Macroeconomics A: EI056

Quizz

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1 Time consistency

Question: Explain the concept of time inconsistency.

Answer: The problem stems from the combination of two elements. First, policy makers want to boost economic activity beyond the level prevailing under flexible prices, as this level is inefficiently low (think of structural unemployment). Second, private agents have to make their decisions before the central bank sets policy.

The central bank is then tempted to deliver unexpectedly high inflation to boost output. The cost of higher inflation is worth paying for reducing unemployment. The central bank can deliver this for given expectations of inflation, as it gets to move after the private sector.

The problem is that inflation expectations are given, but instead an endogenous result of the model. Agents understand that the central bank will inflate, and thus expect high inflation. In equilibrium, there is no possible surprise so all we get is high inflation without extra output. The central bank finds it optimal to deliver the high inflation: keeping inflation low would lead to a recession and even higher unemployment..

2 Gains and losses from rules

Question: Why are rules useful? What's the cost?

Answer: The way around this problem of time inconsistency is to take some freedom away from the central bank, i.e. preventing it from breaking its promise. In practice, this takes the form of an explicit mandate on price stability and regular communication where the central bank has to explain what it does. If it cannot give a convincing explanation, private agents would know that it is cheating.

The cost is that we cannot foresee all contingencies. There will be crises that the rule did not think about, and if the rule is too tight the central bank looses the flexibility to react to the crisis.

That's why in practice central banks operate under "constrained discretion", i.e. rules but not a straightjacket.

3 Conservative central bank

Question: One solution to the time inconsistency problem is to appoint a conservative central banker with a strong distaste for inflation. Explain why this is a solution. Does it have downsides?

Answer: Any central banker that does not have to follow rules will predictably generate inflation, so in equilibrium the economy has positive inflation and no extra output. A conservative central banker has a strong aversion for inflation. This distaste for inflation implies that he will only generate a relatively low level of inflation. Appointing a conservative central banker then limits the magnitude of the problem.

A downside is that the central banker is reluctant to generate inflation both on average (a limited inflation bias, which is good) as well as in reaction to shocks that affect the economy and to whom some inflation is an efficient response (so his reluctance is costly). Going around this problem requires a flexible commitment mechanism where the central bank stick to a policy rule that links inflation to the shocks, instead of an inflation level to be delivered under any circumstance.

4 Empirical evidence

Question: Is central bank independence (CBI) enough to ensure low money growth and inflation?

Answer: CBI is a necessary but not a sufficient condition. The CBI indicators reflects the various rules of governance (length of the governor's term, composition of the policy committee, reappointment rules, etc..).

Good rules on paper are fine, but only if they are actually implemented in practice. The CBI thus must be binding and not merely a nice intent. Governments may always feel tempted not to respect the rule. However, we can conjecture that there is more respect for rule in democracies than in autocracies. Furthermore, even if the government wants to get around the rule, it is harder to do in a country where political institutions can block it, and / or the press is free to point what the government is up to.

Empirically, CBI has a direct negative impact on money creation, as well as on inflation (even controlling for money creation). When we combine this with measures of political rule of low, the evidence is that the CBI effect is only statistically significant in countries where there is enough rule of law. Having a central bank with independence on paper is pointless if an authoritarian regime prevents this independence to be put in practice.