

## December 2018 Taiwan Manufacturing PMI

PMI at 44.8%

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

### MANUFACTURING AT A GLANCE

December 2018

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	44.8	48.0	-3.2	Contracting	Faster	2	45.3	40.8	54.8	42.9	45.5	44.9
New Orders	42.6	47.6	-5.0	Contracting	Faster	2	37.5	37.5	55.6	40.5	47.7	33.7
Production	43.1	49.2	-6.1	Contracting	Faster	2	38.9	37.9	57.4	41.7	40.9	40.8
Employment	47.7	49.3	-1.7	Contracting	Faster	2	52.8	42.9	55.6	42.9	47.7	46.9
Supplier Deliveries	45.0	45.9	-0.9	Faster	Faster	2	50.0	44.2	55.6	39.3	45.5	48.0
Inventories	45.8	48.0	-2.2	Contracting	Faster	2	47.2	41.5	50.0	50.0	45.5	55.1
Customers' Inventories	47.8	50.1	-2.3	Too Low	From Too High	1	41.7	50.9	48.1	39.3	56.8	50.0
Prices	40.1	44.6	-4.5	Decreasing	Faster	2	44.4	41.1	51.9	27.4	52.3	41.8
Backlog of Orders	36.8	41.1	-4.3	Contracting	Faster	6	40.3	35.7	51.9	35.7	40.9	26.5
Exports	38.7	41.6	-2.9	Contracting	Faster	4	48.6	38.4	48.1	35.7	29.5	34.7
Imports	39.0	41.4	-2.4	Contracting	Faster	4	45.8	37.1	53.7	36.9	38.6	34.7
Six-month Outlook	33.2	33.7	-0.5	Contracting	Faster	4	43.1	32.6	50.0	25.0	34.1	29.6
Production Materials	35	36	-	-	-	-	33	33	39	40	39	31
MRO Supplies	29	31	-	-	-	-	31	27	33	33	25	30
Capital Expenditures	62	62	-	-	-	-	62	57	76	61	75	61

Chart 1: Time Series of Taiwan Manufacturing PMI

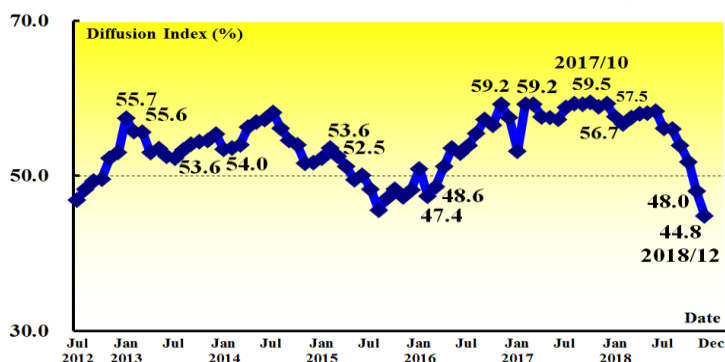
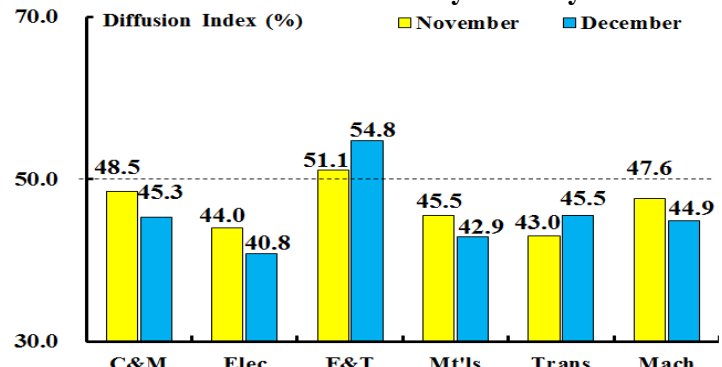


Chart 2: Performance by Industry



### Summary

- The manufacturing sector remains in contraction in December as the seasonally adjusted Taiwan Manufacturing PMI further fell 3.2 percentage points to 44.8 percent and registered its lowest reading index since July 2012.
- Both New Orders and Production Indexes have declined for two consecutive months and further dropped 5.0 and 6.1 percentage points to 42.6 and 43.1 percent, respectively.
- The Employment Index decreased 1.6 percentage points to the seasonally adjusted December reading of 47.7 percent and recorded the lowest index since July 2012.
- The Supplier Deliveries Index registered 0.9 percentage point lower than the 45.9 percent in November, indicating the delivery performance of suppliers to manufacturing sectors was faster for the second consecutive month.
- Manufacturers are currently buying at the lower prices due to the demands of the products is very slowing. The Prices Index further fell 4.5 percentage points to 40.1 percent and registered its lowest reading since February 2016.
- Manufacturing backlog contracted at the fastest rate since July 2012 as the Backlog of Orders Index further decreased 4.3 percentage points to 36.8 percent in December.
- Both manufacturers' export and import contracted at the fastest rate since July 2012 as the Export and Import Indexes further fell 2.9 and 2.4 percentage points to 38.7 and 39.0 percent, respectively.
- Manufactures are seriously commenting pessimistic about the future as the Six-month Outlook Index further decreased 0.5 percentage point to 33.2 percent, registering its lowest recorded level since October 2015.
- Of the six manufacturing industries categories, five are reporting contraction in the following order: Electronic & Optical (40.8%), Basic Materials (42.9%), Electrical & Machinery Equipment (44.9%), Chemical, Biological & Medical (45.3%) and Transportation Equipment (45.5%). Only Foods & Textiles (54.8%) industry reported growth 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) 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.

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