

The Current Sentiment of the Global Electronics Manufacturing Supply Chain

Monitoring the Pulse of the Global Electronics Industry

June 2022



Executive Summary



- > 78% of Electronics Manufacturers are Worried about a Recession in 2023
 - 68% of electronics manufacturers are worried about a recession in 2022
- > 86% of Electronics Manufacturers are Concerned about Inflation
- > 8 in 10 Electronics Manufacturers are Concerned about Extended Supply Chain Disruptions Due to a Prolonged Russia-Ukraine War
 - Global (59%) and European (49%) manufacturers are more likely to indicate they are "extremely worried" about a prolonged Russia-Ukraine war extending supply chain disruptions, whereas North American manufacturers are more likely to be "somewhat worried" (62%) and APAC manufacturers are more likely "not at all worried" (13%).
- Higher Costs Continue to Dominate Electronics Industry Narrative
 - Nine in ten electronics manufacturers are currently experiencing rising material costs and three-fourths are experiencing rising labor costs. This is little changed in recent months.
 - Rising labor costs appear most acute in North America where 86% of manufacturers report labor costs are currently rising. Only 58% of European manufacturers are experiencing an increase.

Executive Summary Part II



> Capacity Utilization Index slips 6 percentage points

The Capacity Utilization Index remains in expansionary territory, but slipped 6 percentage points this month to 104.
 This shift likely reflects continued supply chain challenges. Production rates have suffered as companies have had to wait for parts.

> Profit Margins Remain Weak

- The Profit Margin Index fell 4 percentage points to 85, remaining well within contractionary territory. Weak profit margins is likely a result of rapidly rising costs that have not been offset by higher prices.
- While 29% of Global manufacturers report profit margins are rising, only 7% of those in North America indicate the same.
- The Profit Margin Outlook Index fell 7 percentage points, suggesting a majority of firms expect profit margins to remain weak

Current Conditions for the Electronics Supply Chain Remain Challenging

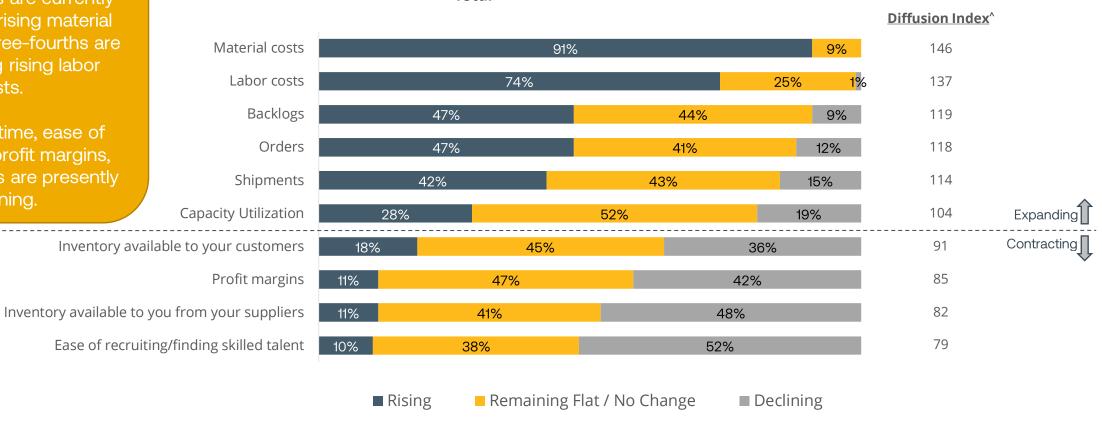


Nine in ten electronics manufacturers are currently experiencing rising material costs, while three-fourths are experiencing rising labor costs.

