

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

Please note that the OECD CLIs of countries marked with an asterisk will be discontinued as of January 2023

| OECD Countries | | | |
|------------------------|-----------------|------------------------------|----------------------------|
| <u>Australia</u> | <u>Germany</u> | <u>Lithuania*</u> | <u>Spain</u> |
| <u>Austria*</u> | <u>Greece*</u> | <u>Luxembourg*</u> | Sweden* |
| <u>Belgium*</u> | <u>Hungary*</u> | <u>Mexico</u> | Switzerland* |
| <u>Canada</u> | <u>Iceland*</u> | <u>Netherlands*</u> | <u>Republic of Türkiye</u> |
| <u>Chile*</u> | <u>Ireland*</u> | <u>New Zealand*</u> | <u>United Kingdom</u> |
| <u>Colombia*</u> | <u>Israel*</u> | <u>Norway*</u> | <u>United States</u> |
| <u>Czech Republic*</u> | <u>Italy</u> | Poland* | |
| <u>Denmark*</u> | <u>Japan</u> | Portugal* | |
| <u>Estonia*</u> | <u>Korea</u> | Slovak Republic* | |
| <u>Finland*</u> | <u>Latvia*</u> | <u>Slovenia*</u> | |
| <u>France</u> | | | |
| | | | |
| Non-member economies | | Area | |
| Brazil | | OECD Total* | |
| China | | OECD + non-member economies* | |
| India | | Major seven countries | |
| Indonesia | | OECD Europe* | |
| Russian Federation | | Euro area* | |
| South Africa | | Four big European countries | |
| | | NAFTA | |
| | | Major five Asia countries | |

Australia

Component Series (Unit)

Permits issued for dwellings sa (number) Manufacturing **survey** - Orders inflow: tendency sa (% balance) Manufacturing **survey** - Production: tendency sa (% balance) Manufacturing - Employment: tendency sa (% balance) Share prices: S&P/ASX 200 index (2015=100) Terms of trade Yield 10-year commonwealth government bonds (% p.a.) *inverted*

Source

Australian Bureau of Statistics ACCI Westpac ACCI Westpac ACCI Westpac Reserve Bank of Australia Australian Bureau of Statistics 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 1978M2, Peak 1981M8, Trough 1983M4, Peak 1985M7, Trough 1986M8, Peak 1989M7, Trough 1992M1, Peak 1994M7, Trough 1996M11, Peak 1998M12, Trough 2001M3, Peak 2002M6, Trough 2003M4, Peak 2005M8, Trough 2006M5, Peak 2008M1, Trough 2011M2, Peak 2012M5, Trough 2015M5, Peak 2019M11, Trough 2020M5

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 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 2000M11, Trough 2003M11, Peak 2008M4, Trough 2009M7, Peak 2012M1, Trough 2015M5, Peak 2019M2, Trough 2020M5

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

European Automobile Manufacturers' Association 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 1987M2, Peak 1990M2, Trough 1993M4, Peak 1994M12, Trough 1996M7, Peak 1997M9, Trough 1998M11, Peak 2000M10, Trough 2003M8, Peak 2008M1, Trough 2009M4, Peak 2011M9, Trough 2013M4, Peak 2015M6, Trough 2016M7, Peak 2019M12, Trough 2020M5

Canada

Component Series (Unit)

Deflated Monetary aggregate M1 sa (2010 cad) Manufacturing survey - confidence indicator (USA - PMI) sa Consumer survey - confidence indicator (2015=100) Spread of interest rates (% p.a.) Ratio of inventories to shipments *inverted* Share prices: S&P/TSX composite index (2015=100)

Source

Statistics Canada US Institute of Supply Management Conference Board of Canada Statistics Canada Statistics Canada Statistics Canada

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 2014M9, Trough 2016M6, Peak 2019M8, Trough 2020M5

Chile

Component Series (Unit)

