

The Current Sentiment of the Global Electronics Manufacturing Supply Chain

Monitoring the Pulse of the Global Electronics Industry March 2023

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Executive Summary



Despite growing economic uncertainties, the electronics manufacturing industry remains upbeat.

> Industry demand appears to remain intact

- The Order Index rose one point to 112.
- The Backlog Index rose 3 points to 104.

> Production remains steady

- The Shipment Index rose point and the Capacity Utilization Index rose 2 points.
- Inventory Available to Customers (IAC) Index rose 2 points and Inventory Available from Suppliers (IAS) Index rose 4 points to 106.

> Some labor challenges might be receding

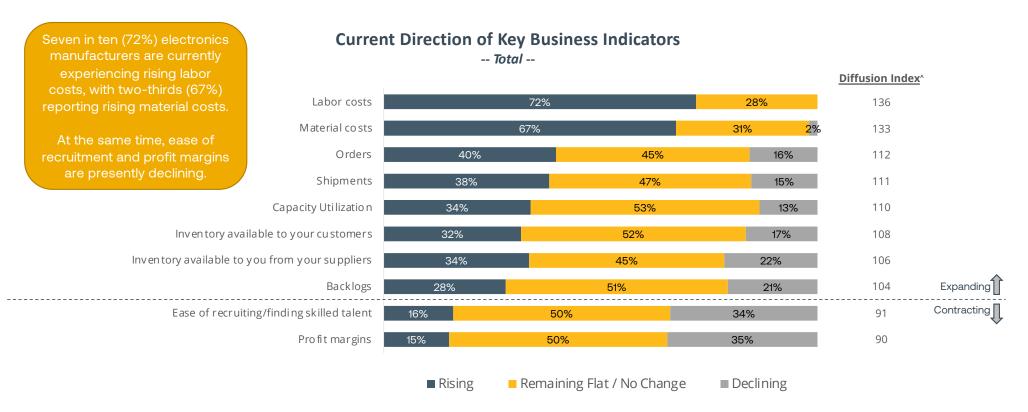
• The Ease of Recruiting Index rose 7 points, the biggest one month gain in the history of the index. While it remains below 100, suggesting the labor market remains tight, more companies are reporting that it is getting easier to find skilled talent.

> Companies expect to raise prices in 2023

- Roughly 58% of electronics manufacturers expect to raise prices in 2023.
- Among firms expecting to raise prices, companies report they will raise prices by 8% on average.
- While prices were up in 2022, many firms report price increases were not the primary reason for higher revenue during the year. More than half of electronics manufacturers report less than 20% of 2022 revenue growth was attributable to pricing impacts.

Current Conditions for the Electronics Supply Chain

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

Regional Differences in Current Conditions

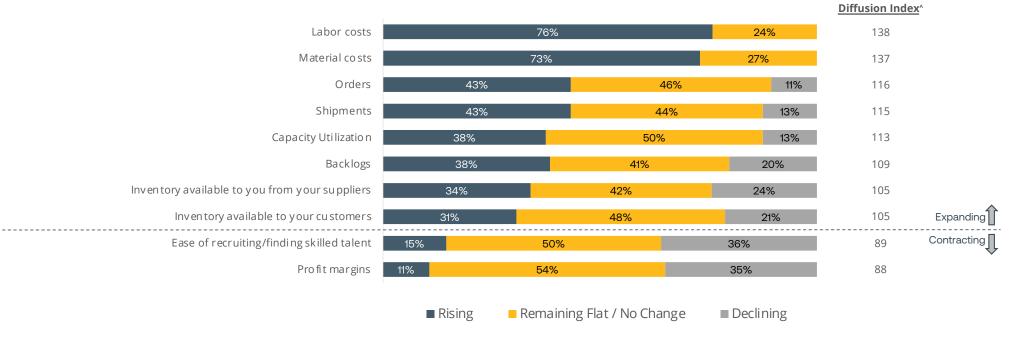


- Nearly two-fifths (38%) of firms in North America indicate backlogs are on the rise, while a significantly lower 8% of European firms and 14% of those in APAC are experiencing a current increase.
- Material costs are declining at a faster pace among manufacturers in Europe vs. those in North America
 - While 11% of firms in Europe indicate material costs are currently declining, 0% of firms in North America are presently reporting a decrease.

