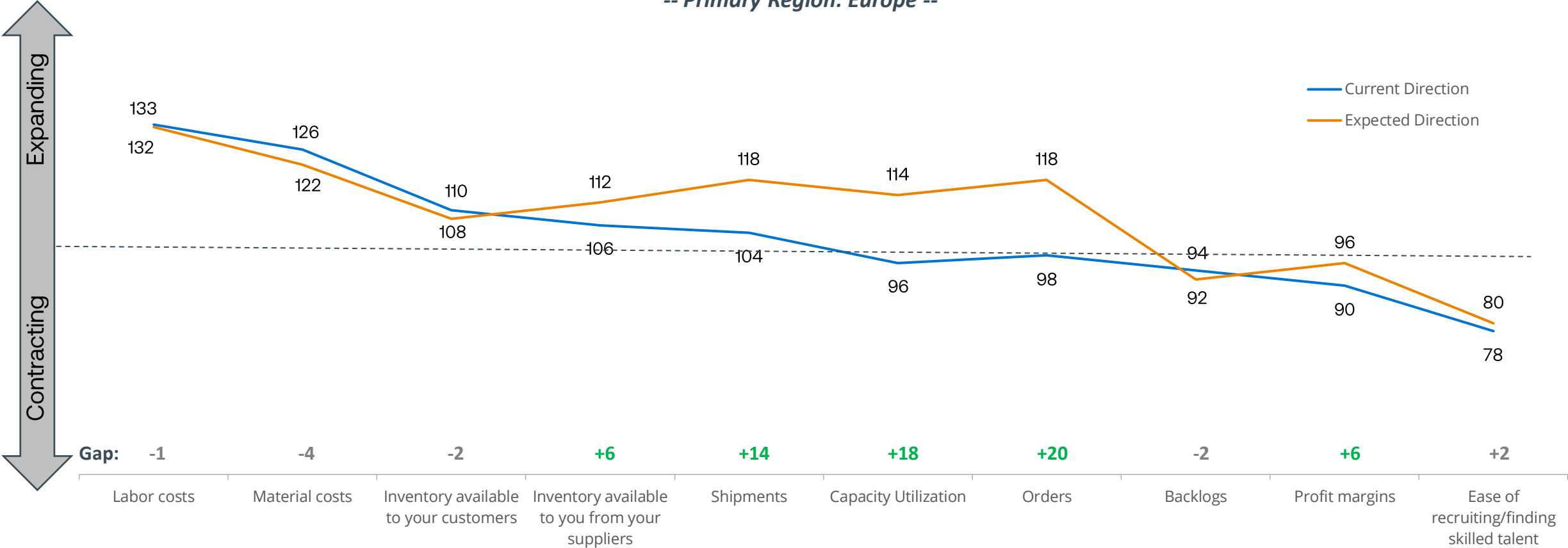


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The View From Companies Primarily Operating in Europe

