

OECD Composite Leading Indicators: Turning Points of Reference Series and Component Series

OECD Countries

Australia	Greece	Norway
Austria	Hungary	Poland
Belgium	Ireland	Portugal
Canada	Israel	Slovak Republic
Chile	Italy	Slovenia
Czech Republic	Japan	Spain
Denmark	Korea	Sweden
Estonia	Luxembourg	Switzerland
Finland	Mexico	Turkey
France	Netherlands	United Kingdom
Germany	New Zealand	United States

Non-member economies

Brazil
China
India
Indonesia
Russian Federation
South Africa

Area

OECD Total
OECD + non-member economies
Major seven countries
OECD Europe
Euro area
Four big European countries
NAFTA
Major five Asia countries

Australia

Component Series (Unit)

Permits issued for dwellings sa (number)
Manufacturing - Orders inflow: tendency sa (% balance)
Manufacturing - Production: tendency sa (% balance)
Manufacturing - Employment: tendency sa (% balance)
Share prices: S&P/ASX 200 index (2010=100)
Terms of trade
Yield 10-year commonwealth government bonds (% p.a.) *inverted*

Source

Australian Bureau of Statistics (ABS)
ACCI Westpack
ACCI Westpack
ACCI Westpack
Reserve Bank of Australia
Australian Bureau of Statistics (ABS)
Reserve Bank of Australia

Reference chronology of turning points

Trough 1961M10, Peak 1965M2, Trough 1966M4, Peak 1970M4, Trough 1972M9, Peak 1973M11, Trough 1975M10, Peak 1976M8, Trough 1978M1, Peak 1981M8, Trough 1983M4, Peak 1985M7, Trough 1986M8, Peak 1989M7, Trough 1992M1, Peak 1994M7, Trough 1996M12, Peak 1999M12, Trough 2001M2, Peak 2002M6, Trough 2003M5, Peak 2008M2, Trough 2011M3, Peak 2012M5, Trough 2015M5, Peak 2016M3

Austria

Component Series (Unit)

Manufacturing - Production: future tendency sa (% balance)
Manufacturing - Order books: level sa (% balance)
Manufacturing - Business situation of Germany: present sa (normal=100)
Consumer - Confidence indicator sa (% balance)
Job vacancies: unfilled sa (persons)
Spread of interest rates (% p.a.)

Source

European Commission
European Commission
IFO Institute, Germany
European Commission
European Commission
European Central Bank

Reference chronology of turning points

Peak 1961M3, Trough 1963M1, Peak 1966M3, Trough 1967M11, Peak 1970M9, Trough 1971M11, Peak 1974M2, Trough 1975M6, Peak 1977M8, Trough 1978M5, Peak 1980M1, Trough 1981M10, Peak 1983M9, Trough 1984M6, Peak 1986M5, Trough 1988M3, Peak 1991M10, Trough 1993M4, Peak 1995M3, Trough 1997M4, Peak 2000M10, Trough 2003M8, Peak 2008M2, Trough 2009M7, Peak 2012M1, Trough 2016M7

Belgium

Component Series (Unit)

Passenger car registrations sa (number)
Manufacturing - Employment: future tendency sa (% balance)
Manufacturing - Export orders inflow: tendency sa (% balance)
Manufacturing - Demand: future tendency sa (% balance)
Manufacturing - Production: tendency sa (% balance)
Consumer - Confidence indicator sa (% balance)

Source

National Bank of Belgium
European Commission
National Bank of Belgium
National Bank of Belgium
European Commission
European Commission

Reference chronology of turning points

Trough 1961M5, Peak 1962M5, Trough 1963M5, Peak 1964M8, Trough 1968M6, Peak 1970M6,
Trough 1971M9, Peak 1974M4, Trough 1975M7, Peak 1976M7, Trough 1977M8, Peak 1980M3,
Trough 1983M4, Peak 1984M2, Trough 1987M2, Peak 1990M2, Trough 1993M4, Peak 1994M12,
Trough 1996M7, Peak 1997M9, Trough 1998M11, Peak 2000M4, Trough 2003M7, Peak 2004M8,
Trough 2005M7, Peak 2008M2, Trough 2009M4, Peak 2011M7, Trough 2013M3, Peak 2016M6

Canada

Component Series (Unit)

Deflated Monetary aggregate M1 sa (2010 cad)	Statistics Canada
Work started for dwellings sa (number)	Statistics Canada
Manufacturing - Industrial confidence indicator (USA - PMI) sa	Institute of Supply Management USA
Consumer - Confidence indicator (2010=100)	Conference Board Canada
Spread of interest rates (% p.a.)	Statistics Canada
Ratio of inventories to shipments <i>inverted</i>	Statistics Canada
Share prices: S&P/TSX composite index (2010=100)	Statistics Canada

Source

Reference chronology of turning points

Peak 1962M2, Trough 1963M6, Peak 1966M4, Trough 1967M12, Peak 1968M12, Trough 1971M2, Peak 1974M1, Trough 1975M4, Peak 1976M6, Trough 1977M7, Peak 1981M5, Trough 1982M11, Peak 1985M11, Trough 1986M11, Peak 1989M5, Trough 1992M5, Peak 1994M12, Trough 1996M8, Peak 2000M6, Trough 2001M10, Peak 2002M7, Trough 2003M10, Peak 2007M8, Trough 2009M7, Peak 2011M11, Trough 2012M11, Peak 2014M8, Trough 2016M6, Peak 2017M7

Chile

Component Series (Unit)

Production of copper sa (tonnes)
Retail trade - Confidence indicator sa (% balance)
Manufacturing - Production: tendency sa (% balance)
Monetary aggregate M1 sa (CLP)
Share prices: IPSA index (2010=100)
I ITS Net trade (f.o.b. - c.i.f.) sa (CLP)

Source

National Statistical Institute of Chile
ICARE
ICARE
Central Bank of Chile
Santiago Stock Exchange
Central Bank of Chile

