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Sources of profits and their sustainability: A survey of basic theoretical issues

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1. The neoclassical position

The dominant neoclassical approach to economic theory tends to be rather sparse on the question of profits. This is not surprising given the neoclassical emphasis on perfect competition and equilibrium. Under perfect competition, equilibrium implies that revenues are exactly equal to costs and, therefore, profits are absent. To be sure, the proper estimation of costs includes a magnitude of “normal” profits – these being defined as the minimum necessary profits for firms to remain in operation. The normal rate of profit is seen as the absolutely essential minimum compensation for enterprise and risk-taking, without which the owners of capital would rather be rentiers than continue in business. Normal profits are, therefore, part of the costs of production; they must be earned for firms to properly cover their costs and the level of production to be in equilibrium.

Outside of equilibrium, “abnormal” profits or, in other words, revenues exceeding properly computed costs of production are quite possible. Abnormal profits arise exactly because a perfectly competitive economy is outside equilibrium and constitute the motivating force for the re-establishment of equilibrium. Abnormal profits motivate firms to expand production and are self-liquidating, as they bring about a new equilibrium at a higher level of output.

It is clear that in perfectly competitive markets abnormal profits play a positive role: they signify the existence of unfulfilled demand and motivate an increase in production. Moreover, abnormal profits are a temporary, transitional phenomenon which competitive forces are certain to eliminate. It follows that abnormal profits far from posing a problem are, on the contrary, a sign of dynamism of a perfectly

competitive economy, as they invariably arise when the economy grows under the spur of innovations or some production factor influx

There is, nevertheless, a different kind of abnormal profits with less benevolent characteristics. These profits are associated with monopoly and, more generally, with a weakening of competition. Any form of competition short of a perfectly competitive market, may give rise to abnormal profits.

But the absence of perfect competition does not *inevitably* give rise to abnormal profits. The Harvard economist, Edward Chamberlin¹, has argued that intense rivalry among firms can lead to an elimination of abnormal profits even in the absence of perfect competition. Chamberlin's monopolistic competition model requires that the number of competing firms producing slightly different products is large enough, so that each firm can ignore the consequences of its actions on others. Moreover, there must be no barriers to entry of new competitors. Under these conditions, abnormal profits are driven to zero in equilibrium exactly like under perfect competition. They are thus, once more, a temporary phenomenon which competition is certain to eliminate in the transition to equilibrium.

The only difference between Chamberlin's monopolistic competition and perfect competition is that equilibrium in the former implies price and average cost being equal at a level exceeding marginal cost and minimum average cost. Consequently, less is produced at a higher price in comparison to perfect competition. Does this mean that the departure from perfect competition even in the absence of abnormal profits leads necessarily to a socially inferior outcome? It would seem so, since production is carried out with excess capacity and plant is not used as efficiently as engineering specifications permit. The inefficiency charge is, nevertheless, disputed on the basis of the benefit afforded by the greater variety in products which is available under monopolistic competition. Variety is valued and since it can only be obtained at a greater cost, a higher price does not necessarily denote inefficiency.²

¹ Chamberlin, E. H. (1933) *The Theory of Monopolistic Competition* (Cambridge, Mass.: Harvard University Press).

² "People value variety, and are willing to pay a higher price to obtain it. Thus, the fact that goods are sold at a price above the minimum average cost does not necessarily mean that the economy is inefficient." Stiglitz J. E. (1993) *Economics* (New York: W. W. Norton & Co., 2nd ed.), p. 357.

Leaving aside Chamberlin's monopolistic competition, does the abandonment of perfect competition imply abnormal profits? This seems generally to be the case when firm rivalry weakens. The existence of abnormal profits means that output is lower and price is higher than they need to be (and certainly than they would be under perfect competition). Buyers pay more for a product than the marginal cost to produce it. Abnormal profits arise from the weakness of competition and tend to be a permanent rather than a transient feature of weakly competitive markets.

This kind of abnormal profits, arising from weak competition, is sharply distinguished from out-of-equilibrium, temporary profits of both perfect and monopolistic competition. Persistent abnormal profits have no obvious social justification and liberal political philosophy has consistently and vigorously opposed them. Anti-monopoly legislation and policies to protect and enhance competition are rooted in the writings of Adam Smith and the classical political economists of the first half of the nineteenth century. Following this joint tradition of classical political economy and political liberalism, persistent abnormal profits are *prima facie* suspect of being socially injurious and the onus is on those making them to justify their existence.

A noteworthy attempt at wholesale justification of persistent abnormal profits was made by another Harvard professor, the famous Austrian economist Joseph Schumpeter. For him, markets are nearly always out of equilibrium. Markets are perpetually in flux as a result of innovations brought about by technological progress and entrepreneurial activity. Innovative activity is the mainspring of economic progress, which is intimately associated with the creative destruction not only of equilibrium but of any settled and stable economic practice. It follows that abnormal profits are generally an out-of-equilibrium phenomenon and their seeming persistence is illusory: they are rather the result of the ubiquity of successive disequilibria. This is supported by the empirical observation that abnormal profits are rarely invariant and though persistent they tend to fluctuate widely.

If it is accepted, following Schumpeter, that all abnormal profits are out-of-equilibrium phenomena, is there a difference between those which arise in perfectly competitive markets from those which appear in imperfectly competitive ones? Are the latter less socially justified than the former? Is monopoly or imperfect competition

socially inferior to perfect competition? The answer to all these is not clearcut any more. It all hinges on which abnormal profits and which market characteristics are more conducive to innovation and economic progress. If abnormal profits in monopolistic or oligopolistic markets lead to a greater R&D effort and more innovation, then this may more than offset the disadvantage of the monopoly's higher price and lower output. It may, in fact, be argued that this is indeed the case, as the many small firms in perfectly competitive markets are as a rule short of funds to finance R&D. Moreover, any innovation in a perfectly competitive world may easily be imitated by competitors, thus eroding any advantage to be had from an effort to innovate.

In conclusion, Schumpeter's analysis manages to take the stigma off persistent abnormal profits and imperfectly competitive markets. To be sure, monopolies and oligopolies may well be abusing their dominance and earn abnormal profits without promoting innovation and even by impeding it. But there is no presumption that their persistently abnormal profits are necessarily unjustifiable. The abnormal profits may be a justified price to pay for greater innovation and, consequently, every case needs to be considered on its own merit.

What is the conclusion to be drawn from this brief survey of the neoclassical stance on profits? It would seem that it does not amount to a penetrating analysis of the nature and the determinants of profits. The basic distinction between normal and abnormal profits serves to separate the kind of profits which is generally unobjectionable from that which may be controversial and socially objectionable. But the separation is not watertight and abnormal profits, even if they persist in imperfectly competitive markets and despite the traditional liberal view of classical political economy, may not be presumed to oppose necessarily the social interest. In addition, it should be clear that the distinction between normal and abnormal profits is not empirically operational. There is no way of empirically estimating normal profits and no empirical data correspond to either one of the two concepts (though empirical data may approximate their sum total).

There are certain important questions that the neoclassical approach does not address at all. What determines the volume of profits in an economy? Neoclassical theory is

silent on this question. Schumpeter provides an interesting hint: innovations and the consequent growth of the economy. But he is suggestive rather than analytical and, in any case, Schumpeter doesn't quite fit in the neoclassical theoretical approach. What is the nature of profits? What is the product counterpart of monetary profits? Or, to put it differently, what products correspond to profits (which are expressed in money terms)? Neoclassical theory is equally silent on these and it is to these questions that we will now turn. Michal Kalecki's analysis provides the direction and guides the remainder of this paper.

2. The Kaleckian approach

The determinants of profits, following Kalecki's analysis, can easily be derived from national accounting identities³. Gross profits net of taxes (P) must be equal to gross private investment (I), plus export surplus (X), plus budget deficit (B), plus consumption out of profits (C), minus savings out of wages (S).

$$P = I + X + B + C - S$$

This approach shows that profits are determined by decisions, actions and outcomes relating to and ultimately determining the magnitude of five macroeconomic variables. Let us consider these in turn.

2.1 Private investment

Private investment is decided and carried out mostly by firms. To the extent that they are financed by loans, the availability of finance and the relevant rate of interest may be decisive influences on the determination of the investment magnitude. But the role of the banking sector and the terms at which it lends are often less important than the psychological state of the business class. The business climate is crucial in determining the perception of risk and the investors' expectations and confidence in

³ Kalecki shows that they may also be derived from the Marxian "schemes of reproduction" by dividing the economy into three departments: department 1 producing investment goods, department 2 producing consumption goods for capitalists and department 3 producing consumption goods for workers. See Kalecki M. (1971) *Selected Essays on the Dynamics of the Capitalist Economy 1933-1970* (Cambridge: Cambridge University Press), Chapter 7.

initiating an investment project. Thus, the variability of business confidence and animal spirits has an impact on investment plans which is often considerably greater than that of interest rates and borrowing terms. In any case, there can be little doubt that the animal spirits of business decision-makers in conjunction with the stance of the financial sector are the two main influences on the volume of investment.

Investment and profits are interdependent but not in the way that it is commonly thought. Investment is carried out in order to make profits in the future. But present-day profits do not determine investment; at most, they may facilitate its financing. In contrast, as Kalecki shows, investment is a determinant of present-day profits. Here, it is necessary to make two important distinctions. The first one is that expected profits (in the future) must be distinguished from actual (present-day) profits. It is then correct that *expected* profits determine investment. But *actual* profits are determined by investment. The second distinction is about the meaning of the verb “to determine” in the preceding two statements. Expected profits determine investment in the manner in which an independent variable in a functional relationship is said to determine the dependent one. The precise specification of the functional relationship may be open to argument and can be different from one context to another. But the functional relationship between actual profits and investment are precisely specified independently of context. Actual profits are determined by investment in the one-to-one manner of an arithmetical relationship. Any change in investment unequivocally and always changes actual profits exactly by the same amount.

The importance of investment as a determinant of profits can hardly be exaggerated. Of all five determinants, this is the only one that increases the productive capacity of the economy. It is also the one that provides the best social justification for the existence of profits. By increasing the productive capacity of the economy, investment expands the choice-set available to society and increases potential welfare. A larger productive capacity puts society in a better position to fulfill whatever goals are set by its citizens. Moreover, the socially useful activity of increasing productive capacity is one that may be carried on indefinitely, so long as business confidence does not falter.

The examination of a certain puzzle may be of help in making clear the importance of investment as a determinant of profits. Let us imagine a closed economy without a public sector consisting of a single giant firm. The single firm hires workers for a wage and carries out production at all stages from raw materials to final consumption and investment goods. Is profit possible in such a setting and what form will it take?

The firm cannot get back as revenue more than it has paid in wages, so it would seem at first sight that it cannot make a profit in money terms. To be sure, if it gets back as revenue on the sale of consumption goods all it has paid in wages (for the production of both consumption and investment goods), it makes a profit on the sale of consumption goods. This is because the wages paid in the production of consumption goods are less than the total wages spent on the purchase of consumption goods. On the other hand, is there not an equal loss in money terms made in the production of investment goods? This is undeniably so and, therefore, no profit is made in money terms when both sectors are taken together. But the investment goods are the property of the firm and constitute part of its productive capacity. Thus, even though the firm cannot make a profit in money terms, it makes one in physical or real terms by keeping the goods produced by the investment sector for its own use. The profit in real terms is equal to the output of the investment goods sector.

It must be noticed that the cost value of this output of investment goods, which is of course the wage-bill paid for their production, exactly equals the profit on the sale of consumption goods (if all wages are spent). The more workers are employed in the production of investment goods and the greater the investment sector's wage-bill, the higher (and exactly equal to the wage-bill) are the profits made on the sale of consumption goods.

It may be concluded that investment increases profit in real terms, by creating productive capacity owned by the firm, while increasing by an equal amount profit in money terms from the sale of consumption goods to the workers. The firm may continue indefinitely to invest and expand its productive capacity making in this way a profit in real terms. (The cost value of this is exactly equal to both the profit in money terms from the sale of consumption goods and the money loss in the production of investment goods).

