

# INTERMEDIATE MACROECONOMICS-II

B.A.(H) Economics, Semester-IV

Topic-3: Fiscal & Monetary Policy

Reference: Blanchard, Macroeconomics (5<sup>th</sup> ed.)

CHAPTER 24: Should Policy Maker's be Restrained

Lecture Notes

Shri Ram College of Commerce

2019-20

# Should Policymakers Be Restrained?

- There's substantial uncertainty about the effects of macroeconomic policies.
- Economists argue that this uncertainty should lead to policymakers to be more careful and use less active policies.
- Two different schools of thought regarding macroeconomic policies:
  - (i) Friedman from Chicago, suggests due to long and variable lags, an activist policy does more harm than good.
  - (ii) Modigliani from MIT believed that economists' have attained knowledge sufficient enough to allow for increasingly fine-tuning the economy with active policies.

# Should Policymakers Be Restrained?

- There's substantial uncertainty about the effects of macroeconomic policies.
- Economists argue that this uncertainty should lead to policymakers to be more careful and use less active policies.
- Two different schools of thought regarding macroeconomic policies:
  - (i) Friedman from Chicago, suggests due to long and variable lags, an activist policy does more harm than good.
  - (ii) Modigliani from MIT believed that economists' have attained knowledge sufficient enough to allow for increasingly fine-tuning the economy with active policies.

# Should Policymakers Be Restrained?

- There's substantial uncertainty about the effects of macroeconomic policies.
- Economists argue that this uncertainty should lead to policymakers to be more careful and use less active policies.
- Two different schools of thought regarding macroeconomic policies:
  - (i) Friedman from Chicago, suggests due to long and variable lags, an activist policy does more harm than good.
  - (ii) Modigliani from MIT believed that economists' have attained knowledge sufficient enough to allow for increasingly fine-tuning the economy with active policies.

# Should Policymakers Be Restrained?

- There's substantial uncertainty about the effects of macroeconomic policies.
- Economists argue that this uncertainty should lead to policymakers to be more careful and use less active policies.
- Two different schools of thought regarding macroeconomic policies:
  - (i) Friedman from Chicago, suggests due to long and variable lags, an activist policy does more harm than good.
  - (ii) Modigliani from MIT believed that economists' have attained knowledge sufficient enough to allow for increasingly fine-tuning the economy with active policies.

# Should Policymakers Be Restrained?

- There's substantial uncertainty about the effects of macroeconomic policies.
- Economists argue that this uncertainty should lead to policymakers to be more careful and use less active policies.
- Two different schools of thought regarding macroeconomic policies:
  - (i) Friedman from Chicago, suggests due to long and variable lags, an activist policy does more harm than good.
  - (ii) Modigliani from MIT believed that economists' have attained knowledge sufficient enough to allow for increasingly fine-tuning the economy with active policies.

- People and firms try to anticipate what policymakers will do.
- This leads to strategic interactions (investment, spending decisions) between policymakers and people.
- Hence, macroeconomic policy should be treated as a game between policymakers and the public.
- An announcement of a policy change induces a change in firms/households behavior: policy changes are internalized by firms and households.
- In a game of strategic decision making, we also find players getting higher pay-off by not taking decisions that are optimal to them. (e.g. In a hostage like situation, govt. negotiate with the hostage-takers (which is the optimal policy). But to deter hostage-taking situations, govt. stated the policy of no negotiations.)

- People and firms try to anticipate what policymakers will do.
- This leads to strategic interactions (investment, spending decisions) between policymakers and people.
- Hence, macroeconomic policy should be treated as a game between policymakers and the public.
- An announcement of a policy change induces a change in firms/households behavior: policy changes are internalized by firms and households.
- In a game of strategic decision making, we also find players getting higher pay-off by not taking decisions that are optimal to them. (e.g. In a hostage like situation, govt. negotiate with the hostage-takers (which is the optimal policy). But to deter hostage-taking situations, govt. stated the policy of no negotiations.)



