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

<table>
<thead>
<tr>
<th>OECD Countries</th>
<th>OECD Countries</th>
<th>OECD Countries</th>
<th>OECD Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Germany</td>
<td>Lithuania</td>
<td>Spain</td>
</tr>
<tr>
<td>Austria</td>
<td>Greece</td>
<td>Luxembourg</td>
<td>Sweden</td>
</tr>
<tr>
<td>Belgium</td>
<td>Hungary</td>
<td>Mexico</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Canada</td>
<td>Iceland</td>
<td>Netherlands</td>
<td>Turkey</td>
</tr>
<tr>
<td>Chile</td>
<td>Ireland</td>
<td>New Zealand</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Colombia</td>
<td>Israel</td>
<td>Norway</td>
<td>United States</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Italy</td>
<td>Poland</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>Japan</td>
<td>Portugal</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>Korea</td>
<td>Slovak Republic</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>Latvia</td>
<td>Slovenia</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-member economies</th>
<th>Area</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>OECD Total</td>
<td>OECD + non-member economies</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td>Major seven countries</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
<td>OECD Europe</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td>Euro area</td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td></td>
<td>Four big European countries</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
<td>NAFTA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Major five Asia countries</td>
<td></td>
</tr>
</tbody>
</table>
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
- Reserve Bank of Australia

**Reference chronology of turning points**

## Austria

### Component Series (Unit)

<table>
<thead>
<tr>
<th>Component</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing - Production: future tendency sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Manufacturing - Order books: level sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Manufacturing - Business situation of Germany: present sa (normal=100)</td>
<td>IFO Institute, Germany</td>
</tr>
<tr>
<td>Consumer - Confidence indicator sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Job vacancies: unfilled sa (persons)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Spread of interest rates (% p.a.)</td>
<td>European Central Bank</td>
</tr>
</tbody>
</table>

### Reference chronology of turning points

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

**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)
ITIS 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 2008M2, Trough 2009M8,
COLOMBIA

Component Series (Unit)  
- Retail trade - Orders: future tendency sa (% balance)  
- Consumer - Confidence indicator sa (% balance)  
- Consumers - Expected economic situation sa (% balance)  
- Imports c.i.f. sa (USD)  
- CPI All items index (2015=100)  
- Permits issued for dwellings sa index (2015=100)  

Source  
- FEDESARROLLO  
- FEDESARROLLO  
- FEDESARROLLO  
- DANE  
- DANE  
- DANE  

Reference chronology of turning points  
Czech Republic

Component Series (Unit)

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

Reference chronology of turning points

## Denmark

### Component Series (Unit)

<table>
<thead>
<tr>
<th>Component Series (Unit)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total retail trade (Volume) sa (2015=100)</td>
<td>Statistics Denmark</td>
</tr>
<tr>
<td>Passenger car registrations sa (number)</td>
<td>Statistics Denmark</td>
</tr>
<tr>
<td>Manufacturing - Employment: future tendency sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Manufacturing - Production: future tendency sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Central bank official discount rate (% per annum) inverted</td>
<td>National Bank of Denmark</td>
</tr>
<tr>
<td>Deflated monetary aggregate M1 (dkk)</td>
<td>National Bank of Denmark</td>
</tr>
<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

- Trough 2020M5

OECD Composite Leading Indicators

[http://www.oecd.org/std/leading-indicators/]
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 2000M11, Trough 2002M1, Peak 2007M5,
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>
</tr>
<tr>
<td>Consumer - Confidence indicator sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Spread of interest rates (% p.a.)</td>
<td>European Central Bank</td>
</tr>
<tr>
<td>Manufacturing - Production: tendency sa (% balance)</td>
<td>European Commission</td>
</tr>
<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>
</tr>
<tr>
<td>Share prices: OMXH index (2015=100)</td>
<td>Bank of Finland</td>
</tr>
<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
- Bank of France
- Eurostat
- 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

**Reference chronology of turning points**

Hungary

Component Series (Unit)

