



BUILD ELECTRONICS BETTER

# The Current Sentiment of the Global Electronics Manufacturing Supply Chain

*Monitoring the Pulse of the Global Electronics Industry*

December 2023

[ipc.org](https://www.ipc.org) →

# Executive Summary



- > **Industry sentiment slipped in the final report of 2023**
  - However, key categories remain in expansionary territory.
- > **Demand sentiment slipped in December, but remains in positive territory.**
  - The New Order Index fell 4 points after rising 5 points in November 2023.
  - The Shipment Index fell 2 points to 105.
  - The Backlog Index fell 2 points in December after rising 5 points in the prior month. The Backlog Index remained in contractionary territory for the 9<sup>th</sup> straight month and the 10<sup>th</sup> month in the last year. The Backlog Outlook Index also declined, falling 7 points and retreating back into contractionary territory.
  - The Capacity Utilization Index remained steady at 106.
- > **Costs continue to improve but the picture was mixed in December.**
  - The Material Costs Index rose 1 point to 119, but remains near the all-time low reached in November 2023.
  - The Labor Costs Index fell 2 points to 128, the lowest level recorded for this metric.
- > **In December 2023, IPC asked industry executives what they believed would happen to PCB demand for domestically produced PCBs if prices were to decline by 25%.**
  - On average respondents predicted demand would rise by 16% on average.
  - Notably, manufacturers in North America predicted demand would rise by 20% on average, higher than in both Europe and APAC.

# Current Conditions for the Electronics Supply Chain

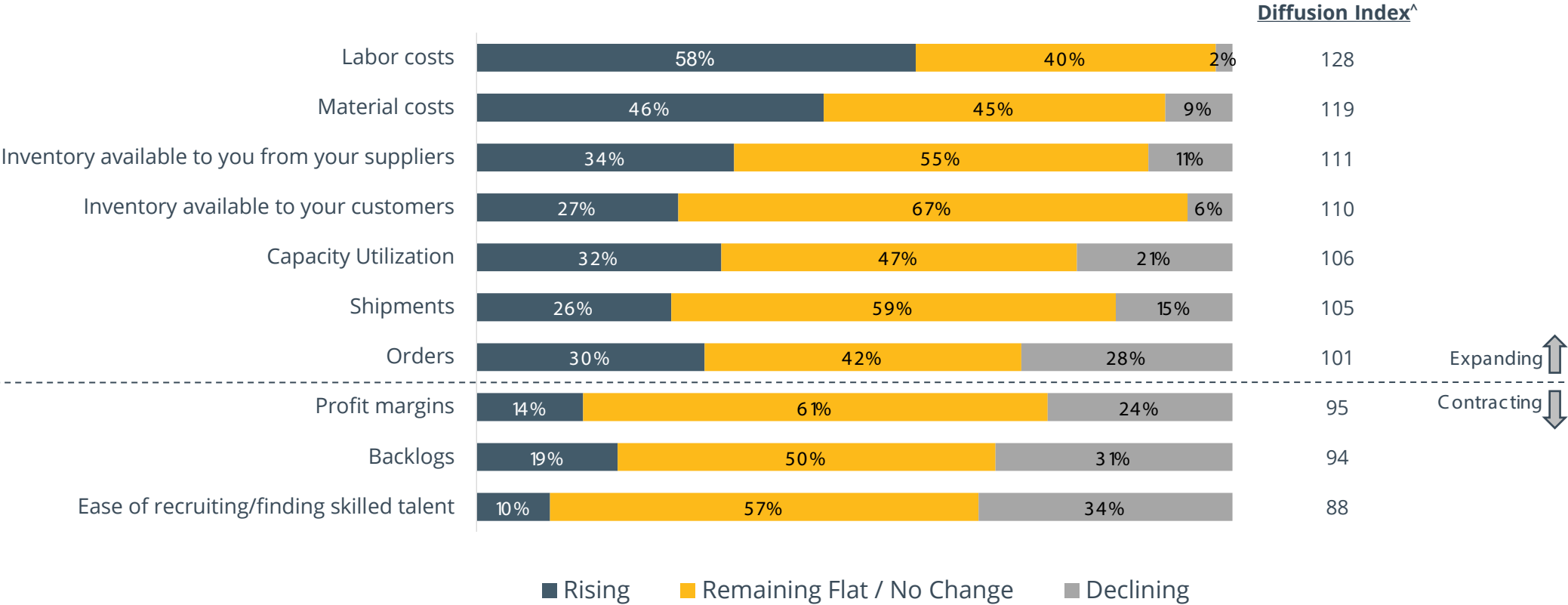


Notably, there are no significant differences in current conditions across all geographic regions.

Three-fifths (58%) of electronics manufacturers are currently experiencing rising labor costs, along with nearly half (46%) 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 --

