Economist Insights

Shanglow

Last week's equity sell-off was led by a drop in Chinese equities. Are the markets telling us something about the state of the global economy? It is likely that the equity markets are reflecting a growing pessimism about growth prospects for China, and its potential knock-on effects for the rest of the world. But equity markets also tend to overreact.

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Last week the headlines were about the trillions of dollars wiped off share values. It's funny how the newspapers never really talk about the trillions that are added to share values when they go up, but perhaps the media are only interested in things that happen quickly.

The sell-off was led by a renewed drop in Chinese equity prices, demonstrating once again the perils for policy-makers of trying to set a floor on the assumption that they have picked the right level (see *Economist Insights*, 13 July 2015). This also created some confusion in financial markets and put the Chinese authorities in a difficult situation: if they did not intervene, equities would have collapsed on the perception that they no longer cared about the stock market. But if they did intervene, then equities would still fall because the market would think that the authorities were really worried about the economy.

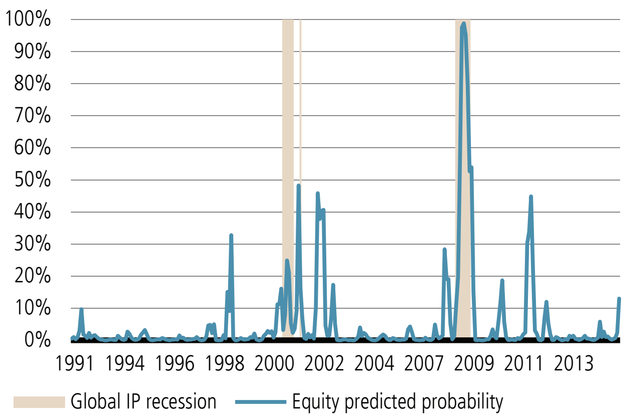
Perhaps the bigger question is whether the equity markets are telling us something important about the global economy. Do equity investors know something about growth prospects that the economists don't? Or alternatively, will the drop in equity markets actually cause a downturn if everyone feels poorer? And in particular, if equity markets are falling around the world, does this mean we face a global downturn?

A simple way to look at it is to ask whether sharp falls in equity markets are a good predictor of downturns in the global economy. The most timely measure of global activity is global industrial production, and we can identify the big downturns in recessions as being a drop of at least 1% in the three month average over the space of three months. Then we ask how well movements in global equity prices predict these global industrial production recessions.

The answer is not very well. Despite the bursting of the dot-come bubble, globally equity prices had only put a 20-30% chance on the 2001 recession (chart 1). Equity markets managed to predict the 2008 downturn as it happened, but then again so did a lot of other markets. But global equity markets also produced numerous spikes in recession probability that were unfounded, such as in 2002 and 2011. The most recent downturn still only indicates a recession probability of about 15%, well below those earlier false positives.

Chart 1: Signal Failure

Probit probability model of global industrial production recession based on moves in the MSCI All-Country index



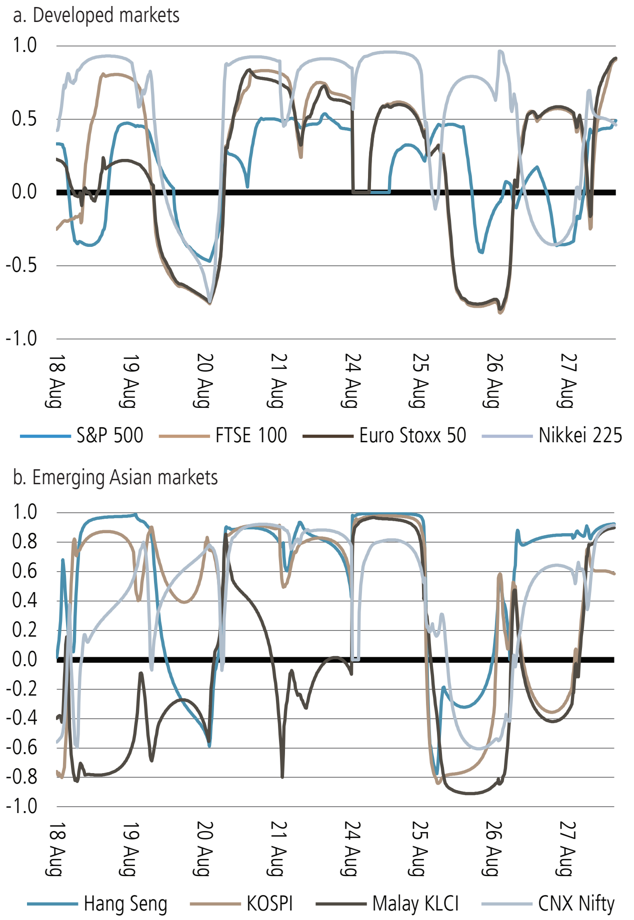
Source: MSCI, CPB, UBS Global Asset Management
Note: Probit estimation is based on percentage change of month-low in equity against month-high three months prior.