<table>
<thead>
<tr>
<th>Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing - Production: future tendency sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Registered unemployment: level (all persons) sa</td>
<td>Hungarian Central Statistical Office</td>
</tr>
<tr>
<td>Monthly hours worked: manufacturing sa (hours)</td>
<td>Hungarian Central Statistical Office</td>
</tr>
<tr>
<td>Monetary aggregate M1 sa (HUF)</td>
<td>Bank of Hungary</td>
</tr>
<tr>
<td>Share prices: BUX index (2015=100)</td>
<td>Bank of Hungary</td>
</tr>
<tr>
<td>Central bank base rate (% per annum)</td>
<td>Bank of Hungary</td>
</tr>
<tr>
<td>ITS Imports c.i.f. total sa (HUF)</td>
<td>Hungarian Central Statistical Office</td>
</tr>
</tbody>
</table>

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

**Reference chronology of turning points**
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

## Israel

### Component Series (Unit)

<table>
<thead>
<tr>
<th>Component</th>
<th>Source</th>
</tr>
</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>
</tr>
<tr>
<td>Domestic PPI Manufacturing (2015=100)</td>
<td>Central Bureau of Statistics</td>
</tr>
<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>
</tr>
<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)**

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

**Reference chronology of turning points**


OECD Composite Leading Indicators

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)
- 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

**Reference chronology of turning points**

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

**Reference chronology of turning points**

Trough 1962M9, Peak 1964M8, Trough 1967M6, Peak 1968M7, Trough 1971M7, Peak 1973M9,
Trough 2003M8, Peak 2008M5, Trough 2009M5, Peak 2012M9, Trough 2013M9, Peak 2018M4,
Trough 2020M5
## Netherlands

### Component Series (Unit)

<table>
<thead>
<tr>
<th>Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing - Order books: level sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Manufacturing - Production: future tendency sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Manufacturing - Finished goods stocks: level sa (% balance) inverted</td>
<td>IFO Institute Germany</td>
</tr>
<tr>
<td>Manufacturing - Business situation of Germany: present sa (normal=100)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Services – Demand evolution: future tendency (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Consumer - Confidence indicator sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Share prices: AEX index (2015=100)</td>
<td>Statistics Netherlands</td>
</tr>
</tbody>
</table>

### Reference chronology of turning points

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: OSE20Gl index (2015=100)

Source
UN – Comtrade database
Statistics Norway
Statistics Norway
Statistics Norway
Oslo Børs

Reference chronology of turning points

## Poland

**Component Series (Unit)**

<table>
<thead>
<tr>
<th>Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real effective exchange rates - CPI Based (2015=100) <em>inverted</em></td>
<td>OECD</td>
</tr>
<tr>
<td>3-month WIBOR (% per annum) <em>inverted</em></td>
<td>Bank of Poland</td>
</tr>
<tr>
<td>Manufacturing - Production: tendency sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Job vacancies: unfilled sa (number)</td>
<td>Central Statistical Office</td>
</tr>
<tr>
<td>Production of coal (tonnes)</td>
<td>Central Statistical Office</td>
</tr>
</tbody>
</table>

**Reference chronology of turning points**

Portugal

**Component Series (Unit)**

<table>
<thead>
<tr>
<th>Series</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial production: electricity, gas &amp; water (2015=100)</td>
<td>INE</td>
</tr>
<tr>
<td>Manufacturing - Production: future tendency sa (% balance)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Manufacturing - Order books: level sa (% balance)</td>
<td>INE</td>
</tr>
<tr>
<td>Manufacturing - Export order books: level sa (% balance)</td>
<td>Lisbon Stock Exchange</td>
</tr>
<tr>
<td>Share prices: PSI-20 index (2015=100)</td>
<td>INE</td>
</tr>
<tr>
<td>Job vacancies: unfilled sa (number)</td>
<td>European Commission</td>
</tr>
<tr>
<td>Services – Demand evolution: future tendency (% balance)</td>
<td></td>
</tr>
</tbody>
</table>

**Reference chronology of turning points**

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**

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**

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)