Reference chronology of turning points

Peak 1997M12, Trough 1999M4, Peak 2001M2, Trough 2003M10, Peak 2008M3, Trough 2009M8,
Peak 2013M7, Trough 2017M2

Czech Republic

Component Series (Unit)

BOP Capital account, debit (czk)
Services - Demand evolution: future tendency sa (% balance)
Manufacturing - Production: tendency sa (%)
CPI HICP All items (2010=100) *inverted*
Consumer - Confidence indicator sa (% balance)
ITS Exports f.o.b. total sa (czk)
Share prices: PX-50 index (2010=100)

Source

Czech National Bank
European Commission
European Commission
Czech Statistical Office
European Commission
Czech Statistical Office
Czech Statistical Office

Reference chronology of turning points

Peak 1996M8, Trough 1999M3, Peak 2000M11, Trough 2004M4, Peak 2008M4, Trough 2009M7,
Peak 2011M5, Trough 2013M6, Peak 2015M8, Trough 2016M10

Denmark

Component Series (Unit)

Total retail trade (Volume) sa (2010=100)	Statistics Denmark
Passenger car registrations sa (number)	Statistics Denmark
Manufacturing - Employment: future tendency sa (% balance)	European Commission
Manufacturing - Production: future tendency sa (% balance)	European Commission
Central bank official discount rate (% per annum) <i>inverted</i>	National Bank of Denmark
Deflated monetary aggregate M1 (dkk)	National Bank of Denmark
ITS Mineral fuels, lubricants and related materials exports deflated CPI energy sa (dkk)	Statistics Denmark
Consumer - Confidence indicator sa (% balance)	European Commission

Source

Reference chronology of turning points

Trough 1960M8, Peak 1962M3, Trough 1963M6, Peak 1964M11, Trough 1968M3, Peak 1969M7, Trough 1971M3, Peak 1973M4, Trough 1975M5, Peak 1976M9, Trough 1978M3, Peak 1979M12, Trough 1981M9, Peak 1986M1, Trough 1987M2, Peak 1989M1, Trough 1991M1, Peak 1992M9, Trough 1993M7, Peak 1994M12, Trough 1995M12, Peak 1997M5, Trough 1998M5, Peak 2000M8, Trough 2003M7, Peak 2006M7, Trough 2009M7, Peak 2011M4, Trough 2012M12, Peak 2014M12, Trough 2015M11, Peak 2017M2

Estonia

Component Series (Unit)

Manufacturing - Export order books: level sa (% balance)
Total retail trade (Value) sa (2010=100)
Passenger car registrations sa (2010=100)
CPI Food excl. Restaurants (2010=100) *inverted*
Share prices: OMX Tallin index (2010=100)
ITS Net trade (f.o.b. - c.i.f.) sa (Eur)

Source

European Commission
Eurostat
Eurostat
Statistics Estonia
NASDAQ OMX Baltic
Eurostat

Reference chronology of turning points

Trough 1996M2, Peak 1997M11, Trough 1999M7, Peak 2000M12, Trough 2002M2, Peak 2003M7,
Trough 2004M7, Peak 2007M5, Trough 2009M9, Peak 2012M8, Trough 2016M5

Finland

Component Series (Unit)

	<i>Source</i>
CPI All items (2010=100) <i>inverted</i>	Statistics Finland
Consumer - Confidence indicator sa (% balance)	European Commission
Spread of interest rates (% p.a.)	European Central Bank
Manufacturing - Production: tendency sa (% balance)	European Commission
Domestic PPI Industrial activities (2010=100)	Statistics Finland
Manufacturing - Finished goods stocks: level sa (% balance) <i>inverted</i>	European Commission
Share prices: OMXH index (2010=100)	Bank of Finland
Services - Demand evolution: future tendency (% balance)	European Commission

Reference chronology of turning points

Peak 1961M11, Trough 1963M3, Peak 1965M6, Trough 1968M7, Peak 1970M7, Trough 1971M10, Peak 1973M11, Trough 1978M1, Peak 1980M8, Trough 1982M2, Peak 1982M11, Trough 1984M7, Peak 1985M4, Trough 1987M2, Peak 1990M1, Trough 1993M3, Peak 1995M6, Trough 1996M6, Peak 1998M10, Trough 1999M8, Peak 2000M10, Trough 2003M3, Peak 2007M12, Trough 2009M6, Peak 2011M11, Trough 2015M2

France

Component Series (Unit)

Passenger car registrations sa (number)
Consumer - Confidence indicator sa (% balance)
Manufacturing - Production: future tendency sa (% balance)
Share prices: CAC All-tradable index (2010=100)
CPI HICP All items (2010=100) *inverted*
Manufacturing - Export order books: level sa (% balance)
Construction - Selling prices: future tendency sa (% balance)
Permits issued for dwellings sa (2010=100)

Source

INSEE
European Commission
European Commission
Bank of France
Eurostat
European Commission
European Commission
INSEE

Reference chronology of turning points

Trough 1960M12, Peak 1963M10, Trough 1968M5, Peak 1971M10, Trough 1972M7, Peak 1974M2, Trough 1975M7, Peak 1979M12, Trough 1981M3, Peak 1982M5, Trough 1987M3, Peak 1990M3, Trough 1993M9, Peak 1995M3, Trough 1997M1, Peak 2000M11, Trough 2003M6, Peak 2008M1, Trough 2009M6, Peak 2011M6, Trough 2013M1, Peak 2014M8, Trough 2016M8

Germany

Component Series (Unit)

IFO business climate indicator (normal=100)
Orders inflow/demand (manuf.): tendency (% balance)
Export order books (manuf.): expectation (% balance)
New orders in manuf. industry (2010 = 100)
Finished goods stocks (manuf.): level (% balance) *inverted*
Spread of interest rates (% p.a.)
Services - Demand evolution: future tendency (% balance)
Consumer - Confidence indicator sa (% balance)

