

Orr & Boss July 2021 Newsletter

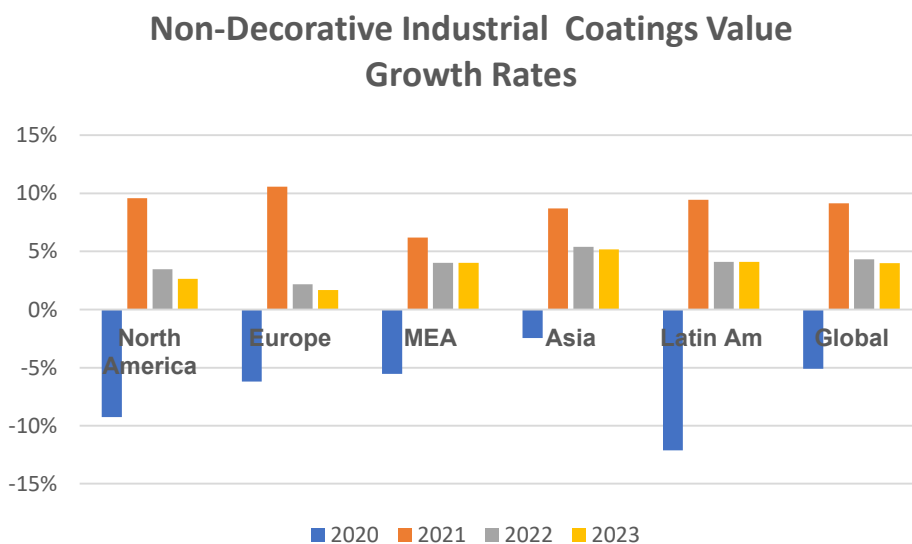
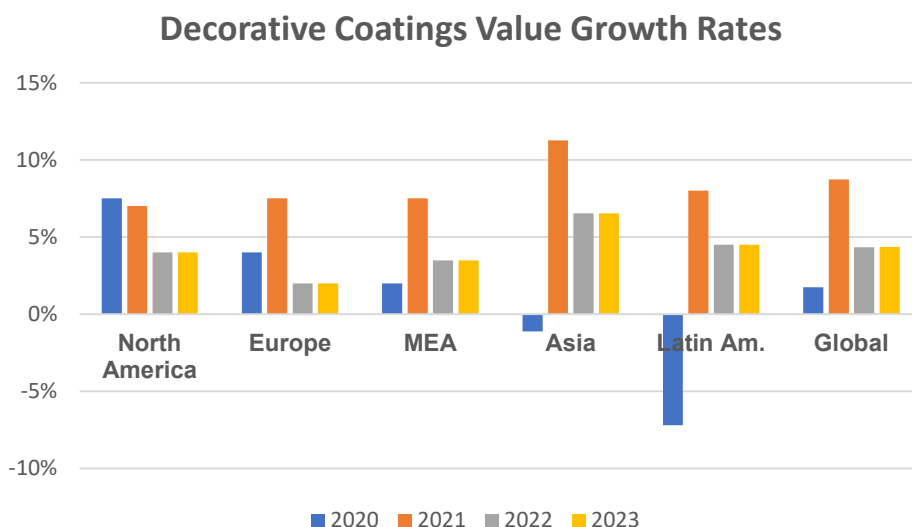
Summary

- The current Orr & Boss forecasts are for decorative coatings to grow by 8.7% and non-decorative coatings to grow by about 9.1% in 2021.
- Raw material prices are up by an estimated 20% from year-end 2020 levels. Raw material price increases are a bit higher in Europe (20-25% range) and slightly lower in Asia (15-20%) with North American price increases around 20%.
- We are seeing some signs of moderation in overall pricing or at least raw material prices are not rising at the rate that they were in March and April. We expect prices to remain high through year-end before easing next year. Supply and availability of raw materials continue to be issues. Logistics bottlenecks also continue to plague the industry.
- Housing markets in North America remain strong but there is moderation in the markets. Existing home sales are declining versus the peak levels although they are still 5-10% higher than pre-pandemic levels. We expect continued moderation going forward before the housing markets level off at or slightly above 2019 pre-pandemic levels.
- Industrial Production is growing in North America but remains below pre-pandemic levels by about 1%. This is hampering the recovery in General Industrial and other Industrial coatings segments. Part of this can be tied to the lack of raw materials and the logistics bottlenecks that continue to slow production in all manufacturing sectors.
- Within Europe, industrial production and overall manufacturing continue to do quite well and show growth which is driving good growth in industrial coatings markets. Construction is growing in Europe but remains a bit below pre-pandemic levels.
- Within Asia, we still expect strong growth versus 2020 in both decorative and industrial coatings. Overall, we expect Asia to grow by about 10% in 2021 versus 2020 levels with South Asia and Southeast Asia growing the fastest. Lockdowns in Southeast Asia may result in our downgrading the forecast for 2021.

