Taiwan



August export orders

September orders to decline 20% YoY off high base, followed by sequential improvement in 4Q23F

Key message

August export orders arrived down 15.7% YoY, worse than our forecast of an 11% YoY decline. Non-electronics orders improved across the board, especially orders for raw materials and optical products. Among major regions, orders from China and the US ameliorated, while other regions, especially ASEAN, saw orders decline further. We forecast September orders will fall 20% YoY off a high base, followed by sequential improvement in 4Q23.

Event

August export orders arrived down 15.7% YoY, worse than our forecast of an 11% YoY decline

Taiwan export orders totaled US\$46.04bn in August, down 3.5% MoM (down 1.8% seasonally adjusted) and 15.7% YoY. The decline widened from last month's 12% drop, and was worse than our forecast of an 11% YoY decline and consensus of an 11.4% YoY decline (see Figure 1).

Non-electronics orders improved, especially those for raw materials & optical products

Among major products, ICT orders fell 14.6% YoY to US\$12.19bn in August, as endmarket demand remained weak, leading to falling NB, handset, and networking orders. However, the contraction was partially offset by rising server and graphics card orders. Electronics orders pivoted by decreasing 17.3% YoY to US\$15.76bn in August, mainly due to anemic demand for end-products and continued inventory adjustments in supply chains, resulting in conservative order placement from clients and order contraction for memory, foundry, PCB, and chip channels, while orders for IC design edged up, partially offsetting the contraction. August optical instrument orders grew 2.5% YoY to US\$1.8bn, turning positive for the first time since February 2022, mainly as rising large-size TV panel prices pushed up order value, although backlight module orders still declined. The decline in raw material orders continued to narrow, with order contraction in two of the three major categories arriving below 15% (chemicals orders fell 17.5% YoY). In terms of base metals, continued weakness in steel demand led to further order contraction. Plastics/rubber prices retreated as oil prices remained below the level in the same period last year, and as overseas competitors ramped up new capacities. However, as oil prices have rebounded recently, prompting restocking by downstream consumers, we note that order contraction has somewhat improved. Similarly, the decline in chemicals orders also narrowed markedly from last month's 25.4% YoY to 17.5% YoY in August. Machinery orders fell 15.7% YoY as manufacturers reduced equipment investment due to a global economic slowdown (see Figures 2 & 3).

Among major regions, orders from China & the US showed improvement, while orders from other regions, especially ASEAN, deteriorated further

Orders from the US fell 14.5% YoY in August, with electronics down by US\$1.05bn, or 15.4% YoY, and ICT orders down by US\$770mn, or 14.4% YoY, which were the biggest declines. Orders from China and Hong Kong fell 2.1% YoY, primarily due to a contraction of US\$140mn, or 36.2%, in machinery orders, and US\$110mn, or 17.3%, in chemicals orders. However, ICT orders rose US\$170mn, or 14.6%, partially offsetting the contraction. Orders from Europe remained in the doldrums, falling 33.6% YoY, with ICT and electronics down the most by 39.1% and 42.6% YoY, respectively. Orders from Japan and ASEAN declined 16.7% and 11.6% YoY, respectively (see Figures 4 & 5).

Outlook – September orders to decline 20% YoY off a high base, followed by sequential improvement in 4Q23F $\,$

While August export orders were worse than expected, with contractions widening again from July, we stand by our forecast that the YoY decline bottomed in 2Q23, even though inventory adjustments have not completely ended and there will be fluctuations in the near future. Additionally, we have seen signs of a rebound in global manufacturing, and as global brands of consumer electronics are launching new products, we expect Taiwan's export orders to pick up steam again. We now anticipate export orders will resume YoY growth in 4Q23, likely prompting full-year contraction to narrow to low-teens or even high-single digits. The Taiwan household-based diffusion index is at 46.5, while that of order amount is at 52.9 in September (see Figure 6). We predict Taiwan's export orders contraction will further deteriorate to 20% YoY in September due to a high base.

