

Unproductive capital and the long run tendency in the distribution of income and wealth: the analysis by Supino¹

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Dedicated to Marcello de Cecco

INTRODUCTION

One of the most important features of the present crisis is a dramatic change in income distribution within western societies and among different economies. This phenomenon is to be understood in the context of globalization where there is an increasing role of financial transactions and activities that appears to dominate the performances and policies of most countries. As we know globalization is not a new phenomenon. Leaving the case of the Roman empire a similar period of increasing real and financial integration among the most important economies was that between the

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last quarter of the XIX century and the first world war (and perhaps until the Great Crash). It would be interesting to search for an analysis of the crisis elaborated with respect to the period just mentioned as the latter appears to have some analogies with the present situation.

During all his life Camillo Supino (1860-1931) was particularly interested in understanding the evolution of the capitalist system and more particularly in searching for an interpretation of economic crises. He first (1898) wrote “La borsa e il capitale improduttivo” and shortly afterwards “Le crisi economiche” (1907); finally he came back to the same topic in his last paper “Il capitale immaginario” published in 1932 shortly after his death.²

In these works he analyzes the role and the effects of the unproductive capital on the production and distribution of income and wealth in the economic system. His 1898 work, being written during the first globalization, appears to be particularly interesting today. In what follows we will make direct reference to this book, and will insert some references (mainly in footnotes) to his last work where he attempts at a generalization of the concept of unproductive capital (hence UC).

2 For biobibliographical informations see Augello (2013). For an overall analysis of Supino's works Perri (2001, 2007). See also Loria (1932).

There are four parts in the paper. In the first an outline (based on 1907 book) of Supino's interpretation of the crises is offered. Then the concept of unproductive capital is introduced and defined. Its roots in the classical analysis will be noted. Thirdly the various forms in which UC manifests itself in the financial sector are described. Finally an analysis of the many effects of UC on the distribution of income and wealth is provided. In turn these effects will change the structure of demand and production over the cycle and the long period. In the final remarks a general interpretation of Supino's arguments in connection with the present debate on the long run tendency of the economic system is offered.³

I A HEURISTIC SCHEME FOR THE EXPLANATION OF THE CRISES

Supino places his analysis firmly within the approach of the classical school centred on the phenomena of production and consumption with a less important role given to the processes of circulation and distribution of goods. At the same time he recognizes that the economic system of his time is characterized by a large and crucial role played by

³ For a modern analysis within the classical approach of the relations between financial and real aspects see e.g. Pegoretti 1983 and Panico 1983.

money and credit which introduce an important element into the working of the mechanism that guarantees market equilibrium over time.

The origin of a crisis lies in the disequilibrium between production and consumption that manifests itself from time to time within the general tendency of the economic system to return to normal conditions in the long run: crises, as Francesco Ferrara (1864: LXVI) once noted, are never permanent. Supino uses this heuristic device to classify the causes of the crisis according to the various elements that drive the disequilibrium. He notices for example that consumption can induce a crisis when it falls short of production or on the contrary when exceeds it (with an ensuing fall in capital accumulation).

He first shows how complicated can be the attainment of a perfect equilibrium between production and consumption owing to a whole series of circumstances: the volatile nature of consumption, the existence of technical progress that creates and destroys industries, the necessity that capital goods are built before they are put to use, the predominance of fixed coefficients in the technical relations, the presence of specialized capital and labour and finally the increased role of fixed capital in production.

All these elements make the adjustment always imperfect. So far it appears as if the problem were mainly of a sectoral nature, but this conclusion would be wrong. More precisely Supino rejects the opinion (that was dominant then as it is now) that only a partial excess of production over consumption can exist and argues in favour of the thesis, advanced by Sismondi and Malthus, that a general glut can exist. The contrary thesis, elaborated by Ricardo, Say, and Mill, while logically correct, starts from premises that are in not in accordance with actual economies and overlooks circumstances that are present. The classical school argues within a stationarity hypothesis which is far from being the case in actual systems and implicitly refers to a barter economy or one where money does not introduce a significant time period between sales and purchases. In so doing it overlooks the element “time” and the fact that this leaves room for the existence and the use of credit, a factor that can reinforce the difficulty in finding and maintaining equilibrium between production and consumption.

