

THE GROWTH OBSESSION

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In pre-capitalist and pre-industrial times economic growth was dependent on population growth which, in turn, depended on the supply of goods and services for subsistence and reproduction. But since the Industrial Revolution GDP growth has been propelled by the dynamic development of the productive forces, i.e. by increased (labour) productivity. From the second half of the nineteenth century, average growth rates increased remarkably. This growth, however, has been extremely uneven over time and in space, and has failed to narrow the inequalities between peoples and regions in a globalizing world.

Ignoring all evidence to the contrary, a recent World Bank report reached the remarkable conclusion that 'growth is good for the poor', i.e. that faster growth is not widening but closing the gap between rich and poor — and, moreover, not as the effect of a 'trickle-down' process; the report alleges the existence of a '1-to-1-relation' between growth and poverty-reduction.¹ The World Bank report is thus very optimistic with regard to the distributional effects of economic growth.² Yet even this bizarre (and strongly contested) conclusion does not touch upon the all-important question of whether economic growth is sustainable, economically as well as socially and ecologically. The essay by Paul Cammack in this volume exclusively examines the World Bank's project of 'making poverty work'. This essay discusses the economic, ecological and financial limits to growth and address the question of why quantitative growth is so crucial for the capitalist system.

1 GROWTH TRIUMPHANT?

In the history of industrial capitalism, and in particular during the second half of the twentieth century under the rule of 'Fordism', economic growth can be said to have been 'triumphant'³ — owing to the ever more efficient mobilization of productive resources. Between 1950 and 1973 (the year of the collapse of the Bretton Woods system and the 'oil crisis'), nearly everywhere in the world growth rates reached levels unprecedented in human history, tempting Richard Easterlin to predict that '[t]he future ... to which the epoch of modern economic growth is leading is one of never ending economic growth, a world in which ever growing abundance is matched by ever rising aspirations'.⁴ Yet the assumption that physical inputs can expand indefinitely and produce an ever growing real output is, as McMichael says, 'ecological nonsense — nothing physical can grow indefinitely'.⁵ The statement 'growth forever' therefore only makes sense if the growth that Easterlin and other growth-enthusiasts have in mind is mere monetary growth (known as inflation), or a purely virtual 'new' economy (without transportation, material production, and physical consumption of resources). And indeed these notions are often invoked in arguments that try to reconcile ecological sustainability with the requirements of a capitalist growth economy.⁶

Yet in both recent economic history and contemporary economic theory enthusiasm for growth is anything but a marginal phenomenon. For one thing, it follows from the 'Eurocentric logic'⁷ of quantitative growth, i.e. of an acceleration in time and expansion in space ('time-space-compression', as David Harvey calls it)⁸ that is responsible for the contemporary process of globalization. It is important to note, however, that in this line of thought it is not simply 'growth' that matters but *efficient* growth. Capital does not like disorderly growth; it needs growth which serves the end of profitability. Conversely, profitability is the motor of growth. Therefore, not only the growth rate of GDP counts but also the profit rate and the accumulation rate. This raises complicated theoretical and methodological questions, especially in the era of globalization when it is no longer the national economy (or a given sector, such as manufacturing) which defines the arena for the formation of an average rate of profit.⁹ Since surplus profits can be generated by both advanced productivity and low labour costs, the same profit rate may result from very different constellations of productivity, wages, and capital-labour relations. The social implications of 'growth' become indeterminate under these conditions.

Furthermore, in this line of thought the performance of the 'real economy' is usually interpreted without reference to financial globalization. This approach is seriously flawed because monetary capital is more mobile and flexible than ever before. Investment decisions (and therefore also growth rates) are not only determined by (industrial) profit rates but also by the global interest rates on financial assets. Since under conditions of financial globalization accumulation no longer necessarily takes place in the real economy, the relation between surplus value, profits, accumulation and real GDP-growth has become much looser. Under

certain circumstances it is now more profitable to accumulate financial assets than to invest in real projects. Thus, prices of financial assets are inflated whereas commodity-prices (in particular in manufacturing, as shown by Duménil and Lévy)¹⁰ are deflated — at least relative to the price-index of GDP. The broken link between real and monetary accumulation manifests itself as a paradoxical ‘inflationary deflation’.¹¹

A second general reason why most social scientists and politicians obsessively preach the ideology of triumphant growth is the idea that economic growth increases employment, incomes and taxes, and in this way provides resources for the alleviation of social conflicts, the expansion of development assistance, the eradication of poverty, the implementation of environmental standards, and so on. Steady growth was indeed the backbone of the corporatist ‘Keynesian class compromise’ associated with the ‘Fordist’ mode of regulation that characterized developed capitalism during the postwar period; and it is also assumed to offer a remedy for backwardness in the less-developed world — the argument of ‘modernization’ theory. Thus a recent article dedicated to the benefits of the ‘Washington Consensus’ declares: ‘Without investment there is no economic growth, and without economic growth there is no sustainable economic policy ...’¹² The idea that there could be a mode of social cohesion other than the capitalist one based on high economic growth is, naturally, not considered.

Given these two mutually reinforcing general reasons for the obsession with growth, it is not surprising that disseminating policy proposals for the stimulation of growth is a common preoccupation of economists, whether they work within the Keynesian tradition or are of a more neoclassical and neoliberal persuasion.¹³ Even many ecological economists also believe that it is not economic growth, but economic *stagnation*, that harms the environment.¹⁴ This may not be entirely false with respect to ‘dirty’, i.e. visible and perceptible, pollution. However, ‘clean’ life style-pollution, e.g. the emission of greenhouse gases or the ‘externalization’ of ecologically destructive effects into remote areas or into the far future (nuclear waste), is without doubt also a side-effect of growth and welfare creation.¹⁵

In addition, as Immanuel Wallerstein has pointed out, growth-mania is of a systemic nature. It is enshrined in the institutions which allow the system to function as a ‘totality’: ‘Capitalism as a historical system is defined by the fact that it makes structurally central and primary the endless accumulation of capital. This means that the institutions which constitute its framework reward those who pursue the endless accumulation of capital and penalize those who don’t.’¹⁶ Since the accumulation of capital is driven on by (the anticipation of) profits, Wallerstein’s statement really summarizes the ‘grand narrative’ of the modern capitalist system: the processes of profit-making, accumulation, and institutional regulation, which give a degree of security to the system, simultaneously produce insecurity on all levels of social and individual life.