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



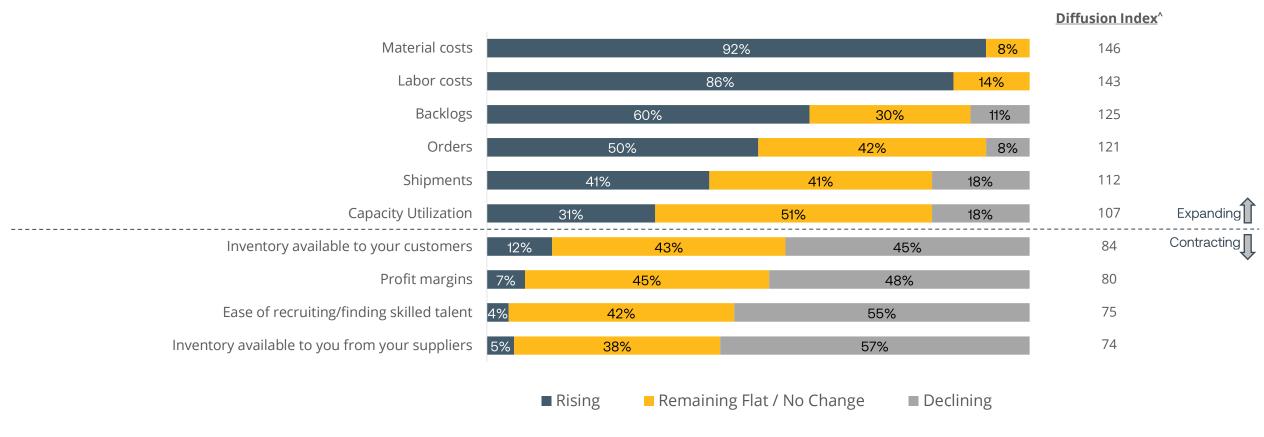
- Profit margins are rising for fewer North American firms than for those operating Globally.
 - While 29% of Global manufacturers report profit margins are rising, only 7% of those in North America indicate the same.
- Labor costs are rising for more North America firms than European firms.
 - 86% of manufacturers in North America report labor costs are currently rising, while only 58% of European manufacturers are experiencing an increase.

The View From Companies Primarily Operating in North America



Current Direction of Key Business Indicators

-- Primary Region: North America --



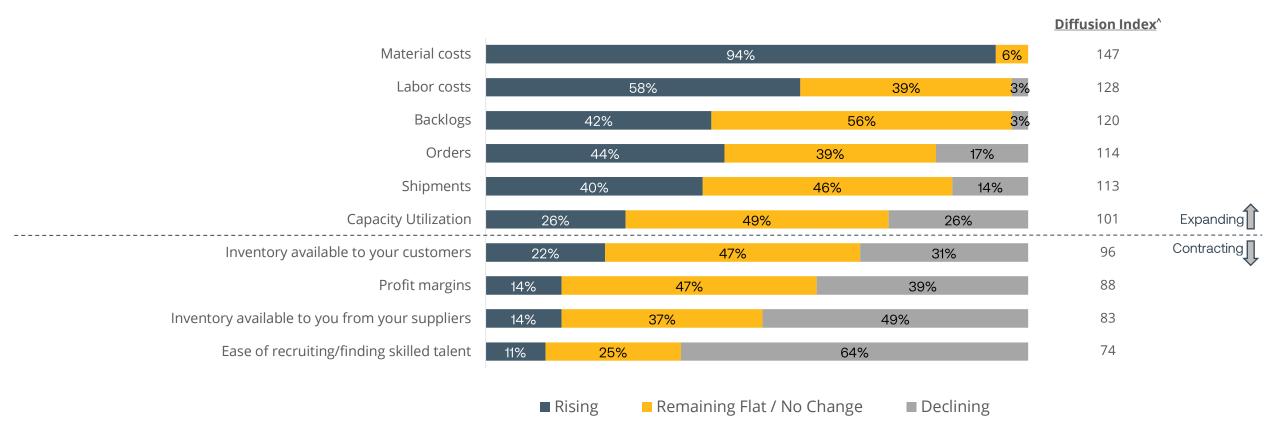
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The View From Companies Primarily Operating in Europe



Current Direction of Key Business Indicators

-- Primary Region: Europe --



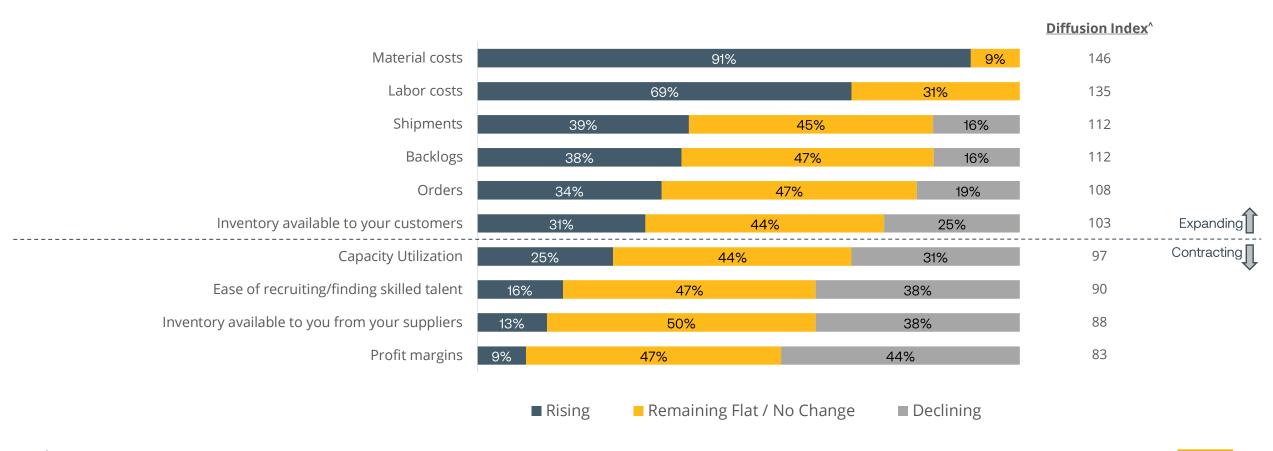
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The View From Companies Primarily Operating in APAC



