Monetary Policy, Fiscal Policy, and the Government Budget

Monetary Policy, Fiscal Policy

• Introduction
  – IS-LM model determines Y(e), r
  – Y(e) may or may not equal Y(n)
  • Can use monetary or fiscal policy to close gap
  – Under normal circumstances
    • Monetary expansion raises Y(e), lowers r
    • Fiscal expansion raises Y(e), raises r
  – Opposite for monetary or fiscal contraction

Monetary & Fiscal Policy

• Introduction (continued)
  – Special circumstances
    • Extreme conditions when monetary, fiscal policy are ineffective
  – Government budget balance
    • Endogenous and simultaneous
    • Structural versus cyclical budget balance
  – Long run effects of sustained budget deficits

Monetary & Fiscal Policy

• Strong & Weak Effects of Monetary Policy
  – IS-LM Model
    • Exogenous variables
      – Business and consumer optimism
      – Monetary policy: money supply
      – Fiscal policy: government spending, autonomous taxes, tax rates
      – Autonomous net exports
      – The price level
    • Endogenous variables
      – real income and output
      – the interest rate

Monetary & Fiscal Policy

• Strong & Weak Effects of Monetary Policy
  – Strong Effects of Monetary Expansion
    • LM curve is steep
      – low interest responsiveness of L
    – With low r sensitivity demand for money must be raised by higher Y
    – Strong gain in Y, large drop in r
    » Figure 5-1

Monetary & Fiscal Policy

• Strong & Weak Effects of Monetary Policy
  – Weak Effects of Monetary Expansion
    • LM curve is flat
      – high interest responsiveness of L
    – With high r sensitivity demand for money must be raised by lower Y
    – Weak gain in Y, small drop in r

Figure 5-1
An Increase in the Money Supply with a Normal LM Curve and a Vertical LM Curve

Monetary & Fiscal Policy

• Strong & Weak Effects of Monetary Policy
  – IS-LM Model
    • Exogenous variables
      – Business and consumer optimism
      – Monetary policy: money supply
      – Fiscal policy: government spending, autonomous taxes, tax rates
      – Autonomous net exports
      – The price level
    • Endogenous variables
      – real income and output
      – the interest rate
Monetary & Fiscal Policy

• Strong & Weak Effects of Monetary Policy
  – Weak Effects of Monetary Expansion
    • Steep IS Curve
      – Low interest responsiveness of A(p)
      » Figure 5-2 (top)
      – Little change in Y(e), large change in r
    • Flat LM Curve
      – Extreme interest responsiveness of L
      » Figure 5-2 (bottom)
      – Little change in Y(e), large change in r

• Strong & Weak Effects of Fiscal Policy
  – Strong effects of fiscal policy
    • Flat LM Curve
      – Extreme interest responsiveness of L
      » Figure 5-3 (top)
      – Full multiplier effect, no crowding out
    – Weak effects of fiscal policy
    • Vertical LM Curve
      – Zero interest responsiveness of L
      » Figure 5-3 (bottom)
      – No multiplier effect, complete crowding out

• How Large Are Actual Multipliers
  – Fiscal policy multiplier fades because higher r
    • Reduces autonomous spending
    • Raises the foreign exchange value of the dollar, making exports more and imports less expensive
    • Increase debt burdens
    • Tend to depress the stock market
      – wealth effect
      – equity cost of capital
    • Raises the price level
Monetary & Fiscal Policy

• The Fiscal-Monetary Policy Mix
  – The Fiscal Multiplier Depends on the Monetary Response
    • No monetary response
      » Figure 5-5a
    • Accommodating monetary response
      – Stabilize r
      » Figure 5-5b
    • Offsetting monetary response
      – Stabilize Y
      » Figure 5-5c

Monetary & Fiscal Policy

• The Fiscal-Monetary Policy Mix (con’t)
  – The Monetary-Fiscal Mix
    • Can achieve any Y but at different r’s
      – Easy money, tight fiscal
        » Composition of Y
      – Tight money, easy fiscal
        » Composition of Y
    • Which composition of Y is better?
      – What kind of G?
        » Consumption versus Investment
      – What kind of T?
        » Personal versus Business

