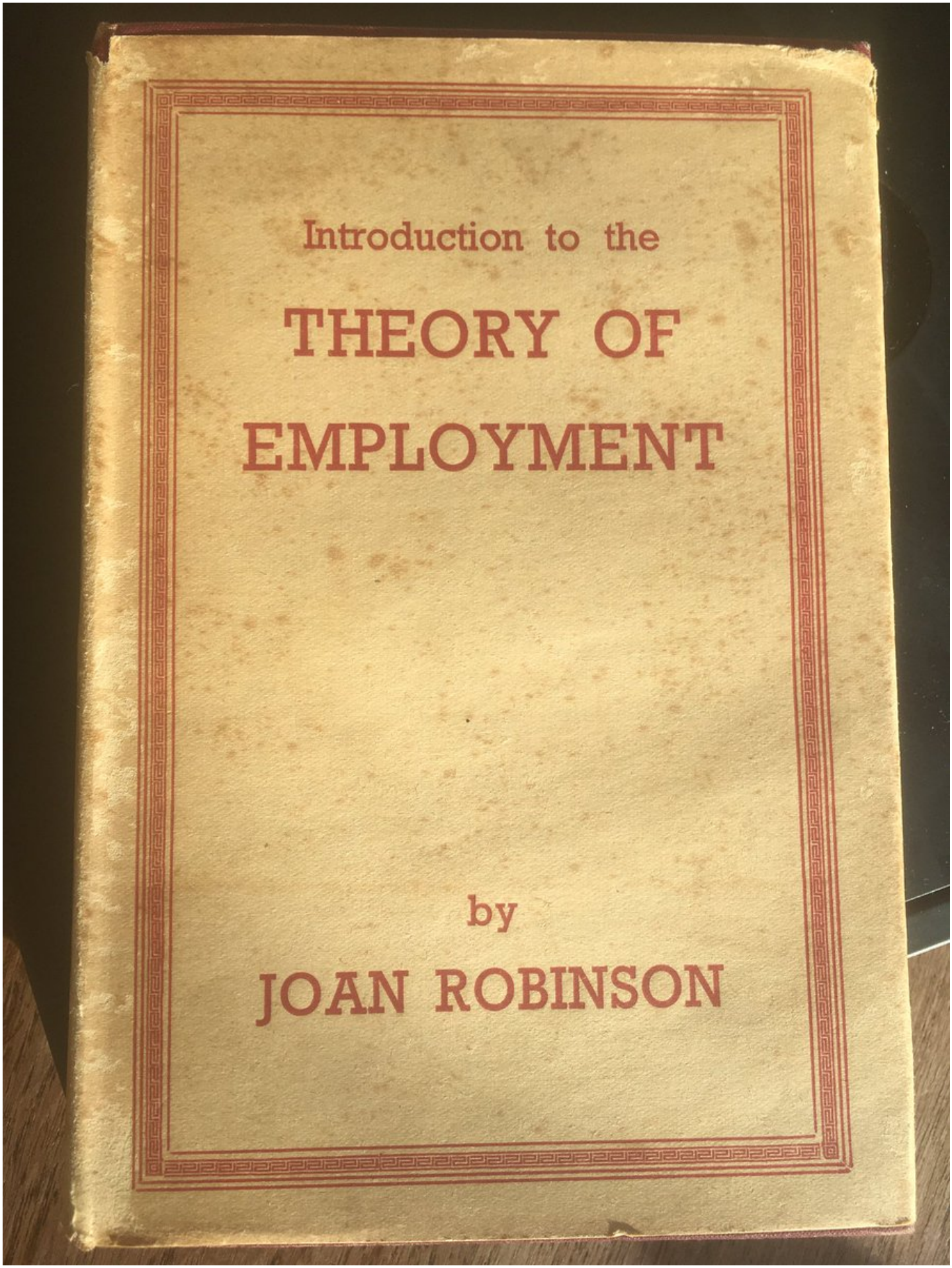
Twitter Thread by Jo Michell



Jo Michell
@JoMichell

Right, let’s do this.