If we leave the confines of a single giant firm, and admit a multitude of firms in both the consumption and investment sectors, the above result does not change to a significant extent. The only difference is that some profit is made in the investment sector. This depends on the total value of investment, consequent on the state of business confidence and the stance of the financial sector, in conjunction with the average profit margin, which is determined by the strength of competition characterizing the investment sector. Consequently, a given value of investment is divided between profits of firms in the investment sector and profits of firms in the consumption sector (instead of being in its entirety profits in the consumption sector). Compared to the previous case of an economy consisting of a giant firm, a given value of investment implies a smaller wage-bill since not only the labor cost but profits also are now included in this value. This implies both a smaller output of investment goods and lower profits in the consumption sector. Given the lower production of investment goods, profits in terms of physical product are lower and shared by all the firms that buy investment goods. Nevertheless, total profits of both sectors in money terms will be positive (instead of zero) and equal to the given value of investment.

2.2 Export surplus

An increase in exports increases profits by the same amount while an increase in imports reduces them correspondingly (assuming that the other variables in the profit equation remain unchanged). Focusing on exports, Kalecki explains the mechanism involved in the following way: “The value of an increment in the production of the export sector will be accounted for by the increase in profits and wages of that sector. The wages, however, will be spent on consumption goods. Thus, production of consumption goods for workers will be expanded up to the point where profits out of this production will increase by the amount of additional wages in the export sector”.⁴

This multiplier effect is common to all the variables in the profit equation. The multiplier does not operate, of course, when the production of consumption goods for workers is at capacity level. In this case, “prices of these goods will rise up to a point

⁴ Kalecki M., *op. cit.* pp. 84-85.

where profits out of this production will increase by the amount of additional wages in the export sector”.⁵ The value of the production or employment multiplier is in this case equal to zero. As long as capacity is available and production expands, the multiplier will be positive. It will be at its highest level if prices remain constant (or fall) but, in general, it will be moderated by a tendency of prices to rise with the increase in demand. Nevertheless, whatever the response of prices to the increase in demand and correspondingly the value of the employment or production multiplier, the rise in profits following an increase in exports is equal to the incremental export value.

Imports affect profits in the opposite direction and exactly to the same extent. Demand lost to imports implies a corresponding reduction in profits and wages either in the investment or the consumption sectors, with a consequent reduction in spending out of wages further impacting negatively the production of consumption goods for workers. It is interesting that the production and employment multipliers, which are obviously negative, will tend to be greater in absolute terms than in the case of an export increase. The reason is that the fall in demand is likely to lead to lower prices and profit margins. As a consequence, the reduction in total profits, which must be equal to the initial increment in import value, is spread over a greater amount of production and employment. The loss of jobs, therefore, that is due to a deficit in the balance of trade is likely to be greater than the gain in employment due to an equivalent surplus in the trade balance.

A trade deficit implies that profits, production and employment are transferred from the domestic economy to its trading partners. Indebtedness and sale of assets to foreigners rises by the same amount as the volume of profits which is lost to foreigners. Currency devaluation, import tariffs and other import obstacles, as well as export subsidies, are the policies used to eliminate a trade deficit and create a trade surplus. To the extent that these policies positively affect the trade balance, to the same extent they increase profits.

⁵ Kalecki M., op. cit., first footnote on p. 85.

It should be noted that there is a strong link between mercantilism and profits. Mercantilism is the doctrine which prevailed for centuries and was vigorously attacked by Adam Smith. Mercantilism held that the wealth of a nation is measured by the amount of gold in its possession. In an age in which gold was the means of payment in international trade, the way for a nation to acquire and accumulate gold was by creating a trade surplus. But the creation of a trade surplus increases profits correspondingly. In conditions of unemployment and, especially, when there is an economic crisis, neo-mercantilist policies aiming at the creation of a trade surplus become very tempting exactly because this increases profits, as well as production and employment.

It is clear that a trade surplus for one country implies an equal trade deficit for the rest of the world, so a boosting of profits and economic activity by means of mercantilist policies aiming at a trade surplus will correspondingly reduce profits and weaken economic activity abroad. It is, therefore, evident that mercantilist policies cannot be used universally to overcome an economic crisis.

Despite the fact that a trade surplus has a “beggar thy neighbor” effect on trading partners by reducing their profits, there are some countries (such as Japan and Germany) with persistent trade surpluses, as there are others with persistent trade deficits. What are the effects of such persistent trade balance conditions and, in particular, is there a problem in having a persistent trade surplus?

Let us examine first the persistent trade deficit. We have already seen that, in this case, there is a systematic transfer of profits, production and employment from the deficit country to its trading partners while indebtedness and sale of assets to creditors rises by the amount of profits lost to the trading partners. Is this necessarily a bad state of affairs? Not always. It depends on the reasons for the persistent trade deficit and, especially, on whether the trade deficit facilitates the growth in productive capacity. If the productive capacity is growing rapidly with no unemployment, the trade deficit does not present a problem. On the contrary, it may serve the cause of rapid growth in productive capacity by making possible the provision of necessary consumption goods produced more cheaply abroad and/or the provision of necessary intermediate and investment goods required for the domestic investment effort. Thus, the crucial

question regarding the trade deficit's effect on the economy is whether or not the productive capacity is growing at a sufficiently fast pace and the extent to which the trade deficit supports the growth of the productive capacity.

There is no doubt that a persistent trade deficit associated with high luxury consumption, high unemployment and low investment in productive capacity has a weakening effect on the economy. Even if GDP and profits grow while unemployment is kept low (which is possible with rising public and private consumption and diminishing savings), a persistent trade deficit associated with a more or less stagnant productive capacity is a drag on the economy and tends to further weaken it. Moreover, it is indicative of a misaligned and overvalued exchange rate resulting in a low international competitiveness of a country's tradeable goods and services. In these circumstances, and unlike the case in which the trade deficit supports rapid growth in productive capacity, a persistent trade deficit becomes unsustainable before long. The reason is that creditors are unwilling to extend credit when the growth in productive capacity does not keep pace with increasing indebtedness. Also, the purchase of assets by foreigners becomes less and less attractive as the threat of currency devaluation looms ever larger. Eventually, a stagnating productive capacity will inevitably result in a painful downward adjustment of private and public consumption impacting negatively total spending and quite likely asset values.

What about a persistent trade surplus? Does it present any disadvantages for the countries concerned? Sustainability is not a problem here; so long as these countries are willing to expand credit to their trading partners, there is no economic mechanism that can compel them to eliminate the surplus. Profits, output and employment are all boosted by the trade surplus and, at first sight, it seems that there are only benefits to be had from a persistent trade surplus. But the crucial question again is what is happening to the productive capacity and how the trade surplus relates to it. For example, if the trade surplus arises from the export of exhaustible natural resources and productive capacity remains stagnant, it is evident that the potential benefits of the trade surplus are wasted.

Even if the trade surplus is due to exports of industrial goods and productive capacity relating to these goods grows at a sufficiently high rate, there is a question about the growth of productive capacity and the diffusion of benefits to the rest of the economy. Thus, a persistent trade surplus due to the international superiority of a particular industrial sector, cannot be deemed satisfactory if it is accompanied with insufficient investment and unemployment in the rest of the economy.

The importance of growth in productive capacity, when assessing the desirability of profits which arise from a trade surplus, is made clear by considering the case of a stationary economy. In such an economy, a trade surplus implies that consumption and the standard of living are lower than what the economy is capable of. And, of course, it is the opposite with a persistent trade deficit. Consumption and the standard of living are kept above the level that the economy is capable of, despite the loss of profits caused by the trade deficit.

The conclusion to be drawn from the above discussion is that the trade surplus cannot be considered to be an unambiguously beneficial source of profits, as is the case with private investment. The latter is certain to positively affect productive capacity and, therefore, the profits arising from investment are unambiguously beneficial to the economy. But this certainty does not exist with respect to the profits arising from the trade surplus. These profits may or may not be beneficial, depending on how they relate and the extent to which they contribute to the growth in productive capacity.

2.3 Budget deficit

The budget deficit is the only source of profits which is completely under the government's control and constitutes, therefore, the most amenable policy instrument for controlling the level of profits and economic activity. Nevertheless, the budget deficit needs to be financed and, for this reason, its effect on profits and economic activity may be moderated depending on the financing method used and the accompanying monetary policy. The problem is that the financing of the budget deficit tends to affect adversely the other sources of profits. Private investment, consumption out of profits and saving out of wages are all affected to a varying degree, which cannot be determined theoretically but is a matter of empirical

estimation on a case-by-case basis. As a result, the effectiveness of this policy instrument has been an issue of controversy, since Keynes' General Theory presented a strong argument for its use in overcoming the Great Depression of the 1930s.

Let us examine how the financing of the budget affects the other determinants of profits. A budget deficit implies that taxation and any other possible sources of revenue do not suffice to finance government expenditure and, consequently, resort to borrowing is inescapable.

Borrowing may take two directions: 1) borrowing from the central bank and 2) borrowing from the public. Both directions affect the monetary policy stance and change the supply of money. Borrowing from the central bank increases in effect the supply of money unless the central bank takes countervailing compensatory ("sterilizing") action. If the central bank does not take such action, then the budget deficit has the maximum potency in increasing profits as none of the other determinants of profits is affected adversely.⁶ Keynes' advocacy of a budget deficit in the midst of the Great Depression, presumed of course that financing of the deficit would be done by the central bank in a permissive manner, allowing the money supply to increase and defusing any upward pressure on interest rates. It may be noted that in this instance net public debt is not affected; given state ownership of the central bank, one part of the state simply borrows from another without affecting state obligations in the hands of the public.

Borrowing from the public, in order to finance the budget deficit, has quite different effects if the central bank is passive. To start with, in the absence of any reaction by the central bank, the monetary stance becomes tighter and interest rates tend to rise. To the extent that interest rates actually rise and investment is interest-sensitive, private investment will fall thus partly offsetting the boost in profits from the budget deficit. Moreover, consumption out of profits and savings out of wages may also be interest-sensitive, with consumption weakening and savings encouraged by rising

⁶ On the contrary, a passive central bank stance tends to soften interest rates and provide further support to the budgetary boost in aggregate spending and profits. This is because lower interest rates tend to encourage private investment and consumption out of profits while discouraging saving out of wages.

interest rates. If this is so, there will be a further offsetting effect on the budget deficit's boost in profits.

From the above, it becomes apparent that the profits-boosting effect of a budget deficit is fully present only when monetary policy ensures that interest rates do not rise. Profits increase by the size of the budget deficit, if monetary policy is accommodating and interest rates are not affected; if interest rates are allowed to rise, the increase in profits will be moderated and may even be eliminated. This will depend on the extent to which private investment, consumption out of profits and savings out of wages are interest-sensitive. It is even imaginable (though not likely in practice) that these determinants of profits react in an adverse manner so strongly to a rise in interest rates, causing profits to actually fall.

Does it make any difference whether the borrowing is from the domestic market or foreign lenders? In the latter case, the relevant interest rate is the one ruling in the international capital market in which the loan is raised. This is not likely to rise because of monetary tightening but it will tend to rise because of the increasing perceived risk with the size of the deficit and especially the already existing public debt. Nevertheless, domestic interest rates need not be affected and, therefore, financing from abroad will likely moderate the profits-boosting effect of a budget deficit less than the equivalent borrowing from the domestic market.

Finally, it should be noted that the profits-boosting effect of a budget deficit may also be moderated for a quite different reason totally unrelated to its mode of financing. We have seen that total spending and profits depend on interest rates and that, as a result, financing the budget deficit from the public may even lead, through an increase in interest rates, to a fall in total spending and profits. But even if total spending unambiguously rises (as in the case of central bank financing of the deficit), the increase in total spending and profits may be moderated by an increase in imports and a consequent reduction in the export surplus. Imports are normally related to total spending and to the extent that the budget deficit increases total spending, imports will rise and the export surplus will fall. The strength of the dependence of imports on total spending thus becomes an important determinant of the budget deficit's impact on profits. Because of this, the budget deficit's positive effect on profits will be

moderated but will remain positive so long as the increase in total spending is not fully matched by an increase in imports.