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Forecasts:

The two charts below and the tables below summarize our forecasts for 2021-2023



Tables providing forecast by segment are given at the end of this document.

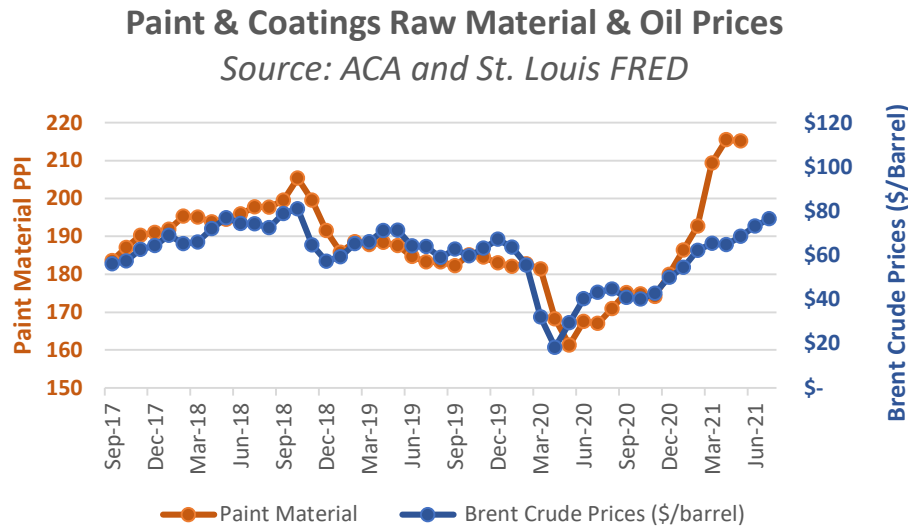
Raw Material Prices:

Raw material price increases have started to moderate at about 20% above 2020 year-end levels. We expect them to remain at these elevated levels through the rest of this year. Gradually, we expect the supply of raw materials to improve. Overall, we are

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slightly more pessimistic than we were in previous months on the raw material supply situation; the continued stronger than expected growth in the global economy is continuing to lead to shortages in raw materials. But we do expect the situation to moderate going forward.

The graph below shows the US data from the American Coatings Association on Raw material prices versus the price of oil. As you can see, there continues to be a significant disconnect between coatings raw material prices and the price of oil.



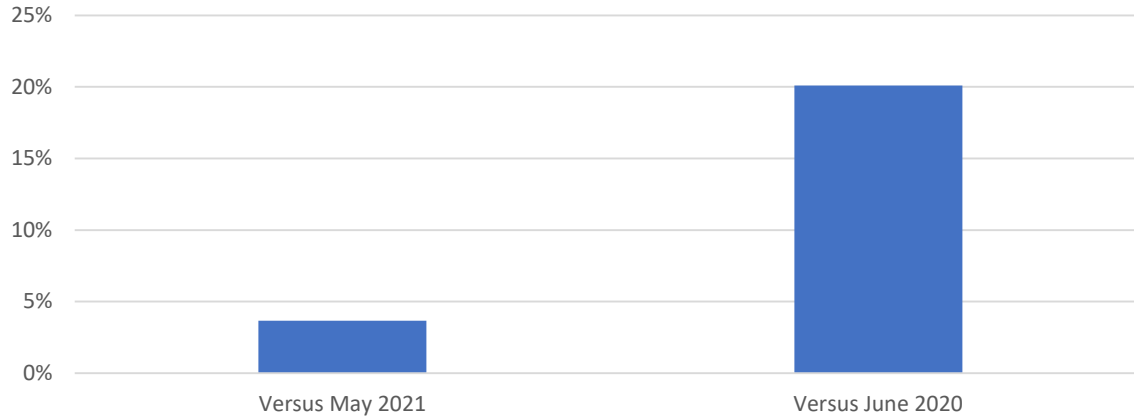
Globally, we think that raw material prices are up more in Europe than in other regions. Overall prices in Europe are up in the 20-25% range. Powder coatings manufacturers would be seeing stronger price increase as would companies producing urethanes and epoxies.

