

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

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

Non-member economies		
<u>Brazil</u>		
<u>China</u>		
India		
<u>Indonesia</u>		
Russian Federation		
South Africa		

Area

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

# Australia

### Component Series (Unit)

Dwelling permits issued (number) Orders inflow (manuf.): tendency (% balance) Production (manuf.): future tendency (% balance) Employment (manuf.): tendency (% balance) S&P/ASX 200 share price index (2010=100) Terms of trade (2010=100) Yield 10-year commonwealth government bonds (% p.a.) *inverted* 

### Source

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

### Reference chronology of turning points

Trough 1961M9, Peak 1965M2, Trough 1966M4, Peak 1970M4, Trough 1972M9, Peak 1973M11, Trough 1975M10, Peak 1976M8, Trough 1978M2, Peak 1981M8, Trough 1983M4, Peak 1985M7, Trough 1986M9, Peak 1989M7, Trough 1991M11, Peak 1994M6, Trough 1996M12, Peak 2000M1, Trough 2001M2, Peak 2002M6, Trough 2003M4, Peak 2008M3, Trough 2011M2, Peak 2012M4, Trough 2013M8

## Austria

### Component Series (Unit)

Production (manuf.): future tendency (% balance) Order books (manuf.): level (% balance) IFO business climate indicator for Germany (normal=100) Consumer confidence indicator (% balance) Unfilled job vacancies (persons) Spread of interest rates (% p.a.)

### *Source*

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

### *Reference chronology of turning points*

Peak 1961M3, Trough 1963M1, Peak 1966M3, Trough 1967M11, Peak 1970M9, Trough 1971M11, Peak 1974M2, Trough 1975M6, Peak 1977M8, Trough 1978M5, Peak 1980M1, Trough 1981M10, Peak 1983M9, Trough 1984M6, Peak 1986M5, Trough 1988M3, Peak 1991M10, Trough 1993M4, Peak 1995M3, Trough 1997M4, Peak 2000M11, Trough 2003M9, Peak 2008M3, Trough 2009M6, Peak 2011M4, Trough 2013M3, Peak 2013M12

# Belgium

### Component Series (Unit)

New passenger car registrations (number) Employment (manuf.): future tendency (% balance) Export orders inflow (manuf.): tendency (% balance) Demand (manuf.): future tendency (% balance) Production (manuf.): tendency (% balance) Consumer confidence indicator (% balance)

### *Source*

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

### *Reference chronology of turning points*

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

# Canada

### Component Series (Unit)

Deflated money supply (m1) sa (2010 cad) Housing starts large cities sa (number) USA business climate indicator (PMI) (normal=50) Consumer confidence indicator (2010=100) Spread of interest rates (% p.a.) Ratio of inventories to shipments (ratio) *inverted* Share prices (S&P/TSX composite index) (2010=100)

### *Source*

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

### Reference chronology of turning points

Trough 1961M3, Peak 1962M2, Trough 1963M6, Peak 1966M4, Trough 1968M1, Peak 1968M12, Trough 1971M2, Peak 1974M1, Trough 1975M5, Peak 1976M6, Trough 1977M7, Peak 1979M11, 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

# Chile

### Component Series (Unit)

Production of copper sa (tonnes) Confidence indicator (Retail trade) (% balance) Production (manuf.): tendency (% balance) Monetary aggregate: M1 sa (CLP) Santiago Stock Exchange General (IGPA) (2010=100) 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 2001M3, Trough 2003M10, Peak 2008M2, Trough 2009M5, Peak 2013M1

# Czech Republic

### Component Series (Unit)

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

### *Source*

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

### Reference chronology of turning points

Peak 1996M7, Trough 1999M3, Peak 2000M11, Trough 2004M4, Peak 2008M4, Trough 2009M7, Peak 2011M7, Trough 2013M3

