



BUILD ELECTRONICS BETTER

The Current Sentiment of the Global Electronics Manufacturing Supply Chain

Monitoring the Pulse of the Global Electronics Industry

September 2023

[ipc.org](https://www.ipc.org) →

> Demand Weakened this Month

- The Orders Index slipped 3 points to 101. This is only the second time the Orders Index has fallen to this level.
- The Backlog Index slipped to 90, its lowest level recorded.
- Capacity Utilization slipped 4 points to 104, remaining in expansionary territory but at the lower range of its trend.

> Operations Remain Generally Healthy

- Both inventory indexes remain strong, suggesting inventory is available from suppliers and inventory is available to customers. We continue to hear of long lead times for some parts but overall inventories appear well balanced.
- The Shipments Index slipped 4 points this month but remain in expansionary territory. Manufacturers expect shipments to weaken further in the coming months. The Shipments Outlook Index fell to 110, the lowest level recorded for that index.

> Cost Environment Continues to Improve

- The Labor Costs Index and the Material Costs Index both fell this month. Both are near the lower part of their ranges and should continue to improve in the coming months.

> Some Manufacturers are Cutting Hours in Order to Keep Workers

- Roughly 22% of electronics manufacturers report they are cutting hours to keep workers even though they are facing slower demand.

Current Conditions for the Electronics Supply Chain



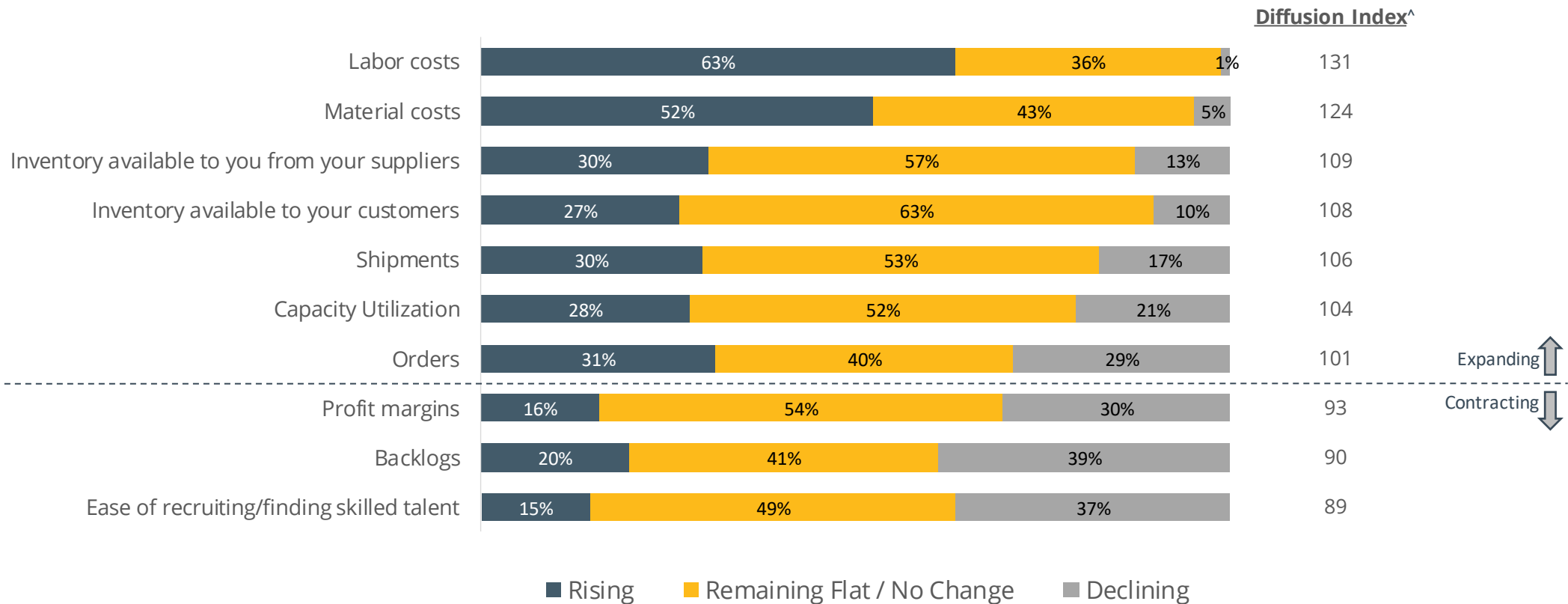
Notably, there are no significant differences in current conditions across all geographic regions.

Nearly two-thirds (63%) of electronics manufacturers are currently experiencing rising labor costs, with more half (52%) reporting rising material costs.

At the same time, ease of recruitment, backlogs, and profit margins are presently declining.

Current Direction of Key Business Indicators

-- Total --



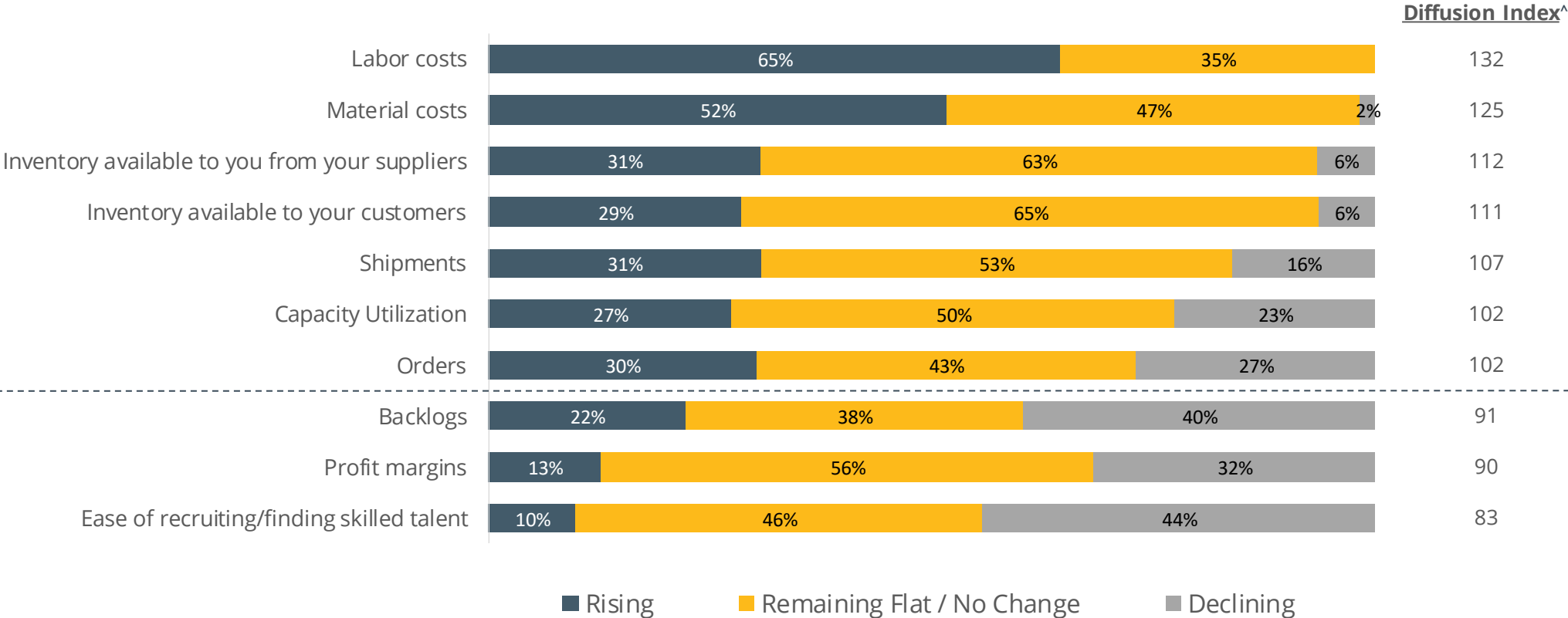
[^]A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating in North America