- People and firms try to anticipate what policymakers will do.
- This leads to strategic interactions (investment, spending decisions) between policymakers and people.
- Hence, macroeconomic policy should be treated as a game between policymakers and the public.
- An announcement of a policy change induces a change in firms/households behavior: policy changes are internalized by firms and households.
- In a game of strategic decision making, we also find players getting higher pay-off by not taking decisions that are optimal to them. (e.g. In a hostage like situation, govt. negotiate with the hostage-takers (which is the optimal policy). But to deter hostage-taking situations, govt. stated the policy of no negotiations.)

- People and firms try to anticipate what policymakers will do.
- This leads to strategic interactions (investment, spending decisions) between policymakers and people.
- Hence, macroeconomic policy should be treated as a game between policymakers and the public.
- An announcement of a policy change induces a change in firms/households behavior: policy changes are internalized by firms and households.
- In a game of strategic decision making, we also find players getting higher pay-off by not taking decisions that are optimal to them. (e.g. In a hostage like situation, govt. negotiate with the hostage-takers (which is the optimal policy). But to deter hostage-taking situations, govt. stated the policy of no negotiations.)

- People and firms try to anticipate what policymakers will do.
- This leads to strategic interactions (investment, spending decisions) between policymakers and people.
- Hence, macroeconomic policy should be treated as a game between policymakers and the public.
- An announcement of a policy change induces a change in firms/households behavior: policy changes are internalized by firms and households.
- In a game of strategic decision making, we also find players getting higher pay-off by not taking decisions that are optimal to them. (e.g. In a hostage like situation, govt. negotiate with the hostage-takers (which is the optimal policy). But to deter hostage-taking situations, govt. stated the policy of no negotiations.)

# Inflation & Unemployment

- The relation between unemployment and inflation, is given by the *Phillips Curve*:

$$\pi = \pi^e - \alpha(u - u_n)$$

- In the above expression, Inflation  $\pi$ , depends on expected inflation,  $\pi^e$ , and on the difference between the actual and natural rate of unemployment  $(u - u_n)$ .  $\alpha$  captures the effect of unemployment on inflation.
- Suppose the Fed announces a monetary policy to ensure zero inflation, on the assumption that wage setters believe that expected inflation will be zero i.e.  $\pi^e = 0$ . Then:

$$\pi = -\alpha(u - u_n)$$

# Inflation & Unemployment

- The relation between unemployment and inflation, is given by the *Phillips Curve*:

$$\pi = \pi^e - \alpha(u - u_n)$$

- In the above expression, Inflation  $\pi$ , depends on expected inflation,  $\pi^e$ , and on the difference between the actual and natural rate of unemployment  $(u - u_n)$ .  $\alpha$  captures the effect of unemployment on inflation.
- Suppose the Fed announces a monetary policy to ensure zero inflation, on the assumption that wage setters believe that expected inflation will be zero i.e.  $\pi^e = 0$ . Then:

$$\pi = -\alpha(u - u_n)$$

# Inflation & Unemployment

- The relation between unemployment and inflation, is given by the *Phillips Curve*:

$$\pi = \pi^e - \alpha(u - u_n)$$

- In the above expression, Inflation  $\pi$ , depends on expected inflation,  $\pi^e$ , and on the difference between the actual and natural rate of unemployment  $(u - u_n)$ .  $\alpha$  captures the effect of unemployment on inflation.
- Suppose the Fed announces a monetary policy to ensure zero inflation, on the assumption that wage setters believe that expected inflation will be zero i.e.  $\pi^e = 0$ . Then:

$$\pi = -\alpha(u - u_n)$$

- If the fed follows through with it's announced policy, it will choose an unemployment rate equal to the natural rate, such that  $u = u_n \rightarrow \pi = \pi^e = 0$ .
- In the U.S.,  $\alpha \approx 1$ . Therefore, the Fed could deviate from its stated policy and achieve an unemployment rate of 1% below the natural rate with just a 1% increase in the inflation rate. i.e. if  $\alpha = 1, \pi^e = 0$  and  $\pi = 1$ , then  $(u - u_n) = -1\%$ .
- This incentive to deviate from the announced policy once the other player (in this case wage setters) has made its move is known as time inconsistency.