In fact, Supino argues, the study of facts does demonstrate the possibility of a general excess of production. What happens is that “ (..) the supply of all commodities can be higher than demand for all commodities as the demand for the commodity in general, ie of money, is larger than the demand for all specific commodities” (1907:43). For Supino

in determining crises an important role is played by changes in income distribution. He sees a major contradiction of capitalism (in opposition to previous economic systems) in the fact that low wages while increase profits do reduce demand and high wages increase consumption of goods but can reduce the rate of profits. Following Rodbertus (1875) he claims that wages do not increase proportionately with production so that the effective demand of workers falls and firms find themselves replete with unsold goods. In addition the consumption pattern of workers and capitalist does not overlap so that the fall in the demand by the former is not compensated for by an increase in the latter.

This for the consumption aspect. As for savings, Supino objects to the thesis that all savings become productive investment. Part of them are indeed idle in the banks or employed in unproductive uses (such as public debt) or finally sent abroad. Today capital is in large supply for the difficulty capitalists find in employing it in productive uses.

Following the classical argument in this respect, Supino argues that in the long run with an increasing population the rate of profits has a tendency to fall because of the increased use of less fertile lands as accumulation proceeds. The novelty Supino adds to this picture is that the enlargement of unproductive capital is an action taken by

capitalists to postpone the effects of this long term tendency. Following Supino's analysis we will dwell on this aspect later in the paper.

In the next sections we outline the main arguments elaborated by Supino on the relation between income distribution, national product, and unproductive capital within the more general topic of the explanation of economic crises. We will overlook the detailed examples or historical episodes he refers to in his work and that are still valuable today.

II DEFINITION OF UNPRODUCTIVE CAPITAL

The definition of UC rests at the macro level and follows by and large Loria's analysis (1889: 473-562).⁴ If capital is used to enlarge net national income, and therefore social wealth, it is productive: as a result a surplus, and hence profits, emerges. If this is not the case, capital is unproductive (1898: 29-31): for instance capital (both fixed and circulating) employed in activities that move wealth

4 It must be observed that Supino's argument is much clearer than Loria's and that already in his 1886 book (cap. V, esp 106-7) there is the distinction of social capital that produces profits from capital that gives its owner the right to an interest. See also Perri (2007). It is on the other hand different from Marx's definition of unproductive labour which is at micro level. For the insufficiency of this definition see Di Matteo 1979.

from one firm or consumer to another. It nonetheless gives to its owner the right to get an interest but this is subtracted from the overall profits due to the productive use (1898: 26-9). This can be labeled unproductive capital for consumption.

But there is another form of UC much more important namely the unproductive intermediary capital which we find in trade activities and especially in the banking system and stock markets.⁵ Following the classical school only the production process of goods (and some type of services 1898:171-2) gives rise to a surplus. Net revenue can be distributed in the first place to workers, entrepreneurs and then to capitalists and landowners. (1898: 160).

5 In his last work (1932) he attempts at a generalization of the concept introducing the expression "imaginary capital". In this he includes all forms of capital that can be derived from the capitalization procedure and can be exchanged on the market, but that have not a physical counterpart. For example the privatives given by the State, the monopoly (be it legal or de facto such as that of public utilities), the production methods exclusive of a firm, etc., all these produce an income well above the normal rate of return and induce to think that there is a capital from which they derive. Within the same line Supino includes into the definition all forms of explicit agreement among firms or legal norms (such as the restriction of the numbers of pharmacies, "notaries", etc.) that limit competition, or finally the patents. This definition appears to be extremely inclusive, although Supino is careful enough not to include, for example, "intellectual capital", that, when applied to the production process, increases social wealth.

The existence and development of UC is made possible by the fact that we observe an increasing degree of separation between capitalists and entrepreneurs. As long as capital is employed directly by its owner, capital accumulation and its productive use are indissolubly linked and capital cannot receive an interest unless a profit emerges from production. The saver who lends its capital to an entrepreneur does not necessarily know what use is made of it; nevertheless he pretends a reward for he leaves a potentially productive capital in the hands of the borrower. If the capital is given to an agrarian entrepreneur who uses it for land improvements, the interest accruing to the capitalist comes out of the increased profits generated from the surplus in the cultivation of land. If on the contrary the agrarian entrepreneur uses it for banquets, then the capitalist is as rich as before receiving the interest, whereas the agrarian entrepreneur is poorer (with less overall capital than before as he has destroyed it) and with him the society as a whole. The saver has the possibility to sell its credit to someone else and be safe. In this case he does not receive his original capital but someone else's who is willing to acquire the claim.