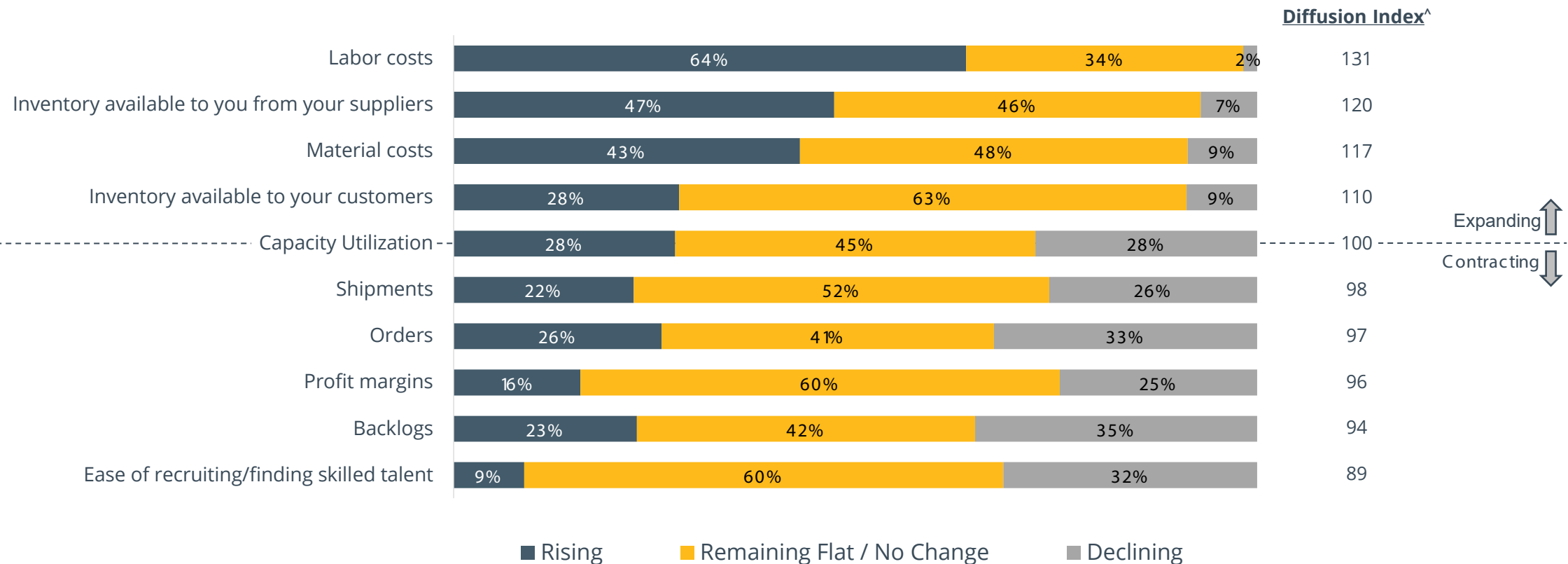


<sup>^</sup>A diffusion index is a statistical measure used to detect economic turning points.

# The View From Companies Primarily Operating in North America



## Current Direction of Key Business Indicators -- Primary Region: North America

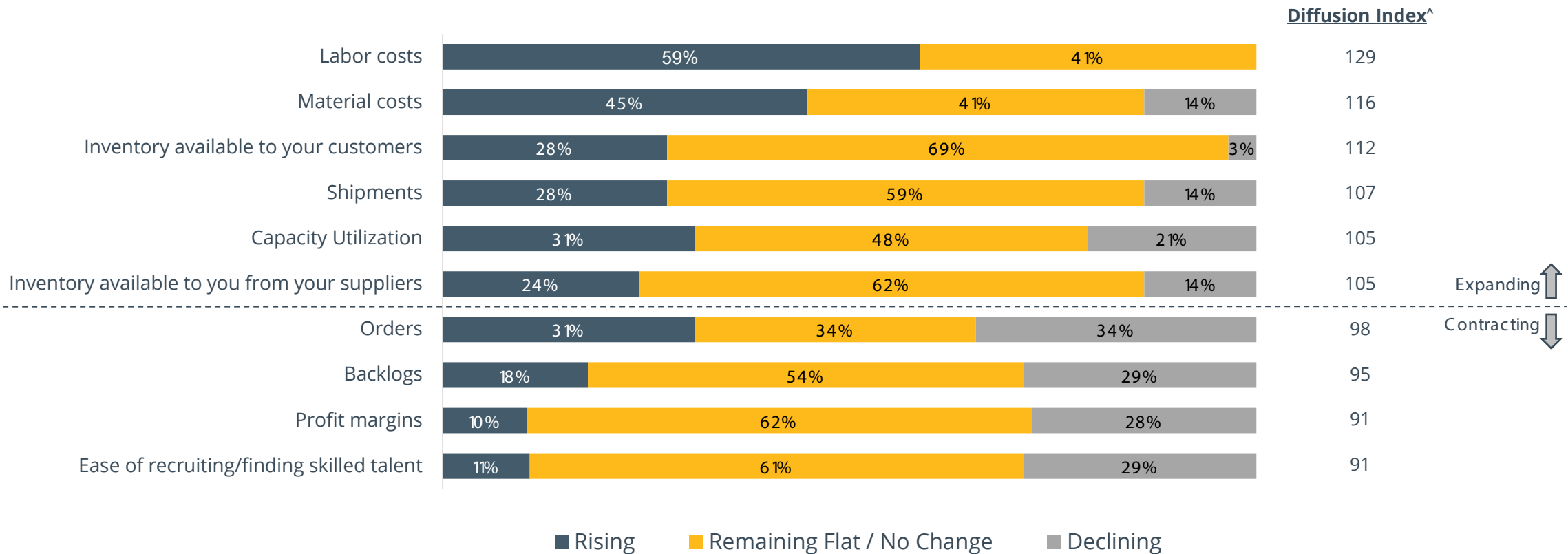


<sup>^</sup>A diffusion index is a statistical measure used to detect economic turning points.