- If the fed follows through with it's announced policy, it will choose an unemployment rate equal to the natural rate, such that  $u = u_n \rightarrow \pi = \pi^e = 0$ .
- In the U.S.,  $\alpha \approx 1$ . Therefore, the Fed could deviate from its stated policy and achieve an unemployment rate of 1% below the natural rate with just a 1% increase in the inflation rate. i.e. if  $\alpha = 1, \pi^e = 0$  and  $\pi = 1$ , then  $(u - u_n) = -1\%$ .
- This incentive to deviate from the announced policy once the other player (in this case wage setters) has made its move is known as time inconsistency.



- If the fed follows through with it's announced policy, it will choose an unemployment rate equal to the natural rate, such that  $u = u_n \rightarrow \pi = \pi^e = 0$ .
- In the U.S.,  $\alpha \approx 1$ . Therefore, the Fed could deviate from its stated policy and achieve an unemployment rate of 1% below the natural rate with just a 1% increase in the inflation rate. i.e. if  $\alpha = 1, \pi^e = 0$  and  $\pi = 1$ , then  $(u - u_n) = -1\%$ .
- This incentive to deviate from the announced policy once the other player (in this case wage setters) has made its move is known as time inconsistency.

- But, this leads to wage setters revising their expectations with positive inflation i.e.  $\pi^e = 1\%$ . Therefore, in order to ensure  $(u - u_n) = 1\%$ , Fed will have to achieve 2% inflation. This will further lead to a revision of expected inflation and eventually leads to higher inflation.
- Overtime, as wage setters understand the Fed's motives, expected inflation catches up with actual inflation, and eventually economy returns to the natural rate of unemployment, but with higher inflation.

- But, this leads to wage setters revising their expectations with positive inflation i.e.  $\pi^e = 1\%$ . Therefore, in order to ensure  $(u - u_n) = 1\%$ , Fed will have to achieve 2% inflation. This will further lead to a revision of expected inflation and eventually leads to higher inflation.
- Overtime, as wage setters understand the Fed's motives, expected inflation catches up with actual inflation, and eventually economy returns to the natural rate of unemployment, but with higher inflation.

# Establishing Credibility

- To deal with the problem of time inconsistency, without totally stripping the central bank of policy-making power include, the following measures are taken:
  - Making the central bank independent. This way, the central bank resists political pressure to decrease unemployment by increasing money growth.
  - Give incentives to the central banker to take the long-term view; that is, to take into account the long-run costs of higher inflation.
  - Choose a “conservative” central banker; i.e., one who dislikes inflation.

# Establishing Credibility

- To deal with the problem of time inconsistency, without totally stripping the central bank of policy-making power include, the following measures are taken:
  - Making the central bank independent. This way, the central bank resists political pressure to decrease unemployment by increasing money growth.
  - Give incentives to the central banker to take the long-term view; that is, to take into account the long-run costs of higher inflation.
  - Choose a “conservative” central banker; i.e., one who dislikes inflation.