Current Direction of Key Business Indicators

-- Primary Region: APAC --



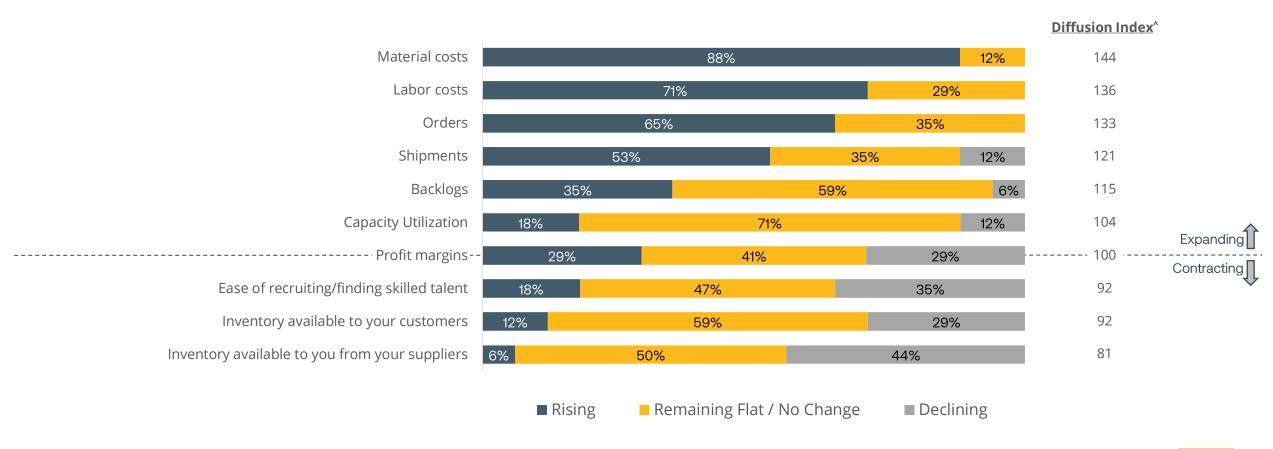
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The View From Companies Primarily Operating Globally



Current Direction of Key Business Indicators

-- Primary Region: Global --



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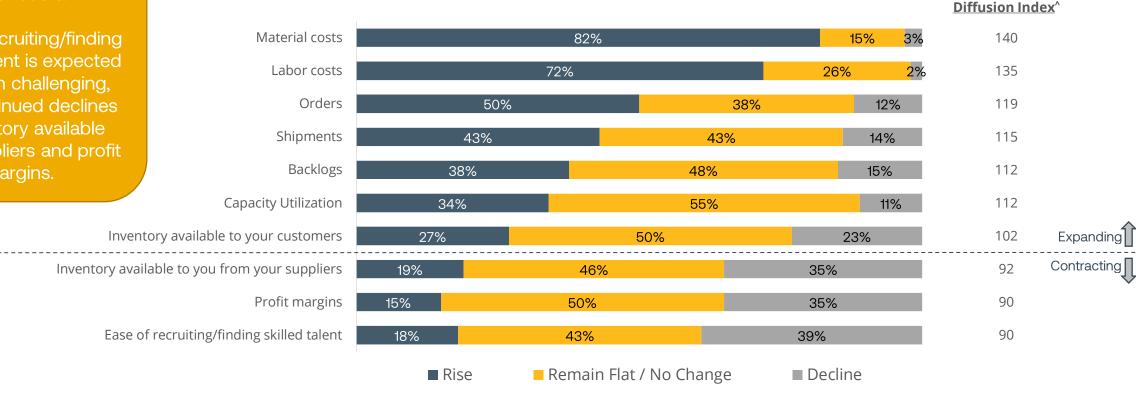
The Outlook for the Next 6 Months: Continued **Challenging Conditions**



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

Ease of recruiting/finding skilled talent is expected to remain challenging, with continued declines in inventory available from suppliers and profit margins.

