特集　スタグフレーションへのネオ・マルクス学派的接近

The Erosion of Profitability in Postwar West Germany*

—— Hypotheses on the Dialectics of Accumulation and Social Relations ——

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1. The economics of the long run is political economics

It is a wide-spread contention that what matters in capitalist economies is not only money but profits. The exact links between profits and the performance of the capitalist economy are subject to ongoing dispute in theoretical and empirical economic research, however. They pose even more of a puzzle since in a number of careful empirical studies on the causes and consequences of the world-wide economic downturn in 1973/74 a long-run negative "trend" underlying the business cycle fluctuations of profitability was discovered.[1] While it was not clear whether this "trend" could be interpreted as part of a "long wave" the data lent even less support to the idea that it had to be conceived of as a contingent deviation from some "normal" level of profitability.[2] Such a long-run change of profitability should therefore be explained by recourse to the basic characteristics of the capitalist mode of production.

Of course, an adequate theory of long-run variations of profitability must be much more complex than a theory of the business cycle. It has to explain the slow variation of the structural determinants of profitability which in business cycle theory can be assumed to be constant or to follow given patterns of motion. Moreover, a genuinely endogenous explanation must relate those structural effects (which by definition lie outside the control domain of the capitalist firm) to entrepreneurial decisions and their interaction with the firm's socio-political environment.

In such a theory profits play a double role: they are the driving force behind management operations and at the same time they function as a barometer of the overall economic situation. While fluctuations of short-run indicators of profitability may be assumed to determine the utilization of productive capacity, it is the expected rate of return over the relevant investment period that governs the rate of capital accumulation ; the "trend" rate of profits characterizes the general state of the economy over a period of several business cycles. Much more than any short-period movement this "general state of the economy" must be described as the aggregate and therefore largely unintended result of previous decisions and their immediate consequences. Hence, the long-run average rate of profit of the entire economy —— whatever the definition chosen for the purpose of empirical measurement —— should be viewed as the (unintended) result of the gradual change of the parameters and boundary conditions of the capitalist process of production and exchange which have been brought about

- by rational profit-oriented investment decisions of individual firms[3] and possibly

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1) See e. g. Nordhaus, W. D. (1974), Glyn, A., and Sutcliffe, R. (1972), Weisskopf, T. E. (1979), Williams, N. P. (1981), Ipsen, D. (1983).

2) Cf. Hill, T. P.(1979), Feldstein, M., and Summers, L. (1977), Holland, D. M., and Meyers, S. C. (1980), Chan-Lee, J. H., and Sutch, H. (1985).

3) This does not preclude the possibility of predominantly exogenous forces at work, but the attempts to base the explanation of declining profitability and slow

- by the short-run variations of profitability under the impact of the dynamic interactions of economic variables.

A famous attempt to develop a theoretical argument along these lines that does not rest on the assumption of contingent developments or inconsistent individual behavior is Karl Marx's "Law of the tendency of the rate of profit to fall." A short reinterpretation of his theorem will lead to a new view of the relevant dimensions of a theory of profitability in the longer run.[4)]

Marx's law has primarily been discussed in the framework of Leontief models of production. Their advantage over neoclassical general equilibrium models seemed to be that they assume the distribution of income to be determined exogenously : with real wages given, the rate of profit depends solely on the methods of production chosen by capitalist entrepreneurs. Under this setting the profit maximizing choice of technique increases the general rate of profit unless the rate of real wages rises sufficiently.[5)] Since Marx explicitly adopted the assumption of profit maximizing choice of technique, there was only one way out of this apparent inconsistency with his "law." He had to assert a fundamental contradiction between rational entrepreneurial decisions and their aggregate outcome. Many attempts have been made to establish a logically correct line of reasoning in support of Marx's assertion. They generally failed because they ran up against one of two problems :

(1) the inconsistency could be maintained for the short period only, because it would induce adjustment processes which would eventually eliminate it, or

(2) it boiled down to the assumption of the capital-output ratio rising beyond limits (while real wages grew less than productivity), which was begging the question how the introduction of new methods of production could lead to the particular change in the cost structure implicit in this assumption.

