

Capital Gains in Economic Theory and National Accounting*

JOSEF STEINDL

1. Strange omissions

It is one of the peculiarities of our very peculiar subject that it takes very little notice of capital gains. The national accounts do not know them at all and economic theory has very little if anything to say about them. The reason? Well, the national accounts have two limitations which together prevent any consideration of the matter: they do not deal with assets, and they consider only the relations of flows taking place in one and the same year, not relations of flows in different years. (This is inevitable because the system of identities refers to one given period.) If they did we should find that the gains of estate speculators are paid out of the rents or interest on the mortgage of home dwellers in later years and it might then be possible to regard realised capital gains as a special kind of transfer incomes (the rent or interest paid by the home dweller services a loan which bought the land and from which the speculator's gain was paid). As it is, all the accounting identities must refer to one and the same period. On the other hand, as far as theory is concerned the prevalence of equilibrium ideas somehow deflects the interest from facts which from this point of view may appear abnormal or unessential.

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But if you consider how vastly the value of the urban land has increased in the course of modern capitalist history and is still increasing all the time, you wonder at the oddness of our modern economics which manages practically to ignore the theoretical relevance of capital gains for the distribution of income in the long run and for the accumulation of credit instruments which finance them in the short run. The astonishment gets even greater if we think of the casino society in which we live and the rise and capital gains it has produced in the '80s. The shares are not as difficult to reproduce as land and works of art but are not as promptly reproduced as manufactures, so that they are liable to great price fluctuations and also to a long time trend increase in value reflecting the accumulation within the firm. Again very unlike manufactures are raw materials and agricultural produce which therefore give rise to price movements and speculative gains.

2. Capital gains and the Keynes-Kalecki paradigm

When Kalecki analysed the relation between investment and national product (the multiplier) he always worked in real terms. (Keynes aimed at the same result by his use of wage units.) He assumed that prices of investment and of consumption goods changed at the same pace so that no practical problems would arise (Kalecki 1990, p. 259). What were his reasons? I think his general method was to separate the analysis of real term movements and price movements since no doubt a simultaneous treatment of both problems might produce difficulties. But the assumption of constant relative prices does not always hold. After World War II the prices of investment goods had risen in comparison to those of consumer goods. In the late '80s the opposite movement can be observed. It seems quite natural to apply a multiplier in terms of money rather than in real terms and the regression would hold equally well. This implies, however, a remarkable step in the theory. Saving is needed, then, not only to finance real investment but also to finance a relative increase in the prices of investment goods. If that is accepted, it is logical that we should take another step and admit that also an increase in the price of land or of shares, whenever they change hands, should require and therefore should produce

savings to finance the appreciation of these assets. A rise in land or share values would then create savings just like real investment.

How does it work? Let us assume, to start with, that all transactions in land are financed by bank credit. The buyer of land who is motivated by expectation of rise will pay a higher than the usual price for it. He finances his purchase with bank credit. The seller of the land will use the proceeds of his sale in order to pay back the credit he had taken when he in turn bought the land. But since he had paid less than he has now received he has got a surplus, his realised capital gain. And the banking system is left with an addition to its credits outstanding, so there is clearly an expansion of credit. Even though there is nothing of substance behind this additional credit, it will create effective demand just as if there were.

The seller of the land may be assumed to hold his gain in the first place in form of short-term assets. In this way the saving created is evident. He may then use his gain for consumption (or if it is a corporation, for paying out dividends) or for real investment or he may buy bonds. In so far as he consumes, this will create a multiplier effect leading to the creation of an equal amount of saving. This is analogous to the effect of consumer credit. In both cases the consumption does not arise from the circulation of income but rather like an exogenous influence comes from outside (analogous to investment).

The situation ought not to be different in principle if the transactions are not carried out by means of bank credit but with the purchaser's own funds. The vendor receives a sum which is more than sufficient to replace the funds which he in his turn used up when he purchased the land. The capital gain represents an increase in the sum of financial assets which ideally represent the counterpart of the land. There is thus an increase in the value of assets which represents saving. If this statement is not easy to accept for traditional Keynesian theory this is due to the idea that saving should represent something real like reproduceable capital and not the finance of a mere change in value. But in fact this idea is anyhow abandoned since it is recognised that budget deficits require saving to be financed.

We have only talked about rise so far but the case of fall might be thought to be symmetrical. We assume again finance by bank credit. The vendor receives less than he needs to pay back the debt he incurred when he purchased the land. The remaining debt - his capital

loss – represents dissaving. If he repays it from his own funds the total bank credit outstanding will be reduced, which involves a credit restriction. If he is not able to repay when he is pressed (which may happen in view of expectations produced by the decline in values) then he will become insolvent. This implies an asymmetry of the effects of boom and bust.