Source

IFO Institute for Economic Research
IFO Institute for Economic Research
IFO Institute for Economic Research
DESTATIS Federal Statistical Office
European Commission
European Central Bank
European Commission
European Commission

Reference chronology of turning points

Peak 1960M11, Trough 1963M2, Peak 1966M2, Trough 1967M5, Peak 1970M8, Trough 1972M2, Peak 1973M4, Trough 1975M6, Peak 1979M11, Trough 1982M10, Peak 1985M9, Trough 1987M4, Peak 1991M3, Trough 1993M9, Peak 1995M6, Trough 1996M3, Peak 1998M1, Trough 1998M12, Peak 2001M4, Trough 2005M2, Peak 2008M3, Trough 2009M6, Peak 2011M6, Trough 2013M3, Peak 2014M2, Trough 2015M9

Greece

Component Series (Unit)

Cost of construction: residential (materials) (2010=100) *inverted*
Bank credit to the manufacturing sector deflated sa (euro 2001)
Services - Employment: future tendency sa (% balance)
Manufacturing - Production: future tendency sa (% balance)
Production of manufactured non-durable consumer goods sa (2010=100)
Total retail trade (Volume) sa (2010=100)
Retail trade - Volume of stocks: level sa (% balance) *inverted*
Domestic PPI Industrial activities (2010=100) *inverted*

Source

National Statistical Service of Greece
Bank of Greece
European Commission
European Commission
National Statistical Service of Greece

National Statistical Service of Greece
European Commission
National Statistical Service of Greece

Reference chronology of turning points

Peak 1961M5, Trough 1962M8, Peak 1965M7, Trough 1968M5, Peak 1973M6, Trough 1974M9, Peak 1979M2, Trough 1981M3, Peak 1981M12, Trough 1983M5, Peak 1985M11, Trough 1987M6, Peak 1989M11, Trough 1990M8, Peak 1991M12, Trough 1993M12, Peak 1994M10, Trough 1996M2, Peak 1998M1, Trough 2000M2, Peak 2000M12, Trough 2002M2, Peak 2004M2, Trough 2005M6, Peak 2008M4, Trough 2012M7

Hungary

Component Series (Unit)

Manufacturing - Production: future tendency sa (% balance)
Registered unemployment: level (all persons) sa
Monthly hours worked: manufacturing sa (hours)
Monetary aggregate M1 sa (HUF)
Share prices: BUX index (2010=100)
Central bank base rate (% per annum)
ITS Imports c.i.f. total sa (HUF)

Source

European Commission
Hungarian Central Statistical Office
Hungarian Central Statistical Office
Bank of Hungary
Bank of Hungary
Bank of Hungary
Hungarian Central Statistical Office

Reference chronology of turning points

Trough 1996M9, Peak 1998M6, Trough 1999M3, Peak 2000M12, Trough 2003M4, Peak 2008M5,
Trough 2009M6, Peak 2011M9, Trough 2012M11, Peak 2015M2, Trough 2016M9

Ireland

Component Series (Unit)

Exports to Northern Ireland sa (EUR)
Exports of agricultural products to other Euro sa (EUR)
Passenger car registrations sa (2010=100)
Total PPI Mining and quarrying activities (2010=100)
Share prices: ISEQ index (2010=100)
Real effective exchange rates - CPI Based (2010=100) *inverted*
Money supply M2 to Euro area (EUR)

Source

Central Statistics Office Ireland
Central Statistics Office Ireland
Central Statistics Office Ireland
Eurostat
Central Bank of Ireland
OECD, Economic Department
Central Statistics Office Ireland

Reference chronology of turning points

Peak 1961M7, Trough 1962M6, Peak 1964M4, Trough 1966M8, Peak 1969M5, Trough 1971M2, Peak 1972M12, Trough 1974M4, Peak 1975M4, Trough 1976M8, Peak 1978M6, Trough 1980M5, Peak 1982M2, Trough 1983M7, Peak 1985M2, Trough 1986M9, Peak 1990M7, Trough 1994M3, Peak 1995M10, Trough 1996M10, Peak 1997M7, Trough 1998M11, Peak 2000M9, Trough 2001M10, Peak 2002M7, Trough 2004M8, Peak 2007M3, Trough 2009M9, Peak 2011M4, Trough 2013M11, Peak 2015M6, Trough 2017M4

Israel

Component Series (Unit)

Manufacturing - Production: future tendency sa (% balance)
Total retail trade (Volume) sa (2010=100)
Domestic PPI Manufacturing (2010=100)
Share prices: TA 100 index (2010=100)
Total Departures Of Israelis sa (number)
Exports of manufactures diamonds prices 2010 (USD)

Source

Bank of Israel
Central Bureau of Statistics
Central Bureau of Statistics
Tel-Aviv Stock Exchange
Bank of Israel
Bank of Israel

Reference chronology of turning points

Peak 1996M12, Trough 1999M1, Peak 2000M9, Trough 2003M9, Peak 2007M11, Trough 2009M5,
Peak 2011M8, Trough 2012M8, Peak 2013M8, Trough 2015M9, Peak 2016M10

Italy

Component Series (Unit)

	<i>Source</i>
Consumer - Confidence indicator sa (% balance)	European Commission
Manufacturing - Order books: level sa (% balance)	European Commission
Deflated orders for total manufactured goods (Value) sa (2010 = 100)	ISTAT
Manufacturing - Production: future tendency sa (% balance)	European Commission
CPI All items (2010=10) <i>inverted</i>	ISTAT
Imports from Germany c.i.f. (USD)	ISTAT

Reference chronology of turning points

Trough 1960M10, Peak 1962M1, Trough 1965M1, Peak 1970M7, Trough 1972M11, Peak 1974M3, Trough 1975M6, Peak 1976M11, Trough 1977M10, Peak 1979M12, Trough 1983M3, Peak 1985M9, Trough 1987M2, Peak 1989M12, Trough 1993M8, Peak 1995M12, Trough 1999M3, Peak 2001M1, Trough 2003M7, Peak 2008M2, Trough 2009M5, Peak 2011M5, Trough 2013M4

Japan

Component Series (Unit)

Ratio of inventories to shipments sa (2010=100) *inverted*

ITS Volume of imports/volume of exports sa (2010=100)

Ratio loans to deposits sa (%) *inverted*

Monthly hours worked: manufacturing sa (2010=100)

Work started for dwellings sa (2010=100)

Share prices: TOPIX index (2010=100)

Spread of interest rates (% p.a.)

