



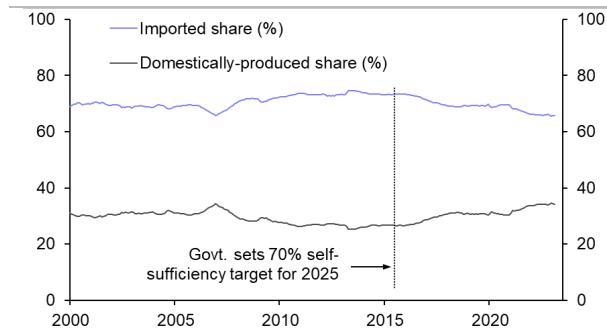
CHINA ECONOMICS WEEKLY

A more targeted approach to chipmaking support

Official efforts to curb China's reliance on imported semiconductors have been going on for years. In 2015, the government set a goal of China being 70% self-sufficient by 2025. But progress toward that target has been much slower than hoped.

Only a third of the chips sold in China last year were produced in the country. (See Chart 1.) The share is even lower for high-end chips. What's more, at least half of domestic production is carried out by foreign firms. And even local players still rely heavily on materials and equipment from overseas.

Chart 1: Integrated Circuit Consumption (units)



Sources: CEIC, Capital Economics

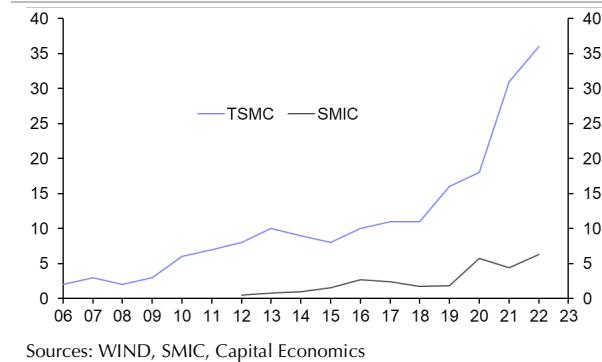
In response to this policy failure, the government appears to be tweaking its approach. Back in January, Bloomberg [reported](#) that officials were discussing a shift in strategy. This week, we learned a bit more about what this may entail. According to [FT sources](#), subsidies are here to stay but they will be channelled to a smaller number of firms, which will also benefit from coordination of R&D efforts.

One consequence of previous support has been a proliferation of chip sector start-ups. By end-2022, China had over 190,000 firms in the chip industry, more than a third of them registered last year. Many are a drag on economic resources, jumping on the subsidy bandwagon despite lacking the technical expertise or deep pockets needed to compete with foreign firms. A narrower focus on a select group of national champions should be more effective. Chipmaking success relies heavily on economies of scale, which only large firms can unlock with

massive capital spending. There's a reason global chip production is dominated by a few companies.

But even with a more refined approach to industrial policy, the challenges that Chinese firms face in catching up to the cutting edge are immense. TSMC currently devotes many times more money to capex than SMIC, China's largest foundry. (See Chart 2.) And since the impact of capex is cumulative, it could still take years for SMIC to catch up even if it were to match TSMC's spending.

Chart 2: Capital Spending (\$bn)



Sources: WIND, SMIC, Capital Economics

In addition to the usual challenges that underdogs face in highly concentrated industries, Chinese chipmakers also have to contend with increasingly stringent controls on access to high-end inputs from the US and its allies. SMIC recently delayed the start of mass production at its new plant in Beijing due to problems securing equipment.

This is not something that money alone can solve. Getting corporations and their engineers more involved in the R&D being done at state research institutes could help accelerate technological progress. But it may not be enough. Even Taiwan would struggle to retain its dominance if it lost access to foreign technology.

The week ahead

The upcoming PMIs may bolster a shift in the narrative around China's recovery. After a rebound in activity from late December that was much faster than most expected, we think momentum will soon be seen to be fading.