When there is general inflation, capital gains may be illusory in so far as they do not enable the owner to consume them as long as he wants to keep his wealth intact. The gain must therefore be measured in terms of purchasing power of consumer goods or possibly in terms of wage units (power to purchase labour for purpose of investing in reproduceable capital).

3. Ricardo's rent

If land is valued at the price paid when it last changed hands, then the value of land consists of the accumulated capital gains of the successive vendors of the land. The value of the land, in so far as it is not directly owned, has its counterpart in an equal value of financial instruments which served to finance the successive purchases, in the same way as reproduceable real capital has its counterpart in the instruments of credit which made its coming into existence possible. The current increase in land value, as far as it is realised (by the land changing hands), is financed by saving in the form of financial assets. Since these gains seem to be quite sizeable, it appears that Ricardo's rent has not lost in importance since his time, the decrease in importance of agricultural rent having been compensated by an increased importance of urban rent. Marx and other economists denied the importance of rent since, they argued, rent and profit, capital and land, could in practice not easily be distinguished. But the above analysis shows that there is a conceptual difference between them which is quite important.

4. Capital gains and the national accounts

The exclusion of the capital gains from the national accounts has led to glaring misinterpretations of the data. If households finance consumption by means of realised capital gains this appears in the accounts as a reduction of personal saving. If corporations use such gains to pay more dividends then the accounts show a reduction in retained profits. The distortion of the savings rate which has been caused by the stock exchange boom in the middle of the '80s in connection with the pension funds has been dealt with in an earlier paper (Steindl 1990).

The capital gains do not arise in the circular flow of production and incomes, they occupy a special position in the accounts.

They are not income as far as their origin is concerned, and yet they are able to fulfill the functions of income: they can be used for consumption or for real investment or, failing that, for investment in financial instruments. In this ambiguous position they resemble consumer credit which also comes from outside the circulation and can also fulfill all the functions of income. This position is truthfully reflected if we introduce separate accounts for both capital gains and consumer credit. We have then a *Consumption-Income Account* which shows the various ways in which consumption is financed: from incomes, from consumer credit and from realised capital gains of households. The balance of these items is saving gross of consumer credit and realised capital gains; we do not consider depreciation of dwelling houses in view of the criticism which can be justly levied against it (Scitovsky 1986) so that the personal saving is in any case gross of depreciation.

The consumer credit is charged against an account *Consumer Credit*, while the capital gains of households are charged against an account *Realised Capital Gains*. This last mentioned account absorbs capital gains both from corporations and from households; they are derived from the respective separate accounts. In analogy to the *Income and Consumption Account* which refers to households we have an *Income and Investment Account* for corporations. This shows on the one hand the sources of corporation income, that is ordinary commercial profit and realised capital gains; and on the other side the uses, that is investment, dividends and, as the balance, retained profits (corporate saving).

We have further an *Investment-Saving Account* which shows the uses to which gross savings are put: the finance of gross investment, consumer credit, capital gains creating spending on assets, and the budget deficit. Consumer credit and the budget deficit are more often regarded as dissaving, but the practical effect of this is to reduce the amount of information. I prefer to make it explicit that the consumer credit of some people must be financed by the saving of others, no less so than the budget deficit. In the same way the spending on assets, in so far as it increases prices, must be financed by the capital gains realised by the seller of the asset. Against these 'investments' there stand the various types of savings: the personal saving (household saving), gross of consumer credit and realised capital gains, the corporate savings gross of realised capital gains and finally (if we think of American conditions) the foreign balance deficit. Thus by introducing two exogenously determined accounts for consumer credit and for realised capital gains we can enrich the information given by the accounts in such a way that the misconceptions mentioned earlier on can be avoided.

What then is the practical consequence of all this? It is, quite simply, that the publication of one single and unique saving ratio, which pretends to be self explanatory and simple, should be stopped, and it should be made clear to the public (which unfortunately includes many economists) that there are various saving ratios with different meanings and that it will not do to refer to any of them without proper specification. I can already hear the objection that this will confuse people. No, they are confused already now, only they do not know it. If they realise that they are confused, they will at least refrain from spreading their confusion to others.

