

# Index

## Business Cycle World and by Countries

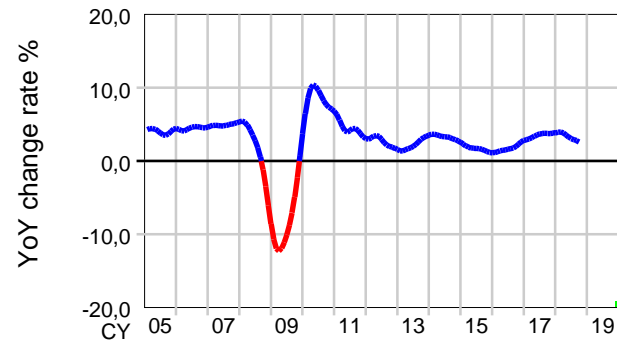
### European Countries

- Germany
- France
- United Kingdom
- Italy
- Austria
- Spain
- Netherlands
- Sweden
- Czechia
- Poland
- Hungary

### World Industry



World Industrial Production  
Monthly X13 Trend YoY Change Rate



Source: CPB Netherlands Bureau for Economic Policy Analysis

### Asian Countries

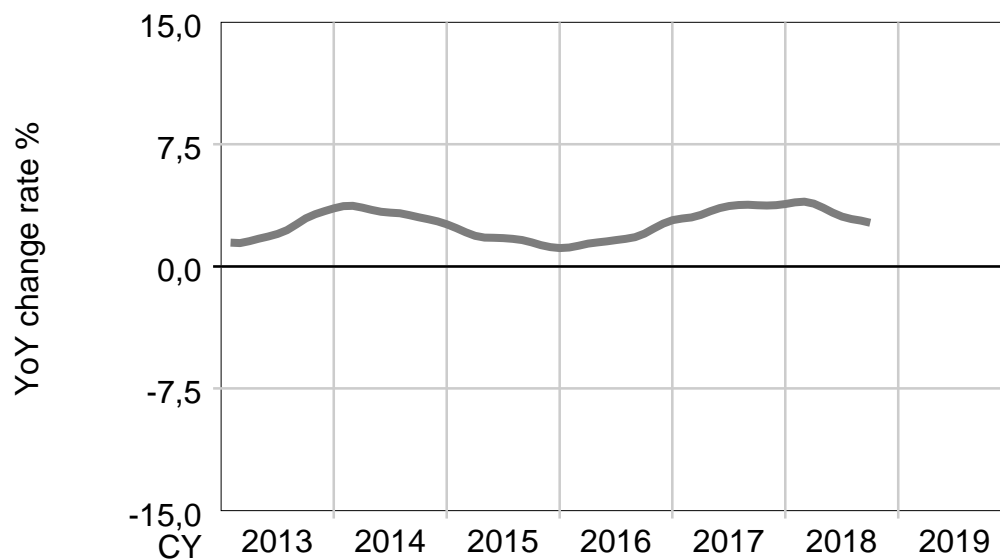
- China
- Japan
- South Korea

- USA

# World: Business Cycle Total Industry



## World Industrial Production World Total X13 Trend YoY Change Rate

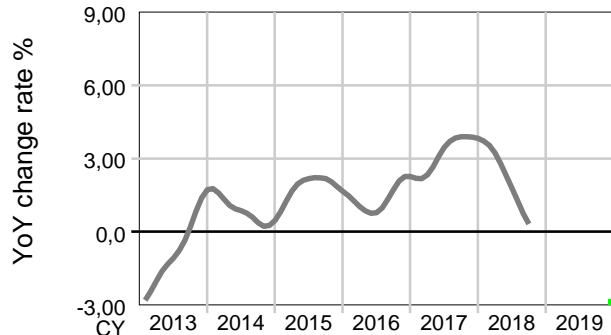


Source: CPB Netherlands Bureau for Economic Policy Analysis

# Business Cycle Euro Area, USA, Emerging Economies and Latin America



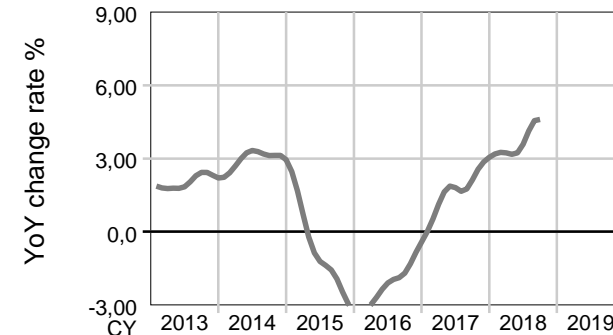
**World Industrial Production  
Euro Area X13 Trend YoY Change Rate**



Source: CPB Netherlands Bureau for Economic Policy Analysis



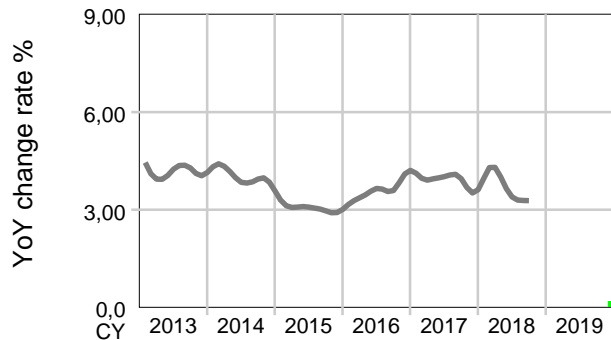
**World Industrial Production  
USA X13 Trend YoY Change Rate**



Source: CPB Netherlands Bureau for Economic Policy Analysis



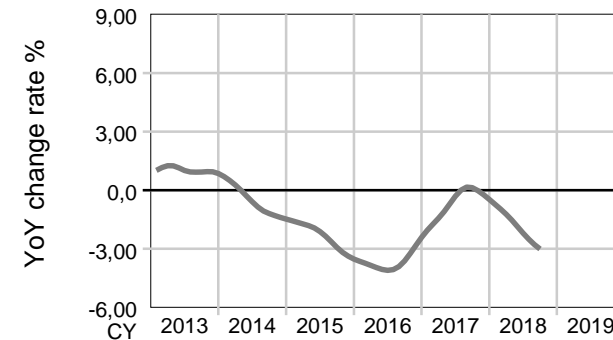
**World Industrial Production  
Emerging Economies X13 Trend YoY Change Rate**



Source: CPB Netherlands Bureau for Economic Policy Analysis



**World Industrial Production  
Latin America X13 Trend YoY Change Rate**

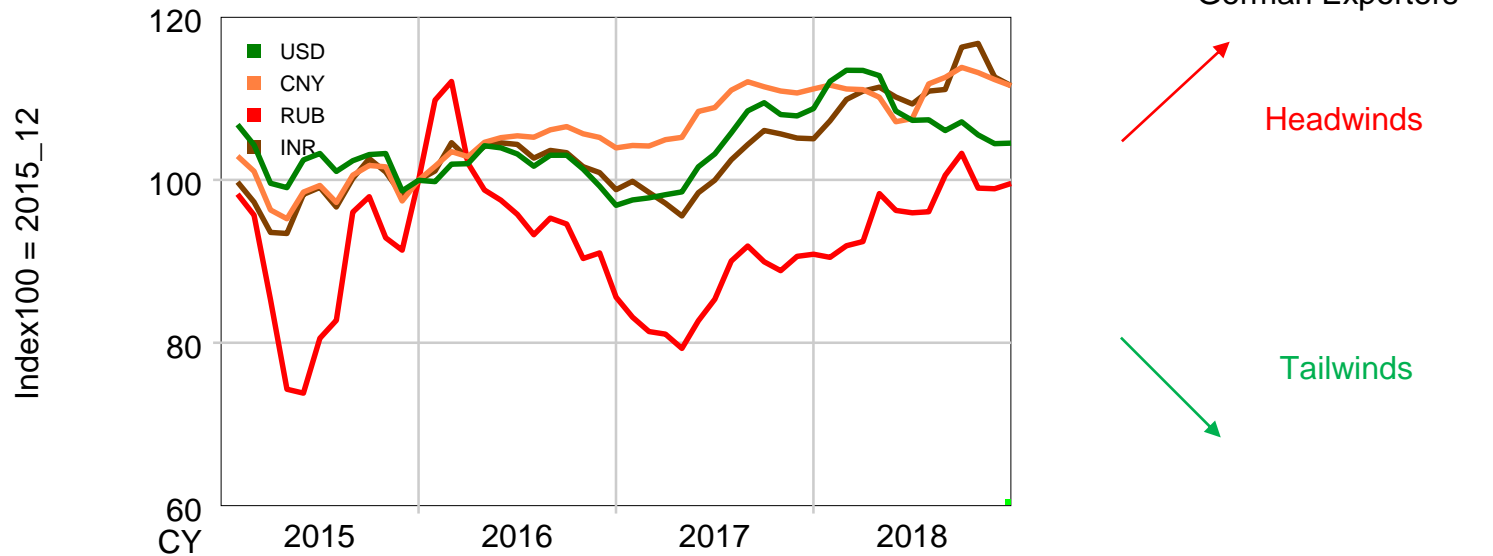


Source: CPB Netherlands Bureau for Economic Policy Analysis

# Influence of Currencies for German Exporters



1 EUR in USD, CNY, RUB, INR  
Index 2015\_12 = 100



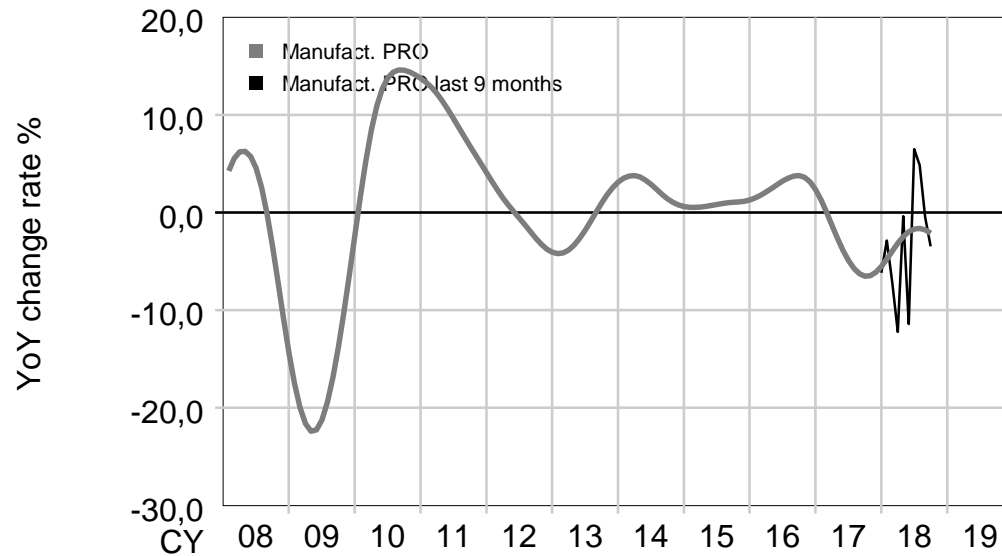
Source: European Central Bank Exchange Rate Service

# Business Cycle Production: Germany

## Total Manufacturing



### Germany: Manufacturing Production Monthly Index X13 Trend YoY Change Rate



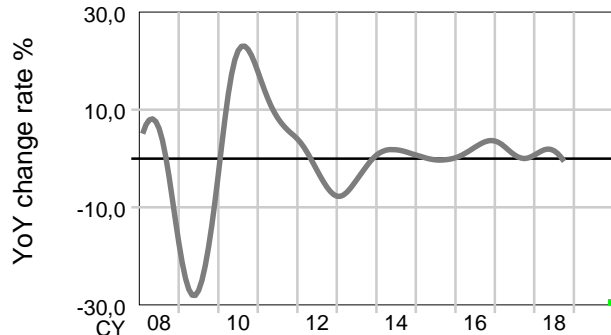
Source: Eurostat

# Business Cycle Production: Germany

## Discrete Manufacturing Industries



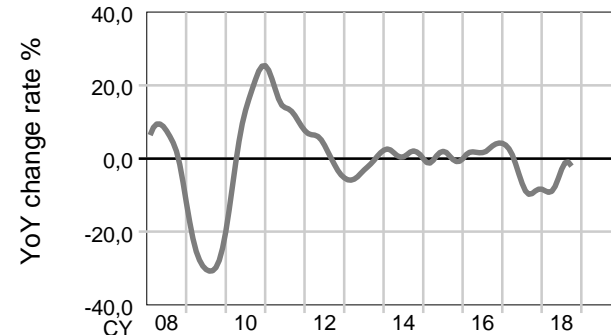
Germany: Electrical Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



