

Global economy

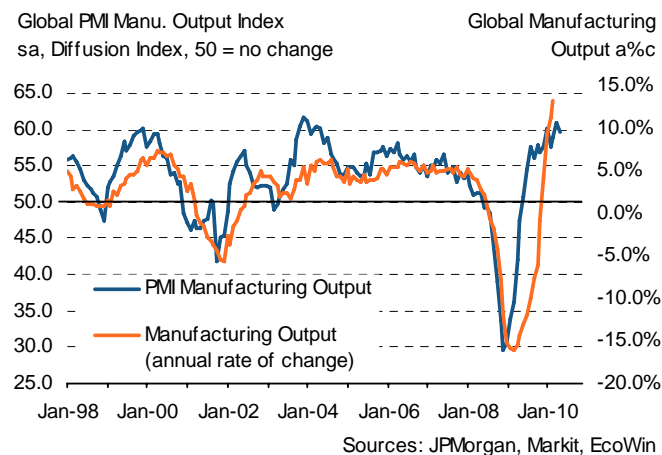
Developed world manufacturing recoups 46% of output lost in recession

Double-digit growth of output in May

One of the more surprising trends to have emerged during the global recovery has been the swift rate at which the manufacturing sector has been recouping its losses. For example, in recent months the JPMorgan Global Manufacturing PMI Output Index – which is compiled by Markit – has signalled a rate of growth rarely seen before in the survey's 12-year history.

At its current level, the Output Index is consistent with double-digit year-on-year growth in manufacturing production, even higher than that seen prior to the manufacturing recession.

Global manufacturing output



With interest rates continuing to be held close to zero in many countries on the assumption that surplus capacity will subdue inflation, it is important to see how quickly this rapid pace of growth is eroding spare capacity.

Developed world manufacturing: just how low did it go?

A prominent feature of the manufacturing recession and recovery has been the difference between emerging and developed markets. Emerging market economies fell into recession later than developed countries on average and have been recovering much faster. For example, China's manufacturing production continued to grow through much of the global downturn,

while Brazilian manufacturing output had already returned to its pre-recession level in March of this year.

Meanwhile, amongst the developed markets, the US retrenched by almost 17% from its pre-recession peak, the Eurozone by over 22%. Japan was hit even harder, with a drop of 35%. The hit taken by UK manufacturing was comparatively modest, but at 15.7% was still substantial. Across all of these major developed countries, 22% of manufacturing production was lost in the recession.

Rapid recouping of manufacturing losses

Official data suggest that the rate of recuperation in the developed markets has been surprisingly strong. Up to April, the US manufacturing sector had grown by 7.4% from its recession trough, meaning that 36.3% of the output lost during the downturn had been recovered. Japanese manufacturing production has risen by 34.6% since its trough in February 2009, recouping almost 64% of its recession losses in the process. Official data for March placed Eurozone manufacturing production at over 8% higher than its nadir in May 2009 – meaning that almost 29% of the output lost during the recession had been regained.

Across all developed economies, 39.4% of the manufacturing output lost in the recession had been recovered by March 2010.

Extrapolating further using PMI data up to May suggests that 45.9% of developed world manufacturing output has been recouped. US manufacturing has so far recovered two-fifths of its recession losses, the Eurozone almost 35% and Japan a rather impressive 68%. Even the UK manufacturing sector, which exited recession later than much of the developed world, has recovered almost one-third of the level of output lost in the downturn.

Table: Recessions and recoveries

	Output lost in recession	Amount ¹ already recovered Official ²	PMI-updated ³
Developed World	21.7%	39.4%	45.9%
US	16.9%	36.3%	40.0%
Japan	35.2%	63.7%	68.2%
UK	15.7%	28.4%	31.9%
Eurozone	22.2%	28.9%	34.7%
Germany	24.8%	42.8%	46.3%
France	20.1%	33.6%	36.5%
Italy	26.2%	24.2%	26.1%

1: Calculated as the percentage of losses recovered since the start of each nation's recovery from their respective recession troughs.

2: According to latest official data.

