



Tracking the Global Recession

Tracking through Cross-Country Comparisons

It is a well-established fact that the current recession has become a highly synchronized global downturn: The IMF estimates that two-thirds of the U.S.' advanced trading partners are also in recession,ⁱ making this the highest percentage in the post-WWII era. Modern trade and communication technologies tie advanced and large economies together more closely now than ever. Shocks to the U.S. economy, such as the bursting of the housing bubble, the subsequent financial crisis, and fluctuations in energy prices, affect the majority of the world's economies, particularly those with close financial and trading ties to the United States. Changes in exports/imports, the flow of investment funds, and the demand for labor in each country then amplify these shocks, causing reverberations throughout the global economy.

These tables and charts peel back the curtain of broad economic terms often used to describe global recessions. Ten data series from the G-7 countries and Australia serve as indicators of economic health. Individual graphs evaluate an indicator from within each country by looking at the values from the average/highest/lowest recession compared with the

current cycle. Alternatively, it is easy to evaluate an indicator across countries as each page's graphs compare only one particular economic indicator from each country.ⁱⁱ The data go back a year before each recession starts (x-axis value of 0) and continue up to 3½ years after the business cycle peak. They have also been indexed so that the indicator's value equals 100 at the start of the recession.

ⁱ IMF April 2009 *World Economic Outlook*.

ⁱⁱ Please note that it is important to read the notes and sources before making comparisons and conclusions, as each indicator is not exactly the same for each country and that recession start dates are not completely objective. Data are updated on an ongoing basis.

Views expressed do not necessarily reflect official positions of the Federal Reserve System.

Cross-Country Comparisons

Annualized Percentage Change Since Most Recent Business Cycle Peak

(Last observation date is in parentheses.)

ECONOMIC INDICATORS

	Business Cycle Peak	Industrial Production	Employment	Real Income ¹	Real Retail Sales
United States	Dec 07	-5.0 (1/10)	-3.0 (1/10)	-2.7 (12/09)	-4.0 (1/10)
Australia	May 08	0.1 (09Q3)	0.9 (12/09)	-1.9 (09Q3)	3.1 (09Q4)
Canada	Jul 07	-7.7 (11/09)	0.0 (12/09)	2.1 (09Q1)	-0.3 (11/09)
France	Feb 08	-9.5 (10/09)	-0.5 (09Q3)	0.4 (09Q2)	-3.9 (11/09)
Germany	Mar 08	-11.7 (10/09)	-0.4 (09Q3)	0.7 (09Q3)	-1.5 (10/09)
Italy	Apr 08	-14.3 (11/09)	-1.8 (09Q3)	-0.9 (09Q3)	
Japan	Mar 08	-10.0 (12/09)	-1.3 (12/09)	0.3 (09Q1)	0.1 (11/09)
United Kingdom	Feb 08	-10.4 (8/09)	-1.3 (09Q3)	-2.6 (09Q3)	-1.7 (8/09)

REAL GROSS DOMESTIC PRODUCT AND COMPONENTS

	Business Cycle Peak	GDP	Personal Consumption Expenditures ²	Gross Private Domestic Investment ³	Government Consumption Expenditures and Gross Investment ⁴	Exports of Goods and Services	Imports of Goods and Services
United States	Dec 07	-0.9 (09Q4)	-0.3 (09Q4)	-13.1 (09Q4)	2.3 (09Q4)	-2.6 (09Q4)	-7.2 (09Q4)
Australia	May 08	0.6 (09Q3)	1.5 (09Q3)	-2.2 (09Q3)	2.6 (09Q2)	-1.6 (09Q3)	-7.0 (09Q3)
Canada	Jul 07	-1.4 (09Q1)	1.2 (09Q1)	-4.3 (09Q3)	2.8 (09Q1)	-11.5 (09Q1)	-11.5 (09Q1)
France	Feb 08	-2.0 (09Q3)	0.6 (09Q3)	-6.8 (09Q3)	1.7 (09Q3)	-9.0 (09Q3)	-8.3 (09Q3)
Germany	Mar 08	-3.8 (09Q3)	-0.1 (09Q3)	-6.4 (09Q3)	2.2 (09Q3)	-10.6 (09Q3)	-5.8 (09Q3)
Italy	Apr 08	-4.4 (09Q3)	-1.3 (09Q3)	-12.8 (09Q3)	1.2 (09Q3)	-17.3 (09Q3)	-13.6 (09Q3)
Japan	Mar 08	-5.2 (09Q3)	-1.2 (09Q3)	-13.4 (09Q3)	0.4 (09Q3)	-19.4 (09Q3)	-12.3 (09Q3)
United Kingdom	Feb 08	-4.0 (09Q3)	-3.1 (09Q2)	-13.7 (09Q2)	2.4 (09Q2)	-10.0 (09Q2)	-12.9 (09Q2)

SOURCES: Board of Governors of the Federal Reserve System, U.S. Department of Labor: Bureau of Labor Statistics, U.S. Department of Commerce: Census Bureau, U.S. Department of Commerce: Bureau of Economic Analysis, Organisation for Economic Co-Operation and Development, Haver Analytics.

NOTE: Columns labels use U.S. concepts; International concepts are noted in the footnotes.

¹ Real Compensation

² Real Private Consumption Expenditures

³ Real Gross Fixed Capital Formation

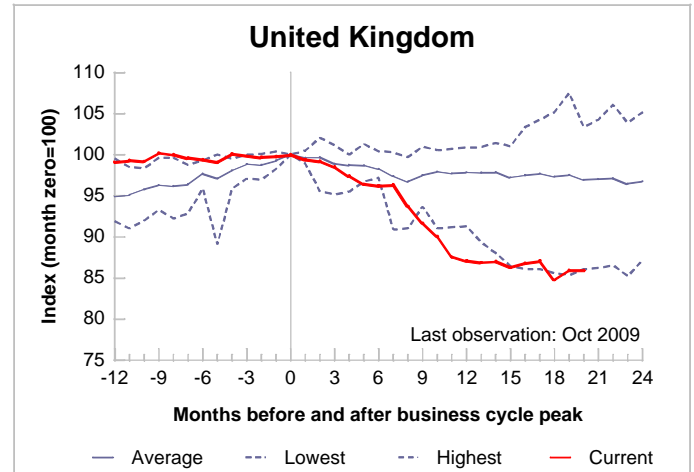
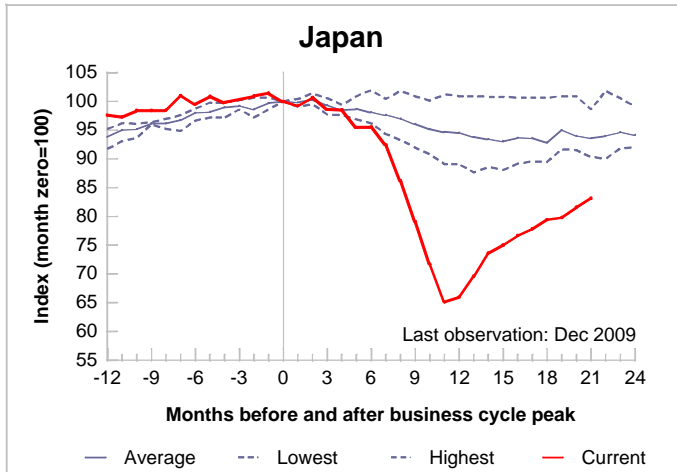
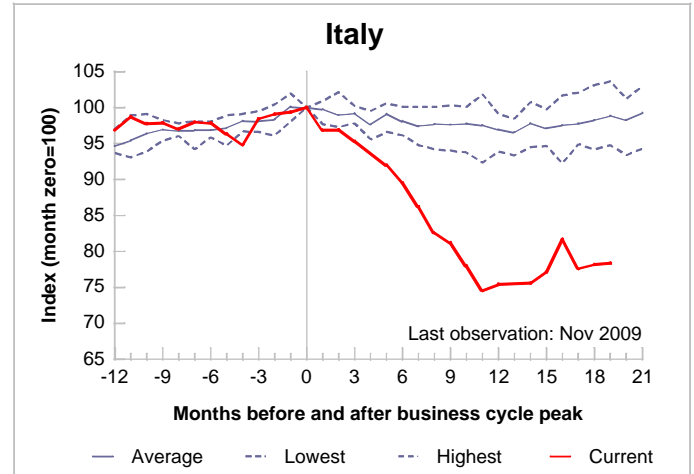
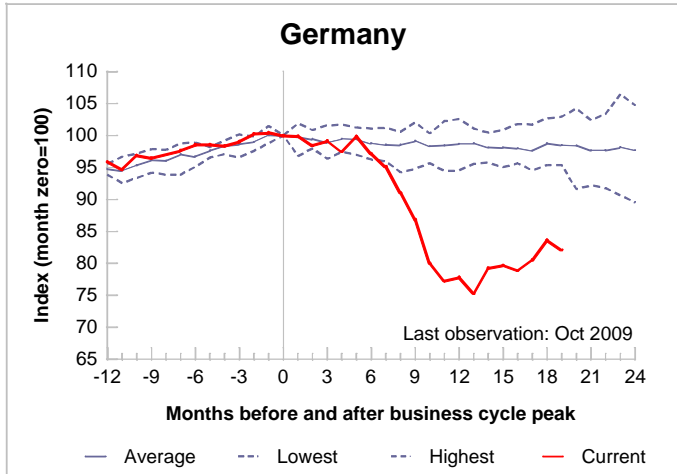
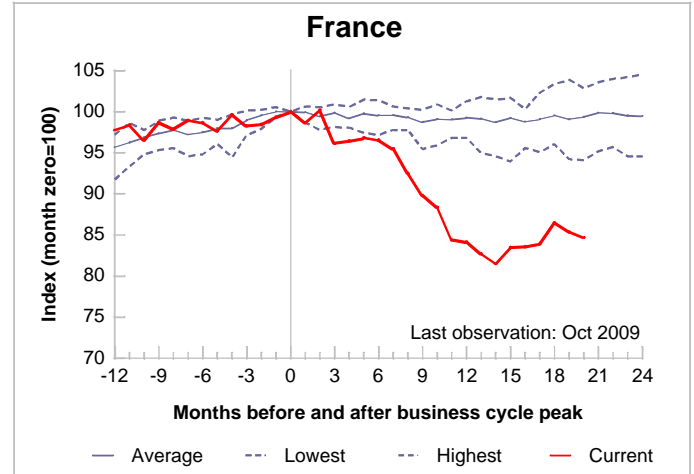
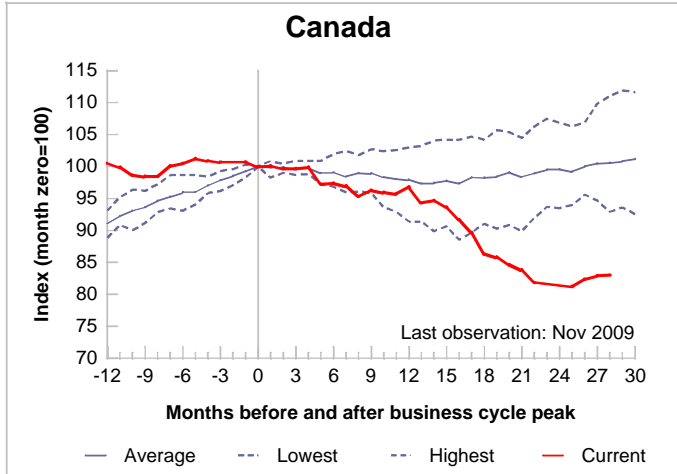
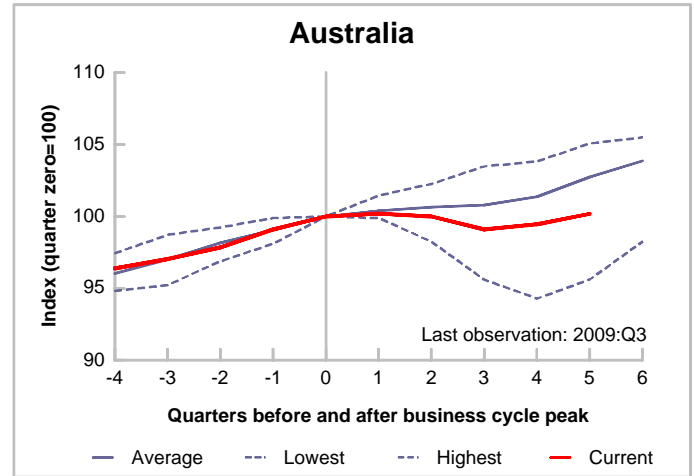
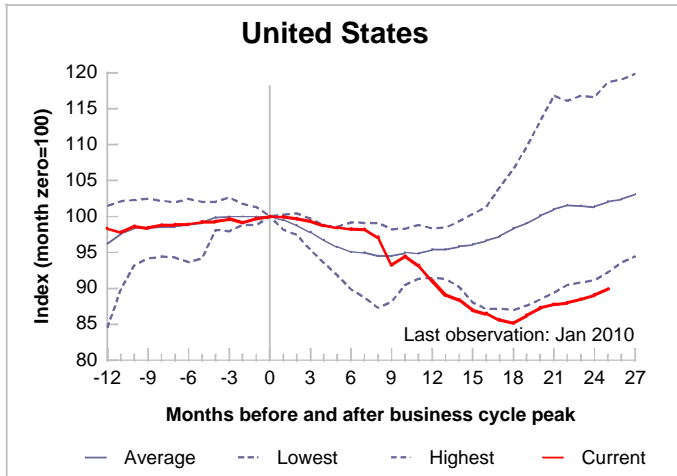
⁴ Real Government Final Consumption Expenditures

