Effect of low saving rate economics essay

ASSIGN BUSTER

We highly acknowledge your help and frequent support to us for this term report and we are looking forward to discuss this report with you and having your response on our hard work. We are immensely grateful to you for providing us the opportunity to understand the theory and concepts of Economics. We would also like to thank all the people who directly and indirectly helped us in making this report.

This report as per your instruction has covered all the areas of concern and contains all the relevant information. We would like to thank you for the faith you showed in our capabilities and the encouragement you gave us when assigning us the report which helped a lot in our learning process.

Kindly let us know if you have any queries or suggestions regarding this report on the following email addresses:

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ACKNOWLEDGEMENT

We are grateful to our teacher Mr. Aijaz rasheed for teaching us the course of “ Macro Economics”.

His versatile knowledge in the field, unique teaching style has developed our knowledge and cleared many essential concepts of Information technology in business.

Also we would like to thank him for providing us the opportunity to understand the theory and concepts of Macroeconomics.

Finally we bestow my thanks to all who have directly or indirectly supported us with their assistance and guidance to make this report and accomplish broader vision to visualize things.

The Saving-Investment Mix

A rise in autonomous consumption causes saving and investment to fall and the real interest rate to rise in the long run. Reduced saving matters for assessing risks to growth and financial stability. Foreign borrowing undertaken because of lower levels of saving, in contrast, supports current consumption while building up a debt burden on future income. Foreign borrowing to finance Productive investment projects raises national income and should result in a surplus over debt service costs.

Low personal saving rate persist, and a cause for concern:

One concern that has been expressed over a low personal saving rate is that it may cause national savings to be insufficient to support the level of investment necessary to sustain a high level of long-run economic growth without excessive dependence on foreign capital.

Some concern also has been expressed that an unusually low personal saving rate may pose problems for the economy in the short run, which could have significantly exacerbated both the depth and duration of the recession.

Reasons of Low saving:

The stock market appreciation of the 1990s been the sole reason for the low personal saving rate, its decline would also indicate weaker consumption.

Increase in trend productivity that induces higher permanent income for households or to a relaxation of financing constraints due to financial innovation.

Changes in Saving:

Raises tax:

If the government raises taxes, the households will have less income to spend and so will consume less and this will increases saving at any given real interest rate.

Government purchases:

A rise in government spending because saving and investment to fall and the real interest rate to rise in the long run.

Government saving:

Government budget deficits occurs because of (government dissaving) cause saving and investment to fall in the long run and the real interest rate to rise.

The root cause of the economic crisis is excessive consumption accompanied by record low savings rates and huge budget and current account deficits.

Saving, investment, and the current account:

While the fiscal deficit has not been strongly correlated with the trade deficit, what might be called the " private sector deficit". The gap between private

investment and saving has been more strongly correlated with the trade imbalance. To see this, consider the relationship between the two deficits and the gap between domestic (private) saving and investment , this relationship, sometimes referred to as the “ national income identity,” can be written as follows:

Current account balance = (Saving – Investment) + Government budget balance.

This accounting identity is very important: it implies that changes in any one of the three balances (fiscal, trade, and private saving-investment) must be accompanied by offsetting changes in the other two combined. There are two problems with the way in which this identity is often employed. First, an accounting identity is not a causal relationship: there is no implication that causality has to flow in any particular direction between the variables linked by it. Rather than the fiscal balance always driving the trade balance, any other direction of causality among the three balances is also possible. Second, the identity includes the private saving-investment balance as well as the current account and government budget balances, so there is no automatic link between the latter two.

Although the fiscal balance seems to have played little role in the widening of the trade imbalance in the late 1990s and the 2003-7 period, there is more evidence that changes in the private saving-investment balance played a significant role in these episodes, at least in an accounting sense.

In the accounting sense, then, the fall in private saving relative to investment “ explains” how the trade deficit could continue to worsen in the

late 1990s in spite of the big improvement in the fiscal balance. Also, the budget deficit was decreasing in the years 2003-7 while the trade deficit was widening rapidly; it was again the fall in the saving-investment balance that was correlated with the worsening of the current account at that time.

The saving-investment balance behaved counter cyclically, that is, it rose in recessions and fell in recoveries, because investment is more cyclically sensitive than saving. However, the private saving-investment balance exhibited an unprecedented drop into negative territory during the 1996-2000 periods, and, after rising in the recession of 2000-1, fell back to negative levels in the subsequent recovery (especially 2004-7).

