Collateral Damage
Quick-o-nomics Update

Leading-Indicator Edition: Searching for Green Shoots

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Introduction: Polishing the Crystal Ball

Quick-o-nomics is part of BCG’s Collateral Damage series of papers reviewing developments in the global financial and economic crisis and drawing implications for managers. This paper focuses on leading indicators—those metrics that have historically turned prior to GDP—and what they suggest about the short-term prospects for economic turnaround in the United States, the United Kingdom, the eurozone, Japan, and China.

In recent weeks, there has been heated debate about the so-called green shoots of recovery. On the one hand, commentators can point to a broad range of indices that have improved or whose rate of decline has abated. For example, manufacturing output and exports rose in Japan in March and April; U.K. home prices appeared close to stable or even seemed to increase in April and May; and metrics of business and consumer confidence in the United States, the United Kingdom, and elsewhere also increased in May.

On the other hand, the fundamentals driving the downturn are yet to relent. Estimated financial-system losses continue to mount; overextended consumers face declining wealth as home prices fall; the credibility of expansionary policy is increasingly stretched as government liabilities grow; and bailouts risk perpetuating a “zombie” banking sector that absorbs finance rather than extending it.

So just how green are these green shoots, and what do they say about the timing and strength of a recovery? In this paper, we first quickly review the experience of the most comparable previous recessions, in which GDP declined for two years, on average. Then we take stock of the financial dimensions of this downturn, which suggest that a strong recovery is not imminent. We then review the OECD’s leading indicators and provide commentaries on recent developments in selected major economies.

We conclude from this exercise that deterioration across a broad set of leading indicators has slowed since the first quarter of 2009, and in some cases reversed. Even as we compiled the data, in late May and early June, the balance of evidence was shifting enough to provide cause to expect that GDP growth in some major developed economies might turn positive in the second half of 2009. The United Kingdom appears closer to recovery than Germany, the United States, and Japan. Meanwhile, China is already growing more strongly than at the start of the year, driven by domestic demand and government stimulus. But a balanced assessment of progress across the major OECD economies is that they remain in the grip of a challenging global recession. Despite some genuine green shoots, there remains significant uncertainty about when, and how strongly, recovery might arrive.

The Paths of Previous Recessions Suggest That the Current Downturn Could Last past 2009

Previous recessions provide a rough indication of how long the current global recession could last. The IMF has shown that recessions that are synchronized and associated with financial disruption last longer and are deeper than those that are not.1 Recessions with financial disruption average 6.7 quarters, in comparison with 3.4 for those without financial disruption; recessions that are synchronized across countries average 4.5 quarters; and recessions with both financial disruption and synchronization last on average almost 8 quarters.

1. International Monetary Fund, World Economic Outlook: Crisis and Recovery, April 2009, Chapter 3.
The current downturn is highly synchronized across countries (65 percent of countries were in recession globally in the first quarter of 2009), and, of course, it is associated with severe financial disruption. It is also deep: GDP in the OECD dropped 2.1 percent in the first quarter of 2009.

Given that the United States entered recession at the end of 2007, and others (including Japan, much of the eurozone, and the United Kingdom) in mid-2008, a turnaround to positive growth in the major OECD countries before the end of 2009 would signal a relatively brief recession, compared with the paths taken in previous synchronized downturns with significant financial disruption.

The Risk of a “Meltdown” Has Receded, but the Financial Fundamentals Are Still Unfavorable for Recovery

One of the prerequisites for a return to growth is likely to be a return to normal functioning of the global financial system. Unfortunately, although the financial system has stabilized since late 2008, it remains a long way from normal functioning. (See Exhibit 1.)

First, aggressive policy interventions have reduced risk aversion inside the financial system, but for nonfinancial companies, spreads remain elevated and credit remains restricted. U.S. TED spreads (the difference between interest rates on three-month interbank loans and rates on three-month Treasury bills) dropped from a peak of about 3 percentage points in September 2008 to about 0.8 of a percentage point in May 2009, reflecting greater confidence within the financial system, stemming largely from government policy to reduce systemic risk. However, while narrow measures of the money supply have increased and risk-free rates have fallen, capital availability remains restricted. Spreads on corporate bonds remain near their highs, reflecting both the limited prospect of government support for most nonfinancial companies and the increased risk of default during the recession. In addition, many bank borrowers continue to experience tight credit.

Second, estimates of system losses suggest that the process of loss recognition and recovery is far from over and that many banks will continue to protect their capital and ration their lending. The IMF recently increased its estimate of system losses for the years 2007 to 2010 to approximately $4 trillion, including total bank write-downs of $2.8 trillion. As just one example, even according to more conservative European Central Bank projections, European banks are expected to make further write-downs of more than $280 billion by the end of 2010.

