07 February 2023

ECONOMIC REVIEW | **December 2022 Industrial Production Index**

IPI Growth Moderated to +3%yoy in Dec-22, Weaker than Expected

- *IPI grew at +3%yoy in Dec-22, below market forecast. Malaysia's IPI growth slowed to +3%yoy in Dec-22 (Nov-22: +4.6%yoy), slower than our estimate and market expectations. The 3% growth was the weakest IPI growth since Sep-21, dragged down by weaker expansion in mining and manufacturing sectors and contraction in electricity output.*
- *Manufacturing sales growth moderated further. Manufacturing sales continued to grow in Dec-22 but the pace of growth moderated to +8.6%yoy, the first sub-10% growth after 15 consecutive months of double-digit expansion. Sales growth was driven by sustained rise in sales of refined petroleum products, E&E (excluding computers & consumer electronics), and motor vehicles. For the year 2022, manufacturing sales grew marginally higher at +15.8% (2021: +15.5%).*
- *Maintain our forecast for IPI to grow at 3.5% in 2023. IPI rose by +6.9% in 2022, not too far from our estimate of +7%. Production continued to grow last year as companies ramped up production to cope with growing demand. For 2023, we maintain our projection that IPI growth will moderate to +3.5%, factoring in moderation in external demand and the diminished low-base effect.*

IPI grew at +3%yoy in Dec-22, below market forecast. Malaysia's IPI growth slowed to +3%yoy in Dec-22 (Nov-22: +4.6%yoy), slower than our estimate and market expectations. The 3% growth was the weakest IPI growth since Sep-21, dragged down by weaker expansion in mining and manufacturing sectors and contraction in electricity output. Slower growth in mining output was mainly attributable to slower rise in LNG production, in contrast to better extraction of crude petroleum. Manufacturing output, which accounted slightly more than two-thirds of overall IPI, also grew slower at +3%yoy (Nov-22: +4.8%yoy), with slower output growth for E&E components, and chemical & chemical products, as well as downward drag from lower output of rubber products, computers & peripheral equipment, and basic metals. Production of machinery & equipment and motor vehicles grew faster in Dec-22, which suggests further improvement in supply condition. Meanwhile, electricity output was -1.1% lower than Dec-21 due to weaker electricity consumption.

Table 1: Malaysia – Summary of Industrial Production Index

	MoM%*				YoY%				
	Sep-22	Oct-22	Nov-22	Dec-22	Sep-22	Oct-22	Nov-22	Dec-22	2022
IPI	0.7	(3.7)	2.6	(2.3)	10.8	4.6	4.8	3.0	6.9
Mining	6.3	(6.0)	(2.1)	(1.3)	15.0	8.6	6.1	4.1	2.8
Manufacturing	(0.5)	(3.1)	3.4	(2.2)	10.4	4.2	4.8	3.0	8.2
Electricity	(1.1)	(0.1)	1.0	(0.4)	4.1	(1.0)	0.7	(1.1)	4.5

*MoM is seasonally adjusted
Source: Macrobond, DOSM, MIDFR

IPI was -2.3%mom weaker from prior month. Taking into account the seasonal difference, industrial production in Malaysia fell by -2.3%mom (Nov-22: +2.6%mom) compared to previous month, following sequential reduction in output for all major sectors. Weaker LNG production contributed to the monthly drop in

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mining output, while month-on-month reduction in manufacturing output was due to lower production of textiles, wood products, refined petroleum, computers & peripheral equipment, tobacco, basic metals and transport equipment. Reading the finding in PMI survey, weaker production was a result of companies scaling back activities due to concerns over softening demand outlook. As a result, reduced energy demand also contributed to reduced electricity output.

