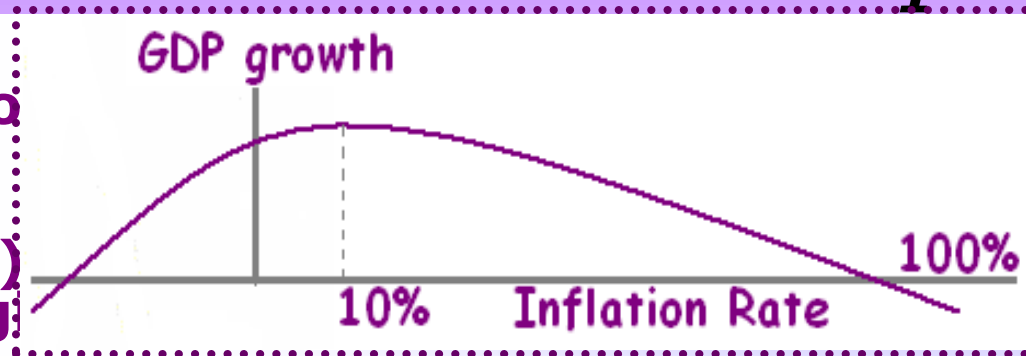


Nature & Impacts of Inflation

1

Rate of Inflation:

- ✓ deflation (negative inflation)
- ✓ low (up to 5%)
- ✓ moderate (5-30%)
- ✓ high, galloping (30-100%)
- ✓ hyperinflation (\geq three-digits)



Major price indexes: CPI, PPI, GDP deflator (*see topic two*).

ANTICIPATED INFLATION is of little if any harm. The costs associated with or anticipated inflation include:

- ✓ “*menu costs*”: actual physical costs of having to change prices (price tags);
- ✓ “*shoe-leather costs*”: the time and effort people take to minimize the effect of inflation.

UNANTICIPATED INFLATION costs and impacts are wide-spread and much more harmful. They include distortions in prices, outputs, employment as well as redistribution of income and wealth:

- ✓ *price effects*: as some prices rise faster than others, so some people are more affected than others
- ✓ *income effects*: as some prices increase faster than others, some incomes increase faster than others.
- ✓ *wealth effects*: income redistribution - unanticipated inflation favors debtors, profit seekers, and risk-taking speculators. It hurts creditors, fixed-income classes, and timid investors.