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The View From Companies Primarily Operating in North America

Current Direction of Key Business Indicators



-- Primary Region: North America --

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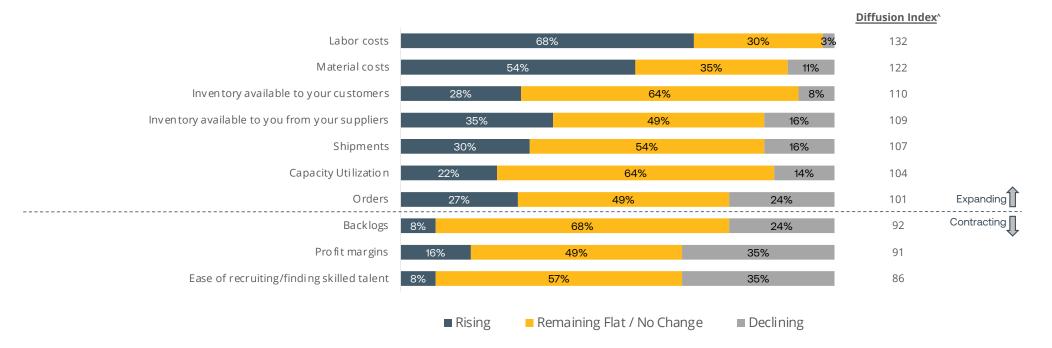
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The View From Companies Primarily Operating in Europe

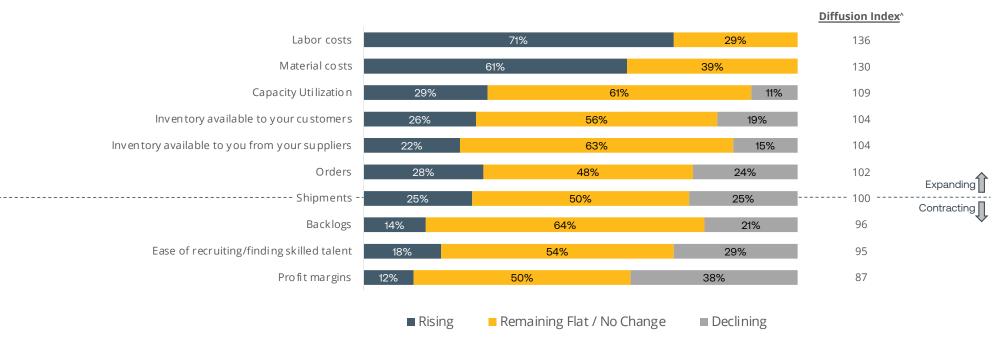
Current Direction of Key Business Indicators -- Primary Region: Europe --



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



The View From Companies Primarily Operating in APAC

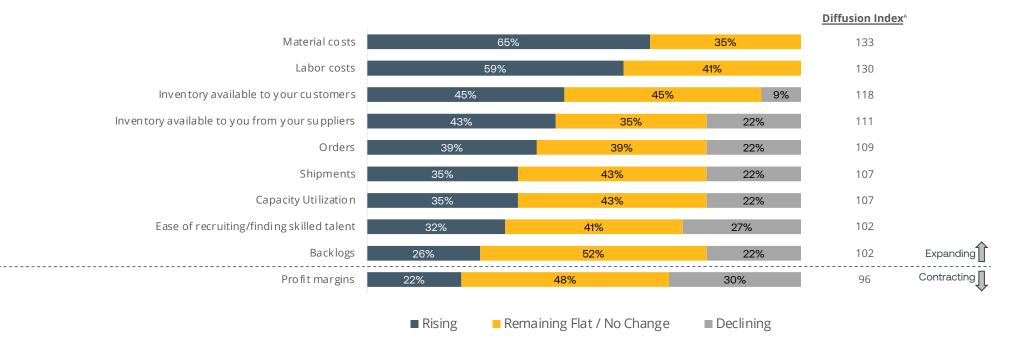


Current Direction of Key Business Indicators -- Primary Region: APAC --

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

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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.