Table 2: Changes in IPI Major Industries (YoY%)

	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	2022
IPI	**12.1**	**12.5**	**13.5**	**10.8**	**4.6**	**4.8**	**3.0**	**6.9**
Mining	**2.1**	**3.2**	**8.0**	**15.0**	**8.6**	**6.1**	**4.1**	**2.8**
Crude Petroleum	(2.4)	(8.6)	8.0	7.2	4.8	3.1	5.1	(1.6)
Natural Gas	5.5	12.6	8.0	21.0	11.4	8.2	3.3	6.0
Manufacturing	**14.4**	**14.9**	**15.2**	**10.4**	**4.2**	**4.8**	**3.0**	**8.2**
Food Products	0.1	5.2	7.6	3.7	3.6	4.9	4.8	4.5
Refined Petroleum Products	11.0	5.7	12.8	15.4	10.6	1.6	3.4	6.3
Chemicals & Chemicals Products	2.2	4.0	4.6	4.2	0.2	4.9	0.4	4.1
Rubber Products	(23.9)	(17.5)	(10.6)	(8.6)	(8.4)	(9.0)	(8.1)	(16.9)
Basic Metals	18.9	22.0	11.4	1.3	1.8	1.4	(3.0)	6.8
Electrical & Electronic Products	16.9	17.3	19.6	15.5	8.7	12.1	7.2	14.3
Computers & Peripheral Equipment	9.8	8.9	11.8	9.8	(7.4)	(2.6)	(9.0)	5.7
Machinery & Equipment	6.9	15.8	14.6	12.9	0.4	4.3	10.3	7.0
Motor Vehicles, Trailers & Semi-Trailers	179.3	129.9	107.1	35.6	(5.7)	9.4	11.8	25.6
Electricity	**15.4**	**13.2**	**9.9**	**4.1**	**(1.0)**	**0.7**	**(1.1)**	**4.5**

Source: Macrobond, MIDFR

Softer IPI growth for both export- and domestic-oriented sectors. IPI for export-oriented sectors rose at slower pace of +2.7%yoy in Dec-22, which was the weakest expansion since Jul-21. While the continued growth was supported by higher output of E&E, refined petroleum, and oils & fats; output declined for other export sectors such as woods & wood products, furniture, rubber products and textiles & wearing apparels. In contrast, IPI for domestic-oriented sector grew at relatively faster pace of +3.8%yoy and therefore was the major contributor to the overall IPI growth during the month. This was driven by pick-up in construction-related output i.e. fabricated metals and non-metallic minerals. Consumer-oriented sectors also reported increased output, mainly motor vehicles, food products and paper & paper products. Going forward, we anticipate domestic-oriented sectors will continue to support overall IPI growth as we reckon export-oriented sectors to be impacted by expected slowdown in advanced economies i.e. US and Europe. On a positive note, we foresee both domestic-oriented and external trade sectors to benefit from reopening of China's economy i.e. production outlook will be more positive backed by demand from China.

Table 3: Changes in IPI for Export-Oriented Industries (YoY%)

	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
IPI: Export-Oriented Industries	**7.8**	**9.5**	**12.4**	**10.1**	**5.0**	**5.1**	**2.7**
Computer, Electronic Products and Optical	19.4	18.4	21.5	16.7	10.3	14.1	7.6
Electrical Equipment	9.7	10.9	10.6	9.5	4.5	3.8	1.9
Chemicals and Chemical Products	2.2	4.0	4.6	4.2	0.2	4.9	0.4
Coke and Refined Petroleum Products	11.0	5.7	12.8	15.4	10.6	1.6	3.4
Vegetable & animal oils & fats	(12.5)	(2.3)	5.0	(2.7)	(1.4)	0.6	7.1
Textiles	3.7	10.7	9.7	5.5	1.3	(3.5)	(0.9)
Wearing Apparel	6.9	9.8	2.5	0.4	(8.1)	0.3	(2.8)
Wood and Wood Products	17.7	42.4	13.1	7.3	0.1	(11.6)	(12.8)
Furniture	24.6	52.2	40.9	10.5	(6.7)	(7.3)	(8.3)
Rubber Products	(23.9)	(17.5)	(10.6)	(8.6)	(8.4)	(9.0)	(8.1)

Source: DOSM, MIDFR

Table 4: Changes in IPI for Domestic-Oriented Industries (YoY%)