2009 Federal Reserve Bank of St. Louis:

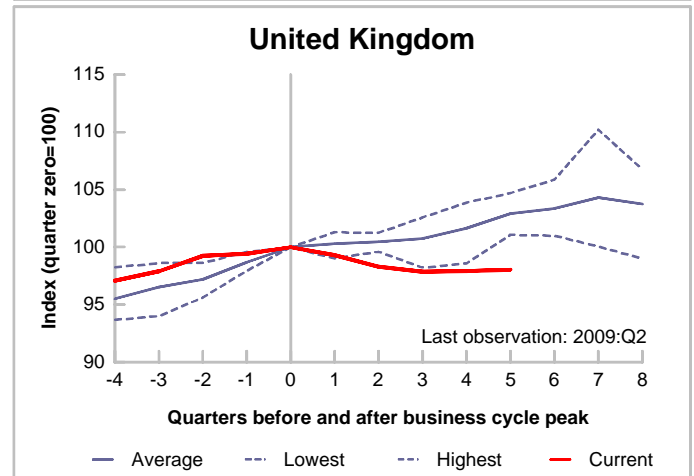
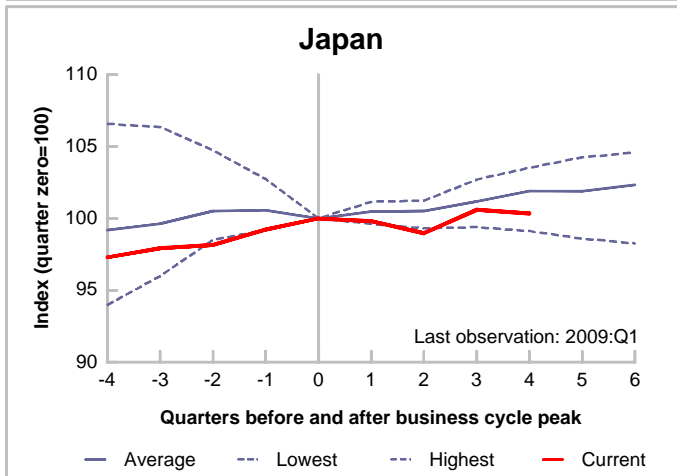
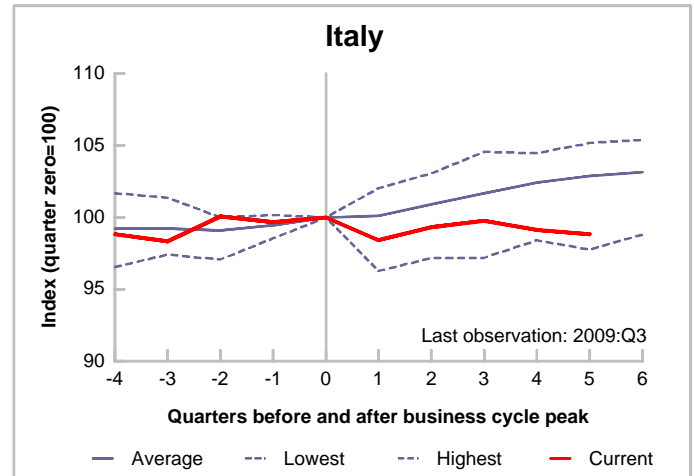
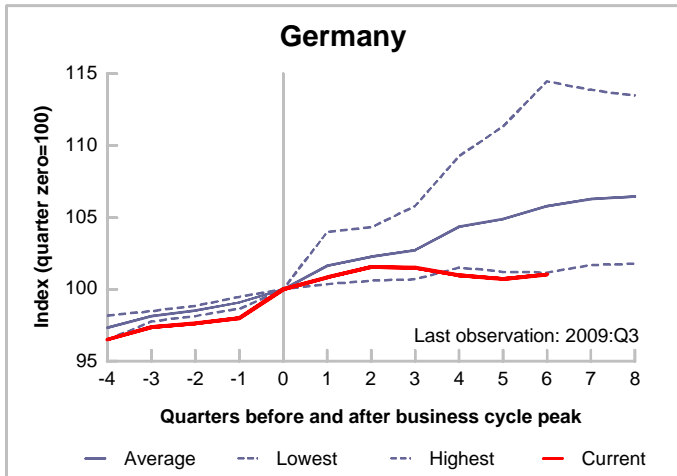
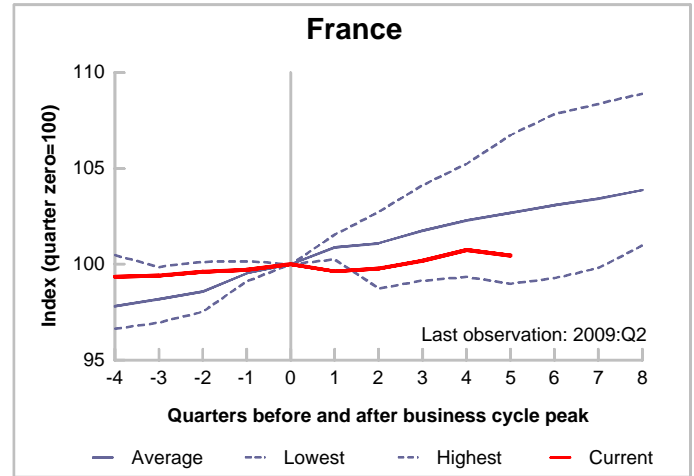
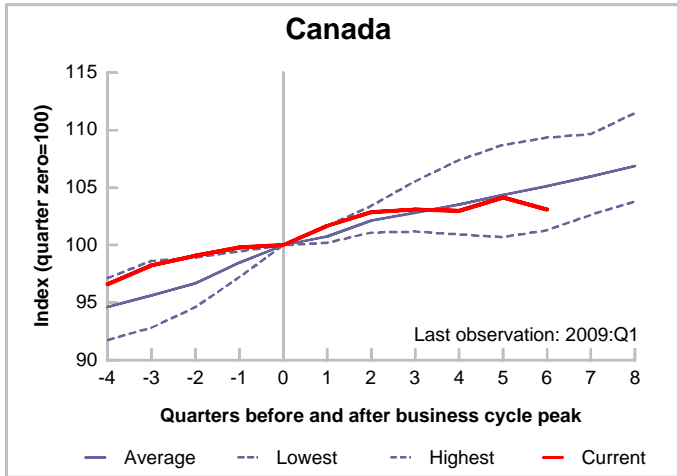
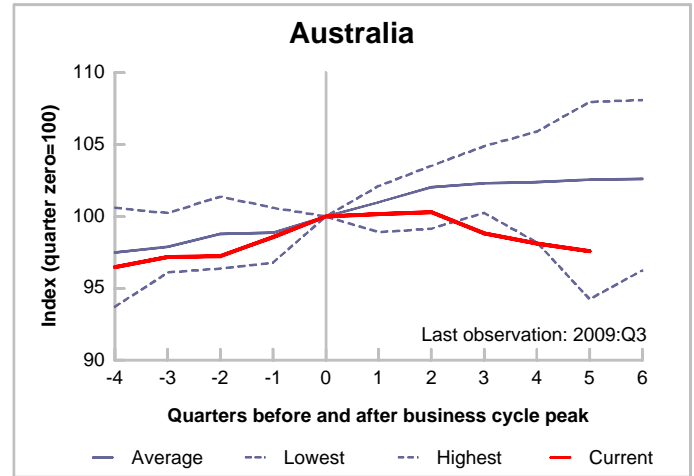
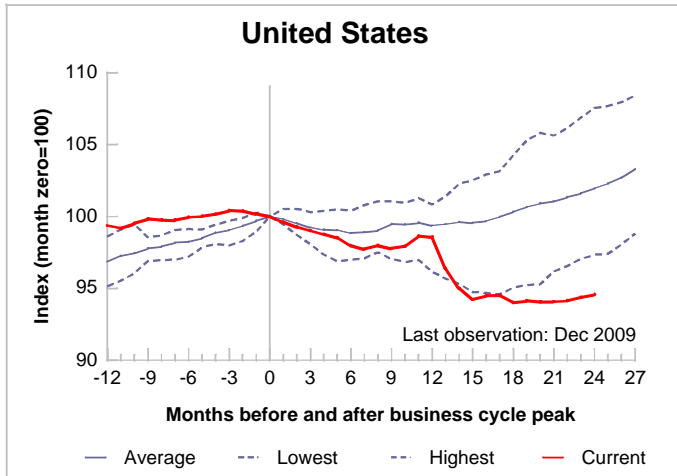
research.stlouisfed.org

Data last updated 2010-02-19.