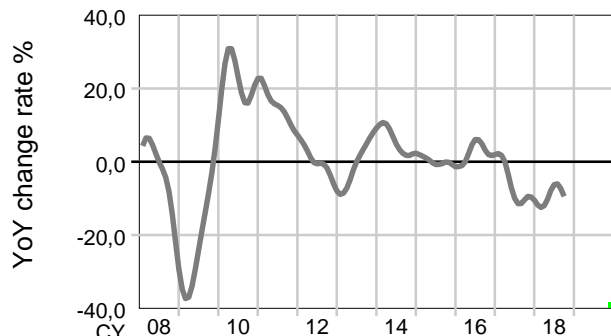
Germany: Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



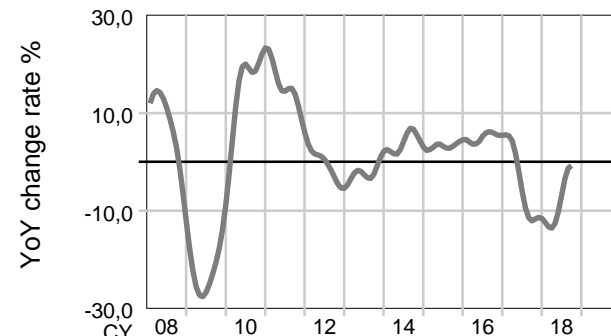
Germany: Motor Vehicles Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



Germany: Electronics Production  
Monthly Index X13 Trend YoY Change Rate

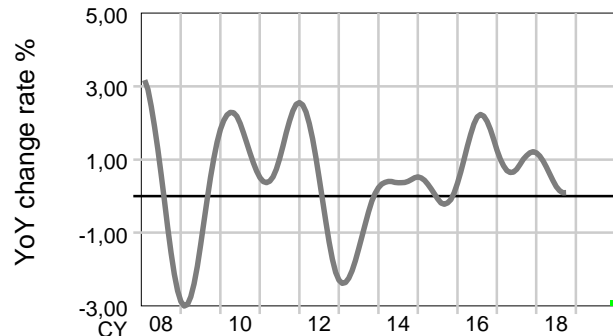


Source: Eurostat

# Business Cycle Production: Germany Continually Manufacturing Industries



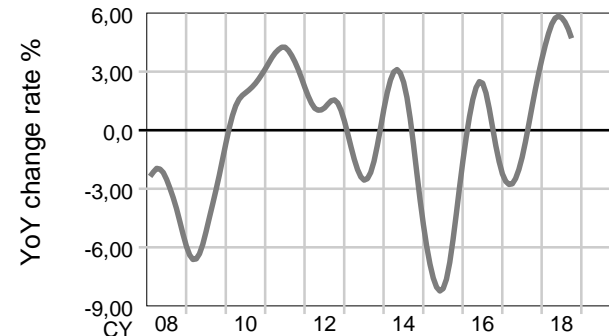
Germany: Food Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



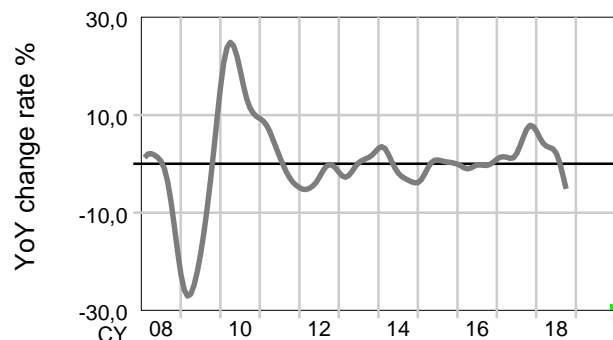
Germany: Beverages Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



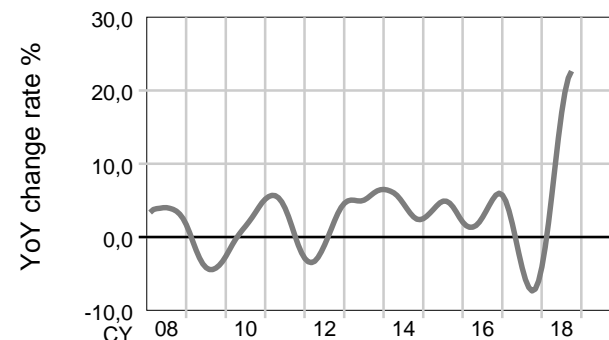
Germany: Chemicals Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



Germany: Pharmaceuticals Production  
Monthly Index X13 Trend YoY Change Rate



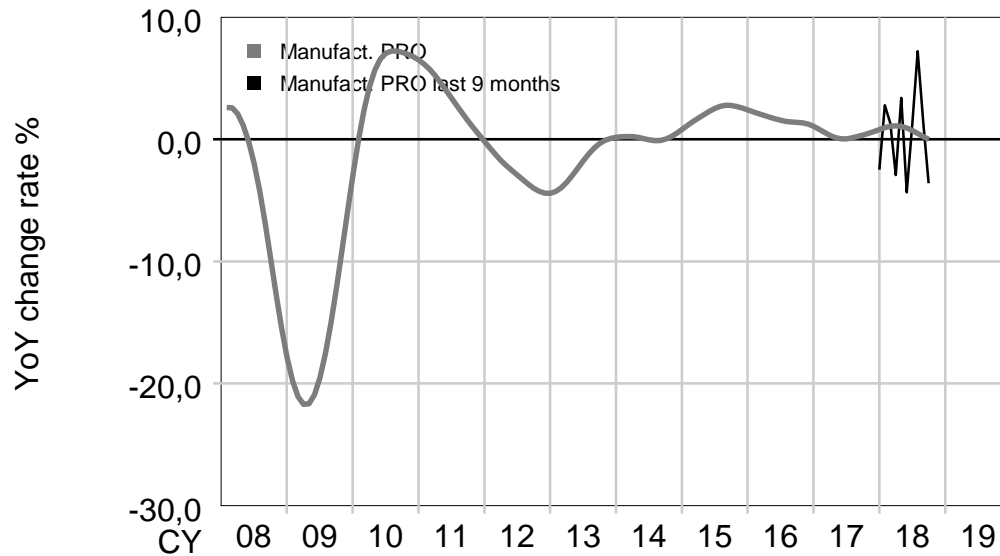
Source: Eurostat

# Business Cycle Production: France

## Total Manufacturing



### France: Manufacturing Production Monthly Index X13 Trend YoY Change Rate



Source: Eurostat

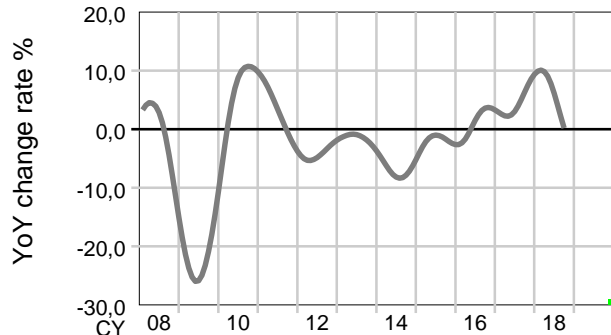


# Business Cycle Production: France

## Discrete Manufacturing Industries



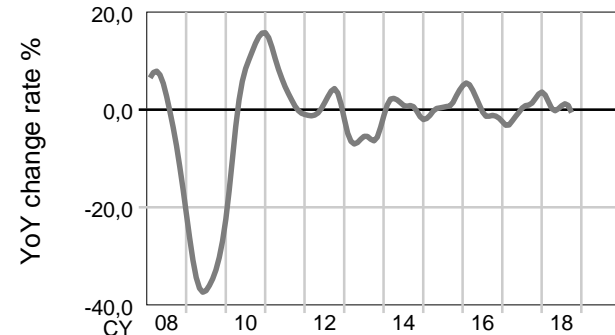
France: Electrical Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



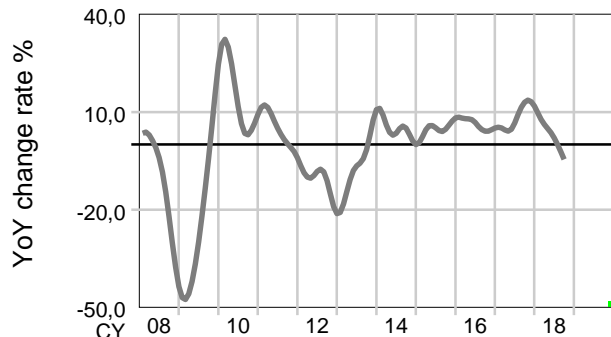
France: Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



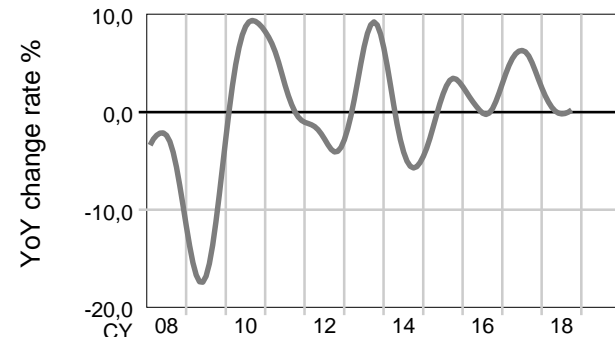
France: Motor Vehicles Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



France: Electronics Production  
Monthly Index X13 Trend YoY Change Rate



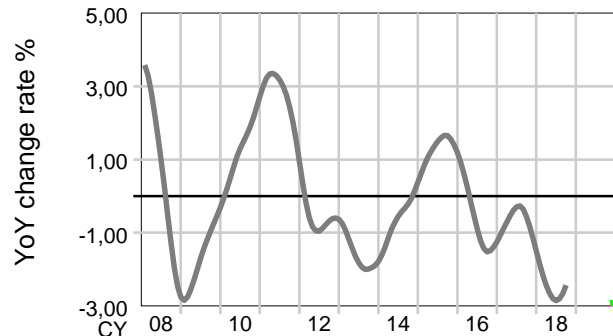
Source: Eurostat

# Business Cycle Production: France

## Continually Manufacturing Industries



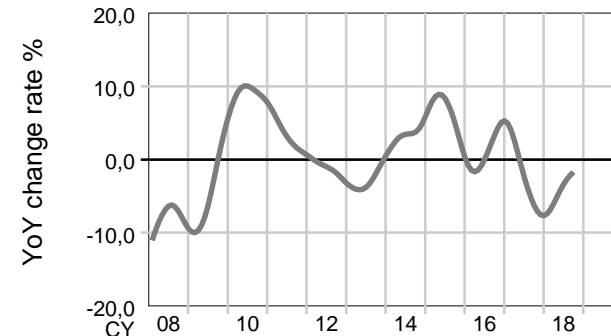
France: Food Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



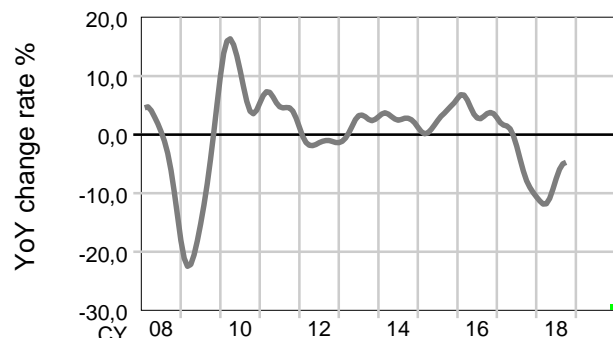
France: Beverages Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



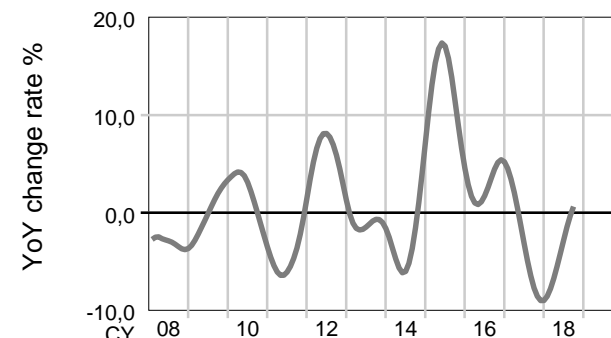
France: Chemicals Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