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Figure 1: August export orders arrived down 15.7% YoY, worse than our forecast of an 11% decline

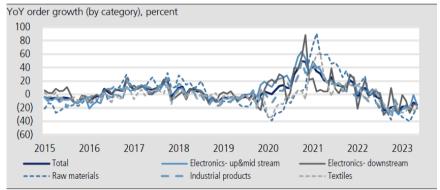


Figure 2: Main order categories

-		Aug-23		From Jan-23 to Aug-23							
	Value (US\$bn)	MoM (%)	YoY (%)	Value (US\$bn)	Weighting (%)	YoY (%)					
ICT	12.2	(4.3)	(14.6)	103.6	28.6	(13.7)					
Electronics	15.8	(11.0)	(17.3)	121.1	33.4	(19.1)					
Optics	1.8	8.9	2.5	12.4	3.4	(22.8)					
Base metals	2.0	(1.9)	(14.7)	17.0	4.7	(26.6)					
Machinery	1.6	9.4	(15.7)	13.0	3.6	(22.7)					
Plastics/rubber	1.7	7.3	(12.4)	12.7	3.5	(31.2)					
Chemicals	1.4	(2.0)	(17.5)	11.7	3.2	(31.5)					
Total	46.0	(3.5)	(15.7)	362.3	100.0	(19.1)					

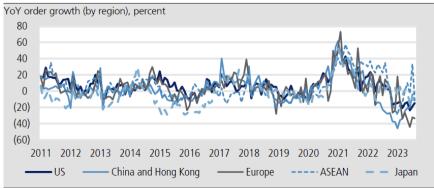
Source: Bloomberg; KGI Research

Figure 3: Non-electronics orders improved across the board, especially orders for raw materials & optical products



Note: Midstream/ upstream electronics include electronic products and optical apparatus; downstream electronics are information and communication categories; raw materials include chemicals, plastics/rubber products, base metals and minerals; industrial products are machinery, electrical machinery products and transport equipment Source: Bloomberg; KGI Research

Figure 4: Orders from China & the US improved, while those from other regions, especially ASEAN, deteriorated further $\,$



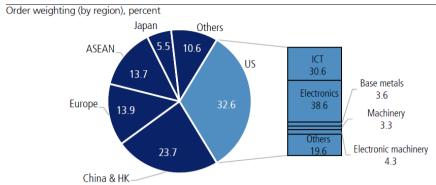
Source: Bloomberg; KGI Research

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Raw materials

Figure 5: Order weighting of ASEAN fell markedly, while weightings of the US & China rose



Source: Bloomberg; MOEA; KGI Research

Optical apparatus

Pigure 6: Diffusion index indicates September export orders will rebound MoM

Diffusion index by order type (value), percent

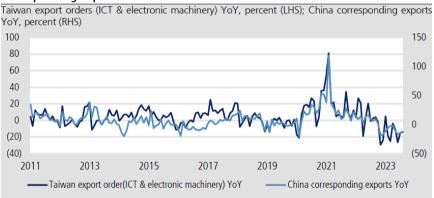
80
70
60
50
40
30
20
10
Aug-18 Feb-19 Aug-19 Feb-20 Aug-20 Feb-21 Aug-21 Feb-22 Aug-22 Feb-23 Aug-23

— Total
— ICT products
— Electronics

Note: Raw materials include chemicals, plastic/rubber products, base metals, and minerals Source: Bloomberg; KGI Research

Figure 7: Contraction YoY in orders for ICT & electronic machinery (higher overseas production ratio) narrowed in August on a slower decline in China's corresponding exports YoY

— Machinery



Source: Bloomberg; KGI Research

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Figure 8: Taiex saw fluctuations in August; YoY export orders contraction deteriorated further in August



Figure 9: Major international political & economic events over next quarter

Date	Major event	Possible effect
October 1	US government shutdown	The stopgap spending bill faced challenges from conservative lawmakers in August, posing a risk to the maturity of US government spending in October. The market is concerned about whether Moody's follows the other two credit rating agencies to downgrade US debts, which would cause volatility and raise yields in the short term
October 26	ECB monetary policy meeting	There may be no policy rate changes in this meeting if interest rates have been raised at the September meeting. If the economy downturns more than expected, investors may expect earlier interest rate cuts than in the US
October 31-November 1	Fed FOMC meeting	Leave interest rates unchanged and the dot plot shows a one-yard reduction in the year-end target rate. The market is focused on whether inflation and employment are moving in the direction of fulfilling rate cutting conditions
October/ November	The Third Plenary Session of the 20th Communist Party of China Central Committee	The market is focused on the Third Plenum for its economic reform focus. But with the current mindset of maintaining stability above all else, it may not be easy to introduce reforms or stimulus that are effective for the market.
December	China central economic working conference	Setting the economic development plan and growth target for next year; we expect the economic growth target to remain at about 5%
December 12-13	Fed FOMC meeting	May provide guidance for rate cutting conditions
December 14	ECB monetary policy meeting	May provide guidance for rate cutting conditions