Anticipated Direction of Key Business Indicators – Next Six Months -- Total --



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

Regional Differences in the Outlook



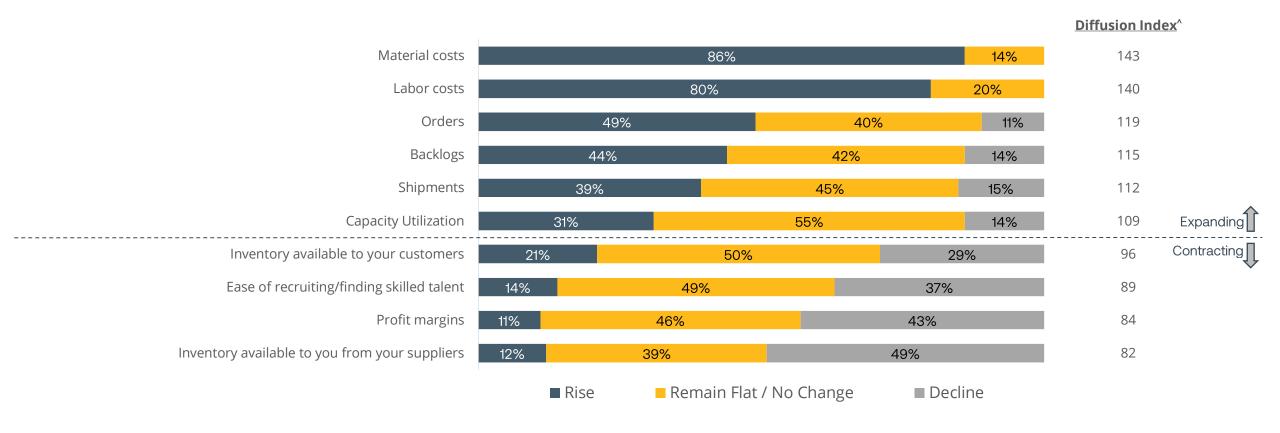
- Among firms operating Globally, profit margins are expected to rise at a higher rate vs. North America and APAC.
 - 41% of Global manufacturers anticipate profit margins to rise in the next six months, compared to only 11% of manufacturers in North America and 6% of those in APAC.
- Ease of recruitment is expected to improve more so in the next six months among firms operating Globally when compared to North American and European manufacturers.
 - 41% of Global manufacturers expect ease of recruitment to improve, which compares to only 14% of manufacturers in North America and 12% of those in Europe.
- Material costs are expected to decline more so among firms operating in APAC vs. North American firms.
 - 9% of manufacturers in APAC anticipate material costs to decline in the next six months, whereas no (0%)
 manufacturers in North America expect to see the same.
- Outlook concerning inventories available from suppliers is more positive among manufacturers operating Globally compared to North American and European manufacturers.
 - 53% of Global manufacturers believe inventory available from suppliers will rise in the next six months vs. a significantly lower 12% in North America and 14% in Europe.

The View From Companies Primarily Operating in North America



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: North America --



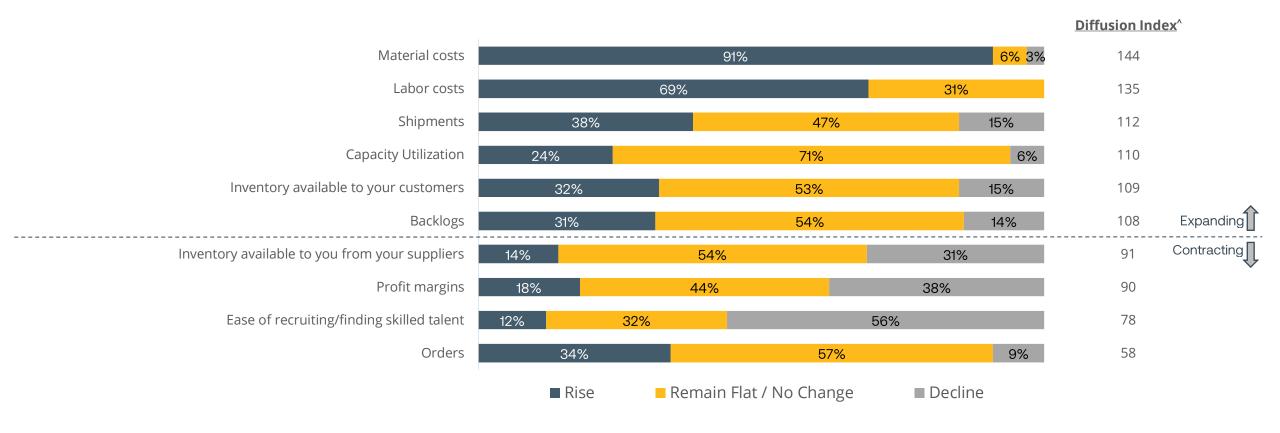
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The View From Companies Primarily Operating in Europe