Production in total mining sa index (2015=100) Retail trade - Confidence indicator sa (% balance) Manufacturing - Production: tendency sa (% balance) Monetary aggregate M1 sa (CLP) Share prices: IPSA index (2015=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 2013M4, Trough 2017M2, Peak 2018M5, Trough 2020M5, Peak 2021M11

Colombia

Component Series (Unit)SourceRetail trade - Orders: future tendency sa (% balance)FEDESARROLLOConsumer - Confidence indicator sa (% balance)FEDESARROLLOConsumers - Expected economic situation sa (% balance)FEDESARROLLOimports c.i.f. sa (USD)DANECPI All items index (2015=100)DANEPermits issued for dwellings sa index (2015=100)DANE

Reference chronology of turning points

Peak 1998M2, Trough 1999M5, Peak 2004M12, Trough 2005M9, Peak 2007M10, Trough 2009M12, Peak 2011M10, Trough 2012M10, Peak 2014M12, Trough 2017M10, Peak 2020M1, Trough 2020M5

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 (2015=100) *inverted* Consumer - Confidence indicator sa (% balance) ITS Exports f.o.b. total sa (czk) Share prices: PX-50 index (2015=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 1999M4, Peak 2001M1, Trough 2004M3, Peak 2008M4, Trough 2009M7, Peak 2011M5, Trough 2014M3, Peak 2015M8, Trough 2016M8, Peak 2020M1, Trough 2020M5

Denmark

Component Series (Unit)

Total retail trade (Volume) sa (2015=100) Passenger car registrations sa (number) Manufacturing - Employment: future tendency sa (% balance) Manufacturing - Production: future tendency sa (% balance) Central bank official discount rate (% per annum) *inverted* Deflated monetary aggregate M1 (dkk) ITS Mineral fuels, lubricants and related materials exports deflated CPI energy sa (dkk) Consumer - Confidence indicator sa (% balance)

Source

Statistics Denmark Statistics Denmark European Commission European Commission National Bank of Denmark National Bank of Denmark Statistics Denmark

European Commission

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 1989M9, Peak 1990M7, Trough 1993M7, Peak 1994M12, Trough 1995M12, Peak 1997M5, Trough 1998M5, Peak 2000M8, Trough 2003M7, Peak 2006M7, Trough 2009M7, Peak 2011M4, Trough 2014M4, Peak 2019M6, Trough 2020M5, Peak 2022M1

Estonia

Component Series (Unit)

Manufacturing - Export order books: level sa (% balance) Total retail trade (Value) sa (2015=100) Passenger car registrations sa (2015=100)

CPI Food excl. Restaurants (2015=100) *inverted* Share prices: OMX Tallin index (2015=100) ITS Net trade (f.o.b. - c.i.f.) sa (Eur)

Source

European Commission Eurostat European Automobile Manufacturers' Association Statistics Estonia NASDAQ OMX Baltic Eurostat

Reference chronology of turning points

Trough 1996M2, Peak 1997M12, Trough 1999M7, Peak 2007M5, Trough 2009M9, Peak 2012M11, Trough 2016M7, Peak 2019M3, Trough 2020M5, Peak 2021M8

Finland

Component Series (Unit)

CPI All items (2015=100) *inverted* Consumer - Confidence indicator sa (% balance) Spread of interest rates (% p.a.) Manufacturing - Production: tendency sa (% balance) Domestic PPI Industrial activities (2015=100) Manufacturing - Finished goods stocks: level sa (% balance) *inverted* Share prices: OMXH index (2015=100) Services – Demand evolution: future tendency (% balance)

Source

Statistics Finland European Commission European Central Bank European Commission Statistics Finland European Commission Bank of Finland 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 1986M3, Peak 1990M1, Trough 1993M3, Peak 1995M5, Trough 1996M8, Peak 2000M10, Trough 2003M3, Peak 2007M12, Trough 2009M6, Peak 2011M9, Trough 2015M2, Peak 2017M11, Trough 2020M5

France

Component Series (Unit)