Here comes in the crucial role of the stock market. Supino, especially in his introduction to the 1898 book, shows to be completely aware of the important functions of the stock

market and indeed recognizes it to be an essential feature of capitalism without which the latter would collapse. The mobilization of capital permitted by the stock market through a variety of financial instruments is an extremely important tool for giving the economic system bigger elasticity and velocity (1898: 7). This goes hand in hand with the invisibility/anonymity of the capitalist and with the fact that each capitalist now is a capitalist “without borders”. The mobilization gives the capital market a special and excessive sensitivity to any outside influence. These aspects make the two forms of capital, productive and unproductive, very difficult to separate but political economy has the ability to disentangle them. The task calls for an analysis that looks for the nature of the income that accrues to the capitalist.

Yet the very existence of the stock market allows both productive and UC to exist side by side. Indeed the stock market facilitates the use of capital for destructive uses; the issue of low quality assets multiplies the quantity of transactions, intrudes into the formation of asset prices: a whole pathological superstructure thus emerges. In general unproductive capital, Supino argues, can be used for useful purposes such as house building (this is to be considered as a durable good), children education (the concept of human capital was not yet developed), etc. These are the goods

produced out of the social surplus (like luxury goods). Its use becomes *pathological* however when capital is employed away from the production process and instead is used in the circulation for endeavours that will never give a profit but that banks and other intermediaries, often with deception, convince the public to participate in.

Finally, according to Supino, there is the case where productive capital changes into UC. When a firm cannot sell its product and therefore has losses rather than profits, its capital is destroyed and can be labeled unproductive. This case, as it is clear, introduces a different level of analysis.

Ultimately Supino's concern is both with long run tendencies of capitalism (exemplified by the struggle among firms, the effects of technical progress, the financialization process, etc.) and with its cyclical behaviour (unproductive capital becoming part of the phenomenon of crises).⁶

Although UC is not developed only in the late phase of capitalism (it is also present in the early phase) according to Supino there is close connection between the phenomena of UC and the development of financial activities in the stock

6 In his last work (1932) Supino concentrates his analysis on the cyclical expansion and contraction of the imaginary capital and tends to overlook the long run aspect that he had emphasized in the 1898 book.

market.⁷ Therefore let's turn to a description of the forms that UC can acquire.

III DIFFERENT FORMS OF UNPRODUCTIVE CAPITAL

In two chapters Supino examines bonds and shares as the most important forms that unproductive capital can assume.

He starts from bonds and first concentrates his attention on the public debt. The economic progress has been one of the major factor behind the growth of public expenditure addressed to the satisfaction of collective needs. Although he recognizes that there can be cases where the capital borrowed by the State is put to productive use, he is inclined to regard most of the public expenditure as a waste of capital, the only exception being public works. In the latter case indeed there is a (physical) asset against the debt the State has incurred in; this is not the case if the State has used the capital obtained for (current) expenditure. Public works often facilitate the production process and contributes to the process of economic development (a case of externality, we would say today). Nevertheless it remains true that, according to him, the interest paid on public debt

7 For a long run perspective on the processes of financialization see Vercelli (2014).

has to come from social surplus.⁸ Quite often the State destroys capital because it engages in war. Capital is also unproductive when it is used for financing the budget deficit, the latter being the result of an expansion of current expenditure.⁹

The other factor that explains the growing public expenditure is that the increasing amount of savings, a consequence of economic progress, is coupled with the facilities provided by the stock market. Thanks to the latter (and in particular to the development of secondary markets) public debt can circulate in a swift way and the government can obtain credit on a very long term. On the other hand the State's ability to repay and/or honour the debt depends on various aspects: the public's confidence in the government, the creditworthiness of the government itself, the wealth of the public, the elasticity of the tax system and the purpose of the debt. Here Supino observes that our society can be characterized as a "commercial constitutional government" where it is only the richest class that actually participates in

8 It is noteworthy Supino's observation, taken from the Palgrave, that only in Germany and Belgium has the State put borrowed capital to productive use.