5. Further comments on accounting

The above proposals have still to be supplemented by a number of details. This concerns first of all the treatment of owner-occupied houses in the accounts. According to the NIPA philosophy they are treated in strict analogy to tenant-occupied houses, that is, as a business selling a service against rent. The owner-occupier is supposed to sell the service to himself, the fictitious rent he pays to himself is ima-

gined to be equal to the rents actually paid for similar houses and the service he enjoys is simply equalled to the fictitious rent.

In a spirited criticism of this procedure Kopcke, Munnell and Cook (1991) have pointed out that the 'income' of the house owner is underestimated in this way and that anyway part of it should be regarded as investment and not consumption, so that the procedure of NIPA leads to a substantial underestimate of saving. This criticism is well taken, but I would prefer to go further to what seems to me the root of the evil. The owner-occupier as such is not a businessman and, while we may not be able to avoid fictitious and arbitrary figures in the accounts, we must at least strive to limit them if possible.

I therefore suggest that we measure consumption as in other cases by the spending of the consumer which we have only to spread over a number of years in this case. The stream of consumption is calculated (like depreciation but with a rather different meaning) by distributing the purchase price of the house over the whole of the useful life. We have to introduce then a separate *Account for Owner-Occupied Houses* which on the left hand side will show the spending of consumers on houses in the given period; on the right hand side it will show the stream of 'use value' measured by depreciation of the whole existing stock of such houses. The remaining balance of the account will represent the investment (equal to saving) of consumers in housing (this is independent of the manner of finance, by mortgage or otherwise). Quite properly this investment will be the difference between the stream of current use and the spending on new houses.

The question arises now whether we ought to adjust this flow of 'use value' to inflation in the way which the NIPA does with depreciation. If we want to base our estimate of consumption on the actual spending, there is no need for such an adjustment. As Scitovsky (1987) argued, home-owning is not a business and the owner is normally not concerned with keeping his capital intact; if he were, he would have to consider the appreciation of housing value, too.

The durable consumption goods might in principle be treated in the same way as houses; spending on them would be regarded as investment as is done by the Flow of Funds. In the sketch of accounting relations which is represented in Tables 1 and 2 I have chosen a mixed treatment which is unsystematic but may serve some practical purposes: I have regarded the durable consumers goods as investment only in so far as they are financed by consumer credit, the remainder are

treated as consumption as before. This is a compromise between the old way and a recognition of the similarity which to some extent exists between the durables in consumption and those in business.

I want to go back now to the question of capital gains and consider the case of pension funds. This case is most important in this context, because it is here that the capital gains undoubtedly play a substantial role, while direct share holding may not have so much influence on consumption in view of the great concentration of the ownership of shares in households. The pension funds hold as investments mainly shares in order to secure the servicing of the future pension claims; these are in addition fed by contributions from the employer. These contributions have to be stopped as soon as the investment portfolio has reached a value which guarantees the safety of the pension claims. Growth of the investment portfolio comes about partly by successful speculation in which the fund managers are experts.

The national accounts include the employers contribution in the disposable income of the employees (Account 1). Again, the capital gains realised by the pension funds are included in the capital gains of the households, because the pension funds are regarded as part of the households. If there are large realised capital gains, as in the middle of the Eighties, the disposable incomes of employees will be reduced by the reduction in contributions, but this will be offset in part at least by the large realised capital gains. Consequently the NI-PA measure of saving will be reduced by the full amount of the cut in contributions, but the saving gross of capital gains will be reduced much less if at all. To the apparent and not in any common sense meaning real reduction in household saving corresponds *prima facie* to a saving of the corporation by the amount of the cut in contributions. What happens with that – whether it goes into dividends, is passed on to the employee in form of higher wages, or is retained as corporate saving – is difficult to say, so that the apparent reduction in household saving may or may not be offset, fully or partly, by an increase in corporate saving. It should be noted, however, that the corporations also receive capital gains and may use them to finance dividend payments or investment in real capital, which means that there will be a corresponding apparent and not real reduction in corporate saving.

TABLE 1

<i>1 Consumption-Income Account</i>	
1. Consumption	1. Disposable personal income
2. Personal saving gross of consumer credit and realised capital gains (5.1)	2. Consumer credit (3.1)
	3. Realised capital gains net of tax (4.1)
<i>2 Corporate Income Account</i>	
1. Dividends	1. Gross profits
2. Retained profits net of tax (5.2)	2. Realised capital gains net of tax (4.1)
<i>3 Consumer Credit Account</i>	
1. Consumer credit (1.2)	1. Consumer credit (5.2)
<i>4 Realised Capital Gains Account</i>	
1. Capital gains of households (1.1)	1. Capital gains creating spending on assets (5.3)
2. Capital gains of corporations (2.2)	
<i>5 Investment-Saving Account</i>	
1. Private investment	1. Personal saving gross of consumer credit and capital gains (1.2)
2. Consumer credit (3.1)	2. Corporate retained gross profits gross of capital gains (2.2)
3. Capital gains creating spending on assets (4.1)	3. Foreign balance deficit
4. Budget deficit	