## Denmark

### Component Series (Unit)

Total volume of retail sales (2010=100) New passenger car registrations (number) Employment (manuf.): future tendency (% balance) Production (manuf.): future tendency (% balance) Official discount rate (% per annum) *inverted* Deflated money supply M1 (dkk) Petrol exports deflated by consumer price index (dkk) Consumer confidence indicator (% 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 1987M2, Peak 1989M1, Trough 1991M1, Peak 1992M9, Trough 1993M7, Peak 1994M12, Trough 1995M12, Peak 1997M5, Trough 1998M5, Peak 2000M8, Trough 2003M7, Peak 2006M7, Trough 2009M7, Peak 2011M5, Trough 2013M5, Peak 2015M4

### Estonia

### Component Series (Unit)

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

### *Source*

European Commission Eurostat Eurostat Statistics Estonia NASDAQ OMX Baltic Eurostat

### Reference chronology of turning points

Trough 1996M2, Peak 1997M11, Trough 1999M7, Peak 2000M12, Trough 2002M2, Peak 2003M5, Trough 2004M7, Peak 2007M6, Trough 2009M9, Peak 2012M7, Trough 2013M7

# Finland

### Component Series (Unit)

CPI All items (2010=100) *inverted* Consumer confidence indicator (% balance) Spread of interest rates (% p.a.) Production (manuf.): tendency (% balance) PPI Total (2010=100) Finished goods stocks (manuf.): level (% balance) *inverted* Share prices (HEX All Share index) (2010=100)

### **Source**

Statistics Finland European Commission European Central Bank European Commission Statistics Finland European Commission Bank of Finland

### Reference chronology of turning points

Peak 1961M11, Trough 1963M3, Peak 1965M6, Trough 1968M7, Peak 1970M7, Trough 1971M10, Peak 1973M11, Trough 1978M1, Peak 1980M8, Trough 1982M2, Peak 1982M11, Trough 1984M7, Peak 1985M4, Trough 1987M2, Peak 1990M1, Trough 1993M3, Peak 1995M5, Trough 1996M7, Peak 1998M9, Trough 1999M8, Peak 2000M11, Trough 2003M3, Peak 2008M1, Trough 2009M6, Peak 2011M11, Trough 2013M1

### France

### Component Series (Unit)

New passenger car registrations (number) Consumer confidence indicator (% balance) Production (manuf.): future tendency (% balance) SBF 250 share price index (2010=100) CPI Harmonised All items (2010=100) *inverted* Export order books (manuf.): level (% balance) Selling prices (Construction): future tendency (% balance) Permits issued for dwellings (2010=100) Expected level of life in France (CS) (% balance)

#### *Source*

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

### Reference chronology of turning points

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

# 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.)

### *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

### 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 1995M5, Trough 1996M3, Peak 1998M1, Trough 1998M12, Peak 2001M4, Trough 2005M2, Peak 2008M2, Trough 2009M6, Peak 2011M6, Trough 2013M2, Peak 2014M2

## Greece

### Component Series (Unit)

Cost of residential construction (2010=100) *inverted* Bank credit to the manuf. sector deflated (euro 2001) Employment (services): future tendency (% balance) Production (manuf.): future tendency (% balance) Production of manuf. non-durable consumer goods (2010=100) Volume of retail sales sa (2010=100) Volume of stocks (Retail trade): level (% balance) *inverted* Wholesale prices: all items (2010=100) *inverted* 

### **Source**

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

### Reference chronology of turning points

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

# Hungary

### Component Series (Unit)

Production (manuf.): future tendency (% balance) Unemployment registered (numbers) Monthly hours of work in manufacturing (hours) Money supply M1 (HUF) Share prices: Budapest Stock Exchange (2010=100) Central bank base rate (% per annum) Total imports C.I.F. (HUF)

### **Source**

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

### Reference chronology of turning points

Trough 1996M9, Peak 1998M6, Trough 1999M3, Peak 2000M11, Trough 2003M5, Peak 2006M9, Trough 2009M6, Peak 2011M9, Trough 2012M11