Third, there is a risk that deflation will further weaken the balance sheets of debtors, drive up real interest rates, and stifle emerging recoveries. While rising long-term bond yields suggest that markets believe that enduring deflation is less likely than it was a few months ago, the Consumer Price Index (CPI) in many economies has still been moving toward deflation. So-called headline CPI inflation, which includes energy and food prices, was negative year on year in April in Japan, the United States, and the eurozone. Measures of the more stable “core” CPI inflation were low and falling in the United Kingdom (where core CPI inflation was 1.5 percent year on year in April—down from 1.7 percent in March), the eurozone (where CPI inflation for all items, excluding energy, was 1.4 percent year on year in May—down from 1.6 percent in March), and Japan (where the core CPI dropped 0.1 percent year on year in both March and April). Home prices, too, continued to fall in many economies (including the United States, Spain, and Ireland), reducing homeowners’ wealth and driving more of them into negative equity.

The OECD Composite Leading Indicator Provides About Six Months’ Notice of Recovery

We now quickly review the performance of one well-regarded leading index, the OECD’s composite leading indicator (CLI), which is based on four classes of metrics that tend to change in advance of industrial production:

- Early stage of production (such as new orders and construction approvals)
Rapidly responsive (such as average hours worked, profits, and new unemployment claims)

Expectation sensitive (such as stock prices, commodity prices, and confidence)

Prime movers (such as monetary-policy indicators)

The OECD’s leading indicator for the entire OECD economy has performed reasonably well in predicting previous turning points in industrial production (which is the most predictable major component of GDP)

Exhibit 1. Nonfinancial Spreads Remain High and Lending Is Sluggish Despite Monetary Expansion

TED Spread

Corporate Bond Spreads

CBOE Volatility Index (VIX)

Home Prices

Policy Interest Rates

U.S. Money Multiplier Index

Sources: Bloomberg; Thomson Reuters Datastream; U.S. Federal Reserve.

Note: The M1 money supply includes only checkable demand deposits; M2 includes everything in M1 and also savings and other time deposits.
and, unlike GDP, is reported on a monthly basis). Exhibit 2 shows the monthly CLI and industrial production since 1990 (both expressed as a year-on-year percentage change). It can be seen that the aggregate OECD CLI usually turns approximately five to six months in advance of industrial production.

The OECD CLI does, however, have inherent limitations:

- The CLI cannot predict industrial production beyond a horizon of about six months, and the indicator is published with a lag of two months.
- The CLI’s advance warning is significantly variable over time and across countries.
- The CLI does not provide a fully independent data source for forming expectations, because it includes an element of expectations (in stock prices, commodity prices, and confidence).
- The CLI also gives some weight to policy settings, which may be less predictive currently than in previous recessions that were triggered by policymakers tightening settings to reduce inflation.
- The CLI cannot distinguish between the effects of temporary spending increases (such as those induced by fiscal policy) and more sustainable increases, so it provides little indication of the economy’s fundamentals.

Despite those limitations, the previous performance of the OECD CLI in predicting industrial output makes it, in our view, a valuable measure of how green the green shoots are. In the current downturn, the OECD CLI began to fall on a year-on-year basis in March 2008, which was after the United States had entered recession but before the decline in OECD industrial output, which was sharpest in the final quarter of 2008 and the first quarter of 2009. Exhibit 2 also shows that the OECD CLI continued to decline, when measured on a year-on-year basis, to April 2009.

**Exhibit 2. OECD CLI Turns Approximately Six Months Prior to Industrial Production**

![Graph showing OECD CLI and industrial production](Image)

**OECD Composite Leading Indicator and Industrial Production Growth Index**

Year-on-year percentage change, monthly

Source: OECD.
Composite Leading Indicators Have Improved, Suggesting the Prospect of Recovery in Late 2009

Exhibit 3 shows selected major economies’ CLIs from January 2000 to the latest available, April 2009. Although the CLIs remained close to, or below, the lowest points recorded in all recessions since 1980, some had increased since February, and all of them increased in April:

- The CLI for China rose significantly in February, March, and April, from a low point in January
- The U.K. CLI also rose each month from February to April, but not as markedly as the CLI for China
- The eurozone CLI rose in March and April, from a low point in February
- The CLIs for the United States and Japan increased only marginally in April, from a low point in March

Outside of China, where output is already growing relatively strongly, these improving CLIs do suggest the potential for an increase in industrial production within six months. Recovery appears more likely in the United Kingdom and in parts of the eurozone, while the larger drops and later and smaller turnarounds in the CLIs for the United States and Japan suggest a weaker or later recovery.

