

September 2018 Taiwan Manufacturing PMI

PMI at 53.9%

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

MANUFACTURING AT A GLANCE September 2018

| Index | Series Index Sep | Series Index Aug | Percentage Point Change | Direction | Rate of Change | Trend (Months) | Industries | | | | | |
|--------------------------|------------------|------------------|-------------------------|-------------|----------------|----------------|------------|------|------|--------|-------|------|
| | | | | | | | C&M | Elec | F&T | Mt'l's | Trans | Mach |
| Taiwan Manufacturing PMI | 53.9 | 56.0 | -2.1 | Growing | Slower | 30 | 49.3 | 55.7 | 47.7 | 52.5 | 50.4 | 50.2 |
| New Orders | 55.2 | 56.3 | -1.1 | Growing | Slower | 20 | 50.0 | 56.5 | 44.2 | 48.8 | 50.0 | 50.0 |
| Production | 54.9 | 58.7 | -3.8 | Growing | Slower | 20 | 48.8 | 58.3 | 44.2 | 51.3 | 39.1 | 48.9 |
| Employment | 52.6 | 54.7 | -2.1 | Growing | Slower | 29 | 51.3 | 54.3 | 53.8 | 52.5 | 50.0 | 51.1 |
| Supplier Deliveries | 54.8 | 54.7 | +0.1 | Slowing | Faster | 30 | 47.5 | 58.7 | 50.0 | 52.5 | 52.2 | 51.1 |
| Inventories | 52.1 | 55.4 | -3.3 | Growing | Slower | 30 | 48.8 | 50.9 | 46.2 | 57.5 | 60.9 | 50.0 |
| Customers' Inventories | 51.1 | 50.4 | +0.7 | Too High | Faster | 2 | 56.3 | 53.0 | 38.5 | 51.3 | 45.7 | 50.0 |
| Prices | 61.4 | 65.6 | -4.2 | Increasing | Slower | 31 | 73.8 | 58.7 | 69.2 | 58.8 | 71.7 | 57.4 |
| Backlog of Orders | 49.2 | 49.3 | -0.1 | Contracting | Faster | 3 | 46.3 | 51.7 | 44.2 | 47.5 | 45.7 | 48.9 |
| Exports | 48.7 | 52.9 | -4.2 | Contracting | From Growing | 1 | 47.5 | 52.2 | 42.3 | 42.5 | 50.0 | 50.0 |
| Imports | 48.7 | 56.0 | -7.3 | Contracting | From Growing | 1 | 52.5 | 50.0 | 46.2 | 47.5 | 41.3 | 46.8 |
| Six-month Outlook | 47.6 | 54.1 | -6.5 | Contracting | From Growing | 1 | 51.3 | 50.4 | 55.8 | 41.3 | 47.8 | 36.2 |
| Production Materials | 37 | 36 | - | - | - | - | 39 | 36 | 31 | 46 | 38 | 31 |
| MRO Supplies | 33 | 33 | - | - | - | - | 40 | 32 | 23 | 42 | 25 | 31 |
| Capital Expenditures | 69 | 63 | - | - | - | - | 65 | 72 | 63 | 67 | 96 | 57 |

Chart 1: Time Series of Taiwan Manufacturing PMI

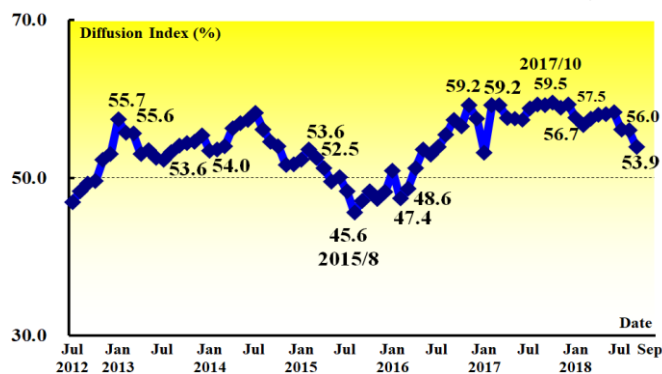
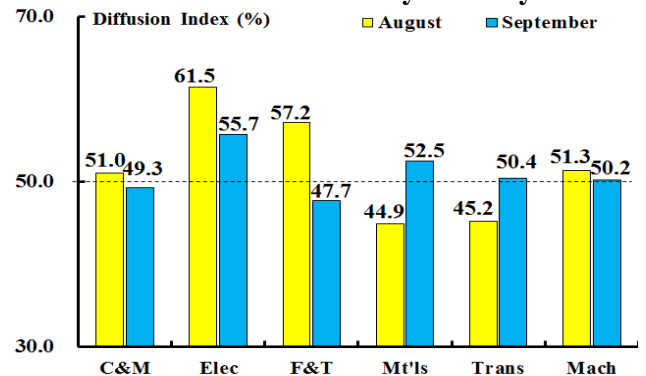


Chart 2: Performance by Industry



Summary

- The manufacturing sector keeps its expanding, but, at the slowest pace since February 2017 as the seasonally adjusted Taiwan Manufacturing PMI further decrease of 2.1 percentage points to 53.9 percent in September.
- Both New Orders and Production Indexes decelerated in September as they dropped 1.1 and 3.8 percentage points to 55.2 and 54.9 percent, respectively.
- Manufacturers' employment remained in growth territory for twenty-nine consecutive months while the Employment Index fell 2.1 percentage points to the seasonally adjusted September reading of 52.6 percent.
- The delivery performance of suppliers to manufacturing sectors was slower for thirty consecutive months as the Supplier Deliveries Index raised from the lowest reading of 54.7 percent since November 2016 to 54.8 percent.
- Manufacturers still believe their customers have more than sufficient inventories on hand for two consecutive months as the Customers' Inventories Index registered 51.1 percent and recorded its highest level since September 2014.
- The Backlog of Orders Index registered 49.2 percent and indicating contraction for three consecutive months.
- The Export index further fell 4.2 percentage points to 48.7 percent and reported contraction for the first time following six months of growth.
- Manufacturers' import failed to grow during September for the first time since March 2016, with the Import Index decreased 7.3 percentage points to 48.7 percent.
- The Six-month Outlook Index reversed its recent trend of growth and contracted for the first time in the past thirty-one months and registered 47.6 percent in September.
- Of the six manufacturing industries categories, four are reporting growth in the following order: Electronic & Optical (55.7%), Basic Materials (52.5%), Transportation Equipment (50.4%) and Electrical & Machinery Equipment (50.2%). While Foods & Textiles (47.7%) and Chemical, Biological & Medical (49.3%) industries reported contraction.

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) which 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, Center for Economic Forecasting
Chung-Hua Institution for Economic Research
E-Mail: csh@cier.edu.tw
Tel: +(886) 2 27356006 ext. 424
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: stvelai@smit.org.tw
Tel: +(886) 2 27495889
www.smit.org.tw