# Ireland

### Component Series (Unit)

Value of exports to Northern Ireland (EUR) Exports: agri. prod. to other EU Members other than UK (EUR) Passenger cars registration (2010=100) Total PPI mining and quarrying activities (2010=100) ISEQ share price index (2010=100) Reel effective exchange rate based on CPI (2010=100) *inverted* Money supply M2 to Euro area (EUR)

### **Source**

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

### Reference chronology of turning points

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

# Israel

### Component Series (Unit)

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

### *Source*

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

### *Reference chronology of turning points*

Peak 1996M10, Trough 1999M1, Peak 2000M9, Trough 2003M5, Peak 2007M10, Trough 2009M5, Peak 2011M8, Trough 2014M8

# Italy

### Component Series (Unit)

Consumer confidence indicator (% balance) Production (manuf.): future tendency (% balance) Deflated net new orders (2010 = 100) Order books (manuf.): level (% balance) CPI All items (2010=10) *inverted* Imports from Germany CIF (USD)

#### *Source*

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 1979M12, Trough 1983M3, Peak 1985M9, Trough 1987M2, Peak 1989M12, Trough 1993M8, Peak 1995M12, Trough 1999M2, Peak 2001M1, Trough 2003M7, Peak 2008M3, Trough 2009M5, Peak 2011M5, Trough 2013M4

# Japan

### **Component Series (Unit)**

Inventories to shipments ratio (2010=100) *inverted* Ratio imports to exports (2010=100) Ratio loans to deposits (%) *inverted* Monthly overtime hours (manuf.) (2010=100) Construction: dwellings started (2010=100) Share price index (TOPIX) Tokyo (2010=100) Spread of interest rates (% p.a.) Small business survey: Sales tendency (% balance)

### **Source**

Statistics Japan Japan Customs Bank of Japan Statistics Japan Ministry of Construction Bank of Japan Bank of Japan Japan Finance Corporation for SMSE

### Reference chronology of turning points

Peak 1961M12, Trough 1963M2, Peak 1964M4, Trough 1965M11, Peak 1970M3, Trough 1971M10, Peak 1973M4, Trough 1975M2, Peak 1979M6, Trough 1980M5, Peak 1982M3, Trough 1983M5, Peak 1985M9, Trough 1987M2, Peak 1990M8, Trough 1993M10, Peak 1997M2, Trough 1999M6, Peak 2001M2, Trough 2002M1, Peak 2004M3, Trough 2004M12, Peak 2008M2, Trough 2009M4, Peak 2010M8, Trough 2012M10, Peak 2013M11

### Korea

### Component Series (Unit)

Business situation (manuf.): future tendency (% balance) Share prices KSE KOSPI index (2010 = 100) Stocks total investment manuf. goods (volume) *inverted* Inventory circulation indicator (manuf.) Interest rate spread (3 years Treasury bonds less overnight rate) (% p.a.) Net Barter Terms of trade (2010=100) sa

### **Source**

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

National Statistical Office

### Reference chronology of turning points

Peak 1971M1, Trough 1972M6, Peak 1973M12, Trough 1975M2, Peak 1979M3, Trough 1980M12, Peak 1984M4, Trough 1986M1, Peak 1988M2, Trough 1989M5, Peak 1991M11, Trough 1992M12, Peak 1997M6, Trough 1998M7, Peak 2000M7, Trough 2001M4, Peak 2002M8, Trough 2005M1, Peak 2007M12, Trough 2009M3, Peak 2011M1, Trough 2013M1, Peak 2014M3

# Luxembourg

### *Component Series (Unit)*

**Source** 

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

### OECD OECD

### Reference chronology of turning points

Peak 1961M5, Trough 1963M3, Peak 1964M8, Trough 1968M2, Peak 1969M7, Trough 1971M5, Peak 1974M3, Trough 1975M9, Peak 1979M11, Trough 1983M3, Peak 1984M5, Trough 1985M6, Peak 1986M7, Trough 1987M10, Peak 1989M5, Trough 1990M5, Peak 1991M7, Trough 1992M10, Peak 1994M3, Trough 1996M9, Peak 2000M5, Trough 2003M2, Peak 2007M8, Trough 2009M5, Peak 2011M2, Trough 2012M4, Peak 2014M12