Current Direction of Key Business Indicators

-- Primary Region: North America --



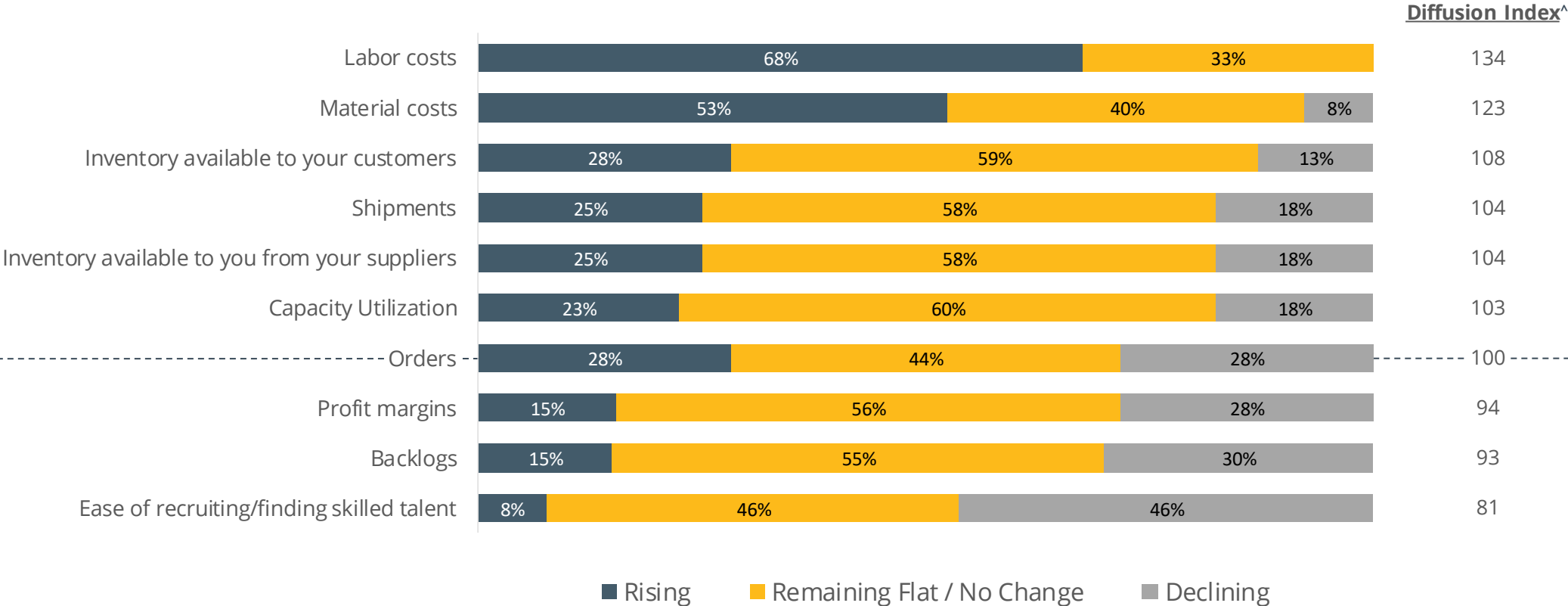
[^]A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating in Europe



Current Direction of Key Business Indicators

-- Primary Region: Europe --



Expanding ↑
Contracting ↓

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

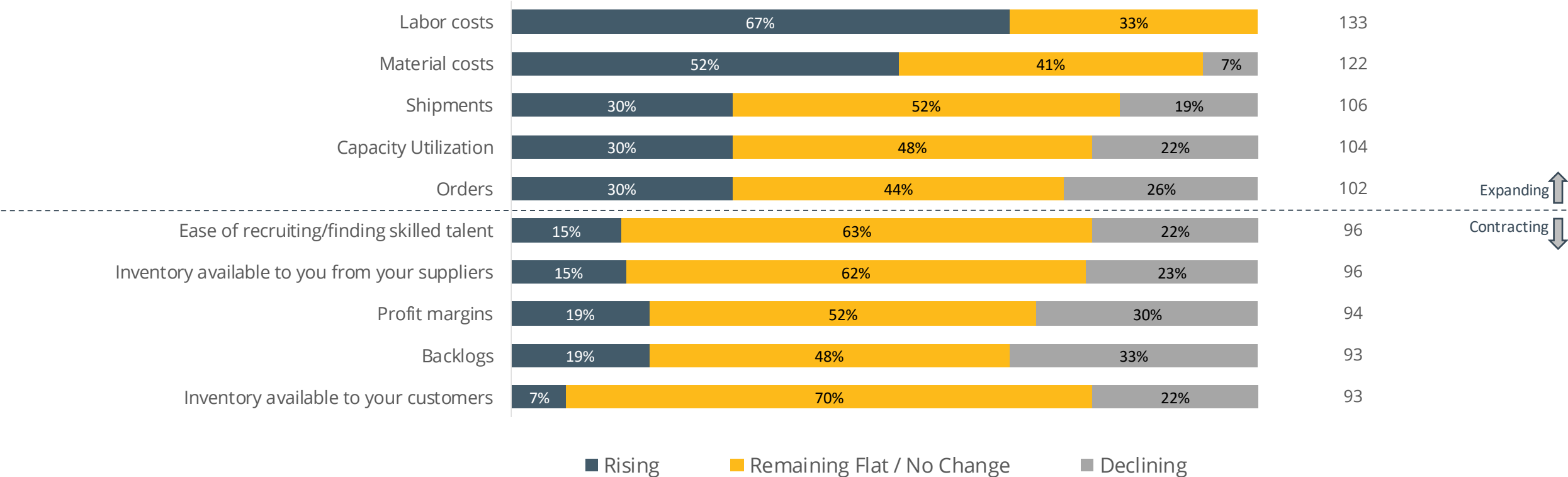
The View From Companies Primarily Operating in APAC