Source: KGI Research

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Figure 10: Key	US economic d	lata
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Indicators		Units	2020	2021	2022	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
GDP	GDP QoQ SAAR	QoQ %, SAAR				3.2			2.6			2.0			2.1		
GDP	GDP YoY	YoY %	(2.8)	5.9	2.1	1.9			0.9			1.8			2.5		
	СРІ	YoY %	1.2	4.7	8.0	8.2	7.7	7.1	6.5	6.4	6.0	5.0	4.9	4.0	3.0	3.2	3.7
Consumer prices	Core CPI	YoY %	1.7	3.6	6.2	6.6	6.3	6.0	5.7	5.6	5.5	5.6	5.5	5.3	4.8	4.7	4.3
Consumer prices	PCE price index	YoY %	1.1	4.0	6.3	6.3	6.1	5.7	5.3	5.4	5.0	4.2	4.3	3.8	3.0	3.3	
	Core PCE index	YoY %	1.3	3.5	5.0	5.2	5.1	4.8	4.6	4.7	4.7	4.6	4.6	4.5	4.1	4.2	
	Labor force participation rate	%	61.5	62.0	62.3	62.3	62.2	62.2	62.3	62.4	62.5	62.6	62.6	62.6	62.6	62.6	62.8
	Unemployment rate	%	8.1	5.4	3.6	3.5	3.7	3.6	3.5	3.4	3.6	3.5	3.4	3.7	3.6	3.5	3.8
	Non farm payrolls	'000	(9,289)	7,267	4,793	350	324	290	239	472	248	217	217	281	105	157	187
Labor market	Net Change In total employment in labor force	'000	(8,873)	6,120	4,793	156	(257)	(66)	717	894	177	577	139	(310)	273	268	222
	Challenger job cut announce	YoY %	15.8	(1.2)	(1.7)	68	48	417	129	440	410	319	176	287	25	(8)	267
	Opening/ hiring	х	1.07	1.57	1.74	1.74	1.70	1.72	1.80	1.67	1.62	1.61	1.69	1.54	1.54	1.53	
	Avg. hourly earnings	YoY %	5.5	5.0	4.8	5.1	4.9	5.0	4.8	4.4	4.7	4.3	4.4	4.3	4.4	4.4	4.3
	Industrial production	YoY %	(7.2)	4.4	3.4	4.5	3.1	1.9	0.6	1.5	0.9	0.2	0.3	0.0	(0.3)	(0.0)	0.3
	Durable goods orders	YoY %	(4.6)	18.4	8.3	8.7	8.3	3.0	4.7	2.3	0.2	4.6	2.7	7.5	9.0	3.1	
	Core capital goods orders	YoY %	(8.3)	12.8	6.5	5.6	5.0	3.2	1.0	5.6	2.7	1.9	1.0	3.2	1.4	0.5	
	Total business inventory/ sales ratio	х	1.44	1.29	1.34	1.36	1.36	1.38	1.39	1.37	1.38	1.40	1.40	1.40	1.40	1.39	
Economic activity & business condition	Manufacturing inventory/ sales ratio	х	1.62	1.49	1.47	1.47	1.46	1.47	1.49	1.48	1.49	1.48	1.50	1.49	1.48	1.48	
	Retail inventory/ sales ratio	х	1.34	1.15	1.24	1.27	1.25	1.27	1.30	1.27	1.28	1.30	1.29	1.30	1.30	1.30	
	ISM manufacturing index	Point	52.4	60.7	53.5	51.0	50.0	49.0	48.4	47.4	47.7	46.3	47.1	46.9	46.0	46.4	47.6
	ISM non-manufacturing index	Point	54.3	62.4	56.1	55.9	54.5	55.5	49.2	55.2	55.1	51.2	51.9	50.3	53.9	52.7	54.5
	ISM manufacturing index: new orders	Point	53.9	64.3	51.6	47.3	48.2	46.8	45.1	42.5	47.0	44.3	45.7	42.6	45.6	47.3	46.8