Small Business Survey: Sales tendency (% balance)

Source

Statistics Japan

Japan Customs

Bank of Japan

Statistics Japan

Ministry of Construction

Bank of Japan

Bank of Japan

Japan Finance Corporation for SMSE

Reference chronology of turning points

Peak 1961M12, Trough 1963M2, Peak 1964M4, Trough 1965M11, Peak 1970M3, Trough 1971M10, Peak 1973M4, Trough 1975M2, Peak 1979M6, Trough 1980M5, Peak 1982M3, Trough 1983M5, Peak 1985M9, Trough 1987M2, Peak 1990M8, Trough 1994M10, Peak 1997M1, Trough 1999M5, Peak 2001M1, Trough 2002M1, Peak 2004M3, Trough 2004M12, Peak 2008M2, Trough 2009M4, Peak 2010M8, Trough 2012M10, Peak 2013M10, Trough 2015M12

Korea

Component Series (Unit)

Manufacturing - Business situation: future (% balance)
Share prices: KOSPI index (2010 = 100)
Stocks of manufactured investment goods (volume) sa *inverted*
Inventory circulation indicator (manufacturing)
Spread of interest rates (% p.a.)
Net Barter Terms of trade (2010=100)

Source

Bank of Korea
Bank of Korea
National Statistical Office
National Statistical Office
National Statistical Office
National Statistical Office

Reference chronology of turning points

Trough 1962M6, Peak 1964M12, Trough 1965M9, Peak 1969M9, Trough 1972M6, Peak 1973M12, Trough 1975M2, Peak 1979M3, Trough 1980M12, Peak 1984M4, Trough 1986M1, Peak 1988M2, Trough 1989M5, Peak 1991M11, Trough 1992M12, Peak 1997M6, Trough 1998M7, Peak 2000M7, Trough 2001M4, Peak 2002M8, Trough 2005M1, Peak 2007M12, Trough 2009M3, Peak 2011M1, Trough 2013M1, Peak 2014M3, Trough 2015M4, Peak 2017M7

Luxembourg

Component Series (Unit)

OECD CLI for Germany (trend restored)
OECD CLI for Belgium (trend restored)

Source

OECD
OECD

Reference chronology of turning points

Peak 1961M5, Trough 1963M3, Peak 1964M8, Trough 1968M2, Peak 1969M7, Trough 1971M5, Peak 1974M3, Trough 1975M9, Peak 1979M11, Trough 1983M3, Peak 1984M5, Trough 1985M6, Peak 1986M7, Trough 1987M10, Peak 1989M5, Trough 1990M5, Peak 1991M7, Trough 1992M10, Peak 1994M2, Trough 1996M9, Peak 2000M3, Trough 2001M7, Peak 2002M4, Trough 2005M3, Peak 2007M8, Trough 2009M5, Peak 2011M2, Trough 2012M9, Peak 2014M12, Trough 2017M4

Mexico

Component Series (Unit)

	<i>Source</i>
Employees - Manufacturing (D) sa (%)	INEGI
Manufacturing - Employment: tendency sa (% balance)	Bank of Mexico
Manufacturing - Finished goods: tendency sa (% balance) <i>inverted</i>	Bank of Mexico
Manufacturing - Production: tendency sa (% balance)	Bank of Mexico
Yield >10-year US fed. Gov. securities (% p.a.) <i>inverted</i>	US Treasury Department USA
CPP Rate (% p.a.) <i>inverted</i>	Bank of Mexico
Real effective exchange rates - CPI Based (2010=100)	OECD

Reference chronology of turning points

Trough 1962M9, Peak 1964M8, Trough 1967M6, Peak 1968M7, Trough 1971M7, Peak 1973M9, Trough 1977M7, Peak 1981M8, Trough 1983M6, Peak 1985M7, Trough 1986M11, Peak 1992M7, Trough 1993M5, Peak 1994M8, Trough 1995M7, Peak 1998M2, Trough 1999M6, Peak 2000M6, Trough 2003M8, Peak 2008M5, Trough 2009M5, Peak 2012M9, Trough 2013M10, Peak 2015M8, Trough 2017M10

Netherlands

Component Series (Unit)

Manufacturing - Order books: level sa (% balance)	European Commission
Manufacturing - Production: future tendency sa (% balance)	European Commission
Manufacturing - Finished goods stocks: level sa (% balance) <i>inverted</i>	European Commission
Manufacturing - Business situation of Germany: present sa (normal=100)	IFO Institute Germany
Services - Demand evolution: future tendency (% balance)	European Commission
Consumer - Confidence indicator sa (% balance)	European Commission
Share prices: AEX index (2010=100)	Statistics Netherlands

Source

Reference chronology of turning points

Trough 1961M9, Peak 1965M1, Trough 1967M6, Peak 1970M12, Trough 1972M8, Peak 1974M5, Trough 1975M4, Peak 1976M8, Trough 1977M5, Peak 1979M11, Trough 1982M12, Peak 1986M5, Trough 1987M2, Peak 1990M9, Trough 1993M12, Peak 1994M12, Trough 1996M3, Peak 2000M11, Trough 2005M1, Peak 2008M3, Trough 2009M6, Peak 2011M4, Trough 2013M4, Peak 2015M2, Trough 2015M11

New Zealand

Component Series (Unit)

Manufacturing - Business situation: future sa (% balance)
Consumer - Confidence indicator sa (% balance)
Total retail trade (Value) sa (NZD)
Short term unemployment sa (persons) *inverted*
Monetary aggregate M1 sa (2010=100)
Yield of 90-day bank bills (% p.a.) *inverted*

Source

New Zealand Inst. Economic Research
Westpac Banking Corporation N.Z.
Statistics New Zealand
Department of Labour N. Z.
Reserve Bank N. Z.
Reserve Bank N. Z.