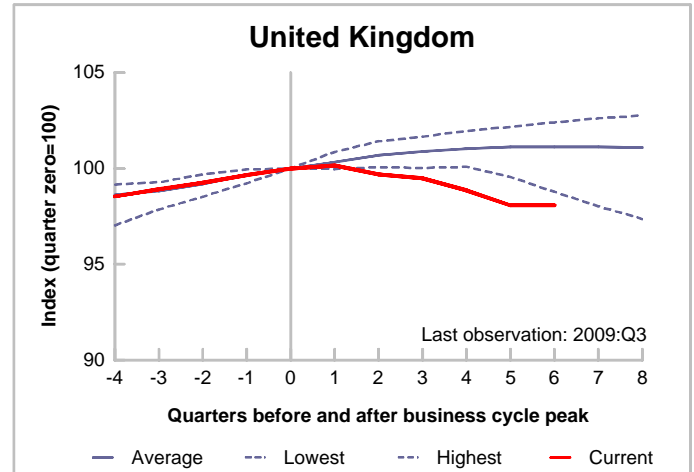
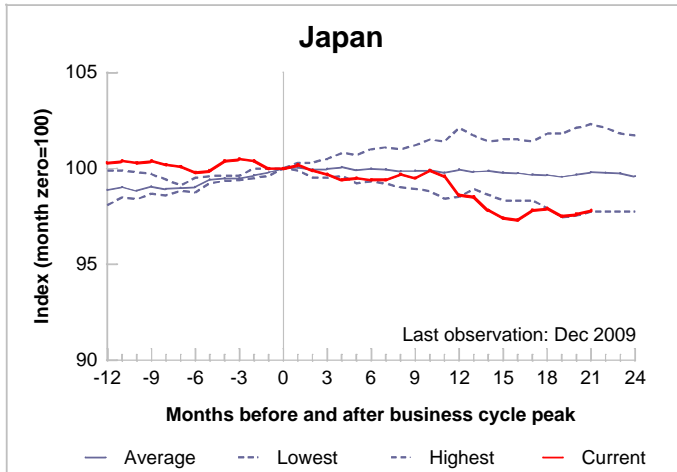
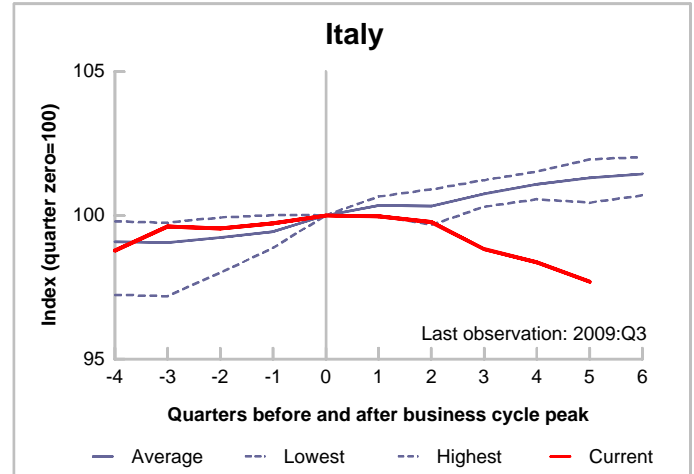
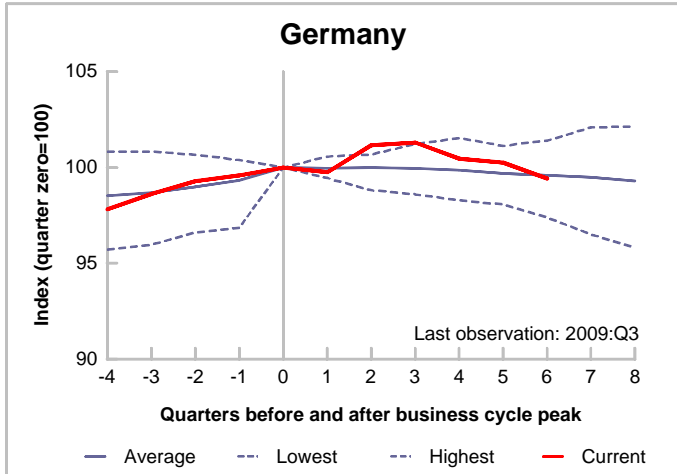
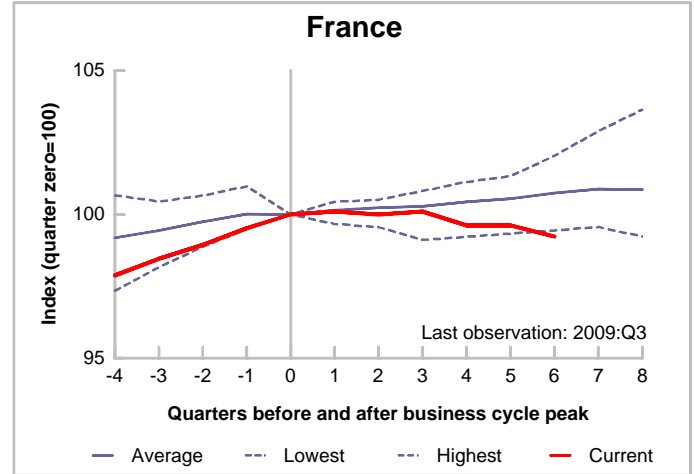
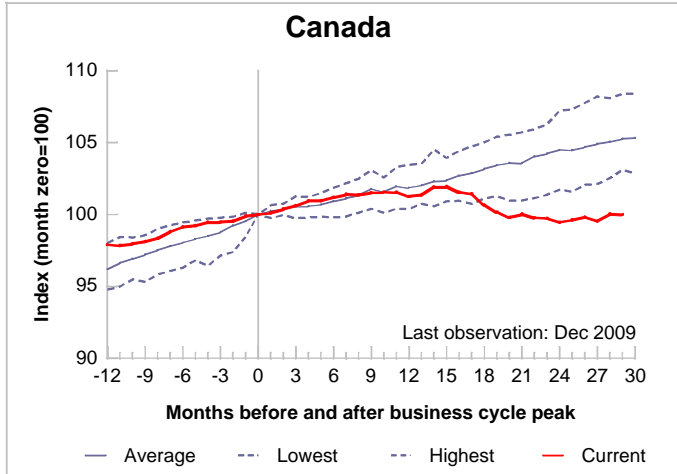
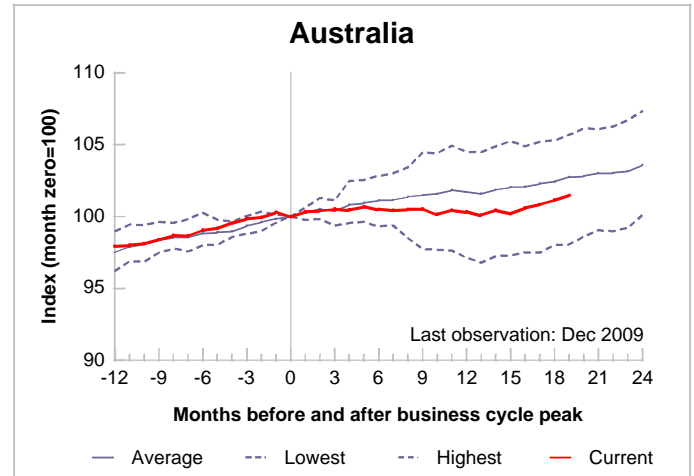
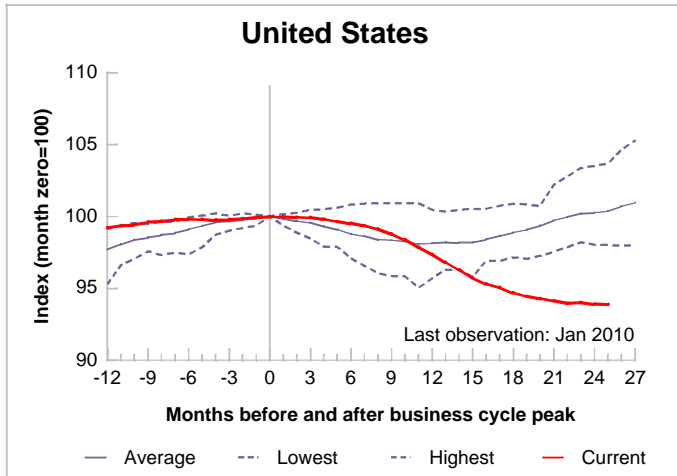
Tracking the Global Recession: Industrial Production



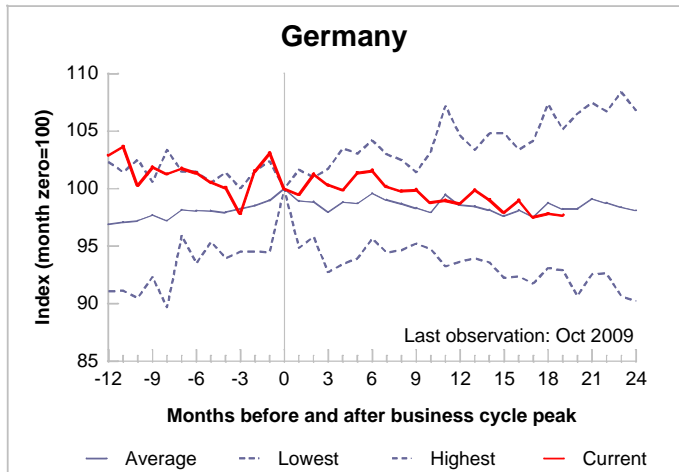
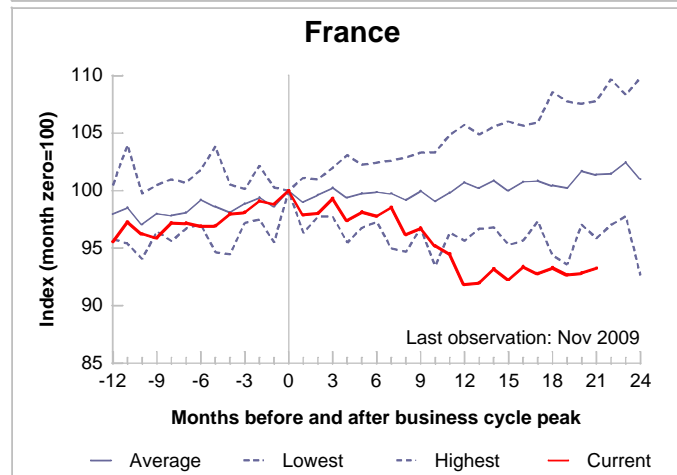
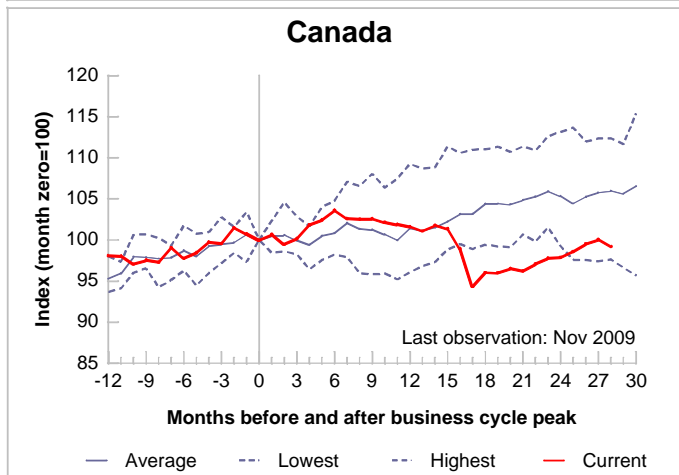
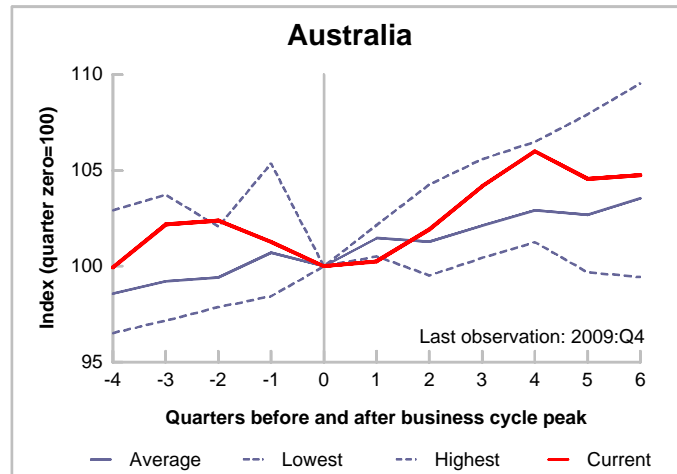
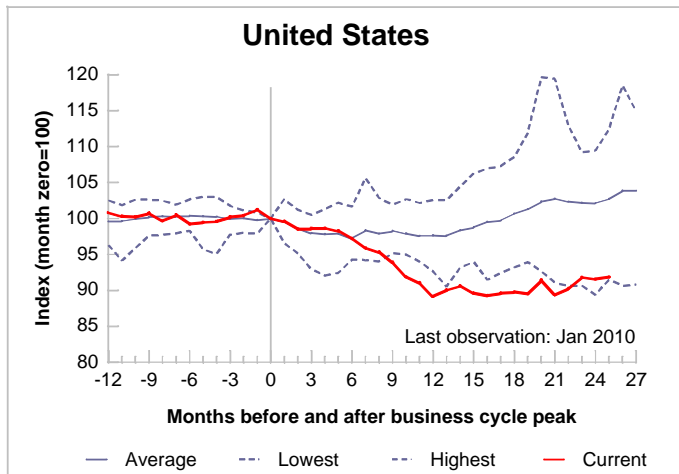
Tracking the Global Recession: Real Income and Real Compensation