	Chicago Fed National activity Index	Point	(0.48)	0.37	0.01	0.11	(0.12)	(0.58)	(0.47)	0.43	(0.33)	(0.49)	0.07	(0.18)	(0.33)	0.12	
	Conference board leading index	YoY %	(4.6)	6.6	0.9	(1.6)	(3.2)	(4.6)	(6.0)	(6.0)	(6.8)	(7.9)	(8.0)	(7.8)	(7.7)	(7.5)	
	C&I Loans for large/medium - tightening lending standard	%	37.6	(15.1)	11.8		39.1			44.8			46.0			50.8	
	C&I Loans for large/medium - stronger demand	%	(15.5)	(1.2)	12.4		(8.8)			(31.3)			(55.6)			(51.6)	
	Building Permits	'000, SAAR	1,479	1,740	1,666	1,588	1,555	1,402	1,409	1,354	1,482	1,437	1,417	1,496	1,441	1,443	1,543
	Housing starts	'000, SAAR	1397	1,606	1,551	1,463	1,432	1,427	1,357	1,340	1,436	1,380	1,348	1,583	1,418	1,447	1,283
Housing market	New home sales	'000, SAAR	833	769	637	567	577	582	636	649	625	640	679	704	684	714	
riousing market	Existing home sales	mn, SAAR	5.6	6.1	5.1	4.7	4.4	4.1	4.0	4.0	4.6	4.4	4.3	4.3	4.2	4.1	
	NAHB housing market index	Point, SA	70	81	59	46	38	33	31	35	42	44	45	50	55	56	50
	S&P/Case-Shiller 20-city composite home price index	YoY %	10.3	18.6	4.7	10.4	8.7	6.8	4.7	2.6	0.4	(1.2)	(1.7)	(1.8)	(1.2)		
	Personal expenditures	YoY %, SA	(3.0)	8.3	2.7	2.1	1.7	1.4	1.9	2.6	2.4	2.1	2.2	2.2	2.4	3.0	
	Retail sales	YoY %	0.9	18.2	9.7	9.4	8.8	6.1	6.0	7.4	5.3	2.2	1.3	2.1	1.5	2.6	2.
Consumption	Retail sales ex-autos	YoY %	1.7	17.2	11.4	10.3	9.6	7.4	7.2	8.4	6.4	2.5	1.6	1.4	0.5	1.6	2.
consumption	Domestic vehicles sales	mn, SA	173.0	179.2	164.8	13.5	14.9	14.1	13.3	15.7	14.9	14.8	15.9	15.1	15.7	15.7	15.
	Conference board consumer confidence	Point	101.0	112.7	104.5	107.8	102.2	101.4	109.0	106.0	103.4	104.0	103.7	102.5	110.1	114.0	106.
	Michigan Consumer Sentiment Index	Point	81.5	77.6	59.0	58.6	59.9	56.8	59.7	64.9	67.0	62.0	63.5	59.2	64.4	71.6	69.
iscal	Budget balance	As % of GDP	(15.4)	(10.6)	(5.4)	(5.3)	(5.0)	(5.2)	(5.4)	(6.0)	(6.1)	(6.8)	(7.3)	(8.0)	(8.5)	(7.6)	
nt'l balance	Current account balance	As % of GDP	(2.8)	(3.6)	(3.8)	(3.8)			(3.7)			(3.4)					
iit i palance	Net foreign securities transactions	US \$bn	505	907	1,321	117.7	67.8	171.5	152.8	30.8	80.5	196.0	127.1	19.2	186.0	8.8	
	Federal funds rate	%	0.25	0.25	4.50	3.25	3.25	4.00	4.50	4.50	4.75	5.00	5.00	5.25	5.25	5.50	5.5
Monetary & financia	al 10-Year treasury yield	%	0.91	1.51	3.87	3.83	4.05	3.61	3.87	3.51	3.92	3.47	3.42	3.64	3.84	3.96	4.1
	Dollar index	Point	89.9	95.7	103.5	112.1	111.5	106.0	103.5	102.1	104.9	102.5	101.7	104.3	102.9	101.9	103.6

