Introduction to macroeconomics
Macroeconomics is ...

- the study of the economy as a whole
- it deals with broad aggregates
- but uses the same style of thinking about economic issues as in microeconomics.
Some key issues in macroeconomics

• Inflation
  – the rate of change of the general price level

• Unemployment
  – a measure of the number of people looking for work, but who are without jobs

• Output
  – real gross national product (GNP) measures total income of an economy
    • it is closely related to the economy's total output
More key issues in macroeconomics

• Economic growth
  – increases in real GNP, an indication of the expansion of the economy’s total output

• Macroeconomic policy
  – a variety of policy measures used by the government to affect the overall performance of the economy
Inflation in the UK, 1950-99

Source: Economic Trends Annual Supplement, Labour Market Trends
Inflation in selected European countries

% change 1998 compared with 1997

- Germany
- France
- Belgium
- EU
- Finland
- UK
- Spain
- Italy
- Portugal
- Greece

20.5
Inflation in UK, USA and Germany

<table>
<thead>
<tr>
<th>Year</th>
<th>UK</th>
<th>USA</th>
<th>Germany</th>
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<tr>
<td>1960-73</td>
<td>5</td>
<td>3</td>
<td>2</td>
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<td>1973-81</td>
<td>15</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>1981-90</td>
<td>6</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>1990-98</td>
<td>4</td>
<td>2</td>
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% p.a.
Unemployment in the UK, 1950-99

Source: Economic Trends Annual Supplement, Labour Market Trends
Unemployment in selected European countries

% unemployment (ILO measure) 1998

Germany
France
Belgium
EU
Finland
UK
Spain
Italy
Portugal
Greece

0 5 10 15 20
Unemployment in UK, USA and Germany

<table>
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<th>Period</th>
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<td>1960-73</td>
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<tr>
<td>1973-81</td>
<td>6.0</td>
<td>8.0</td>
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<td>1981-90</td>
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<td>1990-98</td>
<td>8.0</td>
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% p.a.
Economic growth in UK, USA and Germany

<table>
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<th>Period</th>
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<th>USA</th>
<th>Germany</th>
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<tr>
<td>1960-73</td>
<td>3.2%</td>
<td>4.1%</td>
<td>4.7%</td>
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<tr>
<td>1973-81</td>
<td>1.0%</td>
<td>2.0%</td>
<td>0.8%</td>
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<tr>
<td>1981-90</td>
<td>1.7%</td>
<td>2.5%</td>
<td>2.2%</td>
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<tr>
<td>1990-98</td>
<td>1.9%</td>
<td>2.8%</td>
<td>2.3%</td>
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The circular flow of income, expenditure and output

Households

S

C

I

C + I

Y

Firms
Government in the circular flow

\[ I + C + G \]

\[ C + I + G - T_e \]

\[ S \]

\[ B - T_d \]

\[ Y + B - T_d \]

\[ Y \]

\[ C + I + G \]
Adding the foreign sector

• To incorporate the foreign sector into the circular flow
• we must recognize that residents of a country will buy imports from abroad
• and that domestic firms will sell (export) goods and services abroad.
GDP and GNP

• Gross domestic product (GDP)
  - measures the output produced by factors of production located in the domestic economy

• Gross national product (GNP)
  - measures the total income earned by domestic citizens

• GNP = GDP + net income from abroad
Three measures of national output

• Expenditure
  – the sum of expenditures in the economy
  – $Y = C + I + G + X - Z$

• Income
  – the sum of incomes paid for factor services
  – wages, profits, etc.

• Output
  – the sum of output (value added) produced in the economy
National income accounting: a summary

- GNP (and GNI) at market prices
  - NYA
    - G
    - I
    - X - Z
  - GDP at market prices
  - NNP at basic prices
  - Deprec'n
  - Indirect taxes
  - National income
  - Profits, rents
  - Self-employment
  - Wages and salaries

- NYA
- Deprec'n

20.16
What GNP does and does not measure

• Some care is needed:
  – to distinguish between *real* and *nominal* measurements
  – to take account of population changes
  – to remember that GNP is not a comprehensive measure of everything that contributes to economic welfare