

# Econ 214 reading homework

Churn Ken Lee

## 1 Baxter and King 1993

1. No effect.
2. Permanent increase in government spending has a larger impact. This is due to the investment amplification channel. With a permanent increase in government spending, desired capital stock is higher in the long run. In order to accumulate capital, households supply more labor. With a temporary increase in government spending, desired capital stock is the same in the long run. Hence instead of accumulating capital, households draw down capital stock to finance consumption in the short run.
3. Increase in government expenditure financed via lump-sum taxation increases labor supply, which decreases the marginal product of labor for a given level of capital stock.
4. Increased government expenditure financed via lump-sum taxation increases output more. This is because distortionary taxes reduce households' marginal benefit of increasing labor supply and capital stock, dampening their response to a reduction in full income.
5. Yes. It is modeled as public capital that increases the productivity of private capital and labor.
6. Basic government purchases do not directly affect the productivity of labor and capital unlike spending on public capital. The effect of the former on output is indirect: households supply more labor both due to decreases in full income and also due to an increase in the returns to saving caused by the increased marginal product of capital. The

increase in output is driven by an increase in both labor supply and capital stock. In the latter case, the marginal product of both capital and labor increases mechanically with an increase in public investment. This amplifies the effect on output as labor supply and investment increases by even more.

## 2 Woodford 2011

- There is no capital accumulation channel. Yes.
- The size of the multiplier depends on the specified monetary policy in the benchmark New Keynesian model. In the case a policy that generates constant real interest rates, the multiplier is exactly one.
- With a policy that generates a constant real interest rate (full accommodation), the multiplier is one. On the other hand, a policy that has a zero inflation target (no accommodation) creates a multiplier that is identical to the neoclassical flexible price benchmark. A monetary policy that is in between, i.e., a Taylor rule, would create a multiplier that is between the flexible price multiplier and one.
- The multiplier is larger when monetary policy is more accommodating.
- A more persistent zero lower bound (crisis) state increases the size of the multiplier in the zero lower bound state. Higher persistence of elevated government spending after the end of the crisis state decreases the size of the multiplier during the crisis state.

## References

- Baxter, Marianne and Robert G. King (1993). “Fiscal Policy in General Equilibrium”. In: *The American Economic Review* 83.3, pp. 315–334. ISSN: 00028282. URL: <http://www.jstor.org/stable/2117521>.
- Woodford, Michael (Jan. 2011). “Simple Analytics of the Government Expenditure Multiplier”. In: *American Economic Journal: Macroeconomics* 3.1, pp. 1–35. DOI: 10.1257/mac.3.1.1. URL: <http://www.aeaweb.org/articles?id=10.1257/mac.3.1.1>.