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Indicators		Units	2020	2021	2022	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
GDP	GDP YoY	YoY %	3.4	6.5	2.4	3.6			(0.4)			(2.9)			1.4		
Consumer prices	CPI	YoY %	(0.2)	2.0	3.0	2.8	2.7	2.4	2.7	3.1	2.4	2.4	2.4	2.0	1.8	1.9	2.5
Consumer prices	Core CPI	YoY %	0.7	1.9	2.7	2.8	3.0	2.9	2.7	3.0	2.6	2.6	2.7	2.6	2.6	2.7	2.6
Labor market	Unemployment rate	%	3.7	3.7	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.5	3.5	3.4	
	Industrial production	YoY %	8.8	14.7	(1.7)	(8.5)	(8.1)	(9.2)	(11.5)	(23.6)	(10.0)	(16.0)	(22.6)	(15.7)	(17.3)	(15.2)	
	Markit Taiwan manufacturing PMI	Point		58.5	47.7	42.2	41.5	41.6	44.6	44.3	49.0	48.6	47.1	44.3	44.8	44.1	44.3
Economic activity	NDC monitoring light signal					Yellow- blue	Yellow- blue	Blue									
	NDC monitoring indicators	Point	24.3	39.0	24.2	17.0	18.0	12.0	12.0	11.0	10.0	11.0	11.0	12.0	13.0	15.0	
	NDC composite leading index	YoY %	(0.5)	4.5	(3.2)	(6.1)	(6.9)	(7.1)	(6.8)	(6.2)	(5.6)	(5.3)	(4.9)	(4.4)	(3.8)	(3.3)	
	NDC composite coincident index	YoY %	(0.7)	7.1	(1.2)	(4.6)	(7.2)	(9.6)	(11.7)	(13.2)	(14.1)	(14.4)	(14.0)	(13.0)	(11.6)	(9.8)	
Consumption	Retail sales	YoY %	0.2	3.3	7.4	7.8	2.1	1.8	9.4	4.3	4.6	7.6	7.5	17.1	13.9	5.3	
	Exports	US\$bn	345.2	446.6	479.7	37.5	39.9	36.1	35.8	31.5	31.1	35.2	36.0	36.1	32.3	38.7	37.4
	Imports	US\$bn	285.8	381.3	428.1	32.5	37.0	32.7	31.0	29.2	28.7	31.0	29.3	31.3	26.4	30.3	28.8
	Trade balance	US\$bn	59.4	65.3	51.6	5.0	3.0	3.4	4.8	2.3	2.4	4.2	6.7	4.9	6.0	8.5	8.6
Trade	Export growth	YoY %	4.9	29.4	7.4	(5.3)	(0.5)	(13.1)	(12.1)	(21.2)	(17.1)	(19.1)	(13.3)	(14.1)	(23.4)	(10.4)	(7.3)
	Import growth	YoY %	0.1	33.4	12.3	(2.6)	8.2	(9.2)	(11.4)	(16.8)	(9.4)	(20.1)	(20.3)	(21.8)	(29.9)	(20.9)	(22.9)
	Export orders	US\$bn	533.7	674.1	666.8	60.9	55.4	50.1	52.2	47.5	42.1	46.6	42.5	45.7	44.2	47.7	46
	Export order growth	YoY %	10.1	26.3	(1.1)	(3.1)	(6.3)	(23.5)	(23.2)	(19.3)	(18.3)	(25.7)	(18.1)	(17.6)	(24.9)	(12.0)	(15.7)
	M1B	YoY %	16.2	12.8	4.1	6.6	5.2	4.4	4.1	2.7	2.0	2.0	2.7	3.3	2.4	3.7	
	M2	YoY %	8.5	8.0	7.1	6.8	7.3	7.4	7.1	6.7	6.8	6.6	6.7	6.6	5.9	6.9	
Monetary & financial	Foreign reserves	US\$bn	529.9	548.4	554.9	541.1	542.8	552.2	554.9	557.1	558.4	560.3	561.1	562.9	564.8	566.5	565.5
	Rediscount rate	%	1.1	1.1	1.8	1.6	1.6	1.6	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9
	Exchange rate	USD/TWD	28.3	27.7	30.7	31.8	32.2	30.9	30.7	30.0	30.5	30.5	30.7	30.8	31.1	31.4	31.9

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