TABLE 2

<i>Owner Occupied Dwelling Houses</i>	
1. Houses currently bought at purchase price	1. Depreciation (value used up) to consumption account
	2. Investment (= saving) to investment account

6. Macroeconomic implications of creating capital gains

There is a certain terminological difficulty: saving and investment stand in the same relation as capital gains and what? We might call it capital gains creating credit, although it is not always and entirely credit but may be paid out of the buyer's own pocket. It is strictly the asset buyer's spending in so far as it finances the increase in the asset price. We might for the time being call it inflationary spending on assets. Now this spending creates capital gains of the same amount, which may be spent again on consumption or investment or may be kept in financial assets. At the same time, however, it burdens the buyer of the asset just as much with interest payments (debt service) as if the credit had been used only for productive investment.

Now we must refer to a rather old fashioned distinction between production and consumption credit. If the credit serves to initiate additional production (especially increased productivity), then the interest and in good time also the capital can be paid out of the additional profits created by means of the credit. In the case of the credits which are used only to create capital gains, on the contrary, the interest has to be paid from existing incomes. This means that the distribution of the society's income will be affected, and there will be a shift of incomes in favor of the rentier. This will be true whether the assets are land or shares or even raw material stocks. The most important case is probably that of urban land, because there is here a long-run tendency to an increase in values which means that the shift in income is continuing, just as it had been predicted by Ricardo though for different reasons. The same burdening of the society's income by interest payments not fed from additional output due to the credit is also found in different cases: consumer credit and government borrowing to finance armaments or social expenditure which as a direct effect increase effective demand. The shift in distribution owing to the interest payments may and most probably will, however, influence effective demand in the long run unfavorably if, as it is likely, the interest income is less readily spent than most other incomes. In all cases the shift to interest receivers can be avoided if the total income of society increases correspondingly, so that relatively speaking the position of rentiers is unchanged. The repercussions of a consumer credit or a budget deficit will become more inconvenient if

the (net) borrowing is repeated, with the object of holding effective demand on the same level. The income is then shifted more and more to the rentiers. Since the interest has to be paid out of the new credits, these have either to be increased or the effective demand created will decrease. Similar effects will obtain in the case of continuing increase in land or other asset prices.

If, in order to escape from these troubles, measures are taken to reduce the debt, then this will necessarily mean a corresponding more or less drastic restriction of effective demand. The experience of this is nowadays familiar to everybody in view of the frequent instances of restrictive budget policies. The dilemma is, however, the same for households and corporations.

7. Links to the theory of inflation

We have drawn a parallel between the concepts of investment and saving on the one hand and 'inflationary spending on assets' and realised capital gains on the other. Actually this parallel is really hardly new or strange to the Keynesian tradition if we think of the way in which Keynes dealt with the phenomenon of demand inflation (Kalecki's opinion on the subject was the same). The logic of effective demand implies that in an underemployed economy additional investment (or budget expenditure or exports or any other additional kind of spending) will call forth additional output and incomes sufficient to create the saving necessary to finance the investment. If, however, full or over-full employment of resources has been reached, so that additional output cannot materialise, then further additions to investment (or other types of spending) will exhaust themselves in an increase of prices and the excess profits thereby created will finance the investment (or other types of spending). Thus the identity of the amounts of investment and saving will again be established but by a different mechanism: increase of prices rather than increase in output. In the case of raw materials where supply is inflexible, at least in the short run, the price adjustment method is valid even in an otherwise underemployed economy.

The view of capital gains suggested in this paper is nothing but the application of the same ideas to the special case of non-reproducible or limited assets, a case more special in that it applies only to assets of a certain type, and yet more general in that it holds also in underemployed economies. In both cases the shift in distribution is the essential feature. There is nothing strange then, after all, in the concept of saving needed to finance not only real investment but also the increase in price of assets with inflexible supply.

8. Capital gains as a return on the asset

The price of the asset is ultimately based on what it yields (dividend for a share, rent for land). For anybody, however, who is not determined to hold the asset for ever the expected future price will also be important. The full return on the asset will therefore consist of two terms

$$\text{return} = \text{yield} + \text{appreciation.}$$

$$r = y + a.$$

In the simplest case if the yield, say the dividend R , is constant as a proportion of the asset price and the rate of return r is also constant, the asset price A will depend on the future price of the asset. The rate of return of the share r will be higher than what you would get from holding a bond at fixed interest because of the greater risk involved in the investment.

