

## OECD composite leading indicators give stronger signals of an expansion in economic activity

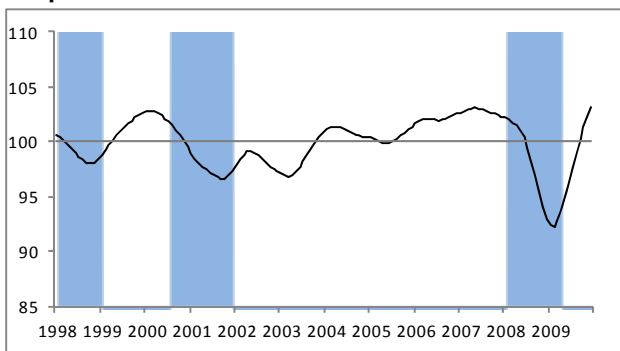
OECD composite leading indicators (CLIs) for December 2009 provide stronger signals of an expansionary economic outlook than last month. CLIs for the G7 economies as well as China, India, Russia and Brazil, are now all close to, or above, their long term trends. In all these countries, industrial production – the underlying reference series for the CLIs – has now reached its trough.

The CLI for the **OECD area** increased by 0.9 point in December 2009 and was 10.1 points higher than in December 2008. The CLI for the **United States** increased by 0.9 point in December, 9.0 points higher than a year ago. The **Euro area's** CLI increased by 0.9 point in December, 12.2 points higher than a year ago. The CLI for **Japan** increased by 1.2 point in December, 8.1 points higher than a year ago.

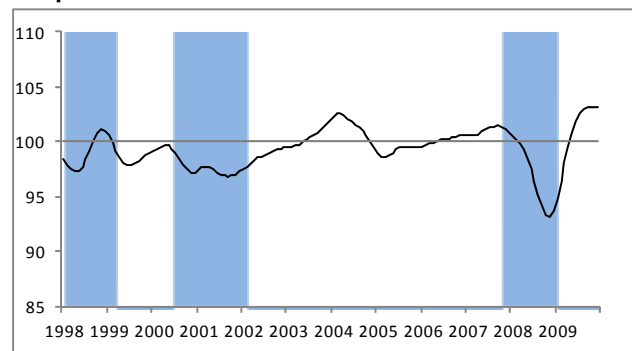
The CLI for the **United Kingdom** increased by 0.9 point in December 2009 and was 11.5 points higher than a year ago. The CLI for **Canada** increased by 1.1 point in December, 11.3 points higher than a year ago. The CLI for **France** increased by 0.9 point in December, 12.4 points higher than a year ago. The CLI for **Germany** increased by 1.2 point in December, 14.9 points higher than a year ago. The CLI for **Italy** increased by 0.8 point in December, 14.7 points higher than a year ago.

The CLI for **China** decreased by 0.1 point in December 2009 but was 9.4 points higher than a year ago. The CLI for **India** is unchanged in December and 4.9 points higher than a year ago. The CLI for **Russia** increased by 0.3 point in December, 14.2 points higher than a year ago. The CLI for **Brazil** increased by 0.1 point in December, 13.8 points higher than a year ago.