# Establishing Credibility

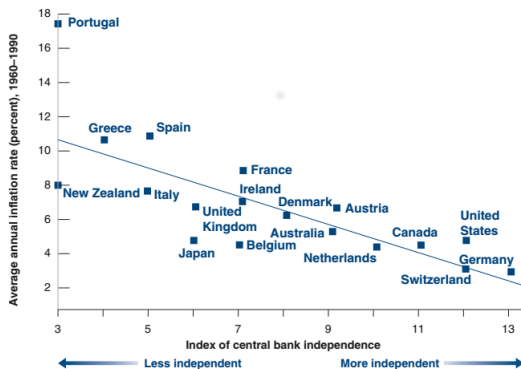
- To deal with the problem of time inconsistency, without totally stripping the central bank of policy-making power include, the following measures are taken:
  - Making the central bank independent. This way, the central bank resists political pressure to decrease unemployment by increasing money growth.
  - Give incentives to the central banker to take the long-term view; that is, to take into account the long-run costs of higher inflation.
  - Choose a “conservative” central banker; i.e., one who dislikes inflation.

# Establishing Credibility

- To deal with the problem of time inconsistency, without totally stripping the central bank of policy-making power include, the following measures are taken:
  - Making the central bank independent. This way, the central bank resists political pressure to decrease unemployment by increasing money growth.
  - Give incentives to the central banker to take the long-term view; that is, to take into account the long-run costs of higher inflation.
  - Choose a “conservative” central banker; i.e., one who dislikes inflation.

# Central bank independence and credibility

- Across OECD countries, the higher the degree of central bank independence, the lower the rate of inflation.





# Time Consistency and Restraints on Policymakers

- When time inconsistency is a concern, tight restraints on policymakers, such as a fixed-money-growth rule in the case of monetary policy, or a balanced budget rule in the case of fiscal policy-can provide a rough solution.
- But these solutions carry costs because it limits the role of macroeconomic policy.
- Better solutions typically involve designing better institutions (such as an independent central bank or a better budget process) that can reduce the problem of time inconsistency while, at the same time, allowing the use of policy to manage the economy.

# Time Consistency and Restraints on Policymakers

- When time inconsistency is a concern, tight restraints on policymakers, such as a fixed-money-growth rule in the case of monetary policy, or a balanced budget rule in the case of fiscal policy-can provide a rough solution.
- But these solutions carry costs because it limits the role of macroeconomic policy.
- Better solutions typically involve designing better institutions (such as an independent central bank or a better budget process) that can reduce the problem of time inconsistency while, at the same time, allowing the use of policy to manage the economy.

# Time Consistency and Restraints on Policymakers

- When time inconsistency is a concern, tight restraints on policymakers, such as a fixed-money-growth rule in the case of monetary policy, or a balanced budget rule in the case of fiscal policy-can provide a rough solution.
- But these solutions carry costs because it limits the role of macroeconomic policy.
- Better solutions typically involve designing better institutions (such as an independent central bank or a better budget process) that can reduce the problem of time inconsistency while, at the same time, allowing the use of policy to manage the economy.

# Politics and Policy

- We have assumed so far that policymakers are benevolent, i.e. that they try to do what is best for the economy.
- Politicians or policymakers, however, often do what is best for themselves, and this is not always what is best for the economy.

# Politics and Policy

- We have assumed so far that policymakers are benevolent, i.e. that they try to do what is best for the economy.
- Politicians or policymakers, however, often do what is best for themselves, and this is not always what is best for the economy.

# Games between Policymakers and Voters

- If voters are shortsighted, the temptation for politicians to cut taxes may prove irresistible.
- With the right timing and shortsighted voters, political parties can win elections. Thus, we might expect a clear political business cycle, with higher growth on average before elections than after elections.
- In that context, debt cycles would be closely related to political cycles.

# Games between Policymakers and Voters

- If voters are shortsighted, the temptation for politicians to cut taxes may prove irresistible.
- With the right timing and shortsighted voters, political parties can win elections. Thus, we might expect a clear political business cycle, with higher growth on average before elections than after elections.
- In that context, debt cycles would be closely related to political cycles.