What course of events can justify a continuous increase in the price of the asset (the share) that is, a positive a ? The answer is: the internal accumulation of retained profits in the firm, which will make it possible in future to pay dividends at a constant rate on an increasing value of the share. We may then regard a also as an estimate of the increase in the real earning capacity of the firm which, if it happens to be realistic, will make it possible for the price of the share to rise continuously without the holders being ultimately disappointed.

The above considerations are very abstract. They do not tell us what happens, how the share prices are formed, but only what would have to happen if a smooth development were to result. In reality it is important that there are two types of holders of shares. The long-

term holder is strongly interested in the dividend. For him the knowledge of the future dividends would be quite sufficient to make a clear decision. The short-term holder on the other hand is predominantly interested in the future price of the share, and a fairly near future at that. The long-term holder will be less prone to flights of imagination and his influence will tend to set a limit – up and down – to the price the share might have. His influence will tend to be stabilising (see Keynes), although this is heavily qualified by the fact that he ultimately has no safe knowledge of the future dividend but only makes a more or less informed guess. The short-term holder is not much interested in the ‘inner value’ of the share but rather in the opinions of others about it. As Keynes (1936, p. 156) has so brilliantly described, his expectations are based on the expectations of others and his influence is therefore basically destabilising. That his influence is of decisive importance on the actual movements of stock prices is shown by experience.

The instability takes the form of cycles. When optimistic expectations lead to an increase in asset value, this tends to be extrapolated and the value continues to increase. If this is not justified *ex post* by a corresponding increase in the ‘inner value’ of the share, then the ratio of the actual dividend to the value will decline, until at a certain point it becomes too low for investors who refuse to believe in a further increase of the asset value. Once the increase in asset values stops and the total return on the share is confined to the dividend, there needs to be a decline in asset values as a consequence of the low return. The market then collapses. Such a self-destructive boom may also be engendered by cyclical changes in the rate of interest. A decline in the rate of interest will drive up the value of shares – note that the short-term holders or speculators finance their holdings in good part by credit – and a boom will be set in motion just as in the case of a surge of optimistic expectations. In both cases there is a non sustainable increase in asset prices. The mechanism resembles that of the trade cycle where there is a non sustainable increase in the rate of growth. Naturally the two – the financial cycle and the trade cycle – influence one another.

9. Effects on interest rates and stability

The boom which is the necessary condition for capital gains is brought about by the expectation of it. Since this involves substantial demand for credit before the capital gains are created, it can be expected that the boom will tend to raise interest rates. It might be thought that this will be compensated once the capital gains materialise, but this will certainly not be the case if the bullish expectations continue. In this case the speculators form a chain, each of them trusting in a continuation of the boom until finally at one point the underlying real determinants set a limit to the rise. As already mentioned, the share prices or the land values become unrealistic because the yield in form of dividend or earning power will be insufficient to maintain the belief in a continuation of the boom, and this will be sufficient to lead to its breaking. Thus the large element of irrationality which is necessarily implied in the expectations leads to instability of asset prices, possibly with effects on the 'real' economy.

10. Capital gains tax

In the United States capital gains are now taxed at the same rate as income. There is a very strong current of political pressure in favor of a reduction or abolition of the capital gains tax. The argument in favor of that is never very clear put, but it is maintained that it would reduce the cost of capital. Apparently the idea is that the recipient of capital gains would invest in bonds and thereby lower interest. It is not considered that the recipient of the gain might use it to continue the game of inflating asset prices, in fact that a substantial gain will tend to encourage him to do that, and therefore to increase the instability. From this point of view, taxing capital gains could be recommended as a way of reducing instability. The argument of the opponents of the tax, incidentally, does not take into account that the tax *prima facie* would reduce the budget deficit and therefore the borrowing of the government.

Some of the opponents of the capital gains tax might have a more sophisticated argument in mind: the tax might make it more difficult to sell new shares, especially those of firms not belonging to the small set of very well established large corporations. The idea is that those who take up newly issued shares of a new high tech concern will often have to base themselves not on actual returns which are still modest but on the promise of large returns in the future. In other words, the chances of new corporations are thought to be based on investors which are to some extent speculative. This argument is less shaky than the earlier one, but it concerns only a very limited field and is therefore weak in comparison to the more general argument that capital gains favor instability over a very wide field.

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