

ECONOMIC POLICY

Manuela Samek Lodovici

msamek@hsn.it

Economic Policy

It deals with the actions that the economic authorities carry out to:

- a) stabilize the economic cycle in the short run (i.e. to reduce its possible negative effects in terms of **inflation and unemployment**)
- b) support **economic growth and employment** in the long run.

It is based on economic policy models considering the relations between the **policy goals** and the **policy tools** which are under the control of economic authorities.

Goals and tools of economic policy

- **Goals:**

- full employment,
- low inflation,
- currency stability
- low public debt,
- economic growth

- **Tools:**

- *Macroeconomic or demand policies*: monetary and fiscal policies, exchange rate policies which intervene on *aggregate demand* ($AD = C + I + G + (X - Q)$)
- *Microeconomic or structural policies*: industrial policies, labour market policies, trade policieswhich intervene on *aggregate supply* (i.e: aggregate output Y which depends on the conditions of the product and the labour markets)

Some Questions

- Should economic authorities intervene to improve the functioning of the economic system?
- When it is better to intervene?
- Which tools are more effective to reach the goals of economic policy?
- Is it better to follow constant rules or to maintain a discretionality in policy making?

Macroeconomic policies

- What are the effects of macroeconomic policies?
- How to predict macroeconomic policy?

Growth policies

- Why some countries are rich and others are not?
- Is there a convergence process among different countries or not?
- What are the determinants of economic growth? Are institutions relevant in supporting economic growth?

Some basic definitions: GNP and GDP

- **Gross Domestic Product (GDP):**
 - Measures aggregate output produced *within a country*
 - relevant measures are:
 - the **GDP rate of growth** = $(Y_t - Y_{t-1}) / Y_{t-1}$;
 - per capita GDP** = $Y / \text{Population}$
 - Difficult to measure: sum of different things; risk of double counting; risk of underestimation if relevant share of black economy.
 - nominal vs real GDP:
 - ❖ *Nominal GDP* measures the value of goods and services produced (output) in a given period at their current prices (prices of that period). Its growth rate is due to increases in quantity produced and increases in prices
 - ❖ *Real DGP*: estimation of the *physical output* in the economy, by valuing the goods and services produced in different periods at constant prices (prices of a base year), in order to isolate the changes in quantities produced.

Some basic definitions: Inflation

- Inflation: rate of increase of prices
- Measured by the rate of increase in *price indexes*:
 - ***GDP Deflator***: *Nominal GDP / Real GD*
 - ***Price index***: *change in the prices of a given basket of goods (Consumer price index or Producer Price index)*

Some basic definitions: Unemployment

- People willing to work and looking for work
- **Unemployment rate:** U/L

Labour Force $L =$ Employed (N) + Unemployed (U)

- $L <$ Population of working age: some people of working age are inactive: not in the labour force and discouraged workers (recessions)
- High U often comes together with low Participation rates: $L/\text{Population of working age}$
- **Phillips curve:** In the short run there is a negative relation between inflation and unemployment which vanishes in the long run, when the unemployment rate is independent of the inflation rate.

Some basic definitions: deficits

- Expenditure $>$ Income
- Trade Deficit: Imports $>$ Exports
- Budget deficit : Gov.Expenditure $>$ Gov.
Revenue

Aggregate demand

- Shows the total output demanded in an economy at given price levels. It depends on the condition of the goods and monetary markets and can be shifted by monetary and fiscal policy.

- $AD = C + I + G + (X - Q)$

$$C = C(Y - T)$$

$$I = I(Y, i)$$

$$AD: Y = Y(M/P, G, T)$$

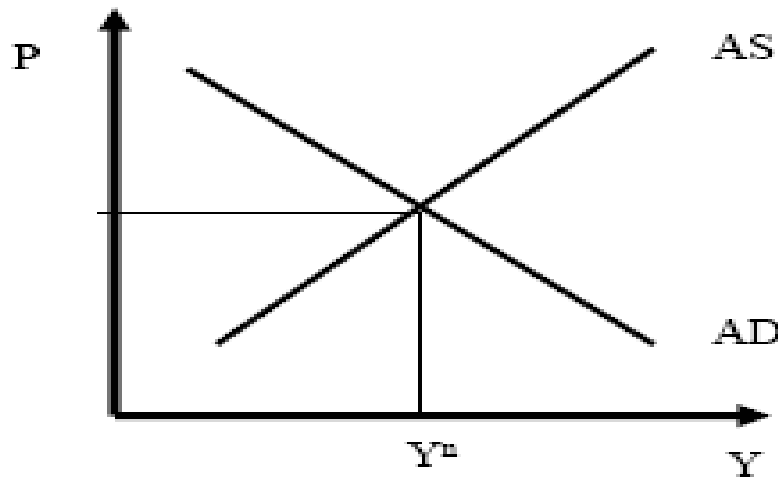
- It is negatively sloped because a reduction in price levels rise real balances (increase the purchasing power of the public cash balances), reduce interest rates and therefore rises income and spending (C and I).