### Mexico

### Component Series (Unit)

Monthly changes in manuf. employment (%) Employment (manuf.): tendency (% balance) Finished goods stocks (manuf.): tendency (% balance) *inverted* Production (manuf.): tendency (% balance) Yield >10-year US fed. Gov. securities (% p.a.). *inverted* Cost managing deposits for banks (% p.a.) *inverted* Real effective exchange rate (2010=100)

### **Source**

INEGI Bank of Mexico Bank of Mexico US Treasury Department USA Bank of Mexico OECD

### Reference chronology of turning points

Trough 1962M9, Peak 1964M8, Trough 1967M6, Peak 1968M7, Trough 1971M7, Peak 1973M9, Trough 1977M7, Peak 1981M8, Trough 1983M6, Peak 1985M7, Trough 1986M11, Peak 1992M7, Trough 1993M5, Peak 1994M8, Trough 1995M8, Peak 1998M2, Trough 1999M6, Peak 2000M6, Trough 2003M8, Peak 2008M1, Trough 2009M5, Peak 2012M9, Trough 2015M4

# Netherlands

### Component Series (Unit)

Order books (manuf.): level (% balance) Production (manuf.): future tendency (% balance) Finished goods stocks (manuf.): level (% balance) *inverted* Orders inflow (manuf.): tendency (% balance) IFO business climate indicator for Germany (normal=100) Share prices: AEX index (2010=100)

### *Source*

European Commission European Commission European Commission IFO Institute Germany 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 1994M12, Trough 1996M3, Peak 2000M11, Trough 2004M12, Peak 2008M2, Trough 2009M6, Peak 2011M4, Trough 2013M4

# New Zealand

### Component Series (Unit)

Business situation (manuf.): future tendency (% balance) Consumer confidence indicator (% balance) Total retail sales (value) (NZD) Unemployed persons less than 1 month (persons) *inverted* Monetary aggregate M1 (2010=100) Yield of 90-day bank bills (% p.a.) *inverted* 

### *Source*

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

### *Reference chronology of turning points*

Trough 1962M7, Peak 1966M5, Trough 1968M3, Peak 1969M7, Trough 1970M11, Peak 1974M5, Trough 1975M8, Peak 1976M5, Trough 1977M10, Peak 1978M9, Trough 1980M5, Peak 1982M5, Trough 1983M2, Peak 1985M1, Trough 1987M2, Peak 1989M2, Trough 1992M10, Peak 1997M7, Trough 1998M6, Peak 2000M2, Trough 2001M2, Peak 2004M3, Trough 2004M12, Peak 2007M9, Trough 2009M2, Peak 2010M2, Trough 2013M5, Peak 2014M11

## Norway

### Component Series (Unit)

Exports to UK (USD) Stocks of orders for exports (manuf., mining, quarrying) (% balance) Production (manuf.): tendency (% balance) General judgment of the outlook for the enterprise in next quarter (manuf., mining, quarrying) (% balance) CPI All items (2010-100) Share price index OSE20 industrials OSLO (2010=100)

### *Source*

Statistics Norway 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 2001M10, Trough 2003M6, Peak 2007M10, Trough 2010M8, Peak 2012M3, Trough 2012M12, Peak 2014M11

# Poland

### Component Series (Unit)

Real effective exchange rate (2010=100) *inverted* Interest rate: 3-month WIBOR (% per annum) *inverted* Production (manuf.): tendency (% balance) Unfilled job vacancies (number) Production of coal (tonnes)

### *Source*

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

### *Reference chronology of turning points*

Peak 1998M3, Trough 2003M1, Peak 2004M3, Trough 2005M6, Peak 2007M12, Trough 2010M2, Peak 2011M10, Trough 2012M12