Current Direction of Key Business Indicators

-- Primary Region: APAC --

Diffusion Index[^]



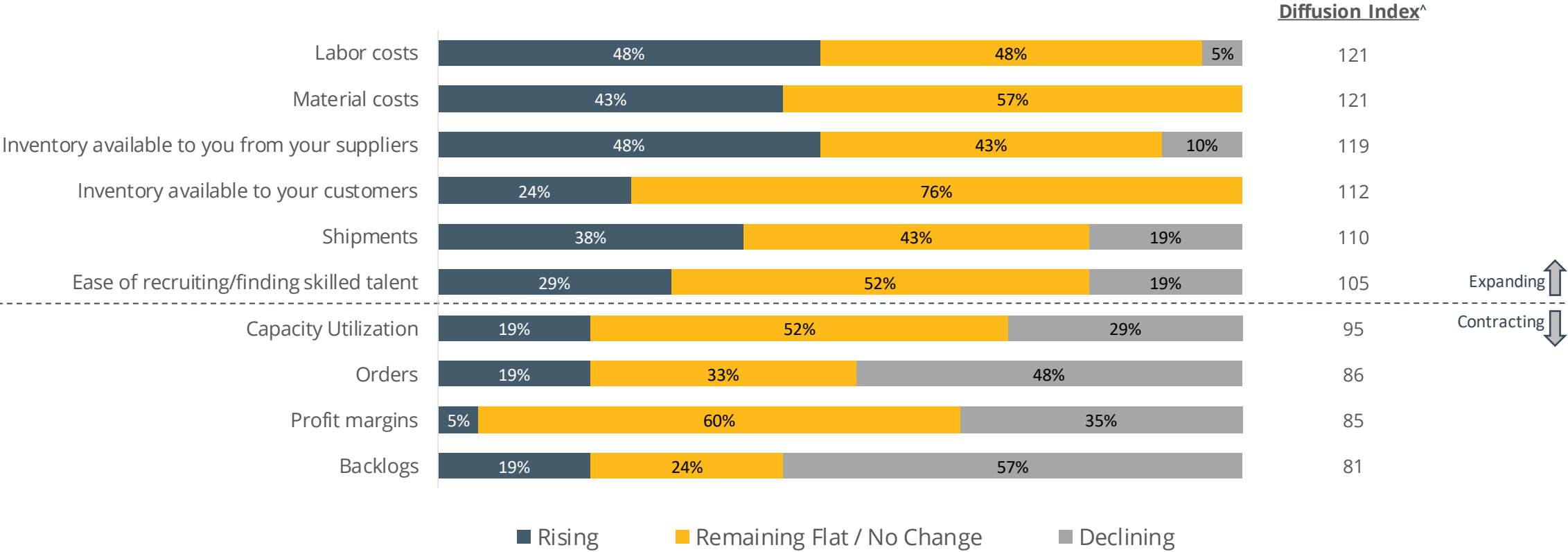
[^]A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating Globally



Current Direction of Key Business Indicators

-- Primary Region: Global --



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

The Outlook for the Next 6 Months



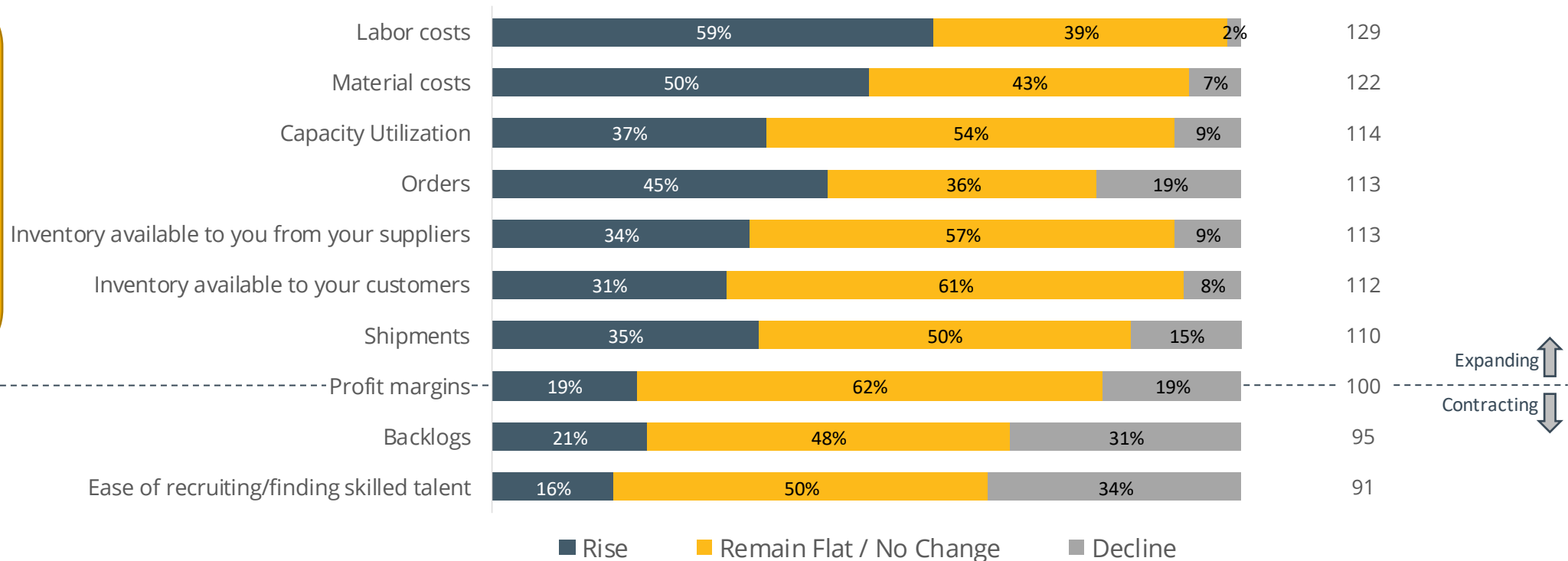
Anticipated Direction of Key Business Indicators – Next Six Months

-- Total --

Diffusion Index[^]

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

At the same time, while profit margins are expected to improve, backlogs and ease of recruitment are likely to remain challenging.