The improvement in outlook in the past few months, in our view, is broad based enough to be taken seriously. But it should not be interpreted as foretelling an immediate, strong, and sustained recovery. As we have noted, the CLI itself is not a perfect leading indicator of recovery. There is, moreover, no reliable leading indicator for the pace of recovery; and neither is there a leading indicator for the repair of the financial fundamentals, which we expect to be protracted. Strong and enduring recoveries, even in those economies displaying the “greenest shoots,” would appear unlikely until the global powerhouses Japan and the United States also begin to recover. And finally, recovery could also be undermined by further financial disruptions (such as emerging-market losses) or by policy mistakes (including protectionism, competitive devaluations, and a premature tightening of fiscal and monetary settings).
We turn next to brief assessments of the signs of recovery in the United States, the United Kingdom, the eurozone, Japan, and China.

**The United States: Recovery Appears Possible in Late 2009**

U.S. GDP fell 1.4 percent in the first quarter of 2009—approximately half the decline forecast for the full year. (IMF: –2.5 percent; private-sector consensus: –2.9 percent.) The most likely short-term outlook for the United States appears to be “contraction, but at a slower pace,” with the potential for an upturn by the end of the year. (See Exhibits 4 and 5.)

**Exhibit 4. U.S. Leading Indicators Suggest Further Declines Through 2009**

![Chart showing various economic indicators for the US, including the OECD Composite Leading Indicator, Orders for Nondefense Capital Goods, Price Index of Equities: S&P 500, and Business and Consumer Confidence Indexes, as well as Weekly Hours of Work and Housing Starts.](chart)

**Sources:** Thomson Reuters Datastream; OECD.

1Excluding aircraft.

3Manufacturing.
The U.S. CLI declined until March and increased very slightly in April, suggesting the possibility of a turnaround before the end of the year.

Early-stage metrics appeared to have stabilized in April but were showing little sign of growth. New orders for nondefense capital goods remained more than 20 percent below peak levels; single-family housing starts were below one-quarter of their peak levels (with little change from January to May).

Rapidly responsive metrics continued to deteriorate in May. Initial unemployment claims remained close to peak rates, with the four-week moving average still in excess of 600,000 in the first week of June.

Expectation-sensitive metrics improved in the second quarter of 2009. Business confidence, after scarcely moving from its low point in December 2008, rose in April and May 2009 but was still at a
level usually associated with recession. Some metrics of consumer confidence, however, rose sharply in May.

- Home prices dropped 2.2 percent in April, to 31 percent below their peak, according to the S&P/Case-Shiller 20-city index.
- Industrial production continued to fall in May, by 1.1 percent month on month, to 13.4 percent below its level of a year earlier.

The United Kingdom: Signs of Recovery Are Strengthening

U.K. GDP dropped 1.9 percent in the first quarter of 2009—the largest fall since 1979. Leading indicators, however, provide some basis to expect that full-year GDP might fall less than the 4 percent forecast by the OECD. (See Exhibits 6 and 7.)


Sources: Thomson Reuters Datastream; OECD.
The OECD CLI for the United Kingdom rose appreciably in March and again in April, suggesting a relatively good prospect of a recovery before the end of 2009.

Early-stage metrics were encouraging: the U.K. Purchasing Managers’ Index rose to 51.7 in May, exceeding the traditional dividing line between contraction and growth for the first time since mid-2008.

Consumer confidence continued falling through the first quarter of 2009 (having fallen throughout 2008), while some measures of confidence improved slightly in April and May, and several home-price surveys showed increases in May.

While bank lending spreads (the difference between banks’ lending rates and their short-term funding costs) remained wide, consumer credit grew strongly in April and the number of home mortgages granted edged up.
U.K. manufacturing output grew 0.2 percent in both March and April (but was still 13.2 percent lower than a year earlier); transport and services output increased 3.2 percent in April.

The Eurozone: Contraction Is Likely to Continue at a Slower Pace Until Exports Recover

The eurozone’s GDP dropped 2.5 percent quarter on quarter in the first quarter of 2009—the largest decline on record, with Germany’s GDP falling 3.8 percent. The European Central Bank’s forecast full-year eurozone GDP contraction is 4.6 percent. The pace of contraction appears to have relented since the first quarter. While the latest eurozone CLIs suggest that GDP could begin to grow within six months, the economy is likely to remain weak until global demand drives a recovery in Germany’s exports. (See Exhibits 8 and 9.)