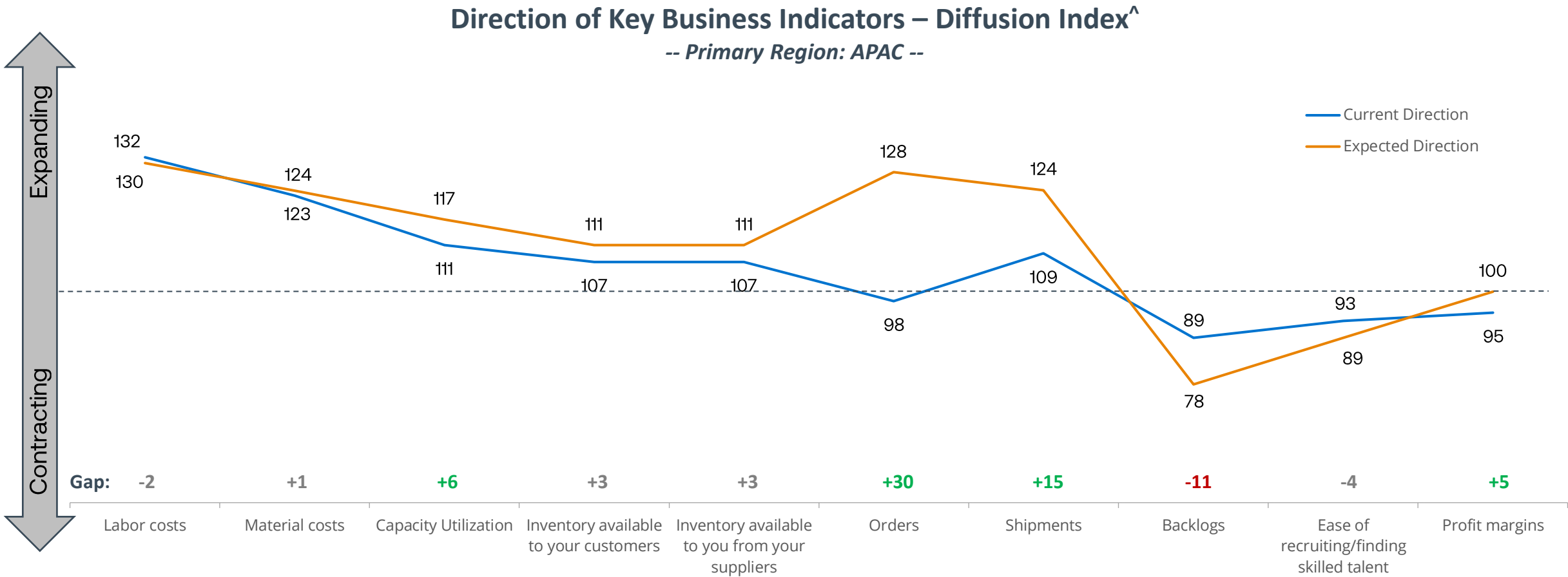


Direction of Key Business Indicators – Diffusion Index[^]
-- Primary Region: Europe --



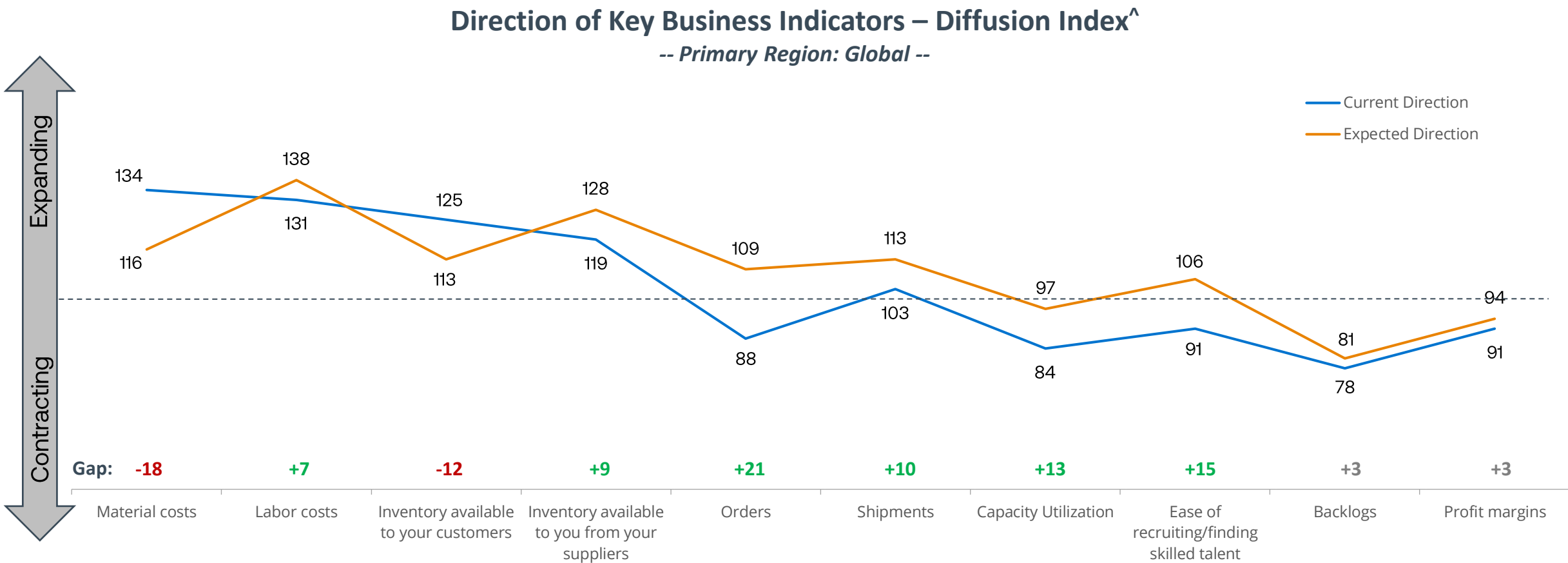
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The View From Companies Primarily Operating in APAC



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The View From Companies Primarily Operating Globally