Joan Robinson on investment and saving in 10 tweets or less. 1/



By investment is meant an addition to real capital ... This use of the word does not correspond to the everyday sense in which investment means merely acquiring a title to capital. ... Saving is the difference between income and expenditure on consumption. 2/

CHAPTER II

INVESTMENT AND SAVING

Terminology

The concept of *investment* plays an important part in the argument which follows, and it is necessary at the outset to be clear about terms. By *investment* is meant an addition to real capital, such as occurs when a new house or a new factory is built, a railway line constructed or a store of raw materials accumulated. This use of the word does not correspond to the everyday sense in which investment means merely acquiring a title to capital. In ordinary speech we may say "I have invested £100 in Home Rails", but in the present context "investment" does not mean buying a piece of paper, but making an addition to the stock of goods in existence. You are not investing when you buy a security; you are investing when you cause a house to be built.

The word saving, on the other hand, is used in its ordinary sense. Saving is the difference between income and expenditure upon current consumption. *Income* also is used in its everyday sense. Refined complications have been raised in connection with the definition of these terms, but for our present purposes a rough-and-ready treatment will suffice.

All income is derived ultimately from selling goods and services. It may be derived by working for wages or salaries, or from owning property, land or capital equipment, which contributes to the output of goods, or from lending money, in which case interest is paid out of

All incomes are derived either from producing C goods or producing I goods.

All income is spent on C goods or is saved.

The income derived from producing C goods is equal to what is spent on them.

Therefore, what is saved is equal to the income from producing I goods.

S=I 3/

receipts derived from selling goods and services, or from gifts or allowances from people who derive income from one of these sources. All income, therefore, is derived either from providing for current consumption or from adding to the stock of wealth, that is, from investment. The work of repairing and renewing existing capital goods is best regarded as part of the process of producing consumption goods, and incomes derived from such activities must not be reckoned as investment incomes.

Equality of Investment and Saving

We have already seen that an individual who adds to his private wealth by saving, that is, by consuming less than the whole of his income, does nothing to encourage the production of more real capital, in short that saving in itself does not cause investment to take place. But yet it can easily be seen that for the community as a whole the rate of saving must be equal to the rate of investment. All incomes are derived either from producing consumption goods or from producing investment goods. And all income either is spent on consumption goods or is saved. The income derived from producing consumption goods is equal to what is spent on them. Therefore what is saved is equal to the income derived from producing investment goods. In short, the rate of saving is equal to the rate of investment.

To look at the same thing in another way: each individual who saves adds to his wealth, while any individual who spends more than his income — that is, dis-saves — reduces his wealth, either by getting rid of part of his past accumulation or by increasing his indebtedness. The sum of all the savings, positive and negative, of individuals is the total increase in wealth of the community, and

The sum of all the savings, positive and negative, of individuals is the total increase in wealth of the community, and the increase in wealth of the community ... is the investment that has taken place.

But saving is not the same thing as investment. 4/

the increase in wealth of the community, over any period, is the investment which has taken place in that period.

But saving is not the same thing as investment. To say that the rate of saving is equal to the rate of investment, for all individuals taken together, does not mean that each individual act of saving leads to a corresponding act of investment. Every individual is free to spend or save his income just as he pleases. His motives for saving are governed by such influences as prudence, family feeling, pride, or inability to think of a new way of spending money. At the same time every entrepreneur is free to decide how much it is worth while to invest in creating new capital goods, having regard to the prospects of profit. Decisions to save and decisions to invest are taken quite independently of each other, and for a quite different class of motives.

In some individual cases the two decisions are bound together, as when a man cuts down his consumption in order to save up and have a house built for himself. But normally even private building is done out of borrowing or out of accumulated wealth, not at the expense of current consumption. Again, in a society different from our own the decision to save and the decision to invest in creating new capital goods may be tied together. Under a completely socialist system the government would decide how much investment was desirable, and would control the amount of collective saving accordingly. Or, in a primitive community, with no money and no borrowing, saving can only take the form of adding to the stock of goods owned by the individual family. When the family desire to save more, they eat up less of the year's crop and retain a larger stock in their barns.

But in the system under which we live the decision to save and the decision to invest are not bound together,

How does it come about that .. individuals always decide to save just as much as entrepreneurs have decided to invest?

Entrepreneurs decide to expand their plant ... Incomes increase.

