



## Weekly Notes on China's Economy

July 6, 2010. Worldwide Edition

Carl B. Weinberg, Chief Economist

### PMI My Eye!

When we first started writing these *Weekly Notes on China's Economy* six and a half years ago—has it really been that long?—people would ask us how fast we thought China's GDP might be growing. Our semi-serious answer was, "10%, plus-or-minus ten percent." That would always generate a laugh. The reality is that our understanding of how quickly China is modernizing can be no better gauged today than it was then. Sure, the numbers are more accurate now than they were then: Data collection techniques have improved, statistical massaging—like seasonal adjustment—has 20% more historical data to apply to the task of making the fluctuations of the numbers more understandable. The government has thrown more resources at the task of measuring what is going on. Then again, there is 85% more activity to be accounted for now than in 2004, if you compound our estimate of 10%-per-year growth six and a half times. The estimate of GDP that NBS will publish on July 15—just 360 hours after the end of the second quarter—will be more accurate than the accounting done for the April 15, 2004, estimate of first quarter GDP... but not by much.

Thus, we are amused as analysts around the world line up their forecasts for second quarter GDP within a few jots of each other. Glance at any survey to find the pack of estimates ranges from 10.5% to 11.2%, suggesting to us that "analysts" are reading each others' forecasts more than they are reading the data. In particular, we have noticed the penchant for "marking down" forecasts for GDP since the CFLP index of purchasing managers' sentiment turned out "lower than expected."

*Oh... come on!*

Let us talk about using indexes like CFLP's PMI and the MNI business conditions survey to estimate GDP... or to estimate anything, for that matter. The first question is, why should we suspect that any PMI can tell us anything about China's GDP growth in the short term? In a

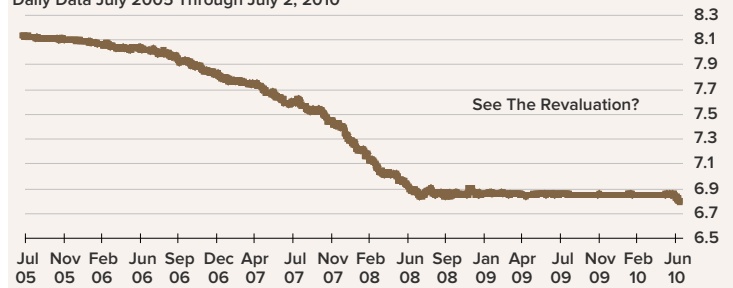
### Recent & Upcoming Economic Releases

Date (Est.)	Content	Expected/Actual	Prior
Jul 1	CFLP PMI (6)	52.1	53.9
Soon	M1 (6) %chya	26.2%	29.9%
Soon	M2 (6) %chya	19.2%	21.0%
July 10	Trade Balance (6)	+\$20.02bn	+\$19.53bn
July 10	Exports (6) %chya	49.7%	48.5%
July 10	Imports (6) %chya	40.9%	48.3%
July 15	CPI (6) %chya	3.4%	3.1%
July 15	PPI (6) %chya	6.6%	7.1%
July 15	Retail Sales Value (6) %chya*	23.5%	24.2%
July 15	Industrial Production (6) %chya*	14.2%	16.5%
July 15	Fixed Asset Investment (6) %chya		25.9%
July 15	Cumulative FDI (6) %chya		27.5%
July 15	GDP (Q1) %chya	11%	11.9%
July 15	Foreign Exchange Reserves (6)	\$2.50tn	\$2.45tn

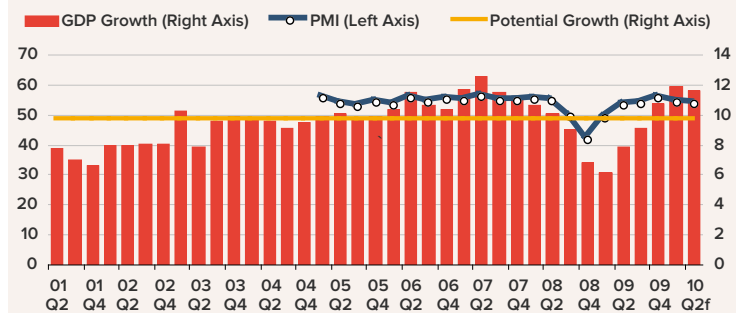
\* Data derived from levels, do not match official releases.