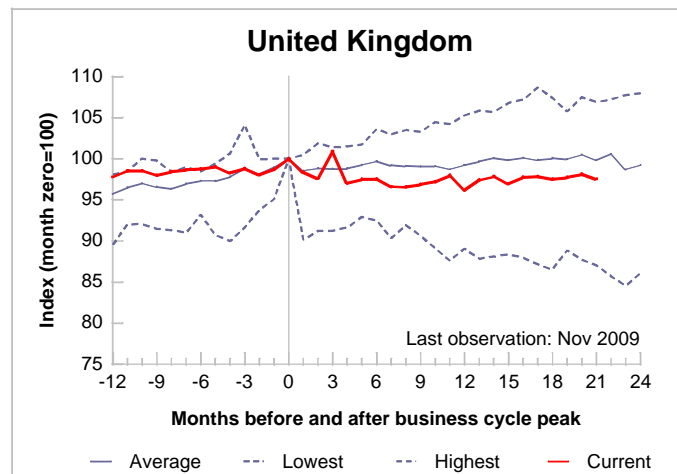
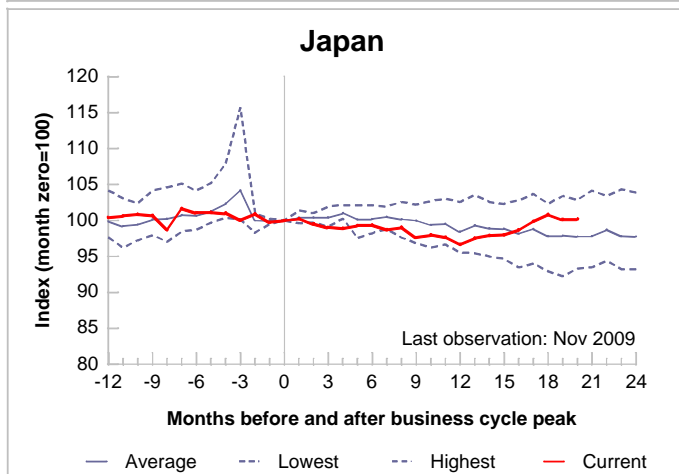
Tracking the Global Recession: Employment



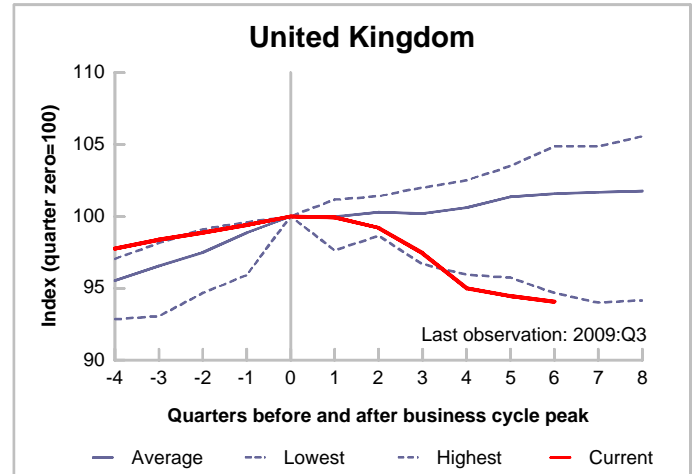
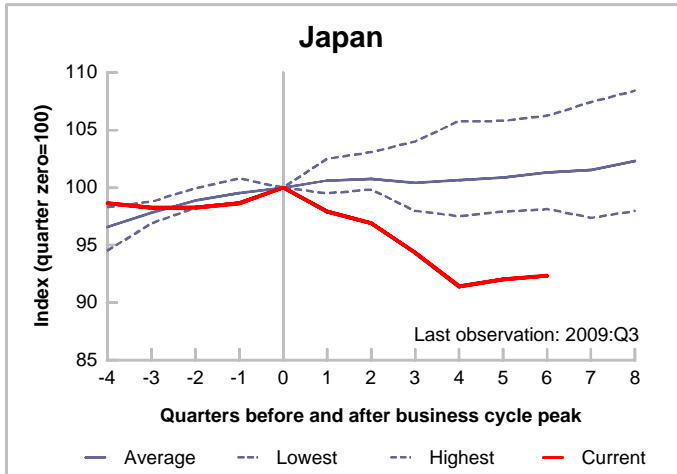
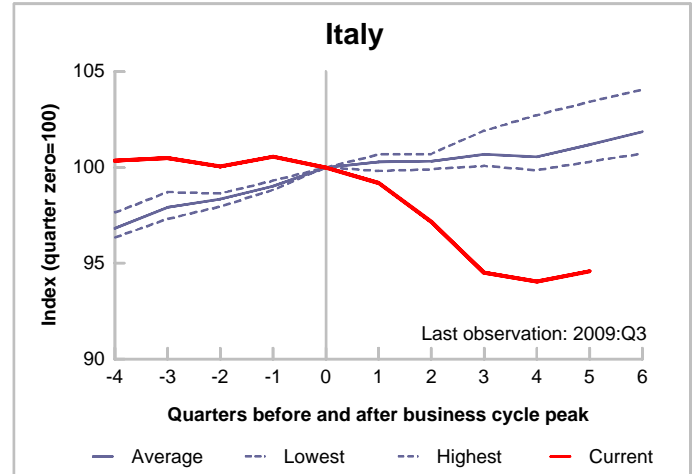
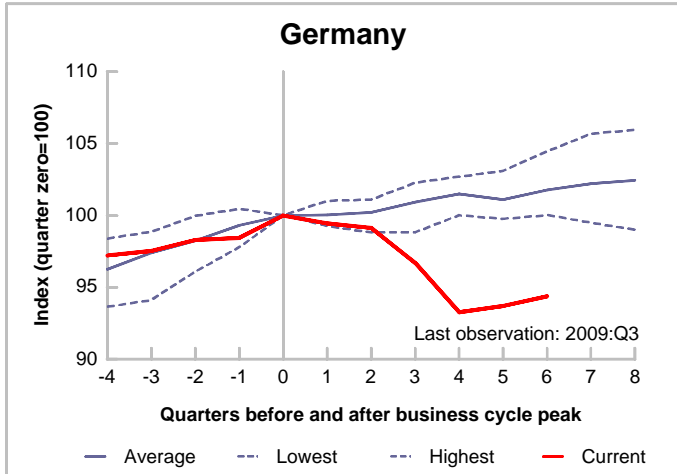
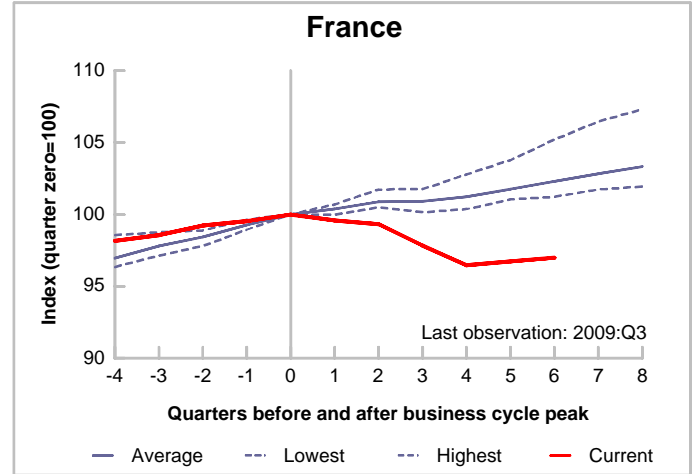
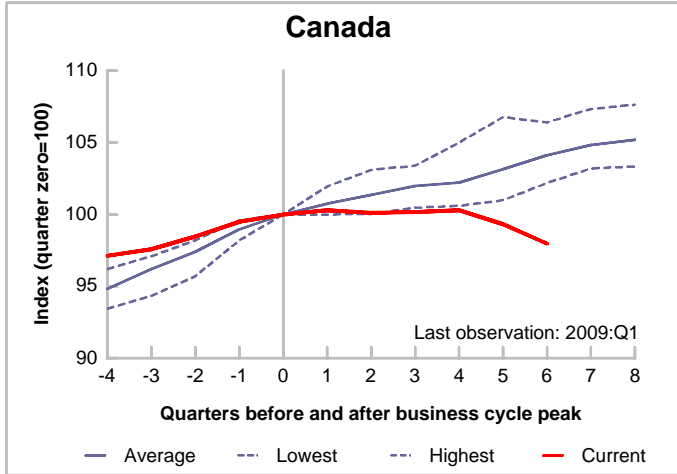
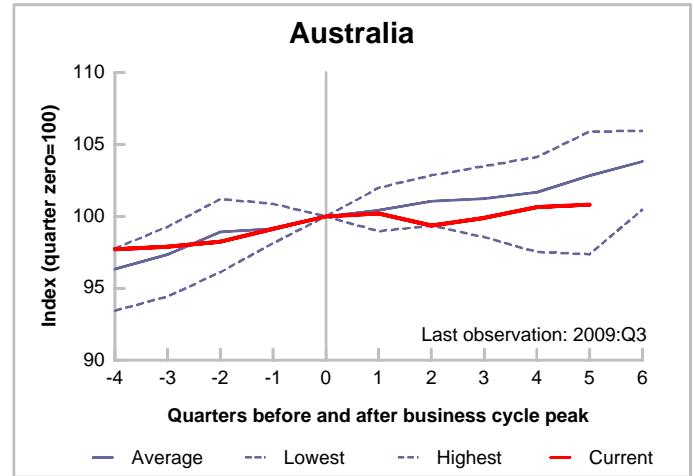
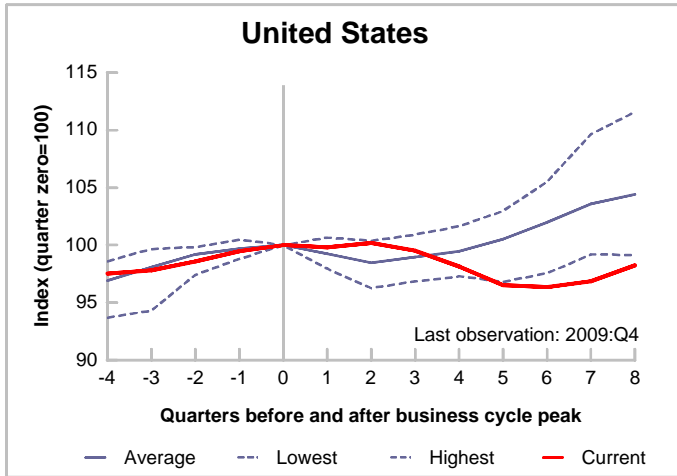
Tracking the Global Recession: Real Retail Sales