9 Under this respect Supino mentions the case of Italy in the period 1860-5 and 1885-9.

the government: so that the rich lend to an institution they themselves control! ¹⁰

The last example in the case of bonds he deals with is foreign borrowing/lending which is increasingly important as capital has taken on an international aspect. For the borrower it is a gain only if capital is put to productive use making possible extraordinary works that otherwise would not have been possible in low income countries and fostering their economic growth.¹¹ Needless to say for the lender it is an effective increase in wealth as long as the debtor does not default.

Let us now move on to deal with the case of shares. Supino is aware of the important role of equities in the growth of the firm: capital can flow in larger amounts to the system of firms as also small savers can participate in big companies and the owner knows at each instant the value of his capital and the return he can get from it. In this context the stock market enables him to exchange shares whenever he feels the investment is no longer worthwhile. This very fact however induces many savers to embark in risky adventures as each can risk a small amount. As a

¹⁰ An echo from the *Communists' Manifesto*.

¹¹ As a side effect it develops mutually beneficial links among nations (1898:53).

consequence the flow of new capital makes the number of firms larger than necessary or the size of the firms bigger than warranted by their market.

One of the most important part of UC is intermediary capital, namely all the capital employed in arranging the issuing of shares and the technical operations connected. The crucial period that deserves special attention, Supino argues, is that between the idea of a new firm and its formal birth. Here you have to convince the largest possible number of savers to subscribe. This is done by massive advertising, often with the help of financial newspapers and politicians bribed to this effect. In addition capital is wasted because there is a whole bunch of people who work as intermediaries instead of producing new goods. Often those involved gain extraordinary amounts of fees and with all possible devices create a demand for the shares to be issued so that the savers are induced to think they are really worth buying. Finally, because of their privileged position, the founders sell to the company patents, buildings, etc at a very high price. All this enables Supino to argue that often the issuing of shares has become an end in itself and the company is a simple excuse for giving birth to equities. The founders very often get out of the company immediately after its birth and cash in the rewards connected with the founding activity itself. The gain is not in the production

process that a firm can develop but in the constitution of the firm itself.¹²

There is an interesting observation that appears to be valid also today. When there is a temporary slowing down of the stock market movements, the banks and the financial intermediaries contrive all possible actions to give impulse to the stock market operations as they depend on them. The whole bunch of people who work as intermediaries represents a subtraction to the productive capital of the economic system.¹³

Then Supino embarks in a description of the operations that take place in the stock market. It is pretty clear that today's operations have their roots in the less sophisticated instruments of the time. Supino mentions *operazioni a premio, stellage* (now: call and put options), *operazioni a termine* (now: forward and futures markets). However in

12 These activities often happen in swarms and Supino illustrates his argument with historical episodes (France, England, Austria, Germany, etc).

13 In his 1932 paper this part is developed and updated with extensive quotations from Lavington (1921), Hilferding (1910), Pigou (1927), Tougan (1913), Aftalion (1913), Bounatian (1922), Fisher (1929), Fanno (1913), Keynes (1930), Marx (1894) witnessing that Supino not only paid attention to the literature of the XIX century but kept himself up to date with the new developments on business cycles and financial matters that came from Marxist as well as mainstream economists.

our analysis a few remarks will suffice at this point. First Supino notices that if capital employed in the financial transactions is the counterpart of movements of funds from one sector where it is abundant to another where it is scarce this has a real utility and is not an example of UC. To negate this would revive an old prejudice against *every* form of circulation (1898: 83) and this would be incorrect. Supino however contends that the large majority of transactions are not of this kind as they reflect speculative activities where the gain of one individual is at the expense of another: the capital employed in these transactions is UC. Unfortunately the two kinds of transactions are apparently similar so it is very difficult to separate them. The difference between the capitalist and the speculator does not manifest until the moment in which the contract has to be liquidated: in this moment one can see that the second, instead of giving or receiving the activity, engages in all the necessary actions to liberate himself from the contract itself (1898: 84). In the end Supino proposes a very simple criterion for picking up the presence of UC in different operations (1898: 89-92): all *operazioni a premio* (options) and most of the *operazioni a termine* (forward and futures market operations) have to be considered as a part of UC, whereas only a small part of spot operations (1898: 78) are examples of UC.