Reference chronology of turning points

Trough 1962M7, Peak 1966M5, Trough 1968M3, Peak 1969M7, Trough 1970M11, Peak 1974M5,
Trough 1975M8, Peak 1976M5, Trough 1977M10, Peak 1978M9, Trough 1980M5, Peak 1982M5,
Trough 1983M2, Peak 1985M1, Trough 1987M2, Peak 1989M2, Trough 1992M10, Peak 1995M6,
Trough 1998M6, Peak 2000M2, Trough 2001M2, Peak 2004M3, Trough 2005M1, Peak 2007M9,
Trough 2009M2, Peak 2010M3, Trough 2013M11, Peak 2016M4, Trough 2017M2

Norway

Component Series (Unit)

	<i>Source</i>
Exports to UK (USD)	UN – Comtrade database
Manufacturing, mining and quarrying - Stocks of orders for export sa (% balance)	Statistics Norway
Manufacturing - Production: tendency sa (% balance)	Statistics Norway
Manufacturing, mining and quarrying - General judgment of the outlook for the enterprise in next quarter sa (% balance)	Statistics Norway
CPI All items (2010=100)	Statistics Norway
Share prices: OSE20GI index (2010=100)	Oslo Børs

Reference chronology of turning points

Peak 1961M7, Trough 1963M5, Peak 1965M5, Trough 1966M5, Peak 1967M6, Trough 1968M7, Peak 1969M6, Trough 1970M9, Peak 1972M6, Trough 1975M5, Peak 1976M7, Trough 1979M2, Peak 1980M2, Trough 1982M10, Peak 1986M10, Trough 1989M2, Peak 1992M5, Trough 1993M3, Peak 1998M2, Trough 1999M3, Peak 2001M10, Trough 2003M6, Peak 2007M10, Trough 2010M8, Peak 2012M3, Trough 2014M1, Peak 2015M7, Trough 2016M8, Peak 2017M8

Poland

Component Series (Unit)

Real effective exchange rates - CPI Based (2010=100) *inverted*
3-month WIBOR (% per annum) *inverted*
Manufacturing - Production: tendency sa (% balance)
Job vacancies: unfilled sa (number)
Production of coal (tonnes)

Source

OECD
Bank of Poland
European Commission
Central Statistical Office
Central Statistical Office

Reference chronology of turning points

Peak 1998M3, Trough 2003M1, Peak 2004M4, Trough 2005M5, Peak 2008M2, Trough 2009M7,
Peak 2011M10, Trough 2013M11, Peak 2015M10, Trough 2016M7

Portugal

Component Series (Unit)

Industrial production: electricity, gas & water (2010=100)	INE
Manufacturing - Production: future tendency sa (% balance)	European Commission
Manufacturing - Order books: level sa (% balance)	European Commission
Manufacturing - Export order books: level sa (% balance)	INE
Share prices: PSI-20 index (2010=100)	Lisbon Stock Exchange
Job vacancies: unfilled sa (number)	INE
Services - Demand evolution: future tendency (% balance)	European Commission

Source

Reference chronology of turning points

Trough 1961M2, Peak 1962M7, Trough 1964M1, Peak 1965M5, Trough 1966M10, Peak 1968M5, Trough 1969M7, Peak 1970M6, Trough 1972M2, Peak 1973M11, Trough 1975M8, Peak 1977M4, Trough 1978M7, Peak 1980M2, Trough 1981M8, Peak 1983M1, Trough 1984M5, Peak 1990M10, Trough 1993M12, Peak 2001M12, Trough 2003M6, Peak 2004M5, Trough 2005M10, Peak 2008M2, Trough 2009M4, Peak 2010M10, Trough 2012M12, Peak 2015M6

Slovak Republic

Component Series (Unit)

Retail trade - Confidence indicator sa (% balance)
Total retail trade (Volume) sa (2010=100)
Consumers - Expected economic situation sa (% balance)
Share prices: SAX index (2010=100)
ITS Imports c.i.f. total sa (USD)

Source

European Commission
Eurostat
European Commission
Bratislava Stock Exchange
Eurostat

Reference chronology of turning points

Trough 1993M9, Peak 1997M7, Trough 1999M12, Peak 2003M3, Trough 2004M5, Peak 2007M12,
Trough 2009M5, Peak 2011M11, Trough 2013M6, Peak 2015M12

Slovenia

Component Series (Unit)

IP Manufacture Basic Metals sa (2010=100)
Manufacturing - Order books: level sa (% balance)
Manufacturing - Production: tendency sa (% balance)
CPI All items (2010=100) *inverted*
EUR/USD exchange rate monthly average (%)
Consumers - Expected economic situation sa (% balance)

Source

Statistical Office of the Republic of Slovenia
European Commission
European Commission
Statistical Office of the Republic of Slovenia
OECD
European Commission

Reference chronology of turning points

Peak 1997M6, Trough 1998M9, Peak 2000M8, Trough 2004M12, Peak 2008M5, Trough 2009M7,
Peak 2011M6, Trough 2013M3, Peak 2014M9, Trough 2015M11

Spain

Component Series (Unit)

Manufacturing - Rate of capacity utilization sa (% balance)
Construction - Employment: future tendency sa (% balance)
CPI Services less housing (2010=100) *inverted*
Share prices: IGBM general index (2010=100)
Passenger car registrations (2010=100)
Consumer - Confidence indicator sa (% balance)