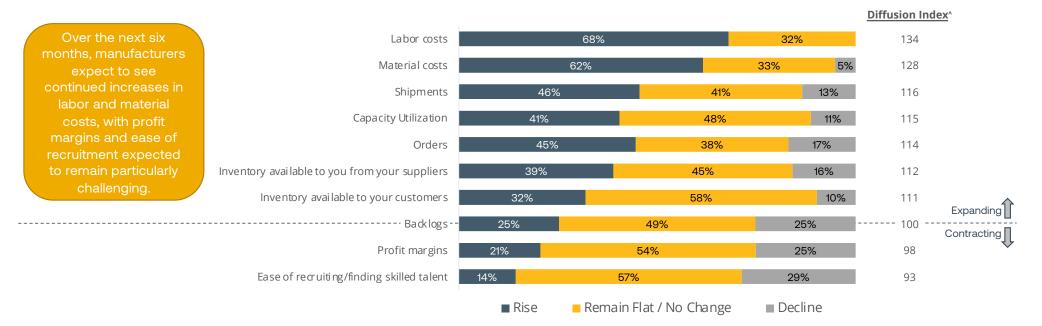
The Outlook for the Next 6 Months

Anticipated Direction of Key Business Indicators – Next Six Months

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-- Total --



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

Regional Differences in The Outlook



• One-third (34%) of firms in North America expect backlogs to rise over the next six months, which compares to a significantly lower 11% of European firms and 7% of those in APAC expecting an increase.

The View From Companies Primarily Operating in North America

Anticipated Direction of Key Business Indicators – Next Six Months

Labor costs 72% 28% 136 Material costs 67% 27% 6% 131 Shipments 52% 35% 13% 119 Orders 49% 35% 16% 116 Capacity Utilization 40% 51% 9% 116 Inventory available to you from your suppliers 38% 40% 21% 109 Inventory available to your customers 32% 54% 14% 109 Expanding Backlogs 34% 47% 19% 107 Contracting Profit margins 98 19% 58% 23% Ease of recruiting/finding skilled talent 14% 57% 29% 93 Remain Flat / No Change Decline Rise

-- Primary Region: North America --

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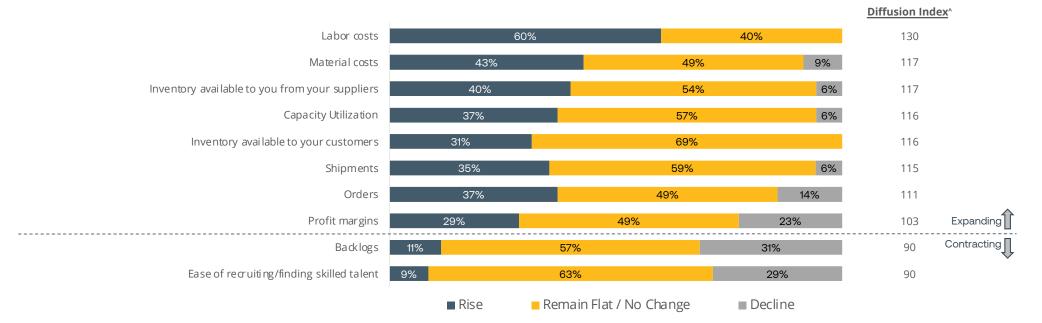
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Diffusion Index[^]

The View From Companies Primarily Operating in Europe

Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: Europe --



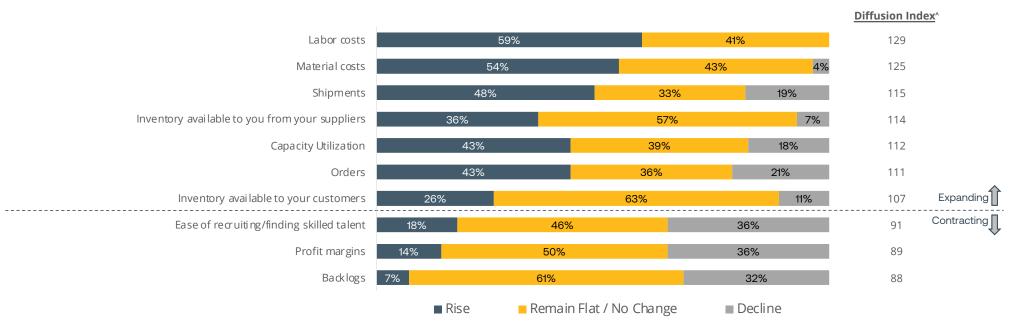
A diffusion index is a statistical measure used to detect economic turning points.