# Portugal

### Component Series (Unit)

Industrial production: electricity, gas & water (2010=100) Production (manuf.): future tendency (% balance) Order books/demand (manuf.): level (% balance) Export order books/demand (manuf.): tendency (% balance) Share prices: BVL general share price index (2010=100) Unfilled job vacancies (number)

### *Source*

INE European Commission European Commission INE Lisbon Stock Exchange INE

### *Reference chronology of turning points*

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

# Slovak Republic

### Component Series (Unit)

Confidence indicator (Retail trade) (% balance) Total retail trade (Volume) (2010=100) Consumer: expected economic situation (% balance) Share prices: SAX index (2010=100) Imports f.o.b. total (USD)

#### *Source*

European Commission Eurostat European Commission Bratislava Stock Exchange Eurostat

### Reference chronology of turning points

Trough 1993M9, Peak 1997M6, Trough 1999M12, Peak 2003M3, Trough 2005M3, Peak 2007M12, Trough 2009M5, Peak 2011M11, Trough 2013M3

### Slovenia

### Component Series (Unit)

Manuf. Basic Metals sa (2010=100) Order books (Manuf.): level (% balance) Production (manuf.): tendency (% balance) CPI All items (2010=100) *inverted* EUR/USD exchange rate monthly average (%) Consumer: expected economic situation (% balance)

### *Source*

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

### *Reference chronology of turning points*

Peak 1997M6, Trough 1998M9, Peak 2000M8, Trough 2004M12, Peak 2008M5, Trough 2009M7, Peak 2011M6, Trough 2013M2

# Spain

### Component Series (Unit)

Rate of capacity utilization (manuf.) (% balance) Production of total construction (2010=100) CPI Services less housing (2010=100) *inverted* Share prices: IGBM general index (2010=100) Passenger car registrations (2010=100)

#### *Source*

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

### Reference chronology of turning points

Peak 1963M3, Trough 1967M12, Peak 1969M3, Trough 1971M3, Peak 1974M4, Trough 1975M10, Peak 1978M3, Trough 1979M5, Peak 1980M4, Trough 1981M12, Peak 1983M12, Trough 1985M7, Peak 1990M11, Trough 1993M5, Peak 1995M6, Trough 1996M12, Peak 1998M2, Trough 1999M1, Peak 2000M11, Trough 2004M11, Peak 2008M2, Trough 2009M8, Peak 2010M12, Trough 2013M4

### Sweden

### Component Series (Unit)

5-year government bonds yields (% p.a.) *inverted* Overtime hours worked mining & manuf. (%) New orders mining & manuf. sa (2010=100) Order books (manuf.): level (% balance) Finished goods stocks (manuf.): level (% balance) *inverted* AFGX share price index sa (2010=100)

### *Source*

Bank of Sweden Statistics Sweden Statistics Sweden 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 1997M1, Peak 2000M7, Trough 2003M6, Peak 2007M10, Trough 2009M7, Peak 2011M2, Trough 2013M6

# Switzerland

### Component Series (Unit)

Finished goods stocks (manuf.): level (% balance) inverted

Orders inflow (manuf.): tendency (% balance) Production (manuf.): tendency (% balance) UBS 100 share price index (2010=100) Consumer: expected economic situation (% balance) Silver prices CHF/kJ

### **Source**

Swiss Institute for Business Cycle Research (KOF/ETZ) KOF/ETZ KOF/ETZ Swiss Exchange KOF/ETZ Swiss National Bank

### Reference chronology of turning points

Peak 1961M11, Trough 1963M2, Peak 1964M5, Trough 1966M1, Peak 1967M1, Trough 1969M2, Peak 1971M7, Trough 1972M4, Peak 1974M3, Trough 1975M12, Peak 1977M9, Trough 1978M9, Peak 1981M9, Trough 1982M11, Peak 1985M4, Trough 1987M4, Peak 1990M4, Trough 1993M1, Peak 1994M8, Trough 1996M11, Peak 1998M4, Trough 1999M3, Peak 2000M11, Trough 2003M5, Peak 2008M3, Trough 2009M6, Peak 2011M4, Trough 2012M5, Peak 2014M10