The dependence of imports on total spending means that, whatever the source of an increase in total spending, the effect on profits will be moderated by the resulting increase in imports and reduction in the export surplus. Consequently, this applies with equal force to all the other sources of profits. Not only a budget deficit but also private investment, exports, consumption out of profits and saving out of wages affect profits through total spending. To the extent that imports are also affected, the effect on profits will be diminished.

It is evident that the point above could have been made already in the previous discussion of sources of profits and, in particular, regarding private investment. It may equally well be made in the ensuing discussion of consumption out of profits and saving out of wages. To avoid repetition, it will not be mentioned again but its general applicability to all sources of profits should be borne in mind.

Another question of a general nature may best be dealt with at this point. This concerns the distinction between real and nominal (or monetary) magnitudes. Obviously, profits and their sources are expressed in monetary terms. So long as prices are constant, monetary and real magnitudes move together and need not to be distinguished. But if prices change, the two may be out of step. It is then not clear whether the increase in a source of profits, such as the budget deficit, increase profits in real terms or solely in monetary ones. Profits, in such an instance, will increase no doubt in monetary terms (subject to the qualifications already mentioned) but, the question is, will their command over real resources increase correspondingly?

The answer to this question is of considerable importance in assessing the value of the contribution that a source of profits makes to the health of the corporate sector. It does not matter so much in the case of the first two sources considered (i.e. private investment and export surplus) because an increase in either one of them does not shift real resources away from the corporate sector. On the contrary, all the rest (i.e. budget deficit, consumption out of profits and saving out wages) involve in the first instance a shift of resources out of the corporate sector's control.

The budget deficit as a source of profits is the one that has the most ambiguous effects on the vigor of the corporate sector. Depending on the state of the economy, a budget deficit may either strengthen or weaken the corporate sector. The exact effects depend not only on the specific circumstances characterizing the economy but also the direction and patterns of state spending (on which more below). Abstracting from the form of state spending, a couple of general statements may be made as follows: First, a budget deficit in an economy characterized by unemployed resources and spare productive capacity is more likely to increase the corporate sector's control over real resources and contribute to its strengthening. The reason is that, in such circumstances, an increase in total spending is not likely to raise prices much and the increase in profits, resulting from the budget deficit, effectively enlarges the corporate sector's command over real resources.

Second, a budget deficit in an economy characterized by fully or nearly fully employed resources will most likely reduce the corporate sector's control over real resources and will tend to weaken it. This is because, in these circumstances, an increase in total spending is much more likely to lead to higher prices rather than expand production. As a result, the increase in profits resulting from the budget deficit will command a smaller amount of real resources.

The conclusion to be drawn from the above is that in conditions of full or near-full employment, with inflation being perceived as the main threat to the economy's stable progress, business interests will reasonably wish that the state does not run budget deficits. A long period of stable growth creates the preconditions for a widely shared optimistic outlook regarding an economy's stability and growth prospects. The setting is then ripe for political platforms demanding the banning of budget deficits.⁷

⁷ This may provide at least a part of the explanation for the European Union's Growth and Stability Pact, which limits the ability of member states to run budget deficits. For other arguments regarding business opposition to the use of budget deficits for boosting profits, see M. Kalecki's classic 1943 article "Political aspects of full employment" in *Selected Essays on the Dynamics of the Capitalist Economy 1933-1970*, Cambridge University Press, 1971. A most important one is that budget deficits undermine a fundamental tenet of capitalist moral ideology. The moral precept that "you shall earn your bread in sweat" is undermined by budget transfers subsidizing consumption. This is noted by Kalecki but there is a further implication that is not emphasized sufficiently. Legitimizing budget deficits destroys the common identification in the public mind between good private housekeeping and good government, since it allows that the rules for good housekeeping are not valid and may even be

On the other hand, in times of economic crisis and stable if not falling prices, it is again quite reasonable for business interests to demand the running of budget deficits. The political demand is then mostly for tax reductions rather than more state spending. The strong preference for tax reductions over state-spending increases of an equal magnitude may seem paradoxical at first sight, given that the latter are more effective than the former in increasing total spending. The reason for which increases in state expenditure boost total spending more than equal-size tax reductions is because the latter result in some increase in saving.⁸

A possible explanation for the insistence on tax reductions rather than equivalent increases in state expenditure may relate to the relative share of real resources controlled by the state and the private sector respectively. Tax reductions increase the relative share of the private sector while state expenditure reduces its relative share. Thus, though a budget deficit cannot fail to benefit the private sector, the share of resources under its control, relative to that of the state, benefits more with tax reductions than with state expenditure increases.

Also, politically, a tax reduction is more attractive because it affects directly a larger as a rule number of voters and, therefore, it tends to have a wider public support, especially if across-the-board tax cuts benefit all tax-payers. Moreover, tax reductions are in tune with the permanent demand by business interests for pushing back the growth of the state and limiting its influence over the economy. This, more or less permanent, political posture by business interests is due to fear about the form that public expenditure may take. Such fear is not unjustified, given that state expenditure often takes forms that not only harm some business interests (while increasing overall

pernicious for the government's proper management of the capitalist economy. The realisation that under capitalism the government should obey rules which are contrary to those of capitalist moral ideology, provokes cognitive dissonance and incites questioning of the paradoxical nature of the capitalist system.

⁸ This was first shown clearly in Haavelmo T. (1945), "Multiplier Effects of a Balanced Budget", *Econometrica*, October. Haavelmo showed that because state expenditure expands total spending more than an equal-size tax reduction contracts it, a balanced budget is not neutral but expansionary and becomes more so as its size increases.

profits) but, most importantly, may damage the long-term prospects of business enterprise.⁹

Let us now turn to the various forms that state expenditure may take and consider their effect on the private sector. Are some types of state expenditure more acceptable to business interests and the private sector than others?

There is no doubt that this is so. Public goods, which cannot be produced profitably by the private sector, constitute clearly a class of state expenditure that is not only acceptable but may be also desirable to business interests. Thus, public expenditure for the maintenance and improvement of defense, the legal system and for securing law and order are all desirable directions for state expenditure. In addition, to the extent that the state has historically assumed responsibility for the provision of transport infrastructure, such as roads, bridges, ports etc., state spending for the maintenance and improvement of this infrastructure can be favorable to the private sector, especially by making it internationally more competitive. This may be also the case for other infrastructure relating to energy, communications, health and sanitation, R and D and others, though the lines here, between what can be produced profitably by private sector and what needs to be provided by the state, are not clearly drawn and may well be in dispute.

In general, it is better for the private sector if the state does not actively engage in production but only spends in commissioning private firms to provide goods and services on its behalf. The state must then take care to commission in a fair manner without favoring or discriminating against any particular firm. Nevertheless, it is unlikely that a state will completely abstain from active engagement in production. In that case, the private sector stands to gain if state production (i) increases directly or indirectly the productivity of private sector activities by reducing their cost or improving their quality; (ii) does not compete directly with any private sector activities; and (iii) does not reduce the scope of private enterprise by forestalling it in potentially profitable directions.

⁹ This is notably the case, as argued below, when state spending is directed to increasing the proportion of the labor force employed in the public sector. Such spending not only deprives the private sector of trained labor but also damages business prospects by increasing bureaucratic meddling and regulatory controls on business activity.

It is clear that in practice most of public expenditure is not directed to activities that meet the above conditions. Not only the state produces good and services that may also be produced possibly better by the private sector but often a considerable, if not the largest, part of public expenditure is directed to the cause of social justice, involving sizeable transfer payments and other redistributive measures.

Moreover, the state bureaucracy, the salaries of which may absorb most of public expenditure, is often excessive both in terms of civil servant numbers and regulatory complexity. Thus, it imposes unnecessary costs both to the operation of the private sector and the public as a whole while, at the same time, it reduces the resources and especially the manpower available to the private sector. Finally, a large state bureaucracy might promote and eventually instill an anti-business attitude not only among state employees but also in the wider society, creating a public mentality and a socio-political environment that are inimical to entrepreneurship and profit-oriented business activities.

In conclusion, state expenditure is a risky way of increasing total profits for business interests. Even though it is more effective than an equal-size tax reduction, it also presents more dangers. It may antagonize directly some business interests; reduce the scope of private sector activities; reduce the share of the private sector's control over resources relative to the state's share; reduce the availability of manpower and resources to the private sector. But, most importantly, it may undermine the long-term prospects and viability of private enterprise. And certainly (as Kalecki has noted) it undermines the business ideology, according to which economic progress and the economy's health depend exclusively on the views and actions of business leaders, and establishes the state as a major actor with a decisive role in the running of the economy. For these reasons, it is understandable that, in seeking higher total profits and a revived economy through a budget deficit, business interests invariably opt for reduced taxes rather than increased state spending.

2.4 Consumption out of profits

Consumption out of profits depends on the corporate sector's dividends policy, as well as on the saving propensity of the firms-owning households. Profits retained by the firms and not distributed to the firm's owners cannot possibly be consumed and constitute a considerable part of overall saving. Households which own firms' shares are on average higher-income households and tend to have a higher than average propensity to save. Given that a large proportion of profits are saved in the form of firms' retained earnings and a sizeable part of dividends tends to be saved, consumption out of profits is normally small.

Though smaller than the previously considered sources of profits, such consumption spending is of major importance to the sales of luxury goods and services. It is worth noting that spending on luxuries has increased considerably in recent times at least until the 2008 crisis not only in developed economies but also in the emerging ones, such as Russia and China. This may mean one or more of the following developments are taking place: 1) the share of profits in national income is increasing; 2) the part of profits paid out in dividends is increasing; 3) the psychology and spending habits of profits recipients is changing in more ostentatious, exclusive and hedonistic directions; 4) luxury goods and services are becoming "democratized" and more affordable to an increasing mass of consumers with rising incomes and middle-class aspirations. There are indications that all of these may be happening to a varying degree in different economies.

Another development that may account, either in conjunction with one or more of the above or even completely on its own, for the recent "luxury fever"¹⁰ relates to the macroeconomic policies which led to the 2008 financial crisis. This operates through the propensity to save of profits recipients. The propensity to save out of dividends (as well as the corresponding propensity to consume, which is its inverse) is not only determined by the size of income but also by the size of wealth or, more accurately, perceived wealth. Wealth affects the precautionary motive for saving. Thus, higher

¹⁰ This is the title of R. H. Frank's book. Writing in the late 1990s, Frank emphasizes the first and third of the developments mentioned above as being relevant to the U.S. at the time. See, Robert H. Frank (1999), *Luxury Fever: Money and Happiness in an Era of Excess*, Princeton University Press.

perceived wealth provides assurance and tends to assuage the precautionary motive leading to more spending out of current income. The rise in the propensity to consume out of distributed profits increases consequently the demand for and sales of luxury goods and services.

Given the above mechanism, the question is what macroeconomic developments led to the perception of greater wealth? The answer is clear: The long-standing US policy of cheap money and easy mortgage lending led to rapidly rising house prices, greater spending power through mortgage refinancing and a perception of greater wealth. This perception was widespread not only among dividends recipients but was shared also by households without profits income. The perception of rapidly increasing wealth was being reinforced for shares-owning households by the rising shares prices in a buoyant stock exchange, which were also due to the same low-interest, easy money policy combined with an absence of inflationary pressures.

We need not dwell here on the reasons for the persistent macroeconomic policies and conditions characterizing the U.S. economy prior to the 2008 crisis, which would have led us to a discussion of fundamental international-trade imbalances and, ultimately, to geo-political speculations. It suffices to draw the conclusions regarding the factors that can affect consumption out of profits and may thus play a role in the determination of the volume of profits. These, as we have seen, extend from the corporate sector's dividends policy, to all the factors which may affect the propensity to save out of dividends. These latter range from macroeconomic policies to psycho-social developments, the common characteristic of which is that their effects on consumption out of profits are, in all cases, non-intentional and unplanned.