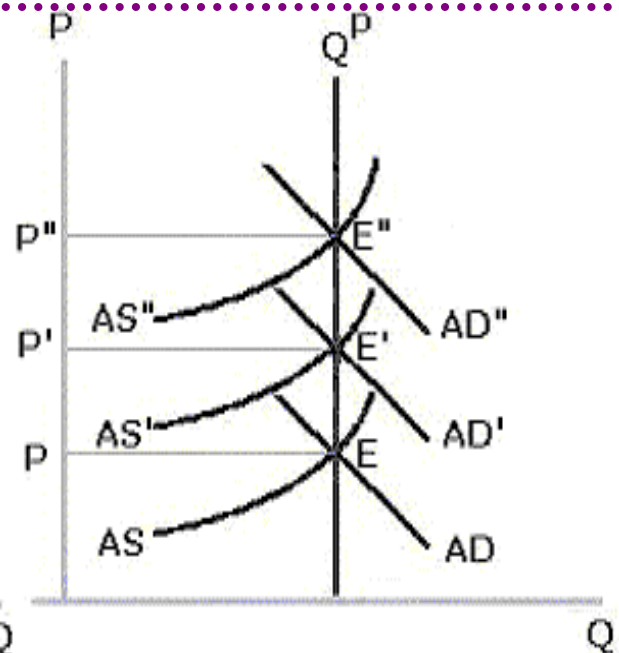
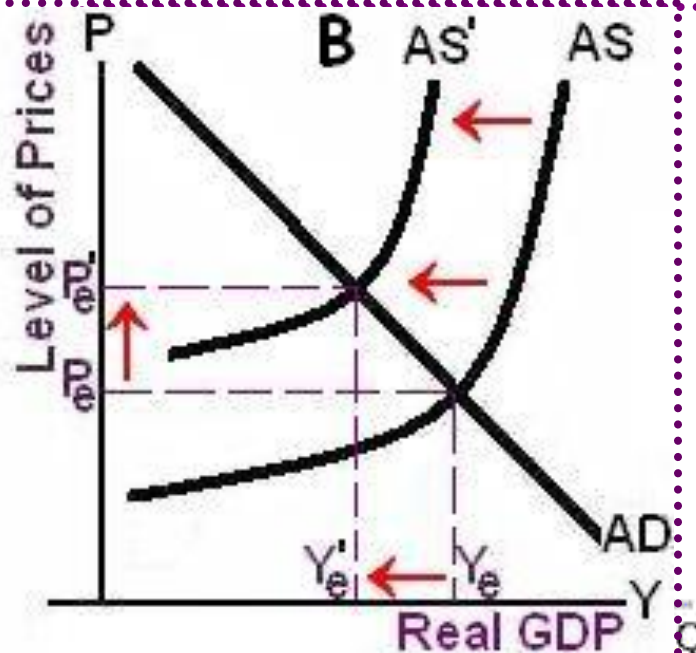
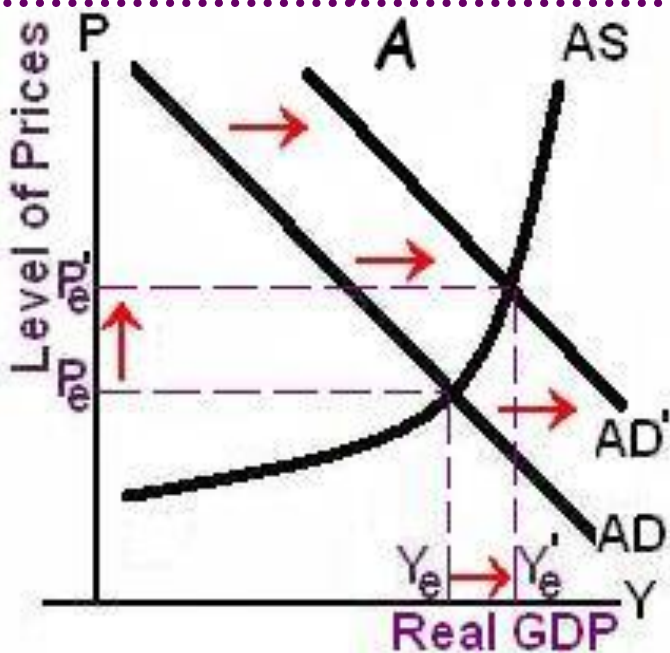
Inflationary Shocks

2

➤ **Inertial (expected, underlying, core) Inflation**: expected rate of inflation built into contracts and arrangements. The **inertial rate** of inflation is a short-run equilibrium and persists until the economy is shocked

➤ The major kinds of shocks that propel inflation away from its inertial rate are **Demand-Pull** and **Cost-Push**

- ✓ **Demand-Pull (Demand-Shock) Inflation**: AD rises faster than productive potential (too much spending chasing too few goods)
- ✓ **Cost-Push (Supply-Shock) Inflation**: result of rising costs (wages, oil prices, etc.) even in periods of high unemployment and idle capacity.



NAIRU & the Natural Rate of Inflation

- Relatively harmless **inertial inflation** in absence of AD/AS shocks is close to a concept of ***the natural rate of inflation*** or ***non-accelerating inflation rate of unemployment (NAIRU)***. As economy has certain ***natural level of unemployment (NLU)*** even while in the situation of full employment (see *topic 7*), that level of unemployment will have corresponding level of natural rate of inflation.
- The definitions of ***the natural rate of unemployment*** and ***NAIRU*** are nearly circular. What is this natural rate? It is the rate of unemployment at which inflation is equal to inertial (expected) inflation. What is ~~inertial~~ (expected) inflation? It is the inflation rate that prevails when unemployment is equal to its natural rate.
- As long as unemployment does not deviate from its natural level, inflation will also not change - it will not accelerate away from non-accelerating inflation rate of unemployment.

Phillips Curve (PC)

➤ **Phillips Curve (PC)** - inverse relationship between *unemployment* and *inflation* (or, changes in *money wages*):

✓ **Short-Run PC:** In the short run, lowering one rate means raising the other. But the short-run PC tends to shift over time as expected inflation and other factors change.