	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
IPI: Domestic-Oriented Industries	**35.5**	**30.9**	**22.5**	**11.2**	**2.5**	**4.3**	**3.8**
Construction (CO)	25.1	23.9	13.6	6.4	3.0	1.1	2.2
CO: Non Metallic Mineral	32.2	34.7	16.7	10.1	3.5	0.1	2.2
CO: Iron and Steel	18.9	22.0	11.4	1.3	1.8	1.4	(3.0)
CO: Fabricated Metal	24.7	18.2	13.0	7.3	3.5	1.6	5.6
Consumer (CS)	41.5	34.9	27.8	14.1	2.1	6.3	4.8
CS: Food Products	9.8	10.2	9.2	8.4	7.8	8.1	3.4
CS: Motor Vehicles, Trailers and Semi-Trailers	179.2	129.9	107.1	35.6	(5.7)	9.4	11.8
CS: Other Transport Equipment	15.0	22.1	6.5	7.6	12.1	2.9	2.6
CS: Beverages	59.9	50.9	14.9	11.8	1.1	5.4	0.7
CS: Tobacco Products	2,763.5	2,699.2	2,813.6	30.0	(28.1)	1.6	(12.4)
CS: Paper and Paper Products	10.5	14.0	12.2	9.9	2.5	0.3	2.4
CS: Others	41.0	46.7	21.3	3.1	0.4	5.4	2.7

Source: DOSM, MIDFR

Manufacturing sales growth moderated further. Manufacturing sales continued to grow in Dec-22 but the pace of growth moderated to +8.6%yoy (Nov-22: +11.8%yoy), the first sub-10% growth after 15 consecutive months of double-digit expansion. The annual growth was driven by sustained rise in sales of refined petroleum products, E&E (excluding computers & consumer electronics), and motor vehicles. On month-on-month basis, sales of manufactured goods fell -2.9%mom from Nov-22 after seasonal adjustment, dragged down by lower sales of refined petroleum, electrical components, consumer electronics, iron & steel and even motor vehicles. For the year 2022, manufacturing sales grew marginally higher at +15.8% (2021: +15.5%) following increased demand for refined petroleum products, E&E parts & components, computers & consumer electronics, motor vehicles and iron & steel products. The sustained double-digit growth last year was partly explained by the low base (due to nationwide lockdown) in 2021 and the positive effect of economic reopening on spending activities last year. Going forward, we forecast manufacturing sales will continue to grow on the back of easing supply constraints, backlog of orders and positive outlook for domestic spending.

Table 5: Manufacturing Sales (YoY%)

	MoM%			YoY%			
	Oct-22	Nov-22	Dec-22	Oct-22	Nov-22	Dec-22	2022
Manufacturing Sales	**(1.8)**	**0.2**	**(1.8)**	**12.9**	**11.8**	**8.6**	**15.8**
Seasonally-adjusted month-on-month change (%)	*(3.0)*	*2.0*	*(2.9)*	-	-	-	-
Refined Petroleum Products	(2.1)	(4.8)	(11.3)	56.0	32.1	25.4	42.3
Chemicals and Chemical Products	(4.2)	6.6	5.5	2.4	5.3	1.1	9.0
Rubber Gloves	2.1	(5.2)	(4.9)	(5.3)	(9.9)	(9.7)	(28.3)
Iron & Steel Products	(1.3)	0.7	(2.5)	(0.4)	2.0	(0.1)	9.6
Diodes, Transistor & Electronic Integrated Circuits Mic	(3.8)	(7.6)	0.9	30.0	23.4	17.0	34.0
Electrical Capacitor Resistor, Circuit Board & Display Comp	(11.5)	5.1	(11.4)	30.8	42.6	11.5	21.4
Computers & Peripherals Equipment	47.0	(8.3)	8.0	(7.3)	(1.3)	(3.0)	8.0
Consumer Electronics	(13.9)	5.2	(13.7)	(8.5)	(5.3)	(10.8)	11.0
Motor Vehicles	7.0	30.7	(4.2)	(7.6)	10.5	13.1	12.2