2.5 Savings out of wages

The factors at play here resemble to a considerable extent those which affect consumption out of profits. The propensity to save (or its inverse, the propensity to consume) holds the center of the stage in both cases. There is, nevertheless, an important difference: The discretionary margin is likely to be much smaller in the case of wages. The propensity to save out of wages is very small and its variation is within a very limited range. On the contrary, the propensity to save out of profits may vary

considerably between different societies and, even within the same society, between different historical periods.

Why is this? The propensity to save out of wages tends to be very small in poor societies because workers are close to subsistence level and cannot afford to abstain from consumption. In richer societies, the physical constraint may not be operative but rising material expectations and social imitation play a similarly constraining role.

The higher consumption level of one's neighbor is emulated as one's needs tend to grow in the presence of neighbors with a higher material standard of living. There is considerable empirical evidence that one's sense of well-being is relative and depends on comparisons made with others in the local environment. Moreover, there is by now a lot of experimental work supporting the view that the evolved human brain is hard-wired to evaluate personal well-being not independently of others but on the basis of comparison with some social group, which is considered to be relevant in the particular context.¹¹ "Keeping up with the Joneses" and developing similar spending habits is thus neither an arbitrary behavior nor due to envy but the product of human evolution.

Though wages tend to be fully spent and the propensity to save out of wages is generally very low, it is an intriguing question what would happen if it were high. This counterfactual case delineates the limits of an analysis based on social class and the unencumbered reproduction of a profit-regulated market system and, for this reason, it may be worth considering.

On the one hand, workers would become owners of firms' shares and would participate in the firms' ownership, with their working and consumption behavior, as well as their economic interests, becoming over time indistinguishable from those of rentier households. On the other hand, total spending and profits would fall unless the other sources of profits increased to an equivalent extent. But there is no compelling reason why exports and private investment might increase in the face of a fall in total

¹¹ R. H. Frank, *op. cit.*, provides plenty of references to experiments mostly by psychologists throughout the book and especially in chapter 9, which is titled "Why context and position are so important".

spending and profits. It is difficult to imagine a plausible mechanism through which any source of profits, other than the government budget, might pick up the slack in total spending and profits caused by increased savings out of wages. Budget deficits thus become essential for the preservation of the profits' level. The alternative, of course, is that profits fall as the propensity to save out of wages increase. In either case, the smooth reproduction of a profit-regulated market system becomes problematical and the road is paved for its transformation into a, possibly classless or permanently state-assisted, different system.

Let us at this point explore briefly the implications of widely different propensities to save out of profits, so as to compare them with the low variation of saving propensities out of wages. A very high propensity to save out of profits would mean that the firms-owning households are frugal and their consumption behavior is characterized by what Max Weber termed the "Protestant ethic" rather than the typically spendthrift rentier mentality. In this case, the economy would tend to increase rapidly its productive capacity, as few resources would be used for their needs and the production of luxuries. Moreover, the frugal life-style of the richer firms-owning households, by setting the standard to be emulated by the rest of the society, would tend to keep in check the rising material aspirations and consumption of the workers' households. By increasing productivity through investment in productive capacity and controlling the rise in consumption and real wages, such an economy would be strong in international competitiveness and export performance.

A contrasting outcome is likely to emerge in the case of a very low propensity to save out of profits. Even though, in a static comparison, total profits would be higher than in the high propensity case, the dynamic tendencies and prospects of such an economy are less bright. A large part of the productive resources are devoted to luxuries and the consumption needs of the firms-owning households, which exhibit a typical rentier mentality. Fewer resources are available for investment and, as a result, productive capacity grows at a slower pace. At the same time, the rentiers' standard of living drifts apart from that of the workers and social inequalities widen. The high consumption of the rentiers becomes the reference point for the material aspirations of the society as a whole and this leads to social tension, demands for higher (real) wages and labor unrest. In these conditions, an inflationary wage-price spiral is likely

to appear, as the overt symptom of the underlying battle over the distribution of income and consumption that is being fought between workers and rentiers. Meanwhile, the growth of productive capacity is weak, as the distribution fight tends to divert the already inadequate resources available for investment to the production of consumption goods. Such an economy is unlikely to be internationally competitive and quite likely to suffer from chronic deficits in its international balance of payments, leading to repeated devaluations and a weak domestic currency. The root cause of its weakness is the overly costly upkeep of its rentier class, which is the exact mirror image of the very low propensity to save out of profits.

After this digression (which might better belong to section 2.4 above), let us now return to the propensity to save out of wages, to consider an interesting recent development. It has been argued that this is as a rule very low, so that its negative influence on total profits is not substantial. But recently it became possible for this propensity to have a *positive* influence on total profits. This is the result of savings out of wages not only being completely eliminated but even turning negative. Spending out of wages can exceed wages only if past savings are spent or borrowing becomes possible for wage earners. It is in fact the latter possibility that has actually materialized.

In many countries, consumer credit was made available on a large scale, as deregulation of the banking system became the fashion, initially in Britain and the US and then widely imitated in the rest of the world. The growth in consumer credit was aided by the cheap money policy and rising asset prices, especially the rapid rise in house prices, which (as noted in section 2.4 above) created the widespread perception of greater wealth and weakened the precautionary motive for saving.

Deregulation increased the competitive pressures in the banking system and the new field of consumer credit was one of the most fiercely contested. Loans for consumption spending were offered freely, often just for the asking. The laxity of lending standards is famously captured in the description of such loans as NINJA, an acronym standing for “no income, no job or assets”.

Under these conditions, the abetting influence of advertising together with the rising social mentality of consumerism, could hardly fail to lead to a considerable indebtedness of the wage-earning class. This indebtedness, of course, increased total spending and augmented the volume of profits. In this way, the propensity to save out of wages was made recently to play a positive rather than negative role in the determination of total profits.

3 The sustainability of profits

Policies designed to stimulate economic activity inevitably aim to strengthen profitability and profits. Though profits can be increased by policies which affect appropriately any of the profits; sources examined above, not all sources can provide sustainable profits. Stimulatory policies based on some of these sources may produce counterforces, which weaken their intended positive impact on profits either from the start or over time, even to the point of ultimately negating the initial impact.

A general (though not the only) reason for this impact neutralization (or even reversal), is that the different sources can be quite interrelated rather than independent of each other. Consequently, an increase in one of them, which *ceteris paribus* would result in higher profits, causes another one to change in a way that tends to lower profits. The final effect thus becomes uncertain and, in any case, is definitely weakened. An instance of an obvious inter-relation, which weakens rather than reverses the primary impact, is that between the export surplus and all the others (as noted in section 2.3). Other instances of such inter-relations have also been examined at various points in the discussion of the different profits' sources but clear conclusions regarding the relative sustainability of these sources still remain to be drawn. It is evident that this is of crucial importance in designing effective policies for the stimulation of economic activity.

We will proceed by examining each one of the profits' sources in turn. In concentrating exclusively on the question of sustainability, some already trodden ground cannot be avoided in the attempt to explore certain novel considerations.

3.1 Private investment sustainability

Investment does not affect the other sources of profits adversely. As has been noted (section 2.1), it is the only source which unequivocally increases the productive capacity of the economy and expands the choices open to society. Its social desirability is thus widely accepted. It may be questioned only on the basis of a global environmentalist viewpoint, which considers that continued economic growth poses a grave risk to the survival of the planet and, therefore, an absolute halt to growth is imperative.

Leaving the potential environmentalist objection aside, is investment a sustainable source of profits? It would seem that its limits are set by its own success. A rapid growth in the productive capacity for an extended period, may put a lid on the production of consumption goods, keeping the standard of living lower than the majority of the population might wish (to the possible benefit of future generations). This is quite possible under a determined authoritarian regime but in a democratic society such an eventuality seems unlikely. Nevertheless, even in the latter, periods of relative poverty and hardship for the most disadvantaged social groups cannot be excluded when investment absorbs for long a large share of productive resources.

In the above case, the limits to the sustainability of profits which arise from private investment are political rather than economic. But economic limits are also possible. In fact, it is exactly the economic limits to overinvestment that classical business theories have been concerned with. Overinvestment is due to excessive optimism of the investing firms relative to their actual performance, resulting in capital losses. It is useful to distinguish between overinvestment which is generalized and characterizes the economy as a whole and that which is limited and concentrated in one or more, albeit important, sectors of the economy.

In the former case, overinvestment might with equal reason be seen as underconsumption, since consumers' demand does not keep pace with the growth in productive capacity. It should then be possible to increase total demand by redistributing income in favor of low-income groups, which have a higher propensity to spend. Alternatively, following the typical Keynesian recipe, the state could intervene to fill in the deficiency in total spending. Thus, generalized overinvestment is the mirror image of underconsumption and can be treated in the usual way that underconsumption is dealt with. In this case, the underlying disproportionality is in the distribution of income between profits and wage recipients. More accurately, given that investing firms are not strictly constrained by their current profits, the disproportionality is in the potential to command resources between profits and wage recipients.

In the latter case of a sectorial overinvestment, even though the problem may not be so grave, an obvious policy response is not so evident. The excessive productive capacity of the overinvested sector needs to be reduced or stay idle until the disproportionality in the sectorial distribution of productive resources is eliminated. This is not easily remedied, as there is no policy intervention that is obviously appropriate and any relief takes time. Unemployment of the specialized resources involved, which probably include not only plant and machinery but also labor, may be unavoidable. Even if labor may be retrained, some social waste is inevitable. In the best possible case, of labor being fully retrained into equally well-paid occupations and of equipment being perfectly preserved without obsolescence, the costs of labor retraining and of storing and maintaining the equipment constitute a real social burden. Nevertheless, the social cost is not as great as it would be if generalized overinvestment were left without treatment to run its course.

To use a medical analogy, a sectorial overinvestment is like a bone fracture or a common flu virus, which only time can heal and, despite some inconvenience, a healthy organism can easily take in its stride. In contrast, a generalized overinvestment is like a heart problem or some other vital organ malfunction, which requires an immediate operation, albeit a well-known and routine one. In the absence of an urgent treatment, even though it is a highly invasive one, the organism will suffer great damage and risk its survival.

Although the conceptual distinction between generalized and sectorial overinvestment is possible in theory, in practice the two tend to become entangled and difficult to distinguish. Private investment is carried out by many firms in different sectors independently of each other; it is not planned so as to maintain a rough sectorial balance. Consequently, the sectorial balance is fluctuating most of the time and thus overinvestment most likely first appears as a sectorial one. It is then a question of judgment to recognize the true nature of overinvestment. Is it truly sectorial or are sectorial imbalances within reasonable bounds and mask a brewing generalized overinvestment? Moreover, even if it is truly sectorial, a judgment needs to be made about its magnitude and power to mutate into a generalized one. If it is of a sufficiently large magnitude, the ripples it causes through unemployment and bankruptcies may spread to the rest of the economy and the initial sectorial overinvestment becomes indistinguishable from a generalized one

The important policy question is what to do in the presence of such a mutant. What is the appropriate remedy for a seemingly generalized overinvestment, the root cause of which is sectorial overinvestment? One school of thought argues that the root cause needs to be addressed first and foremost. According to this, the sectorial disproportionalities must be corrected and policies appropriate to genuine generalized overinvestment, which increase aggregate demand without eliminating the disproportionalities, should be avoided. As there is no clear policy remedy for the elimination of disproportionalities, the market forces must be given time and allowed free play so as to restore the system's health. The usual policy remedy for generalized overinvestment, in this view, is not only ineffectual but likely to worsen the problem through its adverse side-effects. Not only the disproportionalities are not corrected but, in addition, the increase in aggregate demand leads to misallocation of resources and most likely heightens the risk of inflation and adds to uncertainty.