The only way out of this dilemma is

- to give up the assumption of the distributional neutrality of the cost minimizing (profit maximizing) introduction of new methods of production and
- to show that these distributional effects can either not be anticipated or must deliberately be ignored by individual firms.[6)]

Consequently, what needs to be explained is, in what way the subjective and objective determinants of the distribution of income between labor and capital will be altered by technological (and organizational) change accompanying the process of capital accumulation.

In order to do this we will employ the sociological truism (generally overlooked in orthodox economics) that in the long run the institutional and behavioral determinants of the economic process cannot be taken as given exogenously. Rather, a social learning process initiated by the general experience of a profound change of the conditions of working and living for the majority of the people will eventually lead to a change of values and aspirations which again may alter economically relevant behavior.

Here again we can start off by reminding the reader of an invaluable Marxian achievement: to have shown that capital —— besides being

growth on "natural limits of growth," "saturation" or "diminishing chances for technological change" are now generally judged to be unsatisfactory.

4) Cf. Rohwer, G., Kuenzel, R., and Ipsen, D.(1984). I do not maintain that Marx's own argument does not permit alternative interpretations, but this one seems quite congenial to his general view of capitalist development.

5) This result was first established by Okishio, N.(1961) and repeatedly confirmed thereafter. Lipietz's critique of Okishio's theorem remains unsatisfactory because it does not explain why rising wages or other costs do not stop investments leading to a lower rate of profit. See Lipietz, A. (1986).

6) Another option would be to deny the validity of the empirical argument of a long-run negative "trend" of profitability. But that would mean to either ignore the fact of persistent slower growth and increased unemployment or to come up with a convincing alternative explanation for it.

the material means of production employed or the sum of money invested to make a profit —— is foremost and above all an antagonistic class relationship, a social power structure characterized by domination and conflict, but often mitigated and mediated —— at least in its modern form —— by a system of personal rights, legal procedures, and democratic rulership.

One need not denounce the Marxian notion of the economic subsystem proper being the core or basis of the capitalist society[7] in order to be able to stress the importance of the socio-political "environment" of the economy for its functioning. However, Marx certainly underestimated the secondary effects of the "civilizing function of capital" which he attributed to the unfettered development of the productive forces under capitalism : the effects on the social relations not only in production but in all of society, especially in the socio-political institutions of the "superstructure."

In fact, his primary concern was with the growing proletarianization of the working population, the submission of the laborer under the dictatorial regime of the capitalist form of employing technical and organizational innovations, and the misery and insecurity of the living conditions of the masses. Periods of relative prosperity for the working people he described as being merely symptoms of coming crises. Moreover, Marx considered the dynamics of the short-run as well as of secular economic and socio-political development to be entirely determined by internal contradictions of the capitalist economic system. In his view a major qualitative change of the socio-economic relations comprising the entire bourgeois society was only conceivable as part of a revolutionary process which would bring the historical epoch of capitalist domination to an end. The requisite change of mass consciousness he expected to result from the experience of intensified class struggle under the impact of devastating economic crises accompanying the permanent tendency of the rate of profit to fall.

Historical experience since Marx's time suggests a more dialectical relationship between the dynamics of capital accumulation in the longer run and the development of socio-economic relations.[8] It seems doubtful whether the enormous success of the labor movement, of the civil rights movement, and of other "social movements" in their enduring struggle for more social security, personal rights, and democratic participation would have been possible without the historically unprecedented growth of productivity under capitalism. Indeed, it seems plausible to contend that it was not only the predominance of successes over defeats in this struggle but largely the experience of growing mass prosperity which fostered the conviction that more could be achieved in the way of social and democratic reforms. But there were also repercussions from the progressive development of the socio-political "environment" of the economic "system" which altered the speed and direction of change of the technological and organizational basis of economic activity.

The longer view of the economic process therefore necessitates an analysis which considers the capitalist economy to be as much determined by variations of the (public) socio-political relations as the latter are determined by the consequences of (private) profit-oriented capital accumulation.

The neo-Marxian analytical concepts most congenial to the idea of a dialectical relationship between the long-run economic and socio-political "performance variables" are

(1) the theory of "Regimes of Capitalist Regulation" by M. Aglietta, R. Boyer, J. Mistral, and A. Lipietz[9] and

7) Such a view seems to be in vogue nowadays even among "radical" sociologists and political scientists. See e. g. Habermas, J. (1975) and Offe, C. (1977), (1984).