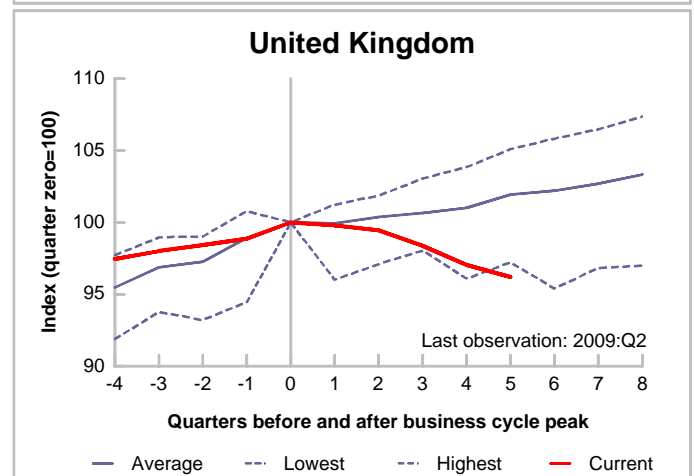
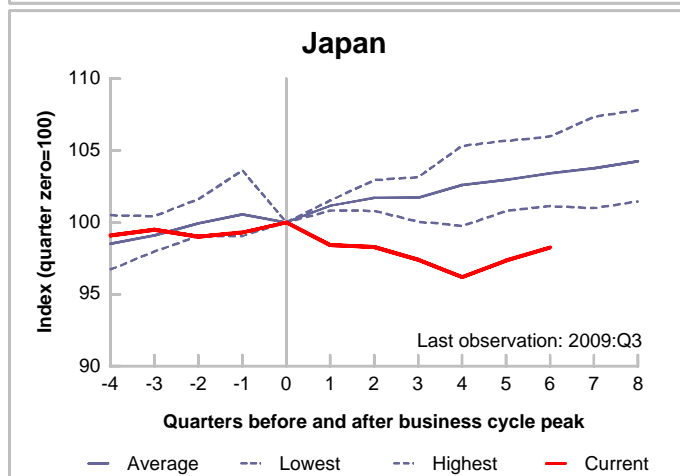
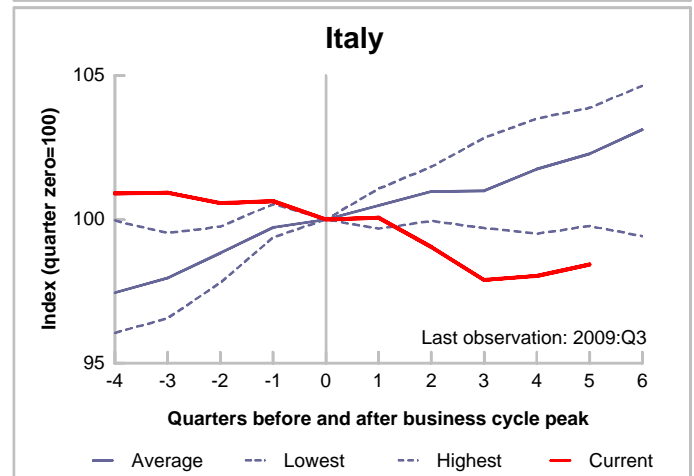
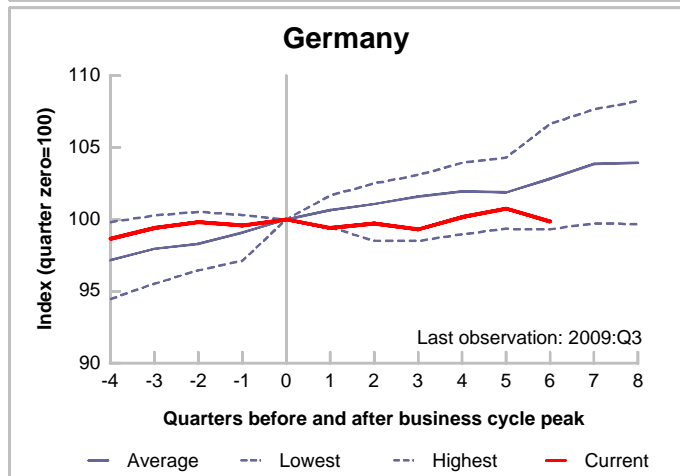
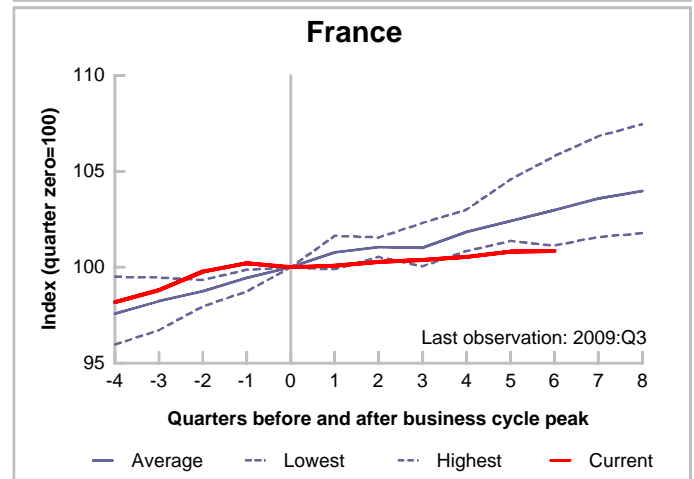
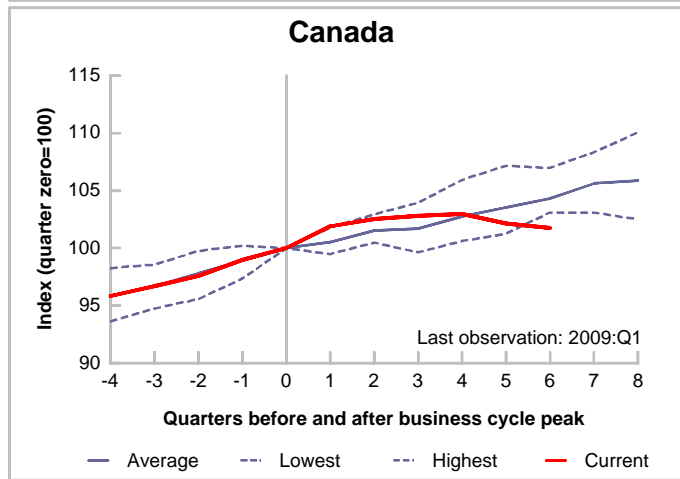
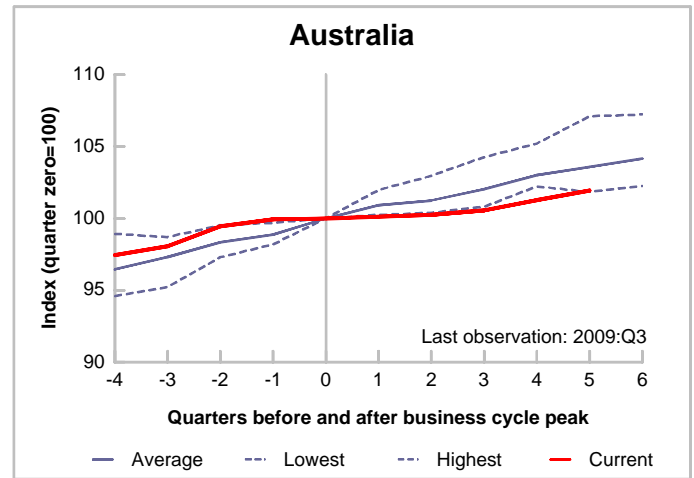
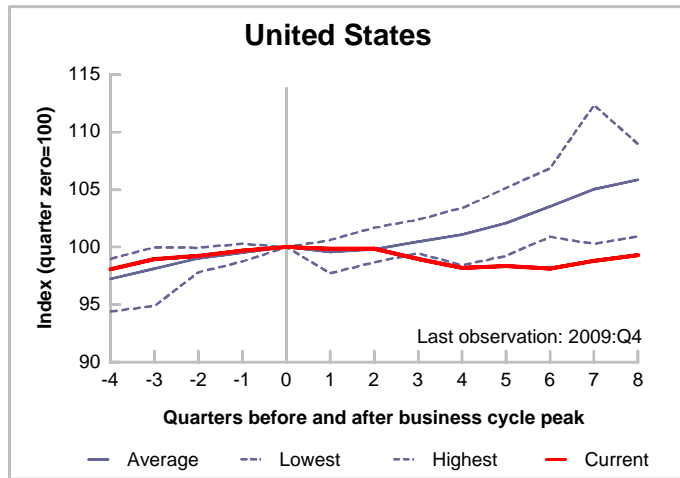
Italy
(no data available)



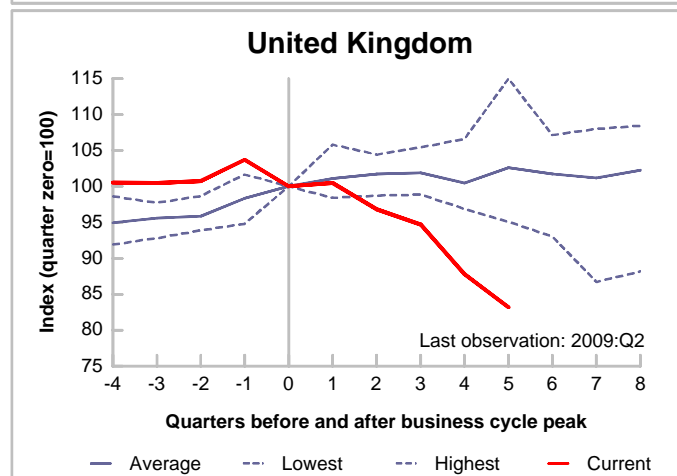
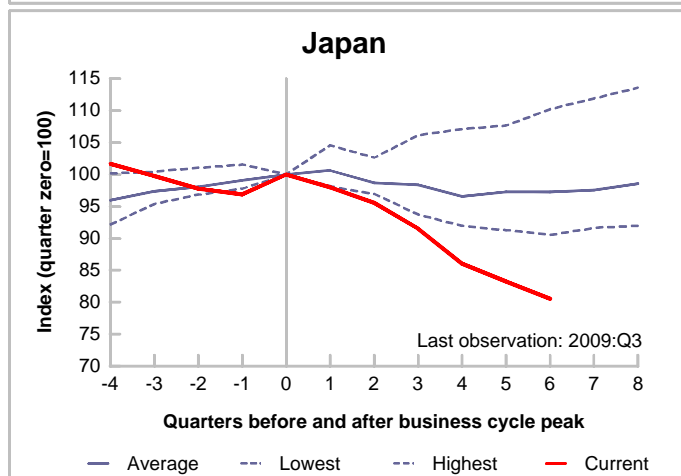
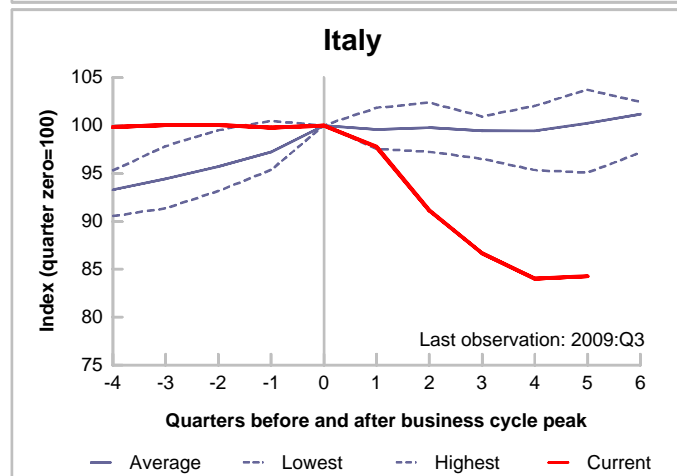
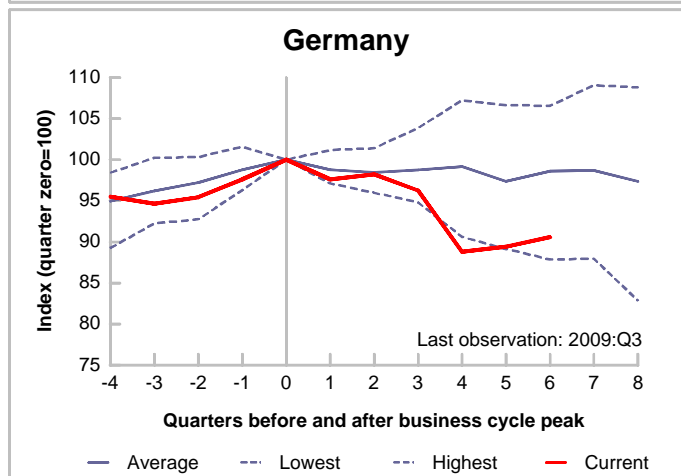
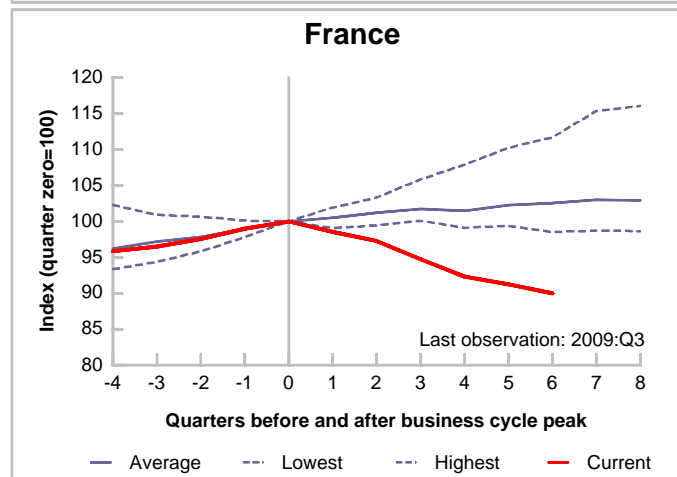
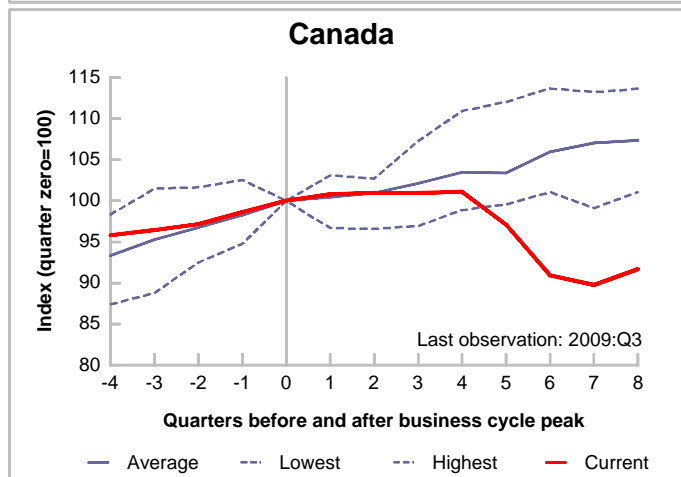
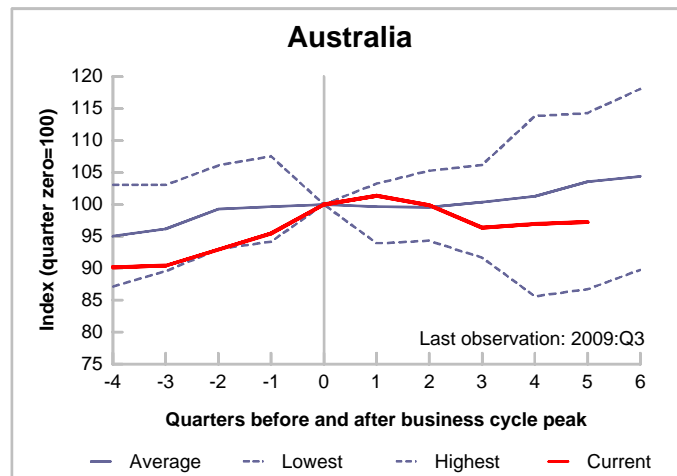
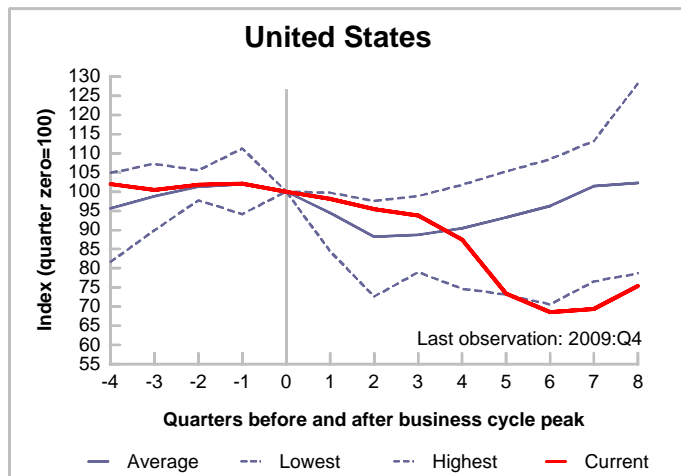
Tracking the Global Recession: Real Gross Domestic Product



