Macroeconomics

Basics

What is macroeconomics?

- First look at:
  - Output and its rate of growth
  - Inflation rate
  - Unemployment rate
  - International trade

Measuring Economic Growth

- Gross Domestic Product (GDP)
  - Value of all final goods and services produced within a country in a given time period
- Real GDP
  - The volume of goods and services produced within a country (i.e. GDP adjusted for inflation, GDP in terms of goods)
- Economic Growth:
  - Percentage rate of increase of real GDP

Measuring Inflation

- Percentage change in the price level
  - GDP deflator
  - Consumer Price Index (CPI)
    - In the Eurozone: Harmonized Index of Consumer Prices (HICP)

Measuring Unemployment

Labor force = employed + unemployed

Unemployment rate=Unemployment/Labor Force

Unemployed: does not have a job and has been looking for one in the past 4 weeks

The long term unemployment rate is the share of unemployed persons since 12 months or more in the total number of active persons in the labor market.

European Labor Force Survey (LFS)

Discouraged workers

Labor force participation varies across countries and time

The European Union

	Subject Descriptor	2006	2007	2008	2009	2010	2011
Euro area	GDP(% change)	3.04	2.858	0.473	-4.069	1.682	1.485
US	GDP(% change)	2.673	1.947	0	-2.633	2.639	2.313
Euro area	Investment (%GDP)	21.68	22.255	21.854	18.897	18.838	18.894
US	Investment (%GDP)	20.541	19.569	18.04	14.821	15.852	16.492
Euro area	National savings (%GDP)	22.557	23.428	21.994	19.039	19.578	19.874
US	National savings (%GDP)	16.228	14.32	12.424	10.863	12.406	13.85
Euro area	Inflation	2.202	2.135	3.284	0.293	1.561	1.478
US	Inflation	3.218	2.87	3.816	-0.324	1.417	0.958
Euro area	Unemployment rate	8.37	7.5	7.56	9.408	10.067	10.044
US	Unemployment rate	4.608	4.608	5.817	9.275	9.73	9.589

Government Policies

- Short-term/Medium term policies
  - Monetary and fiscal policies
  - Affects output, prices, interest rates employment
- Long term policies
  - Affect productive capacity

Monetary Policy

- Independent Central Banks
- Change in money supply affects interest rates and ultimately demand for goods and equilibrium output

Eurosystem (ESCB)

– European Central Bank

– National Central Banks

Tasks of the ECB

- Sets interest rates
- Manages foreign exchange operations
- Holds and manages some official reserves of euro area countries
- Promotes smooth operation of payment systems

- NCBs
  - Lend to national financial institutions
  - Ensure settlement of cashless domestic and trans-border payments
  - Collect national statistics

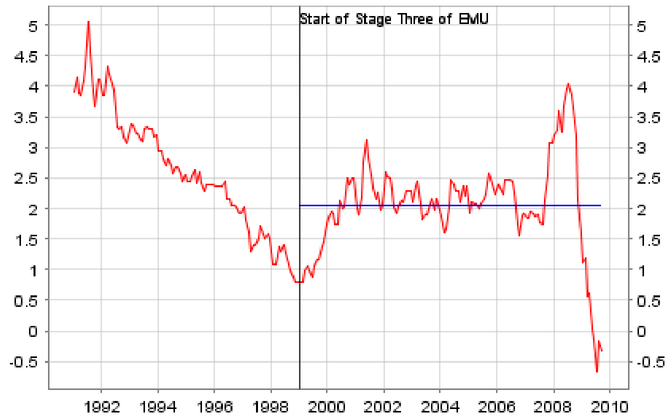
Eurosystem Strategy

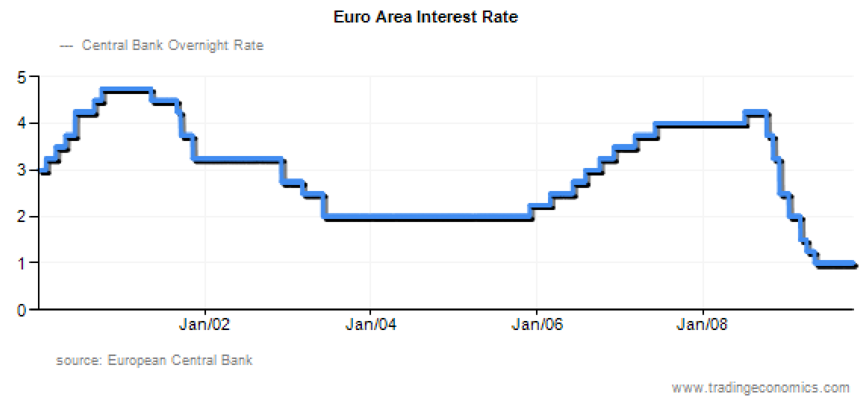
- Primary objective: price stability

- Definition of price stability: “a year-on-year increase in the Harmonized Index of Consumer Prices (HICP) for the euro area of below 2%”

The European Union

Inflation and interest rates in the euro area





Fiscal policies

- Government spending and taxes
- Affect economy’s output and price level

How does fiscal and monetary policies work in the short term?