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

Regional Differences in the Outlook



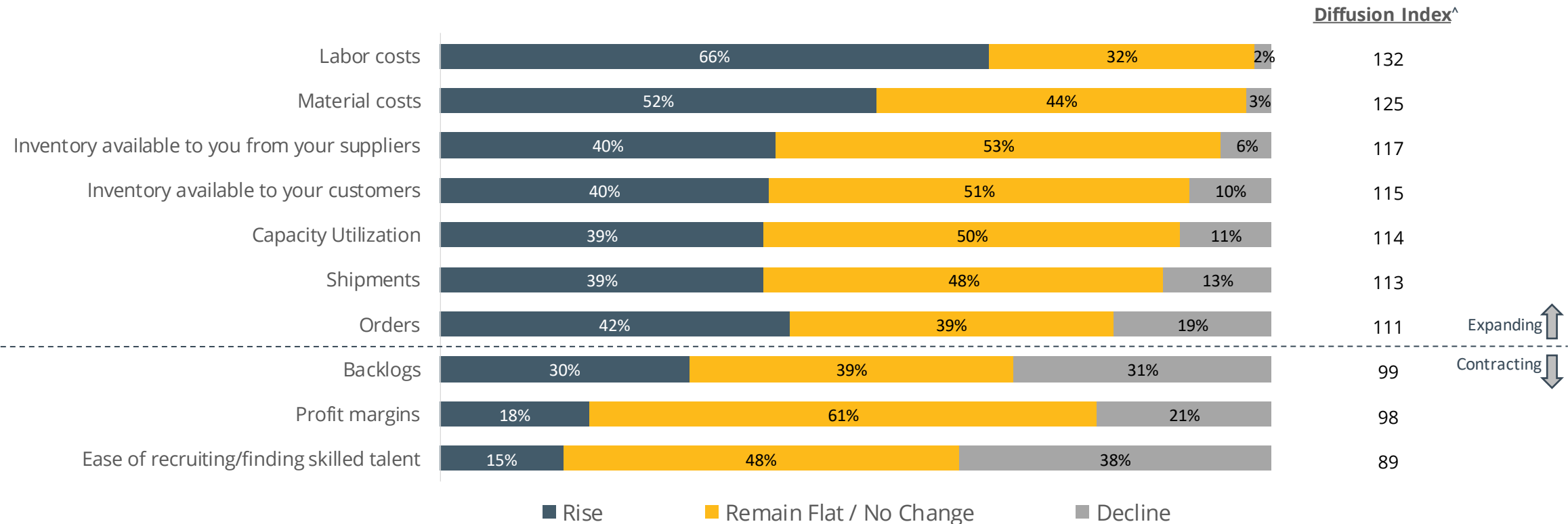
- **Backlogs are expected to rise more so among firms in North America when compared to firms in Europe.**
 - Three in ten (30%) firms in North America are expecting backlogs to rise over the next six months, which compares to only 5% in Europe.
- **Among manufacturers operating Globally, supplier inventory is expected to rise at a higher pace than among manufacturers primarily operating in APAC.**
 - While more than half (52%) of Global firms anticipate supplier inventory to rise, a significantly lower 15% of firms in APAC are expecting the same.

The View From Companies Primarily Operating in North America



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: North America --



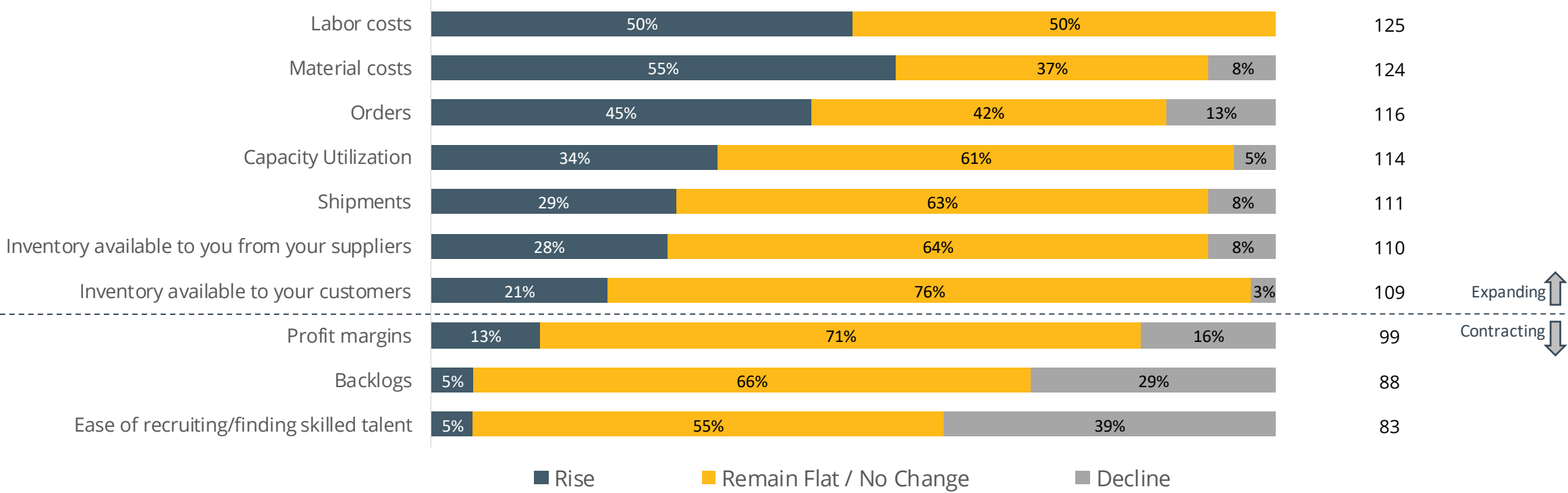
[^]A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating in Europe



