The Role of Expectations in Monetary Policy
ECON 4673
Dr. Keen

Answers

1. *What does the Lucas critique say about the limitations of our current understanding of the way in which the economy works?*

   The Lucas critique says that policymakers' beliefs about how their policy decisions will impact the economy are generally wrong, since it is difficult for policymakers to accurately predict how people will respond to their policy changes. This problem highlights the limitation to our understanding of how the economy works in practice. Specifically, current research cannot fully explain and accurately model the behavior of individuals, and as a result, policymakers have to rely on fundamentally flawed models to estimate the economic effects of their policies.

2. *Can greater central bank independence make the time-inconsistency problem worse?*

   With more independence, central banks have less accountability in their pursuit of low and stable inflation. Therefore, it is easier for these central banks to give the appearance of desiring to pursue low inflation policies, while in actuality pursuing more expansionary policies to lower the unemployment rate and increase output. One way for an independent central bank to reduce the temptation of the time-inconsistency problem is through greater transparency and communication. In that case, the central bank will have less of an opportunity to pursue overly inflationary policies that increase output and lower unemployment in the short-run.

3. *What are the arguments for and against monetary policy rules?*

   Advocates of monetary policy rules argue that they solve the time-inconsistency problem by 1) achieving good long-run economic outcomes; 2) preventing a repeat of serious policy mistakes that have been made in the past; and 3) avoiding the political business cycle where policymakers pursue expansionary policies prior to an election followed by contractionary policies afterwards. Opponents argue that monetary rule rules 1) are too rigid and deny policymakers the flexibility to respond to unforeseen problems; 2) do not allow the policymaker any judgment when setting monetary policy; 3) may be based on incorrect models of the economy; and 4) will lead to bad economic outcomes if the economy undergoes structural changes.

4. *In some countries, the president chooses the head of the central bank. The same president can fire the head of the central bank and replace him or her with someone else at any time. Explain how that situation impacts the conduct of monetary policy. Do you think such a central bank will follow a monetary policy rule, or will it engage in discretionary policy?*

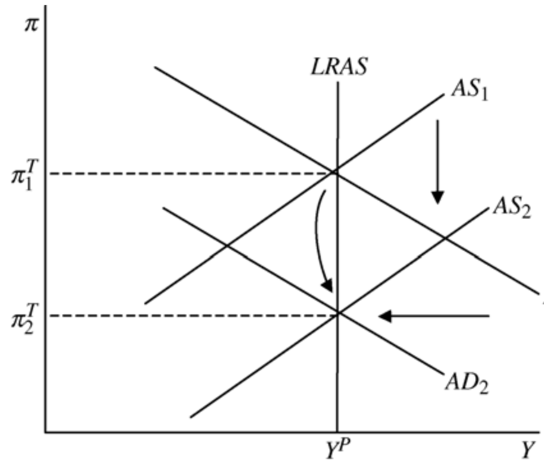
   When a president has the authority to hire and fire the head of the central bank, it is quite plausible that the conduct of monetary policy will be discretionary. Adherence to monetary policy rules involves, at times, imposing some hardship on the economy. If the president can pressure the head of the central bank, then monetary policy will likely be discretionary and will follow the dictates of the president or his/her political party. Not surprisingly, most countries, where the president has such authority, usually experience much higher inflation than countries with a much more independent central bank. Furthermore, frequent changes in monetary policy (and fiscal policy) usually result in increased output volatility and low economic growth. Although most central banks are subject to some pressure from politicians, most economists believe some level of central bank independence is necessary to achieve long-run price stability.

5. *How is constrained discretion different from discretion in monetary policy? How do the outcomes of these policies differ?*

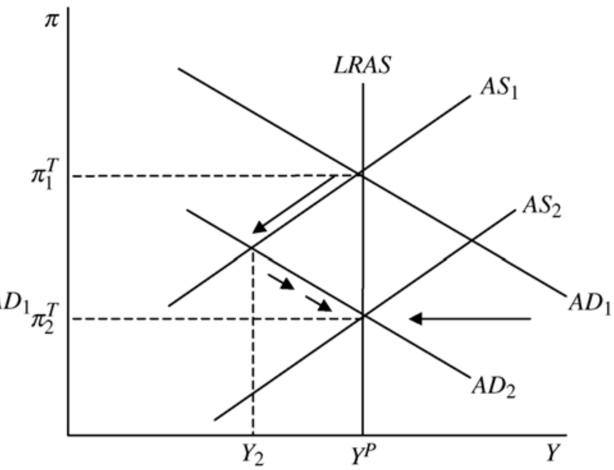
   Constrained discretion is a more transparent and disciplined type of discretion in which the general objectives and tactics of the policymaker are known in advance. This setup allows the policymaker some flexibility to pursue policies consistent with their known objectives, but it also limits the ability of policymakers to pursue overly expansionary policies that are not consistent with their long-run inflation goals. The difference between constrained discretion and pure discretion is observed in their outcomes. Under constrained discretion, policymakers usually have more credibility so inflation and inflation expectations are lower than under pure discretion. The benefits from constrained discretion occur without giving up much of the policymakers' flexibility to adjust policy in response to changes in the economy.