Wallerstein is confident that the contemporary long cycle of accumulation which has lasted for over a century will soon come to an end, and that capitalism will then enter a stage of systemic crisis. It is true that growth mania has no real

ground in the real economy. But the continued construction of institutions that emphasize growth and further instil the profit motive in individual capitalists needs to be understood as an attempt to maintain social, economic and social stability and avoid a radical, ‘paradigmatic’ change. Whether it is dressed up as ‘modernity’ or ‘post-modernity’, whether it appeals to a ‘Third Way’ or a ‘new economy’, or as a rationale for overcoming backwardness, growth mania is nothing but a conservative reaction to the tendency to ‘systemic crisis’ identified by Wallerstein.

2 DISEMBEDDING

The transition to a ‘growth economy’ in the nineteenth century was just one aspect of the ongoing ‘great transformation’ of pre-capitalist social forms into a capitalist market economy.¹⁷ The combination of commodification processes, the circulation-facilitating function of money and the ready availability of fuels formed a perfect ‘trinity’ that sparked capital’s acceleration in time and expansion in space, i.e. accumulation and growth.¹⁸ Markets have existed ever since people began to exchange products, but until the capitalist mode of production emerged markets remained ‘slow’ and growth rates low. Capitalism established a social, economic, political, cultural foundation, and the requisite sources of energy, which allowed for the mobilization and development of productive forces on a hitherto unknown scale. In the course of the ‘primitive accumulation of capital’, economic growth emancipated itself from the limited energy supply afforded by living labour. Thereafter, throughout the history of capitalism, workers have been replaced by means of production fuelled by (mainly) fossil energy. This process has been analyzed as the ‘real subsumption of labour’ or the ‘production of relative surplus value’.¹⁹ Capital and its institutions went through a process of ‘autonomization’ (*Verselbständigung*) vis-à-vis society (e.g. population growth, human needs) and social control. This was the process conceptualized by Polanyi as the ‘disembedding’ of the market from the social system;²⁰ the former then imposed its logic — i.e. the rule of commodities, money and capital — on the latter.

Today, we have to be aware that, firstly, the process of disembedding was by no means an event unique to the nineteenth century; and, secondly, that the continuing process of disembedding embraces money in its many different forms and functions. Money not only circulates goods and services in ‘ordinary markets’; as credit it obeys not only the rules of the real economy but also the ‘logic’ of a disembedded financial system operating on a global scale, partially disconnected from the real economy and increasingly serving to finance not only real (domestic and foreign) investment but also speculation.

Modern financial instruments are almost entirely disconnected from the real economy. As a result, it is possible for growth rates of turnover of financial assets to be many times higher than the growth of any indicator of ‘real’ activity. However, the disembedded financial sphere has certainly not become irrelevant to the functioning of the real economy or society. On the contrary, globally

formed interest rates on financial assets require matching real growth rates and in this way exert a severe pressure on the real economy. This sets new *economic* limits to growth.

3 ECONOMIC LIMITS TO GROWTH

Economic growth is the result of a process of the transformation of energy and matter. In Marxian terms this is the concrete and use value aspect of growth. From this perspective, it should be evident that growth has its limits. After all, planet Earth's stocks of energy and matter are limited. We will discuss this in the next section. But economic growth is also the outcome of a social production process ruled by money (through the interest rate) and capital (through the profit rate). In the long run, capital requires a 'geometric' growth of inputs in order to maintain stable (relative) growth rates. Because the long-run geometric growth of absolute quantities is an absurd idea, high rates of (real) economic growth can only be sustained for a certain period of time. Nevertheless, the maintenance of high interest rates requires nothing less than the realization of precisely this absurdity and the dominant growth discourse presents it as a socially and economically feasible objective.

Statistical evidence (see Table 1) shows that (a) the absolute increases of GDP in highly developed countries remained positive and rather stable since the beginning of the 1960s (with merely cyclical fluctuations); and that (b) in the 1990s real increases were not only smaller in absolute terms, but were also achieved on the basis of an already higher level of real GDP. Growth rates inevitably declined.

Table 1: Absolute increases of real GDP (1991 prices) in billions of national currency, annual averages

Period and Country (Currency)	1960-69	1970-79	1980-89	1990-96	1960-96
USA (US\$)	110.05	120	140.83	120.13	122.72
Japan (YEN)	11.98	9.68	12.18	7.02	11.27
Germany (DM)	46.92	45.52	36.64	76.3**	46.15*
France (FF)	140.1	139.31	123.3	68.35	134.19
Great Britain (BP)	8.26	8.85	13.37	6.88	9.56
Italy (LIT)	29.94	29.61	24.97	9.13	28.25

* 1960-1989 only

** Since 1990 unified Germany; Germany until 1989 West Germany only; Italy: 1000 bn Lira; Japan: 100 bn Yen

Source: Council of Economic Advisers (Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung, Jahresgutachten 1997/98, table 3*; author's calculations)

In Germany the highest increase in real GDP occurred in 1968, after the 'small' crisis of 1966-67; DM 102 billions translated into a real growth rate of GDP of 7.46%. In 1988 the same absolute increase would have produced a

growth rate of only 4.43%. The increase actually achieved in that year equalled no more than DM 83.4 billions. The real growth rate was 3.62%, still rather high by historical standards. In the USA, the highest absolute increase in GDP (US\$ 327.4 billion) during the period under investigation occurred in 1983; the real rate of growth for that year was 7.00%. In 1996 the same real increase would have produced a growth rate of 4.99%. In reality, GDP in that year grew only by a (still respectable) 2.76%.