Source: Macrobond, DOSM, MIDFR

Global production weakened further in Dec-22. Industrial production in various countries contracted and remained weak in Dec-22, in line with the global manufacturing PMI remaining below 50 (i.e. in contractionary trend) for the fourth month in a row (Dec-22: 48.7; Nov-22: 48.8). Looking at IPI trends, regional economies like Thailand, South Korea, Taiwan, Singapore, and Japan recorded further contraction in production activities, signalling weak regional production towards end-2022 in anticipation for slower growth (and demand) especially from advanced economies and concerns over subdued growth in China due to the strict Covid-19 lockdowns. Meanwhile, the US IPI growth was sustained at +2.2%yoy in Dec-22, relatively slower than average +4.3%yoy growth in January to October 2022. For eurozone, reading from PMI report, we anticipate stabilization in manufacturing sector activities in the economic bloc given recent improvement in confidence and easing inflation. With the reopening of China's economy and stabilization in euro area manufacturing activities, we expect global IPI growth to improve slightly in Jan-23. This is also backed by some improvement in global manufacturing PMI which rose to 49.1, indicating activities fell at slower pace last month.

Table 6: IPI for Selected Economies (YoY%)

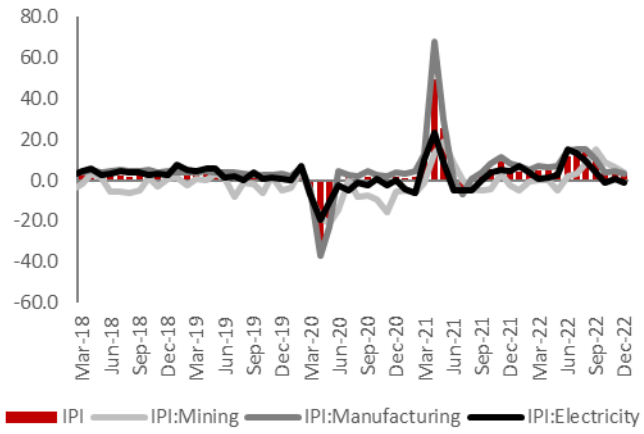
	2021	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	2022
Malaysia	7.2	12.1	12.5	13.6	10.8	4.6	4.8	3.0	6.9
Philippines	49.2	7.9	12.6	12.8	11.8	13.0	12.7	n.a.	n.a.
Thailand	5.8	(0.2)	6.4	14.9	3.3	(4.0)	(5.1)	(8.2)	0.6
Singapore	13.3	3.0	1.4	0.6	1.4	(1.1)	(3.8)	(3.1)	2.5
S. Korea	7.6	1.4	1.5	1.4	0.6	(1.1)	(3.3)	(8.0)	1.4
Taiwan	13.4	0.5	1.6	3.3	(4.5)	(4.3)	(5.5)	(7.9)	0.9
India	11.4	12.6	2.2	(0.7)	3.5	(4.2)	7.1	n.a.	n.a.
Japan	5.9	(2.8)	(2.0)	5.8	9.6	3.0	(0.9)	(2.8)	0.1
Euro area	8.7	2.6	(2.6)	3.5	5.6	4.1	3.4	n.a.	n.a.
USA	4.9	3.6	3.4	3.2	5.0	3.2	2.2	2.2	3.9

*n.a.: not available
Source: Macrobond, MIDFR

IPI trend suggests moderation in GDP growth in 4QCY22. Based on the three months data to Dec-22, IPI grew by +4.1%yoy in 4QCY22, a sharp moderation from +12.2%yoy in 3QCY22. Looking at the IPI trend, we project Malaysia's GDP growth to moderate to around +5%yoy in the final quarter of last year, from +14.2%yoy in 3QCY22. At least the IPI statistics indicate slower output growth in mining (4QCY22: +6.2%yoy; 3QCY22: +8.6%yoy) and manufacturing (4QCY22: +4%yoy; 3QCY22: +13.4%yoy) sectors, and electricity generation contracted by -0.5%yoy during the quarter (3QCY22: +9%yoy).

