Lecture 7 - Low Interest Rates Macro

UCLA - Econ 221 - Fall 2018

François Geerolf

Contents

1 Balanced growth

The one argument for Cobb and Douglas [1928] is that there is balanced growth. This is an extremely bad argument !

Labor augmenting technical change explains balanced growth just as well !

1.1 Harrod [1939] - Domar [1946] model of growth

Solow [1956] suggests that the long run is the "land of the margin." However, at the time, in the thirties and fourties, there were reasons to be pessimistic. Not so much during the 1960s, where financial crises had not yet happened.

Interestingly, Harrod-neutral technical change is labor-augmenting. Therefore, the Harrod-Domar model was perfectly aware of that potential issue. Thus, the typical agument in favor of a unitary elasticity, is on very shaky grounds.

The typical argument goes as follows: there has been a large increase in the marginal product of labor in the last century. At the same time, the interest rate has stayed roughly constant. Thus, w/r has risen. If the elasticity between capital and labor was low, then resoutces should have gone to capital. This has not happened (this is because simultaneously the productivity of labor has risen faster than capital)

$$\frac{wL}{Y} = 1 - \alpha$$

Moreover, the Keynesian view of the labor market has been based on sticky prices, rather than on a "paradox of thrift" view of growth.

the capital / labor ratio in the last century. (note this could be accounted for by land)

Against this backdrop, Flavien Moreau estimates a low elasticity of substitution between capital and labor.

The equations by Sargent: http://www.tomsargent.com/research/Harrod_tom_6.pdf

saving is proportional to national income:

$$S_t = sY_t$$

investment, the demand for saving, is proportional to the growth of national income,

$$I_t = g(Y_{t+1} - Y_t)$$

For example, this could arise because we have a fixed proportion production function, so that K_t is just proportional to output.

These conditions imply a necessary condition for the growth of output, compared to that of the saving rate, and the capital/ output ratio (which is, say, 6 in the UNited States)

saving is proportional to national income

2 Impacts on taxation issues

Does **class income affect saving propensities**? The answer is necessarily yes.

If, then the rich can be taxed.

This all amounts to: why do the rich save in the first place? Utility for wealth == there is a Pareto improvement in this case. Public debt is a way for them to "feel rich", while at the same time

Thrift is good for society Culture too

However the big issue with public debt is

Paper of Jean Baptiste Michau.

According to neoclassical economics, income taxation must strike a balance between equity and efficiency. Redistributing income leads to efficiency losses, as it dimishes workers' incentives to produce income in the first place. Income redistribution leads to lower output, but also to output that is distributed more equally. According to the first welfare theorem, a market economy leads to a Pareto optimal outcome: it is impossible to make someone better off without making someone else worse off. This basic equity-efficiency trade-off is pervasive in the political debate and underlies much of modern public economics, following Mirrlees [1971].

However, Keynesian economics provides a mechanism through which more redistribution might actually increase output overall, at the same time as it reduces inequality. The idea that the economy suffers from a shortage of aggregate demand coming from increases in inequality has been put forward recently by mainstream academics such as Raghuram Rajan, former chief economist of the IMF, and now governor at the Bank of England (Rajan [2010]), as well as by Robert Reich, US Secretary of Labor from 1993 to 1997 (Reich [2011]).

This was noted by Minsky [1976]:

> Although class ideas with respect to consumption are alluded to in The General Theory, and although class income affects the saving propensities in the work of Keynesian economists, such as N. Kaldor and J. Robinson, in general in the mainstream Keynesian literature the law for the determination of the surplus (i.e., the consumption function) treats income as a homogeneous glob in determining consumption behavior.

Is income a homogeneous glob in determining consumption behavior? The answer is: no ! Whether the rich or the poor have a higher marginal propensity to consume…

3 Keynesian Growth

In the 1990s Solow [1956]

References

Charles W. Cobb and Paul H. Douglas. A Theory of Production. *The American Economic Review*, 18(1): 139–165, 1928. ISSN 0002-8282. URL http://www.jstor.org/stable/1811556.

Evsey D. Domar. Capital Expansion, Rate of Growth, and Employment. *Econometrica*, 14(2):137–147, 1946. ISSN 0012-9682. doi: 10.2307/1905364. URL https://www.jstor.org/stable/1905364.

R. F. Harrod. An Essay in Dynamic Theory. *The Economic Journal*, 49(193):14–33, 1939. ISSN 0013-0133. doi: 10.2307/2225181. URL https://www.jstor.org/stable/2225181.

Hyman P. Minsky. *John Maynard Keynes*. Springer, June 1976. ISBN 978-1-349-02679-1.

J. A. Mirrlees. An Exploration in the Theory of Optimum Income Taxation. *The Review of Economic Studies*, 38(2):175–208, 1971. ISSN 0034-6527. doi: 10.2307/2296779. URL http://www.jstor.org/stable/2296779.

Raghuram G. Rajan. *Fault Lines: How Hidden Fractures Still Threaten the World Economy*. Princeton University Press, May 2010. ISBN 978-1-4008-3421-1.

Robert B. Reich. *Aftershock: The Next Economy and America's Future*. Vintage Books, 2011. ISBN 978-0-307-47633-3.

Robert M. Solow. A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics*, 70(1):65–94, 1956. ISSN 0033-5533. doi: 10.2307/1884513. URL http://www.jstor.org/stable/1884513.