# The View From Companies Primarily Operating in Europe



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



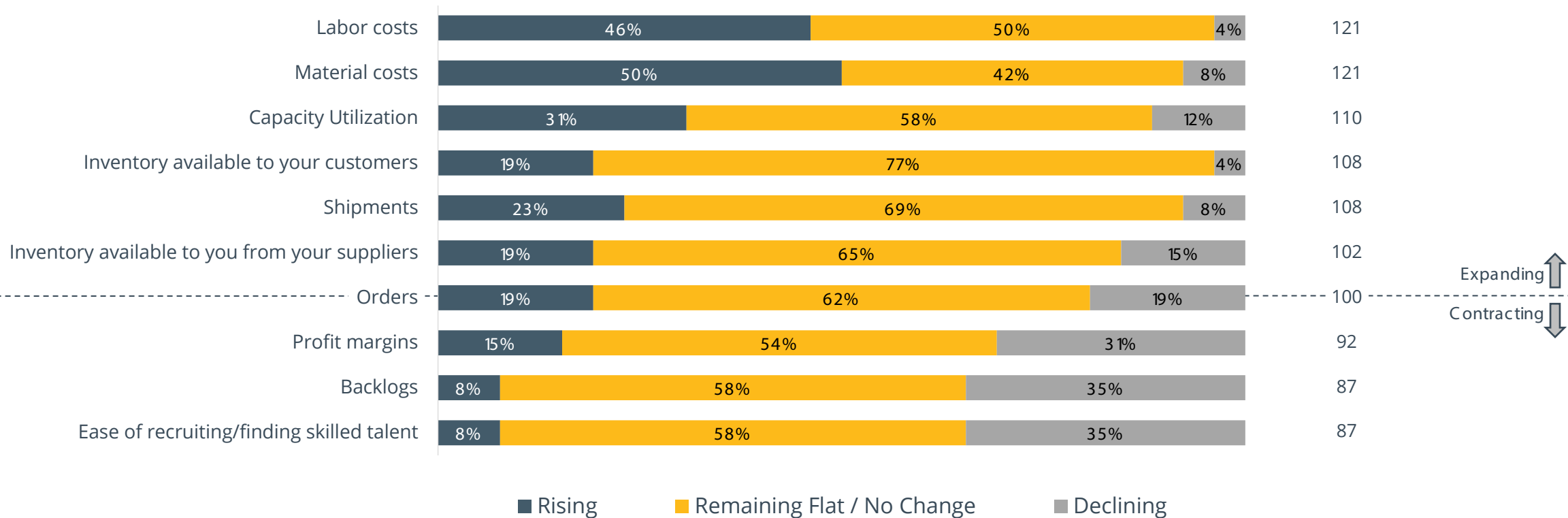
<sup>^</sup>A diffusion index is a statistical measure used to detect economic turning points.

# The View From Companies Primarily Operating in APAC



## Current Direction of Key Business Indicators -- Primary Region: APAC

Diffusion Index<sup>^</sup>

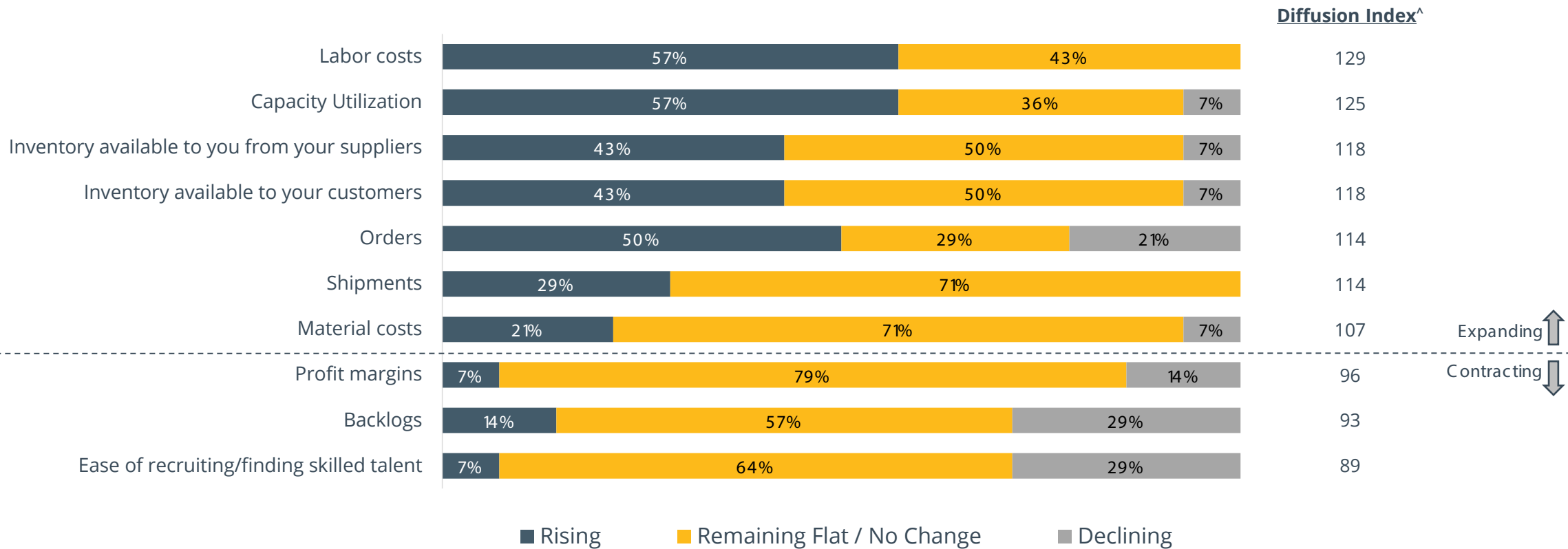


<sup>^</sup>A diffusion index is a statistical measure used to detect economic turning points.

# The View From Companies Primarily Operating Globally



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



<sup>^</sup>A diffusion index is a statistical measure used to detect economic turning points.