In his long-term analysis of economic growth, Angus Maddison has measured the impact of labour productivity, hours worked and capital productivity on the annual average compounded growth rate. He shows that 'over the long term, working hours of the average person fell by half; labour input increased less than population...'. His findings clearly underline the positive relation between labour productivity and economic growth. '[L]abour productivity', he continues, 'rose a good deal faster than GDP per capita. From 1820 to 1992 Japanese labour productivity rose 46-fold compared with a 28-fold increase in per capital GDP'.²¹

But although labour productivity has obviously been the main motor of growth in the last century, a look at the growth figures since 1950 reveals that (1) total factor productivity fell in all countries under consideration, that (2) the capital-labour ratio increased until the mid-1970s and has decreased since then, and that (3) the capital coefficient increased (i.e. 'capital productivity' declined remarkably). The impact of the factors mentioned on the profit rate is negative. For the profit rate depends positively (1) on a distribution of income in favour of capital, i.e. on low real wages per worker; (2) on an increase in labour productivity; and negatively (3) on a growing capital-labour ratio (which, in value terms, indicates the rising organic composition of capital). In the long run, the profit rate tends to decline (as Marx showed), but of course this decline is cyclically modified. Therefore, during the last decade of wild deregulation, flexibilization and mobilization of all factors of production (i.e. of high pressures on individual and social wages, a redistribution of income in favour of capital, and decreasing costs of constant capital (especially of raw materials)), the profit rate went up sharply. Nevertheless, Wallerstein's expectation of a 'global profit squeeze'²² is plausible in the long run.

Since the 1960s, in the industrialized countries rates of productivity growth, although declining, have still been higher than the rate of growth of manufacturing output.²³ The consequence has been the dismissal of workers and the emergence of an 'employment gap'. Growth tends to become 'jobless growth' — a development that can only be counteracted by a reduction of working time or the creation of jobs in the public and non-manufacturing private sector. The historical reduction of working hours per person described by Maddison reduces society's growth potential, but at the same time it provides a partial solution to the problem of the 'employment gap'. In Europe between 1973 and 1992 the number of people in employment rose from 138 to 148 million, while there was a 5% decrease in the number of hours worked — from 242 to 232 billion.²⁴

Table 2: Annual percentage changes of output per hour and output in manufacturing in 10 industrialized countries, 1979-1995

Country	USA	Can	Japan	Bel	Fr	Ger	It	NL	Swe	GB
Manufacturing output	2.1	1.7	3.4	2.0	0.7	0.4	2.3	2.0	2.1	0.7
Output per hour	2.6	1.7	3.4	3.9	3.1	2.2	3.8	3.3	3.3	4.2

Source: Christopher Sparks and Mary Greiner, 'U.S. and foreign productivity and labor costs', *Monthly Labor Review*, February 1997, p. 29.

Table 2 summarizes the long-term development of productivity (output per hour worked) and growth (output in manufacturing). From the end of the 1970s until the mid-1990s, only Japan and Canada achieved an output-growth equal to productivity-growth; all other industrialized countries display the pattern which Maddison discovered as a long-term tendency from the early nineteenth century until the 1990s. The picture, however, changes when long-term GDP-growth is compared with growth rates of GDP per person employed, because the growth rate of labour productivity in services as compared with manufacturing is generally lower. The growth of 'unproductive labour'²⁵ has the effect of diminished productivity increases. Owing in particular to the growing weight of financial services in production and sales (for instance in the motor-car industry it has reached about 70%), 'unproductive' labour partly offsets the productivity increases achieved by 'productive' labour²⁶ and hence also the resulting widening employment gap. But because of the introduction of new communication-technologies into the service sector, this sector is likely to display higher rates of productivity growth in the future — a scenario already announced by the advocates of the 'new economy' — so there are no guarantees that the service sector's capacity to absorb a substantial part of the labour force can be sustained in the long run.

There are no easy solutions for the employment gap in dynamic capitalist societies. That is, structural unemployment must be considered an inevitable consequence of a strongly-performing economy. It is not, however, a state of affairs that people happily and voluntarily resign themselves to. The Left has always pursued 'alternative' (i.e. non-market) policies for achieving full employment. As the space for such alternative projects has sharply contracted, increasingly often the only remaining choice is for people to 'exit' from the system of paid employment. This can take the form of a passive acceptance of unemployment and its consequences or the active organization of new forms of labour. The latter way out refers to nothing but the 'informal sector' which is growing in all parts of the world and thus reducing the employment gap. The ILO notes that more than 80% of new jobs created in Latin America and Africa in recent years have been in the informal economy.²⁷ We return to the 'informal sector' in section 5 below.

4 ECOLOGICAL LIMITS TO GROWTH AND PRODUCTIVITY

High productivity increases constitute one of the basic features of industrial capitalism in general and of the Fordist system in particular. For this reason, productivity growth forms the starting point of Adam Smith's analysis of the 'origins of the wealth of nations': specialization and a deepening of the division of labour help to increase the output per working hour, and this causes income and wealth to rise.²⁸ David Ricardo extended the argument to the international division of labour, based on free trade. His 'law of comparative advantage' still serves as one of the most important theoretical foundations of modern economics, and is even enthusiastically embraced by the modern, Eurocentric globalization literature.²⁹

Leaving aside the effects of efficiency gains, productivity can only be increased by putting more fixed capital into circulation and by consuming ever larger quantities of matter and energy.³⁰ Of course, the reproduction of capital(ism) as a whole remains crucially dependent on (surplus) value which can only be produced by labour. But capital's attempt to emancipate itself from its dependence on living labour by substituting the latter with fossil energy and machinery, establishes a new relationship to nature. Fordism, too, cannot be understood as a mere technical and social innovation. It also includes a new relationship to nature, for both the system of production and consumption and the mode of social regulation are heavily based on the use of fossil energy.³¹

It is clear that the material preconditions of the 'Western life style' cannot be established in all societies on earth without destroying nature to the point where human life on earth is jeopardized.³² One of the first signs that the limits of environmental space have been reached is that the goods needed for production and consumption become 'oligarchic', i.e. reserved for an oligarchy able to secure its access to these resources with monetary claims. Those who do not possess monetary wealth are increasingly excluded from the consumption of goods and services. Consequently the number of poor people in the world is rising; in 1998 the World Bank counted 2.8 billion human beings living below the international poverty line of \$2 per capita per day.³³

But there are also absolute limits, not all of whose effects can be so easily avoided by the rich. Serious studies of the carrying capacity of global ecosystems and on the concept of 'environmental space' have demonstrated that these set objective limits to the process of economic growth.³⁴ By now (since the Rio Conference of 1992) it has become common sense that fossil resources are not only limited, but that their excessive use is responsible for the greenhouse effect and other ecological evils. It is in this way that the question of ecological sustainability asserts itself and reshapes the discourse of the social sciences in general and that of the economics of growth in particular. This should be sufficient reason to jettison any illusions concerning the benign nature of economic and financial globalization. Moreover, Western liberal (formal) democracy could only be globalized if the 'Western way of life' itself could be globalized.