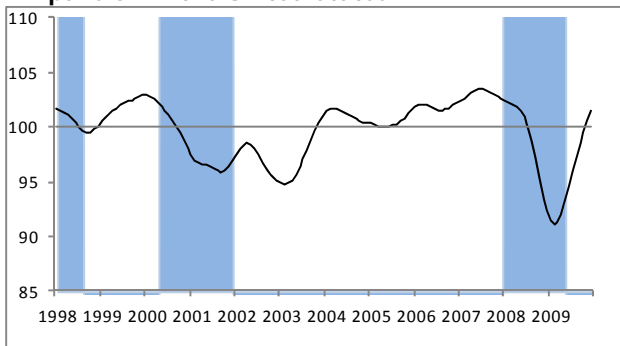
Expansion in the OECD area



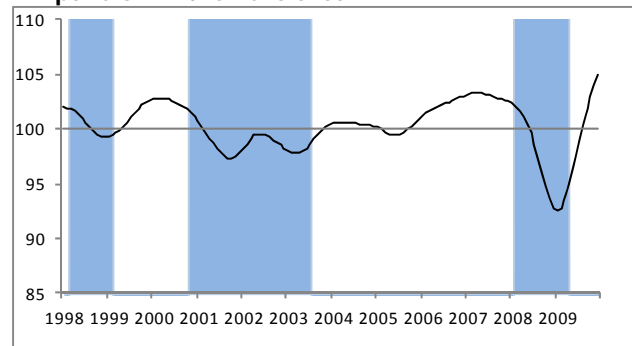
Expansion in China



Expansion in the United States

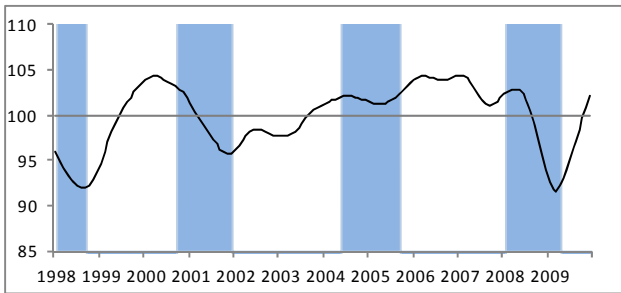


Expansion in the Euro area

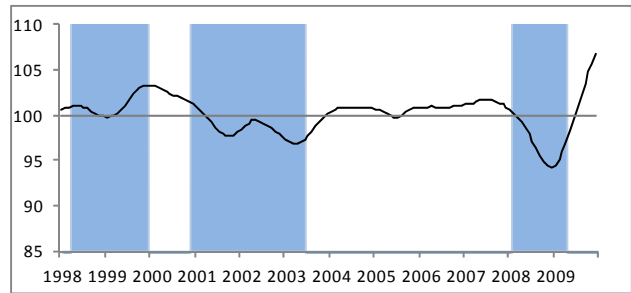


The above graphs show for each country the outlook for economic growth based on the CLIs. CLIs indicate turning points in economic activity approximately six months in advance. Shaded areas represent observed downswings (measured from peak to trough) in industrial production (the reference series for the CLIs).