Source

European Commission
European Commission
Instituto Nacional de Estadística
Bank of Spain
National Statistical Institute
European Commission

Reference chronology of turning points

Peak 1963M4, Trough 1965M9, Peak 1966M8, Trough 1967M12, Peak 1969M4, Trough 1971M3,
Peak 1974M4, Trough 1975M10, Peak 1978M2, Trough 1979M5, Peak 1980M5, Trough 1981M11,
Peak 1983M5, Trough 1986M10, Peak 1991M10, Trough 1993M6, Peak 1995M7, Trough 1996M11,
Peak 2000M11, Trough 2004M10, Peak 2008M2, Trough 2009M8, Peak 2011M2, Trough 2013M7,
Peak 2017M11

Sweden

Component Series (Unit)

	<i>Source</i>
Yield 5-year government bonds (% p.a.) <i>inverted</i>	Bank of Sweden
Overtime hours worked mining & manuf. (%)	Statistics Sweden
Orders for total manufactured goods (Volume) sa (2010=100)	Statistics Sweden
Order books (manuf.): level (% balance)	European Commission
Manufacturing - Finished goods stocks: level sa (% balance) <i>inverted</i>	European Commission
Services – Demand evolution: future tendency (% balance)	European Commission
Consumer - Confidence indicator sa (% balance)	European Commission
Share prices: OMXS30 index (2010=100)	Bank of Sweden

Reference chronology of turning points

Peak 1961M2, Trough 1963M2, Peak 1964M12, Trough 1967M12, Peak 1970M9, Trough 1972M3, Peak 1974M12, Trough 1977M10, Peak 1980M1, Trough 1983M4, Peak 1984M2, Trough 1986M12, Peak 1990M1, Trough 1993M3, Peak 1995M11, Trough 1997M1, Peak 2000M7, Trough 2003M6, Peak 2007M10, Trough 2009M7, Peak 2011M2, Trough 2013M7, Peak 2015M11, Trough 2017M2

Switzerland

Component Series (Unit)

Manufacturing - Finished goods stocks: level (% balance)
inverted

Manufacturing - Orders inflow: tendency sa (% balance)
Manufacturing - Production: future tendency sa (% balance)
Share prices: UBS-100 index (2010=100)
Consumer - Expected economic situation sa (% balance)
Silver prices (CHF/k)

Source

Swiss Institute for Business Cycle
Research (KOF/ETZ)

KOF/ETZ
KOF/ETZ
Swiss Exchange
KOF/ETZ
Swiss National Bank

Reference chronology of turning points

Peak 1961M11, Trough 1963M2, Peak 1964M5, Trough 1966M1, Peak 1967M1, Trough 1969M2,
Peak 1971M7, Trough 1972M4, Peak 1974M3, Trough 1976M1, Peak 1977M9, Trough 1978M9,
Peak 1981M6, Trough 1983M1, Peak 1985M10, Trough 1987M4, Peak 1990M4, Trough 1993M1,
Peak 1994M10, Trough 1996M11, Peak 1998M5, Trough 1999M3, Peak 2000M11, Trough 2003M5,
Peak 2008M4, Trough 2009M6, Peak 2011M3, Trough 2012M6, Peak 2014M10, Trough 2017M3

Turkey

Component Series (Unit)

	<i>Source</i>
Production of electricity sa (GW hours)	State Institute of Statistics
Manufacturing - Finished goods stocks: level sa (% balance) <i>inverted</i>	Bank of Turkey
New domestic orders: tendency sa (% balance)	Bank of Turkey
Manufacturing - Employment: future tendency sa (% balance)	Bank of Turkey
Prospects for exports (manuf.) (% balance)	Bank of Turkey
Discounted treasury auction interest rate (% p.a.) <i>inverted</i>	Bank of Turkey
ITS Import c.i.f. of intermediate goods sa (USD)	State Institute of Statistics
Services – Demand evolution: future tendency (% balance)	European Commission

Reference chronology of turning points

Trough 1961M10, Peak 1963M8, Trough 1965M6, Peak 1966M8, Trough 1967M8, Peak 1968M8, Trough 1971M4, Peak 1972M6, Trough 1973M11, Peak 1976M9, Trough 1980M7, Peak 1981M10, Trough 1982M7, Peak 1984M6, Trough 1985M8, Peak 1987M11, Trough 1989M5, Peak 1993M8, Trough 1994M7, Peak 1998M2, Trough 1999M9, Peak 2000M8, Trough 2001M10, Peak 2008M1, Trough 2009M4, Peak 2011M8, Trough 2012M7, Peak 2015M5, Trough 2016M8

United Kingdom

Component Series (Unit)

Services – Demand evolution: future tendency (% balance)

Passenger car registrations sa (number)

Consumer - Confidence indicator sa (% balance)

Sterling certificates of deposit interest rate 3 months (% p.a.) *inverted*

Manufacturing - Finished goods: tendency sa (% balance)

Share prices: FTSE LOCAL UK (£) index (2010=100)

Source

European Commission

Department of Transport

European Commission

Bank of England

European Commission

London Stock Exchange

Reference chronology of turning points

Peak 1955M9, Trough 1959M1, Peak 1960M2, Trough 1962M12, Peak 1964M9, Trough 1966M12, Peak 1968M8, Trough 1970M2, Peak 1973M4, Trough 1975M8, Peak 1979M6, Trough 1981M4, Peak 1983M10, Trough 1984M7, Peak 1988M12, Trough 1992M6, Peak 1994M9, Trough 1996M8, Peak 1997M11, Trough 1999M5, Peak 2000M2, Trough 2002M5, Peak 2003M11, Trough 2004M11, Peak 2008M1, Trough 2009M6, Peak 2014M11, Trough 2016M6

United States

Component Series (Unit)

Work started for dwellings sa (number)
Net new orders - durable goods sa (USD)
Share prices: NYSE composite (2010=100)
Consumer - Confidence indicator sa (normal = 100)

Weekly hours worked: manufacturing sa (hours)
Manufacturing - Industrial confidence indicator (%
balance)
Spread of interest rates (% p.a.)