But a situation of genuine globality, i.e. a world society based on equality and reciprocity (if not on solidarity), will never be achieved through *capitalist* globalization.

5 FINANCIAL LIMITS TO GROWTH

The interest rate constitutes a benchmark ('hard budget constraint')³⁵ for any economic undertaking. If capitalists fail to make a profit at least equal to the prevailing interest rate, their capital will be classified as non-profitable and loans made to them will be termed non-performing. As long as the real interest rate is lower than the real growth rate of GDP and of the 'marginal efficiency of capital' (i.e. the profit rate), returns from productive investments will exceed the monetary price of capital, and therefore borrowers in financial markets are likely to invest their loans in the real economy. This 'Keynesian state of affairs' came to an end, however, at the same time as the 'golden age' of Fordist expansion, namely in the course of the 1970s. Since the beginning of the 1980s, the real interest rates on global financial markets have by far exceeded the average real growth rate of GDP.³⁶ The real economy is 'depressed' by the financial system. The OECD gives three reasons for this configuration of finance and production: first, the growing fiscal deficits and the accumulation of public debt in the highly developed countries; second, higher inflationary risks and consequently a greater weight of risk factors in the formation of interest rates; and third, the globalization of financial markets since the second half of the 1970s, with the result that deregulated market mechanisms rather than public interventions began to exercise the function of credit allocation.³⁷ The political project of deregulation, liberalization, flexibilization and privatization has thus intensified global competition with regard to the stability of currencies and profitability of assets. The growing opportunities of exploiting interplace-differentials of profitability on a global scale, together with technical (information and communication technologies) and financial innovations (from hedge funds to derivatives and offshore financial centres), can be considered as the main impulse of globalization.

There is, however, a fourth reason for the high real interest rates that have prevailed since the beginning of the 1980s which is not recognized by the OECD: the crisis of American hegemony. The US trade balance deficit existing since 1971 (due to the outflow of capital) and the deterioration of the current account since the mid-1970s, together with the breakdown of the fixed exchange rate system of Bretton Woods, exerted downward pressure on the exchange rate of the US dollar, and spurred on inflation. A further deterioration of the (still hegemonic) dollar could only be prevented by means of an increase in US interest rates.³⁸ The period of high interest rates began in 1979 under the Carter administration and was rigorously continued by the Reagan administration. Its effects on the US exchange rate were positive, but proved devastating for debtors — in the USA (e.g. the Savings & Loans crisis), but above all in the Third World. The combination of high interest rates, rising oil prices and

declining commodity prices triggered a Third World debt crisis which has not yet been overcome twenty years later. Table 3 shows the relation between real long-term interest rates and real growth of GDP in highly developed countries.

Table 3: Real growth rates and long term real interest rates in industrialized countries, 1960-1995

	Real GDP (annual growth rates in percent)				Real Long Term Interest Rates (percent per annum)			
	60-73	74-79	80-89	90-95	60-73	74-79	80-89	90-95
USA	4.0	2.6	2.4	1.9	1.5	-0.5	4.9	4.4
Japan	9.7	3.5	3.8	1.9	..	-0.2	4.3	3.9
Germany	4.3	2.4	2.0	2.0	2.6	3.1	4.8	3.8
France	5.4	2.7	2.1	1.3	1.9	-0.3	4.7	5.9
GB	3.1	1.5	2.4	1.0	..	-2.0	3.5	4.7

Source: OECD, Historical Statistics 1960-1995, Paris, 1997, p. 50 and p. 108.

According to the traditional Keynesian paradigm, the accumulation of capital is financed with loans provided by 'monetary wealth owners', i.e. by banks and institutional investors. The interest rate compels industrial capitalists to produce a profit that is large enough to service their loans as well as to fulfil their own accumulation requirements. In this way, the interest rate is linked to profits, employment and real capital accumulation, i.e. to the social organization of the accumulation regime and its political regulation. The interest rate itself is subject to regulation by (national) monetary authorities, above all the Central Bank. Although it is still a central premise of Keynesian theory, globalization has by now significantly eroded the ability of national monetary authorities to determine interest rates which are nowadays formed on global financial markets. On the one hand, *arbitrage* between different markets equalizes interest rate (and exchange rate) differentials; on the other hand, the differentials (calculated in 'basis points') are continuously recreated, which triggers new rounds of speculation.

Those who lend out monetary wealth (e.g. shares in firms or funds, or government bonds) thereby become *claim holders*. The international financial system works as a very powerful device for channelling surplus produced anywhere in the world to financial claim holders in the big financial centres. As a result, inequality is rising drastically. However, there are so many intermediaries in the chain between monetary claims, debt service and surplus transfer in real terms that under normal conditions these links are rarely visible for people and become recognizable only in times of a crisis. The financial system seems to be a 'virtual world' without any influence on production and reproduction, i.e. on people's living conditions and the natural environment. It is also often regarded as a kind of 'zero sum game' among players in the virtual world of the stock market: some lose what others gain and vice versa, and nothing real is happening. In reality it is another mechanism whereby financial asset holders gain at the

expense of those who do not belong to this enviable species. US figures indicate that between 1989 and 1997, 86% of stock market gains went to the top 10% of households, while between 1983 and 1995 the bottom 40% of households lost 80% of their net worth.³⁹ These facts are in stark contrast with the World Bank's claim that there is a positive '1-to-1-relation' between growth and poverty alleviation. The 'post-modern' understanding of the financial system as de-linked from the real world of production and distribution is completely inadequate for grasping the contradictions and crisis tendencies generated by the global financial system. Some of these tendencies are addressed briefly here.