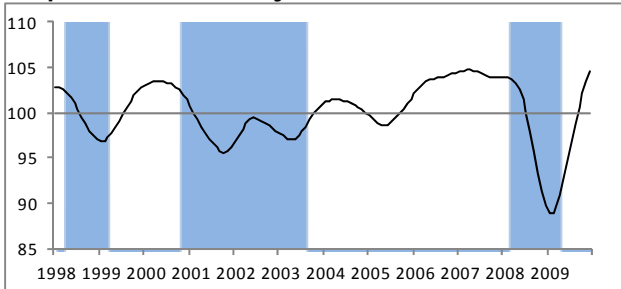
**Expansion in Japan**



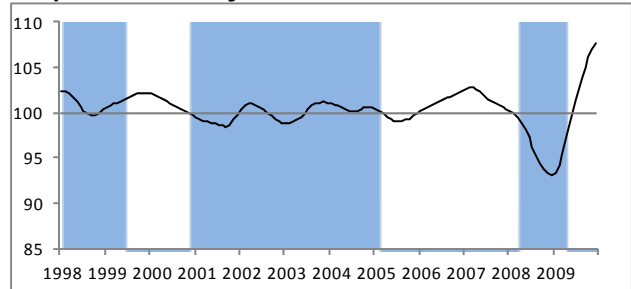
**Expansion in France**



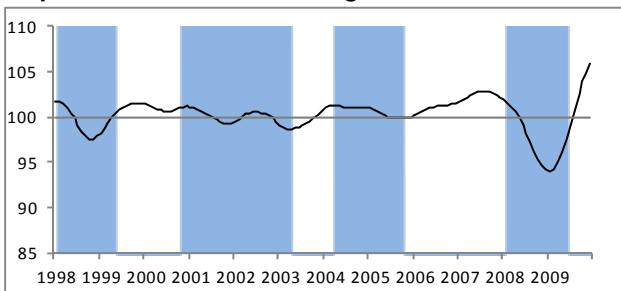
**Expansion in Germany**



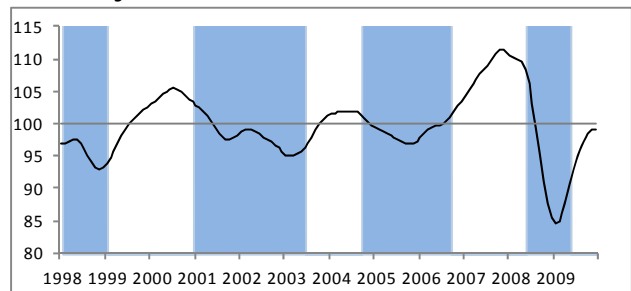
**Expansion in Italy**



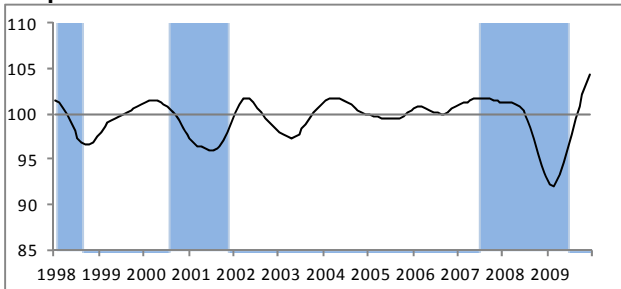
**Expansion in the United Kingdom**



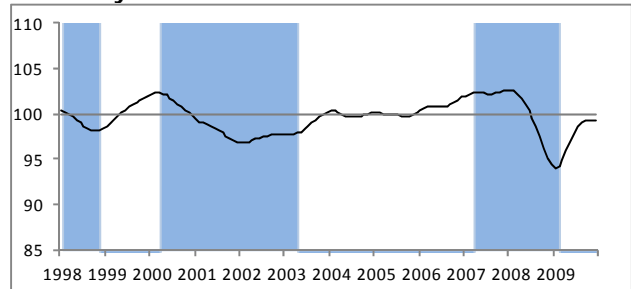
**Recovery in Brazil**



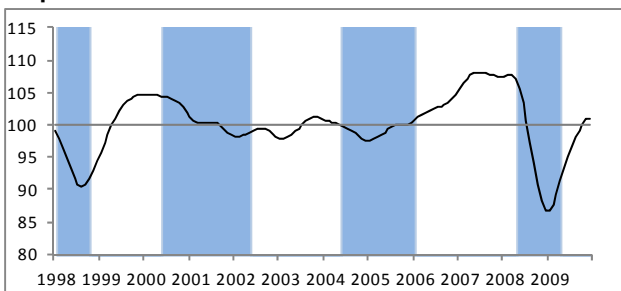
**Expansion in Canada**



**Recovery in India**



**Expansion in Russia**



Note: The horizontal 100 line shows the long-term trend in the reference series (industrial production). *Expansion* denotes a CLI increasing above 100; *downturn* a CLI decreasing but still above 100; *slowdown* a CLI decreasing below 100; *recovery* a CLI increasing and below 100.