France: Pharmaceuticals Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat

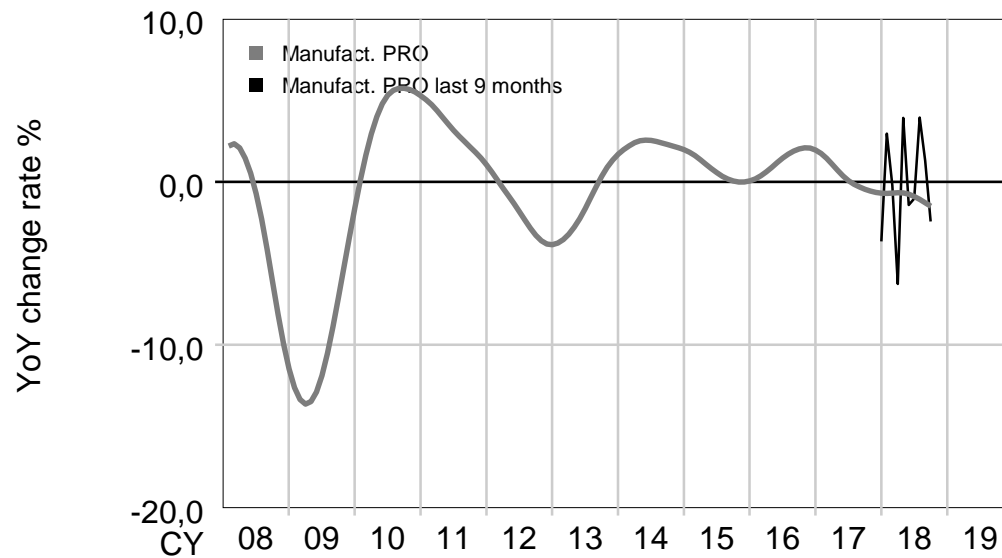
# Business Cycle Production: United Kingdom

## Total Manufacturing



### UK: Manufacturing Production

#### Monthly Index X13 Trend YoY Change Rate



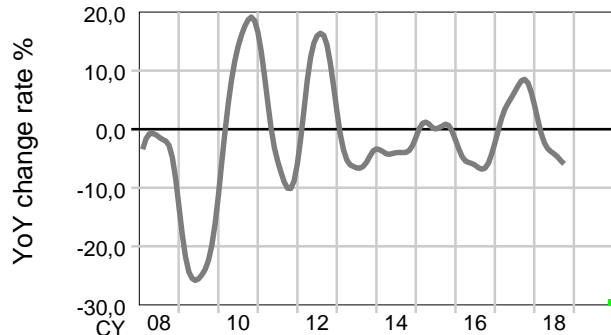
Source: Eurostat

# Business Cycle Production: United Kingdom

## Discrete Manufacturing Industries



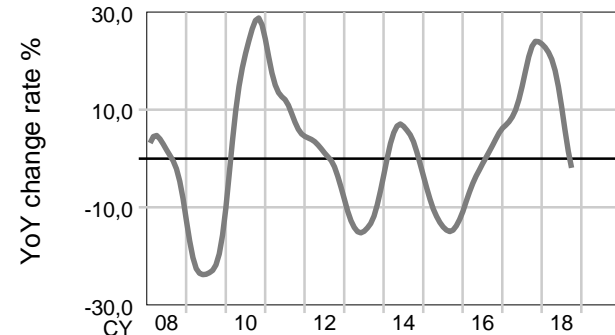
UK: Electrical Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



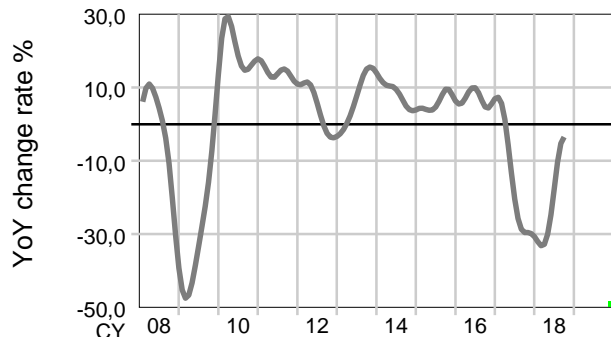
UK: Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



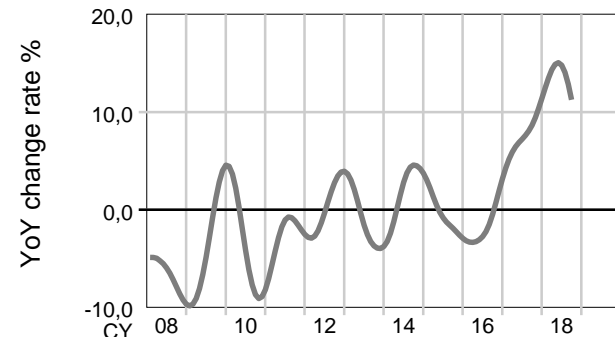
UK: Motor Vehicles Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



UK: Electronics Production  
Monthly Index X13 Trend YoY Change Rate



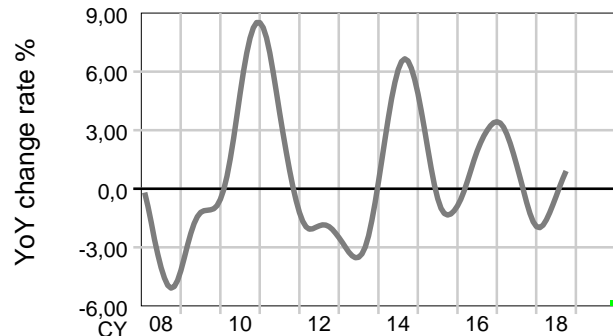
Source: Eurostat

# Business Cycle Production: United Kingdom

## Continually Manufacturing Industries



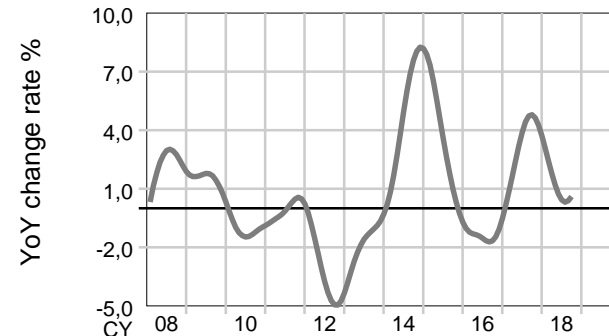
UK: Food Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



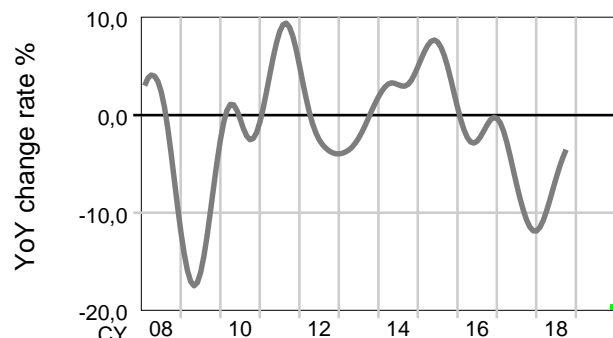
UK: Beverages Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



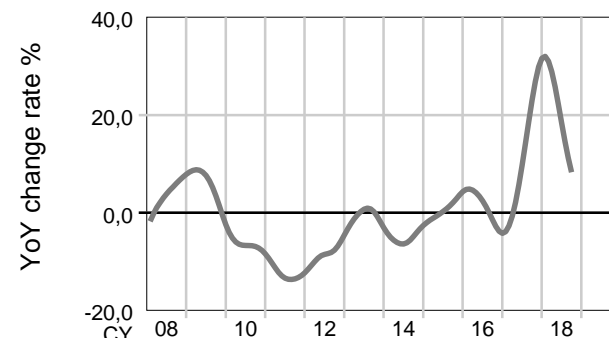
UK: Chemicals Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



UK: Pharmaceuticals Production  
Monthly Index X13 Trend YoY Change Rate



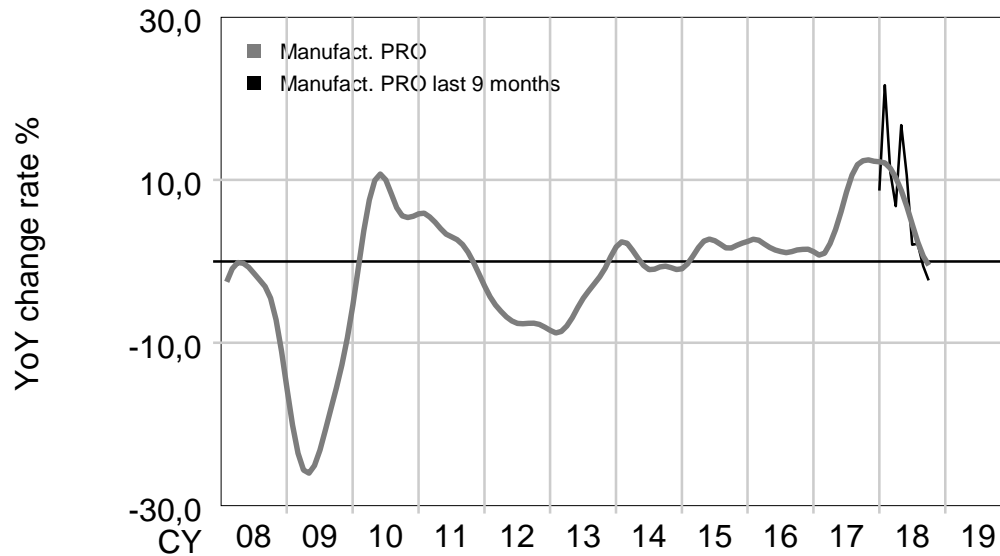
Source: Eurostat

# Business Cycle Production: Italy

## Total Manufacturing



### Italy: Manufacturing Production Monthly Index X13 Trend YoY Change Rate



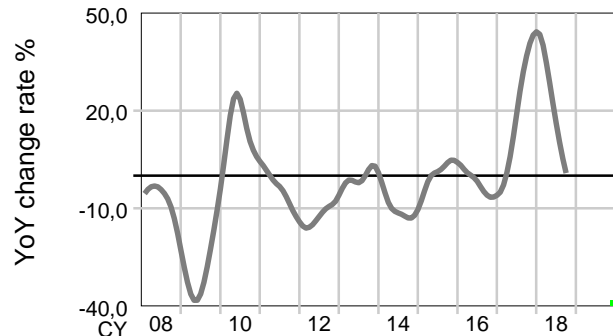
Source: Eurostat

# Business Cycle Production: Italy

## Discrete Manufacturing Industries



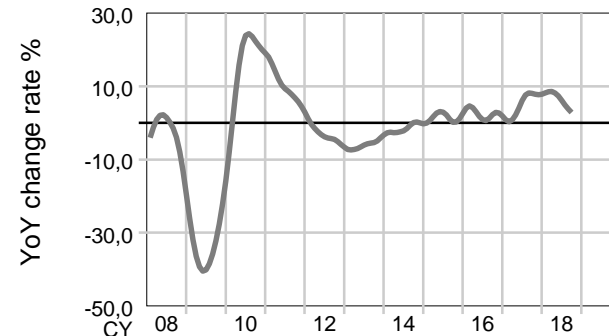
Italy: Electrical Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



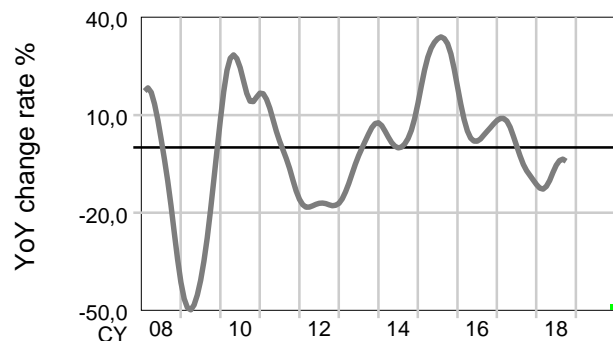
Italy: Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