# Turkey

### Component Series (Unit)

Production amount of electricity (GW hours) Finished goods stocks (manuf.): level (% balance) *inverted* New orders from domestic market (manuf.): future tendency (% balance) Employment (manuf.): future tendency (% balance) Prospects for exports (manuf.) (% balance) Discounted treasury auction interest rate (% p.a. *inverted* Imports of intermediate goods (USD)

### *Source*

State Institute of Statistics Bank of Turkey Bank of Turkey

Bank of Turkey Bank of Turkey Bank of Turkey State Institute of Statistics

### Reference chronology of turning points

Trough 1961M10, Peak 1963M8, Trough 1965M6, Peak 1966M8, Trough 1967M8, Peak 1968M8, Trough 1971M4, Peak 1972M6, Trough 1973M11, Peak 1976M9, Trough 1980M7, Peak 1981M10, Trough 1982M7, Peak 1984M6, Trough 1985M8, Peak 1987M11, Trough 1989M5, Peak 1993M8, Trough 1994M7, Peak 1998M1, Trough 1999M8, Peak 2000M8, Trough 2001M10, Peak 2006M7, Trough 2009M3, Peak 2011M5, Trough 2014M10

# **United Kingdom**

### **Component Series (Unit)**

Business climate indicator (manuf.) (% balance) New car registrations sa (number) Consumer confidence indicator (% balance) Sterling 3 months interbank lending rate (% p.a.) *inverted* Production (manuf.): future tendency (% balance) Finished goods stocks (manuf.): level (% balance) *inverted* FTSE-100 share price index (2010=100)

### *Source*

Confederation of British Industry Department of Transport European Commission Bank of England European Commission European Commission Yahoo Finance

### Reference chronology of turning points

Peak 1955M9, Trough 1959M1, Peak 1961M2, Trough 1962M12, Peak 1964M9, Trough 1966M12, Peak 1968M8, Trough 1970M2, Peak 1973M4, Trough 1975M8, Peak 1979M6, Trough 1981M3, Peak 1983M10, Trough 1986M8, Peak 1988M11, Trough 1992M5, Peak 1994M9, Trough 1996M12, Peak 1997M12, Trough 1999M4, Peak 2000M3, Trough 2002M4, Peak 2003M12, Trough 2004M11, Peak 2008M1, Trough 2009M6, Peak 2011M9, Trough 2012M12, Peak 2014M12

### **United States**

### Component Series (Unit)

Dwellings started (number) Net new orders for durable goods (USD) Share prices: NYSE composite (2010=100) Consumer sentiment indicator (normal = 100)

Weekly hours of work : manufacturing (hours) Purchasing managers index (% balance) Spread of interest rates (% p.a.)

### *Source*

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

### Reference chronology of turning points

Trough 1949M10, Peak 1951M8, Trough 1954M6, Peak 1955M9, Trough 1958M4, Peak 1959M6, Trough 1961M2, Peak 1962M4, Trough 1963M3, Peak 1966M3, Trough 1967M9, Peak 1969M3, Trough 1970M11, Peak 1973M5, Trough 1975M4, Peak 1978M11, Trough 1982M11, Peak 1985M9, Trough 1987M3, Peak 1989M6, Trough 1991M8, Peak 1994M9, Trough 1995M12, Peak 2000M5, Trough 2003M2, Peak 2007M10, Trough 2009M5, Peak 2012M4, Trough 2013M4, Peak 2014M10

# Brazil

### Component Series (Unit)

Share prices BOVESPA index: all shares (2010=100) Production (manuf.): future tendency (% balance) Order books (manuf.): level (% balance) Discount rate (% p.a.) *inverted* Net Trade (f.o.b. - f.o.b.) with EU (USD)

### *Source*

Brazil Yahoo Finance and IMF Gutelio Vargas Foundation, Brazil Gutelio Vargas Foundation, Brazil IMF Ministry of Development, Industry and Foreign Trade, Brazil