IV EFFECTS OF THE UC

The last two chapters are the most important in that the effects of the presence of UC on the production and distribution of wealth and income are examined. As we will notice there are interrelations between the distribution and the production of wealth as well as the distribution of income, its expenditure and the production process.

The line of the argument is briefly the following. As remarked at the outset, the existence of the stock market has several beneficial effects, but because of its intrinsic working and features, has nevertheless some very important negative consequences. The volatility of asset prices and the facility of exchanges attract speculators (professional as well as amateurs) and large amounts of financial funds. This has first redistributive effects on wealth and income and then real effects on production.

To introduce the argument Supino comes up with a theoretical observation that is worth recalling at this stage. Capital has two prices, one derived from the cost of physical (re)production, the other from the capitalized value of its income. It is the latter that constitutes the *normal* exchange value of that capital on the stock market. It is from the divergence of these two values that the investor is induced to increase or decrease the production of new

capital with the final result that the two values coincide in the long run (1898: 98).¹⁴ Indeed, Supino notices, the normal value is in general different from the actual value you get from the stock market in a particular moment, owing to all the influences that affect the price, idiosyncratic (the liquidity of the market, the financial solidity of the firm) and general (the political, financial and economic news): as is well known the stock market reflects not only what has happened but also what could happen (as anticipated by the participants). The fact that wealth as embodied in assets traded on the stock market is easily transmissible from one investor to another gives rise to continuous quotations and therefore oscillations. The latter are larger in restricted markets and are amplified by the new means of communications such as the telegraph (the 1907 crisis will prove this in a perfect way). As already hinted at the stock market is a market with a particular sensitivity. Oscillations are essential to its working and are all that is needed for speculators to operate and to attract savers with a love for risk. The operations of speculators according to Supino are more important in determining prices than the normal forces based on the relative flows of demand for and supply

14 This is nothing else than an embryonic theory of investment, rather similar in spirit to Tobin's q (1969). A hint in this direction can be found already in his 1891 book (p. 90-1, 122).

of funds. In this there is the crucial role of the banking system both in the upswing and in the downswing that supplies credit as needed. In the description of the working of the stock market and its cycles by Supino there are interesting observations that appear to be consonant with Keynes' (1936) analysis of the stock market as a beauty contest (1898: 105), or Merton's (1948) self fulfilling prophecy (1898: 111).

Let us move on to an analysis of the effects on wealth and income. Supino starts his analysis of the effects on wealth from the role of the State. If the latter's resources are put to productive use there is simply a redistribution of capital across sectors but social wealth is unchanged (he possibly overlooks differences in productivity). If on the contrary the funds so acquired are used in unproductive ways social wealth is diminished. This will probably increase the rate of interest the State has to pay on its bonds as the supply of savings has been reduced (an example of crowding out). If public expenditure were financed via tax rather than debt, households would have increased their savings in order to reconstruct their wealth offsetting the negative impact on accumulation. This effect is lacking in the debt financed case as the single household regards (incorrectly?) bonds as an addition to wealth.

It must be observed also that capital becomes unproductive when it flows to firms that are driven out of the market over the descending phase of the cycle or during the crisis. This phenomenon is amplified through the repercussions on other sectors that find themselves in a position that preclude them from selling their products: other firms in different sectors will thus be affected and the productive capital will be even more damaged by the presence of UC.¹⁵

At the same time unproductive capital subtracts both funds and workers from productive uses. But, and this is the novel aspect that calls in a long term tendency, Supino sees a feedback process: the swift accumulation of wealth would have caused a fall in the rate of profit (via Ricardo's mechanism) and therefore capitalists restrain from employing capital in a productive way and rather prefer investing it in assets traded on the stock market, assets that are risky but promise a higher return than that earned on productive capital.¹⁶

15 Supino in this respect criticizes (1898: 142) Ricardo for failing to see this aspect and for the latter's acceptance of Say's Law, a position he will maintain in his 1907 book.

