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

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<tr>
<th>OECD Countries</th>
<th>Non-member economies</th>
<th>Area</th>
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<tr>
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<td>Brazil</td>
<td>OECD Total</td>
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<tr>
<td>Austria</td>
<td>China</td>
<td>OECD + non-member economies</td>
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<tr>
<td>Belgium</td>
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<td>Major seven countries</td>
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<td>Canada</td>
<td>Indonesia</td>
<td>OECD Europe</td>
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<td>Chile</td>
<td>Russian Federation</td>
<td>Euro area</td>
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<td>Colombia</td>
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<td>Four big European countries</td>
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<tr>
<td>Czech Republic</td>
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<td>Denmark</td>
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<td>Major five Asia countries</td>
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<td>Finland</td>
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<td>Japan</td>
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<td>Korea</td>
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<td>Latvia</td>
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<td>Lithuania</td>
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<td>Luxembourg</td>
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<td>Mexico</td>
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<td>Netherlands</td>
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<td>Norway</td>
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<td>Portugal</td>
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<td>Slovak Republic</td>
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<td>Turkey</td>
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<td>United Kingdom</td>
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<tr>
<td>United States</td>
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<td></td>
</tr>
</tbody>
</table>

November 2021
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 (2015=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

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 1977M8, Trough 1978M5, Peak 1980M1, Trough 1981M10, Peak 1983M9, Trough 1984M6,  
Peak 2019M4, 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
- European Commission
- National Bank of Belgium
- European Commission

**Reference chronology of turning points**

Canada

Component Series (Unit)

- Deflated Monetary aggregate M1 sa (2010 cad)
- Manufacturing - Industrial confidence indicator (USA - PMI) sa
- Consumer - 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
- Institute of Supply Management USA
- Conference Board Canada
- Statistics Canada
- Statistics Canada
- Statistics Canada

Reference chronology of turning points

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,
## COLOMBIA

### Component Series (Unit)

<table>
<thead>
<tr>
<th>Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail trade - Orders: future tendency sa (% balance)</td>
<td>FEDESARROLLO</td>
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<tr>
<td>Consumer - Confidence indicator sa (% balance)</td>
<td>FEDESARROLLO</td>
</tr>
<tr>
<td>Consumers - Expected economic situation sa (% balance)</td>
<td>FEDESARROLLO</td>
</tr>
<tr>
<td>imports c.i.f. sa (USD)</td>
<td>DANE</td>
</tr>
<tr>
<td>CPI All items index (2015=100)</td>
<td>DANE</td>
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<tr>
<td>Permits issued for dwellings sa index (2015=100)</td>
<td>DANE</td>
</tr>
</tbody>
</table>

### Reference chronology of turning points

## Czech Republic

### Component Series (Unit)

<table>
<thead>
<tr>
<th>Component Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOP Capital account, debit (czk)</td>
<td>Czech National Bank</td>
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<tr>
<td>Services - Demand evolution: future tendency sa (% balance)</td>
<td>European Commission</td>
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<tr>
<td>Manufacturing - Production: tendency sa (%)</td>
<td>European Commission</td>
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<tr>
<td>CPI HICP All items (2015=100) inverted</td>
<td>Czech Statistical Office</td>
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<tr>
<td>Consumer - Confidence indicator sa (% balance)</td>
<td>European Commission</td>
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<tr>
<td>ITS Exports f.o.b. total sa (czk)</td>
<td>Czech Statistical Office</td>
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<td>Share prices: PX-50 index (2015=100)</td>
<td>Czech Statistical Office</td>
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</table>

### Reference chronology of turning points

Denmark

Component Series (Unit)

<table>
<thead>
<tr>
<th>Total retail trade (Volume) sa (2015=100)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger car registrations sa (number)</td>
<td>Statistics Denmark</td>
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<tr>
<td>Manufacturing - Employment: future tendency sa (% balance)</td>
<td>European Commission</td>
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<tr>
<td>Manufacturing - Production: future tendency sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Central bank official discount rate (% per annum) <em>inverted</em></td>
<td>National Bank of Denmark</td>
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<tr>
<td>Deflated monetary aggregate M1 (dkk)</td>
<td>National Bank of Denmark</td>
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<tr>
<td>ITS Mineral fuels, lubricants and related materials exports deflated CPI energy sa (dkk)</td>
<td>Statistics Denmark</td>
</tr>
<tr>
<td>Consumer - Confidence indicator sa (% balance)</td>
<td>European Commission</td>
</tr>
</tbody>
</table>