# The Outlook for the Next 6 Months

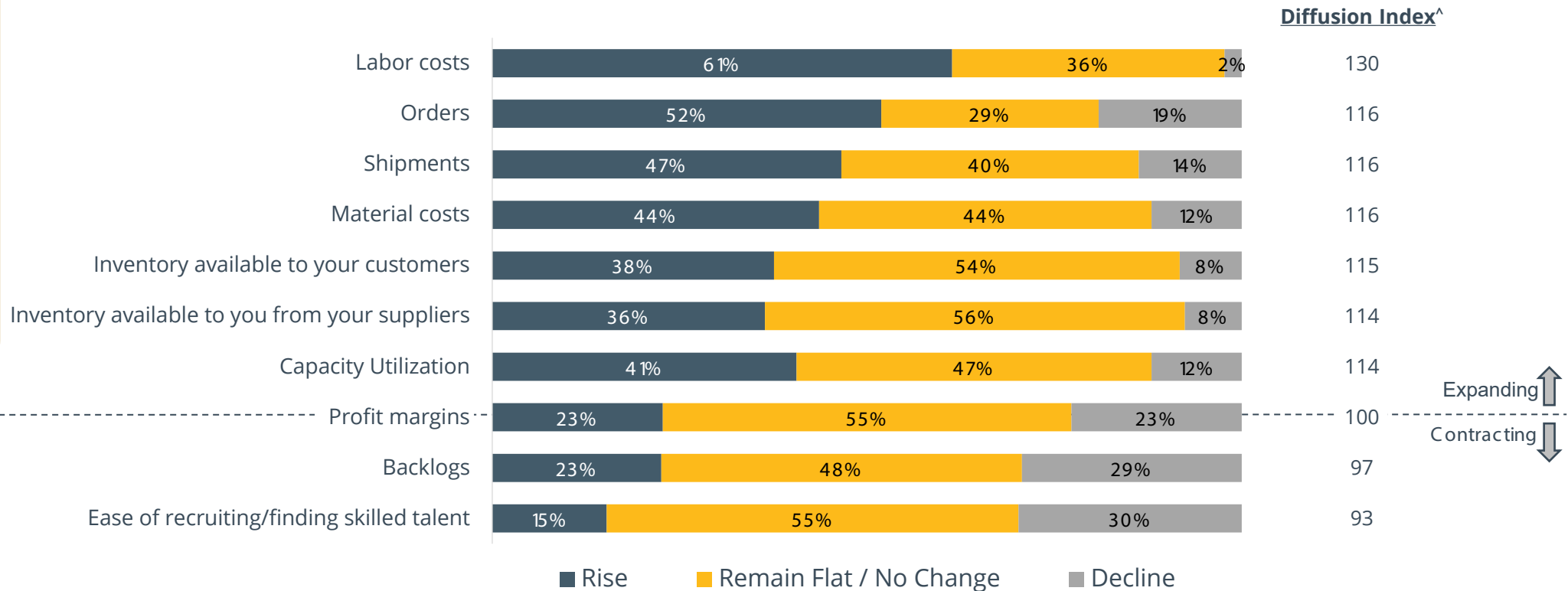


Over the next six months, electronics manufacturers expect to see continued increase in both labor and material costs, while also anticipating a notable increase in both orders and shipments.

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

## Anticipated Direction of Key Business Indicators Next Six Months

-- Total --



<sup>^</sup>A diffusion index is a statistical measure used to detect economic turning points.



# Regional Differences in the Outlook

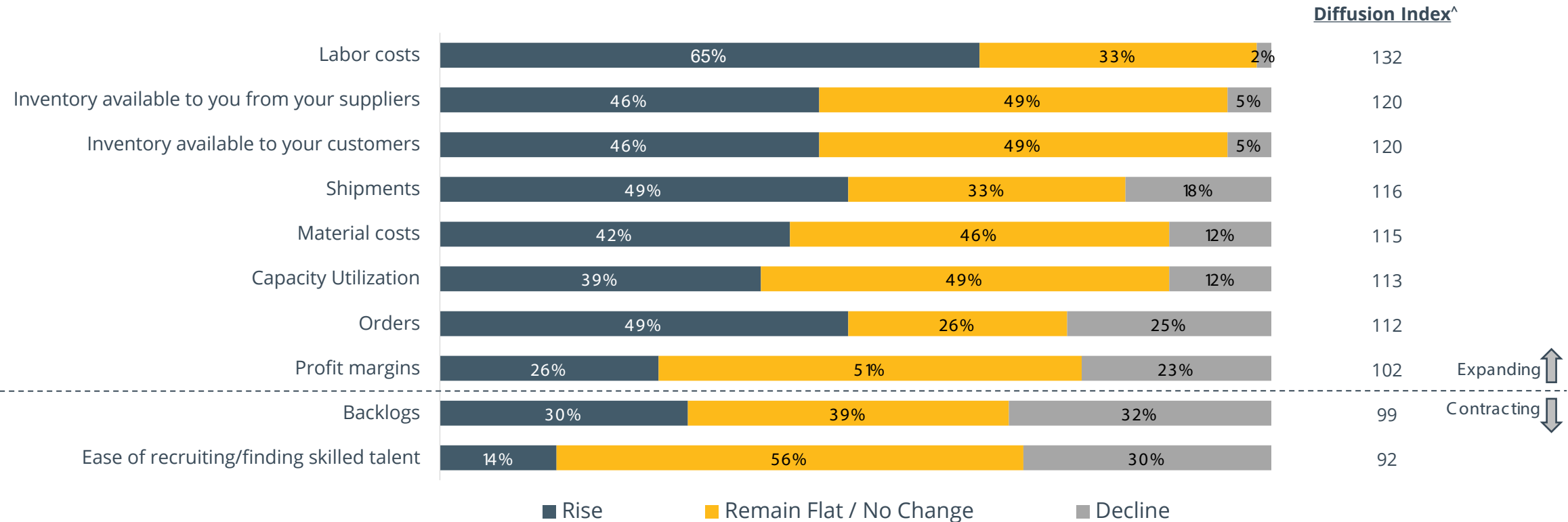


- **Backlogs are expected to rise more so among firms operating Globally when compared to those in APAC.**
  - Two-fifths (43%) of firms operating Globally expect backlogs to rise over the next six months, which compares to only 8% in APAC.
- **At the same time, manufacturers in APAC expect ease of recruitment to rise more so than do manufacturers in Europe.**
  - While nearly two-thirds (31%) of firms operating in APAC expect ease of recruitment to improve over the next six months, only 4% expect the same in Europe.