In China and Asia, price increases are slightly lower. We think that raw material prices will be up about 15% in China. The chart below shows some data from the Chinese National Bureau of Statistics.

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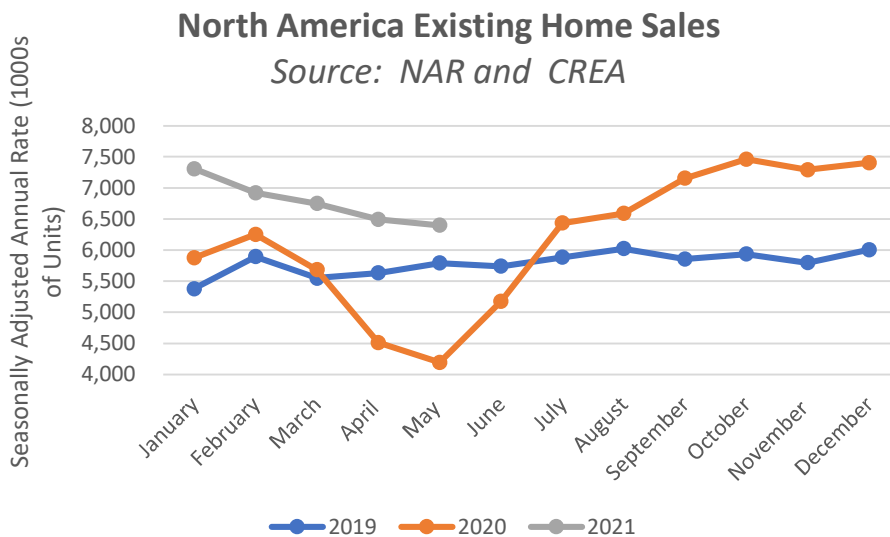
Annualized China PPI for Chemicals and Raw Materials

Source: China National Bureau of Statistics



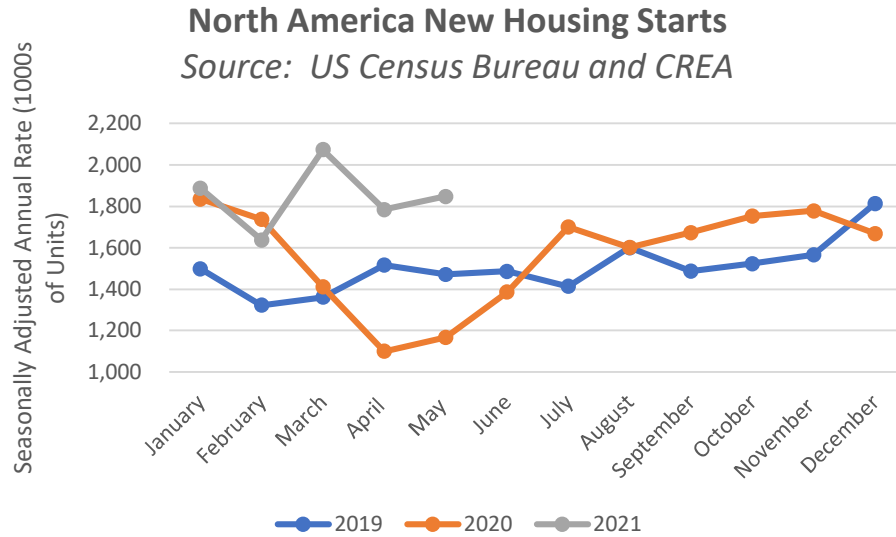
North America Review:

Housing markets are moderating in North America. Existing home sales are declining but are still above pre-pandemic levels.