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: Europe --

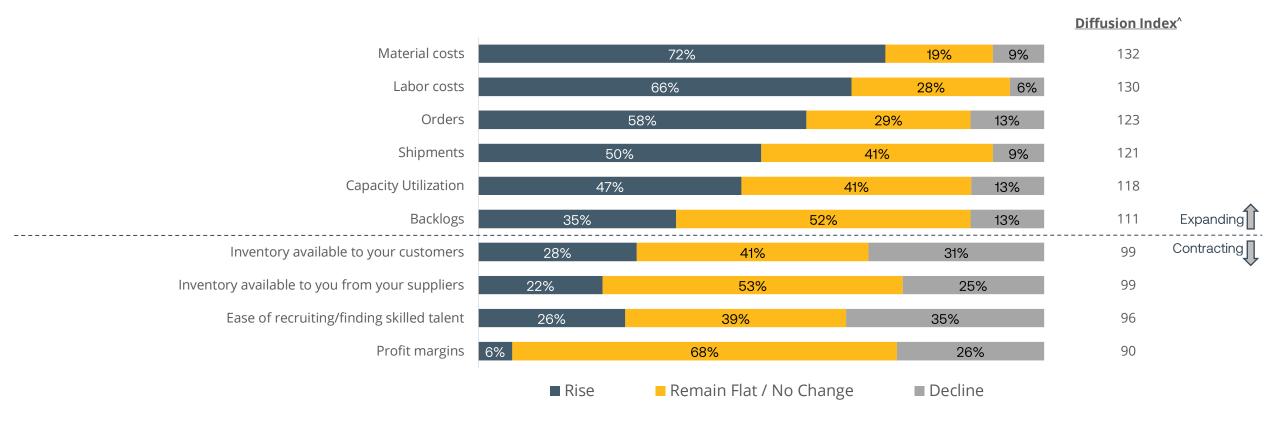


The View From Companies Primarily Operating in APAC



Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: APAC --

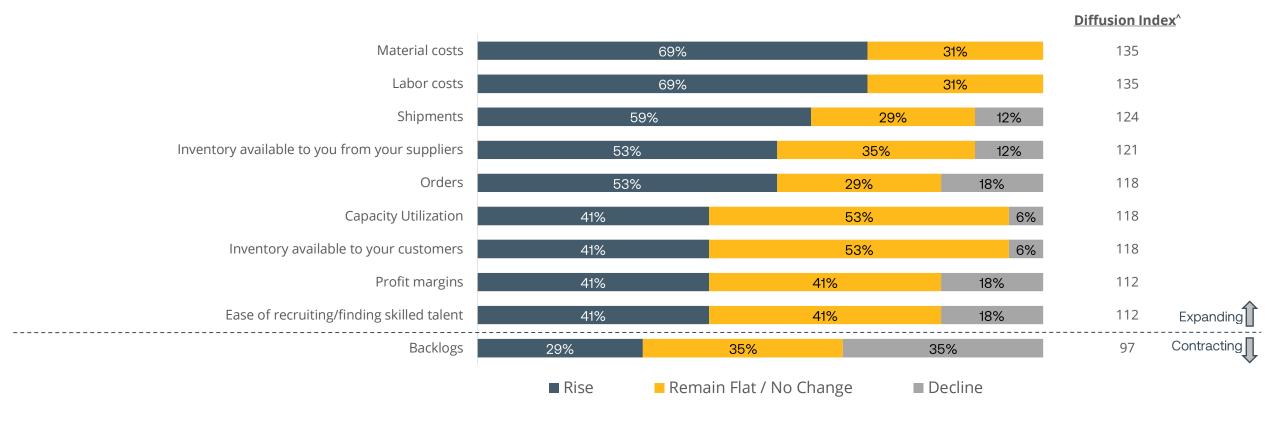


The View From Companies Primarily Operating Globally



Anticipated Direction of Key Business Indicators – Next Six Months

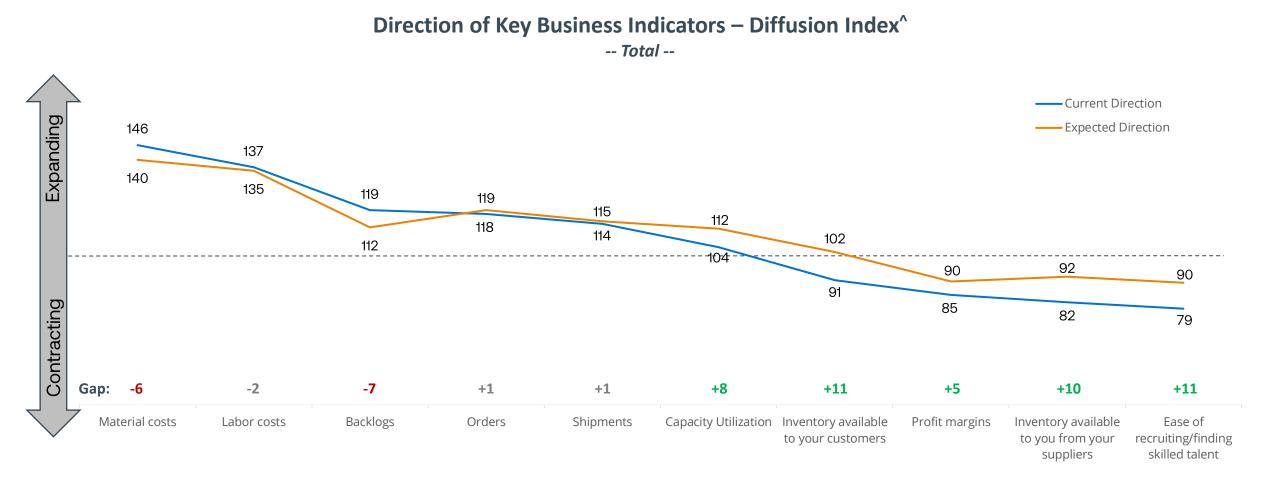
-- Primary Region: Global --