Passenger car registrations sa (number) Consumer survey - confidence indicator sa (% balance) Manufacturing survey - production: future tendency sa (% balance) Share prices: CAC All-tradable index (2015=100) CPI HICP All items (2015=100) *inverted* Manufacturing survey - export order books: level sa (% balance) Construction survey - selling prices: future tendency sa (% balance) Permits issued for dwellings sa (2015=100)

Source

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

Reference chronology of turning points

Trough 1960M12, Peak 1962M5, Trough 1963M2, Peak 1965M10, Trough 1968M5, Peak 1971M10, Trough 1972M7, Peak 1974M2, Trough 1975M7, Peak 1979M12, Trough 1981M1, Peak 1982M5, Trough 1987M3, Peak 1990M1, Trough 1993M9, Peak 1995M3, Trough 1997M2, Peak 2000M11, Trough 2003M6, Peak 2007M12, Trough 2009M6, Peak 2011M9, Trough 2016M8, Peak 2019M5, Trough 2020M5

Germany

Component Series (Unit)

IFO business climate indicator (normal=100) Manufacturing survey - orders inflow/demand: tendency (% balance) Manufacturing survey - export order books: expectation (% balance) Manufacturing survey - new orders (2010 = 100) Manufacturing survey - finished goods stocks: level (% balance) *inverted* Spread of interest rates (% p.a.) Services survey - demand evolution: future tendency (% balance) Consumer survey - confidence indicator sa (% balance)

Source

IFO Institute for Economic Research IFO Institute for Economic Research IFO Institute for Economic Research 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 1994M12, Trough 1996M2, Peak 1998M1, Trough 1998M12, Peak 2001M4, Trough 2005M2, Peak 2008M2, Trough 2009M6, Peak 2011M7, Trough 2015M5, Peak 2017M11, Trough 2020M5

Greece

Component Series (Unit)

Cost of construction: residential (materials) (2015=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 (2015=100) Total retail trade (Volume) sa (2015=100) Retail trade - Volume of stocks: level sa (% balance) *inverted* Domestic PPI Industrial activities (2015=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 1991M11, Trough 1993M12, Peak 1998M1, Trough 2000M2, Peak 2000M12, Trough 2002M2, Peak 2004M2, Trough 2005M6, Peak 2009M9, Trough 2012M6, Peak 2015M2, Trough 2016M6, Peak 2019M6, Trough 2020M5

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 (2015=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 Hungarian Central Statistical Office

Reference chronology of turning points

Trough 1996M9, Peak 1998M6, Trough 1999M3, Peak 2000M12, Trough 2003M5, Peak 2006M9, Trough 2009M6, Peak 2011M10, Trough 2013M1, Peak 2015M2, Trough 2016M9, Peak 2019M9, Trough 2020M5

Iceland

Component Series (Unit)

Cement sales index Current economic situation CPI HICP All items Spread of interes Passengers cars registration sa ICEX Main share price index Passengers through Keflavik

Source

Statistics Iceland Statistics Iceland Statistics Iceland Central Bank of Iceland Statistics Iceland http://www.nasdaqomxnordic.com/indexes Statistics Iceland

Reference chronology of turning points

Trough 1961M9, Peak 1966M7, Trough 1969M12, Peak 1974M1, Trough 1975M12, Peak 1981M12, Trough 1983M9, Peak 1987M8, Trough 1992M10, Peak 1994M5, Trough 1995M8, Peak 1998M10, Trough 2003M8, Peak 2008M1, Trough 2010M4, Peak 2019M2, Trough 2020M5

Ireland

Component Series (Unit)

Exports to Northern Ireland sa (EUR) Exports of agricultural products to other Euro sa (EUR) Passenger car registrations sa (2015=100) Total PPI Mining and quarrying activities (2015=100) Share prices: ISEQ index (2015=100) Real effective exchange rates - CPI Based (2015=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 1983M7, Peak 1985M2, Trough 1986M9, Peak 1990M7, Trough 1994M3, Peak 1995M4, Trough 1996M10, Peak 2000M6, Trough 2003M6, Peak 2007M4, Trough 2009M10, Peak 2011M4, Trough 2013M11, Peak 2015M5, Trough 2020M5