Aggregate supply

- Shows the total value of real output (real GDP) that is made available at various price levels. It depends on the conditions of the labour and the production markets, and on technological change
- AS: $P = P_e + 1/\alpha (Y - Y^*) + Z$
where: Y^* = output at full employment;
 $\alpha = Y/N$ (labour productivity);
 P_e = expected price level
 Z = labour and product market regulations
- The AS curve is **upward sloping in the short run** due to wages and other factor costs' stickiness and the possibility to use more labour and other production factors. But it is **vertical at the full employment output in the long run**, when wages and prices have completely adjusted ($P=P_e$) and when labour and other production factors become scarcer and more expensive as full employment is getting closer.
- AS shifts due to changes in technology, in wages and other factor costs, in business taxes and government regulations of the labour and product markets, in price expectations.

Macroeconomic policies affect aggregate demand (AD), structural microeconomic policies affect aggregate supply (AS)

AD-AS: Canonical Shocks



Monetary expansion; fiscal expansion; oil shock

Business cycles and stabilization policies

- **Business cycles:** fairly regular cycles of booms, declines, recessions and recoveries in aggregate economic activity around a path of long term growth. In cycles we see movements in GDP, inflation and unemployment.
- **Stabilization policy:** use of macroeconomic policies (monetary and fiscal policies) to smooth fluctuations in national income due to business cycles.

| 2006 | EU25 | EU15 | US |
|---|-------------|-------------|-----------|
| Population (millions) | 459 | 385 | 296 |
| GDP (in 1000 million PPS current prices) | 10798 | 9822 | 10362 |
| Employment rate | 63.8 | 65.2 | 71.5 |
| Partecipation rate | 69.7 | 70.6 | 75.4 |
| Unemployment rate | 8.7 | 7.9 | 5.1 |