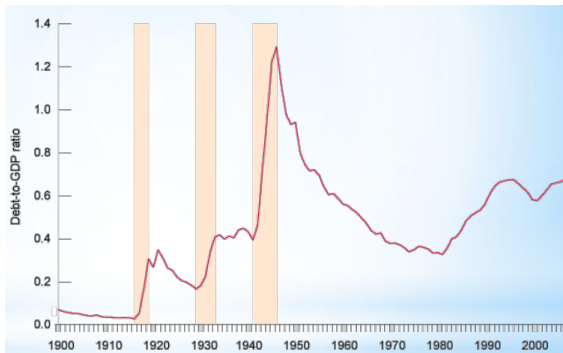
# Games between Policymakers and Voters

- If voters are shortsighted, the temptation for politicians to cut taxes may prove irresistible.
- With the right timing and shortsighted voters, political parties can win elections. Thus, we might expect a clear political business cycle, with higher growth on average before elections than after elections.
- In that context, debt cycles would be closely related to political cycles.



## Is debt build up related to policy cycles?

- The graph represents the evolution of the U.S. Debt-to-GDP ratio since 1900. The three major buildups of US debt since 1900 have been associated with World War I, the Great Depression, and World War II. The buildup since 1980 appears to be different in nature.



# Games between Policymakers

- Game theorists refer to wars of attrition the situations in which each side holds out, hoping that the other side will give in. These wars usually result in delays in the implementation of the policy.
- Republicans arguably worry more than Democrats about inflation and less than Democrats about unemployment. We would then expect to see stronger growth during Democratic administrations.

# Games between Policymakers

- Game theorists refer to wars of attrition the situations in which each side holds out, hoping that the other side will give in. These wars usually result in delays in the implementation of the policy.
- Republicans arguably worry more than Democrats about inflation and less than Democrats about unemployment. We would then expect to see stronger growth during Democratic administrations.

# Politics and Fiscal Restraints

- A balanced-budget amendment would eliminate the problem of deficits, but it would also eliminate the use of fiscal policy as macroeconomic policy instrument.
- The “Budget Enforcement Act” passed in 1990, and extended in 1993 and 1997, introduced two main rules:
  - (i) It imposed constraints on spending. Constraints, called spending caps, were set on discretionary spending for a period of 5 years.
  - (ii) It required that a new transfer program could only be adopted if it could be shown not to increase deficits in the future. This rule is known as the pay-as-you-go or the PAYGO rule.

# Politics and Fiscal Restraints

- A balanced-budget amendment would eliminate the problem of deficits, but it would also eliminate the use of fiscal policy as macroeconomic policy instrument.
- The “Budget Enforcement Act” passed in 1990, and extended in 1993 and 1997, introduced two main rules:
  - (i) It imposed constraints on spending. Constraints, called spending caps, were set on discretionary spending for a period of 5 years.
  - (ii) It required that a new transfer program could only be adopted if it could be shown not to increase deficits in the future. This rule is known as the pay-as-you-go or the PAYGO rule.

# Politics and Fiscal Restraints

- A balanced-budget amendment would eliminate the problem of deficits, but it would also eliminate the use of fiscal policy as macroeconomic policy instrument.
- The “Budget Enforcement Act” passed in 1990, and extended in 1993 and 1997, introduced two main rules:
  - (i) It imposed constraints on spending. Constraints, called spending caps, were set on discretionary spending for a period of 5 years.
  - (ii) It required that a new transfer program could only be adopted if it could be shown not to increase deficits in the future. This rule is known as the pay-as-you-go or the PAYGO rule.

# Politics and Fiscal Restraints

- A balanced-budget amendment would eliminate the problem of deficits, but it would also eliminate the use of fiscal policy as macroeconomic policy instrument.
- The “Budget Enforcement Act” passed in 1990, and extended in 1993 and 1997, introduced two main rules:
  - (i) It imposed constraints on spending. Constraints, called spending caps, were set on discretionary spending for a period of 5 years.
  - (ii) It required that a new transfer program could only be adopted if it could be shown not to increase deficits in the future. This rule is known as the pay-as-you-go or the PAYGO rule.