# The View From Companies Primarily Operating in North America



## Anticipated Direction of Key Business Indicators Next Six Months -- Primary Region: North America

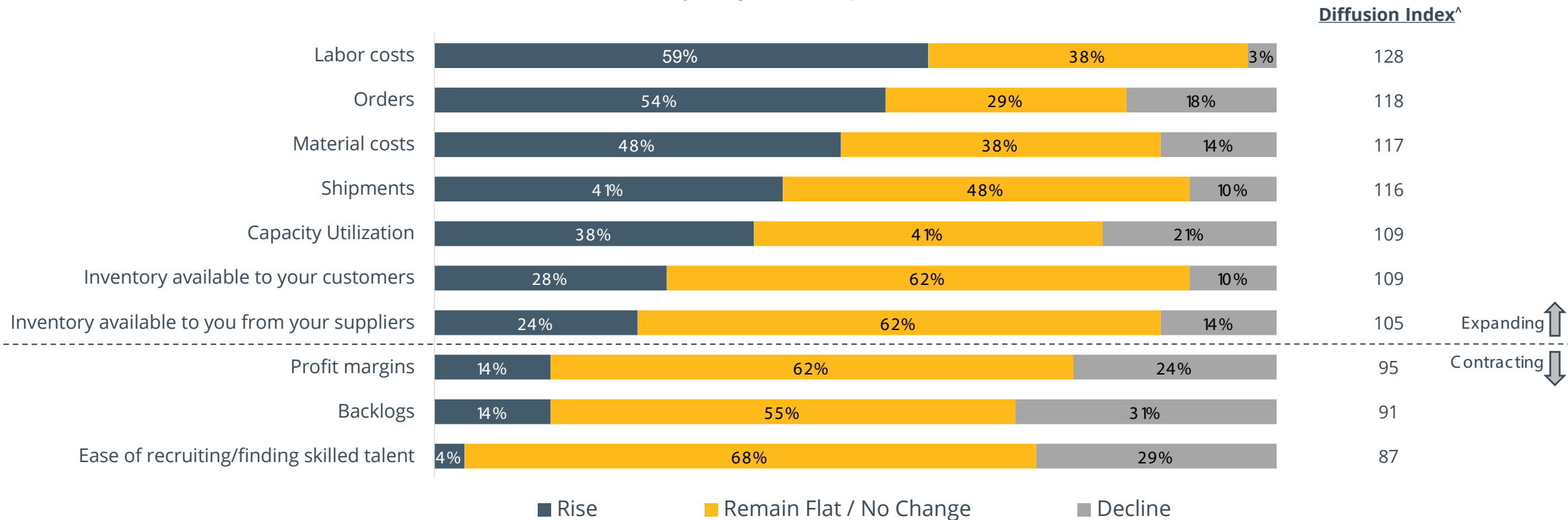


<sup>^</sup>A diffusion index is a statistical measure used to detect economic turning points.

# The View From Companies Primarily Operating in Europe



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



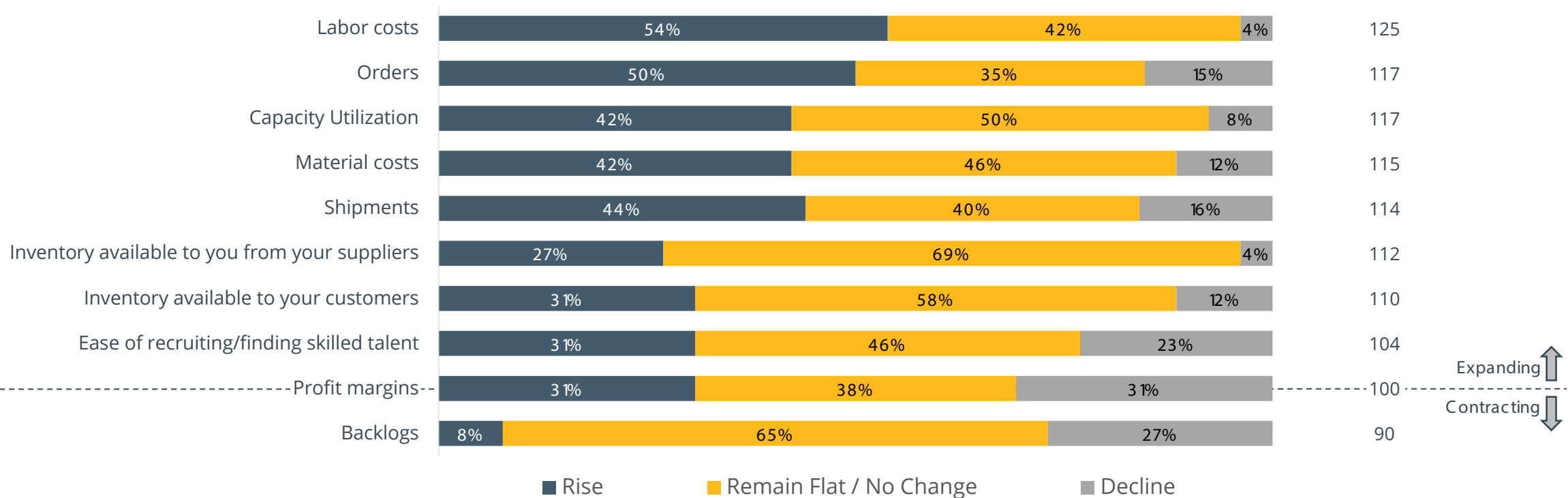
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# The View From Companies Primarily Operating in APAC