16 On this point Supino (1898: 34-5) ventures to argue that the rate of return on unproductive capital is generally higher than that obtained in the production process. There are three reasons, according to him. First if unproductive capital has a return higher than the productive the latter cannot convert itself into the first, as this will reduce overall profit and therefore also the part that accrues to it. Second unproductive capital cannot be rebuilt and given back to the creditor as it has not given rise to net revenue: in these conditions the lender has an advantage and asks for a higher return. Thirdly borrowers,

The bottom line of the argument about the stock market is then that the change in the market value of assets when is not the consequence of a change in the quantity of capital they represent, does not change the value of national wealth while at the same time changes its distribution (1898: 146-7).

This is not without consequences, however, on the production side. First the dramatic swings in values introduces uncertainty in the economic system (this being true even if capital were productive so reducing the benefits of the stock market); second the change in values, in so far as determines a change in the distribution of capital among sectors, closing down firms and opening up new ones, induces relevant transition costs (prolonged unutilized capacity, unemployment, etc). Third there is a tendency for assets to concentrate in the hands of the very rich, determining a decrease in the welfare of the community (this could be interpreted as a consequence of the diminishing marginal utility of income).

There is one more aspect that is worth mentioning. When the value of wealth increases simply as a result of stock market valuation people is induced to spend more but since there is no contemporaneous increase in the supply of

unlike productive entrepreneurs, are pushed by non strictly economic incentives and are generally buoyant (adverse selection?). The thesis appears to be fallacious as long as firms borrow for investment. However it is not necessary for the general argument of Supino.

goods this provokes a disequilibrium in the market for goods and in the housing market: it is necessary to recall that Supino considers new houses as durable consumption goods and not as a net residential investment, so that there is simply a change in the composition of the product according to him and not an increase of the latter. This increase in prices redirects production and it is the beginning of the crisis as this massive redistribution of income affects deeply and negatively those who did experience only the reduction in the purchasing power of their income. In this way following the demand of the rich part who benefitted from the stock market boom, the economic system transforms into consumption goods resources that could have been used to enlarge capital and therefore future wealth. Indeed the promise of high rates of return in the stock market is a powerful inducement for capital already employed in productive use to abandon it and to participate in the “bubble”. In other words, Supino concludes, the ultimate damage that stock markets booms and depressions carry with them is that this phenomenon affects the relative production of industrial sectors and relative employment of capital over the cycle and produces a tendency to reduce the growth of wealth in the long run.

Let us now consider the effects on the (re)distribution of income. We have to remember that for Supino only

production gives rise to net revenue. Therefore interest and rents are taken out of it. The same can be said of interest that accrues to UC. Finally, the argument goes, we have to examine the effects that such a redistribution has on private aggregate expenditure.

To deal more systematically with the redistribution of income that flows out from the presence of UC and its further effects, let us follow Supino and considers three forms of income: a) interests and dividends; b) rewards in favour of the financial intermediaries; c) windfall gains (as we would call them today).

One of the most important form of UC sub a) is public debt that in the end is paid for by the taxpayer. Supino separates three different cases depending on how the debt is financed. If it is by foreign capitalists, national capital is unaffected but the taxes levied to pay for the interests accrue to foreigners. If it is financed by savings that are subtracted from productive uses, demand for productive labour falls and with it workers' wages; in particular if this is subtracted from capital employed in agriculture rents increase. Finally if it is financed by savings that would have not been employed in productive uses, there is nonetheless an increase in taxation to pay for the service of the debt whereas national wealth is unaffected as long as the State

employs capital for consumption. Typically the burden falls to a large extent on the working class that has a reduction in real income as the State increases indirect taxation: in this case we have two groups, those who pay taxes to service the debt and those who receive interests from taxes.

As for equities, the other form sub a), Supino notices that very often dividends are paid out of future profits or directly reducing capital so that they fall on the productive capitalists. Sometimes for inducing an artificial increase in the value of equities exceptional dividends are distributed and in these cases we witness a consumption of capital. This in the case of shares representing productive capital. But needless to say a similar argument applies to equities that are representatives of unproductive capital: there is a reduction of profits.

