

## February 2020 Taiwan Manufacturing PMI

PMI at 52.7%

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

### MANUFACTURING AT A GLANCE

February 2020

Index	Series Index Feb	Series Index Jan	Percentage Point Change	Direction	Rate of Change	Trend (Months)	Industries					
							C&M	Elec	F&T	Mt'l's	Trans	Mach
Taiwan Manufacturing PMI	52.7	51.3	+1.4	Growing	Faster	5	50.7	46.3	49.4	47.1	39.0	45.8
New Orders	56.9	55.0	+1.9	Growing	Faster	6	46.4	41.4	43.5	57.3	33.3	33.7
Production	48.6	41.7	+6.9	Contracting	Slower	2	39.3	30.6	48.4	41.5	33.3	39.5
Employment	50.9	52.8	-1.9	Growing	Slower	5	56.0	46.8	51.6	43.9	40.5	40.7
Supplier Deliveries	63.1	57.1	+6.0	Slowing	Faster	4	58.3	70.7	54.8	48.8	61.9	64.0
Inventories	44.1	50.0	-5.9	Contracting	From Unchanged	1	53.6	41.9	48.4	43.9	26.2	51.2
Customers' Inventories	40.7	42.9	-2.2	Too Low	Faster	15	40.5	40.5	38.7	46.3	31.0	36.0
Prices	52.4	58.5	-6.1	Increasing	Slower	2	51.2	59.5	50.0	37.8	52.4	46.5
Backlog of Orders	55.9	52.9	+3.0	Growing	Faster	3	52.4	62.6	48.4	53.7	35.7	41.9
New Export Orders	40.9	51.6	-10.7	Contracting	From Growing	1	44.0	39.2	41.9	45.1	42.9	36.0
Imports	39.4	50.8	-11.4	Contracting	From Growing	1	41.7	37.8	50.0	45.1	26.2	30.2
Future Outlooks	36.8	63.7	-26.9	Contracting	From Growing	1	23.8	41.0	25.8	41.5	33.3	29.1
Production Materials	37	35	-	-	-	-	45	36	44	43	24	29
MRO Supplies	30	30	-	-	-	-	35	28	31	35	23	25
Capital Expenditures	60	66	-	-	-	-	53	60	70	67	61	48

Chart 1: Time Series of Taiwan Manufacturing PMI

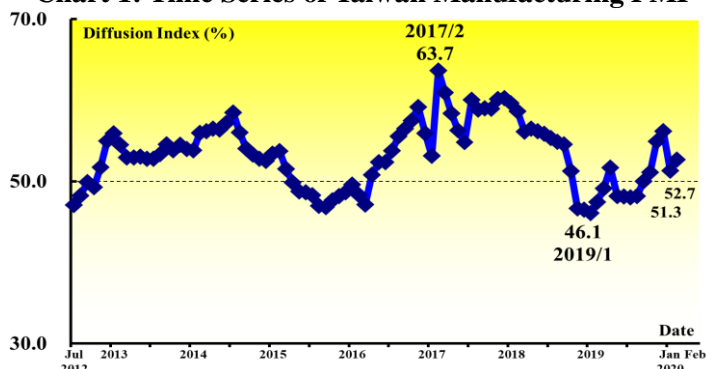
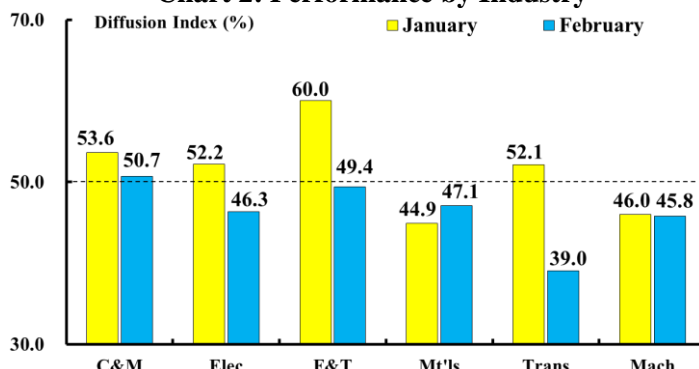


Chart 2: Performance by Industry



#### Summary

- The seasonally adjusted Taiwan Manufacturing PMI registered 52.7 percent in February, an increase of 1.4 percentage points from January. As the COVID-19 outbreak is affecting supply chains and disrupting manufacturing activities around the globe, we urge analysts to look at sub-indices relating to new orders, production, supplier deliveries and inventories rather than the headline composite PMI index, as the latter is influenced by longer delivery delays, giving a reverse reading of health.
- Manufacturers' new orders showed continued moderate growth in February as the seasonally adjusted New Order Index registered 56.9 percent.
- The seasonally adjusted Production Index still remained in contraction and registered 48.6 percent.
- The small growth in manufacturers' new orders, accompanied by contraction in production and inventories and rising supplier deliveries times and backlog of orders, reflected a significant supply shortage. The Supplier Deliveries Index dramatically increased 6.0 percentage points to 63.1 percent and recorded its highest reading since July 2012.
- The Inventories Index fell 5.9 percentage points to 44.1 percent and registered its lowest reading since January 2016.
- The Customer's Inventories Index decreased 2.2 percentage points to 40.7 percent, the fastest contraction rate since July 2012. This reflects the current status of epidemic.
- Both New Export Orders and Imports Indexes contracted at the fastest rates since July 2012 as the Export and Import Indexes fell 10.7 and 11.4 percentage points to 40.9 and 39.4 percent, respectively.
- The Future Outlooks Index shifts from growing to contracting during February, dropping 26.9 percentage points to 36.8 percent. This is also the biggest month-to-month decrease since July 2012.
- Of the six manufacturing industries categories, five are reporting contracting in the following order: Transportation Equipment (39.0%), Electrical & Machinery Equipment (45.8%), Electronic & Optical (46.3%), Basic Materials (47.1%) and Foods & Textiles (49.4%). Only Chemical, Biological & Medical (50.7%) still remained in growth.

## 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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