Labor Costs, Orders, and Shipments are Expected to Remain Relatively Stable in the Next Six Months



Although manufacturers anticipate material costs and backlogs to decline, they do expect to see improvement regarding ease of recruitment, inventories, capacity utilization, and profit margins.



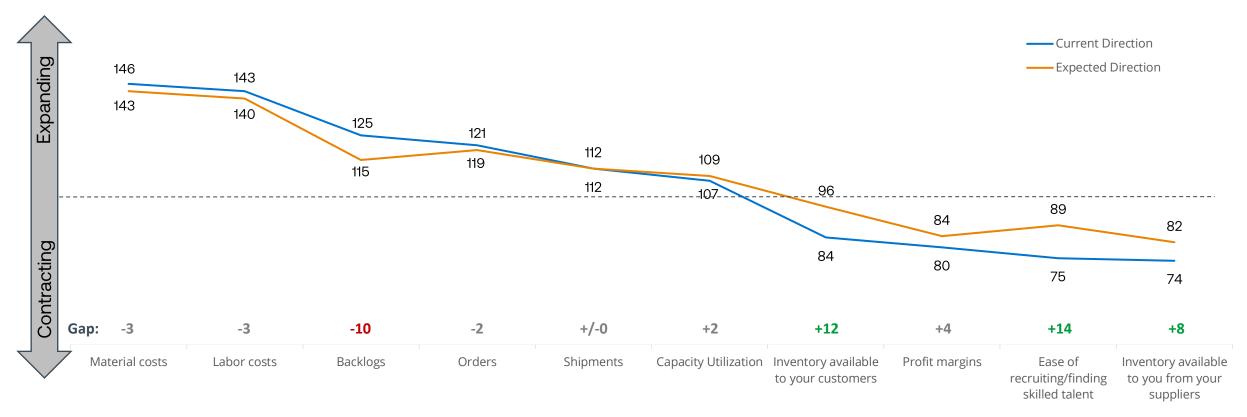
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The View From Companies Primarily Operating in North America