So why did equity markets all fall together? It is likely because the equity markets are reflecting a growing pessimism about growth prospects for China, and if China is weaker then this will have knock-on effects for the rest of the world. And this might affect the profits of many listed companies that make part of their revenue in China or by exporting to China. One trigger for the renewed weakness in China was the disappointing reading on the purchasing manager index (PMI) for manufacturing, which pointed to a faster contraction in Chinese manufacturing. Then there was also the disappointment that the PBOC did not cut rates as expected over the weekend of 22-23 August.

Equity markets tend to overreact, for two very important reasons. Firstly there is the relative prevalence of small investors, many of whom have limited information and are likely to react to news stories and recent momentum. Secondly, the relative prevalence of index tracking funds means that when someone is reducing their equity exposure, they will be selling all the equities in the index. So someone selling the S&P 500 or FTSE 100 index will be sensibly selling companies that export a lot to China, but will also rather less sensibly be selling companies that cater to the domestic market.

Chart 2: Summer roll

Rolling 24-hour correlation of equity markets with the Shanghai composite, (based on 15 minute intervals)



Source: Bloomberg Finance LP, UBS Global Asset Management

The phases in the way the market reacted are relatively clear if we look at the correlation in the markets. So on Monday 18 August, the first day of the most recent weakness in Chinese equities, Japan and the UK were fairly well correlated, but the US and Eurozone largely went their own way (chart 2). Then there was a divergence on Tuesday 19 as the market started to treat this as a China problem. But once things worsened on Thursday and Friday the markets all started to move together, and China was once again seen as dragging down the rest of the world. This continued into Monday 24, but as we reached Tuesday 25 the market started to see the developed markets moving differently. The exception is Japan's Nikkei, where the correlation remained high throughout most of the last two weeks. This is not surprising given that Japan is one of the most exposed developed markets to China (see last week's *Economist Insights*).

Meanwhile in Asia, unsurprisingly, economies that are closely linked to China moved in conjunction with China. So Hong Kong's Hang Seng and Korea's KOSPI both fell (albeit not as much as in China). One interesting exception was Malaysia, which is unique in that it has a properly floating currency. A floating currency can act as a shock absorber to help insulate an economy from outside shocks. But an economy like Hong Kong has no such insulation.

Looking wider, equities are not the only prices that may be reflecting pessimism on Chinese growth. Weaker commodity prices are consistent with expectations of slower demand, and in particular investment, from China. But given that lower commodity prices are usually positive for growth in developed market, this suggests that perhaps investors are reading too much into the China slowdown. Some knock-on effects, such as lower commodity prices, can offset potential negative impacts (again see last week's Economist Insights).

After the initial move in global equities, which tend to move together as they did last week, it is interesting (and potentially profitable) to look for the differentiation that follows. The initial panic often seems to get people thinking that the world economy is heading to disaster, but more often than not the equity market is not really telling you that. So while the Shanghai stock exchange may be looking for lows, the other markets will have to decide where they want to go on their own merit.