8) The analysis of this relationship may be considered the core of political or "radical" economics as opposed to orthodox economic theory. Cf. Kuenzel, R. (1988).

(2) the "Social Structure of Accumulation" approach by S. Bowles, D. Gordon, and T. Weisskopf (B/G/W).[10]

The relavant dimensions of this relationship are most explicitly developed in the "Social Structure of Accumulation" concept by the American radical economists. There is no room here for a detailed discussion of their theoretical arguments and empirical findings, but a certain difference between their perspective and my own ought to be stated.[11]

B/G/W devised their concept of a Social Structure of Accumulation to be an operational model of the "contradictory system of power relationships"[12] characterizing capitalism. To this end they distinguished between three "principal buttresses of United States capitalist power, each of which involved a particular set of institutionalized power relations allowing United States corporations to achieve predominant control over potential challengers in the immediate postwar period."[13] These "axes of domination" were then referred to as the "capital-labor accord, Pax Americana, and the capital-citizen accord,"[14] respectively.

In my view this formulation shifts the emphasis too much towards the aspect of irrationality of the structural relations in a capitalist society and away from the conflictual nature of the social relations based on antagonistic relations in prodution. Since capitalists' leverage over workers rests on their monopolistic ownership of the means of production, specific institutional or legal provisions for the regulation of the exercise of power on this basis should be thought of as limiting rather than securing the dictatorial powers of capital.

This does not mean that the limitations forced upon capital by the working people in their struggle for more economic security and self-determination will —— under all conceivable circumstances —— reduce the rates of profit and of capital accumulation. In view of the historical development of capitalist societies, however, it seems appropriate to consider any kind of institutional regulation which could be called an "accord" to be an outcome of the class battle by which the consequences of an unrestrained utilization or occupation of property rights on the part of capital can be checked. Because under political democracy any formalized institutional structure beyond the legal protection of private property imposes public limitations on the pursuit of private ends, the private exercise of property-based power is most effective in the absence of such democratic control (however weak it might be). Consequently the build-up of a formalized "Social Structure of Accumulation" ought to be considered in itself a threat to capitalist domination.[15]

With this perspective in mind the imposition of institutional (primarily : legal) limitations to the pursuit of private (capitalist) ends leading in effect to a decline in power of the capitalist class must now be related to the process of capital accumulation.

9) See for instance : Aglietta, M. (1979), Boyer, R., and Mistral, J. (1978), Lipietz, A. (1986).

10) Among a large number of contributions by this group see Bowles, S., Gordon, D.M., and Weisskopf, T.E. (1983), (1984), W/B/G (1983), (1985), B/G/W (1986).

11) The view presented in this essay was developed by the author and his colleagues Dirk Ipsen of the Darmstadt Institute of Technology and Goetz Rohwer of the Hamburg Institute for Social Research quite independent of the afore-mentioned French and American concepts in a research proposal to the Volkswagen Foundation in May 1982. Although the author has since benefitted enormously from the admirable works of Bowles, Gordon, and Weisskopf, the original line of reasoning has remained unaltered. For a review of their most recent work see Kuenzel, R. (1986).

12) B/G/W 1986 : 157.

13) Op. cit. : 140.

14) Ibid.

15) This view is in accordance with the fact that "deregulation" has always been a prominent political goal of capital-oriented political factions and (neo-) liberal economic ideology. Attempts on the part of far-sighted representatives of the capitalist class to limit the destructive consequences of unrestrained competition and exploitation are rather an exception to the rule.

2. Rapid capital accumulation fosters the socio-political erosion of profitability

Although the following argument has been inspired by the German postwar experience it is probably also well-suited as a theoretical framework for an analysis of most other developed capitalist countries.