With a higher level of income, and the same attitude to saving, the amount saved increases. 5/

and the motives governing them are quite different. How then does it come about that, on balance, individuals always decide to save just as much as entrepreneurs have decided to invest?

What Happens when Investment Increases

Let us suppose that in a time of general unemployment entrepreneurs decide to extend their plant at a greater rate than formerly, while the desire of individuals to save remains the same. An increase in activity now takes place in the capital-good industries. Incomes increase — men formerly unemployed begin to receive wages and profits go up. Part of these additional incomes are spent, activity in the consumption-good industries also increases, and a further increase in incomes takes place.

Now, with a higher level of income, and the same general attitude to saving as before, the amount that people save will increase. For without any change in the general state of family affection, foresight and pride — without, that is to say, any change in the desire to save — people will save more when their incomes are higher. A change in the desire to save means that people are inclined to save more out of the same income. But with the same desire to save, the actual amount of saving will depend upon the income they have to dispose of. As the most urgent needs are met, and the standard of life becomes more comfortable, the importance of present consumption grows less compared to the advantages of owning wealth, and the moral effort of refraining from present consumption becomes less strenuous. Thus, as a general rule, saving increases with income. This rule does not apply to every individual, nor to any one individual in all circumstances, but, as we should expect, it is found to hold good by and large.

Saving depends on income, and income depends on production of investment goods.

The argument does not run in the reverse way. The desire to save does not promote investment.

Suppose desire to save increases. Some spend less of their income. Activity and income fall. 6/

Saving depends upon income, and income depends upon the rate at which investment goods are being produced. Everyone is free to save as much as he likes, but how much he likes to save is influenced by his income, and his income is influenced by the decisions of entrepreneurs as to how much it is worth their while to invest. Thus everyone does what he likes, but what he likes is determined for him by the entrepreneurs. Saving is equal to investment, because investment leads to a state of affairs in which people want to save. Investment causes incomes to be whatever is required to induce people to save at a rate equal to the rate of investment. The more willing people are to save, the lower is the level of income corresponding to a given rate of investment, and the smaller the increase in income brought about by a given increase in the rate of investment.

What Happens when the Desire to Save Increases

The argument does not run in the reverse way. The desire to save does not promote investment. Let us suppose that individuals' desire to save increases — that is, the amount they will save out of a given income goes up — while entrepreneurs are undertaking investment at the same rate as before. Then, some individuals will spend less of their income than formerly. Activity and income in the consumption-good trades will therefore fall off. Owing to this decline in income, consumption will be further curtailed, and a further decline in incomes will take place. One man's expenditure is other men's income, and when one man spends less, other men earn less. As incomes fall the amount that individuals want to save is cut down, and income for the community as a whole is

Whatever the attitude of individuals to saving may be, the amount that they actually save is determined for them by the decisions of the entrepreneurs as to the amount of investment goods it suits them to produce.

The actions of savers can only influence current consumption. 7/

reduced to the level at which the actual rate of saving is no greater than the rate of investment. The more reluctant people are to cut down their saving, the greater will be the fall in incomes.

Thus we see once more that whatever the attitude of individuals to saving may be, the amount that they will actually save, taken together, is determined for them by the decisions of the entrepreneurs as to the amount of investment goods that it suits them to produce. Any one individual, it is true, can increase his rate of saving, but the very fact that he is saving more, which means that he is spending less, leads to a decline in other people's incomes to such an extent that they save less, and his saving makes no change in the total rate of saving. The individual saver has no direct influence upon the rate of investment. If entrepreneurs see a profit to be made by investment, investment will take place, and if they do not it will not. The initiative lies with the entrepreneurs, not with the savers. The savers, as a group, are helpless in the hands of the entrepreneurs, though any one individually is free to save as much as he likes. If the desire of individuals to save increases, but the desire of entrepreneurs to create new capital goods does not increase, then no increase in the rate of aggregate saving can take place and the impulse to save runs to waste. Consumption falls off, and incomes decline as much as consumption, so that in spite of the sacrifices of increased thrift no increase in saving takes place; abstinence brings no reward of added wealth to the community. The actions and decisions of the savers can have no direct effect upon the rate at which new capital goods are created. All that they can influence directly is the level of current consumption and current output of consumption goods, and so the level of income and total activity.