### *Reference chronology of turning points*

Peak 1997M9, Trough 1999M5, Peak 2000M12, Trough 2003M7, Peak 2004M9, Trough 2005M11, Peak 2008M5, Trough 2009M3, Peak 2011M4, Trough 2012M3, Peak 2013M6

# China

### Component Series (Unit)

Production of chemical fertilizer (tonnes) Production of manufactured crude steel (tonnes) 5000 Ind. Enterprises: Diff. Index: Overseas order level (%) Production of buildings (m2) Production of motor vehicles (number) 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 1994M7, Trough 1999M9, Peak 2000M7, Trough 2002M1, Peak 2004M3, Trough 2005M1, Peak 2007M10, Trough 2009M1, Peak 2011M7, Trough 2012M12, Peak 2013M9

# India

### Component Series (Unit)

Industrial production of durable goods (2010=100) Production manuf. non metallic mineral products (2010=100) Passenger car sales (number) Monetary aggregate M1 (INR) Share prices: BSE Dollex (2010=100) Call money rate (% p.a.) *inverted* 

#### *Source*

Ministry of Statistics Ministry of Statistics Society of Indian Automobile Manufacturers Reserve Bank of India Reserve Bank of India Reserve Bank of India

### Reference chronology of turning points

Trough 1997M10, Peak 1999M12, Trough 2003M1, Peak 2007M10, Trough 2009M3, Peak 2011M1, Trough 2013M1

## Indonesia

### Component Series (Unit)

Share prices: JSX index (2010=100) Central Bank Discount rate (% p.a.) *inverted* IDR/USD exchange rate (%) *inverted* Wholesale Price Index (2010=100) *inverted* Consumer confidence index (normal = 100) Production of paper and paper products (2010=100) Tourist arrivals (number)

#### *Source*

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

### Reference chronology of turning points

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

## **Russian Federation**

### Component Series (Unit)

Order books (manuf.): level (% balance) Share prices: RTS index (2010=100) World market price of crude oil (2010=100)

Production (manuf.): tendency (% balance) Export order books (manuf.): level (% balance)

#### *Source*

GAIDAR, Institute for Economic Policy Central Bank of R.F. Hamburg Institute of International Economics (HWWA) GAIDAR, Institute for Economic Policy GAIDAR, Institute for Economic Policy

### Reference chronology of turning points

Trough 1996M10, Peak 1997M9, Trough 1998M10, Peak 2000M7, Trough 2002M4, Peak 2004M4, Trough 2005M5, Peak 2008M3, Trough 2009M7, Peak 2012M5

## South Africa

### Component Series (Unit)

Orders inflow (manuf.): tendency (% balance) Industrial confidence indicator (% balance) Permits issued: dwellings (2010=100) Sales of motor cars (2010=100) Share prices: FTSE/JSE index (2010=100) Spread of interest rate (% p.a.)

#### *Source*

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

### Reference chronology of turning points

Peak 1960M7, Trough 1962M12, Peak 1965M2, Trough 1966M10, Peak 1967M8, Trough 1969M3, Peak 1971M1, Trough 1972M8, Peak 1974M6, Trough 1977M10, Peak 1981M9, Trough 1983M4, Peak 1984M5, Trough 1986M6, Peak 1989M5, Trough 1992M12, Peak 1996M11, Trough 1998M12, Peak 2000M10, Trough 2003M11, Peak 2008M4, Trough 2009M9, Peak 2013M10

## OECD

#### Reference chronology of turning points

Trough 1961M2, Peak 1962M3, Trough 1963M2, Peak 1964M3, Trough 1965M3, Peak 1966M4, Trough 1967M9, Peak 1969M4, Trough 1971M10, Peak 1973M5, Trough 1975M5, Peak 1979M9, Trough 1982M12, Peak 1985M9, Trough 1987M2, Peak 1990M5, Trough 1993M7, Peak 1994M10, Trough 1995M11, Peak 1997M9, Trough 1999M3, Peak 2000M6, Trough 2003M4, Peak 2008M1, Trough 2009M5, Peak 2012M1, Trough 2013M2,

