December 2021 Taiwan Manufacturing PMI
PMI at 59.3%

New Orders, Production and Employment Growing;
Supplier Deliveries Slowing;
Inventories Growing

MANUFACTURING AT A GLANCE

December 2021

<table>
<thead>
<tr>
<th>Index</th>
<th>Series Index Dec</th>
<th>Series Index Nov</th>
<th>Percentage Point Change</th>
<th>Direction</th>
<th>Rate of Change</th>
<th>Trend (Months)</th>
<th>C&amp;M</th>
<th>Elec</th>
<th>F&amp;T</th>
<th>Mt'ls</th>
<th>Trans</th>
<th>Mach</th>
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<tbody>
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<td>Taiwan Manufacturing PMI</td>
<td>59.3</td>
<td>59.5</td>
<td>-0.2</td>
<td>Growing</td>
<td>Slower</td>
<td>18</td>
<td>56.1</td>
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<td>56.8</td>
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<td>Faster</td>
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</table>

Summary

- The seasonally adjusted Taiwan Manufacturing PMI expanded for eighteen consecutive months while the index slightly fell 0.2 percentage point to 59.3 percent in December.
- The seasonally adjusted New Orders and Production Indexes slightly decreased 0.4 and 0.3 percentage point to 59.7 and 60.2 percent, respectively, remained in expansion for the eighteenth consecutive month.
- The seasonally adjusted Employment Index registered the slowest growth rate since November 2020 recorded in September, while the index further rose 1.1 percentage points to 57.3 percent in December.
- The Supplier Deliveries Index has continuously remained above 60.0 percent during the second half of 2021 and registered 65.0 percent in December following the highest reading (74.8 percent) recorded in May.
- The Inventories Index expanded for twelve consecutive months but further decreased by 2.0 percentage points to 54.5 percent, registered the slowest growth rate since January 2021.
- The Customers’ Inventories Index went down 1.4 percentage points to 48.3 percent in December, which indicating manufacturers believe that their customers have insufficient inventories on hand for three consecutive months.
- The Prices Index maintained above 70.0 percent for fourteen consecutive months but further fell 5.1 percentage points to 73.9 percent, recorded the lowest reading since December 2020.
- The Backlog of Orders Index increased 2.0 percentage points from the lowest reading of 50.3 percent since August 2020 and registered 55.5 percent in December.
- The Imports Index expanded for eighteen consecutive months but decreased 5.2 percentage points to 53.1 percent in December, marked the lowest reading since August 2020.
- The Future Outlooks Index expanded for seventeen consecutive months and registered 57.9 percent in December, the same as the last month.
- All manufacturing industries categories reported growing in the following order: Transportation Equipment (60.9%), Foods & Textiles (59.6%), Electronic & Optical (59.4%), Electrical & Machinery Equipment (58.7%), Basic Materials (56.8%) and Chemical, Biological & Medical (56.1%).
About this Report

This report is jointly issued by the National Development Council (NDC) – a cabinet-level ministry, the Chung-Hua Institution for Economic Research (CIER), and the Supply Management Institute, Taiwan (SMIT). CIER makes no representation, other than that stated within this release, regarding the individual company data collection procedures.

Data and Method of Presentation

The Survey is based on data compiled from monthly replies to questionnaires sent to manufacturing purchasing and supply executives in about 300 manufacturing companies. The panel has been carefully selected to accurately replicate the actual structure of the manufacturing economy, based on each industry’s contribution to gross domestic product (GDP). The diffusion index includes the percent of positive responses plus one-half of those responding the same (considered positive). A PMI reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally decline. Responses to Buying Policy reflect the percent reporting the current month's lead time, the approximate weighted number of days ahead for which commitments are made for Production Materials; Capital Expenditures; and Maintenance, Repair and Operating (MRO) Supplies, expressed as hand-to-mouth (five days), 30 days, 60 days, 90 days, six months (180 days), a year or more (360 days), and the weighted average number of days.

We re-categorize the manufacturing subsectors listed in the Standard Industrial Classification System of the Republic of China (Rev.9, 2011) into six broad categories. The Chemical, Biological & Medical industry (C&M) which includes Manufacture of Chemical Material, Manufacture of Chemical Products, Manufacture of Pharmaceuticals and Medicinal Chemical Products and Manufacture of Medical Instruments and Supplies, The Electronic & Optical industry (Elec) which comprises Manufacture of Electronic Parts and Components and Manufacture of Computers Electronic and Optical Products. The Foods & Textiles industry (F&T) which comprises Manufacture of Food Products, Manufacture of Beverages, Manufacture of Tobacco Products, Manufacture of Textiles, Manufacture of Wearing Apparel and Clothing Accessories, Manufacture of Leather, Fur and Related Products. The Basic Materials industry (Mt'ls) which includes Manufacture of Wood and of Products of Wood and Bamboo, Manufacture of Pulp, Paper and Paperboard, Printing and Service Activities Related to Printing, Manufacture of Rubber Products, Manufacture of Plastics Products, Manufacture of Other Non-metallic Mineral Products, Manufacture of Basic Metals and Manufacture of Fabricated Metal Products. The Transportation Equipment industry (Trans) which comprises Manufacture of Motor Vehicles and Parts and Manufacture of Other Transport Equipment and Parts. The last category is Electrical & Machinery Equipment industry (Mach) which includes Manufacture of Electrical Equipment and Manufacture of Machinery and Equipment.

Starting from each release of the Month of April 2018, the index numbers for Manufacturing PMI, New Orders, Production and Employment are seasonally adjusted to remove those seasonal components and calendar effects such as trading day, leap year and other moving holiday effects. Averaging the seasonally adjusted component series (the New Orders, Production, and Employment indexes) and the seasonally unadjusted components (Supplier Delivers and Inventories indexes) will give rise to the indirect seasonally adjusted Manufacturing PMI. As the direct seasonally adjusted PMI is more stable than the indirect seasonally adjusted PMI, CIER assumes the difference between these two indexes to three seasonally adjusted component series using the variance of each irregular component as weights. Therefore, the equality of seasonally adjusted PMI and its component series is maintained. The diffusion indexes other than the PMI component series and the industrial data are raw data and not seasonally adjusted.

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