During the times when the saving-investment gap was negative, the U. S. private sector was unable to finance domestic investment spending. The negative saving-investment gap had to be filled by some combination of either an increased budget surplus (which means more government net lending to the private sector) or a reduced current account balance (which implies increased borrowing from abroad).

As median wages and household incomes stagnated in spite of rising productivity, households increasingly relied on debt to finance consumption expenditures, and this was aided by the boom in housing prices as well as innovative (and irresponsible) lending practices in deregulated financial markets. Thus, even if government profligacy is not to blame for the trade deficit, perhaps the consumption spending binge of the pre-crisis decade, which pulled the personal saving rate down to historic lows, is a culprit?

One problem with this argument is the issue of " reverse causality." As a product of the U. S. exporting manufacturing jobs, which contributed to the suppression of median wages and middle-class incomes at home, the trade deficit was at least partly a cause of the low saving rate rather than an effect. Decline in saving alone cannot explain the rise in the trade deficit.

Net financial inflows and the " global saving glut":

When the private saving-investment balance turned negative in the late 1990s and again in the early 2000s, the openness of the U. S. economy to international financial flows meant that the extra saving needed to finance domestic investment (which includes housing construction) could be borrowed from other countries. This international borrowing was a necessary enabling factor for the decline in the private saving-investment balance to occur. Without the increase in the current account deficit and the corresponding net inflow of foreign funds, it would have been impossible for the saving-investment balance to fall.

Consequences of the saving glut

Rising global imbalances with respect to international current account balances

Developing countries becoming net lenders on capital markets, while industrialized countries such as the United States became net borrowers

Low rates of interest: Desired saving tending to be larger than desired investment leads to a fall in the interest rate.

Rising asset prices, which result from low interest rates.

The Solow Growth Model:

Solow growth model explains how saving rates and population growth determine capital accumulation, which in turn determine economic growth.

USE OF THE SOLOW GROWTH MODEL:

In Solow's model, new capital is more valuable than old (vintage) capital because-since capital is produced based on known technology, and technology improves with time-new capital will be more productive than old capital. Economists use Solow's sources-of-growth accounting to estimate the separate effects on economic growth of technological change, capital, and labor.

Short run implications

Policy measures like tax cuts or investment subsidies can affect the steady state level of output but not the long-run national curve.

Growth is affected only in the short-run as the economy converges to the new steady state output level.

The rate of growth as the economy converges to the steady state is determined by the rate of capital accumulation.

Capital accumulation is in turn determined by the savings rate (the proportion of output used to create more capital rather than being consumed) and the rate of capital depreciation.

Long run implications

A country with a higher saving rate will experience faster growth, e. g. Singapore had a 40% saving rate in the period 1960 to 1996 and annual GDP

growth of 5-6%, compared with Kenya in the same time period which had a 15% saving rate and annual GDP growth of just 1%. This relationship was anticipated in the earlier models, and is retained in the Solow model; however, in the very long-run capital accumulation appears to be less significant than technological innovation in the Solow model.

Graphical representation of the model

The model starts with a neoclassical production function Y/L = F(K/L), rearranged to y = f(k), which is the red curve on the graph. From the production function; output per worker is a function of capital per worker. The production function assumes diminishing returns to capital in this model, as denoted by the slope of the production function.

Solow growth model1. png

n = population growth rate

Î´ = depreciation (note, this is labeled d on the graph on the right)

k = capital per worker

y = output/income per worker

L = labor force

s = saving rate

Capital per worker change is determined by three variables:

Investment (saving) per worker

Population growth, increasing population decreases the level of capital per worker.

Depreciation – capital stock declines as it depreciates.

When sy > (n + Î´)k, in other words, when the savings rate is greater than the population growth rate plus the depreciation rate, when the green line is above the black line on the graph, then capital (k) per worker is increasing, this is known as capital deepening. Where capital is increasing at a rate only enough to keep pace with population increase and depreciation it is known as capital widening.

The model and changes in the saving rate:

Solow growth model2. png

The graph is very similar to the above, however, it now has a second savings function s1y, the blue curve. It demonstrates that an increase in the saving rate shifts the function up. Saving per worker is now greater than population growth plus depreciation, so capital accumulation increases, shifting the steady state from point A to B. As can be seen on the graph, output per worker correspondingly moves from y0 to y1. Initially the economy expands faster, but eventually goes back to the steady state rate of growth which equals n.