Israel

Component Series (Unit)

Manufacturing - Production: future tendency sa (% balance) Total retail trade (Volume) sa (2015=100) Domestic PPI Manufacturing (2015=100) Share prices: TA 100 index (2015=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 2011M9, Trough 2012M10, Peak 2014M10, Trough 2015M11, Peak 2018M1, Trough 2020M5

Italy

Component Series (Unit)

Source

Consumer survey - confidence indicator sa (% balance) Manufacturing survey - Order books: level sa (% balance) Deflated orders for total manufactured goods (value) sa (2010 = 100) Manufacturing survey - production: future tendency sa (% balance) CPI All items (2010=10) *inverted* Imports from Germany c.i.f. (USD) European Commission European Commission ISTAT European Commission ISTAT 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 1980M1, Trough 1983M3, Peak 1989M12, Trough 1993M8, Peak 1995M11, Trough 1997M1, Peak 1997M11, Trough 1999M3, Peak 2001M1, Trough 2003M7, Peak 2008M3, Trough 2009M5, Peak 2011M5, Trough 2013M4, Peak 2019M5, Trough 2020M5

Japan

Component Series (Unit)

Ratio of inventories to shipments sa (2015=100) *inverted* ITS imports/exports (volume) sa (2015=100) Ratio loans to deposits sa (%) *inverted* Monthly hours worked: manufacturing sa (2015=100) Work started for dwellings sa (2015=100) Share prices: TOPIX index (2015=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

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 1996M12, Trough 1999M5, Peak 2001M1, Trough 2002M1, Peak 2008M2, Trough 2009M4, Peak 2010M9, Trough 2012M10, Peak 2013M10, Trough 2016M8, Peak 2019M5, Trough 2020M5

Korea

Component Series (Unit)

Manufacturing survey - 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 (2015=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 1985M12, Peak 1988M2, Trough 1989M6, Peak 1991M11, Trough 1992M12, Peak 1997M6, Trough 1998M7, Peak 2000M7, Trough 2001M6, Peak 2002M8, Trough 2005M1, Peak 2007M12, Trough 2009M3, Peak 2010M12, Trough 2012M12, Peak 2014M3, Trough 2015M3, Peak 2019M9, Trough 2020M6

Latvia

Reference chronology of turning points

Trough 1996M4, Peak 1998M3, Trough 2004M10, Peak 2007M10, Trough 2010M6, Peak 2013M10, Trough 2016M8, Peak 2018M9

Lithuania

Reference chronology of turning points

Trough 1996M5, Peak 1998M6, Trough 1999M11, Peak 2003M9, Trough 2004M9, Peak 2007M12, Trough 2009M10, Peak 2014M3, Trough 2016M5, Peak 2019M5

Luxembourg

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 1991M7, Trough 1992M10, Peak 1994M2, Trough 1996M9, Peak 2000M3, Trough 2003M2, Peak 2007M7, Trough 2009M5, Peak 2011M2, Trough 2012M10, Peak 2016M9, Trough 2018M12

Mexico

Component Series (Unit)

Employees -manufacturing (D) sa (%) Manufacturing survey - employment: tendency sa (% balance) Manufacturing survey - production: tendency sa (% balance) Real effective exchange rates - CPI Based (2015=100) CPI Household equipment and maintenance (2015=100) Consumer survey - current major purchases sa (% balance) ITS Imports f.o.b. total sa Domestic PPI Industrial activities IPC share price index

Source

INEGI Bank of Mexico Bank of Mexico OECD INEGI Bank of Mexico INEGI Bank of Mexico Mexico Stock Exchange

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 1994M8, Trough 1995M7, Peak 2000M7, Trough 2003M8, Peak 2008M5, Trough 2009M5, Peak 2012M8, Trough 2013M10, Peak 2018M6, Trough 2020M5

Netherlands

Component Series (Unit)

