LEVERAGE

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How does 'leverage' permeate through fiat systems? How do 'capital gains' get 'capitalised' to create more 'capital?' How does instability manifest itself?

Building 'a portfolio.'

The 'capital value' of a house as well its change ('appreciation' and/or 'depreciation') must be examined together for maintenance of clarity.

Basic example

Imagine you're in the fortuitous situation of just receiving $\$100{,}000$. You wish to 'purchase a safe investment' and 'buy a house to rent out.' The prevailing interest rate is $r\%$. The maximum rental charge would be equivalent to $r\% \bullet \$100{,}000$ PA. Why? A renter/tenant would, hypothetically, have the choice of buying a house for a 'loan cost' of $r\%$, or paying rent of, say, $\$R$ per annum. Therefore, in theory, the *maximum* rent that could be charged is $r\% \bullet \$100{,}000$ per annum. However, renters/tenants are rarely of a similar 'financial status' to rentiers/landlords... and often don't have this hypothetical choice of switching from paying rent to a landlord to paying 'interest/capital' on a mortgage.

Variations of landlord/rentier

Rentiers fall into two broad crowds: those who 'save' their rental income and 'spend' sparingly, including on their 'rental portfolio's' building-fabric upkeep, and those who capitalise upon 'capital gains' to accumulate further 'portfolio additions' and further rental income.

Developed example (A)

It was mentioned earlier that we must examine 'the capital value' of a property *and* its change ('capital gain') to maintain clarity.

If we assume the change in capital value is $p\%$ over a period [year], then the *change* in rent, including change in capital value, is:

$$(1 + p\%) \bullet r\% \bullet \$100{,}000 \; - \; r\% \bullet \$100{,}000$$

or $r\% \bullet p\% \bullet \$100{,}000$

From this *change* in rent, we get income of:

$$r\% \bullet (1 + p\%) \bullet \$100{,}000$$

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How much could a 'portfolio owner' borrow on paid up property? What's the value of marginal property that can be acquired and rental income obtained?

A key variable in 'portfolio accumulation' is 'the deposit ratio,' $d\%$, the amount of 'cash' that must be deposited with the loan's issuer to secure the loan, which typically varies from 5% to 20% depending on 'the nature' of the loan. Further 'assets' are acquired as well as 'rental income.' This is where the idea of *leverage* enters.

~~Developed example (B)~~

Assuming initial cash received is now $\$X$ instead of $\$100{,}000$, show that the value of rental income, including cost of leverage, as a function of $r\%$, $p\%$ and $d\%$ is:

$$r\%(1 + p\%)\$X + r\%(1 + p\%)p\%\left(\frac{1 - d\%}{d\%}\right)\$X$$
$$\text{or } \$Xr\%(1 + p\%)\left\{1 + p\%\left(\frac{1-d\%}{d\%}\right)\right\}$$

Note that this expression, let's call it $R(r\%, p\%, d\%, \$X)$ is *quadratic* in $p\%$ ('capital gain') but *linear* in other variables.

This means that, more or less, for a 25% 'increase' in $p\%$, $R(r\%, p\%, d\%, \$X)$ would 'increase' by 56%. Conversely, for a 25% 'decrease' in capital gains, rental income would 'decrease' by 56%. Another formulation that we're all familiar with is 'kinetic energy' which is *linear* in an object's weight but *quadratic* in its speed.

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'Capital *gains*,' when $p\% > 0$, make rentiers 'feel wealthy' and are used to 'pull demand forward' – i.e. create 'artificial demand' driven by rentiers – and consequentially reinforce further capital gains – up to a point. As demand is limited to rentiers, a dearth in demand from them, which arises inseparably when rentiers try to 'crystallise capital gains ‡' makes problems which could prove calamitous.

'Private property' such as residential homes and 'shares' do not appear on central bank balance sheets – at least officially.

'Liquidity' problems.

You might be thinking "I don't do this form of 'leveraged' investment." Nevertheless, *it has already been done*! The 'market value' of all property, not limited just to 'bricks and mortar' but 'shares' as well as 'fine art' *has arisen as a result of processes described*. It doesn't matter per se whether *you* might not be a 'leveraged' rentier, *what you are buying and selling* has *already* resulted from this process.

Assuming $r = 2\%, p = 5\%, d = 10\%$, from a single house with 'market value' of $100,000, earning $2,100, further rental income of $3,045 has been – in part of whole – created out of nowhere – which accompanies fiat appearing out of nowhere as inseparable counterpart. A 'deflationary collapse' could be of the order 3/5 in terms of 'capital values' and/or income falling.

When a seller wishes to sell a house with a loan behind it, there's an automatic realisation of 'duration mismatch' as loans (mortgages) behind a house are *always* of a longer duration than that time up to which a seller wishes to sell a house. *When unexpected,* rentiers needing/wishing to swap from 'bricks and mortar' to cash (i.e. 'to sell') necessitating a swap from a 'long duration' mortgage asset to 'short cash' by their banker, make issues occur at the discount window, as was observed with the Federal Reserve on 17th September †. Having to swap 'long duration' fiat receivables into 'short duration' exceeding the discount mechanism's parameters are part of that.

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We've shown how 'capital gains' get 'capitalised' but how does 'instability' materialise? When change in 'capital value' becomes volatile, then rentiers feel 'less wealthy,' especially if $p\% < 0$ over 'sustained periods.' Remember, 'control of $p\%$' is outside of 'state decision/dictate' (at least officially) even though it's based on 'state dictate' of fiat.

What can be done to compensate for $p\% < 0$ over 'sustained periods' by 'state decision?' Turning to $R(r\%, p\%, d\%, \$X)$, $r\%$ and/or $d\%$ can be 'reduced' ... and there's no limit to 'how far they can be reduced.' However, offering 'cheaper deals' on property that rentiers wish to sell is a moot strategy… and even more moot when 'other' buyers can't afford to buy.

In summary

- Capital gains on property crystallise further capital gains on property, enriching the rentier class.
- Rental income changes by *the square* of capital changes.

- Interest rates will go through zero – and keep on falling – to compensate for what central banks cannot do overtly – i.e. acquire 'private property.'

Sandeep Jaitly, 4th October 2019.

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Notes:

‡ On 'crystallising capital gains' – from *A Bubble that Broke the World,* Garet Garret, Boston, Little, Brown and Co., 1932.

Since John Law and his Mississippi Bubble, individuals have been continually appearing with the same scheme in new disguise. The principle is very simple. You have to only find a way to multiply your creditors by the cube and pay them by the sqaure, out of their own money. Then for a while, you are Nabob. One fish cut up for bait brings three. Four of these cut up for bait bring sixty-four, the cube of four. Sixteen of these for bait bring 4,096 and 256 of these, which is the square of sixteen, will bring 16,777,216, which is the cube of 256. The fatal weakness of the scheme is that you cannot stop. When new creditors fail to present themselves faster than the old creditors demand to be paid off, the bubble bursts.

† https://www.cnbc.com/2019/09/30/fed-has-quieted-bank-funding-market-but-still-faces-pressure-to-fix-it.html