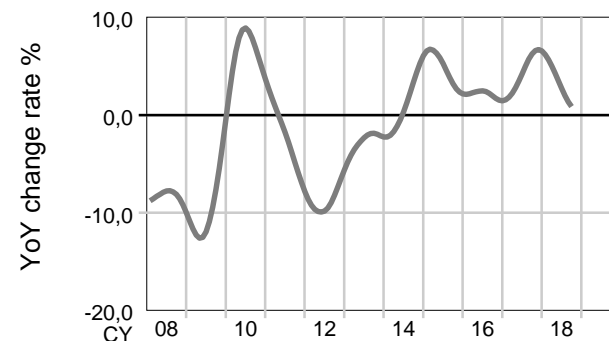
Italy: Motor Vehicles Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



Italy: Electronics Production  
Monthly Index X13 Trend YoY Change Rate



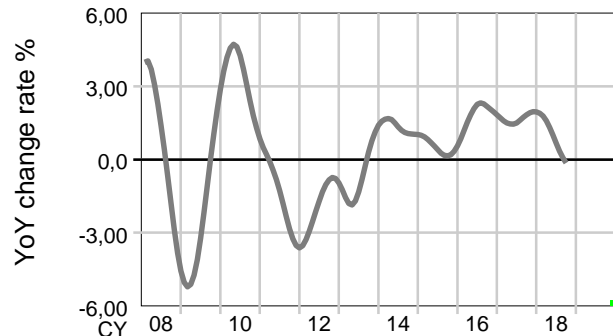
Source: Eurostat

# Business Cycle Production: Italy

## Continually Manufacturing Industries



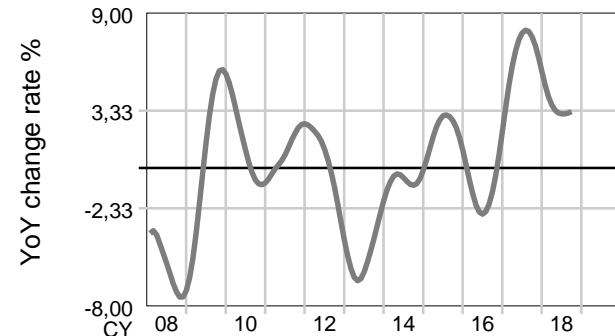
Italy: Food Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



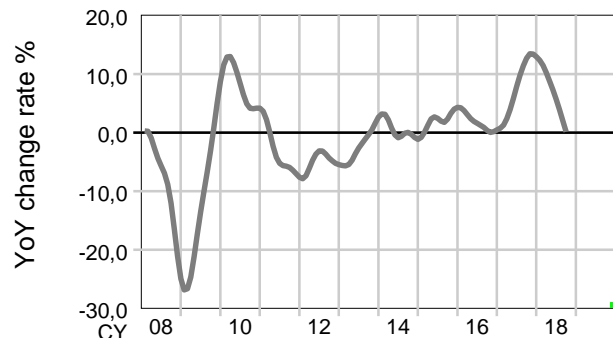
Italy: Beverages Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



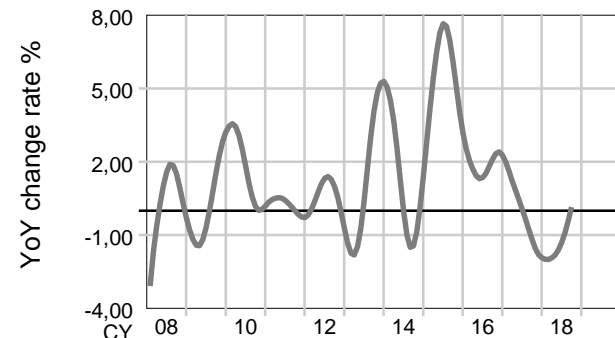
Italy: Chemicals Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