Some appear to disagree with this view. If saving increases, they say, there is increased demand for securities. Securities are issued to finance investment and therefore an increase in saving leads to an increase in investment. This argument sinks at the first step. 8/

The "Hoarding" Fallacy

Some writers appear to disagree with this view. Savings, they say, are devoted to buying securities, and if saving increases there is an increased demand for securities. New securities are issued in order to finance investment, and therefore an increase in saving leads to an increase in investment. This argument sinks at the first step, for, since an individual, by increasing his own savings, reduces the savings of others, he does not add to the rate of saving of the community, and therefore does not add to the demand for securities. But the initial error leads to a further complication. If saving directly caused investment, it would be very difficult to see how unemployment could possibly occur, and such writers, in order to provide an explanation of unemployment, usually fall back on the notion of "hoarding". If an individual saves, they say, and buys securities with his new wealth, investment automatically increases, but if he puts his new wealth into money, that is, hoards it, there is no corresponding investment. But this is simply an error. The saving of the individual is not a cause of investment in either case, and the distinction does not arise. We shall find, it is true, that the desire of individuals to hold their wealth (whether newly saved or owned for some time makes no difference) in money rather than securities plays an important part in influencing the rate of investment, *via* the rate of interest. But this is an indirect and complicated effect. The individual saver has no direct influence on the rate of investment, whether he buys securities or not. He may buy securities or add to his holding of money, whichever he pleases, but since other people are saving less because he is saving more they are buying less securities or parting with money they formerly held. The question of how

The error arises from the desire to find where the vanished savings have got to. The savings are nowhere. They have failed to come into existence because as one increases saving by reducing spending, others incomes fall off and they save less. 9/

wealth is held, whether in money or securities, has only the slightest connection with the interaction of investment and saving.

The error connected with the idea of "hoarding" arises, no doubt, from the desire to find where the vanished savings have got to. It is clear enough that if the desire of individuals to save has increased, but the desire of entrepreneurs to invest has not increased, then actually savings do not increase, and the explanation is put forward that the missing savings have somehow got lost on the way by going into money instead of into securities. But this is not a tenable explanation. The savings are nowhere. They have failed to come into existence, because as fast as one man increases his saving, by reducing his spending, other men's incomes fall off and they save less as much as he saves more. It is of no use to search for the non-existent savings either in "hoards" or anywhere else.

Summary

To sum up: When investment increases, incomes rise to the point at which saving increases equally, but if the desire to save increases, incomes fall off so much that on balance saving is no greater than before. It is through changes in income that the equality of saving and investment is preserved. Thus the level of income is determined by the rate of investment and the desire to save; given the desire to save, the level of income that will rule is governed by the rate of investment. And given the rate of investment the level of income is determined by the desire to save.

We are now able to give a provisional account of how it comes about that resources can be wasted in idleness. If the amount that entrepreneurs in given conditions are

If the amount that entrepreneurs are willing to invest is less than the amount that individuals, taken together, would want to save out of the incomes that full employment would entail, then there cannot be full employment. 10/

willing to invest is less than the amount that individuals, taken together, would want to save out of the incomes which the full employment of resources would entail, then there cannot be full employment, and incomes will in fact be less than they would be if full employment obtained. Or to look at the same thing in another way — suppose that the investment decisions of entrepreneurs have been taken, in the light of expected future profit. Then the current rate of investment is given, and if individuals are not willing to spend on current consumption the whole difference between the rate of investment and the total of income that there would be if there were full employment, then there will not be full employment.

Thus the popular description of unemployment as " poverty in the midst of plenty " contains a large element of truth, for in one sense unemployment arises because the incomes which some individuals would enjoy, in the absence of unemployment, would be so large that they would not want to spend enough money to make it profitable for entrepreneurs to give everyone employment who wants to work.

This is merely a provisional account of matters which will become clearer as our argument proceeds.

This should be the first lesson in macro. Most economists don't understand it. Students should go no further until they've mastered it. No getting tangled up with sectoral balances. No AS-AD. Definitely no rinky dink loanable funds models. This is

macro 101.