Monetary & Fiscal Policy

• How Large Are Actual Multipliers (con’t)
  » Figure 5-4
  – Monetary policy multiplier fades because
    • Rising Y raises L and r which dampens spending
    • Of rising prices

Monetary & Fiscal Policy

• The Pervasive Effects of a Persistent Government Budget Deficit
  – Crowding out of Private Investment
  – Crowding out of Net Exports
    • Budget constraint
      – $G - T = S - (I + NX)$
      – Increase in $(G - T)$ can be financed by
        » increase in S
        » decrease in I
        » decrease in NX (or increase in foreign borrowings)
      – Typically $(G - T)$ and NX are highly correlated
Monetary & Fiscal Policy

• The Pervasive Effects of a Persistent Government Budget Deficit (con’t)
  – Impact on Future Generations
    • Lower domestic investment
    – Effect on productivity and income
    • Lower foreign investment/more foreign borrowing
    – Effect on productivity and income
    • Lower wealth

Monetary & Fiscal Policy

• The U.S. Government Budget Deficit: Historical Perspective
  – Wars and the Increasing Size of Government
    • G spikes up in war years
    • T spikes up in war years (but less than G)
    • Size of government increasing over time
    • Persistent budget deficits between 1980 - 1997
  – The Effects of Recessions
    • Tax revenues decline, transfer payments rise
    • Budget surplus declines/budget deficit widens

Monetary & Fiscal Policy

• Structural and Cyclical Budget Deficits
  – Budget Arithmetic
    • G = G(a)
    • T = T(a) + tY
    • Budget surplus = T - G = T(a) + tY - G(a)
      – Autonomous component: T(a) - G(a)
      – Induced component: tY
    • Budget line
      » Figure 5-7

Monetary & Fiscal Policy

• Structural & Cyclical Budget Deficits (cont)
  – Automatic Stabilization
    • Induced changes in budget deficit
      » Figure 5-7
  – Discretionary Fiscal Policy
    • Changes in G
      » Figure 5-8
    • Changes in t
  – How Do We Separate Automatic and Discretionary Changes?
Monetary & Fiscal Policy

• Structural & Cyclical Budget Deficits (cont)
  – Natural Employment Surplus/Deficit (NED)
    - Budget surplus = \( T - G = T(a) + (Y - G(a)) \)
    - NED = \( T(Y(n)) - G = T(a) + tY(n) - G(a) \)
  - Surplus/deficit measured at \( Y(n) \)
  - Changes in NED reflect changes in policy, not \( Y \)
  - Also called structural deficit

Monetary & Fiscal Policy

• The Actual & Natural Employment Deficit: Historical Behavior
  - Figure 5-9
  - Gap is cyclical deficit
  - 1975-76 tax cut
  - 1982 tax cut/defense spending increase

Monetary & Fiscal Policy

• National Saving and Budget Deficits
  – Fiscal Policy and National Saving
    - \( S + (T - G) = I + NX \)
    - National saving = domestic and foreign investment
  – \( I = S + (T - G) - NX \)
    - Figure 5-10
  – Solutions to the National Saving Squeeze
    - Increase foreign borrowings
    - Increase private saving rate
    - Reduce budget deficit/increase budget surplus
Monetary & Fiscal Policy

• Conclusion: The Role of Monetary and Fiscal Policy
  – Standard IS - LM Model
    • Monetary and fiscal policy are equally suitable for achieving \( Y(n) \)
  – In real world
    • Monetary policy better at achieving \( Y(n) \)
      » faster, more flexible
      » short-term business cycle orientation

Monetary & Fiscal Policy

• Conclusion (continued)
  – Standard IS - LM Model (continued)
  • In real world (continued)
    » Fiscal policy becomes responsible for \( r \)
      » Slower, less flexible
      » Long-term growth orientation
      » International consequences
      † Foreign trade balance
      † Capital flows
      † Foreign exchange rates