



RETHINKING INVESTMENT, SURPLUS, SAVINGS, CAPITAL, GROWTH, AND INEQUALITY

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HOW DO WE MEASURE THE INVESTIBLE 'SURPLUS'?

When we talk of investment in an economy, we assume that it is based on the surplus of production over consumption, that is saved and deployed (ignoring for the time being any foreign investment inflows or outflows), as capital towards growth of the economy, i.e., an increase in the collective wealth of the members of the community. Albeit the distribution of wealth so created is skewed in favour of those who deploy the capital.

But is this equation as simple as it appears to be? The short answer is no, it is not. I will try and explain myself. The conventional wisdom is that the surplus of production over consumption is convertible into investable capital. This of course does not happen directly, the surplus is expressed in money terms, and this money can buy you say machinery, which is the investment that helps produce more and generate growth. However, this money is not simply recirculated by banks, but there is significant multiplying of it.

What happens to the money, between the time the surplus is generated and the time it is invested, as well as how this surplus is continually multiplied, is what we need to focus on. With the banking system in play, the surplus in money form gets deposited in one bank or the other, the bank following the central bank regulations deposits a fraction of the deposit with the central bank and is then able to create new money with the rest through lending. (Note 1)

Of the money created through the lending by the bank, some might be loans to households to finance consumption, consumer durables, or home mortgages etc. Thus, directly, or indirectly, this will end up as sales revenue for businesses.

The other aspect of bank lending will be some borrowing by businesses to finance investment towards increased capacity.

There may also be some lending to the government, which will either be invested in infrastructure or towards meeting current expenses. In either case the recipients of the money from the government will pay businesses that will create new deposits for the banks.

This new money created through lending will end up in the bank accounts of businesses. The bank accounts of the businesses will reflect as new money deposited with the bank.

Irrespective of what the bank lending created money is spent on, it will generate more deposits. So, theoretically, if the reserve ratio is 10% and if the economy started with a surplus of say 100,000 units of money, and assuming all the current holders of the money initially hold it in their respective bank accounts, the banks could collectively create another 90,000 of new money through lending. This 90,000 would flow back to the

banks and they can now create additional new money equivalent to 81,000; and so on. By running this to the fifth cycle, this "surplus" of 100,000 monetary units grows to around 400,000 monetary units. The growth in money created by the banks will be constrained by not only the cash reserve ratio, but by the bank's capital to lending ratio as well. In the assumptions I have used, the banks would be able to meet the requisite capital through the growth in retained earnings. However, these assumptions are meant for illustrative purposes only, the real-life situation will vary depending on the economic conditions, the jurisdiction and the specific bank's performance.

In a Pakistan type situation, where around 30% of money remains in cash, outside the banking system, the theoretical multiplier impact will see a reduced growth of the "surplus" to around 285,000 monetary units after the fifth cycle.

DISTRIBUTION OF THE INCOME GENERATED THROUGH INVESTMENT OF THE SURPLUS (CAPITAL)

Piketty has demonstrated through analysing years of data, that the return on capital is greater than the growth rate of wages. However, what escapes attention is the role of fractional reserve banking and the fact that its impact on the return on capital benefits from the multiplier effect of the 'surplus'.

Importantly, a typical businessperson, who will 'invest' towards growing the business through additional capacity, may finance say, thirty percent through equity, and the rest through bank loans. The loans in turn, are based on deposits from a cross section of members of the community, including some savings of wage-earners, who get a relatively small, fixed rate of return on their money, while the businessperson typically earns a rate of return significantly higher than the rate money is borrowed at from the bank. Thus, the wage earner suffers two levels of creaming off, the business pays an interest rate say, for the sake of illustrating the matter, at 10% per annum, the bank may make a spread of say 4%, thus paying the depositor 6%, while the business earns say 4% more than it pays the bank, thus earning 14%.

However, this is not the difference in earnings for each group, but the difference is significantly higher. I have used some assumptions to illustrate the point. If a typical business invests, using 30% of its own equity and 70% borrowed from banks, and the tax rate across the board is 20%, the equity provider will net a pre-tax return of 23% on the equity, after accounting for the interest paid on the borrowed money. While the earnings on the gross capital employed are 14% as we had assumed, the interest portion paid to the loan provider, is through a legal fiction, treated as, not the share of profit on the borrowed capital, but a tax-

deductible cost. This adds another 5% to the earnings of the equity holder in the form of the tax shield (Note 3) – effectively a tax rebate at the cost of other taxpayers, which include the wage-earners.

This exercise of the tax shield is repeated for the banks as well. If the banks maintain an equity of 20% of the deposits, the pre-tax return on equity works out to 33%, and the tax shield contributes 6%.

Based on these assumptions, on a net-of-tax basis, the depositor gets 4.80%, the business owner 19% and the bank owners 26%.

WHAT IF?

Most people will argue that the return on investment is commensurate with the risk involved. This sounds perfectly justifiable, but what if we did not have, what are essentially credit driven bubbles, through fractional reserve banking, which are the key driver of economic swings, i.e. risk? (Note2)

Also, what if the tax shield (for the benefit of a few, paid for by all the citizens), was not there – would businesses be as likely to borrow and expose their businesses to the economic cycles? If the cyclical risk generated by fractional reserve banking was removed and the businesses were not that dependent on borrowing, the equity risk would be reduced significantly, allowing a better distribution of equity ownership and the returns on the surplus for wider members of the community.