Manufacturing - Order books: level sa (% balance) Manufacturing - Production: future tendency sa (% balance) Manufacturing - Finished goods stocks: level sa (% balance) *inverted* Manufacturing - Business situation of Germany: present sa (normal=100) Services – Demand evolution: future tendency (% balance) Consumer - Confidence indicator sa (% balance) Share prices: AEX index (2015=100)

Source

European Commission European Commission IFO Institute Germany European Commission European Commission Statistics Netherlands

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 2000M11, Trough 2005M1, Peak 2008M4, Trough 2009M6, Peak 2011M4, Trough 2013M4, Peak 2017M12, Trough 2020M5

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 (2015=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

Norway

Component Series (Unit)

Exports to UK (USD) Manufacturing, mining and quarrying - Stocks of orders for export sa (% balance) Manufacturing - Production: tendency sa (% balance) Manufacturing, mining and quarrying - General judgment of the outlook for the enterprise in next quarter sa (% balance) CPI All items (2015=100) Share prices: OSE20GI index (2015=100)

Source

UN – Comtrade database Statistics Norway

Statistics Norway Statistics Norway

Statistics Norway 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 2001M9, Trough 2003M6, Peak 2007M10, Trough 2010M8, Peak 2012M3, Trough 2012M12, Peak 2015M7, Trough 2016M7, Peak 2017M7, Trough 2020M5, Peak 2021M10

Poland

Component Series (Unit)

Real effective exchange rates - CPI Based (2015=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 1996M4, Trough 1999M1, Peak 2000M11, Trough 2003M1, Peak 2004M3, Trough 2005M5, Peak 2008M1, Trough 2009M7, Peak 2011M9, Trough 2013M11, Peak 2019M5, Trough 2020M5, Peak 2022M2

Portugal

Component Series (Unit)

Industrial production: electricity, gas & water (2015=100) Manufacturing - Production: future tendency sa (% balance) Manufacturing - Order books: level sa (% balance) Manufacturing - Export order books: level sa (% balance) Share prices: PSI-20 index (2015=100) Job vacancies: unfilled sa (number) Services – Demand evolution: future tendency (% balance)

Source

INE European Commission European Commission INE Lisbon Stock Exchange INE European Commission

Reference chronology of turning points

Trough 1961M2, Peak 1962M7, Trough 1964M1, Peak 1965M5, Trough 1966M10, Peak 1968M5, Trough 1969M7, Peak 1973M11, Trough 1975M8, Peak 1980M2, Trough 1984M5, Peak 1990M10, Trough 1993M12, Peak 2001M12, Trough 2003M6, Peak 2008M2, Trough 2009M4, Peak 2010M10, Trough 2012M12, Peak 2020M2, Trough 2020M5

Slovak Republic

Component Series (Unit)

Retail trade - Confidence indicator sa (% balance) Total retail trade (Volume) sa (2015=100) Consumers - Expected economic situation sa (% balance) Share prices: SAX index (2015=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 2007M12, Trough 2009M5, Peak 2011M11, Trough 2013M10, Peak 2015M9, Trough 2016M12, Peak 2018M8, Trough 2020M3

Slovenia

Component Series (Unit)

IP Manufacture Basic Metals sa (2015=100) Manufacturing - Order books: level sa (% balance) Manufacturing - Production: tendency sa (% balance) CPI All items (2015=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 1997M7, Trough 1998M9, Peak 2000M9, Trough 2005M1, Peak 2008M5, Trough 2009M7, Peak 2011M4, Trough 2013M2, Peak 2018M11, Trough 2020M3

Spain

Component Series (Unit)

Manufacturing survey - rate of capacity utilization sa (% balance) Construction survey - employment: future tendency sa (% balance) CPI Services less housing (2015=100) *inverted* Share prices: IGBM general index (2015=100) Passenger car registrations (2015=100) Consumer survey - confidence indicator sa (% balance)