Italy: Pharmaceuticals Production  
Monthly Index X13 Trend YoY Change Rate



Source: Eurostat



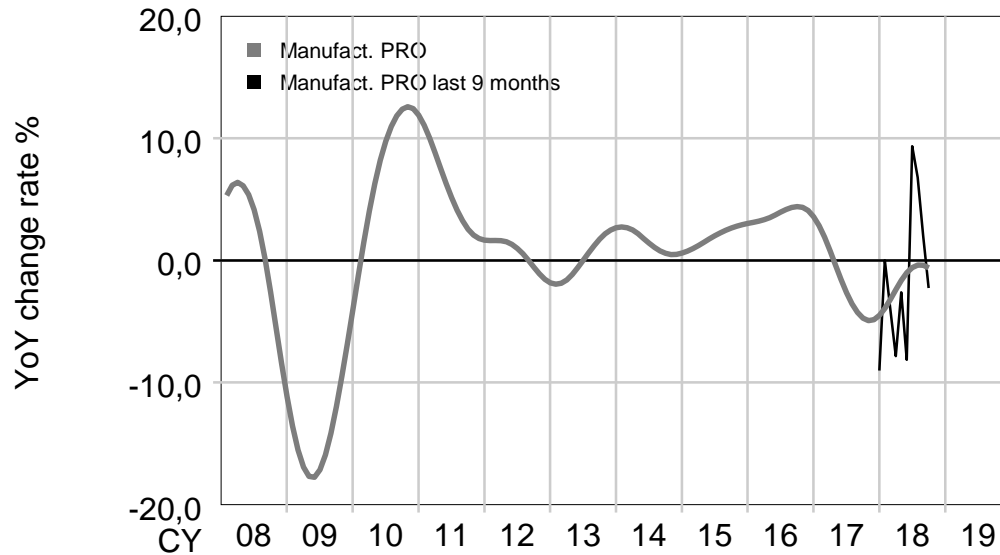
# Weitere Länder Europa

# Business Cycle Production: Austria

## Total Manufacturing



### Austria: Manufacturing Production Monthly Index X13 Trend YoY Change Rate



Source: Eurostat

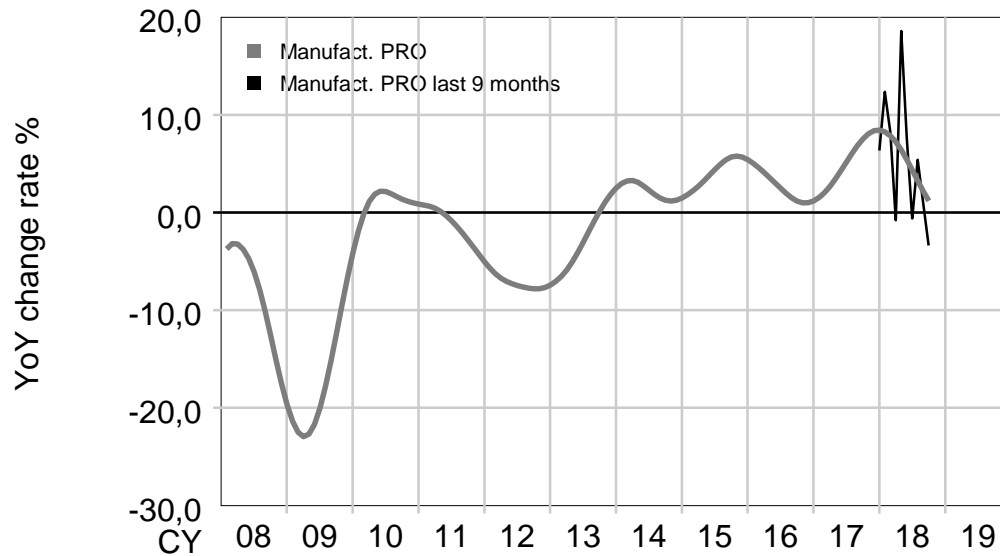
# Business Cycle Production: Spain

## Total Manufacturing



### Spain: Manufacturing Production

#### Monthly Index X13 Trend YoY Change Rate



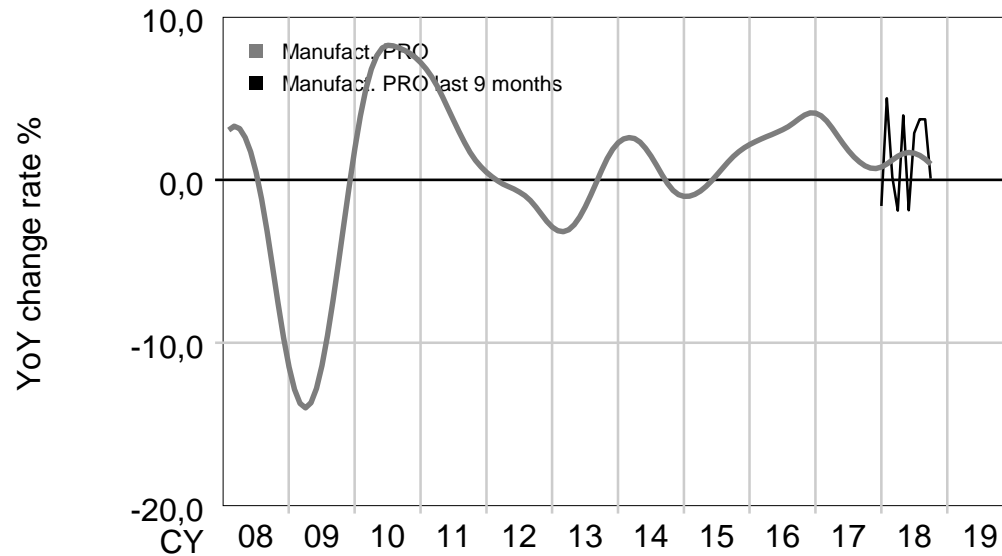
Source: Eurostat

# Business Cycle Production: Netherlands

## Total Manufacturing



### Netherlands: Manufacturing Production Monthly Index X13 Trend YoY Change Rate



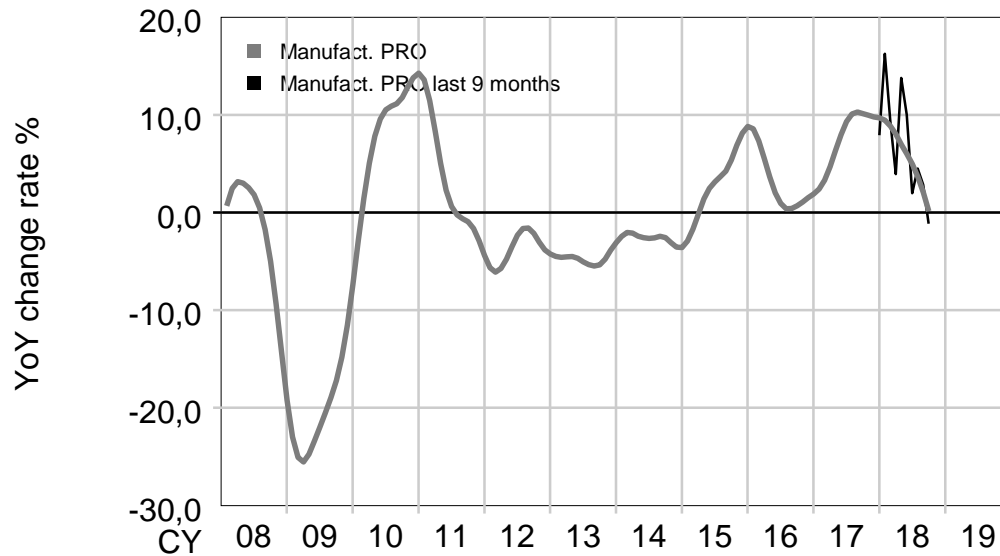
Source: Eurostat

# Business Cycle Production: Sweden

## Total Manufacturing



### Sweden: Manufacturing Production Monthly Index X13 Trend YoY Change Rate



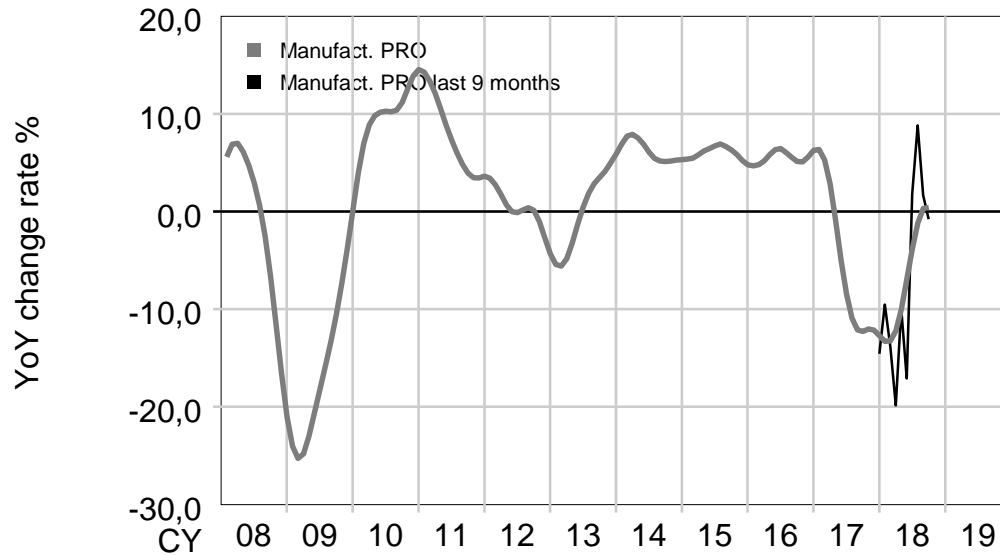
Source: Eurostat

# Business Cycle Production: Czechia

## Total Manufacturing



### Czechia: Manufacturing Production Monthly Index X13 Trend YoY Change Rate



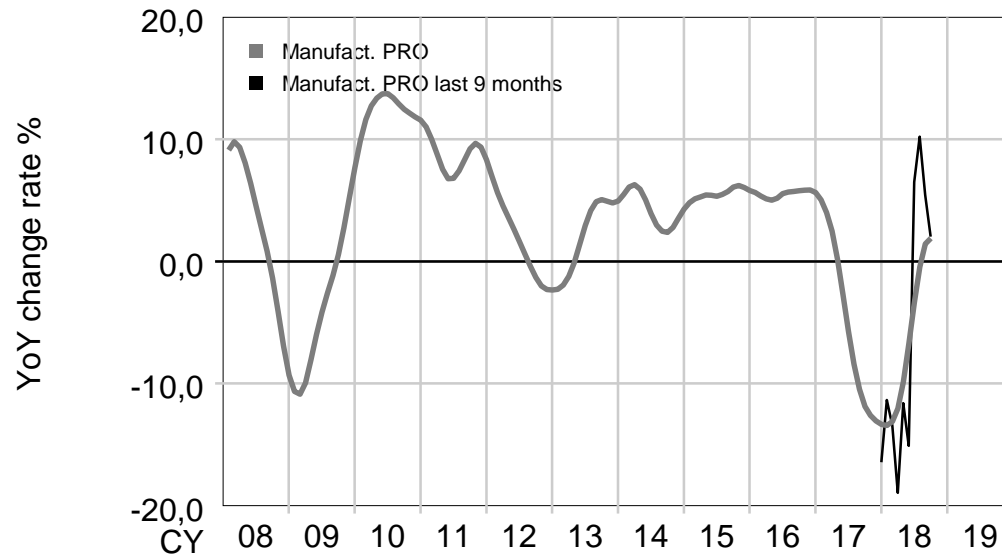
Source: Eurostat

# Business Cycle Production: Poland

## Total Manufacturing



### Poland: Manufacturing Production Monthly Index X13 Trend YoY Change Rate



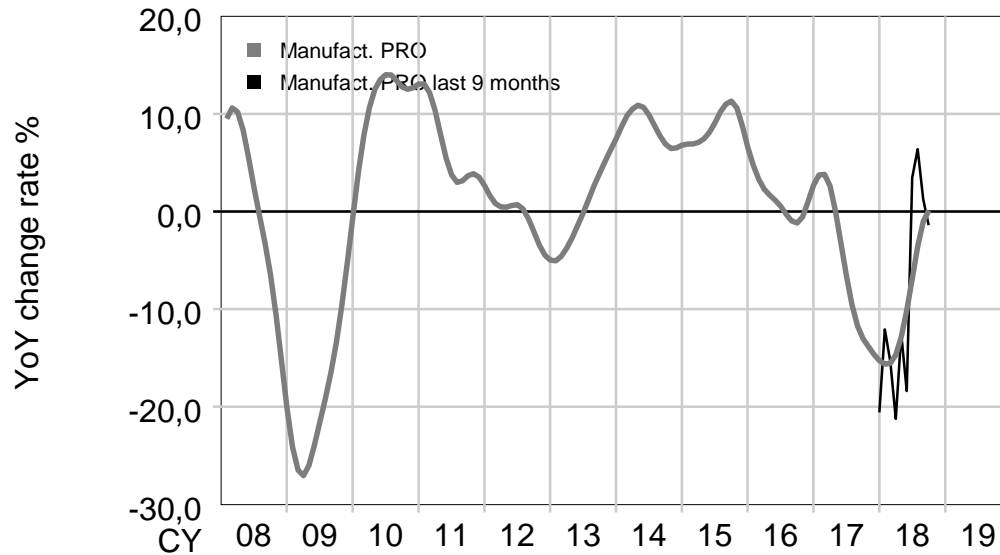
Source: Eurostat

# Business Cycle Production: Hungary

## Total Manufacturing



### Hungary: Manufacturing Production Monthly Index X13 Trend YoY Change Rate



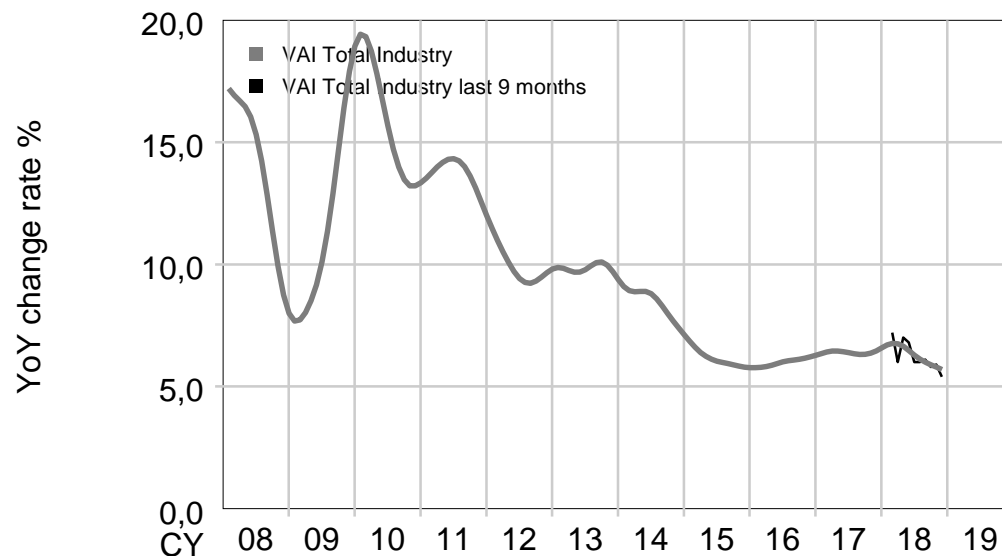
Source: Eurostat



# China: Development Value Added of Industry



## China: Value Added of Industry Total Industry – X13 Trend YoY Change Rate

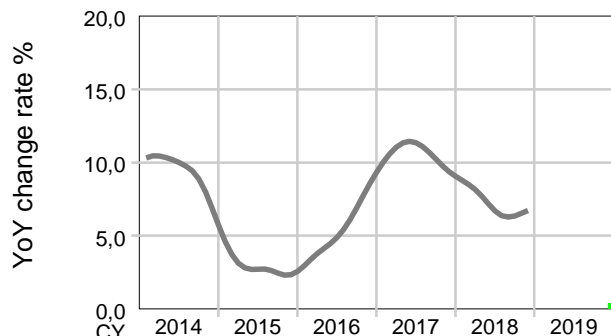


Source: China National Bureau of Statistics

# China: Development Value Added by Industry



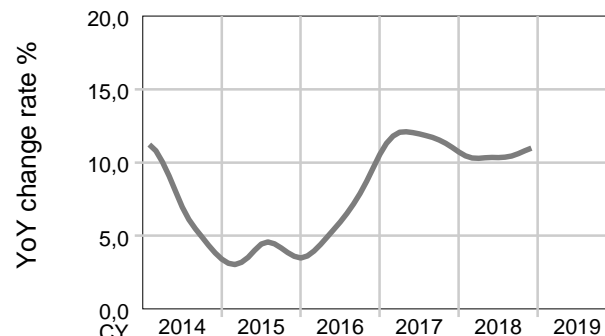
China: Value Added of Industry  
Manufacture of General Purpose Machinery  
Monthly X13 Trend



Source: China National Bureau of Statistics



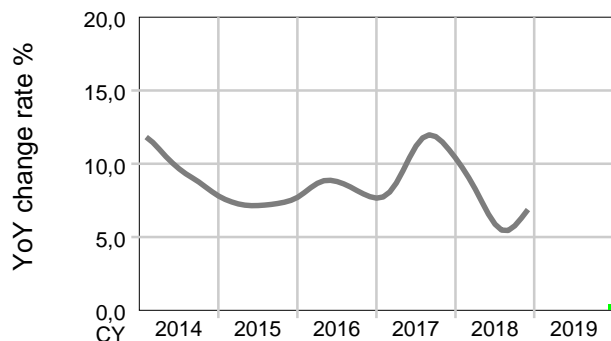
China: Value Added of Industry  
Manufacture of Special Purpose Machinery  
Monthly X13 Trend



Source: China National Bureau of Statistics



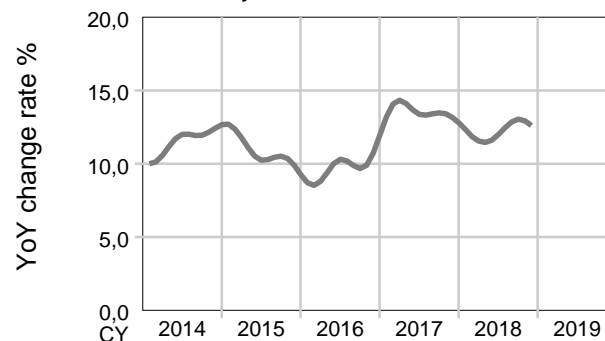
China: Value Added of Industry  
Manufacture of Electrical Machinery and  
Equipment Monthly X13 Trend



Source: China National Bureau of Statistics



China: Value Added of Industry  
Manufacture of Communication Equipment,  
Computers and Other Electronic Equipment  
Monthly X13 Trend

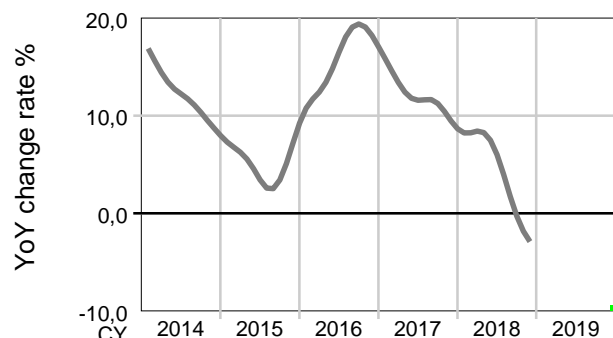


Source: China National Bureau of Statistics

# China: Development Value Added by Industry



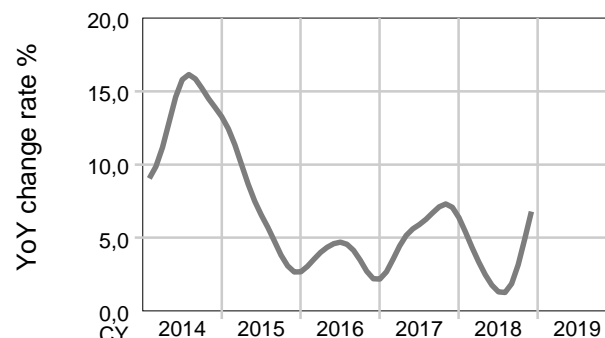
China: Value Added of Industry  
Manufacture of Automobiles Monthly X13 Trend



Source: China National Bureau of Statistics



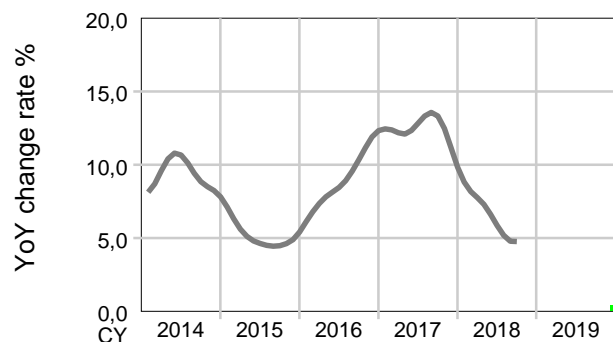
China: Value Added of Industry  
Manufacture of Railway, Shipping, Aerospace and  
Other Transport Equipment Monthly X13 Trend