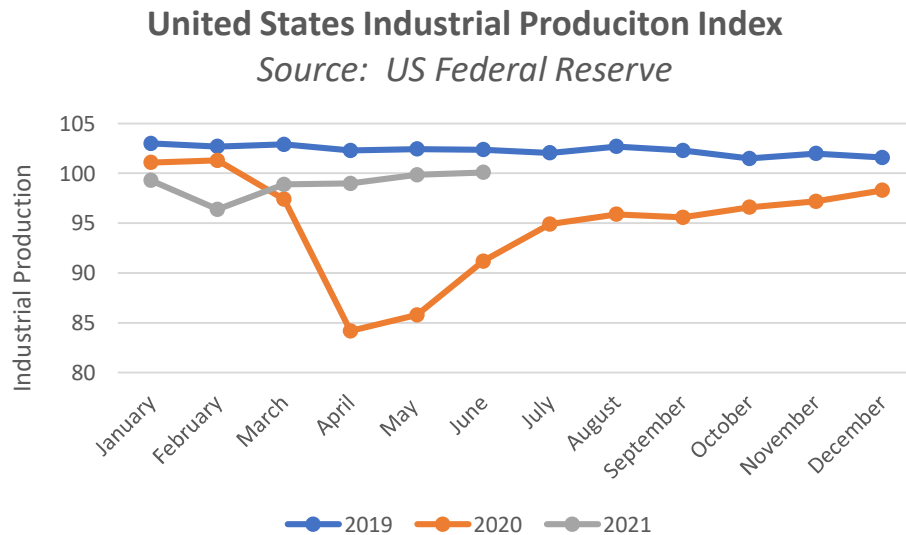


New Housing start are remaining at relatively high levels in North America. Q2 New housing starts were 20% above the pre-pandemic levels.

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Industrial production has increased in 12 of the last 13 months, but it is still 1% below pre-pandemic levels.



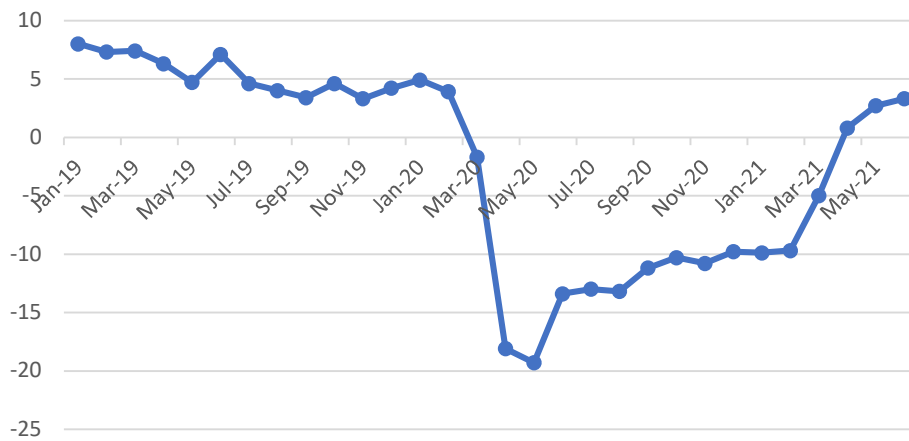
European Review:

In Europe, construction activity continues to return is now just slightly below pre-pandemic levels. On the other hand, manufacturing activity remains significantly above pre-pandemic levels.

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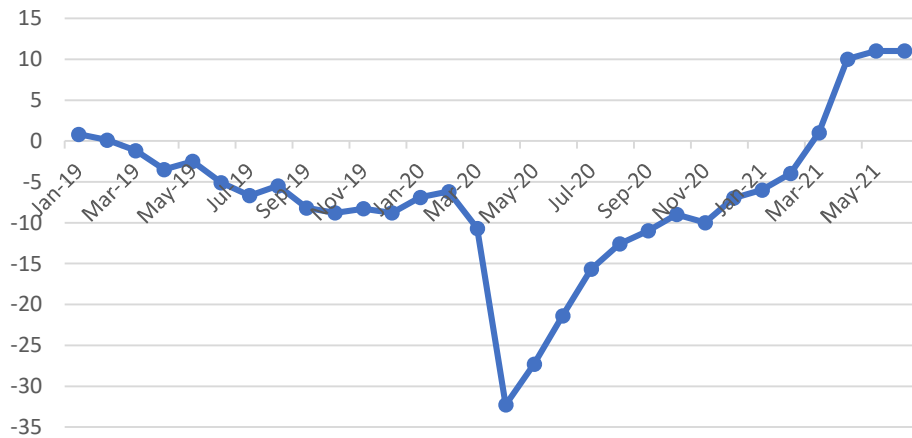
Euro Business Climate Construction Index