Source

Bureau of the Census
Bureau of the Census
Bureau of the Census
Survey of consumers – Thomson Reuters /
University of Michigan
Bureau of Labor Statistics
Institute of Supply Management Federal Reserve

Federal Reserve

Reference chronology of turning points

Trough 1949M10, Peak 1951M8, Trough 1954M6, Peak 1955M9, Trough 1958M4, Peak 1959M6,
Trough 1961M2, Peak 1962M4, Trough 1963M3, Peak 1966M3, Trough 1967M9, Peak 1969M3,
Trough 1970M11, Peak 1973M5, Trough 1975M4, Peak 1978M11, Trough 1982M11, Peak 1985M9,
Trough 1987M3, Peak 1989M6, Trough 1991M8, Peak 1994M9, Trough 1995M12, Peak 2000M5,
Trough 2003M2, Peak 2007M10, Trough 2009M5, Peak 2012M4, Trough 2013M4, Peak 2015M4,
Trough 2017M2

Brazil

Component Series (Unit)

Share prices: BOVESPA - Total return index (2010=100)
Manufacturing - Production: future tendency sa (% balance)
Manufacturing - Order books: level sa (% balance)
Central Bank Policy rate (EOP) (% p.a.) *inverted*
Services – Demand evolution: future tendency (% balance)
ITS Net trade (f.o.b.-f.o.b.) with EU (USD)

Source

Brazil Yahoo Finance and IMF
Fundação Getulio Vargas, Brazil
Fundação Getulio Vargas, Brazil
IMF
Fundação Getulio Vargas, Brazil
Ministry of Development, Industry and Foreign Trade, Brazil

Reference chronology of turning points

Peak 1997M9, Trough 1999M5, Peak 2000M12, Trough 2003M7, Peak 2004M9, Trough 2005M11,
Peak 2008M5, Trough 2009M3, Peak 2011M5, Trough 2012M2, Peak 2013M11, Trough 2016M8

China

Component Series (Unit)

IP Production of chemical fertilizer sa (tonnes)
IP Production of manufactured crude steel sa (tonnes)
5000 Industrial Enterprises: Diffusion Index: Overseas order level (%)
Production of total construction sa (m2)
Production of motor vehicles sa (number)
Share prices: Shanghai Stock Exchange turnover (CNY)

Source

National Bureau of Statistics
World Steel Association
People`s Bank of China
National Bureau of Statistics
National Bureau of Statistics
Shanghai Stock Exchange

Reference chronology of turning points

Trough 1978M12, Peak 1980M2, Trough 1982M11, Peak 1985M4, Trough 1986M4, Peak 1988M9, Trough 1990M5, Peak 1994M9, Trough 1999M7, Peak 2000M7, Trough 2002M1, Peak 2007M12, Trough 2009M2, Peak 2011M8, Trough 2012M11, Peak 2014M1, Trough 2016M10, Peak 2017M9

India

Component Series (Unit)

IP Production of manufactured durable consumer goods sa
(2010=100)

IP Production of manufactured non-metallic mineral products
sa (2010=100)

Passenger car sales sa (number)

Monetary aggregate M1 sa (INR)

Share prices: BSE (100) national index (2010=100)

Call money rate (% p.a.) *inverted*

Source

Ministry of Statistics

Ministry of Statistics

Society of Indian Automobile Manufacturers

Reserve Bank of India

Reserve Bank of India

Reserve Bank of India

Reference chronology of turning points

Trough 1997M10, Peak 1999M12, Trough 2003M1, Peak 2007M10, Trough 2009M3, Peak
2010M12, Trough 2013M7, Peak 2016M4

Indonesia

Component Series (Unit)

Share prices: IDX composite index (2010=100)
Central Bank Discount rate (% p.a.) *inverted*
IDR/USD exchange rate end period (%) *inverted*
Wholesale Price Index (2010=100) *inverted*
Consumer - Confidence indicator (normal = 100)
Production of paper and paper products sa (2010=100)
Tourist arrivals sa (number)

Source

Jakarta Stock Exchange
Central Bank of Indonesia
International Monetary Fund
Central Bank of Indonesia
Central Bank of Indonesia
National Bureau of Statistics
National Bureau of Statistics

Reference chronology of turning points

Trough 1993M3, Peak 1997M8, Trough 1998M10, Peak 2003M3, Trough 2004M4, Peak 2008M5,
Trough 2009M6, Peak 2013M2, Trough 2016M11

Russian Federation

Component Series (Unit)

Manufacturing - Order books: level sa (% balance)

Share prices: RTS index (2010=100)

World market price of crude oil (2010=100)

Manufacturing - Production: tendency sa (% balance)

Manufacturing - Export order books: level sa (% balance)

Source

GAIDAR, Institute for Economic Policy

Central Bank of R.F.

Hamburg Institute of International Economics (HWWA)

GAIDAR, Institute for Economic Policy

GAIDAR, Institute for Economic Policy

Reference chronology of turning points

Trough 1996M10, Peak 1997M9, Trough 1998M10, Peak 2000M7, Trough 2002M4, Peak 2003M1, Trough 2005M5, Peak 2008M3, Trough 2009M7, Peak 2014M4, Trough 2016M6, Peak 2017M7

South Africa

Component Series (Unit)

Manufacturing - Orders inflow/Demand: tendency (% balance)
Manufacturing - Confidence indicator (% balance)
Permits issued for total buildings sa (2010=100)
Passenger car registrations sa (2010=100)
Share prices: FTSE/JSE index (2010=100)
Spread of interest rates (% p.a.)