Source: China National Bureau of Statistics



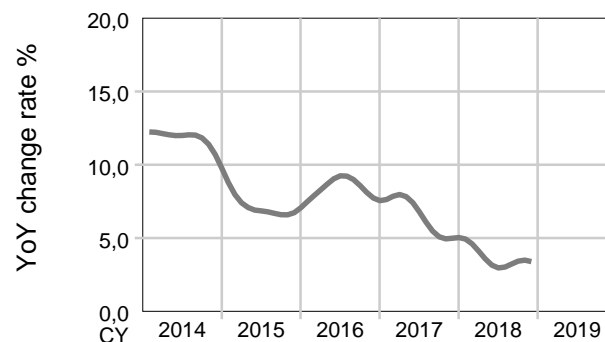
China: Value Added of Industry  
Manufacture of Measuring Instruments  
Monthly X13 Trend



Source: China National Bureau of Statistics



China: Value Added of Industry  
Manufacture of Metal Products  
Monthly X13 Trend



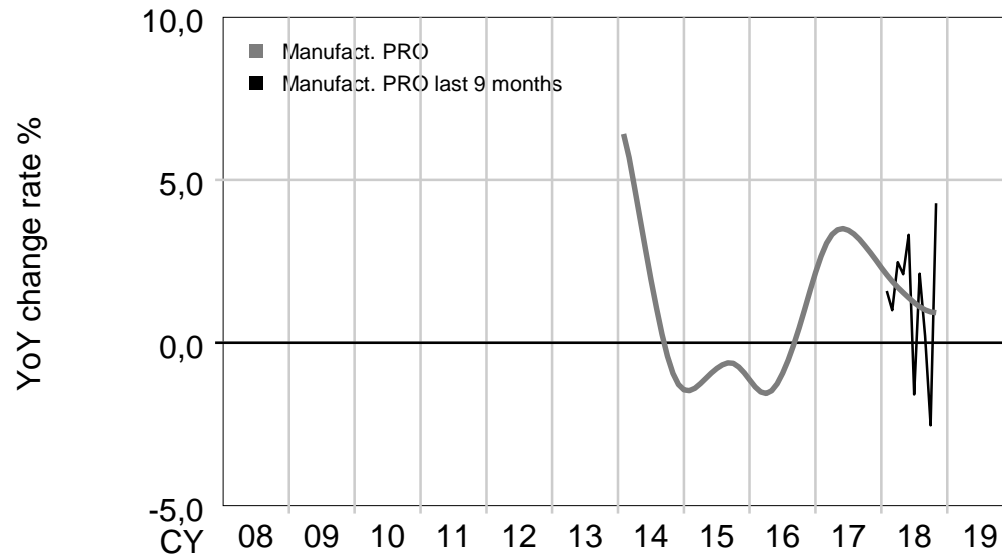
Source: China National Bureau of Statistics

# Business Cycle Production: Japan

## Total Manufacturing



### Japan: Manufacturing Production Monthly Index X13 Trend YoY Change Rate

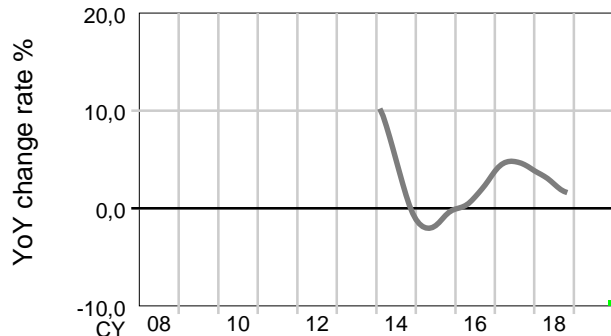


Source: METI

# Business Cycle Production: Japan Discrete Manufacturing Industries



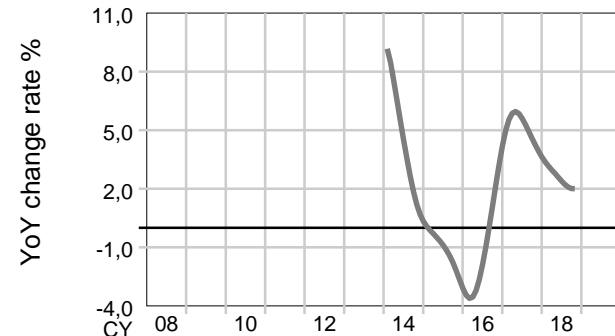
Japan: Electrical Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: METI Ministry of Economy, Trade and Industry



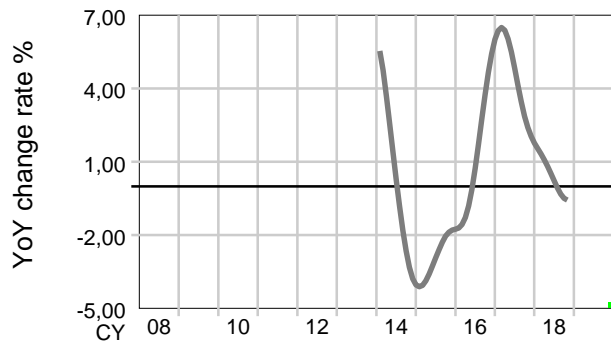
Japan: Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: METI Ministry of Economy, Trade and Industry



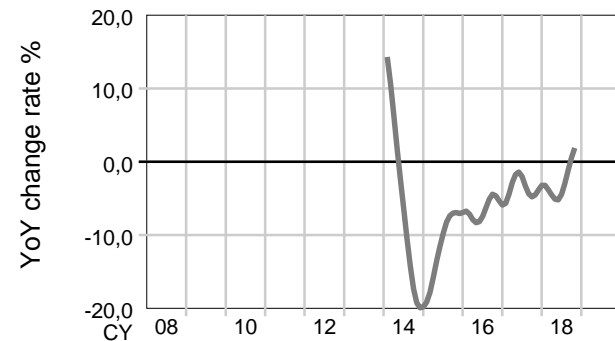
Japan: Motor Vehicles Production  
Monthly Index X13 Trend YoY Change Rate



Source: METI Ministry of Economy, Trade and Industry



Japan: Electronics Production  
Monthly Index X13 Trend YoY Change Rate

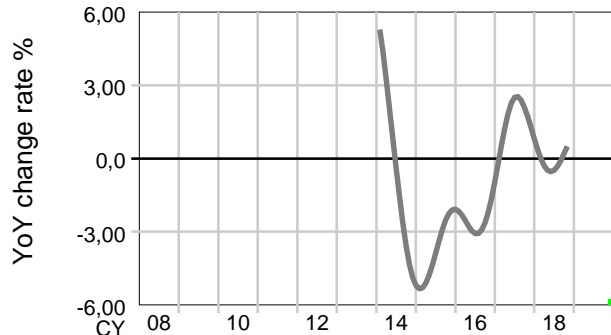


Source: METI Ministry of Economy, Trade and Industry

# Business Cycle Production: Japan Discrete Manufacturing Industries



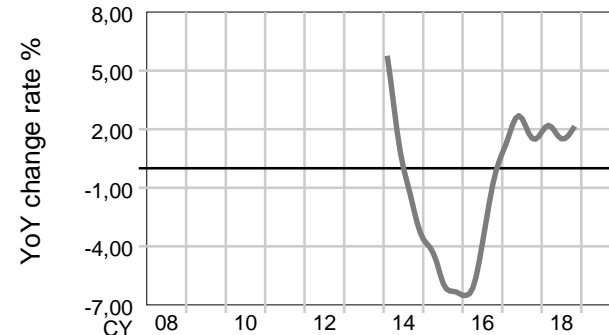
Japan: Fabricated Metals Production  
Monthly Index X13 Trend YoY Change Rate



Source: METI Ministry of Economy, Trade and Industry



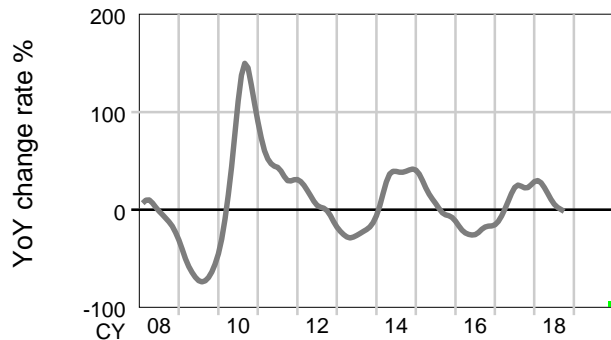
Japan: Rubber, Plastics Production  
Monthly Index X13 Trend YoY Change Rate



Source: METI Ministry of Economy, Trade and Industry



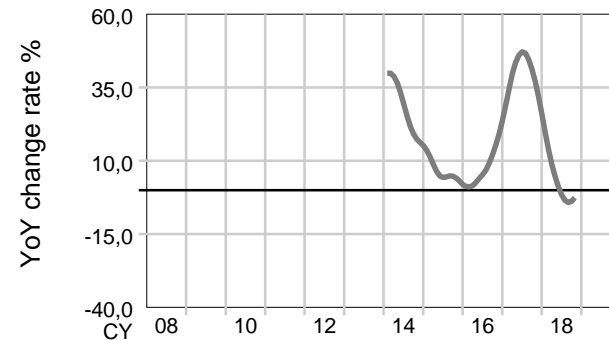
Japan: CNC Machine Tool Production  
Monthly X13 Trend YoY Change Rate



Source: METI Ministry of Economy, Trade and Industry



Japan: Shipment Industrial Robots  
Monthly X13 Trend YoY Change Rate



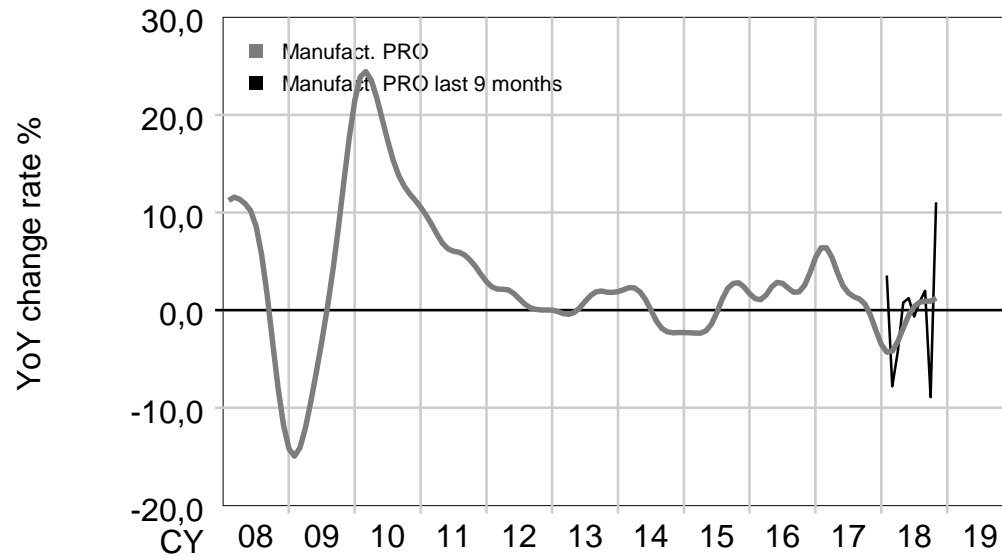
Source: METI Ministry of Economy, Trade and Industry

# Business Cycle Production: Republic of Korea

## Total Manufacturing



### Korea (South): Manufacturing Production Monthly Index X13 Trend YoY Change Rate



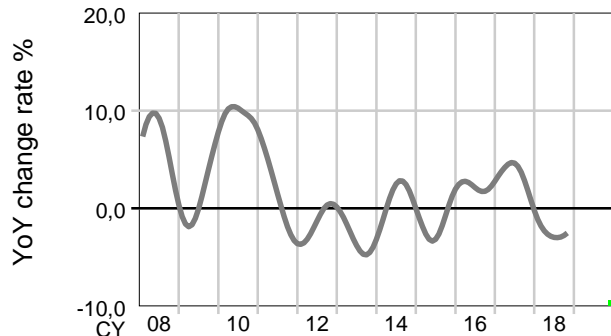
Source: Kosis Korean Statistical Information Service