Source: The European Commission



EU Business Climate Industrial Index

Source: European Commission



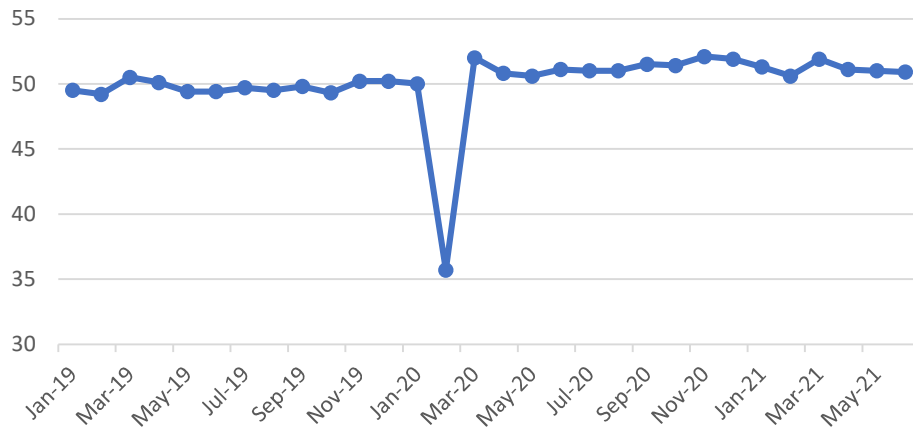
Asia Review

The Chinese economy continues to rebound, although at slower rates than in the previous months. The Chinese Purchasing Managers Index continues to show good growth.

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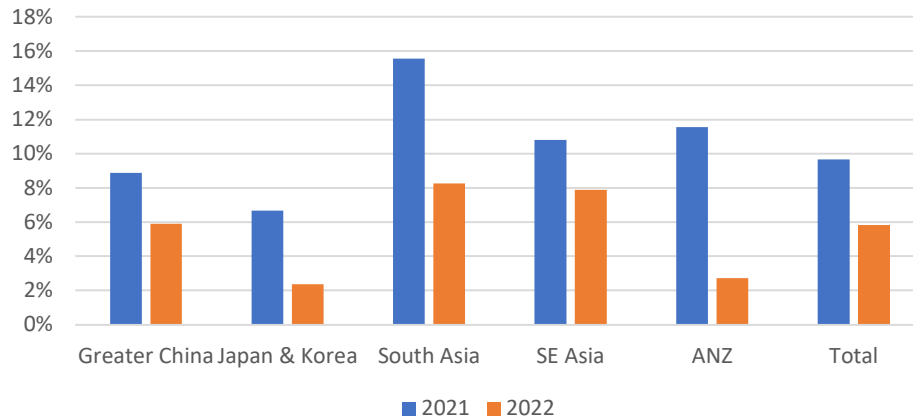
China Purchasing Managers Index

Source: China National Bureau of Statistics



Overall growth rates were very strong in South Asia and Southeast Asia in Q1. The rising number of Covid cases and the associated lockdowns may slow growth in Southeast Asia. As the Covid crisis continues to unfold, we may revise our forecasts.