## OECD + non-member economies

#### Reference chronology of turning points

Trough 1961M2, Peak 1962M3, Trough 1963M2, Peak 1964M3, Trough 1965M3, Peak 1966M4, Trough 1967M10, Peak 1969M4, Trough 1971M10, Peak 1973M5, Trough 1975M5, Peak 1979M10, Trough 1982M12, Peak 1985M7, Trough 1987M2, Peak 1989M2, Trough 1993M6, Peak 1994M10, Trough 1995M12, Peak 1997M9, Trough 1998M11, Peak 2000M7, Trough 2003M4, Peak 2007M12, Trough 2009M4, Peak 2011M11, Trough 2013M1, Peak 2013M11,

## Major seven countries

#### Reference chronology of turning points

Trough 1961M1, Peak 1962M3, Trough 1963M2, Peak 1966M3, Trough 1967M8, Peak 1969M3, Trough 1971M3, Peak 1973M5, Trough 1975M5, Peak 1979M8, Trough 1982M11, Peak 1985M9, Trough 1987M2, Peak 1990M4, Trough 1993M8, Peak 1994M10, Trough 1996M1, Peak 1997M9, Trough 1998M6, Peak 2000M6, Trough 2003M3, Peak 2007M12, Trough 2009M5, Peak 2012M2, Trough 2013M1,

# **OECD** Europe

#### Reference chronology of turning points

Peak 1962M5, Trough 1963M2, Peak 1970M8, Trough 1972M2, Peak 1973M11, Trough 1975M7, Peak 1979M12, Trough 1982M11, Peak 1985M9, Trough 1987M2, Peak 1990M4, Trough 1993M5, Peak 1995M7, Trough 1996M11, Peak 1998M1, Trough 1999M3, Peak 2000M10, Trough 2003M6, Peak 2008M2, Trough 2009M5, Peak 2011M6, Trough 2013M2,

### 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 1983M1, Peak 1985M9, Trough 1987M3, Peak 1991M2, Trough 1993M8, Peak 1995M4, Trough 1997M1, Peak 1998M1, Trough 1999M1, Peak 2001M1, Trough 2003M7, Peak 2008M2, Trough 2009M6, Peak 2011M5, Trough 2013M2,

## 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 1979M11, Trough 1982M11, Peak 1985M8, Trough 1987M3, Peak 1991M2, Trough 1993M8, Peak 1995M2, Trough 1997M1, Peak 1998M1, Trough 1999M3, Peak 2001M2, Trough 2003M6, Peak 2008M2, Trough 2009M6, Peak 2011M6, Trough 2013M2, Peak 2014M2,

## NAFTA area

#### Reference chronology of turning points

Trough 1949M10, Peak 1951M8, Trough 1954M6, Peak 1955M9, Trough 1958M4, Peak 1959M6, Trough 1961M2, Peak 1962M3, Trough 1963M3, Peak 1966M3, Trough 1967M9, Peak 1969M2, Trough 1970M11, Peak 1973M5, Trough 1975M4, Peak 1978M11, Trough 1980M7, Peak 1981M4, Trough 1982M12, Peak 1985M9, Trough 1987M1, Peak 1990M3, Trough 1991M8, Peak 1994M8, Trough 1995M11, Peak 2000M6, Trough 2003M2, Peak 2007M10, Trough 2009M6, Peak 2012M4, Trough 2013M5, Peak 2014M10,

## Major five Asia

#### Reference chronology of turning points

Peak 1979M8, Trough 1983M3, Peak 1985M6, Trough 1987M1, Peak 1988M10, Trough 1990M2, Peak 1991M4, Trough 1993M6, Peak 1997M1, Trough 1998M9, Peak 2000M8, Trough 2002M1, Peak 2004M3, Trough 2004M12, Peak 2007M11, Trough 2009M2, Peak 2010M11, Trough 2012M11, Peak 2013M11,