Anticipated Direction of Key Business Indicators – Next Six Months -- Primary Region: Europe --

Diffusion Index[^]



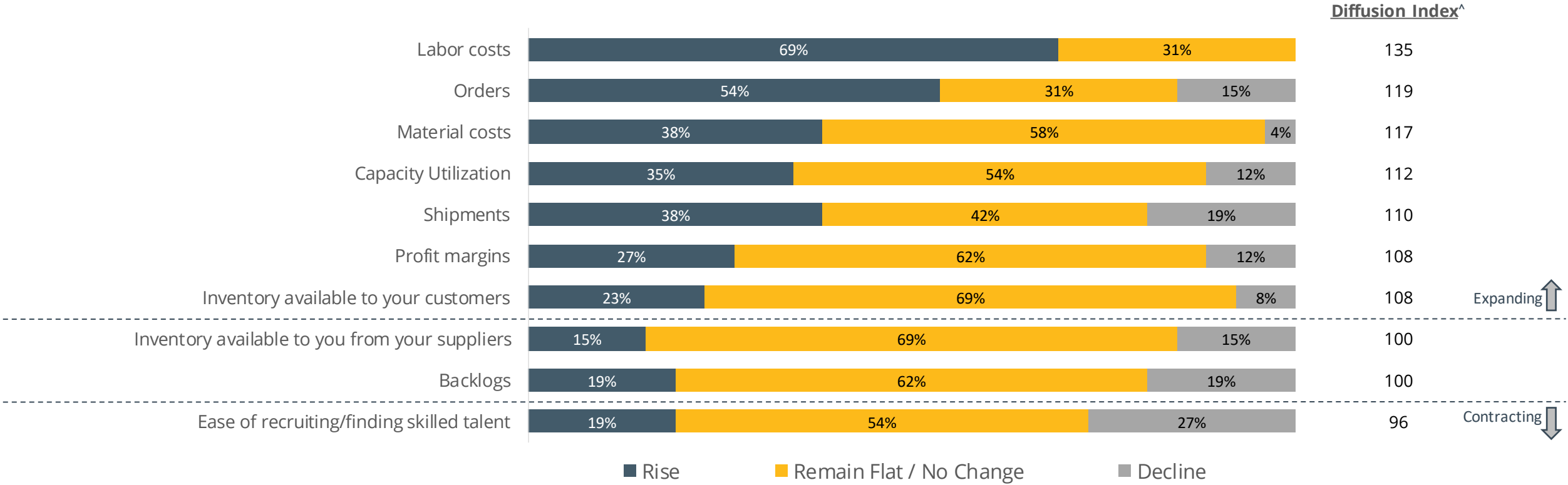
[^]A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating in APAC



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: APAC --



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

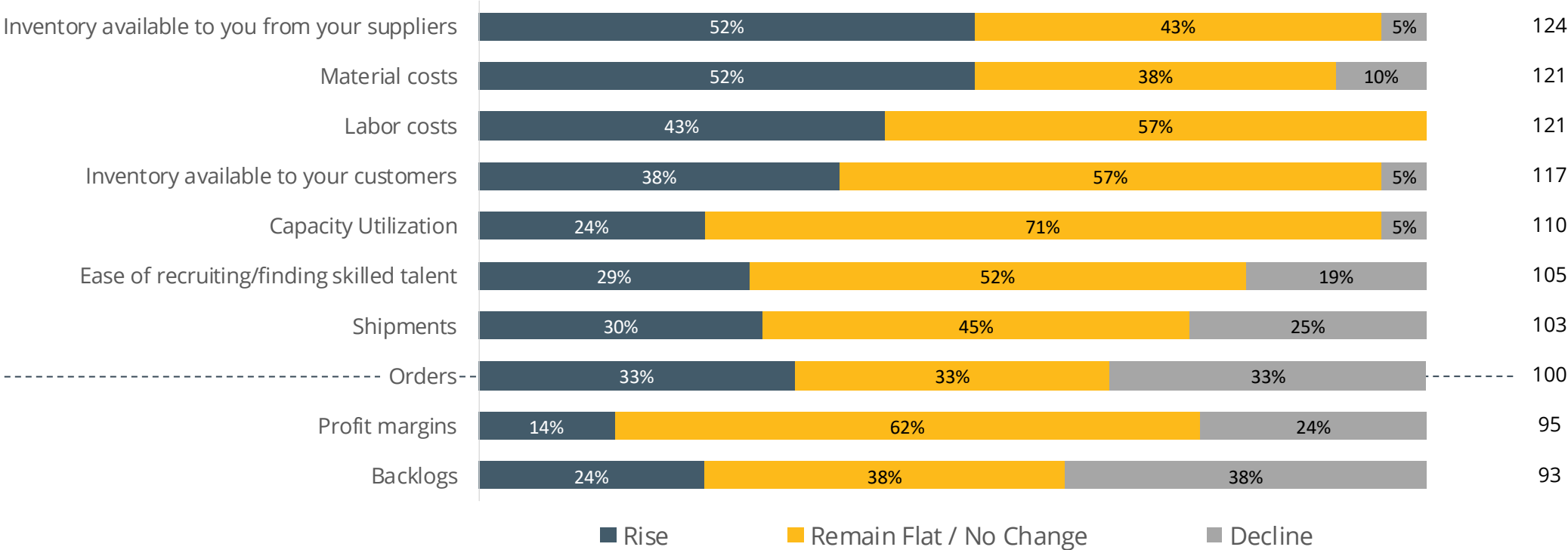
The View From Companies Primarily Operating Globally



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: Global --

Diffusion Index[^]