# Business Cycle Production: Republic of Korea

## Discrete Manufacturing Industries



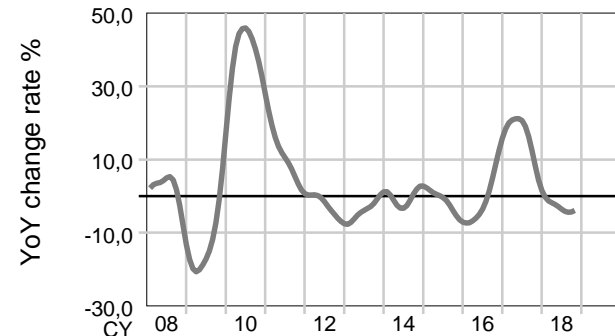
Korea (South): Electrical Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Kosis Korean Statistical Information Service



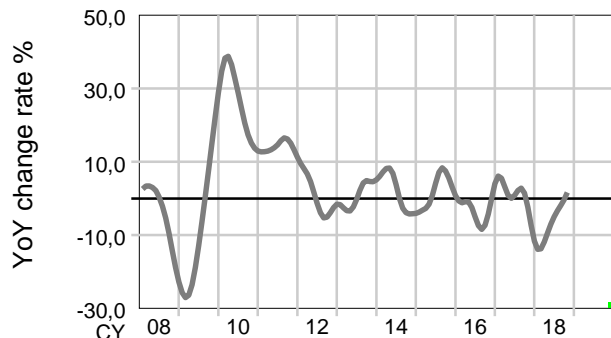
Korea (South): Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: Kosis Korean Statistical Information Service



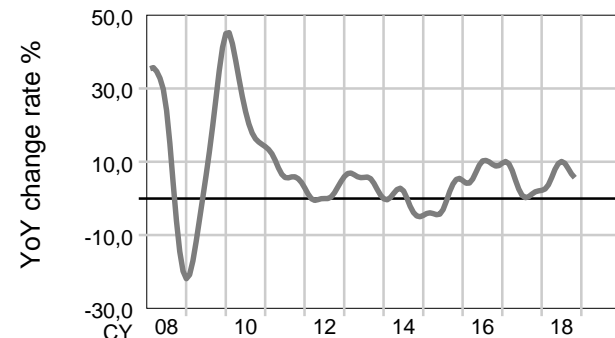
Korea (South): Motor Vehicles Production  
Monthly Index X13 Trend YoY Change Rate



Source: Kosis Korean Statistical Information Service



Korea (South): Electronics Production  
Monthly Index X13 Trend YoY Change Rate



Source: Kosis Korean Statistical Information Service

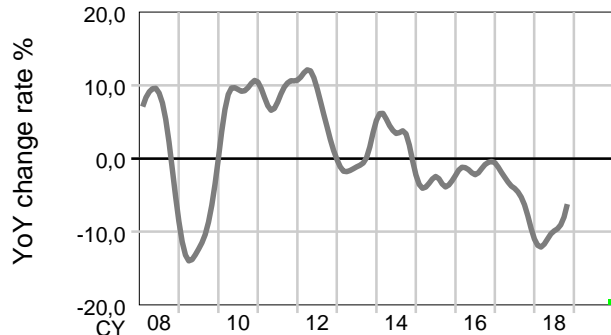


# Business Cycle Production: Republic of Korea

## Discrete Manufacturing Industries



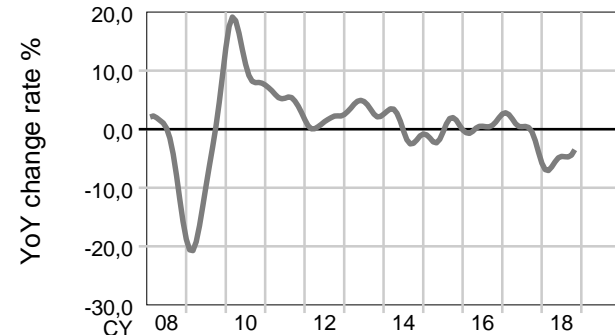
Korea (South): Fabricated Metals Production  
Monthly Index X13 Trend YoY Change Rate



Source: Kosis Korean Statistical Information Service



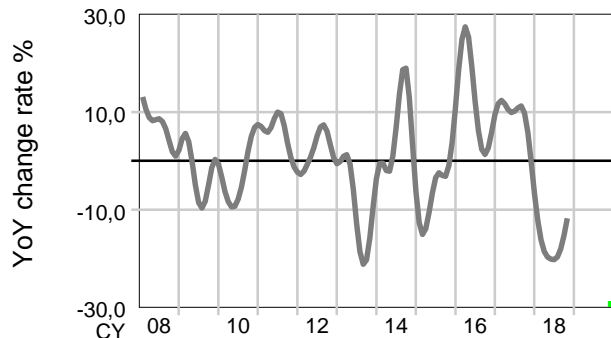
Korea (South): Rubber, Plastics Production  
Monthly Index X13 Trend YoY Change Rate



Source: Kosis Korean Statistical Information Service



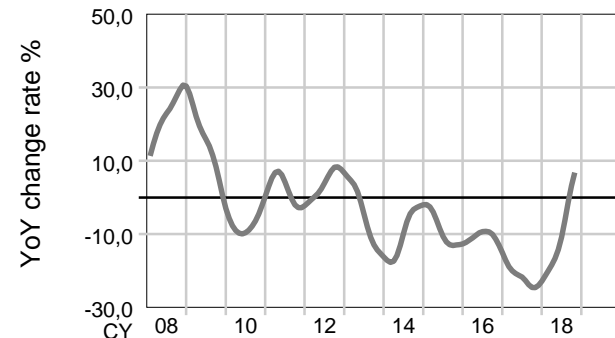
Korea (South): Tobacco Production  
Monthly Index X13 Trend YoY Change Rate



Source: Kosis Korean Statistical Information Service



Korea (South): Rail, Ship, Aircraft Production  
Monthly Index X13 Trend YoY Change Rate

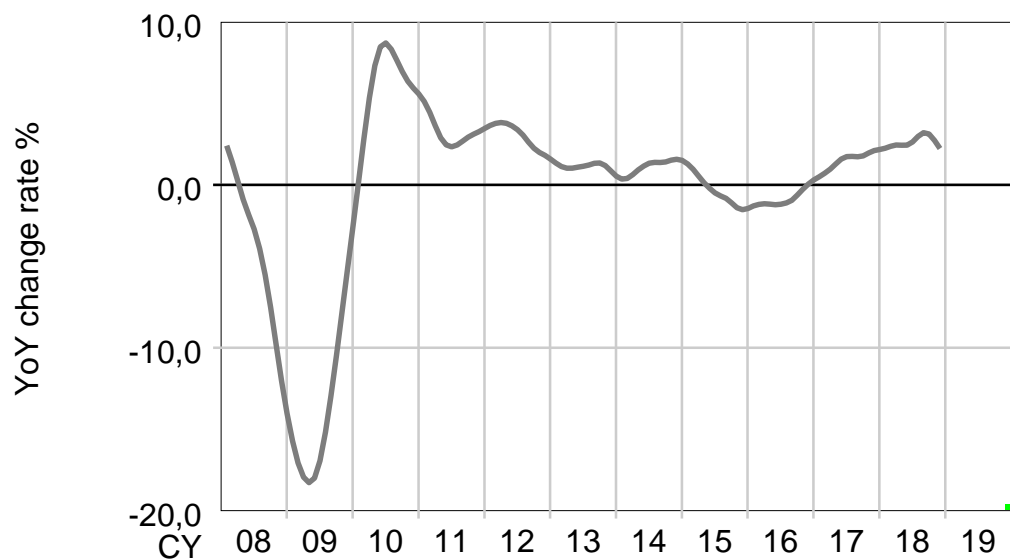


Source: Kosis Korean Statistical Information Service

# Business Cycle Production: USA Total Machinery



## USA: Total Manufacturing Production Monthly Index X13 Trend YoY Change Rate



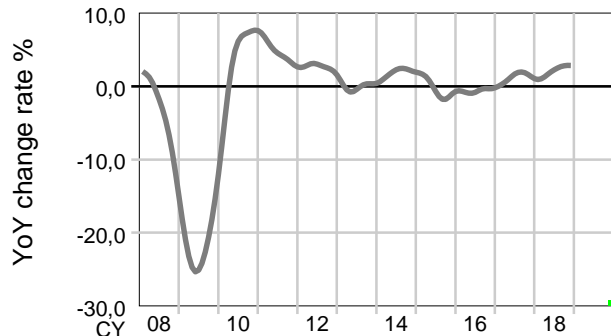
Source: The Federal Reserve

# Business Cycle Production: USA

## Discrete Manufacturing Industries



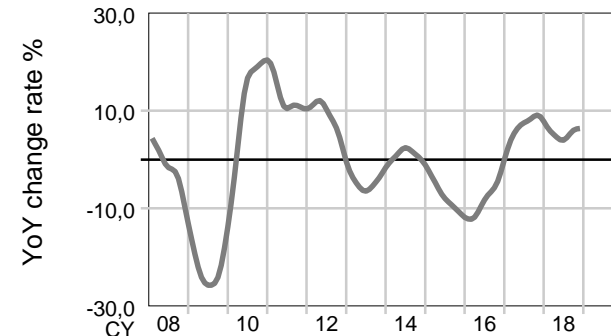
USA: Electrical Equipment Production  
Monthly Index X13 Trend YoY Change Rate



Source: The Federal Reserve



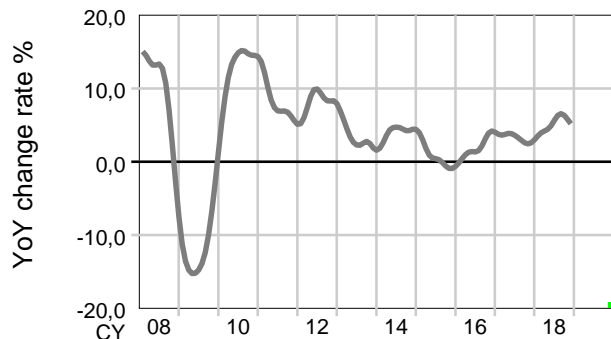
USA: Machinery Production  
Monthly Index X13 Trend YoY Change Rate



Source: The Federal Reserve



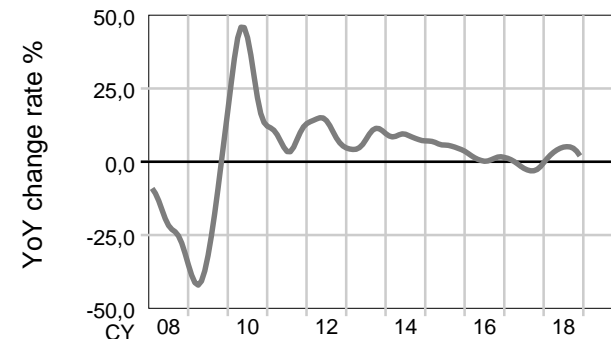
USA: Computer and Electronics Production  
Monthly Index X13 Trend YoY Change Rate



Source: The Federal Reserve



USA: Motor Vehicles Production  
Monthly Index X13 Trend YoY Change Rate



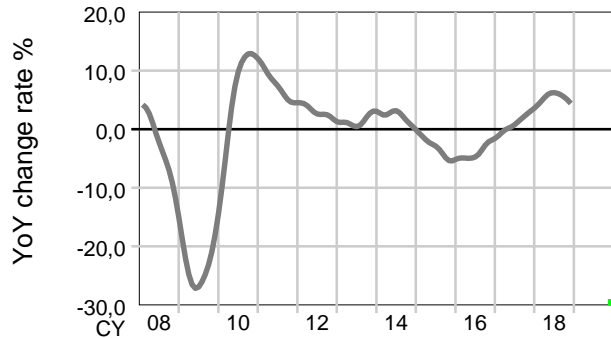
Source: The Federal Reserve

# Business Cycle Production: USA

## Discrete Manufacturing Industries



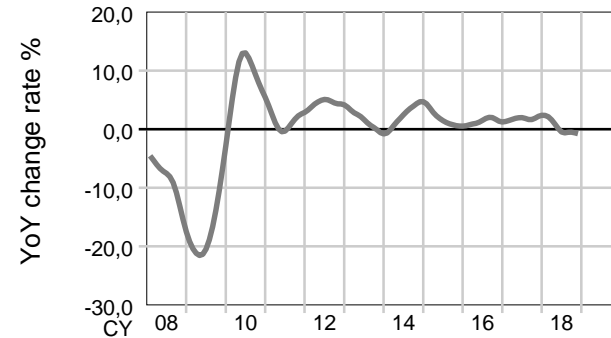
Fabricated Metal Production  
Monthly Index X13 Trend YoY Change Rate



