

December 2022 Taiwan Manufacturing PMI

PMI at 43.7%

**New Orders, Production and Employment Contracting;
Supplier Deliveries Faster;
Inventories Contracting**

MANUFACTURING AT A GLANCE

December 2022

| Index | Series Index Dec | Series Index Nov | Percentage Point Change | Direction | Rate of Change | Trend (Months) | Industries | | | | | |
|--------------------------|------------------|------------------|-------------------------|-------------|-----------------|----------------|------------|------|------|-------|-------|------|
| | | | | | | | C&M | Elec | F&T | Mt'ls | Trans | Mach |
| Taiwan Manufacturing PMI | 43.7 | 43.9 | -0.2 | Contracting | Faster | 6 | 48.1 | 39.8 | 62.1 | 46.0 | 47.0 | 39.0 |
| New Orders | 39.8 | 41.9 | -2.1 | Contracting | Faster | 9 | 50.0 | 34.2 | 66.7 | 46.5 | 45.0 | 26.9 |
| Production | 42.7 | 42.8 | -0.1 | Contracting | Faster | 6 | 54.7 | 39.2 | 68.8 | 48.8 | 55.0 | 26.9 |
| Employment | 48.4 | 48.3 | +0.1 | Contracting | Slower | 5 | 43.8 | 44.2 | 60.4 | 47.7 | 52.5 | 43.6 |
| Supplier Deliveries | 44.1 | 42.7 | +1.4 | Faster | Slower | 6 | 48.4 | 40.4 | 50.0 | 47.7 | 47.5 | 46.2 |
| Inventories | 43.5 | 43.6 | -0.1 | Contracting | Faster | 4 | 43.8 | 41.3 | 64.6 | 39.5 | 35.0 | 51.3 |
| Customers' Inventories | 48.6 | 49.9 | -1.3 | Too Low | Faster | 2 | 53.1 | 47.9 | 56.3 | 45.3 | 52.5 | 46.2 |
| Prices | 50.6 | 45.9 | +4.7 | Increasing | From Decreasing | 1 | 40.6 | 50.4 | 54.2 | 54.7 | 45.0 | 55.1 |
| Backlog of Orders | 35.3 | 32.0 | +3.3 | Contracting | Slower | 7 | 46.9 | 34.2 | 52.1 | 27.9 | 40.0 | 26.9 |
| New Export Orders | 39.3 | 35.5 | +3.8 | Contracting | Slower | 8 | 53.1 | 35.0 | 47.9 | 41.9 | 47.5 | 29.5 |
| Imports | 36.9 | 35.0 | +1.9 | Contracting | Slower | 7 | 32.8 | 34.2 | 50.0 | 39.5 | 42.5 | 38.5 |
| Future Outlooks | 29.3 | 25.3 | +4.0 | Contracting | Slower | 8 | 35.9 | 25.4 | 35.4 | 37.2 | 25.0 | 23.1 |
| Production Materials | 41 | 43 | - | - | - | - | 44 | 43 | 41 | 49 | 31 | 30 |
| MRO Supplies | 34 | 35 | - | - | - | - | 37 | 34 | 33 | 35 | 36 | 30 |
| Capital Expenditures | 61 | 71 | - | - | - | - | 50 | 65 | 64 | 55 | 88 | 47 |

