A slightly modified version of this article appeared in:
Denknetz Schweiz (Publisher): Denknetz Jahrbuch 2010.
Zu gut für den Kapitalismus. Blockierte Potenziale in einer überforderten Wirtschaft
Pages 12 - 19, Edition 8, Zürich 2010

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The Lost Innocence of Productivity

> "Capital itself is the moving contradiction, [in] that it presses to reduce labour time to a minimum, while it posits labour time, on the other side, as sole measure and source of wealth."
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> Marx, Grundrisse: pg. 706

So-called technical progress and the constant rise in productivity are regularly presented as a potential path to the good life and the solution to all the problems of humanity. Seeing as productivity has doubled in the last 30-40 years, meaning that for the same amount of time spent working twice the amount of goods are produced now than in the 1970s, it follows that we have since made great strides towards achieving a life of plenty. Of course any person who asserted this in the face of today's simultaneous and mounting environmental, resource, economic and financial crises would be justly regarded as a dreamer. So something in the calculation and it's promise isn't right.

Where does the error lie? A first indicator towards an answer to this question is provided by a catchphrase that is often repeated in this context, namely *competitiveness*. The significance of productivity lies first and foremost in the act of comparison: the more productive enterprise can make and sell its products more cheaply and pushes competitors out of the market. The more productive location can even become a world leader in exports, while the less productive may have to content themselves with the collapse of their industries. To this extent it is clear that, as a rule, unequal increases in productivity do not benefit all economic subjects equally and even harms many. It is also clear that under competitive conditions increases in productivity are not simply used for a general reduction of working hours, but rather results in fewer numbers of employees producing more.

Nevertheless, this does not yet answer the question of what effect prolonged, competition-induced increases in productivity have on the global capitalist system as a whole. According to the liberal ideology of progress, which likes to employ Darwin's "survival of the fittest" or Schumpeters principle of "creative destruction," the dynamic of competition propels not only technical but also social advancement. That this ideology has been discredited by the course of world affairs is obvious now, at the beginning of the 21st century, at the latest; perhaps less apparent are the reasons for this, which will be brought into focus in the following article.

Productivity, Value and Material Wealth

One speaks of a rise in productivity when the same amount of labor time results in a larger output of material or—what is essentially the same thing—when the same amount of material goods can be produced with less work, thereby diminishing their value. Thus productivity is the proportion of material goods to the labor time necessary for their production. To understand productivity and its changes it is absolutely necessary to distinguish between value-form wealth and material wealth.[1] When Marx says (in the opening quote) that capital sets labor time as the only measure and source of wealth, then he is discussing wealth in the form of value, a historically specific form of wealth that is valid only for capitalist society and comprises its inner core (see Postone 1993, pg. 25). Material wealth, on the other hand, is made up of use-values that can be produced as commodities or not. 500 tables, 4000 pairs of pants, 200 hectares of land, 14 lectures on nanotechnology or 30 cluster bombs would be considered material wealth in this case. This appraisal centers solely on the item's useful application.

Capitalism differs from all other social forms in that another form of wealth dominates, namely the abstract or value-form wealth, which takes the form of money and is measured by the amount of time necessary for the production of commodities. Material wealth is a necessary accessory to capitalist business, but not its goal. This comprises the process of valorization, the aggrandizement of abstract wealth: I invest money in the productive process in the expectation that in the end I will have more money (surplus value). An economic activity that does not at least expect this increase in abstract wealth doesn't even happen.

This difference between the two forms of wealth is in no way self-evident. In the day-to-day affairs of capitalism it plays no role, where there is just “plain wealth.” Criticism of capitalism is at this point primarily criticism of the *distribution* of wealth. The political economy of marxian criticism is by contrast essentially criticism of this unique, insane and exorbitant *form* of wealth (see Postone 1993, pg. 26f), on whose functioning we have all made our lives dependent. However, it functions—even by its own standards—steadily less and less.