Consumer - Confidence indicator sa (% balance)

Source

European Commission
Instituto Nacional de Estadística
Bank of Spain
Asociación Española de Fabricantes de Automóviles y Camiones
European Commission

Reference chronology of turning points

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
- European Commission
- Bank of Sweden

**Reference chronology of turning points**

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


OECD Composite Leading Indicators
http://www.oecd.org/std/leading-indicators/
Turkey

**Component Series (Unit)**

- Production of electricity sa (GW hours)
- Manufacturing - Finished goods stocks: level sa (% balance) \textit{inverted}
- New domestic orders: tendency sa (% balance)
- Manufacturing - Employment: future tendency sa (% balance)
- Prospects for exports (manuf.) (% balance)
- Discounted treasury auction interest rate (% p.a.) \textit{inverted}
- ITS Import c.i.f. of intermediate goods sa (USD)
- Services – Demand evolution: future tendency (% balance)

**Source**

- State Institute of Statistics
- Bank of Turkey
- Bank of Turkey
- Bank of Turkey
- Bank of Turkey
- State Institute of Statistics
- European Commission

**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
- New York Stock Exchange
  - [https://www.nyse.com/quote/index/NY](https://www.nyse.com/quote/index/NY)
- Survey of consumers – Thomson Reuters / University of Michigan
- Bureau of Labor Statistics
- Institute of Supply Management
- Federal Reserve

### Reference chronology of turning points

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 2005M11,
Peak 2008M5, Trough 2009M4, Peak 2011M4, Trough 2012M2, Peak 2014M1, Trough 2016M8,
Peak 2019M12
China

Component Series (Unit)

<table>
<thead>
<tr>
<th>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

Trough 1979M1, Peak 1980M2, Trough 1982M11, Peak 1985M4, Trough 1986M4, Peak 1988M9,
Trough 1990M5, Peak 1994M9, Trough 1999M8, Peak 2000M7, Trough 2002M1, Peak 2004M2,
Trough 2005M3, Peak 2007M12, Trough 2009M2, Peak 2011M8, Trough 2012M11, Peak 2014M1,
Trough 2016M8, Peak 2017M12, Trough 2020M2
India

**Component Series (Unit)**

- IP Production of manufactured durable consumer goods sa (2015=100)
- IP Production of manufactured non-metallic mineral products sa (2015=100)
- Passenger car sales sa (number)
- Monetary aggregate M1 sa (INR)
- Share prices: BSE (100) national index (2015=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**

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.) inverted</td>
<td>Central Bank of Indonesia</td>
</tr>
<tr>
<td>IDR/USD exchange rate end period</td>
<td>(%) inverted</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>Wholesale Price Index</td>
<td>(2015=100) inverted</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</td>
<td>sa (2015=100)</td>
<td>National Bureau of Statistics</td>
</tr>
<tr>
<td>Tourist arrivals</td>
<td>sa (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)

<table>
<thead>
<tr>
<th>Source</th>
<th>Component Series (Unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureau of Economic Research</td>
<td>Manufacturing - Orders inflow/Demand: tendency (% balance)</td>
</tr>
<tr>
<td>Bureau of Economic Research</td>
<td>Manufacturing - Confidence indicator (% balance)</td>
</tr>
<tr>
<td>Reserve Bank</td>
<td>Permits issued for total buildings sa (2015=100)</td>
</tr>
<tr>
<td>Reserve Bank</td>
<td>Passenger car registrations sa (2015=100)</td>
</tr>
<tr>
<td>International Monetary Fund</td>
<td>Share prices: FTSE/JSE index (2015=100)</td>
</tr>
<tr>
<td>Reserve Bank</td>
<td>Spread of interest rates (% p.a.)</td>
</tr>
</tbody>
</table>

### Reference chronology of turning points


---

OECD Composite Leading Indicators

[http://www.oecd.org/std/leading-indicators/]
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

Referent chronology of turning points

NAFTA area

Reference chronology of turning points

Major five Asia

Reference chronology of turning points