The contrary position is taken by the second school of thought. According to this, it is safer to consider the problem as one of generalized overinvestment even when it is sectorial in origin. If it spreads and shows signs of being contagious, it is best to treat it through an intervention that increases aggregate demand. This is because the social cost and the risk to the system can be grave if an immediate intervention is not made.

Moreover, the adverse side-effects of an intervention are far from certain and rarely so severe as to surpass the certain costs of unemployment, wasted productive resources, human hardship, danger to the socio-political institutions and potential damage to the social fabric, which a policy of non-intervention entails. In other words, the balance of risks indicates that the usual policy of increasing total spending, which is appropriate for generalized overinvestment, is the safer alternative and most likely to minimize social cost and avoid the worst.

To use a medical analogy again: If the common flu virus affects a vital organ, an operation may become necessary and pressing even though it does not address the root cause. The risk of grave damage to the organism dictates the urgent use of an invasive rather than a “let nature take its course”, hands-off approach.

It may be concluded that the appropriate policy in the case of a seemingly generalized overinvestment, which is nevertheless due to sectorial imbalances, is a question that should not be answered in a dogmatic manner. The policy to be adopted should be determined on the basis of a two-stage deliberation. First, there is a need of a correct diagnosis: Is the generalized overinvestment caused by serious sectorial imbalances and can these be clearly identified? Second, and this is usually the most difficult part, the advantages and disadvantages of the alternative policies need to be compared. More specifically, what needs to be assessed is the balance of risks between state intervention to boost aggregate demand, on the one hand, and refraining from such action so that market forces are allowed to deal with the problem, on the other.

An important consideration is the time horizon of the assessment. Short-run and long-run risks may be of different weight in the two alternatives, due to an almost philosophical difference. Indeed, the non-intervention school of thought focuses more on the long-run effects, arguing that both the beneficial effects of non-intervention and the detrimental effects of intervention take time to materialize. In contrast, the intervention school gives more weight to immediate and more proximate effects and seems to deem the notion of long-run equilibrium, in which long-run effects make themselves fully felt, to be of little relevance in an ever-changing world characterized by an inherently uncertain and unknowable future. In such a world, it is hubris to

consider human affairs in a timeless perspective and policy-making should heed Keynes' famous dictum "in the long-run we are all dead".

It should also be recognized that more base interests may enter the comparative assessment of the two alternatives. For example, the politicians in charge of policy-making tend to have a time horizon that rarely extends beyond the next elections; their time horizon getting shorter as elections get nearer. It is, therefore, not for philosophical reasons that they tend to be biased in favor of the intervention policy and short-run effects. Their bias for immediate results and intervention is further reinforced by the activism bias in democratic politics, as politicians need to convince the electorate that they are active and concerned rather than passive and indifferent in the presence of a problem. Other interests that may be at play include socialist preference for greater government involvement in the economy, which intervention makes possible. On the opposite side, political opponents of big government tend to dislike intervention and have a bias in favor of non-intervention.

The partiality of interests and various biases, which are commonly enmeshed in the assessment of the alternatives, makes it difficult to reach the right decision. Though the choice between the two should not be made on the basis of partial interests or general doctrines but with an open mind and on a case-by-case basis, taking fully into account the specific circumstances of the particular overinvestment, this often does not prove possible. To resort once more to the medical analogy, the decision about the desirability or not of an operation cannot be left neither to a scalpel-waving surgeon with a financial interest in operating nor to a Jehovah witness who considers any invasive treatment as a sin and an affront to God's wisdom.¹² Yet, the public discussion of economic policy, even among experts, sometimes resembles a dialogue between a frenzied surgeon and a fanatical Jehovah witness.

¹² An example of the dangers of a Jehovah witness attitude in economic policy is afforded by the 2007-8 international financial crisis. There is little doubt that the banking and financial sector had over-expanded and that there was a sectorial imbalance not only in the US but even more clearly in Iceland and Ireland. There is equally little doubt that a Jehovah witness non-interventionist stance would be dangerous and that the balance of risks in these cases dictated extensive state intervention, if total economic collapse were to be avoided.

To briefly summarize this overlong section: Investment is a privileged source of profits because it unequivocally increases the productive capacity of the economy. Nevertheless, its sustainability is not assured. An overexpansion of investment may lead the economy into impasses from which it cannot easily escape. There is considerable controversy in economic theory about the policy responses which can provide appropriate escape routes. The art of policy-making consists in providing a correct diagnosis of the particular circumstances of a case and, more crucially, in assessing correctly the balance of risks involved in the alternative policy stances.

3.2 Export surplus sustainability

It has already been noted in section 2.2 above, that an export surplus does not unequivocally increase the productive capacity of the economy and, therefore, it compares unfavorably to investment as a source of profits. But compared to the other sources of profits, which also do not definitely increase the economy's productive capacity, an export surplus is superior. The reason is that the claims on foreigners, which this source of profits gives rise to, increase the command over resources and wealth of the economy.

The claims on foreigners resulting from export surplus are, apart from foreign currency, bonds issued by governments and private firms, as well as equities of existing and new firms. All these increase the national income of the export surplus country to the extent that interest and profits that is earned from them belong to its residents and, therefore, expand the consumption and investment possibilities available to them.

Moreover, liquidation of these assets at any time in the future, can considerably increase the potential for both consumption and investment through importation of consumption and investment goods respectively. Consequently, the wealth and productive potential of the export surplus economy are effectively enhanced by the amount of the surplus.

As regards the sustainability of profits created by an export surplus, it seems reasonably assured. So long as the export surplus persists, the profits from it, which are equal to the size of the surplus, can continue unabated. Unlike investment, which

may undermine profitability if it is misjudged or excessive (whether in sectorial terms or generally), an export surplus does not undermine profits. But can it continue indefinitely?

There is undoubtedly a tendency for the currency of the export surplus country to appreciate relative to the currencies of its trading partners. As a result, its exports become more expensive for the trading partners while imports from them become cheaper. This tends to reduce and eventually eliminate the export surplus. But how reliably does this adjustment mechanism operate?

Adjustment may take place very slowly and is often dominated by capital movements, which are influenced by relative growth and interest rates. Expected future changes in the latter and speculation also affect capital movements and may thus upend the adjustment process. Moreover, the adjustment may be impeded deliberately by the export surplus country. An exchange rate policy may be adopted with the aim of keeping the exchange rate low enough, so as to perpetuate the export surplus. This may be done by the central bank of the export surplus country buying bonds in the currencies of its trading partners, thus strengthening the net demand for such currencies relative to its own currency. In this way, the adjustment tendency may be counteracted and the export surplus retained for a long time, if not indefinitely.

The historical evidence indicates that an export surplus can persist for a long time spanning many decades. Japan is an obvious case in point but there are also many others with varying spans of continuous export surplus, such as Singapore, Hong Kong, Taiwan, Germany and, more recently, China. These countries have managed to boost profits and economic activity by means of their persistent export surplus at the expense of their trading partners, which have experienced correspondingly lower profits.

This “beggar thy neighbor” policy has not generally gone unchallenged and has often created friction among trading partners. Nevertheless, it has been proven viable and there is a variety of historical circumstances and special geo-political conditions, which have made possible the persistence of export surplus in each different case.

Is there any general statement that may be made at the level of principles? What may be stated in a general manner, is that the smaller the export surplus country and the greater the number of its trading partners, the more likely it is for the export surplus to be sustainable. The reason is that the loss in profits caused by the persistent export surplus to the trading partners' economies is relatively small, so that retaliatory measures and strong political pressure are less imperative. Nevertheless, it is to be expected that some kind of retaliation in the form of higher tariffs or other trade barriers, as well as political protestation, will arise sooner or later from its main trading partners against a country, of at least a certain size, which has a persistent export surplus.

An interesting case is that of an export surplus country, which happens to be a member of a currency union. Such a union has eliminated tariffs among its members, adopted a common currency and trades as a single country with the rest of the world. In this special case, a persistent export surplus by a member of the currency union relative to countries outside the union is unlikely to raise objections by these other countries, if their trade with the union as a whole is in balance.¹³ But this obviously means that the other countries participating in the currency union will have jointly a trade deficit with the rest of the world. At the same time, it is improbable that these countries will not also have a deficit in their trading within the union relative to the export surplus member country. As a result of both these deficits, the member countries will be subjected to a profits loss, fall in domestic economic activity and rise in unemployment.

It should be noticed that the loss from the second of these two deficits, which emanates directly from trading with the export surplus country, is not necessarily the most important; the loss from the trade deficit with the rest of the world may be considerably larger. The latter is due to the union's common exchange rate, which is influenced by the export surplus country. In the absence of an export surplus with the rest of the world, the union's exchange rate would be lower and the trade deficit of the other union members would diminish and tend to disappear.

¹³ This is the case of Germany in the Eurozone and, given its relevance to contemporary developments, it possibly merits a close examination. For this reason, not only the remainder of this paragraph but also the rest of this section are devoted to the discussion of this special case.

It stands to reason that, given the adverse effects of the export surplus on the other members of the union, these members would be displeased with the persistent export surplus. Consequently, in the special case where there is no protest by the union's trading partners which find their trade with the union to be in balance, there is likely discontent and calls for corrective action to eliminate the surplus by the other union members. The obvious corrective action is for the export surplus country to take appropriate measures, so as to expand its domestic aggregate demand.¹⁴

In the absence of an expansion in aggregate demand, the discontent of the other union members may possibly be assuaged if the export surplus country transfers to them enough purchasing power. This may be done by buying all kinds of assets, including bonds, equities and real estate, from the trade deficit countries equal to their full deficit, thus replenishing purchasing power within their economies. But even if such a compensation is deemed acceptable, there are distinct bounds to this solution.

Buying equities makes little sense when profits in these countries are deficient and, apart from speculative buying in an inevitably short-lived stock exchange bubble, the limits are obvious. In the case of bonds, there may be more leeway if private and especially government debt is at a low level to start with. But here too, there are inescapable limits. These are more evident for the generally riskier bonds of private firms, where there are conventional ceilings to the acceptable levels of debt. The limits for sovereign bonds may be less discernible but they are not less real. Once the financial markets have formed a view about the acceptable level of government debt in each particular case, the sale of sovereign bonds beyond that level becomes practically impossible. Finally, real estate buying may continue for a while but sooner or later prices are likely to shoot up and a bubble will develop, the eventual bursting of which can be very painful not only to recent buyers but also to banks which have provided mortgages.

¹⁴ This will increase demand for imports, thus limiting the export surplus. In addition, there will be a tendency for an acceleration in price rises, which would further contract the export surplus by reducing exports. In this way, increasing aggregate demand will eventually eliminate the export surplus.

Are the boundaries of a persistent export surplus fully drawn? There seems to be a further possibility. The export surplus country may compensate the protesting trade-deficit union members by providing government aid. The limits here are clearly political. It is unlikely that the voters in the export surplus country will vote for a government, which is willing to give foreign aid of the magnitude required to offset the union members' trade deficits. Consequently, in the end, the imperatives of parliamentary democracy set the limits of a persistent export policy.

Once the final limit is reached, the choice is either the abandonment of the export surplus policy or the risking of a break-up in the currency union. In these circumstances, if the export surplus country persists with this policy, the deficit trade countries face a particularly painful dilemma: Acceptance of the loss in profits, economic activity, income and employment or exit from the currency union?

The decision to exit the currency union is painful because it can prove disastrous. Even though exit will allow the trade deficit countries to set the exchange rate for their own new currency at a sufficiently low rate, so as to eliminate their trade imbalance, an immediate sizeable reduction in their income and consumption is unavoidable. Moreover, the shock to the business climate and confidence from a decision to exit may result in a drop in private investment causing a greater loss in profits than that due to the trade deficit. The shock will be particularly intense if the exit takes place at a time when borrowing from the financial markets is difficult. Borrowing then becomes impossible and so does servicing of the existing debt, making bankruptcy inevitable.