Reference chronology of turning points

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**

Finland

Component Series (Unit)

<table>
<thead>
<tr>
<th>Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI All items (2015=100) inverted</td>
<td>Statistics Finland</td>
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<tr>
<td>Consumer - Confidence indicator sa (% balance)</td>
<td>European Commission</td>
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<tr>
<td>Spread of interest rates (% p.a.)</td>
<td>European Central Bank</td>
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<tr>
<td>Manufacturing - Production: tendency sa (% balance)</td>
<td>European Commission</td>
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<tr>
<td>Domestic PPI Industrial activities (2015=100)</td>
<td>Statistics Finland</td>
</tr>
<tr>
<td>Manufacturing - Finished goods stocks: level sa (% balance) inverted</td>
<td>European Commission</td>
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<tr>
<td>Share prices: OMXH index (2015=100)</td>
<td>Bank of Finland</td>
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<tr>
<td>Services – Demand evolution: future tendency (% balance)</td>
<td>European Commission</td>
</tr>
</tbody>
</table>

Reference chronology of turning points

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 (2015=100)  
CPI HICP All items (2015=100) inverted  
Manufacturing - Export order books: level sa (% balance)  
Construction - 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

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**

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

Reference chronology of turning points

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

Iceland

Component Series (Unit)

Cement sales index
Current economic situation
CPI HICP All items
Spread of interest
Passengers cars registration sales
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

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) 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 2015M5, Trough 2016M6, Peak 2018M1, Trough 2020M5
## Israel

**Component Series (Unit)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Source</th>
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</thead>
<tbody>
<tr>
<td>Manufacturing - Production: future tendency sa (% balance)</td>
<td>Bank of Israel</td>
</tr>
<tr>
<td>Total retail trade (Volume) sa (2015=100)</td>
<td>Central Bureau of Statistics</td>
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<tr>
<td>Domestic PPI Manufacturing (2015=100)</td>
<td>Central Bureau of Statistics</td>
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<tr>
<td>Share prices: TA 100 index (2015=100)</td>
<td>Tel-Aviv Stock Exchange</td>
</tr>
<tr>
<td>Total Departures Of Israelis sa (number)</td>
<td>Bank of Israel</td>
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<tr>
<td>Exports of manufactures diamonds prices 2010 (USD)</td>
<td>Bank of Israel</td>
</tr>
</tbody>
</table>

**Reference chronology of turning points**

**Italy**

**Component Series (Unit)**

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

**Source**

- European Commission
- ISTAT

**Reference chronology of turning points**

Japan

**Component Series (Unit)**

- Ratio of inventories to shipments sa (2015=100) *inverted*
- ITS Volume of imports/volume of exports 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 for SMSE

**Reference chronology of turning points**

Korea

Component Series (Unit)

Manufacturing - Business situation: future (% balance)  
Source: Bank of Korea

Share prices: KOSPI index (2010 = 100)  
Source: Bank of Korea

Stocks of manufactured investment goods (volume) sa inverted  
Source: National Statistical Office

Inventory circulation indicator (manufacturing)  
Source: National Statistical Office

Spread of interest rates (% p.a.)  
Source: National Statistical Office

Net Barter Terms of trade (2015=100)  
Source: National Statistical Office

Reference chronology of turning points

Trough 1962M6, Peak 1964M12, Trough 1965M9, Peak 1969M9, Trough 1972M6, Peak 1973M12,  
Trough 2001M6, Peak 2002M8, Trough 2005M1, Peak 2007M12, Trough 2009M3, Peak 2010M12,  
Latvia