(1) Although global markets rely in principle on private initiative, the role of the state is indispensable for the working of the system. Of course, nation-states as well as international institutions provide the framework for the social and economic (world) order. With respect to global finance, however, the role of the state, as a public debtor vis-à-vis private monetary wealth owners, is that of a direct participant. The private financial system is fundamentally flawed because wealth owners (and claim holders) are private agents, whereas debtors in most cases are public institutions — or they become public ones when private debtors default. The debt crisis of the 1980s was, above all, caused by the default on public debt, whereas the debt crisis of the 1990s was one of private debt default. This change was an outcome of the policies of deregulation and privatization which have been pursued by international institutions and national governments alike. The Keynesian (as well as Marxian) notion of debtors as private (industrial) capitalists who service their debt by extracting and realizing surplus value has lost its validity in the era of global financial speculation. The debt service of private monetary claims has become 'socialized': governments are made to pass on the costs to their citizens. This is the reason why public debt has increased so remarkably in nearly all countries during the last twenty years. Where neither private debtors nor national states are in a position to service private debt, international institutions (notably the IMF) provide new credits on condition that the country in question adopts a policy package of structural adjustment. The primary aim of debt crisis management is to safeguard the assets of claim-holders from industrialized countries, and thus to prevent a 'systemic crisis'. In the medium and long term, these policies channel resources from the citizens of the indebted country to claim-holders in other countries. Thus the redistribution of real wealth (surplus value) between creditors and debtors is organized by official institutions, not just by the market. This is one of the ways in which capitalism contradicts 'free market' ideology; the latter's presentation of capitalist reality contrasts ever more sharply with people's experience of it.

(2) In most cases, so-called 'emerging markets' are characterized by high real growth rates and/or high nominal interest rates, both serving to attract foreign capital. When the growth rate declines or the currency is expected to depreciate, foreign capital immediately exits the 'emerging market' in order not to 'submerge'. The result of such capital flight is a further depreciation of the currency. In the cases of the Asian countries, Mexico, Brazil and Russia, curren-

cies depreciated between 50 and 80%. For several reasons, the effects were devastating: (a) the foreign debt to be serviced, which is denominated in foreign currency, shot up; (b) higher export volumes were required in order to earn constant export revenues; (c) higher import prices put an inflationary pressure on the economy; (d) for those who had hard currency at their disposal, whether citizens or foreigners, asset prices fell. The global extension of financial claims thus turns out to be a much more efficient device for the transfer of real value and the intensification of exploitation than, for instance, the plundering activities conducted under colonial rule from the sixteenth century onwards. The operating mode of the global credit system annihilates the potential comparative cost advantages of free trade. It follows yet again that the 1-to-1-relation between growth and poverty eradication, posited by the World Bank, is false.

(3) While on the one hand financial capital exerts *deflationary* pressures on the prices of commodities, on the other hand it produces an *inflation* of asset prices. This paradoxical situation of an '*inflationary deflation*'⁴⁰ is an indicator of the extent to which the global financial system has become disconnected from the real economy. A financial boom takes place alongside overproduction and overcapacity in the real economy: 'There is too much of everything. From cashmere to blue jeans, silver jewellery to aluminium cans ... Asia is the epicenter of the problem. Massive investment made on the assumption of continued high rates of growth resulted in broad overcapacity...'⁴¹ The postwar configuration of international institutions was tailored for a world of constant and moderate rates of inflation; it was designed to counter the deflationary pressures which had proved so destructive after the great crisis of 1929. During the 1930s, deflationary tendencies had resulted in a nearly complete collapse of the world market and nation-states' subsequent resort to protectionist measures and aggressively autarchic policies. Low nominal interest rates cause stock market quotations to rise.

However, in connection with the deflationary tendencies of product prices and real growth rates, even low real interest rates do not trigger new investment in the real economy because of its low profitability, as the case of Japan shows. Japan 'built massive industrial capacity at home and abroad throughout the 1980s, encouraged by low interest rates. In the late 1980s, Japanese monetary authorities lowered real interest rates to virtually nothing to help Japanese exporters survive a drastic strengthening of the yen in 1986. That policy fuelled a huge stock-market bubble...'⁴² However, the low real interest rates were still too high in relation to the expected profit rate. Overproduction or overaccumulation of capital triggered a crisis which had its origins in the 'real' sphere of the economy but first surfaced in the monetary sphere — as a stock market crisis in Japan and as a financial crisis in Asia, Russia and Brazil.

A situation characterized by these tendencies is extremely unstable and may cause the collapse of companies which suddenly find themselves in deep debt. This is the situation which Keynes referred to as a 'liquidity trap': although nominal interest rates are low, even near zero, nobody borrows because invest-

ments are not even expected to produce the minimum profit rate. Under such circumstances, it makes sense for individuals to transfer their liquid funds to places where they can earn higher short-term profits.

Nowadays, owners of monetary wealth, rather than 'traditional' industrial capitalists, determine the process of global accumulation. The real rate of return on capital is of less relevance for investment decisions than monetary interest rates. But the process of disembedding and de-linking have not created a completely autonomous financial sphere. The effects of the global financial system constitute the lived experience of people in countries hit by financial crises. The government of Indonesia speaks of at least 30 million people living below the poverty line. In Thailand poverty and informalization are growing visibly. In Russia hunger and malnutrition have returned on a broad scale. In large parts of the country money has disappeared and a pre-modern barter economy is on the rise — a different kind of 'virtual economy'.⁴³ Although the empirical data are better for some cases than for others, the tendency in other countries hit by the crisis is basically the same. All this points to the fact that the financial system continues to have a profound impact on real accumulation, labour and political regulation.

6 CONCLUSION: GROWTH, NATURE, EMPLOYMENT AND MONEY

The problems discussed above arise because for decades both productivity growth and real interest rates have been considerably higher than real growth rates. These are expressions of the declining profit rate on capital in most parts of the world.⁴⁴ Unemployment and inequality are increasing on a global scale. For many, the most obvious and convenient way out of this precarious situation appears to be the stimulation of economic growth. In most policy proposals of national governments, international institutions such as the IMF or the World Bank, research institutes or the media, the stimulation of growth is understood as a panacea capable of resolving each and every global problem. But not only are there economic obstacles to an increase of real growth rates, there are also serious ecological limits to further quantitative growth (which, to be sure, also make themselves felt in economic and social terms). The question then becomes: is it possible to reduce the real interest rate or to curb the growth of labour productivity, rather than to continue to stimulate the real growth rate of GDP?