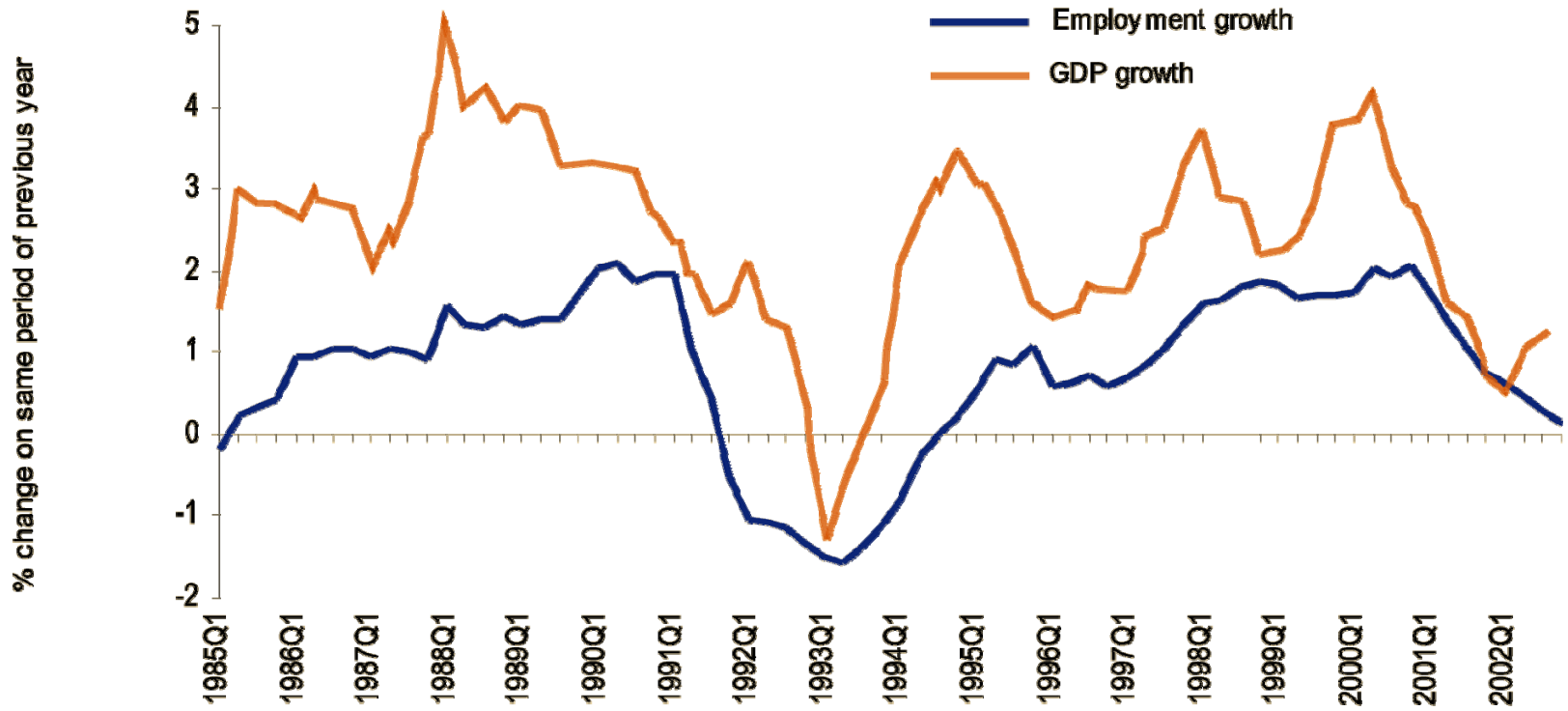
Economic trends EU and US

(annual average percentage changes)

| | 1991-1996 | | 1997-2002 | |
|---------------------|------------------|-----|------------------|-----|
| | EU15 | US | EU15 | US |
| GDP | 1.5 | 3.2 | 2.4 | 3.0 |
| Employment | -0.3 | 1.7 | 1.4 | 1.0 |
| Hourly productivity | 2.2 | 1.4 | 1.5 | 2.2 |

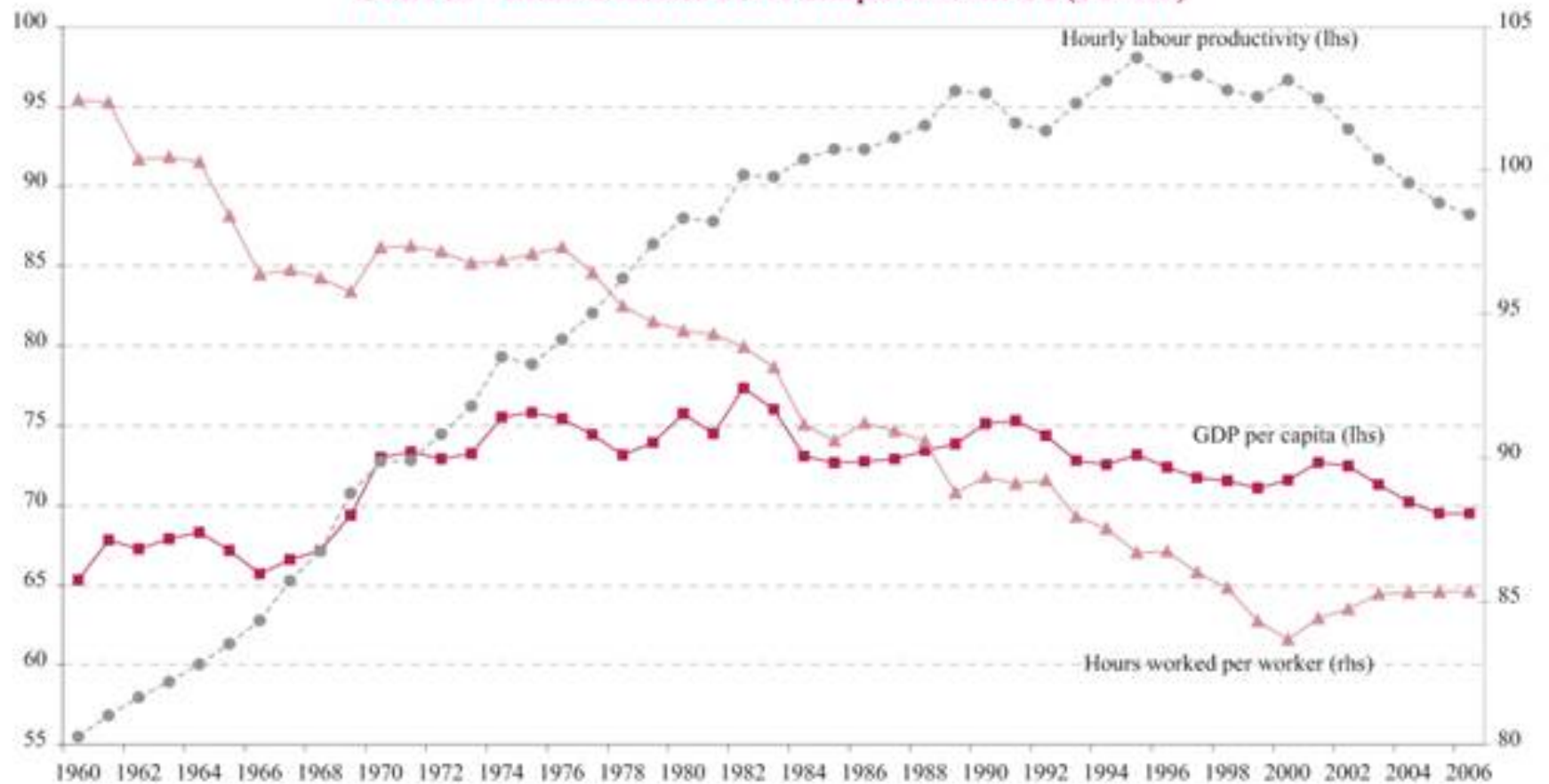
Source: Tabellini-Wyplosz from Kok report of the Employment task force, nov.2003

