

Keynesian legacy:

- importance of the *interrelationships among markets* (goods, money, bonds, labor)
- *effective demand* as main determinant of equilibrium output
 - changes in aggregate demand components (especially private sector investments) as sources of cyclical fluctuations
- possibility of *equilibrium with unemployed resources*, particularly labor
 - key role for (especially downward) nominal wage rigidity; however, also perfectly flexible prices unable to restore full employment equilibrium

- role for *demand management stabilization policies*: fiscal policy and (to a lesser extent) monetary policy
- impulse to *macroeconomic analysis* (econometric models with simultaneous equations) and to the development of systems of *national accounting*

Neoclassical synthesis (1950s and 1960s)

- *formalization* of the interrelationships among markets (in a static framework) based on:
 - IS – LM* (Hicks 1937) with the addition of the labor market (Modigliani 1944)
- *integration* of the walrasian (perfectly competitive general equilibrium) analysis of the *long run* with the keynesian analysis of *short run* fluctuations:
 - distinction between a “long run” horizon, over which the main neoclassical tenets (particularly, monetary neutrality) hold, and a “short run” horizon, over which price adjustments (as an equilibrating mechanism) have not yet restored equilibrium

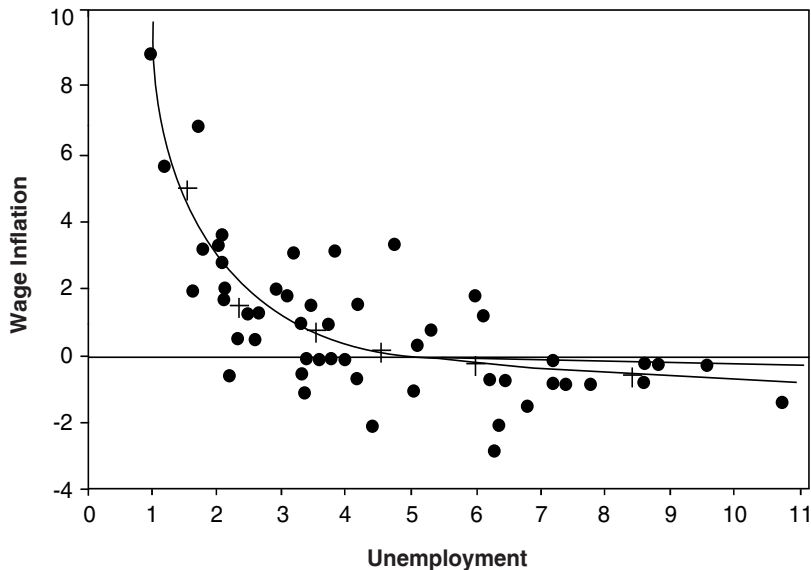
- *aggregate demand modelling* based on the *IS – LM* scheme, with theoretical extensions and empirical analysis of the main behavioral functions in the goods and money markets:
 - *consumption*: “life-cycle” theory (Modigliani) and “permanent income” theory (Friedman)
 - *investment*: “q” (Tobin)
 - *money/bond demand*: theory of liquidity preference (Tobin)

- *aggregate supply*: simple ad hoc (with no rigorous microeconomic foundations) mechanism determining wage and price adjustments over time in response to excess demand/supply in the labor market

⇒ *policy* :