Lowering the interest rate was Keynes' proposal for the creation of new jobs. If the marginal efficiency of capital (the profit rate) could not be increased, the interest rate should be decreased (the 'euthanasia of the rentier').⁴⁵ However, this remedy is premised on the sovereignty of the monetary authorities with regard to the determination of the interest rate. As a result of market deregulation, exchange rate liberalization, and financial innovations, the formation of the interest rate on global financial markets can no longer be significantly influenced by national central banks. And global institutions with an adequate control over financial markets do not exist. Even the reform proposals developed after the Asian crisis of 1997 (e.g. by the 'Global Financial Stability Forum' — see the essay

by Soederberg in this volume) do not go beyond recommendations for more transparency, prudent behaviour, improved surveillance, monitoring and safeguards; there is no suggestion for interventions into the working of financial markets.

Germany's former finance minister, Oskar Lafontaine, tried to establish a degree of political control over global interest rates (by capping them) and exchange rates (by introducing target zones). He was well aware that such a project could only be realized in cooperation with the European Central Bank and in coordination with the other G7 (G8)-governments. But Lafontaine's proposals were indignantly rejected by 'the markets', the big TNCs, the 'independent' central bankers, public opinion, members of his own government, and — last but not least — leading mainstream economists. Lafontaine's project was the last attempt to break out of the dominant growth discourse and to reconquer economic policy sovereignty from 'the global markets'.

There is a third possible solution: reducing the rate of productivity growth. However, economic growth takes place through competition and is thus based on individual countries' efforts to improve their competitive position; this, in turn, requires increases in productivity. This means that the discourse of globalization and competitiveness inevitably relies on productivity and the conditions required to improve it. This view was very clearly expressed by the Brazilian President Fernando Enrique Cardoso:

Globalisation means competition founded on higher levels of productivity. That is to say more output per unit of labour. Unemployment has therefore resulted from the very reason that makes an economy successfully competitive ... Flexibility of labour relations should also result in lower costs for the hiring of workers... In countries with large populations such as Brazil and India consideration must also be given to the operation of the so-called informal economy as far as job creation is concerned ...⁴⁶

The consequence of 'successful' adjustment to the challenges of globalization is thus the creation of a dual economy: a formal part, competitive and highly productive, and an informal part that serves to absorb dismissed workers precisely because it is in general less productive than the formal one.⁴⁷ The rise of the informal economy obviously provides a 'solution' for the problem of growing unemployment. Its detrimental effects on labour conditions, wages, social security, health conditions and so on become virtues in the era of globalization and under an accumulation regime or growth model which excludes growing parts of the global labour force from the formal employment system. The percentages of informal labour in total employment in 'Third World' countries range from 30% in Chile to 84% in Uganda.⁴⁸ In Latin America, between 1990 and 1996 the share of informal employment in non-agricultural sectors increased from 51.6% in 1990 to 57.4% in 1996.⁴⁹ In rural areas the percentage of informal work was even higher; the Brazilian Institute for Geography and Statistics (IBGE) considers as much as 90% of the labour force as informal. In Central and Eastern

Europe, too, the transition to a market economy and the crisis of 1997 pushed many workers out of the formal into the informal sector, and even in highly developed European countries, informal labour is also becoming more and more important. The percentage of people employed in the so-called 'shadow economy' constitutes between 7% and 16%, depending on the measure used, not counting the roughly 15% of the labour force which is self-employed.⁵⁰

Informal labour, although normally less productive than formal labour, does not have to be unproductive in the Marxian sense. Therefore, the tendency of informalization may be a (partial) solution to the employment problem which does not exert pressure on the average profit rate. In fact, since wage costs in the formal sector are also influenced by the low level of pay for informal labour, the effect on the average profit rate is in all likelihood positive, particularly in those industries where big corporations take advantage of the informal labour of local suppliers.⁵¹ We need to consider the possibility that globalization offers new opportunities for capital to bully working people. On the one hand, capital will try to increase the profit rate and boost productivity by the continued forced flexibilization of labour and wages. On the other hand, it will push redundant workers into the informal sector where they supply low-paid labour, engage in self-employment for local and regional markets, or organize services compensating for the functions that the welfare state has abandoned under pressure from capital.

The growth of the informal sector thus seems to offer a partial solution to the problem of unemployment. Much, though, depends on the measure of productivity that is applied. Normally, this is labour input (in hours worked) against saleable output. This measure is not arbitrary; it is an outcome of 'occidental rationality', the prevailing definitions of property rights, and the associated tendency to compare competitiveness in highly integrated world markets in monetary terms. Nevertheless, there is another measure that would make sense: labour input over the whole life cycle of a product including repairing, tuning and updating the product, and including the *non-traded outputs* of production, i.e. externalized pollution. A procedure of this kind could extend the rules of 'least cost planning' already used in energy markets to the markets for other products. Unfortunately, this measure would not be voluntarily accepted by 'the markets'. Markets and competition enforce acceleration, whereas environmental sustainability requires a policy of deceleration, i.e. restraining productivity increases.

Since the stimulation of growth fails to address the problems of unemployment, inequality and economic instability, a more viable solution could be provided by a combination of new forms of regulation of global financial markets in order to reduce the real interest rate, and a deceleration of productivity growth by means of an expansion of informal sectors and/or a transition to ecologically more sustainable production (and consumption) patterns (and lifestyles). Public awareness of the economic, financial, ecological, and social problems raised by globalization and possible solutions to them still has to be created — e.g. by social movements and NGOs. Without it, the illusory faith in 'growth triumphant' is

bound to live on and fuel further deregulation measures — while failing to overcome the crisis. At the end of the day, growth will stagnate or decline, the environment will deteriorate further and the poor will remain poor and grow ever more numerous — all because of the simple-minded notion that growth rates can be advanced even while the limits of the environmental space have been reached and the real economy is depressed by real interest rates higher than the sustainable rate of real GDP growth. In an era of globalization, the conventional paradigm of economic policy is in need of radical rethinking. Such a paradigmatic shift, however, will necessarily have to be accompanied by practical efforts to re-embed the global economic system in qualitatively new social relations and forms of political regulation, on both local and global levels. It is to a transformation of this kind that the movements against de-civilized capitalism, from Seattle to Genoa, aspire.