Exhibit 8. Eurozone Leading Indicators: The Contraction May Be Moderating

Source: Thomson Reuters Datastream; OECD; Eurostat; Bloomberg.

1 This index is a summary of five sector-specific confidence indicators: industrial confidence, services confidence, consumer confidence, retail trade confidence, and construction confidence.
The CLI for the eurozone rose slightly in March and April 2009, suggesting the possibility of a turnaround later in 2009. Country-level CLIs for France and Italy appeared stronger than the CLI for Germany.

Although the eurozone Purchasing Managers’ Index for services and for manufacturing rose in April and May, both indices were still well below the threshold of 50, which has traditionally separated expansion from contraction.

The Economic Sentiment Indicator rose to 69.3 in May, but it was still only 2.5 points above its all-time low, recorded in March.

The pace of job losses in the eurozone hit a record high in March and was almost as high in April.
Loans outstanding to nonfinancial corporations were stagnant from November 2008 to April 2009, reflecting both low demand for funds and continued tight lending conditions.

Eurozone industrial production fell 1.9 percent month on month in April, to 21.6 percent below the level of a year earlier.

Despite eurozone governments’ running fiscal deficits averaging 5.5 percent of GDP in 2009, the European Central Bank does not expect recovery until mid-2010.

Japan: A Few Metrics Are Recovering After a Precipitous Decline in the First Quarter

Japan’s economy contracted by 3.8 percent in the first quarter of 2009—an annual rate of 14 percent. The Bank of Japan expects some moderation of that pace, and the OECD CLI increased marginally in April, suggesting that a recovery could possibly occur within six months. But, as in the United States, the increase in the CLI was small. (See Exhibits 10 and 11.)

Exhibit 10. Japanese Leading Indicators: Continued Contraction Appears Likely

Sources: Thomson Reuters Datastream; OECD.
Japan’s OECD CLI fell sharply from mid-2008 to March 2009, before recovering marginally in April.

Confidence metrics are mixed. Consumer confidence rose to 32.4 in April 2009 from a trough of 26.2 in December 2008, but business confidence remains low. The Nikkei improved from a low of just above 7,000 in March to almost 10,000 in early June, but it was still far below the 13,000s of mid-2008.

Retail sales rose almost 0.6 percent month on month in April but were still 2.9 percent below their August 2008 level.

After a record export collapse of 46 percent year on year to February 2009, Japanese exports recovered modestly, by 1.6 percent in March and 7.8 percent in April. However, machinery exports continued to drop in April, and auto exports to the United States in April remained at less than one-quarter of their peak levels (reached in November 2006).
Industrial production increased in March by 1.6 percent month on month, and by 5.2 percent in April—the biggest monthly increase in 50 years. However, even after those increases, industrial production was 30.7 percent below its level of April 2008.

The introduction of a new economic-stimulus package in mid-April, with a fiscal expenditure of ¥15.4 trillion—the biggest ever, and contributing to a net fiscal stimulus of 5 percent of GDP—is likely to slow the decline later in 2009. However, as Japan’s public-sector debt-to-GDP ratio continues to increase, the credibility of the fiscal stimulus may be weakened.

China: A Recovery Has Already Occurred, but a Quick Return to Double-Digit Growth Appears Unlikely

China’s GDP grew 6.1 percent year on year in the first quarter of 2009 (but as little as 3 to 4 percent quarter on quarter²) and is likely to have been growing at about 7 percent in the second quarter. After a slow start to 2009 as exports collapsed, massive government spending and monetary expansion have driven growth. Several indicators suggest that a recovery is well under way. (See Exhibit 12.)

². Dragonomics Advisory Services.

Exhibit 12. Chinese Leading and Current Indicators Suggest That a Recovery Is Under Way

Sources: Thomson Reuters Datastream; OECD.
The OECD CLI for China rose in February, March, and April.

The Chinese Purchasing Managers’ Index entered expansionary territory in February (though it changed little from March to May).

Exports in April 2009 were 26 percent below a year earlier, reflecting the collapse in global demand.

The volume of cargo handled at major seaports appears to have increased sharply in March and remained high in April, driven mostly by imports.

Investment in fixed assets grew 30 percent year on year in the first quarter of 2009 (driven predominantly by public-sector investment).

Retail sales in May were 15.2 percent above their level a year earlier.

Industrial production increased in May, for the third consecutive month, to 8.9 percent above its May 2008 level.

However, double-digit growth rates in China appear unlikely to recur until export demand recovers.
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