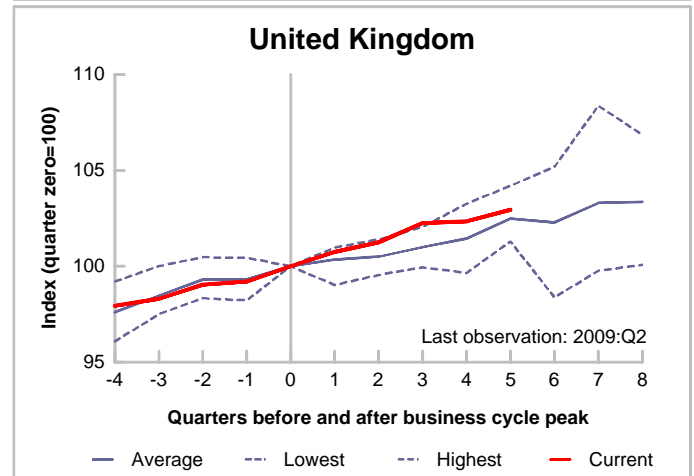
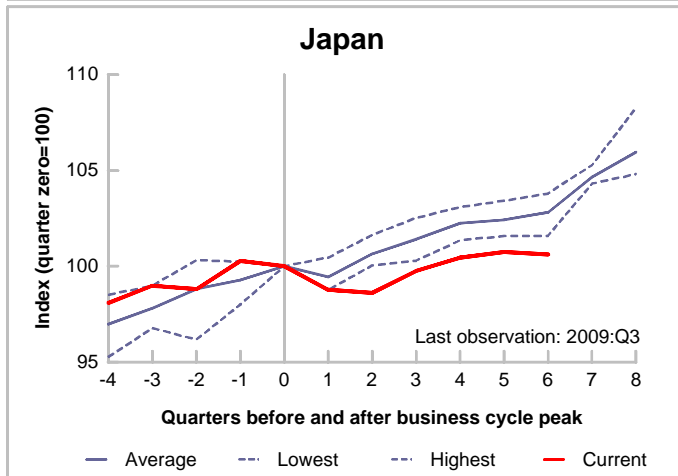
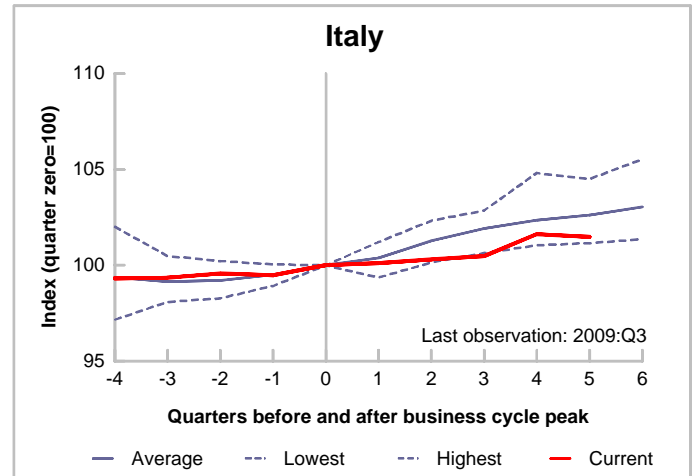
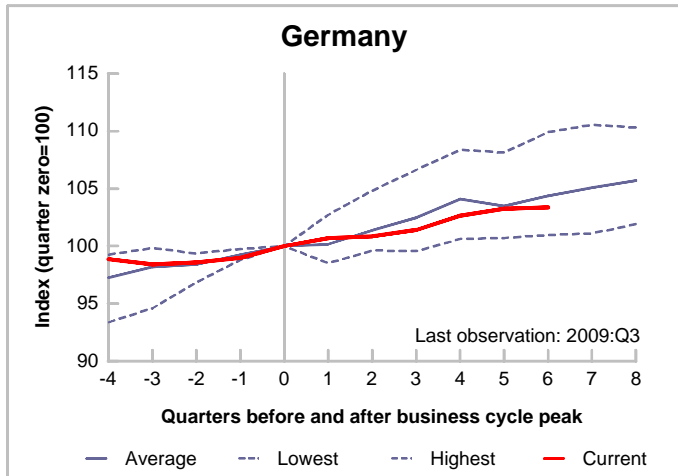
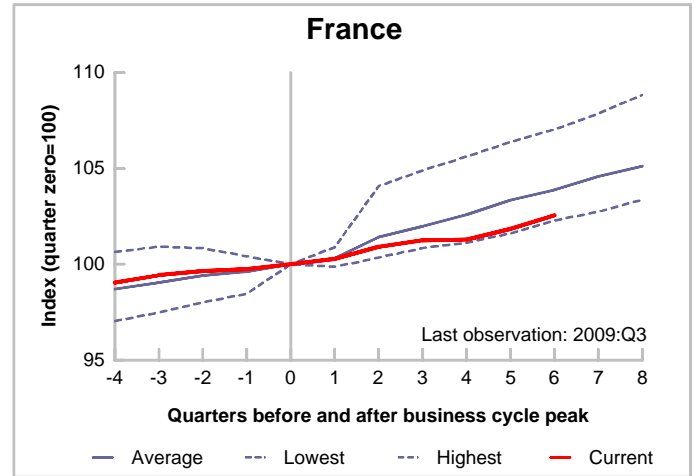
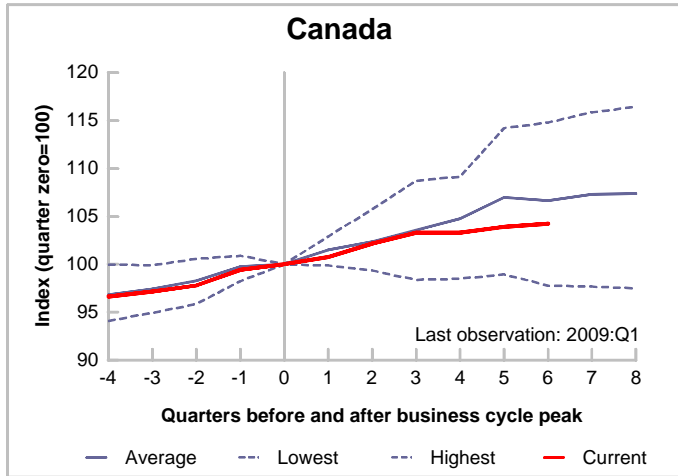
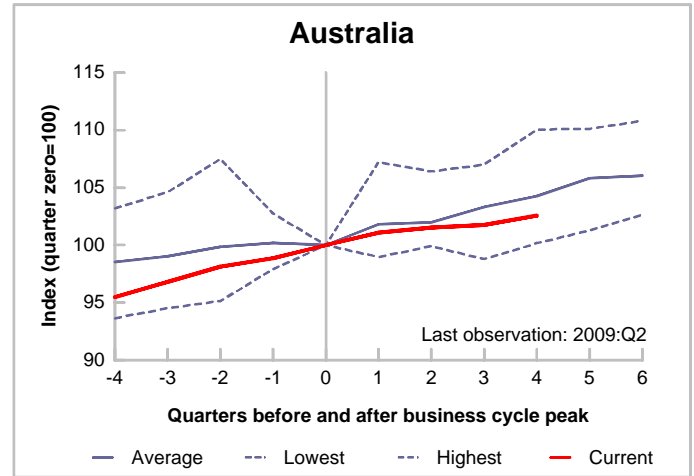
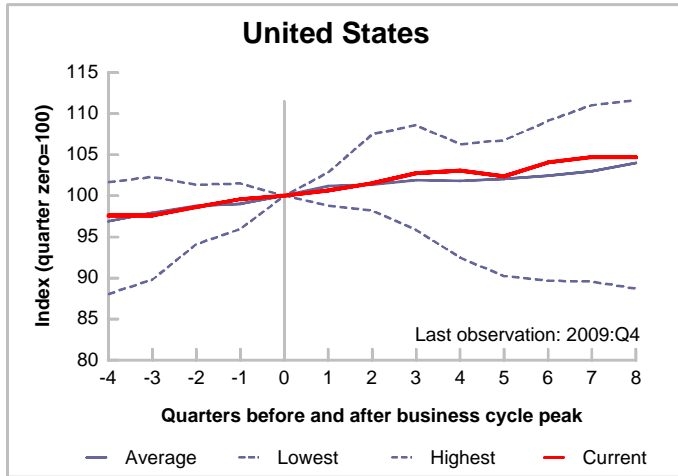
Tracking the Global Recession: Real Consumption