NOTES

- 1 David Dollar and Aart Kraay, *Growth is Good for the Poor*, Development Research Group of the World Bank, <http://worldbank.org/research>, downloaded June 2000.
- 2 This position has been quoted broadly by newspapers, underlining the necessity of economic growth as a solution for everything. For instance: ‘there is no getting around the fact that economic growth must be the point of departure for all improvements in living standards...’ (Maza Livanos Cattai, ‘Globalization Holds the Key to Ending World Poverty’, *International Herald Tribune*, 30 June 2000). Similarly, the argument of Keith Marsden, published in *The Wall Street Journal Europe* (19 July 2000): ‘To reduce poverty, grow the economy.’ Not everybody in the World Bank shares the view outlined by Dollar and Kraay and supported by the new chief economist Nicholas Stern. The editor responsible for the World Development Report 2000 Ravi Kanbur resigned from his office because he could not agree with the optimistic (and in many ways opportunistic) interpretation of Dollar and Kraay (Alan Beattle, ‘World Bank Stages Intellectual Battle over Globalisation’, *Financial Times*, 30 June 2000).
- 3 Richard A. Easterlin, *Growth Triumphant: The Twenty-first Century in Historical Perspective*, Ann Arbor: The University of Michigan Press, 1998.
- 4 *Ibid.*, p.153. This statement seems to be a repetition of quite similar futur-ological predictions of perennial growth by Herman Kahn and his Hudson Institute in the 1960s (Fred Moseley, ‘The United States Economy at the Turn of the Century: Entering a New Era of Prosperity?’, *Capital and Class*, No 67, Spring 1999, p.26). The emphasis on the desirability and feasibility of growth is an essential aspect of the affirmative discourse of modernity because one of the most important features of modernity is its quantitative expansion in time and space.
- 5 Philip McMichael, quoted by John Bellamy Foster, ‘The Crisis of the Earth.

- Marx's Theory of Ecological Sustainability as Nature-Imposed Necessity for Human Production', *Organization & Environment*, Vol. 10, No. 3 (September), 1997, p. 126.
- 6 Paul Ekins and Michael Jacobs, 'Environmental Sustainability and the Growth of GDP: Conditions for Compatibility', in V. Bhaskar and A. Glyn., eds., *The North, The South and the Environment. Ecological Constraints and the Global Economy*, London: Earthscan, 1995.
 - 7 Enrique Dussel, 'Beyond Eurocentrism: The World-System and the Limits of Modernity', in Frederic Jameson and Masao Miyosh, eds., *The Cultures of Globalization*, Durham and London: Duke University Press, 1998, p. 3 passim.
 - 8 David Harvey, *Justice, Nature & the Geography of Difference*, Cambridge, Mass./Oxford: Blackwell, 1996.
 - 9 This has to be understood as a statement about the main trend in economic development. There are also counter-tendencies, such as protectionism between trading blocks, and the great divide between those parts of the world captured by the dynamics of globalization and the parts excluded from these.
 - 10 Gérard Duménil and Dominique Lévy, 'Brenner on Distribution', *Historical Materialism*, 4 (summer), 1999.
 - 11 Paul Mattick 'Die deflationäre Inflation', in Elmar Altvater, Volkhard Brandes, and Jochen Reiche, eds., *Inflation — Akkumulation — Krise, I, Handbuch 3*, Frankfurt-Main/ Köln: Europäische Verlagsanstalt, 1976.
 - 12 Moisés Naím, 'Washington Consensus or Washington Confusion?', *Foreign Policy*, Spring, 2000, p. 96.
 - 13 For example, World Bank, *World Development Report 2000/2001: Attacking Poverty*, Washington D.C., 2000.
 - 14 Jüßen Blazejczak, ed., *Zukunftsgestaltung ohne Wirtschaftswachstum? — Ergebnisse eines Workshops des DIW im Auftrag von Greenpeace Deutschland*, DIW — Diskussionspapier Nr. 168, Berlin, May 1998; Andrew Glyn, 'Northern Growth and Environmental Constraints', in V. Bhaskar and Andrew Glyn, eds., *The North The South and the Environment. Ecological Constraints and the Global Economy*, London: Earthscan, 1995.
 - 15 For the distinction between 'clean' and 'dirty' pollution, see Elmar Altvater and Birgit Mahnkopf, *Grenzen der Globalisierung. Ökonomie, Politik, Ökologie in der Weltgesellschaft*, Münster: Westfälisches Dampfboot, 1999.
 - 16 Immanuel Wallerstein, 'A Left Politics for the 21st Century? Or, Theory and Praxis Once Again', *New Political Science*, Vol. 22, Number 2, 2000.
 - 17 Karl Polanyi, *The Great Transformation*, Frankfurt am Main: Suhrkamp, 1978.
 - 18 The question of whether this process began, as Polanyi assumes, in the eighteenth and nineteenth century or much earlier, in the course of the long sixteenth century, is an important one; however, this question cannot be answered here.
 - 19 Karl Marx, *Das Kapital*, Marx-Engels Werke 23, Vol. 1, chapter 14.