Source

European Commission European Commission Instituto Nacional de Estadística Bank of Spain Asociación Española de Fabricantes de Automóviles y Camiones 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 1986M10, Peak 1991M10, Trough 1993M6, Peak 2000M11, Trough 2004M4, Peak 2008M2, Trough 2009M7, Peak 2011M3, Trough 2013M8, Peak 2017M8, Trough 2020M5

Sweden

Component Series (Unit)

Yield 5-year government bonds (% p.a.) *inverted* Overtime hours worked mining & manuf. (%) Orders for total manufactured goods (Volume) sa (2015=100) Order books (manuf.): level (% balance) Manufacturing - Finished goods stocks: level sa (% balance) *inverted* Services – Demand evolution: future tendency (% balance) Consumer - Confidence indicator sa (% balance) Share prices: OMXS30 index (2015=100)

Source

Bank of Sweden Statistics Sweden Statistics Sweden European Commission European Commission European Commission 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 1996M11, Peak 2000M7, Trough 2003M6, Peak 2007M11, Trough 2009M7, Peak 2011M6, Trough 2013M8, Peak 2015M10, Trough 2016M9, Peak 2019M3, Trough 2020M5

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 (2015=100)

Consumer - Expected economic situation sa (% balance)

Silver prices (CHF/kJ)

Source

Swiss Economic Institute KOF/ETH

Swiss Economic Institute KOF/ETH Swiss Economic Institute KOF/ETH Swiss Exchange Swiss State Secretariat for Economic Affairs (SECO) & Konso Basel Swiss National Bank

Reference chronology of turning points

Peak 1961M11, Trough 1963M2, Peak 1964M5, Trough 1966M1, Peak 1967M1, Trough 1969M2, Peak 1974M3, Trough 1976M1, Peak 1981M7, Trough 1983M9, Peak 1985M5, Trough 1987M3, Peak 1990M4, Trough 1993M1, Peak 1998M5, Trough 1999M3, Peak 2000M12, Trough 2003M5, Peak 2008M4, Trough 2009M4, Peak 2011M3, Trough 2013M1, Peak 2014M8, Trough 2017M5, Peak 2018M5, Trough 2020M5

Republic of Türkiye

Component Series (Unit)

| Production of electricity sa (GW hours) Manufacturing survey - finished goods stocks: level sa (% balance) <i>inverted</i> | State Ir Bank of | |
|--|-------------------------------|--|
| Manufacturing survey - new domestic orders: tendency sa (% | Bank of | |
| balance) | | |
| Manufacturing survey - employment: future tendency sa (% balance) Prospects for exports (manuf.) (% balance) | | |
| Discounted treasury auction interest rate (% p.a.) inverted | | |
| ITS Import c.i.f. of intermediate goods sa (USD) Services survey – demand evolution: future tendency (% balance) | Bank of State In Europe | |

Source

State Institute of Statistics Bank of Turkey

Bank of Turkey

Bank of Turkey Bank of Turkey Bank of Turkey State Institute of Statistics 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 1984M6, Trough 1985M8, Peak 1987M11, Trough 1989M5, Peak 1993M8, Trough 1994M7, Peak 1998M2, Trough 1999M8, Peak 2000M9, Trough 2001M10, Peak 2008M1, Trough 2009M3, Peak 2011M9, Trough 2012M6, Peak 2015M7, Trough 2016M8, Peak 2018M2, Trough 2020M5

United Kingdom

Component Series (Unit)

Retail Prices Index - All Items Index (January 1987=100) Passenger car registrations sa (number)

Consumer survey - confidence indicator sa (% balance) GBP Interbank LIBOR 3 months delayed (% p.a.) *inverted* Manufacturing survey - production: future tendency sa (% balance) Share prices: FTSE LOCAL UK (£) index (2015=100)

Source

Office for National Statistics Society of Motor Manufacturers & Traders UK GfK Bank of England CBI London Stock Exchange