Direction of Key Business Indicators – Diffusion Index^



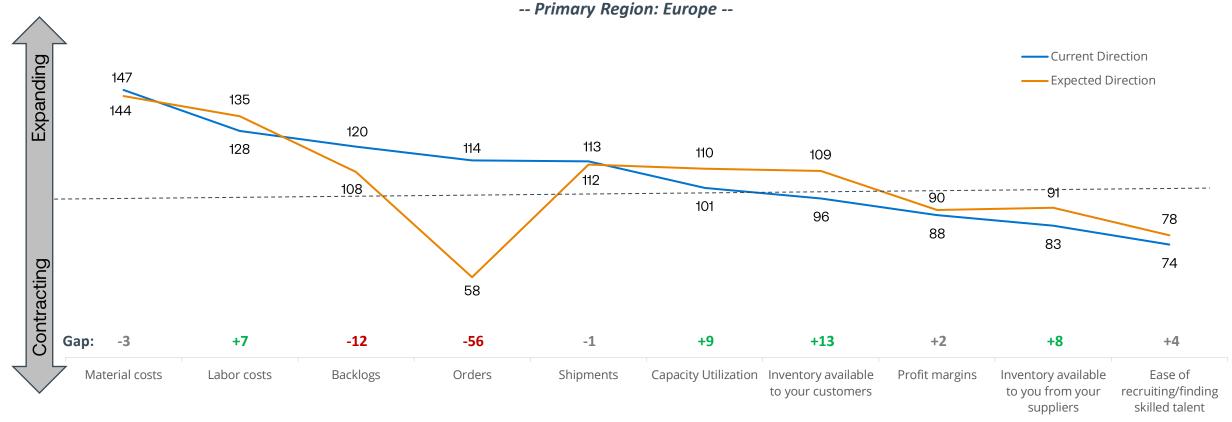


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The View From Companies Primarily Operating in Europe







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The View From Companies Primarily Operating in APAC



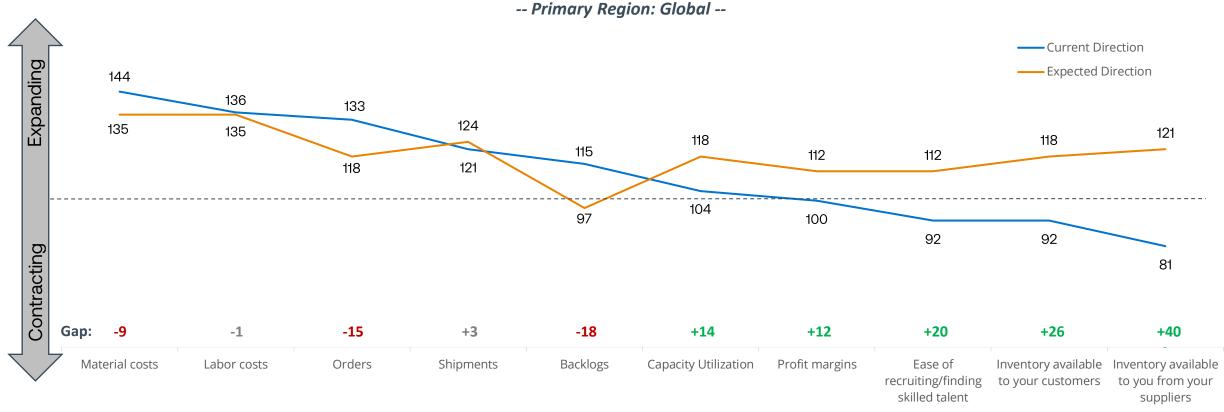




The View From Companies Primarily Operating Globally







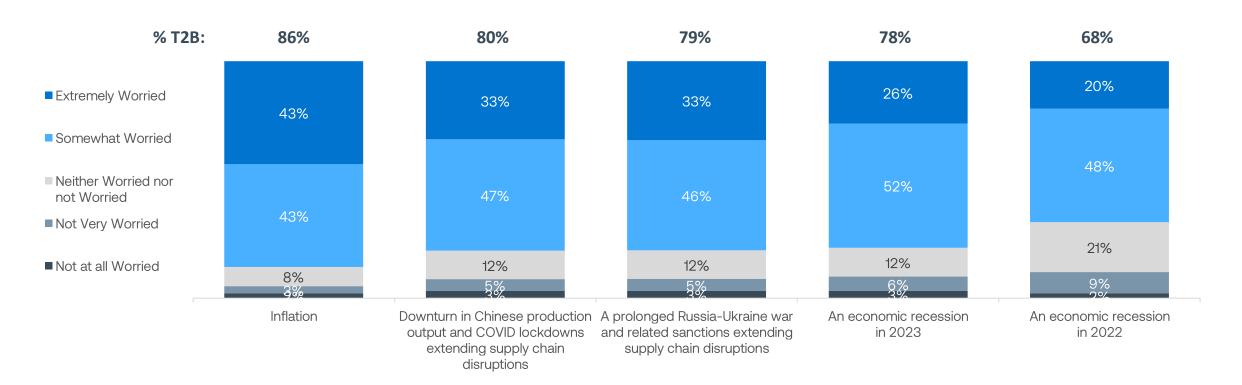
June 2022 Special Questions

Just Under Nine in Ten Manufacturers are Concerned About Inflation, While Eight in Ten are Concerned About Extended Supply Chain Disruptions Due to Either Covid Lockdowns in China or a Prolonged Russia-Ukraine War



While the majority of manufacturers indicate they are worried about a potential economic recession being on the horizon, concern for a recession occurring in 2023 is more pronounced vs. that for a 2022 recession (78% vs. 68%, respectively).