Expanding ↑
Contracting ↓

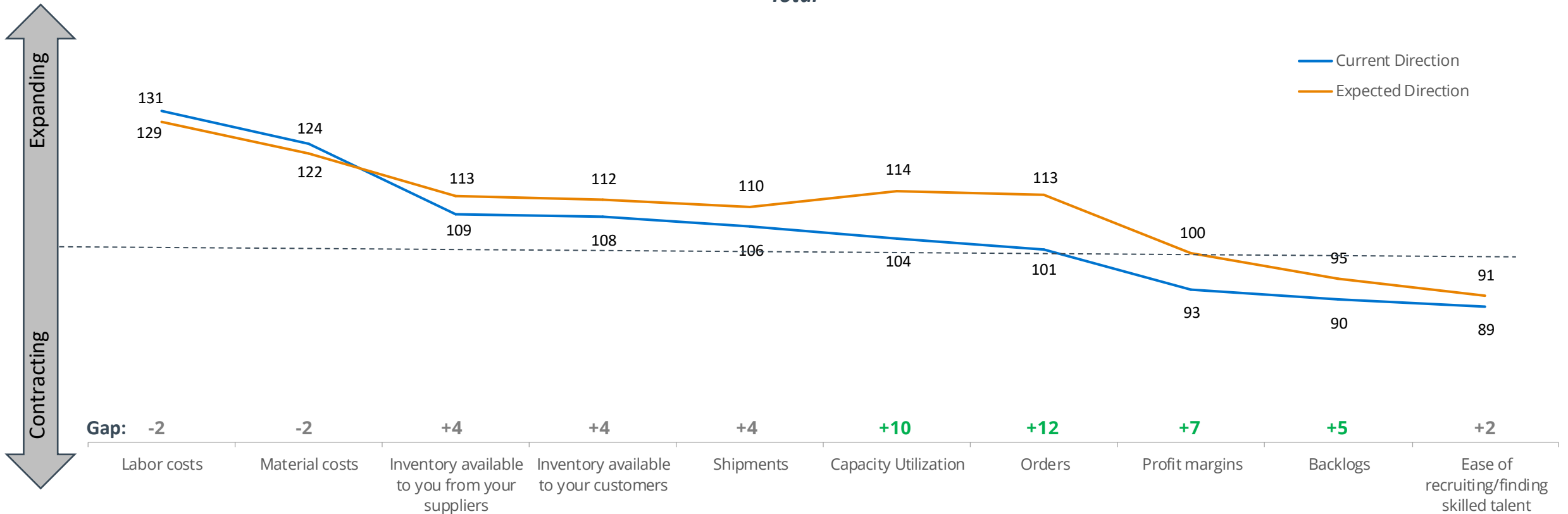
[^]A diffusion index is a statistical measure used to detect economic turning points.

Orders, Capacity Utilization, Profit Margins, and Backlogs are Expected to Rise Over the Next Six Months, While All Other Key Business Indicators are Expected to Remain Relatively Stable



Direction of Key Business Indicators – Diffusion Index[^]

-- Total --



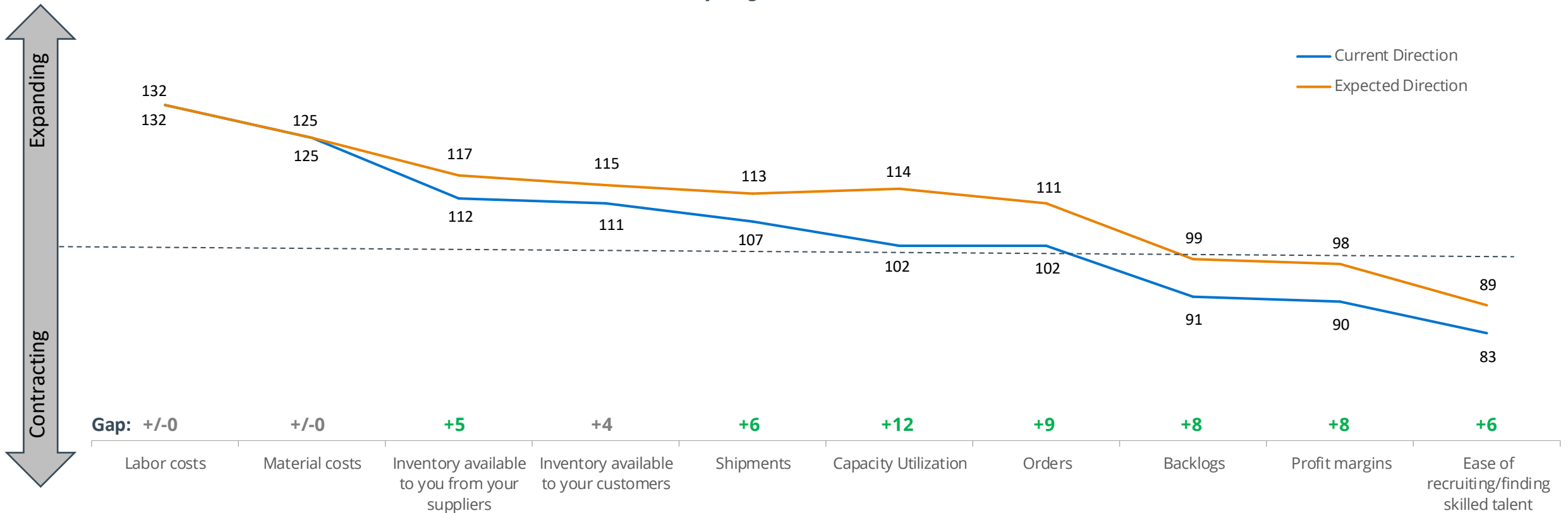
[^]A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating in North America



Direction of Key Business Indicators – Diffusion Index[^]