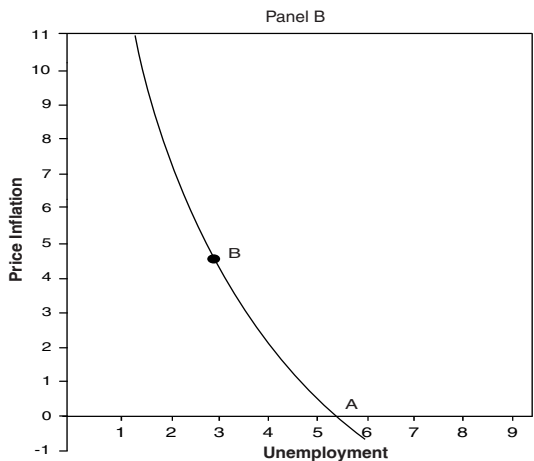
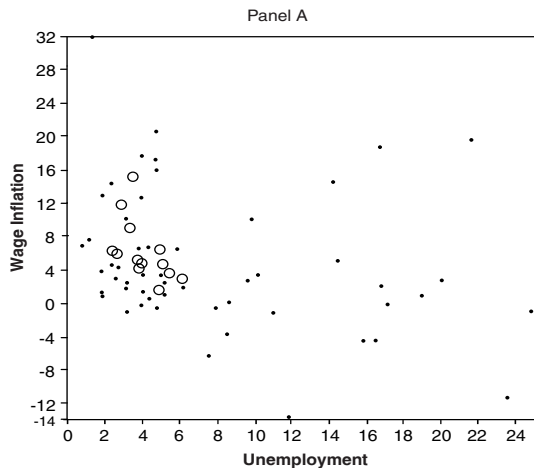
adoption of the “*Phillips curve*” as a description of the trade-off between inflation and unemployment, interpreted as a menu of policy choices (Samuelson-Solow) fully exploitable by policymakers

Figure 1 Original Phillips' Curve for UK (1861-1913)



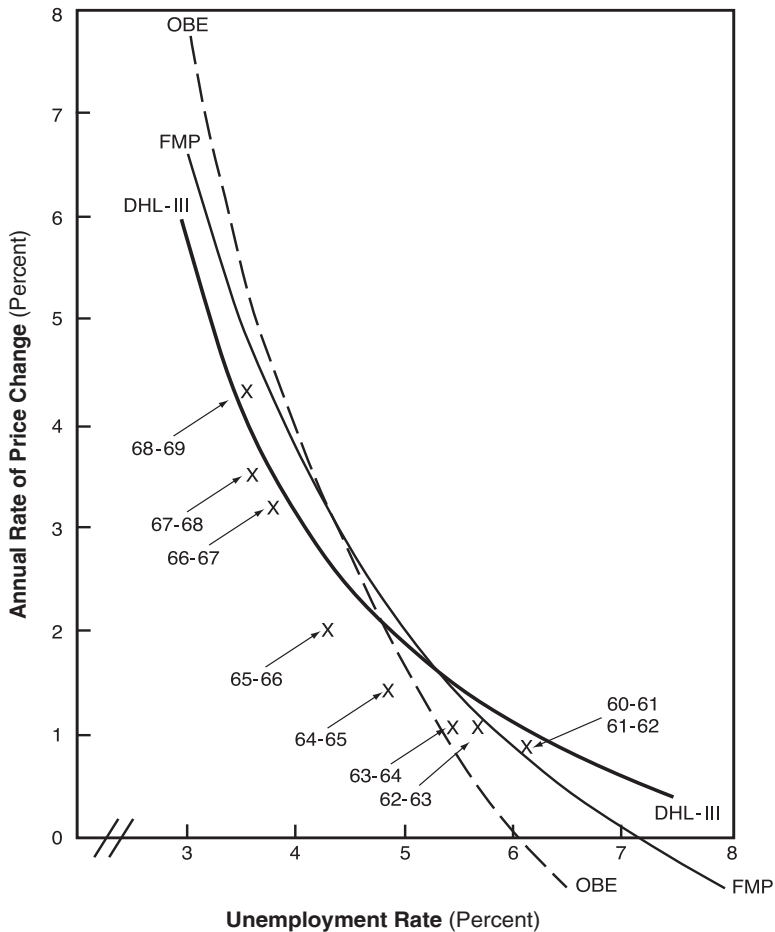
Notes: This is Figure 1 from Phillips (1958), displaying the relationship between unemployment and wage inflation over 1861–1913. The dots represent annual observations, while the crosses represent trade cycle averages.