### Yuan Per U.S. Dollar

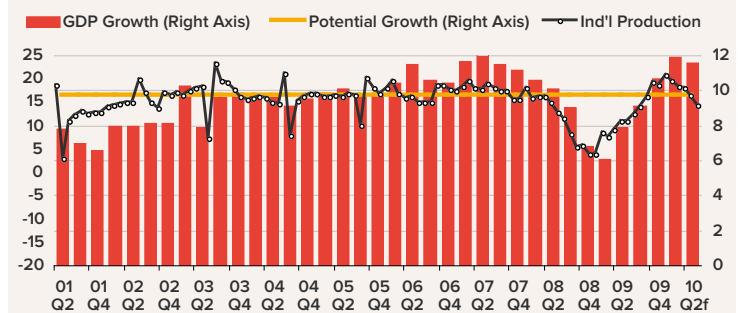
Daily Data July 2005 Through July 2, 2010



### China: GDP, Percent Change Year Ago, Vs PMI



### China: GDP, Percent Change Year Ago, Vs Industrial Output



developed market economy, the theory of the business cycle is that economic activity varies as factories increase or decrease their output relative to full capacity. Purchasing managers observe the flow of orders for production inputs before anyone else. As long as the dominant source of the economy's fluctuation is the **cycle**, then the purchasing managers see it first and the PMI tells us the right story.

Consider instead the situation in the developing world, where economic growth is running in the double digits. Suppose all the purchasing managers felt like dirt last year, and suppose they all feel like dirt this year, too. If the resulting PMI was below 50 then and

below 50 now, you might believe that the economy was contracting both last year and this year. However, the number of factories—and the number of purchasing managers—might be up by 10% or more in a developing economy like China's. So there could be a 10% or bigger increase in output because there is 10% more capacity, regardless of how grim the PMIs suggest the situation is at individual plants. Oh yes, and did the surveys expand to include the new purchasing managers at the new factories? If they did, then the change in the sample could introduce a bias in the inferences. If they did not, that could introduce a different bias in the inferences from the sample. **PMIs only make sense if the sample does not change much from estimate to estimate, and if the cycle is more important in determining short-term fluctuations of the economy than the trend.** This is not the case in China.

We are not even going to bother to point out that since both the CFLP PMI and the MNI survey span only 5-1/2 years, we only have a bit more than one business cycle to ascertain whether they actually correlate with the cycle. Furthermore, we are not going to point out that these data are not seasonally adjusted, nor can they be. With

only 5-1/2 years of monthly data, we have only five independent observations on each of the monthly patterns. So month-to-month and quarter-to-quarter changes in the PMI are meaningless. In other words, if anyone *could* generate a statistically meaningful forecast of the June PMI—which you cannot, because there is not enough historical data to do so—the “disappointment” of the monthly figure turning out lower than “expectations” would be meaningless. *Great!*

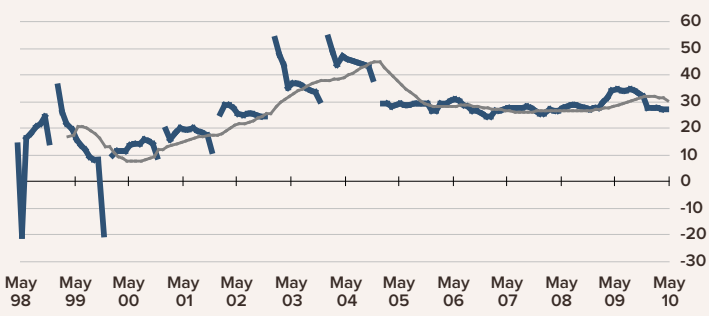
*As our chart below shows, there is a sort-of correlation visible to the naked eye between the PMI and the latest wiggle of the economy. The correlation is rockier before the 2008-09 downturn. Maybe there is a statistically significant correlation between the PMI and GDP growth—we just do not have enough data to tell.*

Instead, we can look at the industrial production series, which runs back to 2000 on a monthly basis at least, and back to 1978 on a yearly basis. The seasonally immune year-over-year rate of production growth correlates well and significantly with the seasonally immune year-over-year rate of GDP growth. Industrial output did slow in the first quarter, but only to about 16%. This matches the pace seen in late 2007, when GDP grew about 11% year-over-year.