Under these conditions, it is evident that exiting the currency union can be suicidal. If a helping hand is offered by the export surplus country in order to stay in the union, it will be difficult to reject such an offer. The aid provided by the export surplus country does not need to be so large as to offset the trade deficit of the distressed union member. It suffices that it provides immediate relief and offers a plausible road path out of the impasse in due time. The road path will require reform measures to be undertaken by the trade deficit country, in order to strengthen competitiveness, and the implementation of the agreed reforms will be made a strict condition for the provision of aid. Such minimal aid, offered as a token of solidarity rather than as a

necessary compensation for the continuation of the export surplus policy, may be politically acceptable to the electorate of the export surplus country. In this way, the boundaries of a persistent export surplus may be extended for a considerable time.

The conclusion of this lengthy discussion on a persistent export surplus policy in the context of a currency union, is that its sustainability limits are ultimately political. Market forces are not capable on their own of putting an end to a determined export surplus policy. Even though tariffs cannot be used as a political weapon inside a currency union, the threat of exit by the aggrieved members is a possible weapon. At the same time, politics within the export surplus country define the extent of concessions that are likely to be made, in order to avoid a breakup of the currency union. Thus, political considerations, within not only the trade deficit countries but also the export surplus country, determine the ultimate limits of export surplus sustainability.

3.3 Budget deficit sustainability

A budget deficit requires borrowing by the government. So, the first question that needs to be faced concerns the limits to borrowing. A clear distinction needs to be made here between borrowing in domestic currency and borrowing in foreign currency. The former is far easier, since domestic currency is under the government's control and can become available to the government in unlimited quantities. The latter presents much greater difficulties and is clearly a more complex problem. Consequently, the discussion below mostly concentrates on the examination of the limits to borrowing in foreign currency, with only limited comments addressed sporadically to the domestic currency case.

The limits to borrowing in foreign currency are dependent on the expectations of lenders regarding the borrowing government's ability (and, of course, willingness) to meet its obligations. Since expectations are changeable and influenced by the general business climate, the limits are not set in stone and are often hazy from afar. Once reached, they are rigidly binding but their exact position is not always clear far in

advance. A worsening in the terms of borrowing (i.e. rise in the interest rate) is an indication that the limits are getting closer, especially when the interest rise is accelerating.

A major factor in the determination of the borrowing limits is the size of the deficit in relation to the gross domestic product (GDP). The greater the budget deficit as a proportion of GDP, the more likely it becomes that the borrowing terms will worsen. But the cost of borrowing depends also, and more crucially, on the already existing debt. The higher the outstanding debt as a percentage of GDP, the higher is likely to be the interest rate at which borrowing is possible. Even a smaller deficit may be, *ceteris paribus*, more costly to finance than a larger one, if the outstanding debt is higher. The reason, of course, is that the larger debt increases the risk that the government may not be able to meet its debt obligations in the future.

Though the size of the deficit and especially the debt, both in relation to GDP, are possibly the major factors in determining the costs of and limits to borrowing, they are not the only ones. The cost of borrowing also depends on other factors, the most important of which concern the economy's growth prospects. These influence the future evolution of the debt to GDP ratio and, therefore, are relevant to the pricing of government debt by the financial markets.

It should be noticed that the growth prospects are dependent, among other things, on the nature of the government budget and its deficit and, more specifically, on the direction of expenditure. If expenditure is directed to investment, then it contributes to the growth of productive capacity and enables future GDP growth.¹⁵ If, on the other hand, it is directed to consumption, then the deficit does not improve the economy's growth prospects and, as future debt in relation to GDP is likely to increase, the risk of default increases and so does the cost of borrowing.

¹⁵ It is, of course, possible that the use of productive resources for investment (or for that matter consumption) is inefficient and wasteful. In this case, investment may not contribute to the growth or replenishment of productive capacity. This possibility is generally abstracted from, except when the focus is on the question of efficiency and an explicit distinction is drawn between efficient and inefficient investment (or consumption).

It is worth noting, that the above consideration concerning the risk of default, does not arise in the same clear-cut manner when borrowing is in domestic currency. The reason is that the government is in effect the sole producer of domestic currency. Though it does not produce it directly, it can always create new currency by borrowing from the central bank, which is nominally in charge of currency creation.

Nevertheless, the deterioration or, at least, lack of improvement in the economy's growth prospects, as a result of borrowing for consumption rather than investment, is not without consequences on the limits of borrowing, even in the case of domestic currency. The latter also may be affected adversely but in a more roundabout way, through the effects that borrowing for consumption has on inflation and the balance of payments.

A budget deficit, whether it is caused by spending on consumption or investment, increases demand and, depending on the state of the economy, tends to raise to a different extent prices, as well as output. Let us consider the case of an inflation-fearing government, which wishes to minimize the inflationary effect of its budget deficit. It will then borrow from the public rather than its central bank. The rate of interest on domestic currency (i.e., the cost of borrowing) depends on the rate of domestic inflation and, especially, the expectations regarding its future course. This is because the rate of interest normally moves in tandem with the rate of inflation.

The nature of the budget deficit and composition of government expenditure is again of relevance here, as it affects the expectations regarding future inflation. Government spending on investment tends to lower the future rate of inflation, since higher productive capacity enables the production of a greater output. In contrast, government spending on consumption does not result in greater future output and tends to raise the future inflation rate. Given that the interest rate follows closely movements in the rate of inflation, the effect on the cost of borrowing is on account of this definitely in an upward direction. Moreover, this effect may be quite pronounced for an additional reason: Any expected rise in the future interest rates, implies a fall in bond prices and, therefore, an expected capital loss and this needs to be compensated by a sufficiently higher return on lending (i.e., interest rate or cost of borrowing).

Consequently, an expectation of a rise in the rate of inflation can lead to a much more rapid rise in the cost of borrowing.

A related issue, following from the one above, concerns the economy's competitiveness, which is reflected in the balance of payments and the export surplus. A rise in the rate of inflation reduces the degree of competitiveness and the export surplus and leads to a fall in the exchange rate of the national currency relative to other currencies. As a result of the worsening in the terms of trade, the country become poorer and needs to make a greater productive effort to be able to pay for a given volume of imports. But loss of competitiveness and deteriorating terms of trade also affect the ability to borrow in foreign currency. This is because repayment of foreign currency loans requires the use of more productive resources and becomes more onerous. As a result, the risk of default and the cost of borrowing tend to increase, making competitiveness a significant factor in the determination of limits to borrowing in foreign currency.

Moreover, the currency's weakness reduces its attractiveness for inward capital flows and encourages capital outflows. This again tends to raise not only the cost of borrowing in foreign currency but also domestic interest rates. The latter can be countered by a decisive move on the part of the central bank to increase the supply of money. The risk then is that the rate of inflation will accelerate and there will be an inflation-devaluation spiral, with damaging effects on economic efficiency and social cohesion.

A third factor in determining the borrowing potential in foreign currency is the demographic structure of an economy and the likely future demographic developments. A non-growing labor force and an ageing population reduce the economy's growth potential and, at the same time, increase the proportion of GDP required in order to provide for the non-working elderly. In contrast, a young population and a growing labor force improve the economy's growth prospects and reduce the weight of necessary consumption for the sustenance of the elderly. Consequently, the risk of default and cost of borrowing is, *ceteris paribus*, higher for an ageing than for a young economy.

A fourth factor is the economy's endowment, in terms of natural resources and environment, as well as historical and cultural heritage. Clearly, the existence of oil and gas or valuable minerals is favorable to a country's economic performance and growth prospects. Similarly, a temperate and dry climate, beautiful and wide-ranging scenery, clean sea and sand beaches, are all advantages for the development of tourism and can provide an important stream of income and, especially, foreign exchange earnings. Also, archaeological and more recent architectural and other monuments, together with an interesting and hospitable culture are equally important assets for the development of tourism.

A fifth factor is the institutional framework relating to public administration and its interaction with civil society. This includes the operation of a wide range of institutional arrangements in the areas of justice, law enforcement, government bureaucracy, trade unionism and political activity, which determine the quality of a country's governance. These institutions' functioning is also responsible for the degree of corruption characterizing an economy. It is evident that the quality of governance affects economic performance and it is especially important in the economy's attractiveness to foreign investment. Consequently, a country with a good institutional setting and governance can be expected to have, *ceteris paribus*, a lower risk of default and cost of borrowing than one with worse institutions and governance.

The variety of factors, which are involved in determining the limits to government borrowing, together with the uncertainty concerning their relative weight, renders quite unreliable any simple rule or formula as a guide to policy. Even the consideration of the seemingly most important factor, which is the debt to GDP ratio, is a poor indicator of the limits to borrowing. For example, there are instances of countries reaching the limits and going bankrupt with debt being 20% of GDP while a country like Japan, which borrows mostly in domestic currency, can sustain debt exceeding 200% of GDP. Consequently, simple rules, which stipulate that the limits are reached when the servicing of debt exceeds 50% or debt exceeds 300% of the budget revenue should be seen as rough counsels for (possibly excessive) prudence rather than as theory-derived or evidence-based reliable and accurate propositions.

Nevertheless, simple rules regarding the limits to borrowing or even prudence in borrowing, such as the European currency union rules that debt should not exceed 60% and budget deficits 3% respectively of GDP,¹⁶ are not without consequences. To the extent that they are widely accepted and influential in shaping public opinion and the mindset of investors and lenders, they can become self-fulfilling. Since the risk of default is largely a matter of the lenders' opinion and the psychological climate of the financial markets, conventional beliefs can often become compelling and crucially important even if their scientific validity is doubtful.

A simple proposition, which purports to be a scientific one and as such has gained a lot of publicity, is that when the debt to GDP ratio exceeds 90%, the growth rate tends to fall.¹⁷ More specifically, a statistical analysis of 44 countries spanning about 200 years and incorporating over 3,700 annual observations, shows that the median growth rates for countries with public debt over 90% of GDP are about one percent lower than they are at more modest debt levels, while average (mean) growth rates are even lower. A second result is that growth declines by about 2 percentage points when sovereign and private debt held by foreigners reaches 60% of GDP and falls to half its rate when such debt reaches 90% of GDP.

This analysis has been criticized because it does not distinguish between debt payable in a foreign currency from that payable in domestic currency, regarding which the inevitability of default is eliminated, since domestic currency is fully controlled by the government and can be produced at will to meet any debt obligations. It has also been

¹⁶ The 60% debt to GDP rule is not based on any serious argument and seems to be quite arbitrary. The 3% budget deficit to GDP rule seems to be premised on the notion that budgets, especially their main consumption component, should be balanced over time while productive public investment is not likely to fall short of 3% of GDP.

¹⁷ See, Reinhart Carmen M. and Rogoff Kenneth S.(2009), *This Time is Different: Eight Centuries of Financial Folly*, Princeton University Press and, particularly, Reinhart Carmen M. and Rogoff Kenneth S.(2010) "Growth in a Time of Debt", *American Economic Review: Papers and Proceedings* 100, May, pp. 573-578. For a critical review, see Nersisyan Yeva and Wray L. Randall(2010) *Does Excessive Sovereign Debt Really Hurt Growth?* Working Paper No. 603, Levy Economics Institute, June; see also Shiller Robert J.(2011) *Debt and Delusion*, Project Syndicate, 21 July. It should be mentioned that the Reinhart & Rogoff study makes some technical mistakes, such as a coding error, some data omissions and certain inappropriate aggregation procedures. If these are corrected, the association between high debt and low growth is considerably weakened (see, Herndon Thomas, M. Ash and R. Pollin (2013), "Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff", *Political Economy Research Institute*, University of Massachusetts at Amherst, Working Paper Series, No.322, April. See also, Wolf Martin (2013), "Austerity Loses an Article of Faith", *Financial Times*, April 24.

criticized for reversing causality, since debt-to-GDP ratios tend to increase for countries experiencing economic difficulties and weak growth. A third criticism concerns the robustness of the statistical relationship, which groups debt-to-GDP ratios into four seemingly arbitrary categories (under 30%, 30-60%, 60-90%, and over 90%) with the last category containing few observations, and the relationship to average (mean) growth rates being sensitive to extreme values and not varying monotonically. Finally, given the statistical nature and numerous exceptions to the above proposition, it is impossible to know its validity in any particular case. Consequently, not only it cannot be a substitute for a detailed analysis of the specific characteristics of each case but, what is worse, it may be also a misleading guide to policy-making.