The View From Companies Primarily Operating in APAC

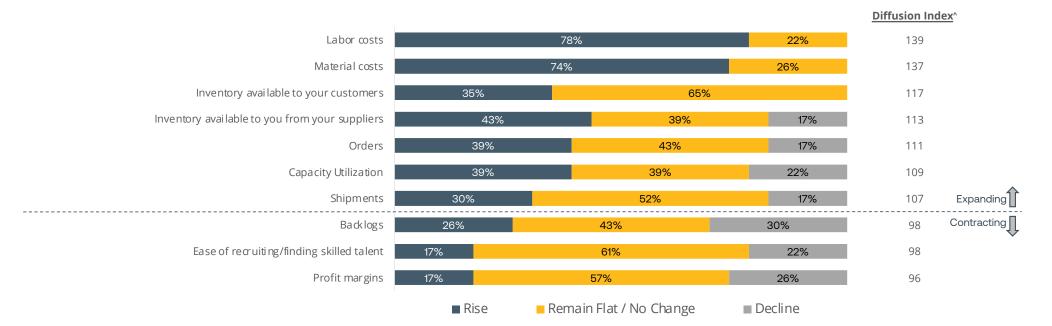
Anticipated Direction of Key Business Indicators – Next Six Months -- Primary Region: APAC --



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 --



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





Labor Costs, Orders, Customer Inventory, Backlogs, and Ease of Recruitment Expected to Remain Relatively Stable

While manufacturers anticipate material costs will decline over the next six months, profit margins, supplier inventory, shipments, and capacity utilization are expected to rise.



Direction of Key Business Indicators – Diffusion Index[^] -- Total --

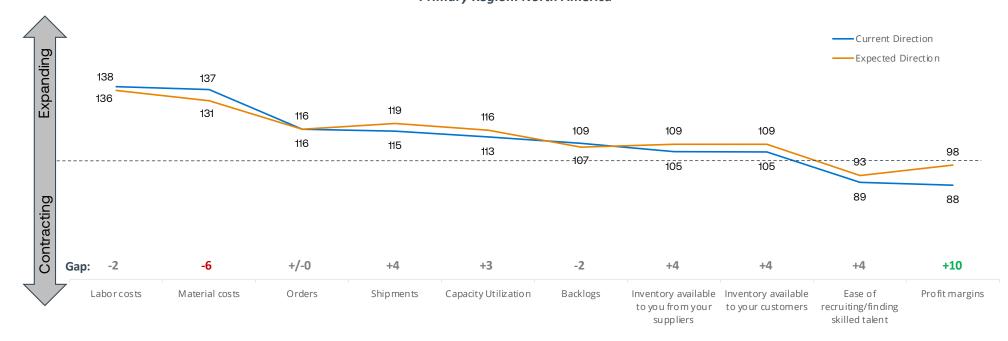
A diffusion index is a statistical measure used to detect economic turning points

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The View From Companies Primarily Operating in North America



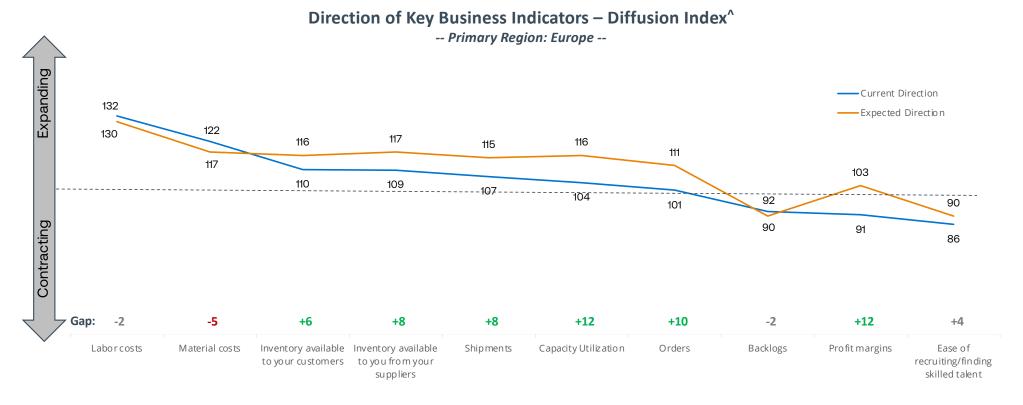
Direction of Key Business Indicators – Diffusion Index[^] -- Primary Region: North America --

