Secular Stagnation, Rational Bubbles, and Fiscal Policy

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In the debate on Secular Stagnation, usually interpreted as the steady decline in the real interest rate since 1990, people have worried about the risk of bubbles blowing up. Bubbles have a negative connotation for most people. They are considered as signals of irrational herd behaviour. Moreover, they pose a risk to financial stability, since they might burst. However, this interpretation is one-sided. Tirole (1985) has shown that bubbles can be fully rational when the economy is on stable growth path where return to capital r is equal to the growth rate g. If an asset is in fixed supply, then it might nevertheless carry a positive market price even when it does not yield any real dividend stream. The reason is that the demand for this -bubbly- asset will increase at a rate g along this stable growth path. Since its supply is fixed, its price has therefore to increase at rate g. Hence, buying bubbly assets is equally profitable as investing in physical capital, since r=g. In fact, in that case, trade in bubbly assets furthers efficiency as it allows the young to save for their retirement. When the demand for physical capital is too low to absorb all savings for retirement, bubbly assets might provide an alternative store of value. Then, trade in bubbly assets moves the economy to an efficient equilibrium that would otherwise be unattainable. Without trade in bubbly assets, resources would be wastefully spent on investment in capital with a low return.

The current paper considers a world where the expected return to capital fluctuates over time. Also in that case the availability of bubbly assets furthers efficiency. When the return to capital is expected to be low, the young buy bubbly assets instead. This will drive up the price of bubbly assets above its long run equilibrium value, thereby leading to a lower expected return, up till the point that the expected return to bubbly assets is equal to that capital. The high price of bubbly assets offers a windfall profit to the old, who use this windfall to raise their consumption during retirement. The fall in investment is therefore offset by a high consumption of the old. Exactly the reverse happens when the return to capital is expected to be high. We show that in this situation, trade in bubbly assets increases efficiency as it avoids people to invest in physical capital when its expected return is low. However, this trade does not return the economy to an efficient outcome, since the expected return to bubbles varies too much.

Next, we consider whether bubbles are the most efficient way of dealing with the variation in the expected return to capital, or that there are more efficient alternatives. In particular, one can wonder what is the best option: either the government issuing debt or trade in bubbly assets? Either

the young buy bubbly assets from the old or the young buy bonds from the government where the government uses the receipts to repay the bonds held by the old. Both solutions transfer income from the young to the old. In a world of perfect information, both solutions are perfect substitutes. In a world where the future return to capital is uncertain, government bonds outperform trade in bubbly assets. When the expected return to capital falls, investment goes down. Hence, consumption must go up to offset the lower demand. With trade in bubbly assets, all fluctuations in consumption are born by the elderly, as they own the bubbly assets. When the government issues bonds, a fall in investment demand will reduce the interest rate. The government runs a surplus on its debt operations, since it gets a higher price for its new issuance of bonds. It can distribute this surplus among both the young and the elderly, thereby achieving a better spread of the shock in consumption between the young and the old. Contrary to common wisdom, trade in bubbly assets implements intergenerational transfers without government intervention, while fiscal policy implements intragenerational transfers, by giving the young tax relief during an investment slump as to increase demand at the expense of a lower future interest payments on their holding of government bonds. Sovereign debt is therefore a more efficient alternative than trade in bubbly assets.