Reference chronology of turning points

Lithuania

Reference chronology of turning points

Luxembourg

Reference chronology of turning points

### Mexico

#### Component Series (Unit)

<table>
<thead>
<tr>
<th>Series</th>
<th>Source</th>
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</thead>
<tbody>
<tr>
<td>Employees - Manufacturing (D) sa (%)</td>
<td>INEGI</td>
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<tr>
<td>Manufacturing - Employment: tendency sa (% balance)</td>
<td>Bank of Mexico</td>
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<tr>
<td>Manufacturing - Production: tendency sa (% balance)</td>
<td>Bank of Mexico</td>
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<td>Real effective exchange rates - CPI Based (2015=100)</td>
<td>OECD</td>
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<tr>
<td>CPI Household equipment and maintenance (2015=100)</td>
<td>INEGI</td>
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<tr>
<td>Consumer - Current possibilities of purchasing goods sa (% balance)</td>
<td>Bank of Mexico</td>
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<tr>
<td>ITS Imports f.o.b. total sa</td>
<td>INEGI</td>
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<td>Domestic PPI Industrial activities</td>
<td>Bank of Mexico</td>
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<tr>
<td>IPC share price index</td>
<td>Mexico Stock Exchange</td>
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</tbody>
</table>

#### Reference chronology of turning points

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 1987M2, Peak 1990M9, Trough 1993M12, Peak 2000M11, Trough 2005M1, Peak 2008M4,
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)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Source</th>
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</thead>
<tbody>
<tr>
<td>Exports to UK (USD)</td>
<td>UN – Comtrade database</td>
</tr>
<tr>
<td>Manufacturing, mining and quarrying - Stocks of orders for export sa (% balance)</td>
<td>Statistics Norway</td>
</tr>
<tr>
<td>Manufacturing - Production: tendency sa (% balance)</td>
<td>Statistics Norway</td>
</tr>
<tr>
<td>Manufacturing, mining and quarrying - General judgment of the outlook for the enterprise in next quarter sa (% balance)</td>
<td>Statistics Norway</td>
</tr>
<tr>
<td>CPI All items (2015=100)</td>
<td>Statistics Norway</td>
</tr>
<tr>
<td>Share prices: OSE20GI index (2015=100)</td>
<td>Oslo Børs</td>
</tr>
</tbody>
</table>

**Reference chronology of turning points**

Poland

Component Series (Unit)                     Source
Real effective exchange rates - CPI Based (2015=100) \textit{inverted}                      OECD
3-month WIBOR (% per annum) \textit{inverted}                       Bank of Poland
Manufacturing - Production: tendency sa (% balance) European Commission
Job vacancies: unfilled sa (number) Central Statistical Office
Production of coal (tonnes) Central Statistical Office

Reference chronology of turning points
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: PSL-20 index (2015=100)
- Job vacancies: unfilled sa (number)
- Services – Demand evolution: future tendency (% balance)

**Source**

- INE
- 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 1993M12, Peak 2001M12, Trough 2003M6, Peak 2008M2, Trough 2009M4, Peak
- 2010M10, Trough 2012M12, Peak 2018M4, 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 2012M1,
Slovenia

Component Series (Unit)

IP Manufacture Basic Metals (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 2011M4, Trough 2013M2, Peak 2018M10, Trough 2020M3
Spain

**Component Series (Unit)**

Manufacturing - Rate of capacity utilization sa (% balance)
Construction - Employment: future tendency sa (% balance)
CPI Services less housing (2015=100) *inverted*
Share prices: IGBM general index (2015=100)
Passenger car registrations (2015=100)

**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 2011M3, Trough 2013M8, Peak 2017M9, Trough 2020M5
## Sweden

### Component Series (Unit)

<table>
<thead>
<tr>
<th>Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield 5-year government bonds (% p.a.) <strong>inverted</strong></td>
<td>Bank of Sweden</td>
</tr>
<tr>
<td>Overtime hours worked mining &amp; manuf. (%)</td>
<td>Statistics Sweden</td>
</tr>
<tr>
<td>Orders for total manufactured goods (Volume) sa (2015=100)</td>
<td>Statistics Sweden</td>
</tr>
<tr>
<td>Order books (manuf.): level (% balance)</td>
<td>European Commission</td>
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<tr>
<td>Manufacturing - Finished goods stocks: level (% balance) <strong>inverted</strong></td>
<td>European Commission</td>
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<tr>
<td>Services – Demand evolution: future tendency (% balance)</td>
<td>European Commission</td>
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<tr>
<td>Consumer - Confidence indicator sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Share prices: OMXS30 index (2015=100)</td>
<td>Bank of Sweden</td>
</tr>
</tbody>
</table>