Source

Bureau of Economic Research
Bureau of Economic Research
Reserve Bank
Reserve Bank
International Monetary Fund
Reserve Bank

Reference chronology of turning points

Peak 1960M7, Trough 1962M12, Peak 1965M2, Trough 1966M10, Peak 1967M8, Trough 1969M3,
Peak 1971M1, Trough 1972M8, Peak 1974M6, Trough 1977M10, Peak 1981M9, Trough 1983M4,
Peak 1984M5, Trough 1986M6, Peak 1989M5, Trough 1992M12, Peak 1996M11, Trough 1998M12,
Peak 2000M10, Trough 2003M11, Peak 2008M4, Trough 2009M9, Peak 2015M1, Trough 2017M2

OECD

Reference chronology of turning points

Trough 1961M2, Peak 1962M2, Trough 1963M2, Peak 1964M3, Trough 1965M4, Peak 1966M4, Trough 1967M9, Peak 1969M5, Trough 1971M10, Peak 1973M5, Trough 1975M5, Peak 1979M9, Trough 1982M12, Peak 1985M9, Trough 1987M2, Peak 1990M5, Trough 1993M7, Peak 1994M11, Trough 1995M11, Peak 1997M10, Trough 1999M3, Peak 2000M7, Trough 2003M4, Peak 2008M1, Trough 2009M5, Peak 2011M12, Trough 2013M1, Peak 2015M5, Trough 2016M8,

OECD + non-member economies

Reference chronology of turning points

Trough 1961M2, Peak 1962M2, Trough 1963M2, Peak 1964M3, Trough 1965M4, Peak 1966M4, Trough 1967M9, Peak 1969M5, Trough 1971M10, Peak 1973M5, Trough 1975M5, Peak 1979M10, Trough 1982M12, Peak 1985M8, Trough 1987M2, Peak 1989M2, Trough 1993M7, Peak 1994M11, Trough 1995M12, Peak 1997M9, Trough 1998M12, Peak 2000M7, Trough 2003M4, Peak 2008M1, Trough 2009M5, Peak 2011M10, Trough 2013M1, Peak 2014M12, Trough 2016M8,

Major seven countries

Reference chronology of turning points

Trough 1961M1, Peak 1962M3, Trough 1963M2, Peak 1966M3, Trough 1967M8, Peak 1969M3, Trough 1971M3, Peak 1973M5, Trough 1975M5, Peak 1979M8, Trough 1982M11, Peak 1985M9, Trough 1987M2, Peak 1990M4, Trough 1993M8, Peak 1994M11, Trough 1996M1, Peak 1997M9, Trough 1998M6, Peak 2000M6, Trough 2003M3, Peak 2007M12, Trough 2009M5, Peak 2012M2, Trough 2013M1, Peak 2015M4, Trough 2016M11,

OECD Europe

Reference chronology of turning points

Peak 1963M12, Trough 1968M4, Peak 1970M8, Trough 1972M1, Peak 1973M11, Trough 1975M7, Peak 1979M12, Trough 1982M11, Peak 1985M9, Trough 1987M2, Peak 1990M4, Trough 1993M5, Peak 1995M7, Trough 1996M11, Peak 1998M1, Trough 1999M3, Peak 2000M9, Trough 2003M6, Peak 2008M1, Trough 2009M6, Peak 2011M6, Trough 2013M2, Peak 2015M8, Trough 2016M8,

Euro area

Reference chronology of turning points

Peak 1963M11, Trough 1968M4, Peak 1970M8, Trough 1972M3, Peak 1974M1, Trough 1975M6, Peak 1976M12, Trough 1977M9, Peak 1980M1, Trough 1982M12, Peak 1985M9, Trough 1987M3, Peak 1991M2, Trough 1993M8, Peak 1995M4, Trough 1997M1, Peak 1998M1, Trough 1999M1, Peak 2001M1, Trough 2003M7, Peak 2008M2, Trough 2009M6, Peak 2011M5, Trough 2013M3, Peak 2016M2,

Four big European countries

Reference chronology of turning points

Peak 1962M5, Trough 1963M2, Peak 1965M8, Trough 1967M4, Peak 1970M8, Trough 1972M3, Peak 1973M9, Trough 1975M7, Peak 1976M12, Trough 1977M9, Peak 1979M11, Trough 1982M11, Peak 1985M8, Trough 1987M3, Peak 1991M2, Trough 1993M7, Peak 1995M2, Trough 1997M1, Peak 1997M12, Trough 1999M3, Peak 2001M2, Trough 2005M1, Peak 2008M2, Trough 2009M6, Peak 2011M6, Trough 2013M2, Peak 2014M12, Trough 2016M8, Peak 2017M12,

NAFTA area

Reference chronology of turning points

Trough 1949M10, Peak 1951M8, Trough 1954M6, Peak 1955M9, Trough 1958M4, Peak 1959M6, Trough 1961M2, Peak 1962M3, Trough 1963M3, Peak 1966M3, Trough 1967M9, Peak 1969M2, Trough 1970M11, Peak 1973M5, Trough 1975M4, Peak 1978M11, Trough 1980M7, Peak 1981M4, Trough 1982M12, Peak 1985M9, Trough 1987M1, Peak 1990M3, Trough 1991M8, Peak 1994M8, Trough 1995M11, Peak 2000M6, Trough 2003M2, Peak 2007M10, Trough 2009M5, Peak 2012M3, Trough 2013M5, Peak 2015M4, Trough 2017M2,

Major five Asia

Reference chronology of turning points

Peak 1979M8, Trough 1983M3, Peak 1985M6, Trough 1987M2, Peak 1988M10, Trough 1990M2, Peak 1991M4, Trough 1993M9, Peak 1996M12, Trough 1998M8, Peak 2000M9, Trough 2002M1, Peak 2007M12, Trough 2009M3, Peak 2011M8, Trough 2012M11, Peak 2013M12, Trough 2016M12, Peak 2017M9,