-- Primary Region: North America --



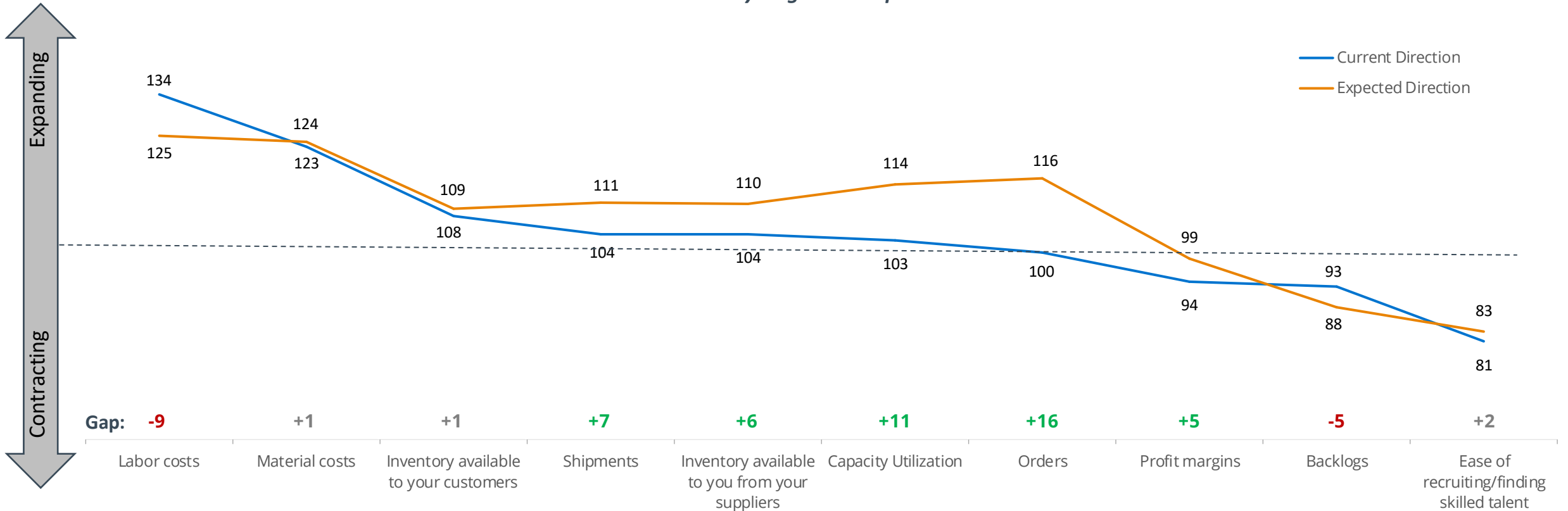
[^]A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating in Europe



Direction of Key Business Indicators – Diffusion Index[^]

-- Primary Region: Europe --



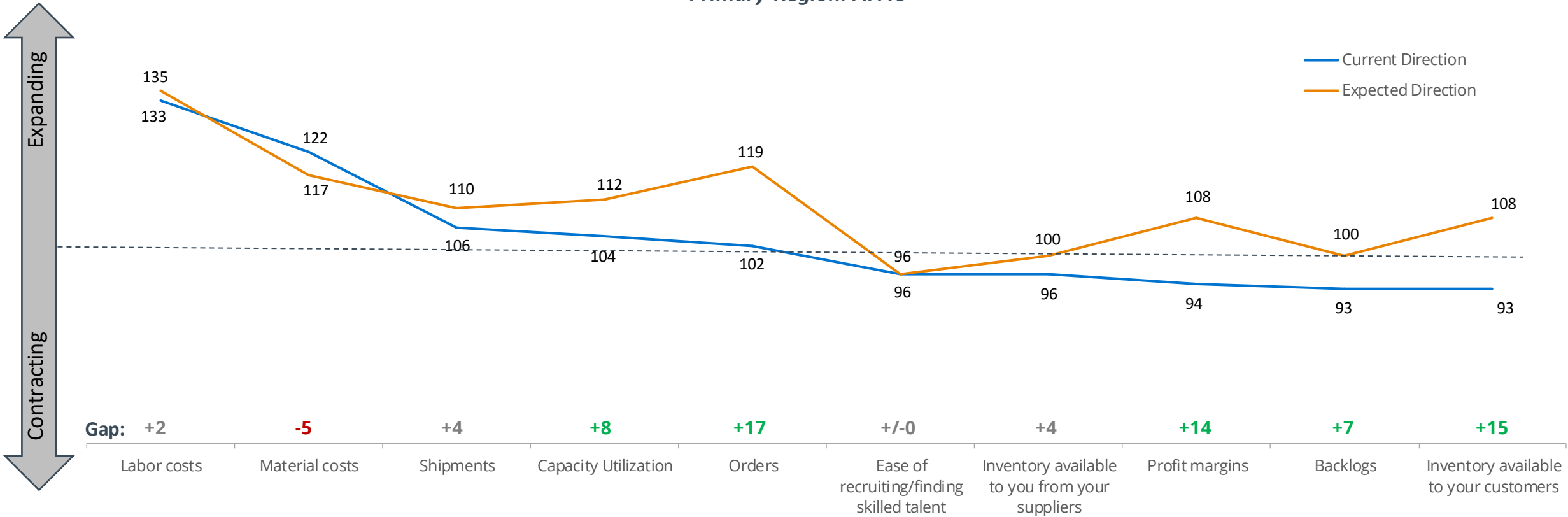
[^]A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating in APAC



Direction of Key Business Indicators – Diffusion Index[^]

-- Primary Region: APAC --



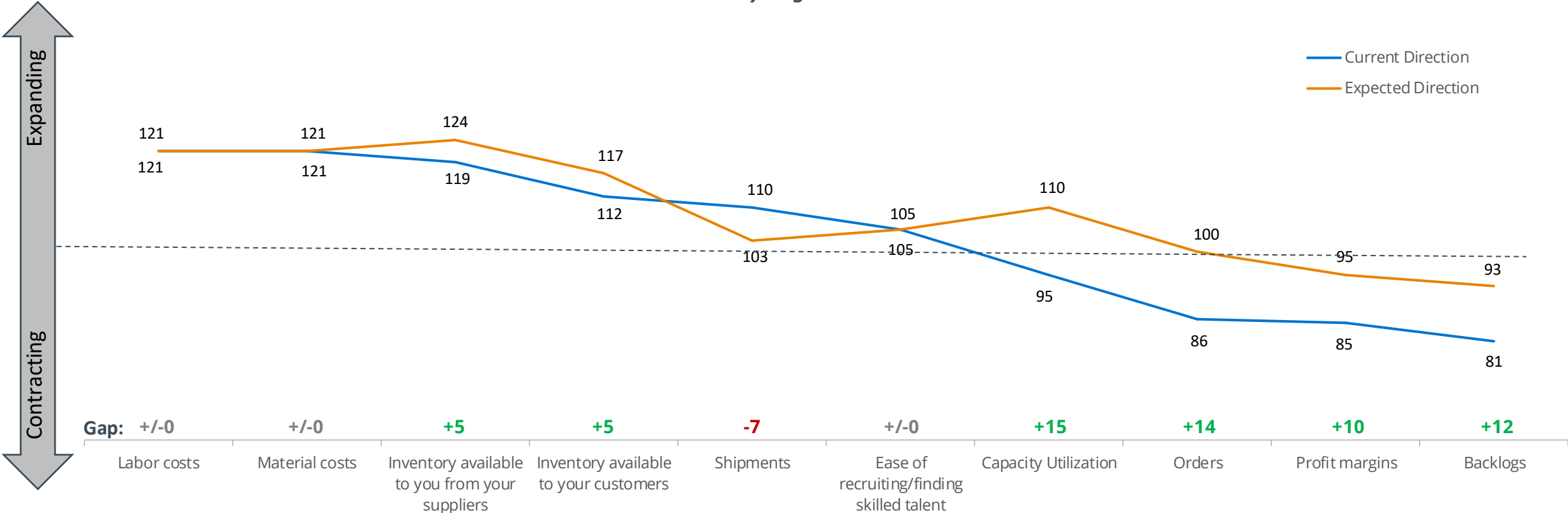
[^]A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating Globally