Asian Coatings Markets Forecasted Value Growth Rates



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Appendix

2021 Global Coatings Market Value Growth

	North America	Europe	MEA	Asia	Latin America	Global
Deco	7.0%	7.5%	7.5%	11.3%	8.0%	8.7%
Auto OEM	20.5%	16.5%	10.5%	9.3%	17.0%	13.9%
Auto Refinish	10.0%	15.0%	6.0%	9.0%	9.0%	10.9%
Medium & Heavy Duty	22.0%	22.0%	15.0%	-18.8%	14.0%	0.6%
Motorcycle	15.0%	10.0%	4.5%	8.1%	6.5%	8.8%
Rail	8.0%	8.5%	6.0%	8.2%	8.0%	8.0%
Trailer	8.0%	9.0%	6.0%	7.3%	8.0%	7.9%
Aerospace	8.0%	9.0%	5.5%	8.8%	8.0%	8.3%
Powder	9.0%	12.0%	7.5%	8.2%	8.5%	8.9%
Wood	8.5%	10.0%	6.5%	14.9%	7.5%	12.7%
Coil	7.5%	10.0%	8.0%	8.6%	8.0%	8.6%
Rigid Can Packaging	5.0%	6.0%	7.5%	8.1%	8.0%	6.8%
Flexible Packaging	8.0%	6.0%	10.5%	9.7%	7.0%	8.6%
GI	9.5%	12.0%	7.5%	10.8%	7.5%	10.7%
IM and PC	5.0%	4.0%	5.0%	4.0%	4.0%	4.2%
Marine	0.0%	-1.0%	-3.0%	4.7%	3.0%	2.6%
Total	8.1%	8.8%	7.0%	9.7%	8.5%	8.9%

2022 Global Coatings Market Value Growth

	North America	Europe	MEA	Asia	Latin America	Global
Deco	4.0%	2.0%	3.5%	6.5%	4.5%	4.3%
Auto OEM	6.0%	1.5%	4.0%	3.5%	5.0%	3.7%
Auto Refinish	4.0%	2.0%	4.0%	4.0%	3.0%	3.3%
Medium & Heavy Duty	3.0%	3.0%	3.0%	4.3%	5.0%	3.8%
Motorcycle	3.0%	3.0%	3.0%	5.8%	5.0%	5.3%
Rail	3.0%	3.0%	3.0%	5.8%	5.0%	4.5%
Trailer	3.0%	3.0%	3.0%	2.0%	5.0%	2.6%
Aerospace	3.0%	3.0%	3.0%	7.1%	5.0%	4.0%
Powder	3.5%	4.0%	4.5%	7.0%	5.5%	6.0%
Wood	2.5%	1.5%	3.5%	5.5%	4.5%	4.3%
Coil	2.0%	2.0%	4.0%	4.5%	4.0%	3.2%
Rigid Can Packaging	2.4%	3.0%	4.0%	4.7%	4.5%	3.7%
Flexible Packaging	3.0%	4.0%	7.2%	5.4%	4.0%	4.7%
GI	2.0%	1.5%	4.0%	5.3%	4.0%	4.1%
IM and PC	4.0%	2.5%	4.0%	6.4%	3.0%	5.4%
Marine	3.5%	2.5%	3.0%	2.6%	3.0%	2.7%
Total	3.8%	2.1%	3.7%	5.8%	4.3%	4.3%

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2023 Global Coatings Market Value Growth

	North America	Europe	MEA	Asia	Latin America	Global
Deco	4.0%	2.0%	3.5%	6.5%	4.5%	4.4%
Auto OEM	4.5%	1.0%	4.0%	3.2%	5.0%	3.2%
Auto Refinish	2.5%	1.5%	4.0%	3.8%	3.0%	2.6%
Medium & Heavy Duty	2.5%	2.5%	3.0%	4.1%	5.0%	3.5%
Motorcycle	2.5%	2.5%	3.0%	5.6%	5.0%	5.0%
Rail	2.5%	2.5%	3.0%	5.6%	5.0%	4.2%
Trailer	2.5%	2.5%	3.0%	1.7%	5.0%	2.3%
Aerospace	2.5%	2.5%	3.0%	6.9%	5.0%	3.7%
Powder	3.0%	3.5%	4.5%	6.8%	5.5%	5.7%
Wood	2.0%	1.0%	3.5%	5.3%	4.5%	4.0%
Coil	1.5%	1.5%	4.0%	4.3%	4.0%	2.9%
Rigid Can Packaging	2.0%	2.5%	4.0%	4.4%	4.5%	3.4%
Flexible Packaging	2.5%	3.5%	7.2%	5.2%	4.0%	4.4%
GI	1.5%	1.0%	4.0%	5.0%	4.0%	3.8%
IM and PC	3.5%	2.0%	4.0%	6.2%	3.0%	5.1%
Marine	3.0%	2.0%	3.0%	2.3%	3.0%	2.4%
Total	3.4%	1.9%	3.7%	5.7%	4.3%	4.2%