In the concept of productivity the focus rests on the quantitative relations between the two forms of wealth that were created in commodity production. At any given moment they are established, yet as Marx ascertained (Capital I, pg. 136f) they are constantly in flux:

> "*In itself, an increase in the quantity of use-values constitutes an increase in material wealth. Two coats will clothe two men, one cote will only clothe one man., etc. Nevertheless, an increase in the amount of material wealth may correspond to a simultaneous fall in the magnitude of its value. This contradictory movement arises out of the twofold character of labour. By 'productivity' of course, we always mean the productivity of concrete useful labour; ... it naturally ceases to have any bearing on that labour as soon as we abstract from its concrete useful form. The same labour, therefore, performed for the same length of time, always yields the same amount of value, independently of any variations in productivity.*”

The last sentence is worth emphasizing if we are to understand the following: an increase in productivity

- does not alter the value (measured in labor time) of goods produced on any given workday
- increases, by contrast, the material wealth produced on any given workday
- and decreases the value of any single product as a result

The Necessities of the Production of Abstract Wealth

For these reasons the empirically established historical tendency in capitalism towards a continuous rise in productivity leads to an equally continuous devaluation of material wealth. And as can be shown (because surplus value is always smaller than the total value of a commodity; see Ortlieb 2009, pg. 33f), from a certain and already reached point in capitalist development onwards the contribution of any material unit produced as a commodity to the total surplus value produced by society becomes ever smaller.

Capital, whose only interest is in the greatest possible accumulation of surplus value, cuts off its nose to spite its face with continuous increases in productivity, since the material expenditure necessary to attain any surplus value steadily increases. The question is, why does capital act against its own "interests." The answer is to be found in the fact that the matter looks quite different from the perspective of the individual capitals: through competition (of enterprises, locales, national economies) the individual capitals gain an advantage and can expand their portion of the market, which gives them a productive edge over their counterparts. From this results the paradoxical situation that precisely those individual capitals that enlarge their portion of the total social surplus-value pie the most do so by reducing the total size of the pie by the greatest amount. Out of this comes the "moving contradiction" that Marx identified 160 years ago, one in which capital, by simply following its own logic, undermines the very form of wealth necessary for its existence. Anyone who fails to participate in the expulsion of labor from production is swept from the market.

Because the aim of all business in capitalism is the attainment of surplus value, which is to say that the money invested in the process of production has to have increased in the end, a functioning market economy without growth simply does not exist, for without prospects for growth no one would be economically occupied anymore. This is especially noteworthy for all those well-meaning people who say that national economies, for the sake of the environment and humanity, should get used to doing without growth in the future, but don't wish to speak of the end of capitalism.

What is it that grows so compulsively? From the perspective of capital it is abstract wealth that must grow, and with it the surplus value that corresponds to an ever larger capital stock with growing capital accumulation. In the case of increasing productivity, however, material output must grow faster than surplus value. For even a constant level of surplus value production would require material growth that corresponds to that of productivity.

The production of abstract wealth is subject to the double pressures of increasing surplus value and increasing productivity, which in turn requires an even higher rate of growth in terms of material wealth. Historically capitalism has complied with its innate growth-compulsion through two immense waves of expansion (see Kurz, 1986, pg. 30f):

- expansion "outwards" through the successive conquest of those branches of production that already existed before capitalism, the transfer of the working population to a state of wage-dependency and the conquest of geographical space
- expansion "inwards" through the creation of new branches of production and—in connection with this—new needs, through production for mass-consumption and through the penetration of the split-off "feminine" realm of reproduction.

The realms that are filled here are material in nature, and as a result finite. Through the exorbitant increase in abstract wealth these must be filled up at some point. This point has been reached, simultaneously in two respects:

The Internal and External Limits of the Capitalist Mode of Production

Pertaining to the expansion of capital Kurz stated (1986, pg. 31ff) as early as the mid-1980s that an effect of the "microelectronic revolution" would be the following:

> "*Both essential forms or aspects of the capitalist process of expansion are today beginning to reach their absolute material limits. The saturation-limit of capitalization was reached in the sixties; this source for the absorption of living labor has come to a standstill. At the same time the coalescence of scientific technology and ergonomics in microelectronics implies a fundamentally new stage in the revolutionizing of the material labor process. ... The mass elimination of living productive labor as the source of value production can no longer be absorbed by cheapened products newly introduced to mass production, because this mass production no longer arranges the re-absorption of working population that has become "superfluous" elsewhere. Thus the relationship between the elimination of living pro-*

> *ductive labor through scientific rationalization on one hand and the absorption of living productive labor through the process of capitalization on the other, or perhaps the creation of new branches of production, is irrevocably overturned: from now on inexorably more labor will be eliminated as can be absorbed.*“

The recognition that “from now on inexorably more labor will be eliminated as can be absorbed” rests fundamentally on the assumption that capital will no longer be in the position to generate product innovations that will make up for the losses in (surplus) value production induced by process innovations. This has a lot to commend it, even today—24 years later—we have yet to see such innovations. As stated, we are not speaking simply of new products and their attendant needs, but of new products whose production demands such massive amounts of labor that the potential rationalization of microelectronics could be at least compensated for.