Chart 7- EU 15 GDP and Employment Growth, 1985-2002



Source: Eurostat and OECD

Chart 80 – Relative indices EU-15 compared to the US (US=100)



Source: Ameco, GGDC-OECD, and DG EMPL calculations.

Main issues in the debate on economic policy

- Selecting tools and goals
- Uncertainty in economic policy
- Activisims vs laissez faire
- Discretionary vs policy rules
- Timing of intervention

Problems

- **Trade offs:** in the short term economic authorities are limited in the number of goals they may achieve with each tool. For example, the trade off between inflation and employment goals: policies to reduce inflation increase unemployment in the short run, and vice versa
- There are **lags** in the effects of policies, which reduce the effectiveness of economic policies
- There is **uncertainty** in the effects of policies
- There is an important role of the **expectations** of economic agents to be considered and **credibility** is an important issue in economic policy

1. Selecting tools and goals

- To solve a problem of economic policy it is necessary to select the most effective tools, among those available, to reach the defined goals.
- **Tinbergen Rule:** It is possible to find a unique solution to this problem if the number of tools is the same as the number of goals (necessary conditions) and if the tools are independent one from the other:
 - if number of goals $<$ number of tools the system is over-determined: we have to choose the most effective tools (i.e. the one which is relatively more effective for each goal)
 - if number of goals $>$ number of tools the system is under-determined: we have to find additional tools or reduce the number of goals.

2. Uncertainty and economic policy

- Uncertainty on the actual structure of the economy (do we know how our economy is working? Are economic models correct in interpreting the economy?)
- Uncertainty on current economic conditions (lack of updated data)
- Uncertainty on the effects of economic policy and their timing (Lags)
- Uncertainty on how the economic agents will respond to economic policies: the role of expectations in determining private sector responses to policy

Uncertainty and lags in economic policy

- Economic disturbances may not be completely anticipated:
 - They may come from changes in other countries
 - They may be due to the policy makers themselves
 - There may be lags in economic policy effects due to:
 - ❖ *recognition lags* (difficulties in understanding the exact nature of the problem to be tackled and its nature: temporary or permanent)
 - ❖ *decision lags* (is it necessary to intervene ?)
 - ❖ *action lags* (how long does it take for the economic policy to have effects?)

The Recognition Lags

- The recognition lag is the period that elapses between the time a disturbance occurs and the time policy makers recognize that action is required.
- This lag could be negative if the disturbance is predicted and policy actions are taken before it even occurs
- It may be positive when it takes time to be aware a disturbance is occurring, due to lack of updated data and information.

The Decision and Action Lags

- The **decision lag** is the delay between the recognition of the need of action and a policy decision
- The **action lag** is the time needed for the policy to have effects
- Usually decision and action lags are much shorter in monetary policy than in fiscal and structural policies
- For these reasons often *automatic stabilizers* are usually adopted which are automatically activated when a certain disturbance takes place:
 - *unemployment benefits* are an automatic stabilizer of income when a recession takes place and unemployment increases. This helps consumption expenditure not to fall as much as it would without unemployment benefits
 - *fiscal drag*: the inflation risks of overheated economies are contained by the automatic increase in taxation

The Lucas Paradox and role of expectations

- Usually economic models are assuming that relations among economic variables are fully known and constant in time.
- In the real world, instead, the behaviour of economic agents is affected by economic policies, since economic agents behave on the basis of **rational expectations**.
- Hence the economic system cannot be considered as static and policy makers should consider how agents form their expectations in designing economic policy.
- If economic authorities are not **credible**, agents will not change their expectations and policies will be ineffective.

Discretionality vs laissez faire

- What is the optimal behaviour of economic policy given these uncertainties?
- **Discretionality or activism** in economic policy is aimed at reducing the costs of business cycles and of economic adjustment (**fine tuning**): the idea is that with no intervention markets adjustment may take time and could be very costly in terms of unemployment and income losses.
- **Laissez faire** is advocated by those economists who think that intervention may increase inefficiencies and the economic costs of adjustment. Given rational expectations, discretionary policies may be subject to **dynamic inconsistency** and lose their credibility, becoming ineffective. According to these economists economic policy (and especially monetary policy) should follow **permanent policy rules** (such as a constant growth rate in monetary supply, no matter what happens).