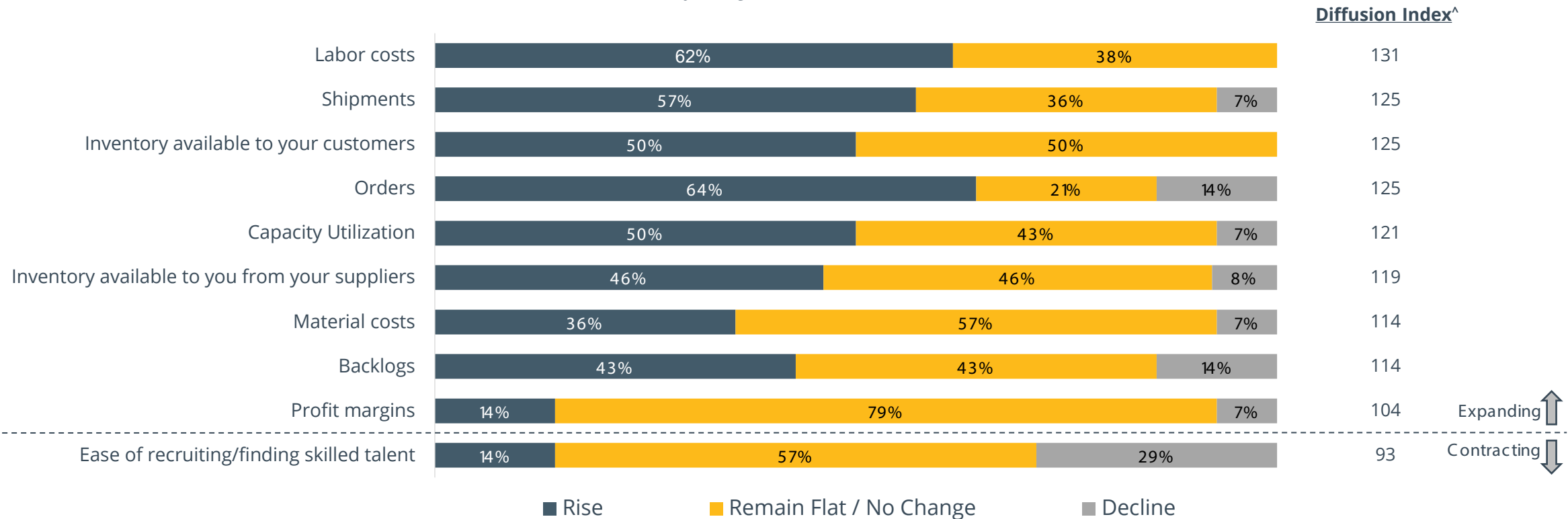
## Anticipated Direction of Key Business Indicators Next Six Months -- Primary Region: APAC

Diffusion Index<sup>^</sup>



<sup>^</sup>A diffusion index is a statistical measure used to detect economic turning points.

## Anticipated Direction of Key Business Indicators Next Six Months -- Primary Region: Global



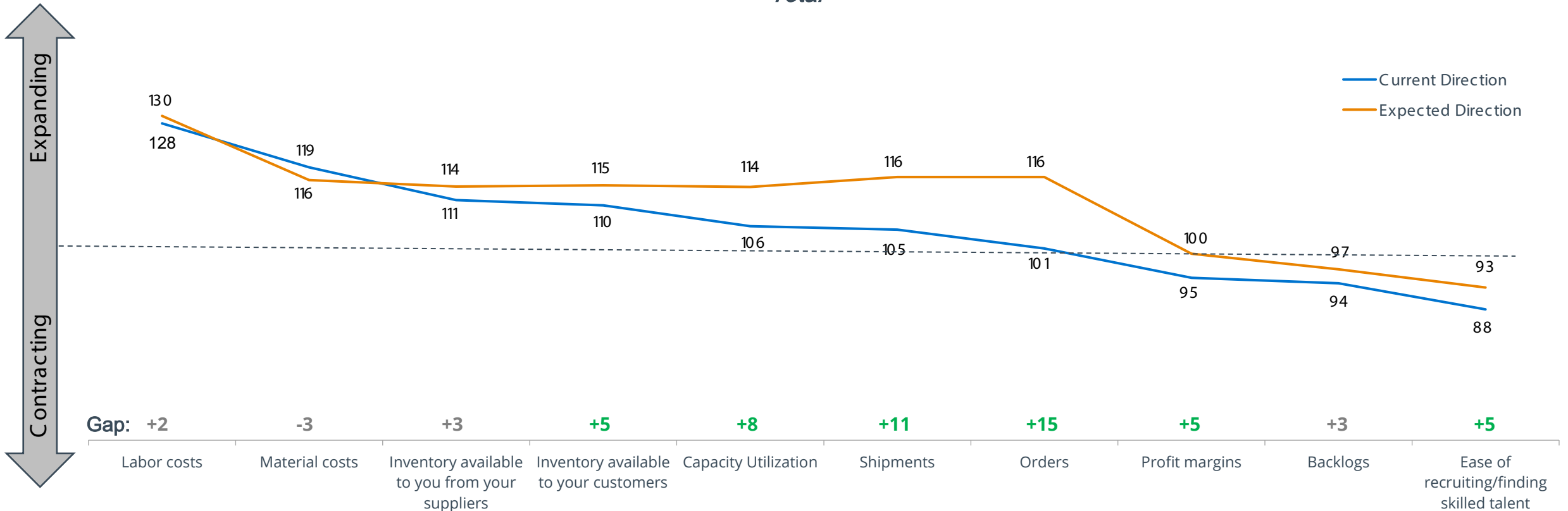
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# Orders, Shipments, Capacity Utilization, Customer Inventory, Profit Margins, and Ease of Recruitment are Expected to Rise Over the Next Six Months, While All Other Key Business Indicators are Expected to Remain Relatively Stable