In conclusion, the limits to government borrowing are not easily discernible. There is an important difference in the borrowing limits between foreign and domestic currency. The limits to borrowing in foreign currency are set by the lenders' feeling of increasing default risk, which is influenced by a variety of factors, including the current psychological climate in the financial markets. In the case of borrowing in domestic currency, the limits are determined by the likely consequences of expanding debt on the balance between the private and public sectors, as well as the economy's growth prospects. Increasing government borrowing and debt, which widen the government's control over the economy, eventually result (even inevitably, once full employment is reached) in accelerating inflation, a destructive inflation-devaluation spiral, inefficient use of resources and declining growth.¹⁸ Consequently, the limits to borrowing in domestic currency are ultimately set by the extent to which the society is willing to tolerate the government's widening control over resources, with all that this is likely to entail.

¹⁸ It is in order to guard against government spending spinning out of control and resulting in «anarchistic chaos and inefficiency», that Paul Samuelson finds socially useful the belief in the «superstition» that budgets must be balanced. See, Blaug M.(1995)The movie «John Maynard Keynes: Life/Ideas/Legacy», cited in Nersisyan Yeva and Wray L. Randall, op.cit..

3.4 Sustainability of consumption out of profits

There are obvious limits to consumption out of profits, which are reached when there is no saving out of profits and the totality of profits is spent on consumption goods. It may be argued that this is not the absolute limit, since spending by the rentier class may be carried further if it liquidates its wealth. Nevertheless, selling of wealth assets has narrow bounds, as their value will tend to shrink rapidly with successive sell-offs, unless there is buying from a foreign rentier class.

In any case, long before such formal limits are reached, the sustainability of this source of profits is likely to have come under threat. This is because the inequality in the standard of living between the rentier and the working class will widen as consumption out of profits increases. An increasing consumption out of profits implies that an increasing amount (and possibly proportion) of productive resources will be devoted to the production of luxury and other goods meant for the consumption of the rentier class. As long as there is spare productive capacity and the extra demand from the rentier class reduces unemployment, the sustainability of this source is probably not endangered. But once full employment is reached, it is inevitable that social tensions will arise, as the proportion of productive resources used for the consumption of the rentier class definitely rises. Further increases in the propensity to consume out of profits will then necessarily squeeze workers' consumption. Consequently, further increases in the consumption out of profits is certain to cause inflationary pressures and a deterioration in the average standard of living of the working class.

It may be argued that the above result may not materialize if productive resources are switched from the production of investment goods to that of consumption goods. But this may provide only a temporary respite to the squeeze in the consumption commanded by wages. The inevitable reduction in the workers' consumption cannot be avoided for long and it will be more pronounced when it finally comes. The reduction finally will be more severe because the switch of productive resources from investment to consumption, which succeeds in delaying it, also results in a lower future productive capacity. Thus, with a lower productive capacity, a given increase in

consumption out of profits will eventually squeeze even harder workers' consumption.

There is, nevertheless, a deeper reason why the sustainability of this source of profits is unlikely to reach its limits. The social legitimation of the capitalist system rests on its effectiveness in increasing a society's productive capacity. Profit-making is the motive force at the heart of the system and the realization of profits is central to its operation. Hence, the social legitimacy of profits is inseparable from that of capitalism. Can this legitimacy be preserved when profits do not arise from growth in productive capacity but from increases in capitalist consumption at the expense of workers' consumption?

A capitalist system, which does not expand productive capacity and in which profits are sustained solely by increasing capitalist consumption, is difficult to legitimize. Being essentially parasitical, it invites social unrest and polarization. Without social legitimacy, it is not likely to survive for long as a democracy and, if it cannot overcome its exclusive dependence on this source of profits, it will tend towards a dictatorial regime of a left-wing or right-wing variety. Though the latter variety may allow the further continuation of this source of profits, this will only be possible in extremely repressive conditions under a most oppressive regime. In any case, the operative limits of profits' sustainability stemming from consumption out of profits are probably determined by political factors before any ultimate financial or other constraints to capitalist consumption come into effect.

3.5 Sustainability of reducing saving and dis-saving out of wages

Saving out of wages decreases profits and, therefore, reduced saving should increase profits. Saving out of wages is normally a small amount and its reduction cannot go far before saving becomes zero. Nevertheless, there can be dis-saving or negative saving when wage-earners' consumption exceeds their wages.

Dis-saving or negative saving is possible through liquidation of assets or by way of borrowing. Wage earners' assets are quite limited, with the most important being home ownership. Borrowing ability is also quite limited, with home ownership again providing the foremost collateral. Consequently, it would appear that the limits not only to reducing but also to negative saving are quite narrow. Moreover, in the case of negative saving via borrowing, the repayment of the loan will necessitate future saving and hence reduced future profits.

In view of the above, it may be thought that this source of profits and its sustainability are of little importance. Nevertheless, recent events have belied this belief. The banking crisis of 2007-8 in the US and its continued manifestation in Europe today (2013), originate in reduced saving out of wages and even dis-saving (especially in the US) for nearly a decade preceding the crisis. This was based on a number of developments (the story of which cannot be recounted here), which made possible borrowing on an extensive scale for wage-earners. The most important of these in our context, was the long and substantial rise of house prices in conjunction with the banks' enhanced readiness in providing mortgages and consumer loans. When the bubble in house prices finally burst, the collapse of the housing market and the banking crisis inevitably ensued.

What this episode demonstrates is that, under the appropriate circumstances, the source of profits premised on dis-saving out of wages can play an important role in supporting for a considerable period the level of profits. Of course, it also demonstrates vividly the dangers of this manner of profits' support and how difficult it is to replace it with other profits' sources. This is especially the case, when the growth of consumption out of wages has masked and made largely irrelevant the growth in income inequality (particularly in the US).¹⁹ The reversing in the trend of growing income inequality, through measures which improve labor productivity (such as better education and training, as well as labor market reforms), may be the best way today to support the volume of profits. Such a reversal will make possible an increase in consumption out of wages, thus strengthening aggregate demand and

¹⁹ See, Rajan Raghuram (2010) "How Inequality Fueled the Crisis", *Project Syndicate*, July; also, Dadush Uri, Kemal Darvis, Sarah P. Milsom and Bennett Stancil (2012) *Inequality in America: Facts, Trends, and International Perspectives*, Brookings Institution Press.

encouraging investment. To the extent that investment is positively affected, the level of profits will be lifted.²⁰

4 Monetary policy and profits

Unlike fiscal policy, which directly affects profits, monetary policy can have only an indirect effect. Monetary policy, carried out by the central bank, directly determines the key interest rate and the quantity of high-powered or base money (i.e., total currency in circulation or in banks' vaults plus commercial banks' reserves with the central bank). Through these and the determination of reserve requirements and operating regulations for commercial banks, as well as the use of open market operations to set the yield on an array of Treasury bonds (and more unconventionally even other bonds), the central bank can influence the whole structure of interest rates and the full range of assets that, with varying degrees of liquidity, may serve as money. It is then on the basis of these that monetary policy may be able to affect profits.

Let us consider how monetary policy may affect the various sources of profits, starting with investment. Monetary policy can encourage investment by lowering interest rates. A lower rate of interest increases the present value of an investment project and facilitates its financing, thus making it more attractive.

Monetary policy's ability to lower interest rates affects similarly most of the other sources of profits. A budget deficit becomes cheaper to finance when interest rates fall and, therefore, it tends to be encouraged. Spending out of profits and dis-saving out of wages are also encouraged, since the return to saving is reduced. The propensity to save out of all types of income tends to fall and, correspondingly, the propensity to consume tends to rise. The increase in consumption is likely to be less marked, if not insignificant, for profits recipients than for wage earners for two reasons. First, profits recipients have a much lower propensity to consume and their saving habits probably have a negligible sensitivity (i.e., are relatively inelastic) to changes in interest rates.

²⁰ A reversal of the income inequality trend through taxation, though seemingly more straightforward, may be problematic if investment is affected adversely by the income-equalizing taxes.

Second, profits recipients are likely to be owners of bonds and, therefore, they are also interest recipients. Consequently, lower interest rates reduce their income and this will tend to reduce their consumption. Nevertheless, this negative income effect is also likely to be negligible and capitalist consumption out of both profits and interest will be most probably largely unaffected by interest rate changes.

The final source of profits, which is the export surplus, is also affected positively by lower interest rates. This is because lower interest rates will lead to a lower exchange rate. To start with, the increased consumption will tend to affect adversely the balance of payments, the more so the greater the proportion of imports in consumption. As a result, the exchange rate is likely to be lowered, not only because of the increased imports of the consumption goods but also because capital inflows in search of an attractive interest return will be reduced. A lower exchange rate discourages imports, since they become more expensive in terms of the local currency, and encourages exports, which become cheaper in terms of foreign currencies. Consequently, the export surplus will tend to increase.

This result does not hold when exchange rates are fixed. In the case of a fixed exchange rate of the local currency relative to the currencies of the foreign trading partners, the increased consumption arising out of lower interest rates leads unambiguously to increased imports of consumption goods and a fall in the export surplus. Consequently, in this case, profits are lower rather than higher.

The above case is of relevance not only to fixed exchange rates arrangements among states that retain the right to a national monetary policy, such as the European experiments that preceded the introduction of the euro, but also for the present-day Eurozone. In the Eurozone, of course, monetary policy is the responsibility exclusively of the European Central Bank (ECB). When the ECB lowers interest rates, it considers the effects of this policy on the Eurozone as a whole rather than on each individual member country separately. From this viewpoint, the weakening of the euro's exchange rate can be expected to increase profits in the Eurozone as a whole. But this impact may be distributed in a markedly different fashion among the individual member countries and depends largely on the extent to which their trade is concentrated within the Eurozone. This becomes quite evident in the extreme case of a country that, let us suppose, does no trading at all with countries outside the

Eurozone. In that case, the fall in the euro's exchange rate resulting from a lowering of the interest rate will be of little significance to its actual terms of trade. It will be effectively in the position of a country with fixed exchange rates in relation to its actual trading partners, in which a lowering of the interest rates implies higher consumption and imports and, consequently, a lower export surplus and volume of profits.

It may be concluded that, with the exception of fixed exchange rates or when terms of trade are not affected, lowering of interest rates by monetary policy generally results in a boost to profits. There are, nevertheless, limits to the effectiveness of monetary policy in boosting profits.²¹ These limits are reached when interest rates are very low and the central bank's base rate approaches zero. It is then difficult for monetary policy to further boost profits.

It would seem that once the base rate has reached zero, the only way that monetary policy can continue to have an effect is by pushing the interest rate below zero. This is quite possible for the *real* interest rate, i.e. the interest rate minus the rate of price inflation, and implies an inflation-aiming monetary policy that goes against the grain of central banking orthodoxy. Equally, if not even more, unorthodox is the alternative possibility of imposing a cost on the holding of money. Such a suggestion was made about one century ago by Silvio Gessel, a would-be reformer of the capitalist system who was influenced by Henry George and wished to abolish the privileges attaching to the non-productive, passive ownership of land and money. It is noteworthy, that J.M. Keynes commented favorably on Gessel's scheme of "stamped" money, finding it only impracticable because it would lead to substitution of currency by other less liquid assets, such as bank deposits, debts at call, foreign money, jewelry and precious metals.

²¹ The limits are usually associated in textbooks with Keynes' liquidity trap, when the holders of Treasury bonds are willing to offer all the bonds in their possession at a price implying a low but still positive yield. At that price, their supply (or equivalently the demand for money) becomes perfectly elastic and monetary policy has no traction. According to Krugman, "essentially the whole advanced world, accounting for 70% of world GDP at market prices, is in a liquidity trap"; see Krugman Paul (2010), "How Much of the World is in a Liquidity Trap?", *The New York Times*, March 17.