### Reference chronology of turning points

Switzerland

**Component Series (Unit)**

- Manufacturing - Finished goods stocks: level (% balance) \textit{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**

## Turkey

### Component Series (Unit)

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

### Reference chronology of turning points

United Kingdom

**Component Series (Unit)**

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

Consumer - Confidence indicator sa (% balance)
Great British Pound Interbank LIBOR 3 Months Delayed (% p.a.) *inverted*
Manufacturing - Production: future tendency sa (% balance)
Share prices: FTSE LOCAL UK (£) index (2015=100)

**Source**

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

**Reference chronology of turning points**

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

**Reference chronology of turning points**


OECD Composite Leading Indicators
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
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 2020M5
## China

### Component Series (Unit)  

<table>
<thead>
<tr>
<th>Component Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Production of chemical fertilizer sa (tonnes)</td>
<td>National Bureau of Statistics</td>
</tr>
<tr>
<td>IP Production of manufactured crude steel sa (tonnes)</td>
<td>World Steel Association</td>
</tr>
<tr>
<td>5000 Industrial Enterprises: Diffusion Index: Overseas order level (%)</td>
<td>People’s Bank of China</td>
</tr>
<tr>
<td>Production of total construction sa (m²)</td>
<td>National Bureau of Statistics</td>
</tr>
<tr>
<td>Production of motor vehicles sa (number)</td>
<td>National Bureau of Statistics</td>
</tr>
<tr>
<td>Share prices: Shanghai Stock Exchange turnover (CNY)</td>
<td>Shanghai Stock Exchange</td>
</tr>
</tbody>
</table>

### Reference chronology of turning points

India

**Component Series (Unit)**

<table>
<thead>
<tr>
<th>Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Production of manufactured durable consumer goods sa (2015=100)</td>
<td>Ministry of Statistics</td>
</tr>
<tr>
<td>IP Production of manufactured non-metallic mineral products sa (2015=100)</td>
<td>Ministry of Statistics</td>
</tr>
<tr>
<td>Passenger car sales sa (number)</td>
<td>Society of Indian Automobile Manufacturers</td>
</tr>
<tr>
<td>Monetary aggregate M1 sa (INR)</td>
<td>Reserve Bank of India</td>
</tr>
<tr>
<td>Share prices: BSE (100) national index (2015=100)</td>
<td>Reserve Bank of India</td>
</tr>
<tr>
<td>Call money rate (% p.a.) <em>inverted</em></td>
<td>Reserve Bank of India</td>
</tr>
</tbody>
</table>

**Reference chronology of turning points**

## Indonesia

### Component Series (Unit)

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share prices</td>
<td>IDX composite index (2015=100)</td>
<td>Jakarta Stock Exchange</td>
</tr>
<tr>
<td>Central Bank Discount rate</td>
<td>% p.a. <em>inverted</em></td>
<td>Central Bank of Indonesia</td>
</tr>
<tr>
<td>IDR/USD exchange rate</td>
<td>end period (%) <em>inverted</em></td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>Wholesale Price Index</td>
<td>(2015=100) <em>inverted</em></td>
<td>Central Bank of Indonesia</td>
</tr>
<tr>
<td>Consumer - Confidence indicator</td>
<td>(normal = 100)</td>
<td>Central Bank of Indonesia</td>
</tr>
<tr>
<td>Production of paper and paper products sa</td>
<td>(2015=100)</td>
<td>National Bureau of Statistics</td>
</tr>
<tr>
<td>Tourist arrivals sa</td>
<td>(number)</td>
<td>National Bureau of Statistics</td>
</tr>
</tbody>
</table>

### Reference chronology of turning points

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**

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**

OECD

Reference chronology of turning points

OECD + non-member economies

Reference chronology of turning points

Major seven countries

Reference chronology of turning points

OECD Europe

Reference chronology of turning points

Euro area

Reference chronology of turning points

Four big European countries

Reference chronology of turning points

NAFTA area

Reference chronology of turning points

Trough 1949M10, Peak 1951M8, Trough 1954M6, Peak 1955M9, Trough 1958M4, Peak 1959M6,
Trough 1995M11, Peak 2000M6, Trough 2003M2, Peak 2007M11, Trough 2009M5, Peak 2012M4,
Major five Asia

Reference chronology of turning points