The second form namely b) concerns capital that is employed in the intermediation processes. In the cases of speculators it simply exists in order to facilitate the speculators' game where one actor gains and another loses. The intermediaries (bankers, traders, etc.) will receive fees and remunerations but again UC cannot produce new wealth but only consume it.

Finally it is necessary to examine the ways in which income (interests, dividends, profits of speculators and financial intermediaries) accrued to the owners of UC is spent.

According to Supino there is no net addition to aggregate demand, as income is transferred from one group to another. It can be argued however that while the income accruing to workers and capitalists of the productive sector is *pro tanto* reduced there is a concentration of income into a small group of speculators and financiers. The latter's savings will be used to enlarge the operation of UC, either in foreign countries or in the purchase of public debt.¹⁷ There will be also a change in the consumption pattern. Luxury goods will be purchased in large quantities and again this will be harmful for the working class in that basic consumption goods will increase in prices and the lack of productive capital will depress wages and increase unemployment.

FINAL REMARKS

¹⁷ Quite often (in those times!) the State purchase military goods and therefore there will be a fall in the production of consumption goods for the large part of the population in favour of production of arms.

Before concluding let us notice a connection between some of the arguments advanced in the paper and the recent debates on financialization that have occurred partly in connection with Piketty's analysis (2013). We can bridge Supino's analysis with the present debate on growing inequality in this way. Take the well known relation

$$(*) \quad v=s/g$$

where $v=K/Y$ (capital/output ratio), s = marginal propensity to save and g = income growth rate. We can modify it into $rK/Y=sr/g$ which is a synthetic expression that summarizes Piketty's argument according to Panico & Pinto (2015). The French economist argues that when g falls, the share of income accruing to capital increases. This does not necessarily implies that r increases as well but on empirical grounds Piketty states that this is the case arriving at his famous inequality

$$(\wedge) \quad r>g$$

from which he derives that inequality has been increasing in recent times (on this see the observations by Franzini (2014) and De Bonis (2015). The analysis has a rather general validity as the only historical exception to (\wedge) is to be found

in the golden age following II WW when the growth rate was “abnormally” high.¹⁸

However the above relation (*) can also be read in a different way. For example Panico & Pinto (2015) argue that in the analysis the *primum mobile* is not the fall in g but the reduction in the capital share (for which they supply various determinants) from which inequality arises, the fall in g being merely a consequence rather than a cause.

But the two readings are not mutually exclusive as they can reinforce each other in a cumulative sequence. And here comes Supino. The latter argues, as we have seen, that as the share of capital increases, there is the possibility that a large part of the capital becomes unproductive particularly involved in financial activities. This tends to lower the rate of growth triggering a spiral. In addition Supino notes that the rate of profit on productive activities, if not hampered by unproductive capital would have fallen, whereas the (overall, we must add) rate of return on financial capital is more stable enabling the capitalists, who are involved in financial activities, to be better off.

What conclusion in terms of long run analysis? UC is necessary to the existence of capitalism. If all the capital

¹⁸ On theoretical grounds one can recall that the case $r=g$ is the golden rule derived by Phelps (1961) as a normative result.

went into productive form, accumulation would be faster than population increase, wages then would go up and profits would go down more swiftly than otherwise: the system probably would collapse.

In other words for the capitalist class as a whole the presence of UC is an absolute necessity: it prevents the rate of profits from falling by keeping the rate of growth quite low. On the other hand UC enables capitalists as a class to enjoy a high level of rewards. On the contrary for the workers, the UC means fall in demand for labour, higher unemployment and lower wages so that the distribution of income and wealth deteriorates over time.

This evolution of capitalism where each capitalist pursues every action that gives rise to a return regardless of the effects on the creation of wealth that are inherent in its use, while perfectly rational from the individual's point of view, appears to have transformed capitalism from a progressive system where the capitalist's action is a benefit both to himself and to the society, into a regressive one where only the personal benefit is present.

Supino observes (1898: 5) that wealth, becoming more and more mobile, increases the rights of the owners who earn an income without working but at the same time weakens the feeling of their dues and goes on arguing that this contrast

between right and effective authority is the weakest side of the present economic system and is a powerful justification of the socialists' criticism and attacks.

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