**Table 1: Composite Leading Indicators**

	Ratio to trend, amplitude adjusted (long term average = 100)					Change from previous month (points)					Year on Year change (points)	Growth cycle outlook**
	2009					2009					Latest month	
	Aug	Sep	Oct	Nov	Dec	Aug	Sep	Oct	Nov	Dec		
<b>OECD Area</b>	99.0	100.2	101.3	102.2	103.1	1.3	1.2	1.1	1.0	0.9	10.1	expansion
<b>Euro Area</b>	100.5	101.8	103.0	104.0	104.9	1.5	1.3	1.2	1.0	0.9	12.2	expansion
<b>Major Five Asia*</b>	101.0	101.5	101.9	102.2	102.5	0.7	0.5	0.4	0.3	0.3	8.6	expansion
<b>Major Seven</b>	98.6	99.9	101.1	102.1	103.1	1.4	1.3	1.2	1.1	1.0	10.4	expansion
<b>Canada</b>	99.4	100.8	102.1	103.2	104.3	1.6	1.4	1.3	1.1	1.1	11.3	expansion
<b>France</b>	102.2	103.5	104.7	105.8	106.7	1.3	1.3	1.2	1.1	0.9	12.4	expansion
<b>Japan</b>	97.1	98.4	99.6	100.9	102.1	1.3	1.3	1.2	1.2	1.2	8.1	expansion
<b>Germany</b>	98.9	100.6	102.1	103.4	104.6	2.0	1.7	1.5	1.3	1.2	14.9	expansion
<b>Italy</b>	103.6	104.9	106.0	107.0	107.7	1.4	1.3	1.1	0.9	0.8	14.7	expansion
<b>United Kingdom</b>	101.1	102.6	103.8	104.9	105.8	1.5	1.5	1.3	1.0	0.9	11.5	expansion
<b>United States</b>	97.3	98.5	99.6	100.5	101.5	1.3	1.2	1.1	1.0	0.9	9.0	expansion
<b>Brazil</b>	96.6	97.7	98.5	99.0	99.1	1.6	1.2	0.8	0.5	0.1	13.8	recovery
<b>China</b>	103.0	103.2	103.2	103.2	103.1	0.4	0.2	0.0	0.0	-0.1	9.4	expansion
<b>India</b>	99.0	99.2	99.3	99.3	99.2	0.5	0.2	0.1	0.0	0.0	4.9	recovery
<b>Russia</b>	98.0	99.2	100.1	100.8	101.0	1.4	1.2	0.9	0.7	0.3	14.2	expansion

\* China, India, Indonesia, Japan and Korea.

\*\* Growth cycle phases of the CLI are defined as follows: expansion (increase above 100), downturn (decrease above 100), slowdown (decrease below 100), recovery (increase below 100). CLI data for 29 OECD member countries and 6 OECD non-member economies available at: [http://stats.oecd.org/wbos/default.aspx?datasetcode=MEI\\_CLI](http://stats.oecd.org/wbos/default.aspx?datasetcode=MEI_CLI)

**Table 2: Historical Performance of CLI and Recent Cyclical Turning Points in the Reference Series**

	CLI Historical Performance			Recent confirmed Turning Point dates in the reference series					
	Lead (+) / Lag (-) at all turning points			Dates marked with (P) are provisional turning points					
	start year	mean	st. dev.	peak	trough	peak	trough	peak	trough
<b>OECD Area</b>	1961	6	3.5	Aug 2000	Jan 2002			Feb 2008 P	May 2009 P
<b>Euro Area</b>	1963	7	3.1	Nov 2000	Jul 2003			Mar 2008 P	May 2009 P
<b>Major Five Asia*</b>	1982	6	6.0	Aug 2000	Dec 2001	May 2004 P	Jun 2005 P	Feb 2008 P	Mar 2009 P
<b>Major Seven</b>	1959	6	3.7	Aug 2000	Jan 2002			Mar 2008 P	May 2009 P
<b>Canada</b>	1956	8	3.7	Aug 2000	Nov 2001			Aug 2007 P	Jun 2009 P
<b>France</b>	1962	7	4.9	Dec 2000	Jul 2003			Feb 2008 P	Apr 2009 P
<b>Japan</b>	1959	6	4.5	Sep 2000	Dec 2001			Mar 2008 P	Apr 2009 P
<b>Germany</b>	1961	5	4.0	Nov 2000	Jul 2003			Mar 2008 P	May 2009 P
<b>Italy</b>	1973	7	5.8	Dec 2000			Feb 2005 P	Mar 2008 P	May 2009 P
<b>United Kingdom</b>	1958	7	5.2	Sep 2000	Apr 2003	Apr 2004	Aug 2005 P	Feb 2008 P	Jun 2009 P
<b>United States</b>	1955	5	3.4	May 2000	Dec 2001			Feb 2008 P	May 2009 P
<b>Brazil</b>	1989	5	2.3	Jan 2001	Jun 2003	Oct 2004	Aug 2006 P	May 2008 P	Apr 2009 P
<b>China</b>	1983	5	5.3	Jul 2000	Jan 2002			Dec 2007 P	Feb 2009 P
<b>India</b>	1994	5	5.6	May 2000	Apr 2003			Apr 2007 P	Jan 2009 P
<b>Russia</b>	1993	3	2.7	Jun 2000	Jul 2002	Jun 2004	Sep 2005 P	Apr 2008 P	May 2009 P