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Data Previews

Manufacturing PMIs (Mar.)

Fri. 31st Mar. / Mon. 3rd Apr.

Forecasts	Time (China)	Previous	Consensus	Capital Economics
"Official" PMI (31 st Mar.)	09.30	52.6	51.8	50.5
Caixin/S&P Global PMI (3 rd Apr.)	09.45	51.6	-	50.5

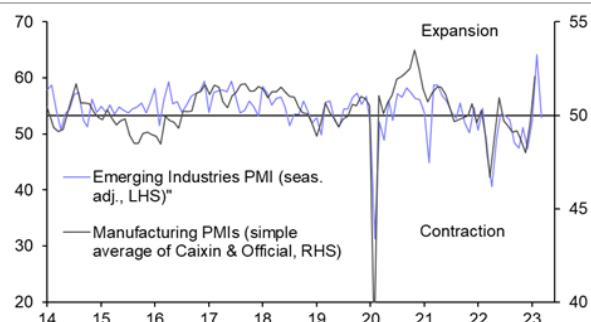
Not much room for further improvement

Both manufacturing PMIs jumped again in February. The average of the two rose to its highest since late 2020, reflecting both fading of supply-side disruption and a pick-up in demand as the economy reopened.

Early signs suggest the strength was not sustained into March now that the reopening boost has happened. Most workers would already have returned to factories by February and supply-chain disruptions would largely have been resolved too, leaving less room for further improvement. The external picture remains clouded too, compounded by worries about problems in global banking. The official Emerging Industries PMI – which covers

high-tech parts of manufacturing – dropped back sharply this month. (See Chart 3.)

Chart 3: Manufacturing & Emerging Industry PMIs



Sources: CEIC, S&P Global, Capital Economics

Non-manufacturing PMIs (Mar.)

Fri. 31st Mar. / Thu. 6th Apr.

Forecasts	Time (China)	Previous	Consensus	Capital Economics
"Official" PMI (31 st Mar.)	09.30	56.3	54.3	55.5
Caixin/S&P Global PMI (6 th Apr.)	09.45	55.0	-	54.0

Reopening rebound shifts down a gear

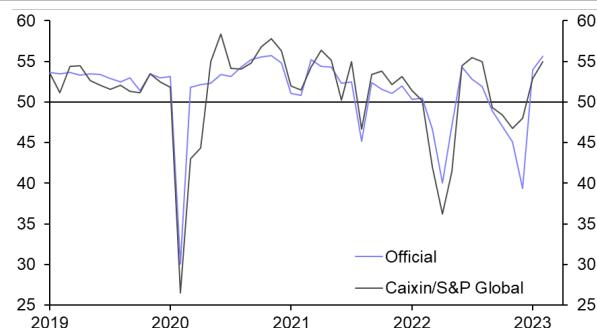
The services PMIs strengthened again in February (see Chart 4), with the average of the two reaching its highest level since early 2021. We expect both indices to have moderated in March given the limited room for further recovery.

Mobility has largely stabilised since returning to more normal levels around end-January. That suggests that the most rapid stage of the recovery has ended. Most firms will therefore have seen improvements in activity by February, leaving less scope for gains in March. As diffusion indices, the PMIs don't directly measure the scale of changes in activity but rather their breadth – i.e. the share of firms seeing a rise or fall in sales. As such, we think the services PMIs will have dropped back.

Construction activity, which is part of the official non-manufacturing PMI, probably held up better.

This partly reflects stronger infrastructure spending. What's more, increased financing to help developers complete stalled projects and an improvement in sentiment among homebuyers will also have contributed to a pick-up in construction activity.