Will the absence of fractional reserve banking and the money creation through it, adversely impact the investment and the growth therein so created? Not necessarily – should the collective wisdom demand, a similar amount of fiat money, as that created by lending, to now be created by the state, to provide the investment capital. This state created money can be auctioned to business houses and banks. I had recently written an article in these pages, 'Reimagining Economics in the Pakistan Context' and am quoting excerpts from it:

- In the absence of FRB, some of the new money created, within the overall target of aggregate money supply, which is in excess of budgeted expenditure, can be auctioned to the private sector for specific development projects. It could be an inverse auction, where some portion of that auctioned money would be the purchaser's equity in the business in which it is deployed, while the rest of it would be owned by a Pakistan Sovereign Fund. All such businesses would have to be listed for transparency and governance reasons. The rest of the new money could be auctioned to banks for onward lending in the normal course of business.
- The government should do away with taxing efficiency (earning incomes/profits), and, not as a money supply managing exercise, but an exercise towards decreasing inequality, it should tax wealth, thereby

reducing the potential unearned income on that wealth (assets).

However, to ensure that there is no abuse of the auctioned funds by anyone bidding aggressively for high-risk businesses, there would be the need to ensure that the bidder contributes a significant portion of the equity, so as to have meaningful skin in the game. Also, there is no reason to continue with the legal fiction and continue providing a tax shield. In any event, it will become academic if income tax is done away with.

In the absence of the fractional reserve system, as well as by doing away with the tax shield on interest, banks would become more like mutual fund managers, where the savings of individuals would be invested in loans, as well as in the equity of listed entities that would emerge in a relatively low volatile environment. It will allow the banks to offer various risk profile-based options to the traditional depositor.

NOTES

- Fractional Reserve Banking (FRB): The normal understanding of the function of banks is that they recirculate money, i.e., take deposits of people's savings and lend this money out to borrowers, primarily for investment, but some for bridging over earnings and expenditure gap. However, this not quite how the system works. For ease of understanding, let us assume that there is only one bank in the country. When it receives a deposit, it will in turn hand over a fraction of that deposit in line with the cash reserve ratio (CRR) to the central bank. We will assume that the CRR is 10% (it is currently 6.5% in Pakistan). Now let's also assume the public has deposited 100,000 rupees with the bank, and a business wants a ten-year loan from the bank, the bank can lend upto 90,000 rupees to the business. However, the bank does not block the public's deposits for ten years. It will create a loan in the favour of the business for 90,000 without blocking anyone's deposit. The business may issue cheques in favour of several suppliers, the suppliers will in turn deposit their cheques in their respective accounts with the bank. The original depositors have their deposits intact and there are now new deposits of 90,000. The bank can once again hand over 10%, i.e., 9,000 to the central bank and issue new loans of 81,000 rupees. This process can go on and on. In real life, all money does not get deposited in banks, people keep some in cash, and of course that are several banks, but this concept of new money creation through bank lending is real.
- Credit driven bubbles lead to economic swings, making investing in businesses risky: When banks create money through lending, businesses borrow to set up new capacity or to add to existing capacity to grow their businesses if they are anticipating growth in consumer demand. As is normally observed, when the sentiment towards the economy is positive, every business tries to rush in to build the capacity and have the first mover advantage.

However, there never is enough visibility on how much capacity is being added in the system and what the exact demand will turn out to be. Typically, since everyone wants to join the band wagon, we end up with excess capacity developed on borrowed money. Sooner or later, some business cannot service the debt as there isn't enough demand for the aggregate capacity set up in the economy, this leads to bank defaults and banks start recalling loans and auctioning off whatever assets of the borrower they can lay their hands on. When loans are pulled back, it amounts to the reverse of money creation through loans, this stifles the economy, starting a downward spiral – the other end of the pendulum swing. The excessive money creation through Fractional Reserve Banking and the overreaction during negativity are the economic cycles that create risk for investors.

- **Tax-shield:** Let me explain through an example, assume party A runs a business with Rs 100,000 as capital and earns 14% of that from the business, this is Rs. 14,000, if the tax rate is 20%, Party-A will pay Rs.2,800 in tax and earn net Rs. 11,200. This works out to a return of 11.20% on Party-A's investment of Rs. 100,000. Now let us assume that Party-B does similar business but invests Rs.30,000 as his own capital and borrows Rs. 70,000 at an interest rate of 10%, the gross earning is the same Rs. 14,000 on the total of Rs. 100,000 that was deployed; however, he will pay the lender 7,000 in interest leaving a profit before tax of Rs, 7,000 or 23.33 % on his capital, on this Rs. 7,000 he will pay 20% or Rs 1,400 tax and earn a net profit of 5,600, this works out to a return of 18.67% on his investment of Rs 30,000. Please note that Party-B has paid only Rs. 1,400 in tax versus Rs. 2,800 paid by Party-A for the same business. This tax savings is referred to as a tax-shield.

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