## Direction of Key Business Indicators Diffusion Index

-- Total --

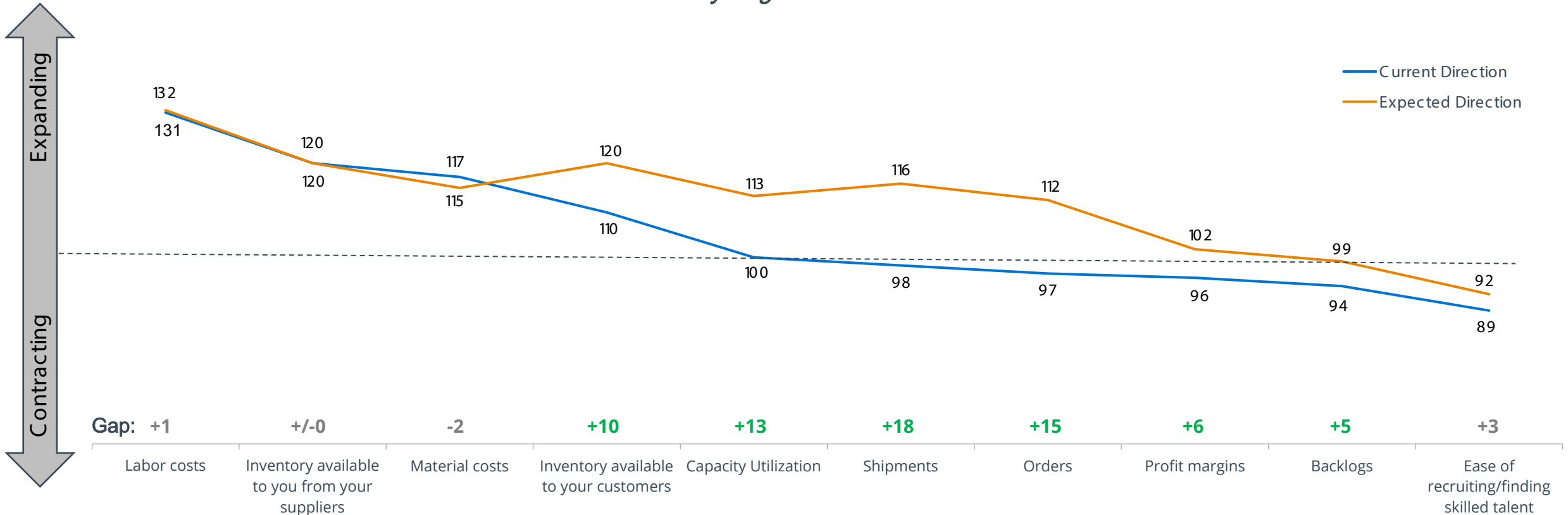


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# The View From Companies Primarily Operating in North America



**Direction of Key Business Indicators Diffusion Index**  
*-- Primary Region: North America*

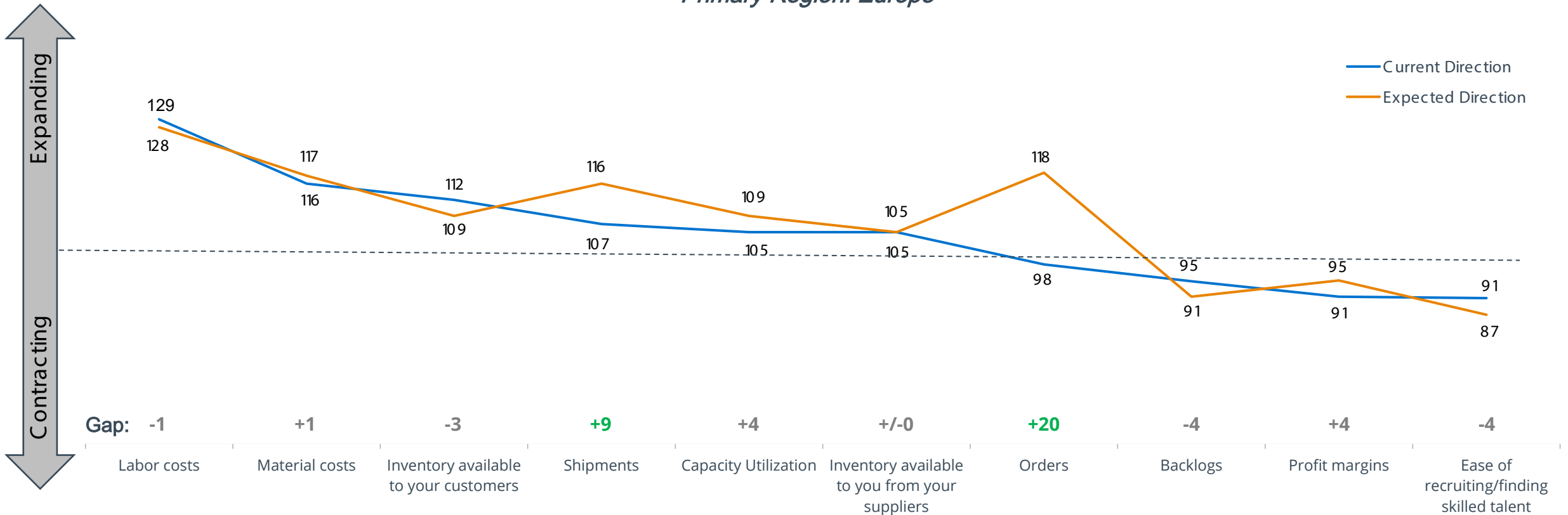


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# The View From Companies Primarily Operating in Europe



**Direction of Key Business Indicators Diffusion Index**  
 -- Primary Region: Europe



<sup>^</sup>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



<sup>^</sup>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*



<sup>^</sup>A diffusion index is a statistical measure used to detect economic turning points.