Source: The Federal Reserve



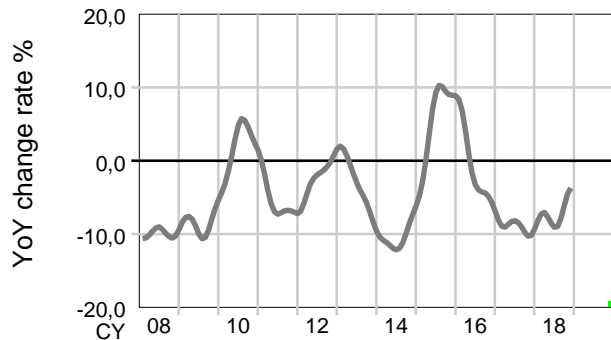
Plastics and Rubber Production  
Monthly Index X13 Trend YoY Change Rate



Source: The Federal Reserve



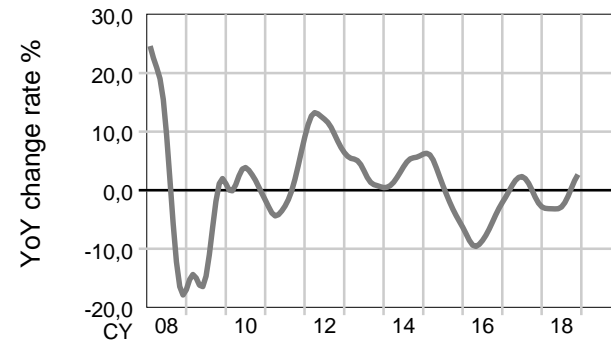
Tobacco Production  
Monthly Index X13 Trend YoY Change Rate



Source: The Federal Reserve



Other Transportation Production  
Monthly Index X13 Trend YoY Change Rate



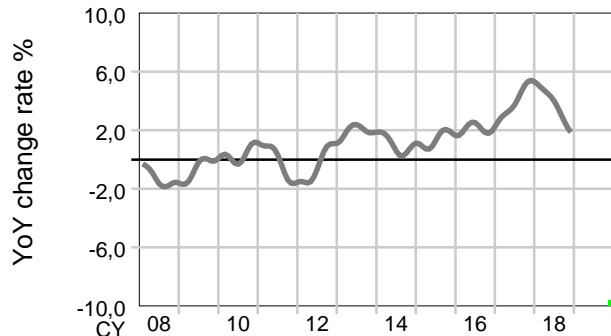
Source: The Federal Reserve

# Business Cycle Production: USA

## Continually Manufacturing Industries



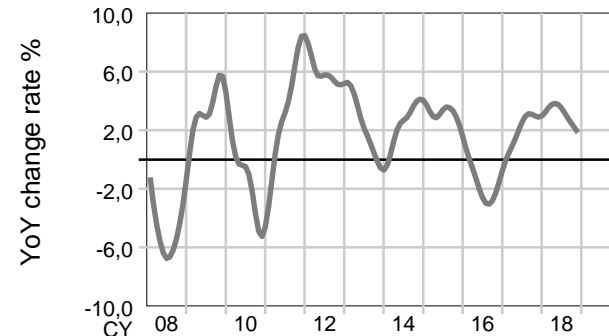
Food Production  
Monthly Index X13 Trend YoY Change Rate



Source: The Federal Reserve



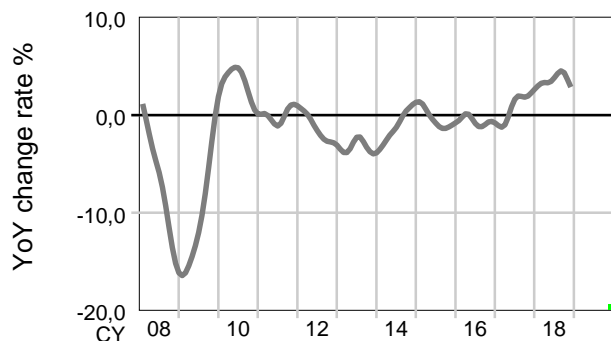
Beverage Production  
Monthly Index X13 Trend YoY Change Rate



Source: The Federal Reserve



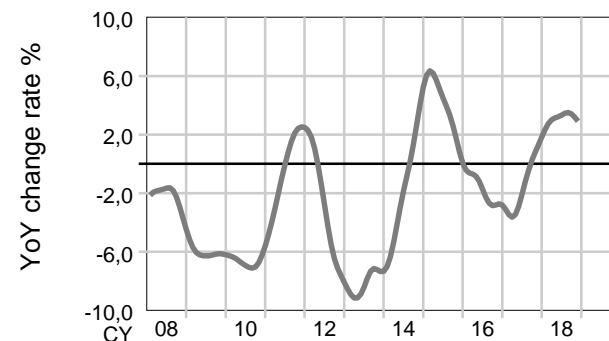
Chemicals Production  
Monthly Index X13 Trend YoY Change Rate



Source: The Federal Reserve



Pharmaceutical and Medicine Production  
Monthly Index X13 Trend YoY Change Rate

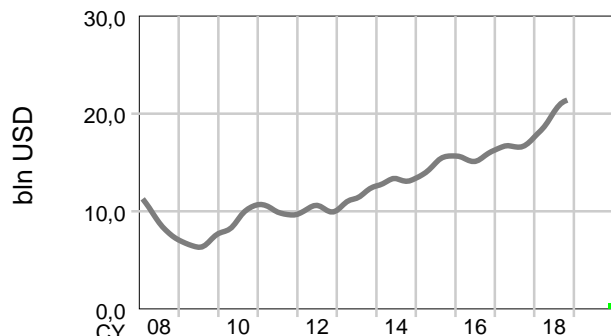


Source: The Federal Reserve

# Business Cycle Production: USA Motor Vehicles



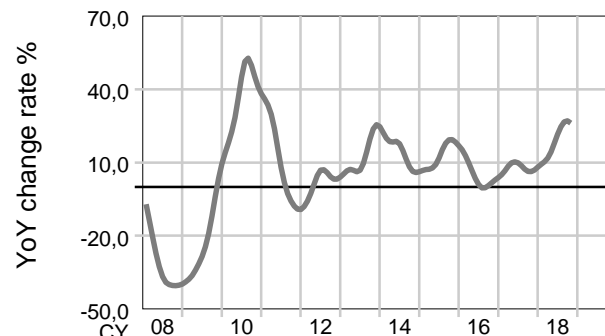
USA: Light Truck and Utility Vehicle Manufacturing  
Monthly Value of Shipments X13 Trend



Source: U.S. Census Bureau



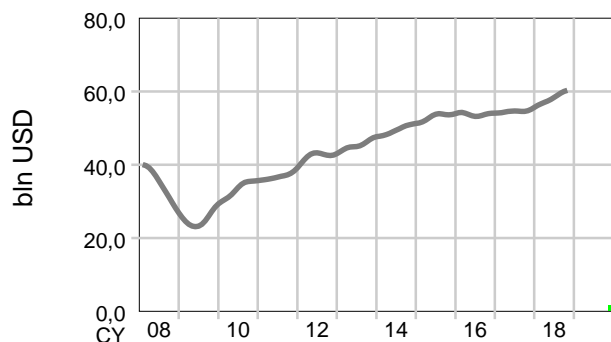
USA: Light Truck and Utility Vehicle Manufacturing - Monthly Value of Shipments X13 Trend YoY Change Rate



Source: U.S. Census Bureau



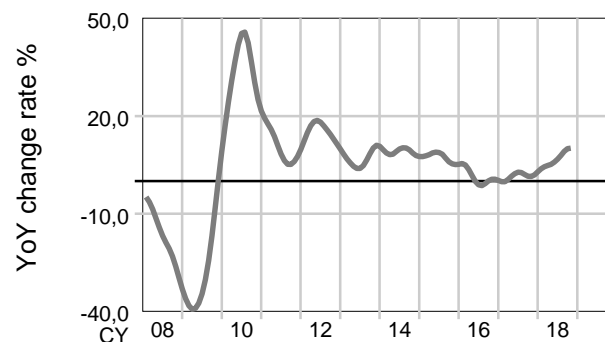
USA: Motor Vehicles and Parts Monthly Value of Shipments X13 Trend



Source: U.S. Census Bureau



USA: Motor Vehicles and Parts Monthly Value of Shipments X13 Trend YoY Change Rate

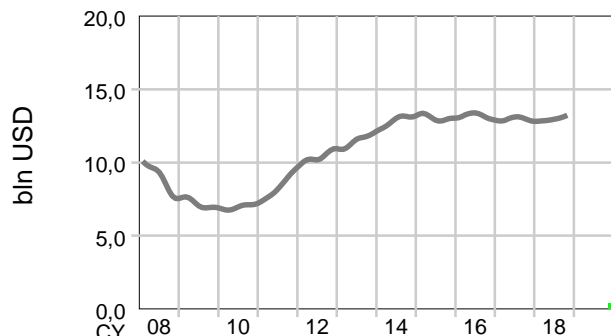


Source: U.S. Census Bureau

# Business Cycle Production: USA Aircraft, Ships and Boats



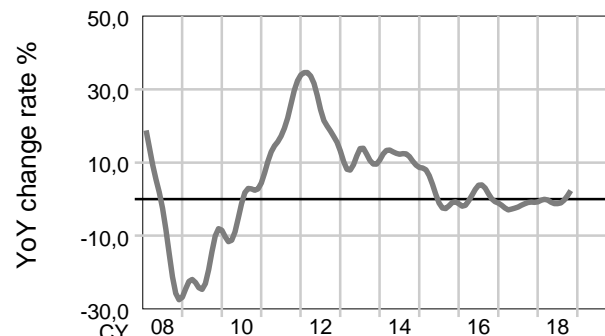
USA: Nondefense Aircraft and Parts  
Monthly Value of Shipments X13 Trend



Source: U.S. Census Bureau



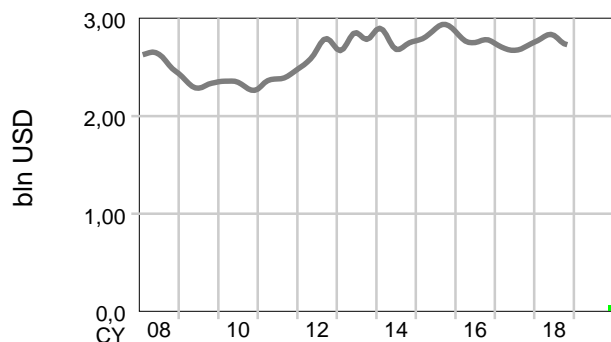
USA: Nondefense Aircraft and Parts  
Monthly Value of Shipments X13 Trend YoY  
Change Rate



Source: U.S. Census Bureau



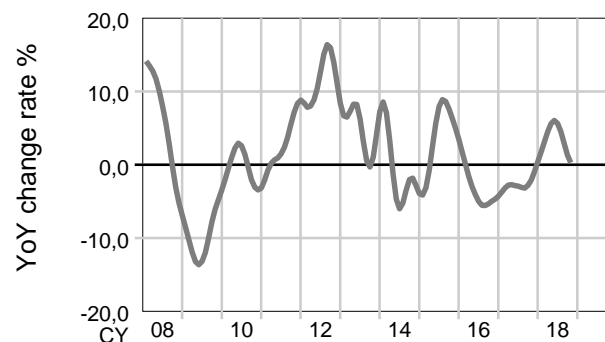
USA: Ships and Boats  
Monthly Value of Shipments X13 Trend



Source: U.S. Census Bureau



USA: Ships and Boats  
Monthly Value of Shipments X13 Trend YoY  
Change Rate



Source: U.S. Census Bureau