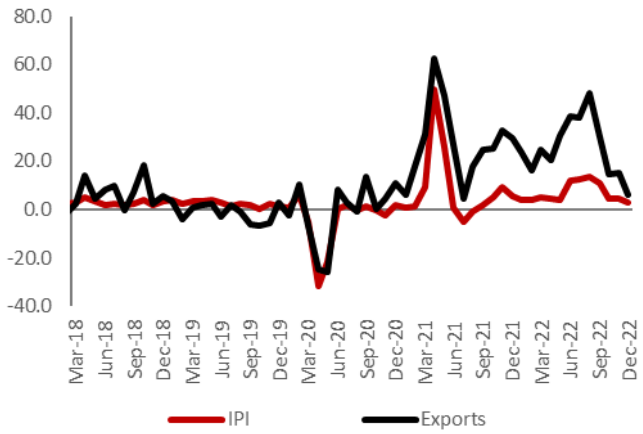
Maintain our forecast for IPI to grow at 3.5% in 2023. Despite the weaker-than-expected Dec-22 IPI growth, overall IPI rose by +6.9% in 2022 which was not too far from our estimate of +7%. Production continued to grow last year after +7.2% growth in 2021 as companies ramped up production to cope with growing demand, both from domestic and export markets. On the back of economic reopening and transitioning into endemic phase, we noticed 2022 IPI growth was underpinned by stronger output growth in domestic-oriented sectors, which grew faster at +12% (2021: +10.7%); in contrast to moderate output growth of +7% in export-oriented sectors (2021: 13%). For 2023, we maintain our projection that IPI growth will moderate to +3.5%, factoring in moderation in external demand and the diminished low-base effect. Apart from sustained rise in domestic spending, we foresee production will grow further on the back of improved supply conditions, easing cost pressure and better supply of foreign workers. However, we remain cautious that 2023 IPI outlook may be negatively impacted by sharper-than-expected fall in global demand, prolonged high inflation, and renewed risk of supply disruptions.

Chart 1: IPI Performance by Sector (YoY%)



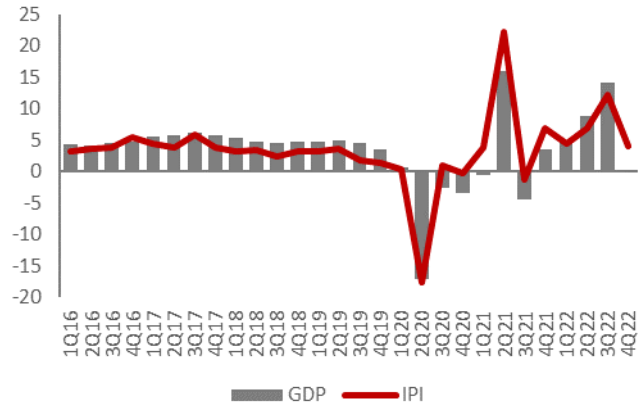
Source: Macrobond, MIDFR

Chart 2: IPI vs Exports (YoY%)



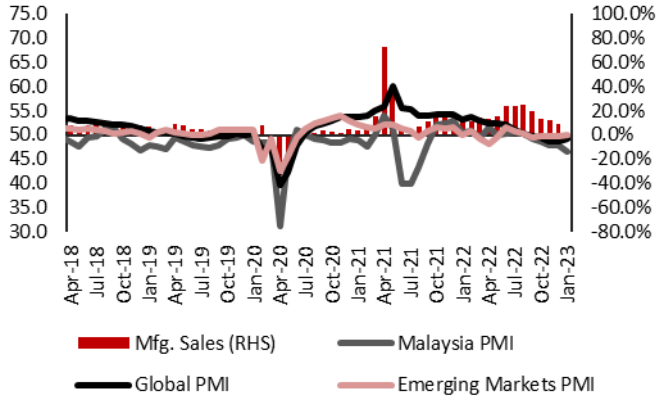
Source: Macrobond, MIDFR

Chart 3: IPI vs GDP (YoY%)