Chart 1: Time Series of Taiwan Manufacturing PMI

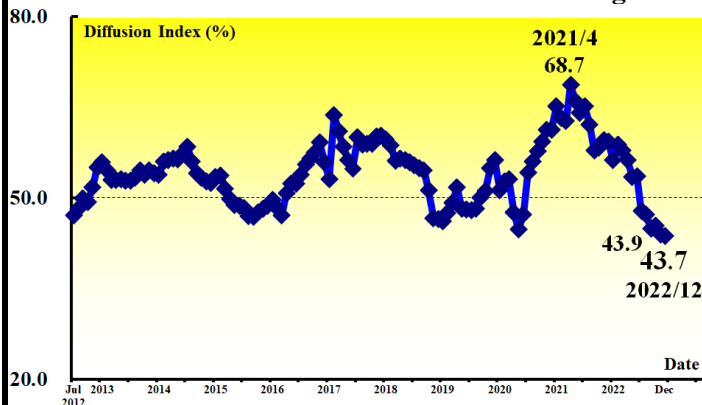
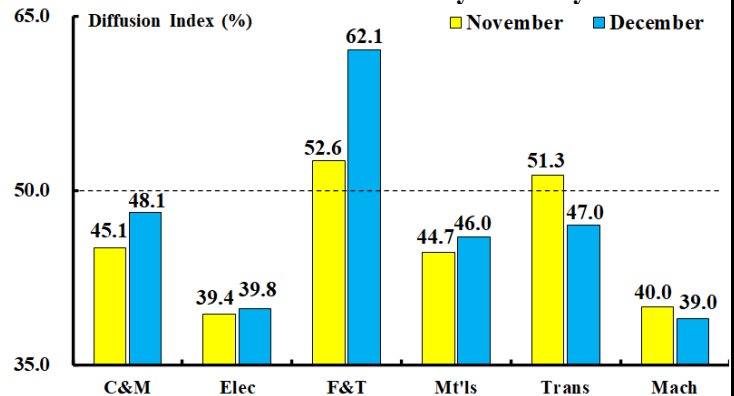


Chart 2: Performance by Industry



Summary

- The Taiwan manufacturing sector contracted for the sixth consecutive month as the seasonally adjusted Taiwan Manufacturing PMI slightly decreased 0.2 percentage point to 43.7 percent in December.
- Destocking across the manufacturing industries categories prevailed and resulted in reductions in purchasing activity before the Chinese New Year holiday. The seasonally adjusted New Orders Index decreased 2.1 percentage points to 39.8 percent, contracting for nine consecutive months.
- The seasonally adjusted Production Index slightly declined 0.1 percentage point to 42.7 percent in December, indicating contraction for six consecutive months.
- The seasonally adjusted Employment Index contracted for the fifth consecutive month and registered 48.4 percent.
- Manufacturers reported faster delivery performance for six consecutive months. The Supplier Deliveries Index registered 44.1 percent, an increase of 1.4 percentage points from the lowest reading (42.7 percent) since July 2012.
- Manufacturers' inventories contracted for the fourth consecutive month as the Inventories Index only inched down 0.1 percentage point to 43.5 percent, marking the fastest contraction rate since November 2015.
- Manufacturers reported their customers have insufficient inventories on hand for the second consecutive month. The Customers' Inventories Index further decreased 1.3 percentage points, registering 48.6 percent in December.
- Manufacturers experienced higher purchasing prices for the first time in the past six months as the Prices Index registered 50.6 percent, up 4.7 percentage points from the November reading.
- The Backlog of Orders Index contracted for the seventh consecutive month as the index registered 35.3 percent, an increase of 3.3 percentage points from the lowest reading (32.0 percent) since July 2012.
- The Future Outlooks Index contracted for the eighth consecutive month while the index rose 4.0 percentage points to 29.3 percent in December.
- Five among six manufacturing industries categories reported contraction in the following order: Electrical & Machinery Equipment (39.0%), Electronic & Optical (39.8%), Basic Materials (46.0%), Transportation Equipment (47.0%) and Chemical, Biological & Medical (48.1%). Only Foods & Textiles (62.1%) remained in expansion in December.

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.

Contact Information:

For economics comments, data and technical queries, please contact

Shin-Hui Chen, Ph.D.

Assistant Research Fellow, Division of Taiwan Economy
Chung-Hua Institution for Economic Research
E-Mail: csh@cier.edu.tw
Tel: +(886) 2 27356006 ext. 623
www.cier.edu.tw

For industry comments, please contact:

Steve Lai

Executive Director, Center for Purchasing and Supply Studies
Supply Management Institute, Taiwan
E-Mail: stevelai@smit.org.tw
Tel: +(886) 2 27495889
www.smit.org.tw