Empirically, the *internal limits* of capitalist production appear as a competitive crowding out of the market and structural unemployment, such as in the auto industry, whose situation was described very well in DIE ZEIT on October 16th, 2008 in an article by D.H. Lamparter, which was titled *Emergency Brake* [*Notbremsungen*]:

> „*The crux of the situation: even if German manufacturers could keep their car sales constant, with each model the pressure on jobs increases. When production shifted from the Golf V to the Golf VI, Volkswagen executive Winterkorn disclosed proudly at the presentation of the company's most important new line, productivity in Wolfsburg rose by ten percent and in Zwickau by more than fifteen percent. That means that for the assembly of the same number of cars fifteen percent fewer people are necessary. So if the Golf VI doesn't sell correspondingly well, jobs are in danger. It's same with new models from BMW, Mercedes or Opel. In some of those cases productivity has jumped twenty percent.*“

If productivity rises 15% then sales must correspondingly rise if the same (surplus) value is to be produced (in terms of labor time), as it is from this value alone that profits are generated. Should this not be achieved not only are those employees affected who are laid off, but so is the capital bound up in the automobile industry, which can no longer obtain the same surplus value as before. The enterprises most threatened by the drop in profits are those that couldn't keep pace with the growth in productivity, which explains the pride of the VW executive, who can look forward to a larger market share and maybe even rising profits. In summary however, in the branch as a whole higher productivity will necessarily lead to slimmer profits.

Alongside these internal limits the *external limits* come into effect with the ecological limits of growth, which have not yet been adequately recognized, as the phantasm of a “market economy without growth” shows. As early as the beginning of the 1990s Postone (1993, pg. 311f) made reference to this relationship:

> "*Leaving aside considerations of possible limits or barriers to capital accumulation, one consequence implied by this particular dynamic – which yields increases in material wealth greater than those in in surplus value – is the accelerated destruction of the natural environment. ...*
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> *The pattern I have outlined suggest that, in society in which the commodity is totalized, there is an underlying tension between ecological considerations and the imperatives of value as a form of wealth and social mediation. ... The tension between the exigencies of the commodity form and ecological requirements becomes more severe as productivity increases and, particularly during economic crises and periods of high unemployment, poses a severe dilemma. This dilemma and the tension in which it is rooted are immanent to capitalism; their ultimate resolution will be hindered so long as value remains the determining form of social wealth.*"

In every day politics the dilemma described here appears as a conflict between environmental and development policy: while in terms of environmental policy there is consensus that the global spread of the "American way of life" or even just the Western European "lifestyle" would bring with them an environmental catastrophe of as yet unheard of proportions, institutions dedicated to economic development must pursue precisely this goal, even if it is unrealistic. Or to use the terms of this article: employing merely half of the world's available workforce at a level necessary for further capital accumulation while maintaining the current level of productivity (with the accompanying material output and use of resources) would result in the immediate collapse of the Earth's ecosystem.

Either way, the capitalist mode of production has reached the end of its developmental possibilities as a result of its own compulsory dynamic. The global society stands before two alternatives: either to go under with it or to free itself from the pressures of abstract wealth and plan social reproduction solely according to material criteria. Then the development of productivity could regain its innocence: on one hand not every possible increase in productivity would have to be obligatorily enacted, for not every activity becomes more pleasant the faster it is completed. On the other hand it could actually be used to improve the lives of humanity.

Notes

[1] This difference is obfuscated by the fact that empirical economic studies measure productivity in GDP (gross domestic product) by working hours, so that labor output is expressed from the start solely in monetary values. Nevertheless, the (real) GDP should represent the total amount of goods produced and services rendered. The resulting confusion should be avoided.

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Translated from German by John Carroll