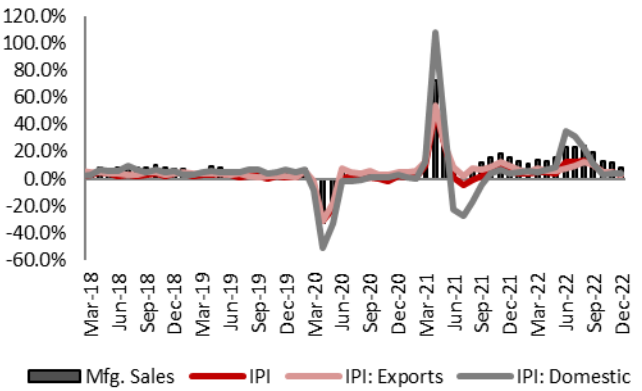
Source: Macrobond, MIDFR

Chart 4: Mfg. Sales (YoY%) vs PMI (Points)



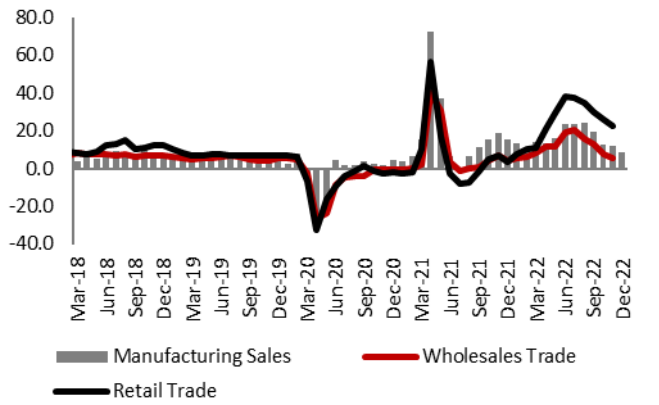
Source: Macrobond, Bloomberg, MIDFR

Chart 5: IPI & Mfg. Sales (YoY%)



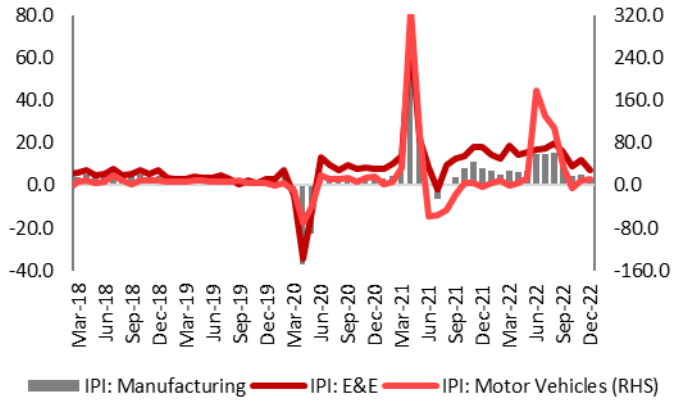
Source: Macrobond, DOSM, MIDFR

Chart 6: Mfg. Sales vs. Wholesale & Retail Trade (YoY%)



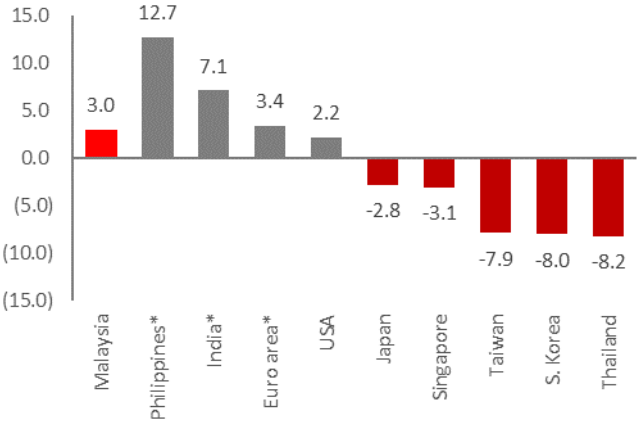
* refers to latest available data for Nov-22
Source: Macrobond, MIDFR

Chart 7: IPI: Mfg. vs IPI: Motor Vehicles & IPI:E&E (YoY%)



Source: Macrobond, DOSM, MIDFR

Chart 8: Global IPI in Dec-22 (YoY%)



* refers to latest available data for Nov-22
Source: Macrobond, MIDFR

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