

## December 2020 Taiwan Manufacturing PMI

PMI at 61.3%

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

### MANUFACTURING AT A GLANCE

December 2020

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	61.3	61.2	+0.1	Growing	Faster	6	63.0	60.4	64.1	62.0	65.9	61.5
New Orders	69.4	64.8	+4.6	Growing	Faster	6	66.3	69.2	72.2	78.8	65.9	76.9
Production	66.9	66.5	+0.4	Growing	Faster	6	72.5	62.9	74.1	68.8	70.5	74.4
Employment	54.9	55.8	-0.9	Growing	Slower	6	55.0	52.2	63.0	55.0	61.4	52.6
Supplier Deliveries	65.1	63.5	+1.6	Slowing	Faster	14	67.5	71.9	50.0	53.8	70.5	57.7
Inventories	49.9	55.4	-5.5	Contracting	From Growing	1	53.8	45.5	61.1	53.8	61.4	46.2
Customers' Inventories	44.2	43.9	+0.3	Too Low	Slower	7	42.5	45.1	57.4	41.3	40.9	38.5
Prices	82.8	72.5	+10.3	Increasing	Faster	7	81.3	82.1	77.8	88.8	75.0	83.3
Backlog of Orders	63.3	59.6	+3.7	Growing	Faster	5	56.3	65.2	63.0	65.0	59.1	60.3
New Export Orders	62.6	60.6	+2.0	Growing	Faster	6	70.0	62.5	51.9	60.0	59.1	70.5
Imports	58.2	56.3	+1.9	Growing	Faster	6	56.3	60.3	55.6	55.0	65.9	53.8
Future Outlooks	69.9	63.4	+6.5	Growing	Faster	5	62.5	70.5	66.7	71.3	72.7	74.4
Production Materials	40	36	-	-	-	-	49	36	37	49	30	41
MRO Supplies	35	30	-	-	-	-	41	36	31	36	29	28
Capital Expenditures	64	56	-	-	-	-	53	64	95	62	61	61

Chart 1: Time Series of Taiwan Manufacturing PMI

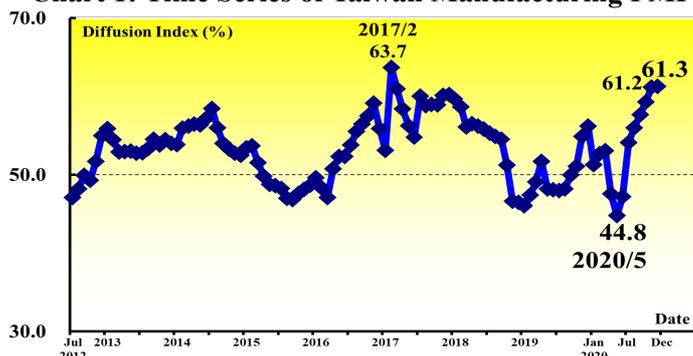
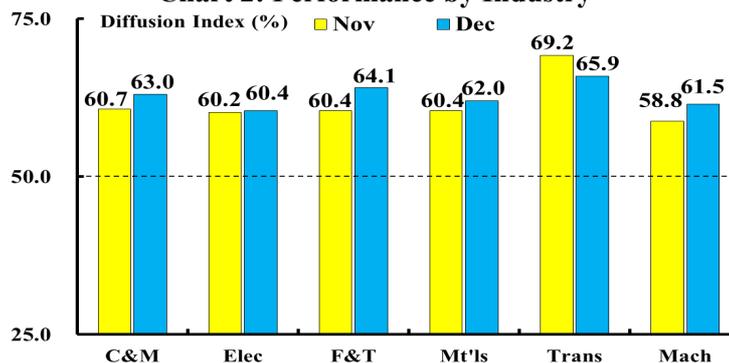


Chart 2: Performance by Industry



#### Summary

- The Taiwan manufacturing sector expanded for six consecutive months. The seasonally adjusted Taiwan Manufacturing PMI only inched up 0.1 percentage point to 61.3 percent, recorded the highest reading since March 2017.
- The global shipping delay and shortage of shipping container both impacted the nation's manufacturing activities. The New Orders Index registered 4.6 percentage points higher than the seasonally adjusted reading of 64.8 percent in November and grew at the fastest rate since July 2012.
- The seasonally adjusted Production Index further increased 0.4 percentage point to 66.9 percent and remained strongly above 60.0 percent for four consecutive months.
- The Employment Index went down 0.9 percentage point to 54.9 percent, indicating growing for the six consecutive month.
- The Supplier Deliveries Index further increased 1.6 percentage points to 65.1 percent, indicating the second highest reading since July 2012.
- The Inventories Index turned to contraction following four months of growth, as the index decreased 5.5 percentage points to 49.9 percent.
- Manufacturers believe that their customers still having insufficient inventories on hand for seven consecutive months, while the Customer's Inventories Index only slightly increased 0.3 percentage point to 44.2 percent.
- The Prices Index remained highly further rose 10.3 percentage points to 82.8 percent, signaling continuous upward pressure on manufacturers' cost for past seven months. This is also the highest mark for the Prices Index since July 2012.
- The Backlog of Orders Index further went up 3.7 percentage points to 63.3 percent and recorded the fastest rate since July 2012.
- Manufacturers' new export orders and imports grew for six consecutive months as the New Export Orders and Imports Indexes further increased 2.0 and 1.9 percentage points to 62.6 and 58.2 percent, respectively.
- The Future Outlooks Index went up 6.5 percentage points to 69.9 percent and grew at the fastest pace since July 2012.
- All manufacturing industries categories reported growing in the following order: Transportation Equipment (65.9%), Foods & Textiles (64.1%), Chemical, Biological & Medical (63.0%), Basic Materials (62.0%), Electrical & Machinery Equipment (61.5%) and Electronic & Optical (60.4%).

## 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](mailto:csh@cier.edu.tw)  
Tel: +(886) 2 27356006 ext. 623  
[www.cier.edu.tw](http://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](mailto:stvelai@smit.org.tw)  
Tel: +(886) 2 27495889  
[www.smit.org.tw](http://www.smit.org.tw)