Figure 2 Phillips Curves of Samuelson-Solow (1960) for the US: 1890-1958



Notes: Panel A shows annual unemployment and wage inflation in U.S. data (this is

Figure 3 The Long-Run Tradeoff in Major US Macroeconomic Models



Problems:

- *empirical* side:

end of the 1960s and first half of the 1970s: period of high and persistent inflation coupled with increasing unemployment

Figure 4 Inflation and Unemployment in the US 1955–1996

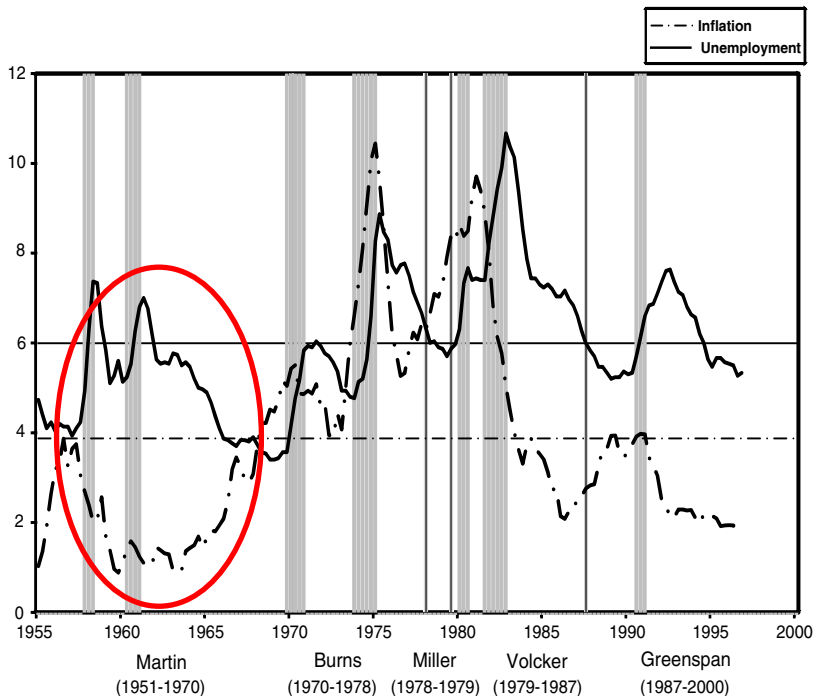


Figure 4 Inflation and Unemployment in the US 1955–1996

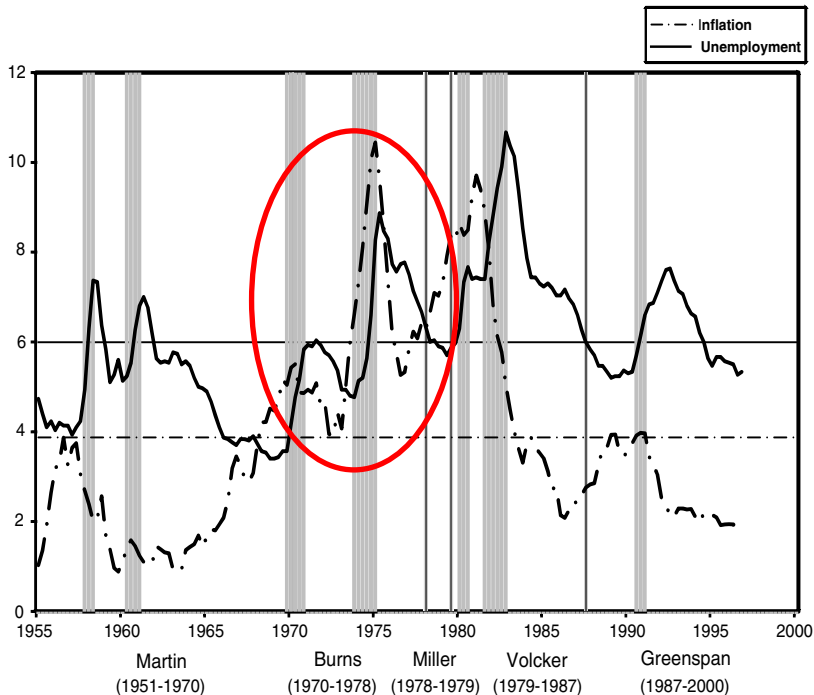