Reference chronology of turning points

Peak 1955M9, Trough 1958M12, Peak 1960M2, Trough 1962M12, Peak 1964M9, Trough 1966M12, Peak 1968M8, Trough 1970M2, Peak 1973M4, Trough 1975M8, Peak 1979M6, Trough 1981M3, Peak 1983M10, Trough 1984M7, Peak 1988M12, Trough 1992M6, Peak 1994M9, Trough 1996M5, Peak 1997M12, Trough 1999M4, Peak 2000M3, Trough 2002M4, Peak 2008M2, Trough 2009M7, Peak 2019M8, Trough 2020M5

United States

Component Series (Unit)

Work started for dwellings sa (number) Net new orders - durable goods sa (USD) Share prices: NYSE composite (2015=100) Consumer survey - confidence indicator sa (normal = 100) Weekly hours worked: manufacturing sa (hours) Manufacturing survey - confidence indicator (% balance) Spread of interest rates (% p.a.)

Source

Bureau of the Census Bureau of the Census New York Stock Exchange Survey of consumers – University of Michigan Bureau of Labor Statistics US Institute of Supply Management Federal Reserve

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 1969M3, Trough 1970M11, Peak 1973M5, Trough 1975M4, Peak 1978M11, Trough 1982M11, Peak 1984M7, Trough 1987M3, Peak 1989M6, Trough 1991M9, Peak 1994M9, Trough 1995M12, Peak 2000M5, Trough 2003M2, Peak 2007M11, Trough 2009M5, Peak 2012M4, Trough 2014M2, Peak 2015M3, Trough 2017M3, Peak 2020M1, Trough 2020M5

Brazil

Component Series (Unit)

Share prices: BOVESPA - Total return index (2015=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 1999M6, Peak 2000M12, Trough 2003M8, Peak 2004M9, Trough 2005M10, Peak 2008M5, Trough 2009M4, Peak 2011M4, Trough 2012M2, Peak 2014M1, Trough 2016M8, Peak 2020M2, Trough 2020M6

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 1979M1, Peak 1980M2, Trough 1982M11, Peak 1985M4, Trough 1986M4, Peak 1988M9, Trough 1990M5, Peak 1994M9, Trough 2002M1, Peak 2004M2, Trough 2005M3, Peak 2007M12, Trough 2009M2, Peak 2011M8, Trough 2020M2, Peak 2021M1

India

| Source |
|--|
| Ministry of Statistics |
| Ministry of Statistics |
| Society of Indian Automobile Manufacturers |
| Reserve Bank of India |
| Reserve Bank of India |
| Reserve Bank of India |
| N N R R |

Reference chronology of turning points

Trough 1997M10, Peak 1999M12, Trough 2003M1, Peak 2007M9, Trough 2009M3, Peak 2010M12, Trough 2013M9, Peak 2018M11, Trough 2020M5

Indonesia

Component Series (Unit)

Share prices: IDX composite index (2015=100) Central Bank Discount rate (% p.a.) *inverted* IDR/USD exchange rate end period (%) *inverted* Wholesale Price Index (2015=100) *inverted* Consumer - Confidence indicator (normal = 100) Production of paper and paper products sa (2015=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 2008M4, Trough 2009M5, Peak 2012M11, Trough 2015M9, Peak 2019M12, Trough 2020M5

Russian Federation

Component Series (Unit)

Manufacturing - Order books: level sa (% balance) Share prices: RTS index (2015=100) World market price of crude oil (2015=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 2005M5, Peak 2008M3, Trough 2009M8, Peak 2014M3, Trough 2016M6, Peak 2019M5, Trough 2020M5

South Africa

Component Series (Unit)

Manufacturing - Orders inflow/Demand: tendency (% balance) Manufacturing - Confidence indicator (% balance) Permits issued for total buildings sa (2015=100) Passenger car registrations sa (2015=100) Share prices: FTSE/JSE index (2015=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 1992M11, Peak 1996M12, Trough 1998M12, Peak 2000M10, Trough 2003M11, Peak 2008M4, Trough 2009M9, Peak 2013M8, Trough 2016M11, Peak 2018M10, Trough 2020M5