The basis of an extended period of rapid capital accumulation is high profit expectations fostered by large investment opportunities, a qualitatively and quantitatively unlimited labor supply, a high rate of productivity growth, and a rate of growth of aggregate demand close to that of gross national income. Productivity growth is of critical importance as soon as the costs of production rise. Unless the share of profits in income can be stabilized by mark-up pricing actual profitability and profit expectations will falter if cost increases tend to permanently outpace productivity growth. There are several ways to argue for such a possibility in the short run.[16] Cumulative effects leading to the development of absolute or to the change of relative market scarcities lie at the center of the short-run dynamics. They can be assumed to resolve in the course of business cycle crises, however, unless there are underlying long-run effects on the determinants of distribution and productivity which are not controlled by market forces. Such long-run effects are what we are looking for.

The accumulation of capital necessitates a permanent search for new investment opportunities. In many cases new fields of investment are not just there to be discovered —— they have to be developed for the purpose of their subsequent exploitation by redefining existing or by newly creating private property rights. This Schumpeterian process of "innovative destruction" is not only an important aspect of capitalist competition, but it is also a potential source of conflict between capitalists and other members, groups or classes of society who feel endangered, impeded or otherwise negatively affected by the redefinition or occupation of property rights.[17] Moreover, the private individualist perspective of the profit maximizing capitalist investor implies a cost minimizing choice of technique for any feasible output. Since the introduction of new methods of production does not only depend on the employment of purchasable inputs but also on the use of "costless" resources supplied by nature and society, rapid capital accumulation partly rests on and partly generates negative external effects on its social and natural environment. These negative effects —— contrary to their positive counterparts —— are in the interest of their originators insofar as they are means to avoid expenses. They can generally be characterized as unremunerated encroachments upon the achieved standards of living and working resulting e.g. from a growing intensity of work, increasing health hazards at the work place, all forms of "Marxian alienation," the consequences of agglomeration effects caused by "over-industrialization" (like traffic problems, long ways between home and work place, crowded residential areas, rising rents), the pollution of air and water, the commercialization of private consumption, rapid deskilling of workers by accelerated organizational and technological change etc.

Of course, a direct quantitative relationship between the rate of private capital accumulation and the negative external effects it generates cannot be specified. Such a specification would in fact depend on the exact accountability of the different kinds of physical and immaterial impairments of man and nature. Nevertheless, if they pass a certain threshold of perceptability and acceptability they will most probably lead to attempts on the part of the individuals affected to avoid or eliminate

16) The relevant arguments are most clearly developed in Weisskopf, T. E. (1978).

17) The conflicts over atomic energy, genetic engineering or the collection of "personal" data by public authorities and private agencies are prominent examples in kind.

them or at least to receive compensation for them. If such resistance is successful the negative externalities will be re-internalized into the economic system in the form of rising costs of production.

This feedback is not likely to function automatically and continuously because it requires the formation of an effective opposition on the part of the individuals who have become aware of the existence or probable occurrence of a reduction of their welfare. The organization of such an opposition, however, depends upon and at the same time fosters a social learning process by which those actual or probable negative external effects of the private economic operations are transformed into political, social and economic claims.[18] The process generating these claims will typically appear to be purely political or ideological in nature ; not only the long time lag between cause and effect but also the institutional, legal, organizational and financial implications they have will camouflage their economic origin.

On the other hand the process of rapid capital accumulation is as much the cause of negative effects on its social and natural environment as it is the source of the material means that could in principle be used to reduce those externalities or to compensate for welfare losses. If the gap widens between the accumulated material riches or the developed productive forces on the one side and the growing negative side-effects of their profit-oriented use under capitalist production relations on the other side, a growing number of troublesome circumstances are considered to be untenable. Existing or newly developing organizations of workers, citizens, consumers, minorities etc. will raise new issues of conflict, addressing either the state or the capitalist firms and their alliances. A phase of heightened conflict at the work place and in the political arena will come about which —— economically speaking —— must be interpreted as an intensified and generalized distributive struggle. On the part of the citizens and workers it is an attempt to re-internalize the negative external effects of the prolonged phase of rapid capital accumulation by transforming them into costs for capital. In many cases this will imply a detour via additional state expenditure which will eventually lead to a struggle about the incidence of the induced tax increase, public deficit, or rate of inflation.