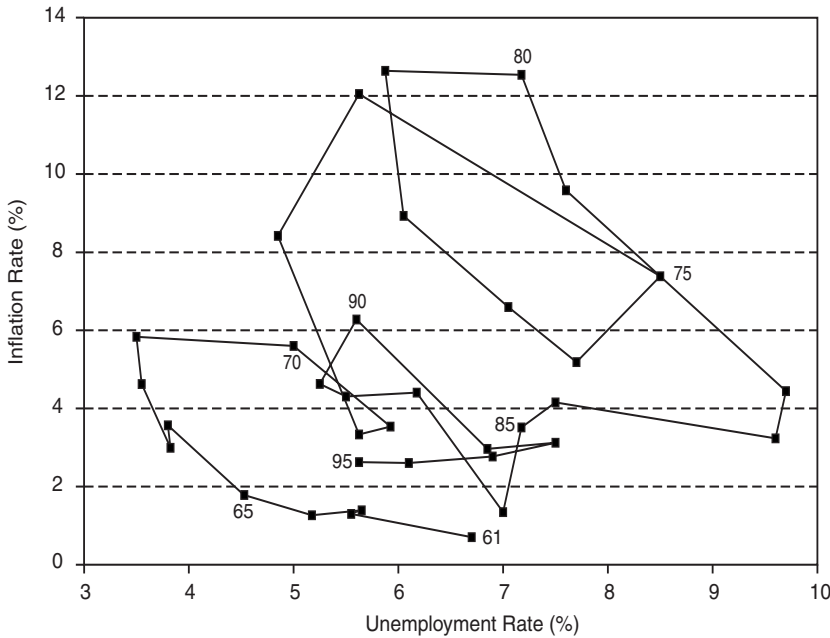
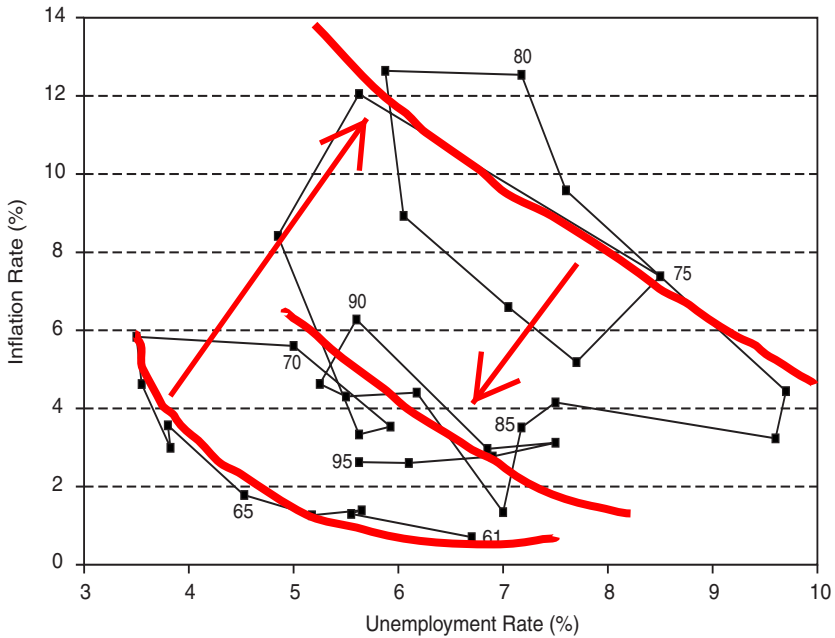


Figure 5 Inflation-Unemployment Relationship in the US 1961-1995



Notes: Inflation rate is seasonally-adjusted CPI, Fourth Quarter.

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- *empirical* side:

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- *theoretical* side:

inability of the neoclassical synthesis model to provide microeconomic foundations for the dynamic process of wage and price adjustment;

unsatisfactory assumptions on expectations formation in modelling agents' behavior