Chart 4: Services PMIs



Sources: CEIC, S&P Global, Capital Economics



Economic Diary & Forecasts

Upcoming Events and Data Releases

Date	Country	Release/Indicator/Event	Time (China)	Previous*	Median*	CE Forecasts*
March						
Mon 27 th	Chn	Profits of Large Industrial Firms (Feb., ytd y/y)	(09.30)	(-4.0%)	-	-
	HK	Exports (Feb., HKD)	(16.30)	(-36.7%)	-	(-31.0%)
	HK	Imports (Feb., HKD)	(16.30)	(-30.2%)	-	(-21.0%)
	HK	Trade Balance (Feb., HKD)	(16.30)	-25.4b	-	-57.0b
	Chn	25bps Reduction to RRR Comes into Effect	-	-	-	-
Fri 31 st	Chn	"Official" Manufacturing PMI (Mar.)	(09.30)	52.6	51.8	50.5
	Chn	"Official" Non-Manufacturing PMI (Mar.)	(09.30)	56.3	54.3	55.5
	HK	Retail Sales (Feb.)	(16.30)	(+7.0%)	-	(+15.0%)
	Chn	Current Account Balance (Q4, Fin.)	-	+\$106.8b	-	-
Also expected during this period:						
TBC	Chn	CBRC Data on Assets and Liabilities of Financial Institutions (Feb.)	-	-	-	-

Selected future data releases and events:

April

Mon 3 rd	Chn	Caixin Manufacturing PMI (Mar.)
Thu 6 th	Chn	Caixin Services PMI (Mar.)
Fri 7 th	Chn	Foreign Exchange Reserves (Mar.)

Main Economic & Market Forecasts

%q/q annualised (%y/y), unless stated	Latest	Q1 2023	Q2 2023	Q3 2023	Q4 2023	2022	2023f	2024f	2025f
Official GDP	0.0(+2.9)*	(3.4)	(7.6)	(4.9)	(6.2)	(3.0)	(5.5)	(5.0)	(4.5)
GDP (CE CAP-derived estimates)	-2.6(-5.9)*	(1.7)	(8.2)	(5.3)	(10.7)	(-2.4)	(6.5)	(4.5)	(4.0)
Consumer Prices	(+1.0)**	(1.9)	(1.5)	(1.7)	(2.1)	(2.0)	(2.0)	(2.0)	(1.0)
Producer Prices	(-1.4)**	(-1.3)	(-2.8)	(-0.5)	(0.5)	(4.1)	(-1.0)	(0.5)	(0.0)
Broad Credit (AFRE)	(+9.9)**	(10.1)	(10.2)	(10.4)	(10.5)	(9.6)	(10.5)	(8)	(10.5)
Exports (US\$)	(-6.8)***	(-11.1)	(-15.9)	(-18.1)	(-8.7)	(7.0)	(-13.5)	(0.0)	(2.5)
Imports (US\$)	(-10.2)***	(3.8)	(-3.1)	(-7.9)	(1.4)	(1.1)	(-1.5)	(3.5)	(-0.5)
RMB/\$ [†]	6.84	6.85	6.80	6.70	6.50	6.95	6.50	6.40	6.20
7-day PBOC reverse repo [†] %	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1-year Loan Prime Rate [†] (LPR) %	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65
1-year MLF Rate [†] %	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
10-year Government Bond Yield [†] %	2.87	3.10	3.10	3.15	3.20	2.85	3.20	2.90	2.60
RRR (major banks) [†] %	10.75	10.75	10.75	10.75	10.75	11.00	10.75	10.75	10.75
CSI 300 Index [†]	4,035	4,095	4,320	4,545	4,770	3,872	4,770	5,110	5,468
Hong Kong GDP	(-4.2)*	(1.6)	(3.6)	(8)	(9.3)	(-3.5)	(5.5)	(7.5)	(4.5)
Hang Seng Index [†]	19,920	20,500	22,000	24,000	26,000	19,781	26,000	27,500	28,000

Sources: Bloomberg, Refinitiv, CEIC, Capital Economics *Q4; **Feb.; ***Jan. & Feb., [†] End of period



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