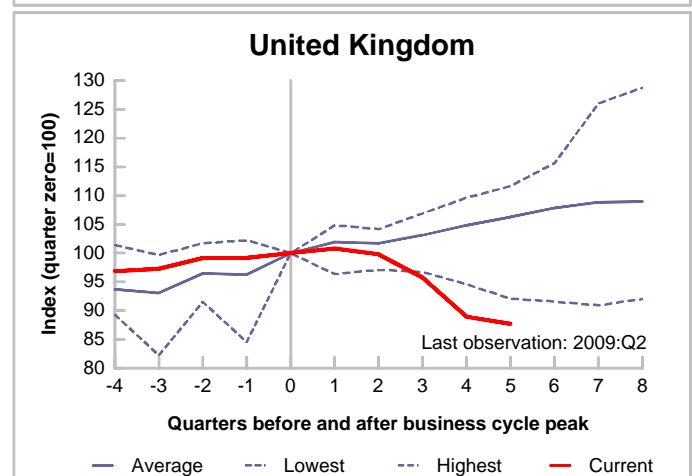
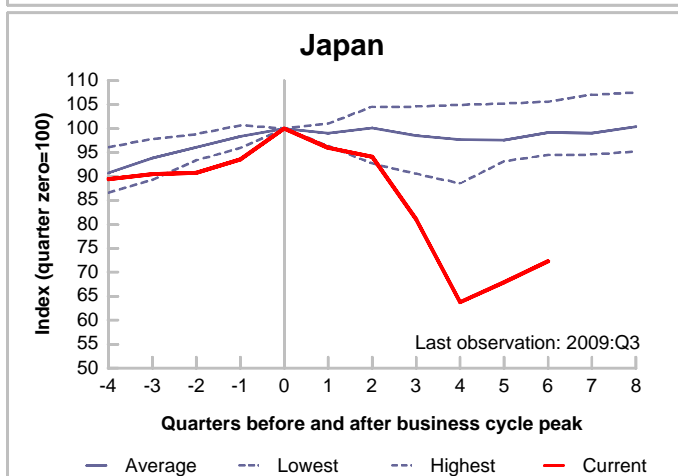
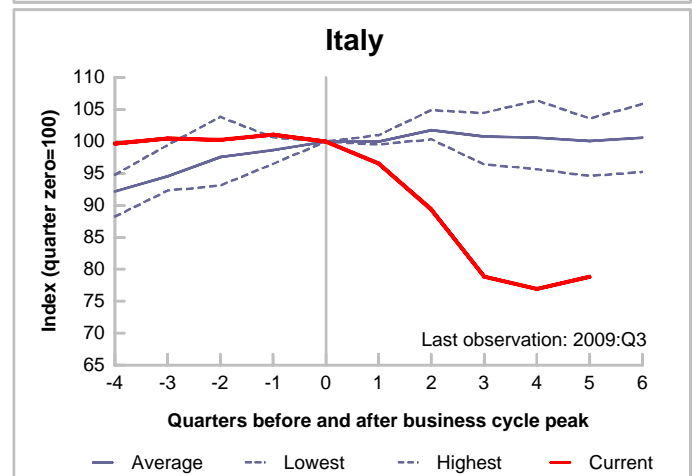
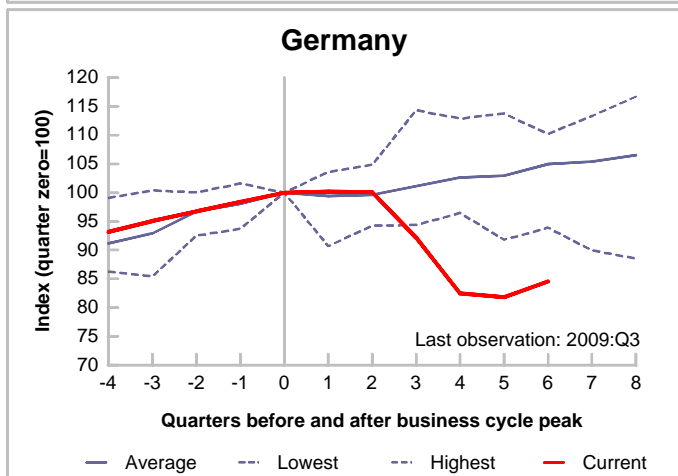
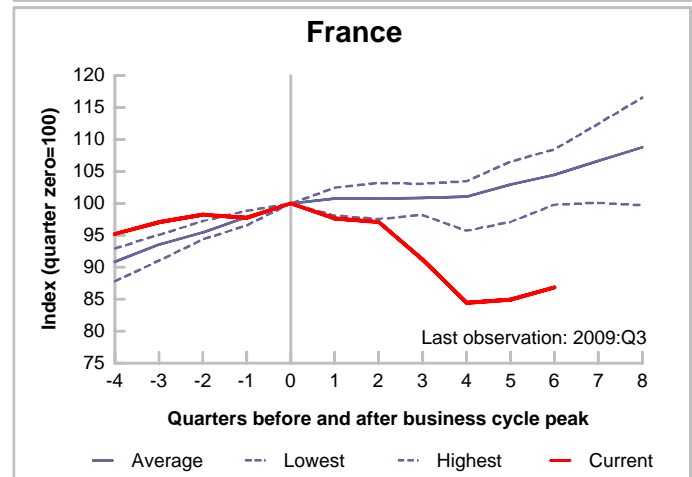
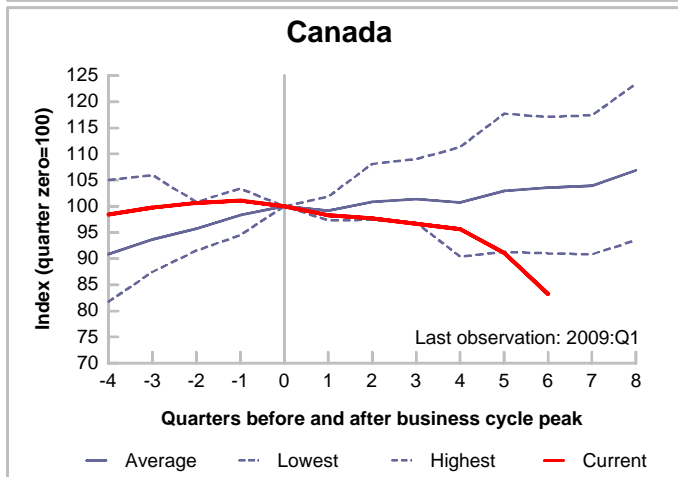
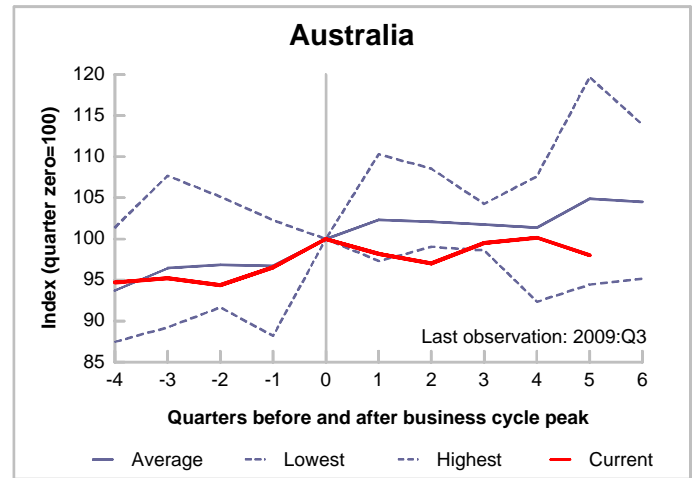
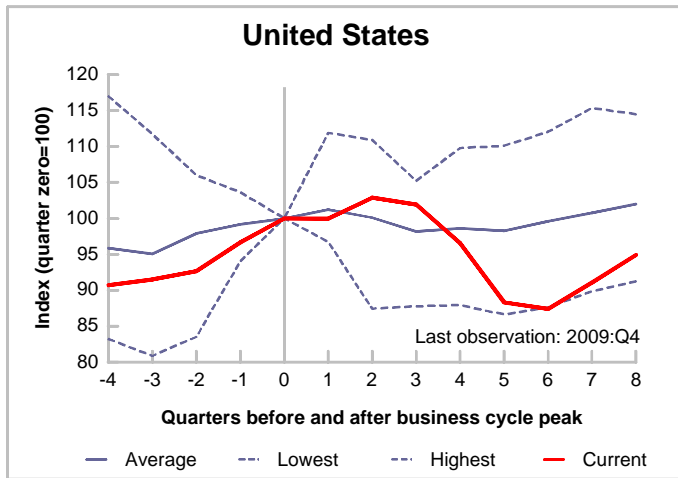
Tracking the Global Recession: Real Investment



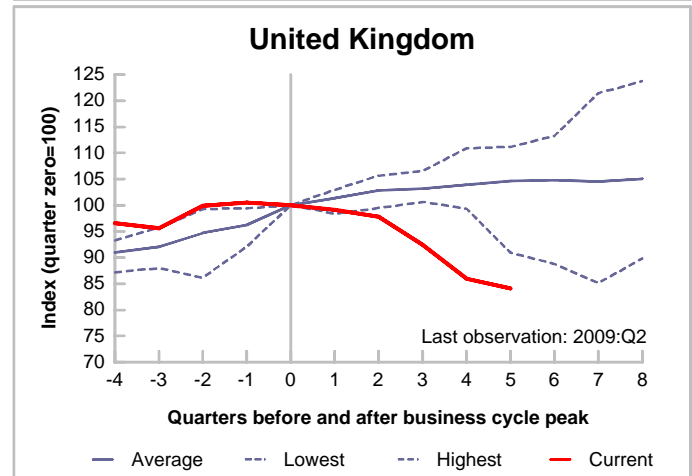
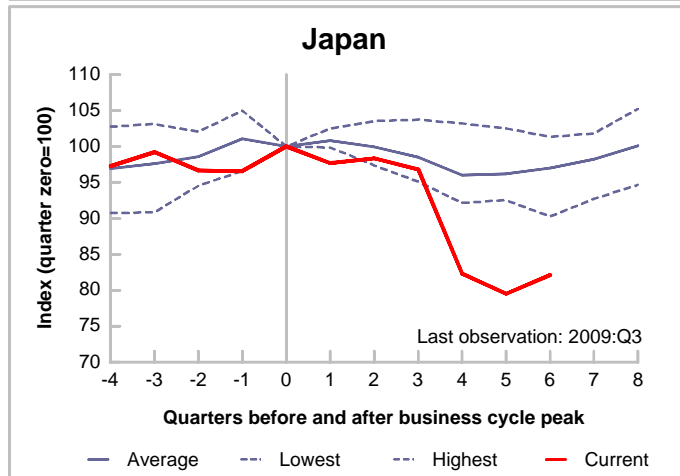
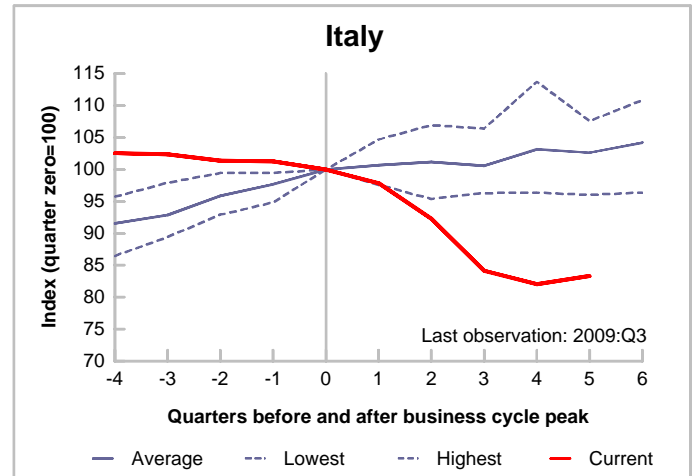
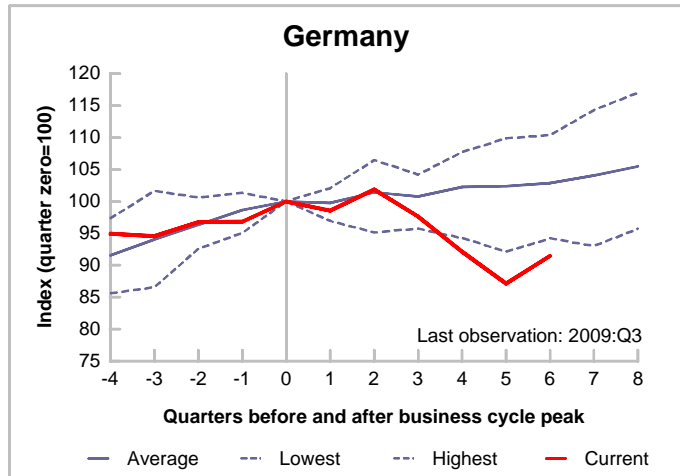
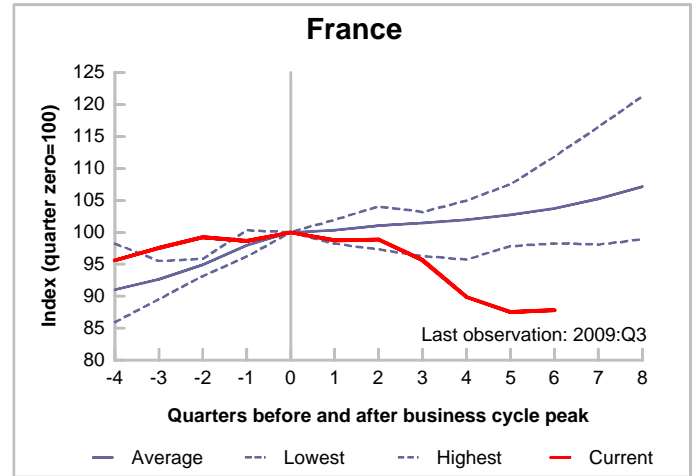
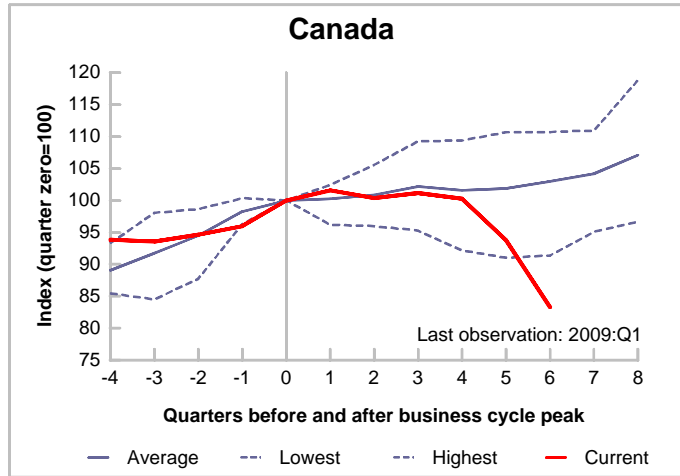
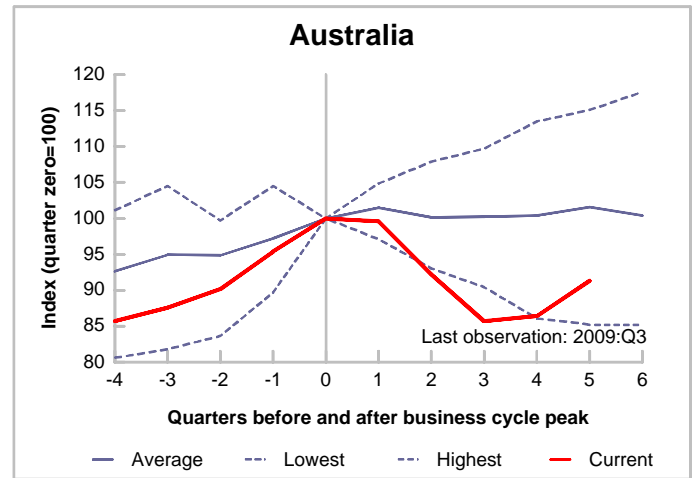
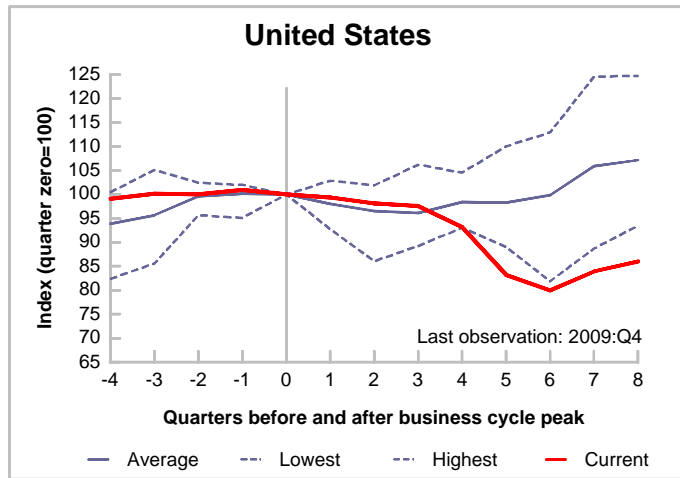
Tracking the Global Recession: Real Government Spending