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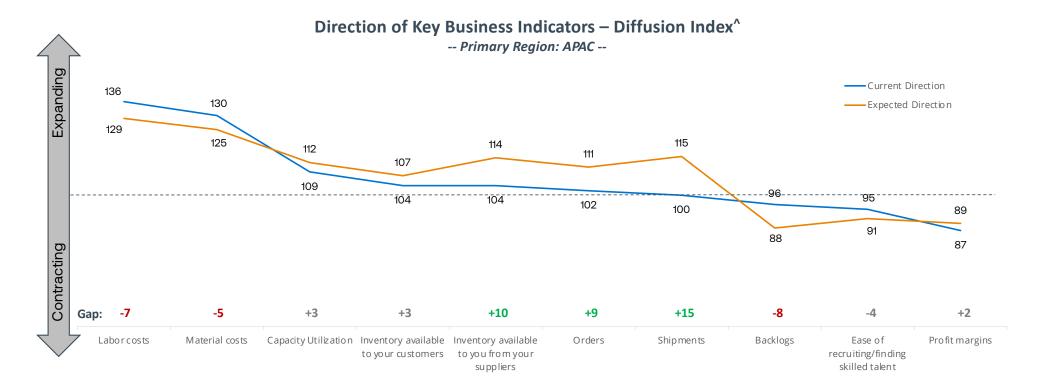
The View From Companies Primarily Operating in Europe



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

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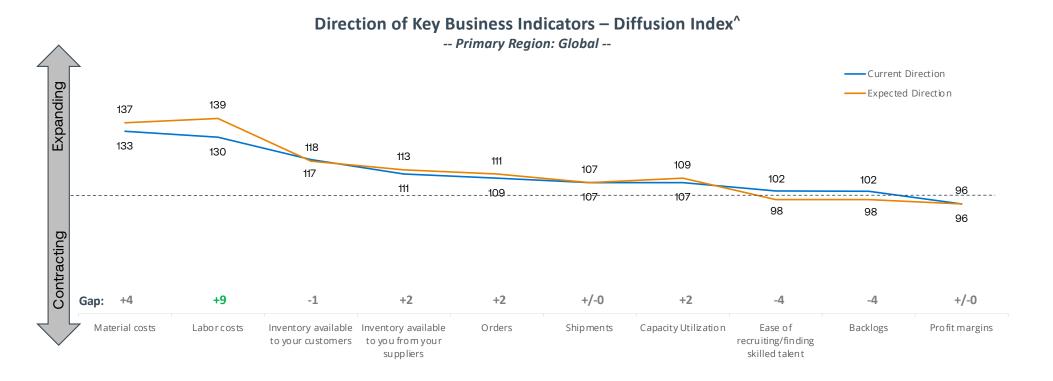
The View From Companies Primarily Operating in APAC



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

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The View From Companies Primarily Operating Globally



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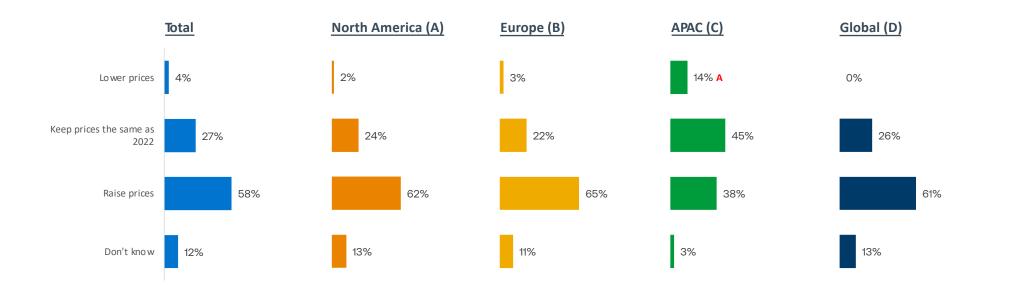
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March 2023 Special Questions

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Three-Fifths (58%) of Manufacturers Expect Their Company to Raise Prices in 2023, Which is Consistent Across North American, European, and Global Manufacturers

Directionally, manufacturers in APAC are less likely expecting 2023 price increases, with firms in this region being more likely to indicate their company will instead lower prices in the year ahead, particularly in comparison to firms operating primarily in North America.



