The Four R-stars: From Interest Rates to Inflation and Back

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R-star is a useful benchmark for the real interest rate. Sometimes, it refers to the steady-state equilibrium rate where savings equal investment (m), other times to the long-run value for the yield on safe government bonds (y), other times to the counterfactual return earned by inputs when the level of output is at potential (\rho), and some other times to the neutral monetary policy rate at which inflation is at its target value (i). This lecture distinguishes between the four to make sense of why it has been so hard to measure this concept in the data. Both theory and the 1995-2019 experience support making this distinction. I offer a framework that explains why the four R-stars will differ given the macro trends that we observed. Each of the R-stars is important for different questions that are central to macroeconomics and finance, and the framework connected their evolution to the levels of investment, output, and inflation.

Looking at the recent 2021-24 past, there are signs in the data that the wedge between the marginal return to private investment and the yield on government bonds is closing. I lay out arguments in theory for why this may be a persistent trend, and suggested that this will come through a fall in the safety and liquidity premium of government bonds and perhaps due to an investment boom lowering the returns to private investment. This sheds light on what challenges policymakers will face. In particular, there are three possible policy scenarios in which the US and other advanced economies might find themselves. In a first benevolent scenario, monetary policy would set policy rates forever higher on average, and fiscal policy would raise primary surpluses to pay for the higher interest on the public debt. Inflation would stay on target. In a second scenario, policy would try to run the economy hot and deliver low returns to bondholders. This would lead to high and rising inflation. In a third scenario, both monetary and fiscal policy would find themselves constrained, by the effective lower bound and by fiscal capacity, respectively. The economy would be stuck with stagnation, operating below capacity and with too-low inflation.