Direction of Key Business Indicators – Diffusion Index[^]

-- Primary Region: Global --



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

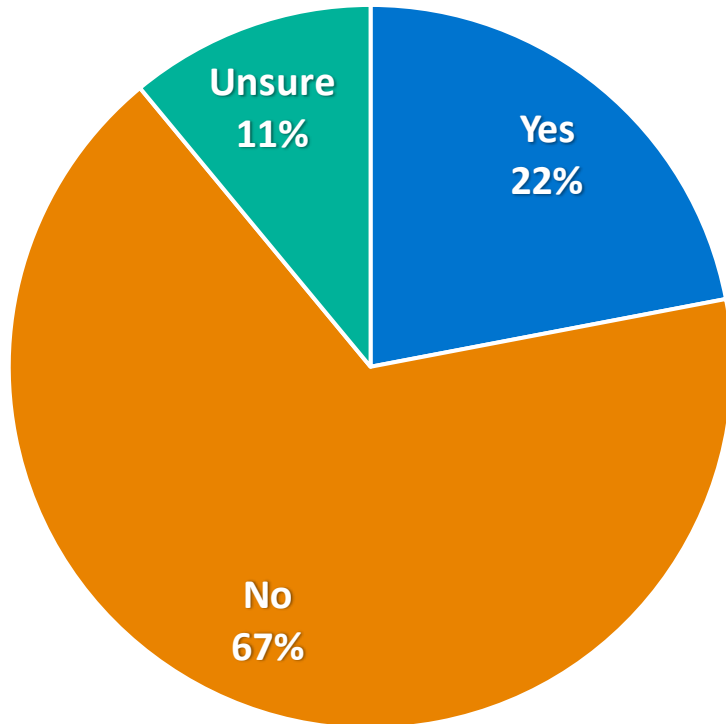
September 2023 Special Questions

Some Electronics Manufacturers are Cutting Hours to Keep Workers



Notably, there are no significant differences across all geographic regions.

Incidence of Cutting Hours, Even if Facing Slower Demand



- “We have had to cut hours and have no OT because we are so slow.” Wire Harness and Cable Assembly Manufacturer, North America
- “We are experiencing short-term slow periods, so part of our strategy is to reduce hours to keep our team intact through this unstable period, which is anticipated to be very short term.” Wire Harness and Cable Assembly Manufacturer, North America
- “It has been one of the slowest business years for us so far in 2023. We've reduced our operational hours almost every week in 2023.” PCB Board Fabricator/Supplier, North America
- “Hours cut to keep staff, not in response to slack order intake.” Component Supplier, Global
- “Voluntary short term lay-offs.” Wire Harness and Cable Assembly Manufacturer, North America
- “Focusing on cross-training so we don't have to cut hours.” Contract Electronics Manufacturing Services, North America
- “Cut normal overtime 3 hours a day.” Contract Electronics Manufacturing Services, APAC
- “If we cut hours, employees may leave.” PCB Board Fabricator/Supplier, North America
- “Available hours are not sufficient to meet customer demands and, also, skill levels are not sufficient to improve the efficiency.” Wire Harness and Cable Assembly Manufacturer, APAC
- “We still have strong demand. No need to cut hours. Plus, we have a significant backlog coming out of the pandemic.” Contract Electronics Manufacturing Services, North America
- “We are not facing slower demand.” Contract Electronics Manufacturing Services, North America
- “Demand is increasing. Currently have workers on overtime.” Equipment Supplier, North America
- “We are paying a monthly attendance bonus if the company meets or exceeds its sales budget for the month.” Contract Electronics Manufacturing Services, North America
- “We have started to do 9/80's. Our company is always working overtime and can't seem to find qualified employees.” Other, North America

Appendix

Current Conditions Diffusion Indices

Past 12 Month Comparisons (TOTAL)



	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023
Shipments	112	111	106	109	112	110	111	110	109	108	103	110	106
Orders	109	112	109	107	112	111	112	105	101	107	103	104	101
Profit margins	86	89	87	90	89	86	90	93	95	96	91	96	93
Backlogs	107	110	108	105	99	101	104	97	99	95	93	98	90
Ease of recruiting/finding skilled talent	85	84	84	88	87	84	91	89	92	90	92	92	89
Material costs	139	141	139	138	136	135	133	130	128	126	123	128	124
Labor costs	136	136	139	136	136	137	136	131	128	129	129	133	131
Capacity utilization	109	110	107	105	111	108	110	105	103	108	103	108	104
Inventory available to you from your suppliers	96	99	98	102	104	102	106	108	110	112	112	110	109
Inventory available to your customers	106	101	102	105	111	106	108	111	116	115	109	109	108

△+5 points or more vs. previous month

△-5 points or more vs. previous month

Outlook Diffusion Indices

Past 12 Month Comparisons (TOTAL)



	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023
Shipments	116	114	112	112	120	119	116	118	118	112	115	117	110
Orders	113	108	110	113	116	116	114	118	111	111	116	117	113
Profit margins	93	95	94	98	97	100	98	98	99	99	96	104	100
Backlogs	99	100	100	99	100	97	100	95	93	92	98	100	95
Ease of recruiting/finding skilled talent	92	86	90	93	95	95	93	95	95	93	95	95	91
Material costs	131	134	131	131	130	127	128	126	122	123	120	123	122
Labor costs	134	136	135	133	135	133	134	132	124	128	126	126	129
Capacity utilization	117	112	111	111	118	115	115	112	110	111	113	115	114
Inventory available to you from your suppliers	107	108	110	108	113	113	112	113	113	113	118	113	113
Inventory available to your customers	111	114	106	109	117	114	111	110	114	111	117	112	112

△+5 points or more vs. previous month

△-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 August 14 and August 31, 2023.



Questions? Please contact:

Shawn DuBravac,
IPC Chief Economist

ShawnDuBravac@ipc.org