\* China, India, Indonesia, Japan and Korea

P= provisional (see Methodological Notes on next page)

## Methodological Notes

### Purpose

The OECD CLI is designed to provide early signals of turning points in business cycles – fluctuations of economic activity around its long term potential level. The approach, focusing on turning points (peaks and troughs), results in CLIs that provide qualitative rather than quantitative information on short-term economic movements. Four cyclical phases form the basis of this qualitative approach: *expansion* – CLI increasing and above 100; *downturn* – CLI decreasing and above 100; *slowdown* – CLI decreasing and below 100; *recovery* – CLI increasing and below 100. Although the CLIs attempt to predict movements in the output gap, they should not be interpreted as providing exact forecasts.

### Reference Series

OECD CLIs are constructed from economic time series that have similar cyclical fluctuations to those of the business cycle but which precede those of the business cycle. Typically movements in GDP are used as a proxy for the business cycle but, because they are available on a more timely and monthly basis, the OECD CLI system uses instead indices of industrial production (IIP) as proxy reference series. Moreover despite their tendency towards higher volatility historical turning points of IIPs coincide well with those of GDP for most OECD countries. Table 2, above, shows recent turning points in the reference series and these are marked provisional until they have been verified with the turning points of de-trended quarterly GDP estimates.

### Summary Methodology

The OECD CLIs are composite indicators: with components that target the early stages of production, respond rapidly to changes in economic activity, are sensitive to expectations of future activity or are control variables that measure policy stances. All components are passed through a series of filters before aggregation (seasonal adjustment, trend-removal, smoothing and normalisation). The composite indicator is constructed to: preserve the leading properties of the components, have more stable lead times, and have fewer missed or extra turning-points when compared to the reference series than the components alone. The historical performance (lead/lag at turning points) of the CLIs for individual countries and areas are set out in Table 2.

More information on methodology is available in the following document: "[OECD system of composite leading indicators](#)".

### Data

A large set of component series, selected from a wide range of economic indicators, are used in constructing CLIs (224 series are used in total, about 5-10 for each country). CLIs are calculated for 29 OECD countries and 9 zones. They are calculated in three forms: amplitude adjusted, trend-restored, and year-on-year growth rate. These are comparable, respectively, with the de-trended reference series, the original reference series and the year-on-year growth rate of the reference series. The press release focuses on the amplitude adjusted form of the CLI, and includes the major countries and zones.

Access to time series data and methodological information for OECD *Composite Leading Indicators* (CLI) and *Consumer and Business Confidence Indicators* is provided by the OECD Business Cycle Analysis Database available at the OECD web site at <http://stats.oecd.org/mei/default.asp?rev=2>

The **OECD-Total** covers the following 29 countries: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

The **G7 area** covers Canada, France, Germany, Italy, Japan, United Kingdom and United States.

The **Euro area** (only Euro area countries that are members of OECD) covers the following 13 countries: Austria, Belgium, Finland, France, Germany, Greece, Italy, Ireland, Luxembourg, the Netherlands, Portugal, Slovak Republic and Spain.

The **Major Five Asia area** covers China, India, Indonesia, Japan and Korea.

This Press Release can be found on the OECD web page, see [OECD Internet Site](#)

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