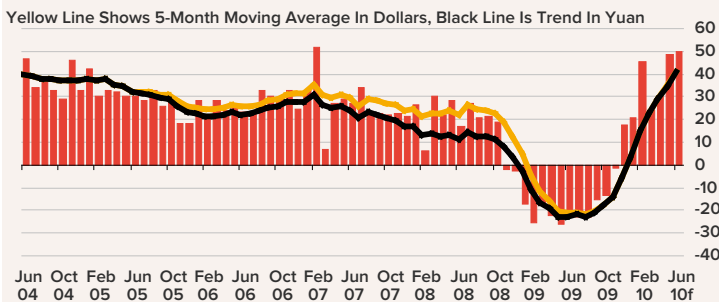
So there is our point forecast for GDP growth, about 11%. This would be about a percentage point faster than trend or potential growth, which we put just under 10% per year. Probably, the headline figure for Q2 growth will be a few jots less than the Q1 result. The difference will be trivial. The economy continues to grow briskly.

So you do not need to obsess over the latest nuances of the PMIs because they do not mean anything to anyone about the economy. GDP is growing fast in China, somewhere around 10% give or take a wide—10%?—margin. That is all you need to know.

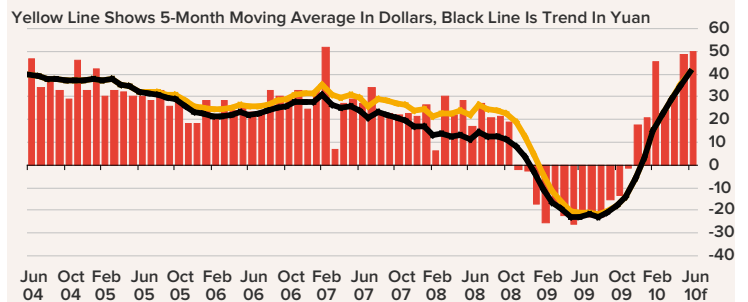
China: Cumulative Fixed Investment, Percent Change Year Ago



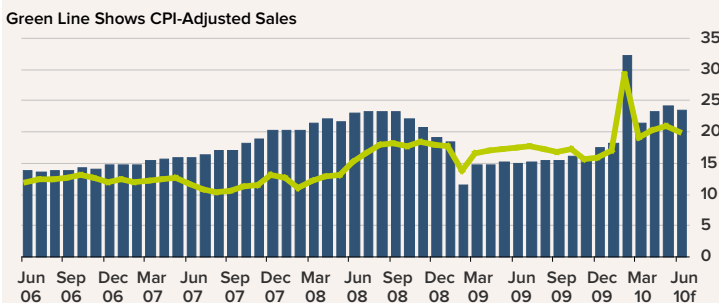
China: Exports, Percent Change Year Ago



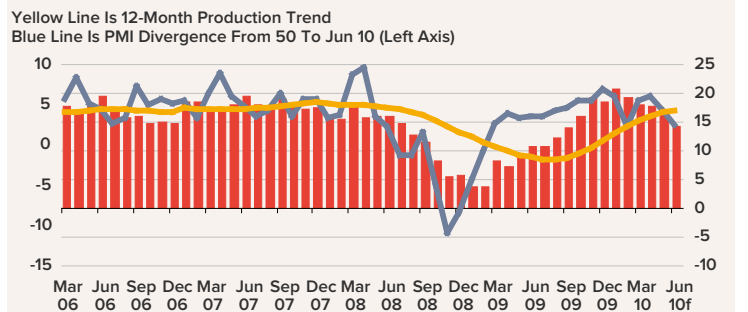
China: Exports, Percent Change Year Ago



China: Retail Sales, Percent Change Year Ago



China: Value Added In Industry, Percent Change Year Ago



Carl B. Weinberg

+1-914-773-2121

cweinberg@hifreqecon.com