There is now permanently higher capital and productivity per worker, but economic growth is the same as before the savings increase.

Golden Rule savings rate:

The rate of savings which maximizes steady state level or growth of consumption.

In the Solow growth model, a steady state savings rate of 100% implies that all income is going to investment capital for future production, implying a steady state consumption level of zero. A savings rate of 0% implies that no new investment capital is being created, so that the capital stock depreciates without replacement. This makes a steady state unsustainable except at zero output, which again implies a consumption level of zero. Somewhere in between is the " Golden Rule" level of savings, where the savings propensity is such that per-capita consumption is at its maximum possible constant value.

Policy that can change the savings rate

Various economic policies can have an effect on the savings rate and, given data about whether an economy is saving too much or too little, can in turn be used to approach the Golden Rule level of savings. Consumption taxes, for example, may reduce the level of consumption and increase the savings rate, whereas capital gains taxes may reduce the savings rate. These policies are often known as savings incentives in the west, where it is felt that the prevailing savings rate is " too low" (below the Golden Rule rate), and consumption incentives in countries like Japan where demand is widely considered to be too weak because the savings rate is " too high" (above the Golden Rule).

Private and public saving

Japan’s high rate of private saving is offset by its high public debt. A simple approximation of this is that the government has borrowed 100% of GDP from its own citizens backed only with the promise to pay from future taxation. This does not necessarily lead to capital formation through investment (if the revenue from bond sales is spent on present government consumption rather than infrastructure development, say).

Golden rule taxes within economic models

If consumption tax rates are expected to be permanent then it is hard to reconcile the common hypothesis that rising rates discourage consumption with rational expectations (since the ultimate purpose of saving is consumption). However, consumption taxes tend to vary (e. g., with changes in government or movement between countries), and so currently high consumption taxes may be expected to go away at some point in the future, creating an increased incentive for saving. The efficient level of capital income tax in the steady state has been studied in the context of a general equilibrium model and Judd (1985) has shown that the optimal tax rate is zero. However, Chamley (1986) says that in reaching the steady state (in the short run) a high capital income tax is an efficient revenue source

INVESTMENT FUNCTION:

To simplify our analysis of the demand for goods and services, we will assume that the economy is closed and that government spending is zero.

In per-worker terms, this means that the total demand for output is equal to consumption

per worker plus investment per worker:

yt = ct + it

In developing his model, Solow assumed that consumers save a fixed fraction s, the saving rate, of their income each year, so that saving per worker, y – c, is

Since from Equation 5,

it = yt-ct

which is the familiar result that investment equals saving in a closed economy. This equation tells us that investment is proportional to output, with s as the fraction of output that goes into investment.

Substituting the per worker production function, yt = Akt0. 3 into Equation 7, we get

the investment function, which reveals the relationship between per capita investment

and the per capita capital stock when investment equals saving.

it= sAkt^0. 3

We show the plot of the investment function-that is it against kt-in Figure 6. 3. It has a similar bowed-out shape to the production function in Figure 6. 3, and it is always below the production function because the saving rate is always between zero and one.

Return to prosperity requires reversal of excessive consumption, low savings trends:

FINANCIAL INVESTMENT:

To rebuild the economic foundation for sustainable long-term growth, the U. S. economy needs higher levels of financial and real investment. Financial investment means that the savings rate must increase significantly to start generating household wealth sufficient to deal with retiring baby boomers, increased health costs, etc. This transition will hamper near-term growth given the importance of consumption to the U. S. economy.

Real investment is needed to create the infrastructure that will generate wealth and support the future needs of retirees. Investments in future growth industries are facilitated by capital spending by corporations, but just as importantly through education, job retraining and public infrastructure expansion.

Road to Recovery

The decline in the savings rate isn’t just bad news for consumers it’s bad for the entire economy. For a recovery to be maintained, business and consumers have to spend money.

Investment requires savings, and savings requires income. Consumers are reluctant to spend because they have less of a financial cushion. Without consumer spending to help expansion, businesses wait before making sizable investments that could help sustain recovery

Long-run improvements in standards of living are really only achieved with elevated levels of investment and, most importantly, technological

advancements that stimulate productivity. The U. S. remains among the most innovative and flexible economies in the world. To maintain that status, the importance of investment in innovative technologies, education, and job training cannot be understated.