Though major central banks (US, EU and Japan) keep base rates well below 1%, they do not seem prepared at present to use such unconventional practices²² but engage in measures, such as quantitative easing, which increase liquidity. Money has never been so cheap yet investment is weak, as US listed firms alone sit on reserves of 1.8 trillion dollars.²³ As a result, monetary policy seems to be ineffective in amplifying the sources of profits and actually attaining higher profits.

The main effect of cheap money seems to be rising asset prices. Stock market and real estate prices are on the rise and, it might be argued, this is part of the mechanism through which monetary policy achieves its intended effects.²⁴ But there may be a disjunction between the assets markets, in which bubbles may be forming, and the products markets which remain weak. The distinction drawn by Keynes between “financial circulation” and “industrial circulation” may well be apposite.²⁵ Liquidity and indeed productive resources may be drawn into the financial sphere for considerable time and create bubbles in asset prices, which burst before any beneficial effect is transmitted to the industrial sphere. As a result and contrary to the established theory, the bursting of the asset prices bubble finally has a damaging rather than a beneficial effect on the industrial sphere.

Under what conditions can such an eventuality arise? What is required is an initial impetus in asset prices and the view by a sufficient mass of market participants that the particular assets have a potential for capital gains exceeding the prospective profits in the production of goods and services. The historically not uncommon recurrence of bubbles not only in financial and other assets but even in products, such as tulips in 17th century Holland, shows that the required conditions are far from inconceivable.

²² There are, nevertheless, indications that the Bank of Japan, after more than twenty years of devotional focus on the fear of inflation and resistance to pursuing an expansionary policy in a determined fashion, today seriously contemplates measures aiming at a 2% rate of inflation.

²³ See, *The Economist* (2013), “A World of Cheap Money”, April 6.

²⁴ This is the established position; see, for example, Mishkin Frederic S. (2001), “The Transmission Mechanism and the Role of Asset Prices in Monetary Policy”, *National Bureau of Economic Research*, Working Paper 8617, December.

²⁵ See, Keynes J.M. (1930), *A Treatise on Money*, reprinted in Keynes J.M. *Collected Writings*, Vol.6, Cambridge University Press, pp.217-218.

In conclusion, monetary policy can affect positively the sources of profits through lowering interest rates but only within certain bounds. Once interest rates approach zero or a liquidity trap is reached, monetary policy becomes impotent. Increases in liquidity (not only when these boundaries are reached but even before), can be destructive as well as beneficial to profits and production. Keynes' distinction between "financial circulation" and "industrial circulation" has long been ignored by orthodox economic theory and needs to be revisited and seriously studied, as it may prove to be the key to a better understanding of monetary policy's effects and potential.²⁶

5. Concluding comments

In this concluding section, the primary impacts, pathology and negative side effects, as well as the sustainability limits of the different profits' sources are briefly reviewed. In addition, a terminology that can aptly distinguish the sources among themselves, as well as from the pathological instances with which they are associated,²⁷ is proposed for evocative aid. Finally, in the context of the suggested terminology, mention is made of a neglected term proposed nearly a century ago, which brings out the relationship between profits and employment.

The name proposed for the profits generated by the investment source of profits is *organic profits*. The primary association of organic profits is with the economy's productive capacity. This is expanded by the investment, which has given rise to organic profits, according to the estimations of the investing firms regarding the prospects for future profits in different economic activities. These estimations are

²⁶ It is worth noting that a similar distinction was also made by Joseph Schumpeter, who distinguished "capital markets" in stocks, bonds, mortgages, real estate and land from "circulating capital" for the needs of production. This point is made in an excellent paper, which is mindful of the importance of such a distinction and shows the way forward in this area, by Bezemer Dirk J. (2012), "Finance and Growth: When Credit Helps and When it Hinders", Invited presentation at the Institute for New Economic Thinking Plenary Conference, April 2012, Berlin.

²⁷ The pathological form takes hold when the limits, which may not always be precisely identifiable, are eventually reached. Its appearance may then become suddenly rather than gradually evident to the perception of the relevant market participants and policymakers.

influenced by a host of factors, such as the climate of business confidence, the ease of financing conditions and the interpretation of market-prices signaling, including the present volume of total profits and its distribution among different sectors. The estimations of the investing firms may turn out wrong, so that excessive investment is made in certain activities. This may prove disastrous for the firms concerned but the necessary adjustment of resource reallocation among firms and sectors does not ordinarily pose a problem to the operation of the economy. If, nevertheless, the excessive investment results in a grave sectorial imbalance, especially in strategic sectors with a large number of linkages throughout the economy (e.g. banking), then the collateral damage can be extensive and the necessary adjustment becomes impossible without a serious disruption to the operation of the economy. A grave sectorial imbalance sets then the limits of the investment source of profits, generating widespread losses throughout the economy. These limits give rise to the pathological form of organic profits, which may be termed *miscarried profits*.

The profits emerging from the export surplus source might be named *non-autonomous profits*. These are primarily associated with the acquisition of foreign assets but also with a reduction in foreign profits of an equal magnitude. The limits of non-autonomous profits are determined by the extent to which the foreign trading partners are willing to tolerate this practice, which in effect amounts to a kind of poaching of their own profits. Once their toleration is exhausted, they can resort to tariffs on imports and/or lowering of the exchange rate. These measures can eliminate the non-autonomous profits, turning them to their pathological form, which is of two kinds. The reversal of their balance of trade from negative to positive through tariffs and/or the exchange rate leads to what may be termed *thwarted profits*, while the lower value of foreign assets in terms of the local currency might be called *devalued profits*.

The name proposed for the profits issuing from the budget deficit is *provisioned profits*. These are primarily associated with an increase in public debt. The limits of provisioned profits are determined by the creditors' confidence that the debt will be fully honored. Clearly, this greatly depends on whether the debt is incurred in the local currency, which is under the control of the borrowing country, or whether it is in foreign currency. But it also depends on whether the debt is utilized to strengthen the productive potential or made use of to increase consumption. This is of importance

even if the debt is in local currency. A consumption-oriented, or generally wasteful use of the debt, which does not enhance the productive capacity, tends to create inflationary pressures and to lower the exchange rate of the local currency. As a result, even the certain repayment of a local currency debt will impose a loss on both the home and foreign creditors, since it will represent a lower value in purchasing power or real terms (a loss that is particularly relevant for the home creditors) and a lower value in terms of foreign currency (more important for the foreign creditors).²⁸ Consequently, the creditors' confidence wanes and the limits of provisioned profits are reached when the mounting debt is increasingly channeled to wasteful or other uses that do not promote the productive potential, at which point they assume in creditors' perception the pathological form of *squandered profits*.

The profits generated by increased consumption out of profits, may be termed *embellishing profits*. They are largely associated with a larger production and consumption of luxury goods. The approach to the limits of this source is shown by the appearance of inflationary pressures and increasing inequality in living standards, as the economy gets near full employment. But the limits are definitely arrived at, when the social legitimacy of a democratic capitalist system is widely questioned and put in jeopardy. This source can then be retained only by a passage to a non-democratic oppressive regime. The pathological form of profits, which will have taken hold by then, may be termed *dissolute profits*.

The source of profits associated with lower saving and indeed dis-saving out of wages, gives rise to profits which may be labeled *gratifying profits*. These profits are connected with a greater consumption of goods and services and, hence, a higher living standard of wage-earners. The limits of gratifying profits are normally narrow and cannot extend beyond the point where all wages are consumed and there is no saving out of wages. Nevertheless, the boundaries may be extended considerably if the banking system's laxity increases and lending terms are loosened. In this case, the limits are arrived at, when the default rate in wage-earners' loans increases and the

²⁸ The main difference between home and foreign creditors seems to be that the latter can stop lending and thus may extricate themselves while the former, even if they refuse to lend, will still carry the debt burden as taxpayers, if the government controls the central bank and borrows from it.

loans are perceived to have become unsustainable. The pathological form, which then comes into evidence, may be called *dissipated profits*.

The comments above are presented in the form of a table (see Table 1); in which, **I** stands for investment, **X-M** for export surplus, **B** for budget deficit, **C_π** for consumption out of profits and, finally, **-S_w** for less saving out of wages. The beneficial phase profits are transformed into the pathological phase ones, as the limits of the beneficial phase are approached. Though the transformation may be gradual, its widespread realization by the public of the pathological nature of profits is likely to take place suddenly. This is to be expected, since if the on-going transformation were widely realized, normally there would be pressures to arrest the increasing use of the particular profits' source. Nevertheless, the possibility that the forces insisting on the continued use of the hazardous source are strong enough to prevail, should not be dismissed. Most crises result from profits reaching their pathological phase because the power structure in a society is stacked in favor of particular business interests or populist political forces.

After this short review of the main impacts, limits and pathological forms of the five sources of profits, and following the proposed terminology, the concluding section ends with a brief consideration of a final concept. This is *wasted profits*, first introduced by Jerome Levy.²⁹

Levy believed that profits, being crucially important to the operation of the capitalist economy, should not be wasted but made the most of, so as to provide the highest possible level of employment and output. Profits are wasted, whenever they are greater than what is absolutely necessary for any given level of employment and output. The volume of profits that is absolutely necessary for a level of employment is determined by the risks (market and any other) inherent in each line of production. The estimation of wasted profits, therefore, requires knowledge of the risks attendant

²⁹ Jerome Levy was an American businessman and later financier, who independently investigated the sources of profits from an empirical rather than a theoretical standpoint and in a more disaggregated detail than Kalecki (allegedly before Kalecki, though his conclusions were published later in 1943). The Levy Economics Institute at Bard College was founded and financed by him and his descendants. See, Levy S. Jay (2001), "Profits: The Views of Jerome Levy and Michal Kalecki", *Journal of Post-Keynesian Economics*, Vol.24, Issue 1, pp.17-30.

on the particular economic activity, in order to establish the volume of profits which are absolutely necessary.

It is clear that Levy's concept of wasted profits is not easy to estimate and this is perhaps a reason it did not catch on. A general inference that may, nevertheless, be drawn from it concerns the intrinsic wasted profits associated with monopolies. Consequently, its usefulness is to be found not so much in its operational value as to the attention it directs to the wasted profits and loss of employment, which are unfailingly involved in monopolies.

The concept of wasted profits might yet be reinterpreted in a Kaleckian fashion, so as to be made more operational. Wasted profits, in this case, will not be measured as such but will be measurable in terms of the loss in employment which they cause. Given the volume of profits determined by the five sources, the level of employment is determined by the degree of monopoly. The latter can be simply indicated by the profit margin per unit of employment. Wasted profits can then be defined as the loss in employment associated with a given increase in the degree of monopoly or profit margin. In this manner, wasted profits are expressed in terms of their effect on employment and measured in labor units.

Table 1: Sustainability limits of profits' sources and related terminology

Profits' Sources	Beneficial phase	Primary impacts	Limits	Pathological phase
I	<i>organic profits</i>	Increase in productive capacity.	Excessive sectorial imbalance.	<i>miscarried profits</i>
X-M	<i>non-autonomous profits</i>	Increase in the ownership of foreign assets. Decrease pro tanto in the profits of trading partners.	Waning toleration of trading partners to decreases in their profits.	<i>thwarted profits</i>
B	<i>provisioned profits</i>	Increase in public debt and the sovereign debt/GDP ratio. Increase in public infrastructure, transfers and social services (health, education, police, army etc.).	Faltering creditors' confidence.	<i>squandered profits</i>
C_{II}	<i>embellishing profits</i>	Increase in the consumption of luxury goods and services.	Crumbling social legitimacy.	<i>dissolute profits</i>
-S_w	<i>gratifying profits</i>	Increase in mass consumption and the general living standard. Increase in the debt/income and debt/assets ratios.	Mounting debt leverage vulnerability.	<i>dissipated profits</i>

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