OECD

Reference chronology of turning points

Trough 1961M1, 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 1997M10, Trough 1999M3, Peak 2000M7, Trough 2003M4, Peak 2008M1, Trough 2009M5, Peak 2011M12, Trough 2013M1, Peak 2015M5, Trough 2016M7, Peak 2018M4, Trough 2020M5

OECD + non-member economies

Reference chronology of turning points

Trough 1961M2, Peak 1962M2, Trough 1963M2, Peak 1964M3, Trough 1967M10, Peak 1969M6, Trough 1971M10, Peak 1973M6, Trough 1975M5, Peak 1979M10, Trough 1982M12, Peak 1985M8, Trough 1987M2, Peak 1989M1, Trough 1993M7, Peak 1994M11, Trough 1995M12, Peak 1997M9, Trough 1998M11, Peak 2000M8, Trough 2003M4, Peak 2008M1, Trough 2009M4, Peak 2011M10, Trough 2012M12, Peak 2013M11, Trough 2016M8, Peak 2018M4, Trough 2020M5

Major seven countries

Reference chronology of turning points

Trough 1961M1, Peak 1962M2, Trough 1963M2, Peak 1964M3, Trough 1965M2, Peak 1966M3, Trough 1967M7, Peak 1969M3, Trough 1971M3, Peak 1973M5, Trough 1975M5, Peak 1979M8, Trough 1982M11, Peak 1985M9, Trough 1987M2, Peak 1990M4, Trough 1993M8, Peak 1997M10, Trough 1999M3, Peak 2000M6, Trough 2003M3, Peak 2008M1, Trough 2009M5, Peak 2012M2, Trough 2012M12, Peak 2015M3, Trough 2016M8, Peak 2019M7, Trough 2020M5, Peak 2022M1

OECD Europe

Reference chronology of turning points

Peak 1962M5, Trough 1968M4, Peak 1970M8, Trough 1972M1, Peak 1973M11, Trough 1975M7, Peak 1979M12, Trough 1982M11, Peak 1990M4, Trough 1993M6, Peak 1998M1, Trough 1999M3, Peak 2000M10, Trough 2003M6, Peak 2008M1, Trough 2009M5, Peak 2011M6, Trough 2013M2, Peak 2015M9, Trough 2016M7, Peak 2018M1, Trough 2020M5

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 1991M2, Trough 1993M8, Peak 1995M3, Trough 1997M1, Peak 1998M1, Trough 1999M1, Peak 2001M2, Trough 2003M6, Peak 2008M2, Trough 2009M6, Peak 2011M5, Trough 2013M3, Peak 2017M11, Trough 2020M5

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 1991M2, Trough 1993M8, Peak 1995M2, Trough 1996M12, Peak 1998M1, Trough 1999M3, Peak 2001M2, Trough 2003M6, Peak 2008M2, Trough 2009M6, Peak 2011M6, Trough 2013M3, Peak 2019M4, Trough 2020M5

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 1968M7, Trough 1970M11, Peak 1973M5, Trough 1975M4, Peak 1978M11, Trough 1980M7, Peak 1981M4, Trough 1982M12, Peak 1985M9, Trough 1987M1, Peak 1990M3, Trough 1991M9, Peak 1994M8, Trough 1995M11, Peak 2000M6, Trough 2003M2, Peak 2007M11, Trough 2009M5, Peak 2012M4, Trough 2014M2, Peak 2015M3, Trough 2016M7, Peak 2019M12, Trough 2020M5

Major five Asia

Reference chronology of turning points

Trough 1983M3, Peak 1985M6, Trough 1987M2, Peak 1988M11, Trough 1990M2, Peak 1991M4, Trough 1993M9, Peak 1996M12, Trough 1998M8, Peak 2000M11, Trough 2002M1, Peak 2004M3, Trough 2004M12, Peak 2007M12, Trough 2009M3, Peak 2011M8, Peak 2013M11, Trough 2016M9, Peak 2018M3, Trough 2020M2, Peak 2021M2