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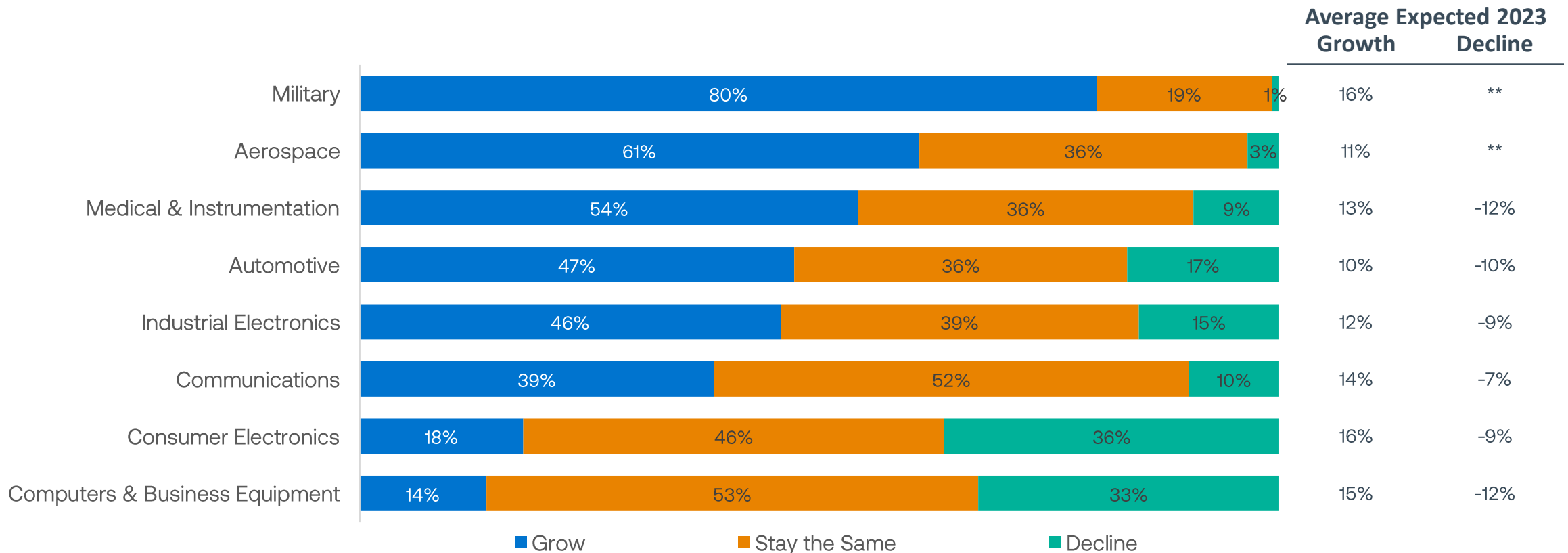
April 2023 Special Questions

Four-Fifths (80%) of Manufacturers Expect the Military Sector to Grow in 2023 at an Average Rate of 16%



- Additionally, Manufacturers are expecting growth in the Aerospace, Medical & Instrumentation, Automotive, and Industrial Electronics industry sectors in 2023.

2023 Expected Industry Changes



**Insufficient base size

Regional Differences in Expected Industry Changes



- **APAC firms tend to be more optimistic for growth in the Automotive sector when compared to both North American and European firms.**
 - 86% of firms in APAC expect to see growth in the Automotive sector in 2023, which compares to a significantly lower 37% of firms in North America and 30% in Europe.
 - At the same time, European firms are more likely expecting Automotive to stay the same (61%), while North American firms are more likely expecting it to decline (27%).
- **Both APAC and North American firms are more expectant of growth in Industrial Electronics vs. those in Europe.**
 - While 60% of firms in APAC and 49% in North America expect to see growth in Industrial Electronics, only 18% of firms Europe are expecting the sector to grow in 2023, where manufacturers are instead more likely expecting Industrial Electronics to remain stable (68%) through the remainder of the year.

Appendix

Current Conditions Diffusion Indices

Past 12 Month Comparisons (TOTAL)



	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023
Material costs	146	145	146	144	142	139	141	139	138	136	135	133	130
Labor costs	134	138	137	139	138	136	136	139	136	136	137	136	131
Orders	121	119	118	115	112	109	112	109	107	112	111	112	105
Backlogs	114	120	119	114	111	107	110	108	105	99	101	104	97
Shipments	115	114	114	111	110	112	111	106	109	112	110	111	110
Capacity utilization	114	110	104	107	110	109	110	107	105	111	108	110	105
Profit margins	85	89	85	84	86	86	89	87	90	89	86	90	93
Inventory available to your customers	94	94	91	96	102	106	101	102	105	111	106	108	111
Ease of recruiting/finding skilled talent	79	81	79	80	85	85	84	84	88	87	84	91	89
Inventory available to you from your suppliers	83	79	82	86	94	96	99	98	102	104	102	106	108

Δ+5 points or more vs. previous month

Δ-5 points or more vs. previous month

Outlook Diffusion Indices

Past 12 Month Comparisons (TOTAL)



	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023
Material costs	140	138	140	138	136	131	134	131	131	130	127	128	126
Labor costs	135	134	135	139	136	134	136	135	133	135	133	134	132
Orders	121	122	119	120	117	113	108	110	113	116	116	114	118
Backlogs	109	114	112	103	104	99	100	100	99	100	97	100	95
Shipments	117	119	115	120	117	116	114	112	112	120	119	116	118
Capacity utilization	116	116	112	115	114	117	112	111	111	118	115	115	112
Profit margins	94	97	90	92	95	93	95	94	98	97	100	98	98
Inventory available to your customers	101	100	102	105	107	111	114	106	109	117	114	111	110
Ease of recruiting/finding skilled talent	88	86	90	88	88	92	86	90	93	95	95	93	95
Inventory available to you from your suppliers	93	92	92	102	104	107	108	110	108	113	113	112	113

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 March 13 and March 31, 2023.



Questions? Please contact:

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