The span of time necessary for the social learning processes which lead to cost-increasing conflicts over the socio-political implications of private, profit-oriented decision making is typically much longer than a business cycle period. Even if the general "trend" of profitability across several business cycles is detected to be negative, the accumulation of capital will not necessarily be reduced. Unless there are better profit opportunities elsewhere there is no necessary rate of profit in the long-run (provided it remains positive) below which net investment becomes zero. Cost-increasing claims and activities may therefore cumulate over an extended period of time before they become a barrier to recovery from a business cycle trough. The resulting period of relative stagnation and high unemployment puts the citizen movements and the working class organizations on the defensive again, but it is more than unlikely that history could ever be completely reverted.

In order to give an illustration of the ideas outlined above we will now take a brief look at the case of postwar West Germany.

3. Hypotheses on the erosion of profitability in postwar West Germany

In order to be more specific about the economic variables through which the rate of profit may be depressed in the long run by the re-internalization of negative external

18) See Mancur Olson's attempt to lay bare the historical and institutional foundations of collective action aiming at the redistribution of the goods and bads of the economic process : Olson, M. (1965), (1982).

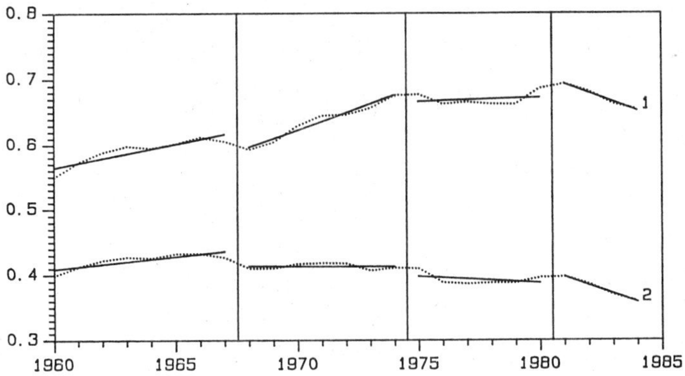

Figure 1:
Graph 1: Gross(before tax)wage share in net value added,
Graph 2: Net(after tax)wage share in not value added,
of the West German private business sector.

sixties, however, the unions pressed for rates of wage increases that would change the distribution of income in favor of labor. They were successful for a very short period of time only as can be gathered from figure 1 representing the gross (before tax) wage share (graph 1) and a proxy for the net (after tax) wage share (graph 2) in net value added of the entire private business sector.[19)]

The first major business cycle crisis after the war in 1966/67 revised the upward trend of the after tax wage share. From then on it remained negative whereas the gross share grew discontinuously until 1981. As the gross wage share is the complement to unity of the gross profit share its upward tendency meant a permanent pressure on profits. It did not result in a relative gain in the share of net income going to the working people after 1966/67, however, as graph 2 clearly demonstrates. The growing share of taxes in both wage and non-wage income began to play a significant role from the mid-sixties onward. Although the incidence of the growing tax burden cannot be inferred directly from the graphs of figure 1,[20)] it is interesting to note

effects we need to decompose the profit rate into its most relevant determinants:

$r=P/K=P/Y\cdot Y/X\cdot X/K$, where

P:=volume of profits,

Y:=net national income or net output,

X:=potential output (productive capacity),

K:=capital stock.

A long-run decline of profitability must be grounded in a decline of the profit share P/Y and/or the potential "productivity" of capital X/K; the average rate of capacity utilization Y/X may be assumed constant because in the long run Y and X should be highly interdependent.

During the first fifteen years of rapid capital accumulation after World War II the general socio-economic conditions fostered a high level of both P/Y and X/K.

As regards the distribution of income the first postwar decade was certainly quite favorable to capital. Nominal wages and taxes were low while the threat of unemployment, immigration of skilled workers from East Germany, long work days, a high work intensity, and the availability of advanced production techniques secured a relatively high level of labor productivity. Neither were there any institutional or structural factors limiting the growth of aggregate demand (mounting state budget surpluses were compensated by growing foreign demand).

