# MFE Economics
# Problem set 6

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**1. 'Optimal' conventional policy**

- Compare and contrast the effects (IRFs) of the monetary policy and preference shock in the basic NK model
- What do their characteristics suggest about the ability of monetary policy to offset 'demand side' shocks? Give intuition - with reference to the IS curve / intertemporal decisions by households.

**2. 'Optimal' conventional policy**

- Explain why in the basic NK model optimal policy will feature $i_t = r_t^n$ in equilibrium (Couple of paragraphs)
- Explain why announcing a rule simply to ensure this condition is problematic? [Hint:You should consider theoretical and practical reasons] (Couple of paragraphs)
- What is a Taylor rule, what are its origins and what is the 'Taylor principle'? (One short paragraph)

**3. Unconventional policy**

- Why are short term interest rates bounded at zero (or small negative) a problem for monetary policy? Are they always a problem or are they particularly concerning in recent times? (Couple of short paragraphs, maybe with a few equations)
- What is forward guidance and how might it affect the economy / help policymakers achieve their goals? (One paragraph, maybe with a few equations)
- What is quantitative easing? Does it have the same aims as forward guidance? (Couple of short paragraphs)
- Briefly describe examples of quantitative easing and forward guidance used by the Fed, BoE and ECB (set of bullet points for each)

## 4. Financial crisis

- Explain what a repurchase agreement is? In what sense is it a form of collateralized loan? (A short paragraph maybe with a couple of equations)
- Why do regulators set minimum capital ratios for banks? Why might net worth be particularly important for banks (as opposed to for non-financial firms) from a regulatory perspective? [Hint: You should mention externalities and deposit insurance somewhere]. (Two or three short paragraphs.)
- In the Diamond-Dybvig-esque model discussed in class... (all of these should be a few sentences)
  - What aspects of it capture shocks to 'liquidity'?
  - What aspects of it capture the role of banks in liquidity provision?
  - How do the good and bad equilibria differ in terms of agents' beliefs?
  - In what sense is the bad equilibrium actually 'bad'?
  - Suppose a government introduced a 'deposit insurance scheme' - how would that affect the thought process of the type 2 agent?
  - Suppose banks can 'suspend convertibility' (ie. just refuse to pay out in a panic), would that 'fix' the problem? Is it a sensible policy?
  - Suppose the central bank provides a 'lender of last resort' role for banks (look this up - along with the 'deposit window'), how might that help?[1]
- Why did the exaggerated use by banks of repo leading up to the crisis render the system extremely vulnerable? (Paragraph or so)

[1] You should also figure out who Bagehot was and how to pronounce his name...