Tracking the Global Recession: Real Exports of Goods and Services



Tracking the Global Recession: Real Imports of Goods and Services



NOTES and SOURCES

UNITED STATES

The charts plot four main economic indicators tracked by the [NBER](#) dating committee and Real Gross Domestic Product and its major components; each series is indexed to 100 at the start of the recession. The red line indicates the current recession, starting in December 2007. For industrial production, employment, real retail sales, and real GDP and its components, the solid blue line indicates the average of the past 10 recessions. For real income, the average starts with the April 1960 peak. For additional information, see the Federal Reserve Bank of St. Louis [Economic Synopses, 2009, No. 4](#).

BUSINESS CYCLE PEAK DATES:

- November 1948
- July 1953
- August 1957
- April 1960
- December 1969
- November 1973
- January 1980
- July 1981
- July 1990
- March 2001
- December 2007

SOURCE: [NBER Business Cycle Expansions and Contractions](#)

DATA DESCRIPTIONS:

The following [FRED®](#) data series are used to create the charts:

- Industrial Production
 - [Industrial Production Index](#)
- Real Income ⁱ
 - [Personal Income in current dollars](#)
 - less [Personal Current Transfer Receipts](#)
 - deflated by the [Personal Consumption Expenditure: Chain-type Price Index](#)
- Employment
 - [Total Nonfarm Payrolls: All Employees](#)
- Real Retail Sales
 - [Retail Sales \[SIC-basis\]](#) and [Retail and Food Services Sales \[NAIC-basis\]](#) ⁱⁱ
 - deflated by the [Consumer Price Index for All Urban Consumers: All Items](#)
- [Real Gross Domestic Product](#)
- [Real Personal Consumption Expenditures](#) ⁱⁱⁱ
- [Real Gross Private Domestic Investment](#) ^{iv}
- [Real Government Consumption Expenditures and Gross Investment](#) ^v
- [Real Exports of Goods and Services](#)
- [Real Imports of Goods and Services](#)

SOURCES: Board of Governors of the Federal Reserve System, U.S. Department of Labor: Bureau of Labor Statistics, U.S. Department of Commerce: Census Bureau, U.S. Department of Commerce: Bureau of Economic Analysis, Haver Analytics.

INTERNATIONAL

The charts plot four main economic indicators, similar to those tracked by the [NBER](#) dating committee for the U.S., and Real Gross Domestic Product and its major components; each series is indexed to 100 at the business cycle peak. The red line indicates the [current recession](#). The solid blue line indicates the average of [previous recessions](#). The two dashed lines report the highest and lowest values recorded across these previous recessions.

The data and recession dates used in the international charts are from the Organisation for Economic Co-Operation and Development (OECD).

BUSINESS CYCLE PEAK DATES:

Australia	Canada	France	Germany	Italy	Japan	United Kingdom
April 1977	January 1966	August 1979	April 1973	September 1984	November 1984	June 1973
September 1979	March 1969	February 1984	January 1977	November 1989	February 1991	June 1979
March 1982	January 1974	March 1990	January 1980	October 1995	June 1997	November 1983
July 1985	July 1979	February 1995	October 1985	November 1997	October 2000	November 1988
December 1988	August 1984	April 1998	February 1991	December 2000	March 2008	October 1994
February 1996	April 1988	December 2000	December 1994	April 2008		November 2000
August 2000	January 1995	February 2008	April 1998			April 2004
May 2008	August 2000		December 2000			February 2008
	July 2007		March 2008			

SOURCE: http://www.oecd.org/document/29/0,3343,en_2649_34349_35725597_1_1_1_1,00.html

DATA DESCRIPTIONS:

The following data series are used to create the charts:

AUSTRALIA

- Industrial Production
 - Industry excl. Construction
- Real Compensation ⁱ
 - Compensation of Employees
 - deflated by the Price Index for Private Consumption
- Employment
 - Civilian Employment
- Real Retail Sales
 - Value of Retail Sales
 - deflated by the Consumer Price Index: All Items ^{vi}
- Real Gross Domestic Product
- Real Private Final Consumption Expenditures ⁱⁱⁱ
- Real Gross Fixed Capital Formation ^{iv}
- Real Government Final Consumption Expenditures ^v
- Real Exports of Goods & Services
- Real Imports of Goods & Services

CANADA

- Industrial Production
 - Industry excl. Construction
- Real Compensation ⁱ
 - Compensation of Employees
 - deflated by the Price Index for Private Consumption
- Employment
 - Civilian Employment
- Real Retail Sales
 - Value of Retail Sales
 - deflated by the Consumer Price Index: All Items ^{vi}
- Real Gross Domestic Product
- Real Private Final Consumption Expenditures ⁱⁱⁱ
- Real Gross Fixed Capital Formation ^{iv}
- Real Government Final Consumption Expenditures ^v
- Real Exports of Goods & Services
- Real Imports of Goods & Services

FRANCE

- Industrial Production
 - Industry excl. Construction
- Real Compensationⁱ
 - Compensation of Employees
 - deflated by the Price Index for Private Consumption
- Employment
 - Civilian Employment
- Real Retail Sales
 - Value of Retail Sales
 - deflated by the Consumer Price Index: All Items^{vi}
- Real Gross Domestic Product
- Real Private Final Consumption Expendituresⁱⁱⁱ
- Real Gross Fixed Capital Formation^{iv}
- Real Government Final Consumption Expenditures^v
- Real Exports of Goods & Services
- Real Imports of Goods & Services

GERMANY

- Industrial Production
 - Industry excl. Construction
- Real Compensationⁱ
 - Compensation of Employees
 - deflated by the Consumer Price Index: All Items^{vi}
- Employment
 - Civilian Employment
- Real Retail Sales
 - Value of Retail Sales
 - deflated by the Consumer Price Index: All Items^{vi}
- Real Gross Domestic Product
- Real Private Final Consumption Expendituresⁱⁱⁱ
- Real Gross Fixed Capital Formation^{iv}
- Real Government Final Consumption Expenditures^v
- Real Exports of Goods & Services
- Real Imports of Goods & Services

ITALY

- Industrial Production
 - Industry excl. Construction
- Real Compensationⁱ
 - Compensation of Employees
 - deflated by the Price Index for Private Consumption
- Employment
 - Civilian Employment
- Real Gross Domestic Product
- Real Private Final Consumption Expendituresⁱⁱⁱ
- Real Gross Fixed Capital Formation^{iv}
- Real Government Final Consumption Expenditures^v
- Real Exports of Goods & Services
- Real Imports of Goods & Services

JAPAN

- Industrial Production
 - Industry excl. Construction
- Real Compensationⁱ
 - Compensation of Employees
 - deflated by the Consumer Price Index: All Items^{vi}
- Employment
 - Civilian Employment
- Real Retail Sales
 - Value of Retail Sales
 - deflated by the Consumer Price Index: All Items^{vi}
- Real Gross Domestic Product
- Real Private Final Consumption Expendituresⁱⁱⁱ
- Real Gross Fixed Capital Formation^{iv}
- Real Government Final Consumption Expenditures^v
- Real Exports of Goods & Services
- Real Imports of Goods & Services

UNITED KINGDOM

- Industrial Production
 - Industry excl. Construction
- Real Compensationⁱ
 - Compensation of Employees
 - deflated by the Price Index for Private Consumption
- Employment
 - Civilian Employment
- Real Retail Sales
 - Value of Retail Sales
 - deflated by the Consumer Price Index: All Items^{vi}
- Real Gross Domestic Product
- Real Private Final Consumption Expendituresⁱⁱⁱ
- Real Gross Fixed Capital Formation^{iv}
- Real Government Final Consumption Expenditures^v
- Real Exports of Goods & Services
- Real Imports of Goods & Services

ⁱ U.S. = real income; International = real compensation.

ⁱⁱ These two series are spliced to create a single series starting in 1947.

ⁱⁱⁱ U.S. = personal consumption expenditures; International = private final consumption expenditures.

^{iv} U.S. = gross private domestic investment; International = gross fixed capital formation.

^v U.S. = government consumption expenditures and gross investment; International = government final consumption expenditures.

^{vi} Seasonally adjusted by the Federal Reserve Bank of St. Louis.