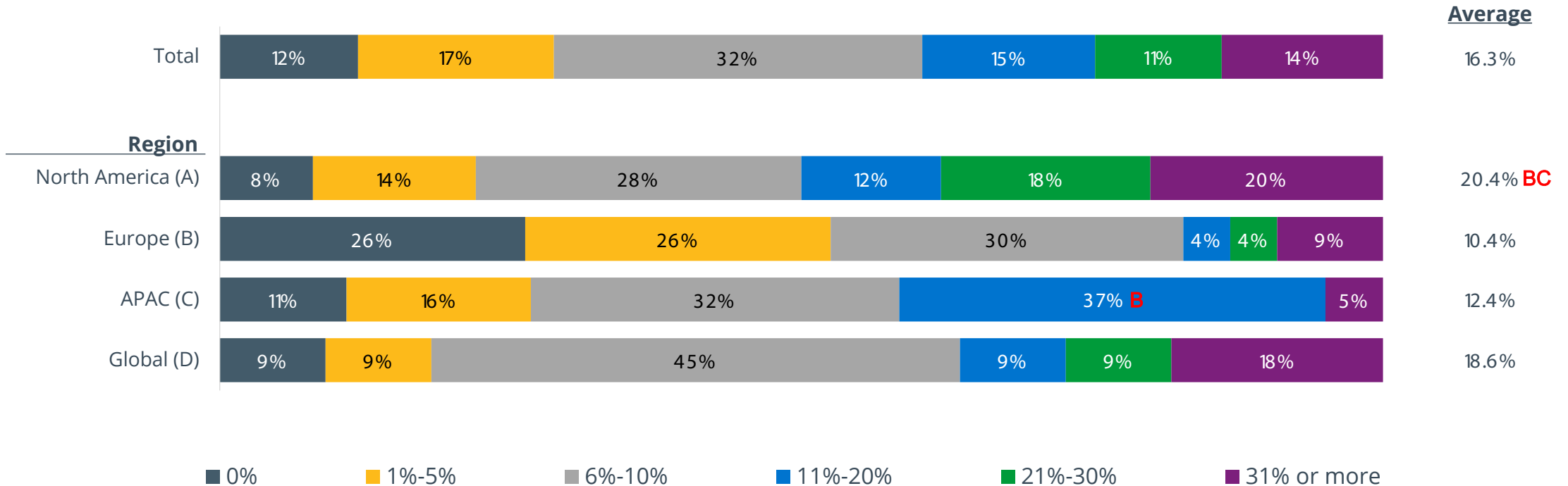
# December 2023 Special Questions

# If Domestically Sourced PCB Were to Experience a 25% Decline in Price, Electronics Manufacturers Would Expect Demand to Increase 16%, on Average



Notably, manufacturers in North America (20%) would expect a greater increase in demand when compared to that expected among manufacturers in both Europe (10%) and APAC (12%).

## Expected Increase in Demand if Domestically Sourced PCB Experienced a 25% Decline in Price



Q. If PCB sourced domestically were to experience a 25% decline in price, demand would rise by what percentage?

A/B/C/D Statistically significant at 90% confidence interval

# Appendix

# Current Conditions Diffusion Indices

Past 12 Month Comparisons (TOTAL)



	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	October 2023	November 2023	December 2023
Shipments	109	112	110	111	110	109	108	103	110	106	104	107	105
Orders	107	112	111	112	105	101	107	103	104	101	100	105	101
Profit margins	90	89	86	90	93	95	96	91	96	93	92	94	95
Backlogs	105	99	101	104	97	99	95	93	98	90	91	96	94
Ease of recruiting/finding skilled talent	88	87	84	91	89	92	90	92	92	89	88	87	88
Material costs	138	136	135	133	130	128	126	123	128	124	122	118	119
Labor costs	136	136	137	136	131	128	129	129	133	131	129	130	128
Capacity utilization	105	111	108	110	105	103	108	103	108	104	102	106	106
Inventory available to you from your suppliers	102	104	102	106	108	110	112	112	110	109	111	112	111
Inventory available to your customers	105	111	106	108	111	116	115	109	109	108	108	107	110

Δ+5 points or more vs. previous month

-5 points or more vs. previous month

# Outlook Diffusion Indices

Past 12 Month Comparisons (TOTAL)



	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	October 2023	November 2023	December 2023
Shipments	112	120	119	116	118	118	112	115	117	110	114	116	116
Orders	113	116	116	114	118	111	111	116	117	113	114	114	116
Profit margins	98	97	100	98	98	99	99	96	104	100	100	102	100
Backlogs	99	100	97	100	95	93	92	98	100	95	97	104	97
Ease of recruiting/finding skilled talent	93	95	95	93	95	95	93	95	95	91	91	89	93
Material costs	131	130	127	128	126	122	123	120	123	122	120	116	116
Labor costs	133	135	133	134	132	124	128	126	126	129	128	132	130
Capacity utilization	111	118	115	115	112	110	111	113	115	114	111	114	114
Inventory available to you from your suppliers	108	113	113	112	113	113	113	118	113	113	113	112	114
Inventory available to your customers	109	117	114	111	110	114	111	117	112	112	112	111	115

Δ+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 November 15 and November 30, 2023.





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