When full employment was reached in the

19) The graphs were computed from data provided by Statistisches Bundesamt Wiesbaden (Federal Statistical Office), Volkswirtschaftliche Gesamtrechnung (National Accounts), Revidierte Ergebnisse (Revised Results) 1960–1984, Fachserie 18, Reihe S. 8 (Series of Division 18, Branch S. 8) pp. 140, 248. The gross (before tax) wage share was calculated as gross (before tax) wage and salary income received in the private business sector divided by net value added of the private business sector (graph 1). Since data on the net (after tax) wage and salary income in the private business sector are not available the share of net wage and salary income (Nettolohn- und Gehaltssumme)in gross wage and salary income (Bruttoeinkommen aus unselbständiger Arbeit) of the entire economy was taken as a proxy for the respective share in the business sector. It was multiplied by the gross wage share to get the net (after tax) share of wage and salary income in value added of the business sector (graph 2). Piecewise linearization by OLS regressions.

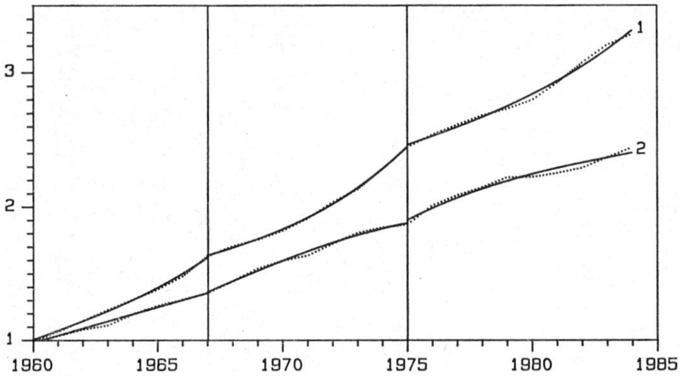

Figure 2:
Graph 1: Index(1960=1.0)of the capital-labor ratio,
Graph 2: Index(1960=1.0)of labor productivity,
of the private business sector of West Germany.

that during the six years prior to the world economic crisis in 1974 the rapid growth of the gross wage share was accompanied by a slight decline of its after tax value. This result does not support the idea quite common among conservatives that labor managed to increase its share of take home pay in value added on the basis of permanently tight labor markets thus squeezing profits to a point where only unemployment could bring about the necessary relief. What it does show, however, is that up to the 1974 crisis labor was quite successful in defending its share of the productivity gains while the growing burden of non-wage labor costs and increased public expenditure depressed the share of gross profits in net value added.

What appears to be an indication of the practical success of a purely ideological socialist program that aimed at winning control over the private economy by assigning a dominant economic role to the state must nevertheless be traced back to its material basis. Although there is neither room nor time to provide detailed proof in this essay, I feel quite safe in asserting that almost all the additional public services, as well as the private non-wage remunerations of labor, were generated by problems which can be attributed to negative externalities of the postwar "golden" years of rapid capital accumulation. While compensation for the burden of these externalities was sought in wage negotiations,[21] solutions to a growing number of problems could only be expected from an increased supply of public goods and services.[22]

The internalization of negative external effects did not only result in a mounting pressure on the gross profit share but affected the physical output-capital ratio X^*/K^* as well. Since $X^*/K^*=(X^*/L)/(K^*/L)$, the "productivity" of capital falls if the capital intensity rises faster (falls more slowly) than labor productivity. From figure 2 we can learn that a scissor's blade between the indices of labor productivity (graph 2) and of the capital-labor ratio (graph 1) has been characteristic for the entire period of investigation.[23]

20) Unfortunately an exact empirical account of the role of the state is not possible on the basis of national accounting data because the national accounts do not treat state expenditure consistently as public consumption of part of the national income generated in the private sector. For an econometric account of the factors determining the share of profits and the after tax profit rate in manufacturing see Funke,M. (1987), however.

21) Even though the ideological compromise between employers and unions sanctioned a growth rate of real wages equal to that of productivity unions were actually able to shift a major part of the burden resulting from the growth of non-wage labor costs on capital because they guided their demands along the productivity gains of the most dynamic industries.

22) For an orthodox account of the numerous cost-increasing measures taken by the center-left coalition of Social Democrats and Liberal Democrats see Scherf, H. (1986).