Level of Concern



Regional Differences in Level of Concern



- Global and European firms are more concerned about extended supply chain disruptions due to a prolonged Russia-Ukraine war.
 - Global (59%) and European (49%) manufacturers are more likely to indicate they are "extremely worried" about a prolonged Russia-Ukraine war extending supply chain disruptions, whereas North American manufacturers are more likely to be "somewhat worried" (62%) and APAC manufacturers are more likely "not at all worried" (13%).
- At the same time, Global and North American manufacturers tend to be more concerned about inflation.
 - Global (63%) and North American (51%) manufacturers are more likely to be "extremely worried" about inflation vs. firms primarily operating in Europe (29%) and APAC (27%).
- Manufactures in APAC are less concerned about an economic recession occurring in 2023.
 - Manufacturers in APAC (9%) are more likely to indicate they are "not at all worried" about an
 economic recession in 2023 compared to 0% among North American firms.

Many Electronics Manufacturers Indicate They Have Increased Pay in an Effort to Hire and/or Retain Workers



Other actions commonly taken include offering increased benefits, added bonuses, referral incentives, and flexible work schedules/arrangements; in addition, manufacturers are also looking towards outside resources, including educational institutions and recruitment/employment agencies, to help in finding workers, with a focus on training and upskilling, even for those coming into industry with limited or no prior experience.

Actions Being Taken to Hire/Retain Workers



"Increase in pay, addition of bonuses, and more vacation time."

"Everything possible!!! We have created multiple flexible schedules, relaxed attendance policies beyond imagination, increased pay rate significantly, are working with multiple agencies, and we are hiring 2nd chance workers, etc..... Still need more production staff!"

"Increasing salary, offering flexible work schedule, offering work remote, and more benefits at work."

"Flexible work hours, continuing education, pay increases."

``Adding intern programs, increasing wages, enhanced training and introduction programs, offering higher finder's fees.''

"Additional bonus, pay hike, performance-based incentives, personal benefits."

"Billboards, job fairs, referral bonuses, social platform advertising."

"Increased use of referrals from existing employees by offering an enhanced bonus."

"Looking at universities and community colleges to find local talent that we will need to educate, but have basic electronics knowledge."

"Loosening job eligibility requirements, offering tuition reimbursement, post-education employment, and improved wages."

"Training new employees with correct aptitude but no experience."

"Using recruitment agencies, reviewing pay and conditions."

"Working hard to create a healthy supportive environment, pay increases, hybrid work options, bonuses."

Note: Larger-sized font indicates greater number of mentions

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
Material costs	144	144	145	145	143	142	146	145	146
Labor costs	133	136	135	137	138	138	134	138	137
Orders	127	124	123	123	120	124	121	119	118
Backlogs	125	122	124	124	122	119	114	120	119
Sales*	124	123	122						
Shipments [^]				117	112	115	115	114	114
Capacity utilization	114	115	110	114	111	113	114	110	104
Profit margins	96	91	90	87	82	86	85	89	85
Inventory available to your customers	89	92	87	91	88	109	94	94	91
Ease of recruiting/finding skilled talent	77	80	77	78	80	78	79	81	79
Inventory available to you from your suppliers	73	78	73	77	78	78	83	79	82

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
Material costs	136	139	138	139	142	139	140	138	140
Labor costs	131	135	133	133	137	136	135	134	135
Orders	126	128	126	125	121	123	121	122	119
Backlogs	112	116	116	120	113	110	109	114	112
Sales*	128	129	127						
Shipments [^]				120	119	121	117	119	115
Capacity utilization	119	118	116	118	118	116	116	116	112
Profit margins	103	100	96	92	94	97	94	97	90
Inventory available to your customers	100	100	99	97	99	103	101	100	102
Ease of recruiting/finding skilled talent	91	88	86	82	87	86	88	86	90
Inventory available to you from your suppliers	95	92	88	90	93	94	93	92	92

△+5 points or more vs. previous month

△-5 points or more vs. previous month

*Removed January 2022 ^Added January 2022

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 May 10 to May 28, 2022.





Questions? Please contact:

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