6. *Suppose country A has a central bank with full credibility while country B has a central bank with no credibility. How does the credibility of each country's central bank affect the adjustment of the short-run aggregate supply curve to a monetary policy announcement? How does this result affect output stability? Use an aggregate demand and supply graph to support your answer.*

   In country A, the public is more likely to believe announcements about future monetary policy changes, and therefore, will adjust inflation expectations in anticipation of those future policy changes. As a result, the short-run aggregate supply curve will adjust more quickly to a monetary policy announcement in country A than in country B where the central bank has no credibility. If the central banks both announce an autonomous tightening policy to reduce the target inflation rate, the short-run aggregate supply curve will shift down more quickly in country A than country B. With no credibility, country B would likely have to reduce aggregate demand first and then let expectations adjust after the policy is implemented to achieve the same lower long-term inflation rate as country A. The faster adjustment process in country A than country B also causes output to be more stable in country A.



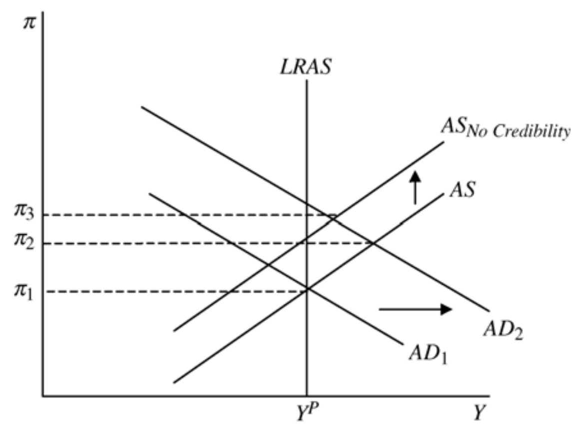
Country *A*: Full Credibility



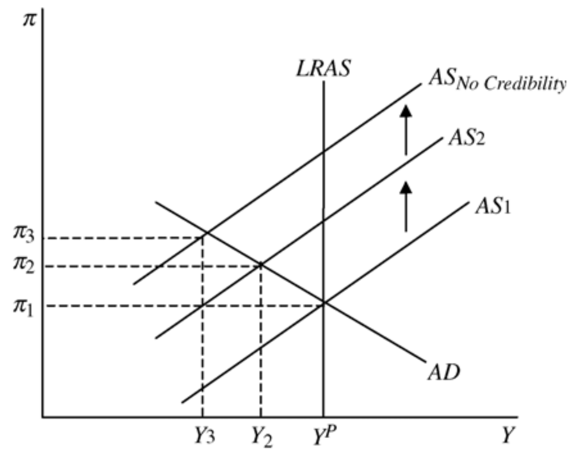
Country *B*: No Credibility

7. *How does a credible nominal anchor help improve the economic outcomes that result from a positive aggregate demand shock? How does a credible nominal anchor help if a negative short-run aggregate supply shock occurs? Use an aggregate demand and aggregate supply graph to support your answers.*

   Positive aggregate demand shocks shift the aggregate demand curve to the right, causing both inflation and output to rise. Without a credible nominal anchor, the increase in inflation causes expected inflation to rise, which shifts up the short-run aggregate supply curve and causes the inflation rate to increase further to π_3. With a credible nominal anchor, the aggregate demand shock does not impact expected inflation, so there is no upward shift in the short-run aggregate supply curve and inflation only rises to π_2. Thus, inflation is more stable following a positive aggregate demand shock when monetary policy has a credible nominal anchor.



   A similar outcome occurs when a negative short-run aggregate supply shock hits the economy. That negative shocks pushes up inflation and pushes down output as the short-run aggregate supply curve shifts upward. With a credible nominal anchor, expected inflation remains unchanged so the short-run aggregate supply curve does not further shift upward. As a result, the credible nominal anchor moderates the increase in inflation and the decrease in output whereas those responses would be larger without a credible nominal anchor.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LRAS
AS No Credibility
AS2
AS1
π3
π2
π1
AD
Y3
Y2
YP
Y