

Econ 8108, Macroeconomic Theory
Prof. José-Víctor Ríos-Rull
Problem Set 2

Problem 1

Write one of the economies in sections 2.1-2.3 in sequence form and show that it is equivalent to the recursive problem.

Problem 2

Show explicitly that in the economy in section 2.1, we do not need feasibility in the definition of equilibrium.

Problem 3

Write the economy in section 2.2, in two alternative ways: with a consumption tax and investment credit instead of capital income tax.

Problem 4

Show that in the economy in section 2.3, aggregate capital is not a sufficient statistic for capital tomorrow unless decision rules are linear.

Problem 5

Write the economy in section 2.3 with an alternative choice of state variable.

Problem 6

Show that in economy in section 3, the definition of SME is equivalent to ADE.