✓ **Long-Run PC:** economy rests at the minimum rate of unemployment consistent with steady inflation - level of *unemployment* at which labor and product markets are in inflationary balance (NAIRU: *Non-Accelerating Inflation Rate of Unemployment*)

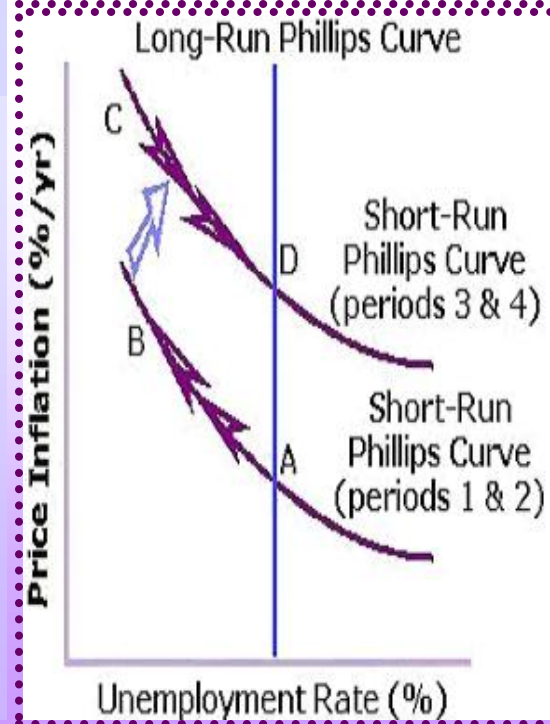
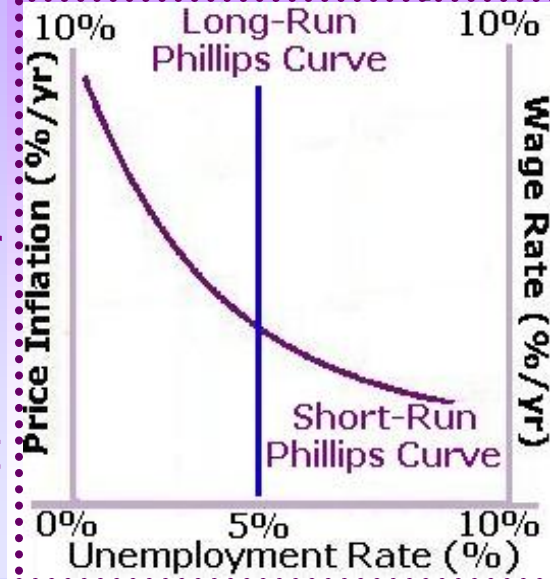
➤ **Example: "Boom Cycle":**

- ✓ **Period 1 (A):** economy is at its sustainable rate of U
- ✓ **Period 2 (B):** expansion lowers U rate, wages & prices increase
- ✓ **Period 3 (C):** inflationary expectations shift PC up.
- ✓ **Period 4 (D):** contraction brings output back to potential level, U returns to sustainable level with higher than initial expected rate of inflation.

➤ **Conclusions:**

- ✓ There is a minimum level of **U** that an economy can sustain in the long run (**NAIRU**)
- ✓ A government might use monetary & fiscal policies to drive the **U rate** below the sustainable rate, although at the price of rising inflation

4



Lowering NAIRU & Anti-Inflationary Policies

5

- ***In the short run*** it is impossible to achieve simultaneously both low unemployment, and price stability. Therefore, in the short run it is governments' choice to target along the short run Phillips curve's trade-off between unemployment and inflation using standard tools of the fiscal and monetary policy
- ***In the long run*** the only reliable way to achieve lower unemployment and lower inflation is to design special policy affecting NAIRU. This is usually accomplished by addressing either unemployment, or inflation sides of the couple:
 - **Unemployment measures include:**
 - ✓ ***improve labor market services***
 - ✓ ***develop training programs***
 - ✓ ***remove government obstacles***
 - **Anti-inflationary measures include mostly incomes anti-inflationary policies:**
 - ✓ ***wage-price controls or voluntarily wage-price guidelines***
 - ✓ ***market strategies to restrain wage & price increases***
 - ✓ ***tax-based incomes policies***
 - ✓ ***profit-sharing policies***

- ✓ **basics of inflation: definitions, measurements**
- ✓ **types and costs of inflation**
- ✓ **sources of inflation**
- ✓ **natural rate of inflation - NAIRU**
- ✓ **Phillips curve: short-run and long-run**
- ✓ **lowest sustainable rate of unemployment**
- ✓ **anti-inflationary policies: short-run and long-run**

Course Web Support:

- <http://www.skylinecollege.info/mosesov/macro/>
- www.mhhe.com/economics/samuels17/students/summ32.mhtml