- Equilibrium in the goods market:

$$Y = C(Y-T) + I(i, Y) + G + NX(Y, E, Y^*)$$

- In the short term, priorities may reflect the business cycle or response to a natural disaster
- in the longer term, the drivers can be development levels, demographics, or resource endowments.

Fiscal Policy

- Stability and Growth Pact
  - National government
    - deficit no larger than 3% of GDP
    - debt-to-GDP ratio of 60%
  - Reduces inflationary pressures (and free-riding)
  - Main purpose of fiscal policy should be stabilization
- But fiscal policy is main tool left to governments where monetary policy is constrained
  - Evidence that most fiscal policy is pro-cyclical
  - Automatic stabilizer

Automatic stabilizers and fiscal stimulus

- Stabilizers go into effect as tax revenues and expenditure levels change and do not depend on specific actions but operate in relation to the business cycle.
- Taxes collected, unemployment benefits and other social spending
- These cyclical changes make fiscal policy automatically expansionary during downturns and contractionary during upturns.
- Automatic stabilizers are linked to the size of the government

Measuring trade with other countries

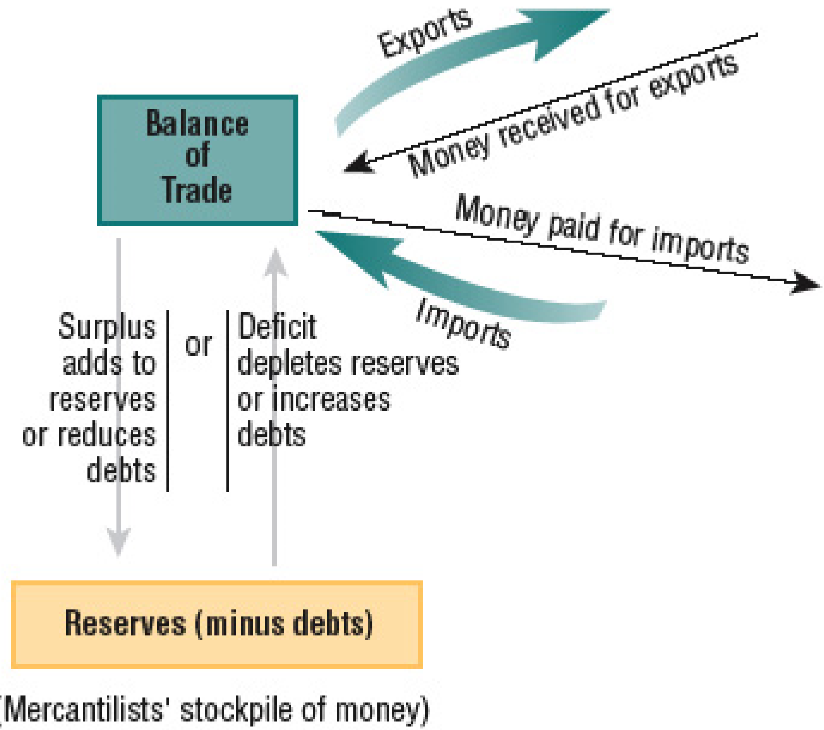


FIGURE 8.3 Balance of Trade

The European Union

	Subject Descriptor	2006	2007	2008	2009	2010	2011
Euro area	Government budget (%GDP)	-1.283	-0.611	-1.942	-6.305	-6.451	-5.098
US	Government budget (%GDP)	-2.036	-2.669	-6.67	-12.884	-11.084	-9.665
Euro area	Government debt (%GDP)	53.285	50.966	53.422	62.308	67.391	70.389
US	Government debt (%GDP)	41.857	42.393	47.637	58.758	65.761	72.699
Euro area	Current account (%GDP)	0.425	0.378	-0.741	-0.406	0.177	0.47
US	Current account (%GDP)	-5.99	-5.107	-4.655	-2.68	-3.19	-2.642
Euro area	General government total expenditure	46.503	45.85	46.776	50.627	50.221	49.326
US	Government total expenditure (%GDP)	35.794	36.581	39.053	43.254	41.409	41.163

A European Economic Recovery Plan (December 2008)

- The Commission is proposing that, as a matter of urgency, Member States and the EU agree to an immediate budgetary impulse amounting to € 200 billion (1.5% of GDP), to boost demand in full respect of the Stability and Growth Pact.

- The second pillar rests on the need to direct short-term action to reinforce Europe's competitiveness in the long term. The Plan sets out a comprehensive program to direct action to "smart" investment.

Other Public Policies

- – Investing in productivity (technology policy)
- – Improving human capital (education)
- – Improving physical capital (infrastructure)
- – External relations (e.g. war expenditures in Iraq)

- In the EU, these public policies mostly not integrated

Euro: Optimal Currency Area?

Common currency:

Benefits: elimination of foreign exchange transactions lead to reduction in costs (0.5% of GDP), increased competition

– The euro is as stable as the best-performing currencies previously used in the euro area countries

Costs: loss of monetary policy

- **Optimal currency area** (Robert Mundell):
  - Countries have to experience similar shocks
  - If not: countries must have high factor (labor) mobility