23) The capital-labor ratio was calculated as net stock of fixed capital at constant (1980) prices divided by the domestic labor force of the private business sector (graph 1). The productivity of labor was calculated as (1980) constant-price gross value added of the private business sector divided by the domestic labor force employed in that sector (graph 2). Data on net value added at constant (1980) prices were not available. Assuming that depreciation allowances do not follow a specific trend the general speed and direction of change of X^*/L will not depend on the choice for X^* of gross or net value added. All data were taken from Statistisches Bundesamt (ed.), op. cit., pp. 50, 278, 302. Piecewise regressions by spline functions subject to convexity constraints.

Moreover, whenever the growth of labor productivity slowed down the attempt on the part of capital to boost productivity growth by increasing capital investment per head had a lagged but only temporary and insufficient effect.

On the basis of the above argument on the lagged socio-political consequences of accelerated growth under capitalist production relations several factors eroding the efficiency of increased capital investment per head with respect to the growth of labor productivity may be distinguished: One such factor comprises those additional capital investments which are necessary to comply with new legal requirements to protect the natural environment from pollution or the workers from health hazards at the work place.

Formerly "free" or cheap inputs into the production process are thus being "capitalized," raising K^*/L without necessarily exerting an equally large positive influence on the potential labor productivity X^*/L, let alone its actual value X^*/L_e.[24] Another substitution of capital investments for "free" resources takes place if firms establish kindergardens, sports clubs, health centers, medical stations, pension funds, vocational training schools, or similar social installations which reduce the necessary (mostly women) labor services in the sphere of reproduction or help to preserve the physical and mental working ability of employees.

The more workers are required to work to the limits of their physical and mental capacity the more labor becomes the limiting factor for productivity growth. Those limits to workers' capacity are not strictly defined, however. Before they coincide with the boundaries drawn by nature they become binding on account of "laws" of social behavior. Workers will resist extreme forms of exploitation if they feel that the discrepancy between actual and potential working conditions (at the achieved overall level of social wealth and technological know-how) has become too large and if the possible gains of successful resistance will exceed the possible losses in case of failure.[25]

Five probable consequences can be derived: the first is a decline of actual productivity of labor X^*/L_e with respect to potential labor productivity X^*/L (given K^*/L), the second is a decline of X^*/L (given K^*/L) on account of additional ("unproductive") supervisory personnel, while the third is an increased average capital-intensity of production K^*/L (given X^*/L) as a result of additional capital costs to control the labor process and to prevent actual labor productivity X^*/L_e from falling. The fourth consequence results from the fact that an intensive capital-saving utilization of fixed capital is bound up with multiple shifts, long work days, overtime work or work on weekends and holidays. If workers —— by means of negotiations between trade unions and capitalist firms or by a political struggle for legal restraints —— manage to limit this method of intensive exploitation of their labor power, they push up the minimum of capital investment per unit of output. Finally, growing resistance on the part of workers against the prevailing methods of production and their negative side-effects will induce labor-saving organizational and technical investments well beyond the point of maximal technical efficiency.[26] Even though such an investment strategy will be profit maximizing under the given social boundary conditions of effective worker resistance, the concomitant loss of efficiency implies a lower maximal rate of profit on account of higher capital costs per unit of

24) The potential productivity of labor X^*/L is equal to the actual productivity of labor X^*/L_e if the labor power a capitalist has paid for can be utilized to the limits of the workers' ability (L_e:=effective labor power).

25) S. Bowles, D. Gordon, and T. E. Weisskopf have belabored this point very satisfactorily. See e. g. Bowles, S. (1985), B/G/W (1983), (1984) and elsewhere in their work on the social determinants of labor productivity.

26) Cf. Bowles, S. (1985) and Marglin, St. (1974) who have analyzed this relationship in detail.

output.[27] All these factors may have been at work causing a persistent decline of the physical output-capital ratio in the private business sector of the German economy.