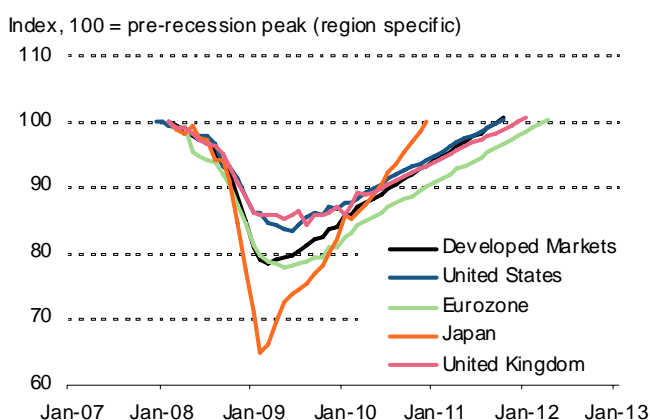
3: Estimate using PMI survey data in addition to official data.

It is interesting to see when output volumes would return to pre-recession levels if the average monthly "recuperation rate"⁴ of these nations since the trough of the recession to the latest official data point were to continue in future months. Given its faster rate of recuperation, Japan would recover by the start of 2011, followed by Germany in September that year and the US in October. The Eurozone would reach this stage in April 2012, mainly due to the slower recuperation rates in France and Italy, later than the UK in January 2012.

It should be noted that part of the intra-regional trend relates to base effects, so it is no surprise that nations hit hardest such as Japan are initially recuperating at a faster pace than the Eurozone.

It should also be noted that the likelihood of recent strong growth rates persisting in coming months is growing increasingly unlikely (and in no way represents a forecast from Markit), given the easing of the inventory cycle, headwinds of the sovereign debt crisis and national government austerity measures. However, the research does illustrate that it is at least *feasible* that many of the developed world's manufacturing sectors could have fully recovered by mid-2012, much earlier than many originally thought possible.

Potential paths to full recovery



	Developed	US	Eurozone	Germany	France	Italy	Japan	UK
Pre-recession peak*	Feb 2008	Dec 2007	Feb 2008	Feb 2008	Feb 2008	Apr 2008	Feb 2008	Feb 2008
Recession trough*	Mar 2009	Jun 2009	May 2009	Apr 2009	Apr 2009	Mar 2009	Feb 2009	Aug 2009
Peak-to-trough output loss*	-21.7%	-16.9%	-22.2%	-24.8%	-20.1%	-26.2%	-35.2%	-15.7%
Latest official data point*	Mar 2010	Apr 2010	Mar 2010	Apr 2010	Apr 2010	Apr 2010	Apr 2010	Apr 2010
Trough-to-latest official output growth*	10.9%	7.4%	8.3%	14.1%	8.5%	8.6%	34.6%	5.3%
Trough-to-latest PMI (May 2010) growth	12.7%	8.1%	9.9%	15.3%	9.2%	9.3%	37.1%	5.9%
Possible full recovery reached in...	Oct 2011	Oct 2011	Apr 2012	Sep 2011	Apr 2012	Sep 2013	Jan 2011	Jan 2012

* based on official data

⁴ Calculated as the percentage of losses recovered since the start of each nation's recovery from their respective recession troughs to the latest official data point. For the forward projections, this assumes a steady recovery in *volumes of output*, building in an assumption of a moderating rate of growth as time progresses. This measure was used as it should provide a more conservative approximation for the month of full recovery than the assumption a steady *rate of growth in output*.

Rob Dobson

Senior Economist

Markit

Tel: +44 1491 461 095

Email: rob.dobson@markit.com

For further information, please visit www.markit.com

The intellectual property rights to this report provided herein is owned by Markit Group Limited. Any unauthorised use, including but not limited to copying, distributing, transmitting or otherwise of any data appearing is not permitted without Markit's prior consent. Markit shall not have any liability, duty or obligation for or relating to the content or information ("data") contained herein, any errors, inaccuracies, omissions or delays in the data, or for any actions taken in reliance thereon. In no event shall Markit be liable for any special, incidental, or consequential damages, arising out of the use of the data. Markit is a trademark owned by the Markit group.