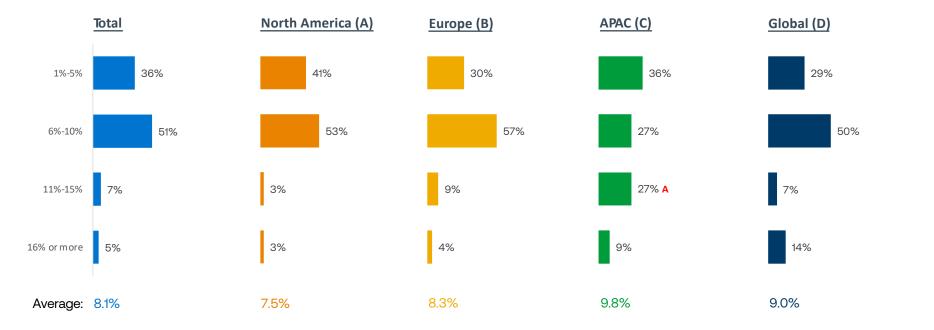
2023 Pricing Plans

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Among Firms Anticipating a 2023 Price Increase, the Average is Expected to be 8%

While North American and European manufacturers' expectations are aligned at 8%, firms operating Globally are expecting a 9% increase, with firms in APAC expecting closer to 10%, which is driven by a significantly higher proportion of APAC firms estimating price increases to be in the range of 11%-15%.



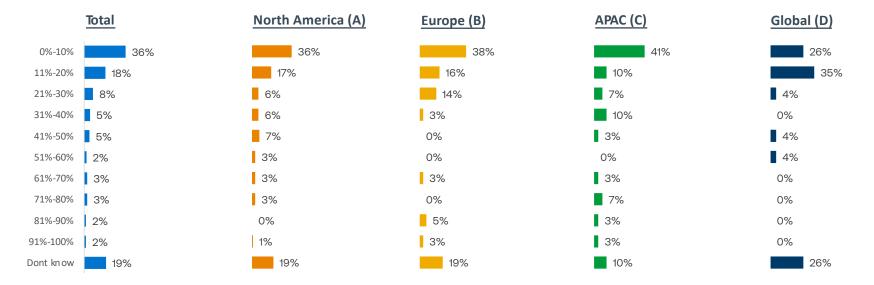
Anticipated 2023 Price Increase -- Among Those Expecting a 2023 Price Increase --

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The Majority of Manufacturers Indicate Less than 10% of 2022 Revenue Growth was Attributable to Pricing Impacts, Which Holds True for Manufactures in North America, Europe, and APAC

However, Global manufacturers are directionally more likely to attribute a higher 11%-20% of their revenue growth to pricing impacts in 2022.



Percentage of 2022 Revenue Growth Attributable to Pricing Impacts

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Appendix

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Current Conditions Diffusion Indices

Past 12 Month Comparisons (TOTAL)

	March 2022	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023
Material costs	142	146	145	146	144	142	139	141	139	138	136	135	133
Labor costs	138	134	138	137	139	138	136	136	139	136	136	137	136
Orders	124	121	119	118	115	112	109	112	109	107	112	111	112
Backlogs	119	114	120	119	114	111	107	110	108	105	99	101	104
Shipments	115	115	114	114	111	110	112	111	106	109	112	110	111
Capacity utilization	113	114	110	104	107	110	109	110	107	105	111	108	110
Profit margins	86	85	89	85	84	86	86	89	87	90	89	86	90
Inventory available to your customers	109	94	94	91	96	102	106	101	102	105	111	106	108
Ease of recruiting/finding skilled talent	78	79	81	79	80	85	85	84	84	88	87	84	91
Inventory available to you from your suppliers	78	83	79	82	86	94	96	99	98	102	104	102	106

 Δ +5 points or more vs. previous month

 \triangle -5 points or more vs. previous month

Outlook Diffusion Indices



Past 12 Month Comparisons (TOTAL)

	March 2022	April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023
Material costs	139	140	138	140	138	136	131	134	131	131	130	127	128
Labor costs	136	135	134	135	139	136	134	136	135	133	135	133	134
Orders	123	121	122	119	120	117	113	108	110	113	116	116	114
Backlogs	110	109	114	112	103	104	99	100	100	99	100	97	100
Shipments	121	117	119	115	120	117	116	114	112	112	120	119	116
Capacity utilization	116	116	116	112	115	114	117	112	111	111	118	115	115
Profit margins	97	94	97	90	92	95	93	95	94	98	97	100	98
Inventory available to your customers	103	101	100	102	105	107	111	114	106	109	117	114	111
Ease of recruiting/finding skilled talent	86	88	86	90	88	88	92	86	90	93	95	95	93
Inventory available to you from your suppliers	94	93	92	92	102	104	107	108	110	108	113	113	112

 Δ +5 points or more vs. previous month

 Δ -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 February 10 and February 28, 2023.







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