Additional pressure on the profitability of capital resulted from the consequences of accelerating inflation in the early part of the 1970s. A rising rate of inflation was the monetary expression of the "inflation of private and public claims on the net national income" the conservatives self-righteously lamented about, accusing the Social Democrats of an unsound fiscal policy. In fact, the majority of the claims emanating from a spreading sensation of (public) poverty vis-à-vis growing (private) material wealth were directed toward the state. In addition to state measures for the limitation, compensation, or avoidance of the negative externalities of private production, public services complementing the growing private means for the enhancement of individual welfare were called for. It soon proved to be politically hopeless to try to transform those claims into a generally accepted reduction of private consumption. Repeated attempts to control inflation by means of a restrictive monetary policy short of throtteling the engine of accumulation were not successful because

- its cause was not "too much money chasing too few goods" and
- almost unlimited finance —— although at rising costs —— was available on the international money markets.[28]

Rising costs of finance thus became a factor that added to the growth of capital costs. Tax measures designed to ease the burden on capital slowed the decline of the after-tax profit rate but did not stop it. Because of extremely tight labor markets all through the latter part of the sixties and the early seventies the defensive strength of labor was great enough to prevent the net (after-tax) wage increases from being squeezed substantially below the rate of growth of labor productivity.

Finally, on account of the significance of raw material and energy (crude oil) imports for the West German economy the dramatic price hikes of these primary inputs led to a significant boost of costs. However, this effect may only be considered as endogenous to the expansion of the entire capitalist world economy during the latter part of the postwar "golden age" while its precipitant impact on the national economies added to the factors triggering the acute crisis in 1974. The other factors which dealt a decisive blow to profitability were

- the acceleration of nominal wage increases in 1973,
- the sudden decline of labor productivity on account of the heightened conflict at the work place,
- the switch of monetary policy to very restrictive measures, and —— last but not least ——
- the intensified competition on Germany's export markets which inhibited the stabilization of profitability by markup pricing.[29]

As soon as the business cycle crisis got underway in 1974 the already enfeebled long-term profit expectations collapsed despite relatively stable exports. Investment demand decreased and unemployment rose dramatically thus limiting even more the margins for output

27) Apart from "materializing" in rising capital outlays these factors may also enter the calculation of expected returns on existing or planned investment in the form of fictitious capital costs, risk premiums etc. The parallel development of Tobin's Q and of the profit rate can be taken as an indication of the existence of such a relationship. Cf. Funke, M. (1987). See also Svindland's early interpretation of the 1974 crisis along these lines : Svindland, E. (1979).

28) See Rosenberg, S., and Weisskopf, T.E. (1981) for a conflict-theoretical explanation of inflation along these lines.

The conservatives' cure after the 1973/74 crisis, however, namely "deregulation," tax cuts and reduction of the state was seemingly ignorant of the fact that the problems underlying those claims had been brought about by a long period of accelerated industrial growth and that the revision of its institutional and legal —— i. e. structural —— consequences would of necessity imply a prolonged period of stagnation.

29) Cf. Funke, M. (1987), p. 204.

price adjustments. The trend rate of profit reached a postwar low and would not recover significantly before the bulk of re-internalized social costs of capital accumulation could be reduced by keeping unemployment high for an extended period of time.

4. The modern dialectic of the productive forces and of the relations of production

At least two conclusions can be drawn from our analysis of the 1974 crisis. The first is that for the capitalist class it has become an abvious and a problematic fact at the same time that the accumulation of capital increasingly depends on conditions which lie outside of its control domain. In Marx's terminology : it is indeed the relations of production which restrict the development of the productive forces, but, contrary to his notion, it is the capitalist form of their development and not the productive forces themselves which has become incompatible with the capitalist production relations ; and it is not so much the capitalist form of those relations but its modification by the growth of elements of democracy, personal rights, and social security which have become an obstacle to the capitalist development of the productive forces.

As has been argued above the dynamics of the production relations themselves —— i. e. of their political, legal, and social dimensions —— depended in large part on the dramatically increased productivity of the capitalist processs of production. So it seems as if a new stage in "capital's historical mission" (Marx) was reached when it extended its "civilizing function" from the productive forces to the relations of production.

But if this is part of the truth it is certainly no more than half of it. The second conclusion to be drawn from the postwar experience is that public and social goals as well as individual freedom, self-determination and security are not at all an end of the capitalist process of production but —— at best —— its unintended result and a major cause of its crisis. Since social and democratic reforms have to be forced upon capital, progress cannot be made without recurrent conflict. Whenever conflict leads to economic crisis the capitalist form of production inhibits the further improvement of the production relations.

In this way the progress toward more social democracy in postwar West Germany was drastically limited by its adverse effects on the capitalist economy.

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