- 20 Polanyi, *The Great Transformation*; Anthony Giddens, *Konsequenzen der Moderne*, Frankfurt/M.: Suhrkamp, 1995; Altvater and Mahnkopf, *Grenzen der Globalisierung*, chapter 3, pp. 90-123.
- 21 Angus Maddison, *Monitoring the World Economy 1820-1992*, Paris: OECD, 1995, p. 40. Data presented and interpreted by Crafts support Maddison's statement; see Crafts, *Globalization and Growth*.
- 22 Wallerstein, 'A Left Politics for the 21st Century?', p. 147.
- 23 The German Institute for Economic Research (DIW) calculated an annual average increase of production value in German manufacturing of 1.7% and an average increase of labour productivity (production value per person employed) of 3.7% from 1991 to 1999 (Deutsches Institut für Wirtschaftsforschung, *Wochenbericht* 14/2000).
- 24 Mario Pianta, 'Trasformazioni del lavoro: il "terzo settore"', *Parolechiave*, 14/15 dicembre 1997, Roma: Dozelli editore, 1998.
- 25 For the USA, see Fred Moseley, 'The United States Economy at the Turn of the Century: Entering a New Era of Prosperity?', *Capital and Class*, 67, Spring 1999, pp. 28-9.
- 26 This is not the place to discuss the Marxist concepts of productive and unproductive labour. For Marx, a worker is productive insofar as he (she) produces surplus value. Unproductive labour, by contrast, does not produce, but merely consumes surplus value. This does not mean that it is useless. Unproductive labour is often necessary in order to sustain a social process of reproduction. The distinction between productive and unproductive labour is not coterminous with that between production and services, or with that between material and immaterial labour. It is, however, obvious that productivity increases can be 'consumed' by unproductive workers, so that there is some margin for the creation of jobs outside the 'productive' sector.
- 27 Paul E. Bangasser, *The ILO and the Informal Sector: an Institutional History*, Geneva: ILO, 2000 (<http://www.ilo.org/public/english/employment/strat/publ/ep00-9.htm>, downloaded 24 October 2000); Victor Tokman, 'La informalidad en los años noventa: situación actual y perspectivas', in Jorge Carpio and Irene Novacovsky, eds., *De igual a igual. El desafío del Estado ante los nuevos problemas sociales*, Buenos Aires: Siempro, FLACSO, 1999. For European countries, see Sergio Bologna and Andrea Fumagalli, eds., *Il Lavoro Autonomo di Seconda Generazione. Scenari del Postfordismo in Italia*, Milano: Feltrinelli, 1997; Friedrich Schneider and Dominik Enste, *Schattenwirtschaft und Schwarzarbeit. Umfang, Ursachen, Wirkungen und wirtschaftspolitische Empfehlungen*, München und Wien: R. Oldenbourg, 2000.
- 28 Adam Smith, *An Inquiry into the Nature and Causes of The Wealth of Nations*, Chicago: The University of Michigan Press, 1976 [1776].
- 29 David Held, Anthony McGrew, David Goldblatt and Jonathan Perraton, *Global Transformations. Politics, Economics and Culture*, Cambridge: Polity Press, 1999.
- 30 In any given production process, the material content of a unit of output may

decrease. But in the long run, and on a society-wide scale, the consumption of energy and matter is increasing so rapidly that the carrying capacity of ecosystems has become overstretched. If it were possible to reduce the consumption of matter and energy by simple technical measures, many difficulties during climate and water negotiations would not arise.

- 31 Elmar Altvater, *Der Preis des Wohlstands*, Münster: Westfälisches Dampfboot, 1992; Elmar Altvater, *The Future of the Market*, London: Verso, 1993.
- 32 Robert Goodland, Herman Daly, and Serafy El, *Nach dem Brundtland-Bericht: Umweltverträgliche wirtschaftliche Entwicklung*, Bonn: Deutsche UNESCO-Kommission, 1992.
- 33 World Bank et. al, *Global Poverty Report*.
- 34 Wuppertal Institut für Klima, Umwelt, Energie, *Zukunftsfähiges Deutschland. Ein Beitrag zu einer global nachhaltigen Entwicklung*, ed. by BUND and Misereor, Basel/Boston/Berlin: (Birkhäuser), 1996; annual reports of the Worldwatch Institute Report (1984 etc.): Lester R. Brown et al., *State of the World*, New York/ London: W.W. Norton.
- 35 János Kornai, 'The Soft Budget Constraint', *Kyklos*, vol. 39, No. 1, 1986.
- 36 OECD, *Economic Outlook*, June 1993, Paris.
- 37 Ibid., pp.29–31.
- 38 The macro-economic policy trilemma first articulated by Mundell (that a government can achieve only two of the following three objectives — a fixed or at least stable exchange rate, the free movement of capital, and an independent monetary policy) has been resolved by using high interest rates to protect the exchange rate in the face of a more and more deregulated financial market (i.e. independent monetary policy has been sacrificed).
- 39 Gates, 'People-ized Ownership Patterns', p. 437.
- 40 Mattick, 'Die deflationäre Inflation'.
- 41 Jonathan Friedland and Leslie Chang, 'Spreading Fat Slows Global Economy', *Wall Street Journal*, 30 November 1998. The authors continue their argument by pointing to the fact that China and other new competitors have been throwing masses of cheap goods on already satiated markets. But the main culprit of global overproduction is Japan.
- 42 Ibid.
- 43 Clifford G. Gaddy and Barry W. Ickes, 'Russia's Virtual Economy', *Foreign Affairs*, September/ October 1998.
- 44 Robert Brenner, 'The Economics of Global Turbulence', *New Left Review*, No 229.
- 45 John M. Keynes, *The General Theory of Employment, Interest and Money*, London/Melbourne/Toronto: Macmillan, 1964 [1936].
- 46 The text of the speech can be accessed on the Internet: <http://www.brasil.emb.nw.dc.us/fpst06gl.htm>; downloaded 24 January 1999; in Portuguese: Folha de Sao Paulo, 28 January 1996.
- 47 ILO, *Employment, Incomes and Equality*, Geneva: ILO, 1972; Alejandro Portes, 'The Informal Economy. Perspectives from Latin America', in Susan

- Pozo, ed., *Exploring the Underground Economy, Studies of Illegal and Unreported Activity*, Michigan: W.E. Upjohn Institute for Employment Research, 1996.
- 48 See <http://www.ilo.org/public/spanish/region...temas/worker/doc/otros/iv/ii/i/index.htm>
- 49 Victor Tokman, 'La informilidad en los años noventa: situación actual y perspectivas', in: Jorge Carpio/ Irene Novacovsky, eds., *De igual a igual. El desafío del Estado ante los nuevos problemas sociales*, Buenos Aires: Siempre, FLACSO, p. 82.
- 50 Paolo Perulli, 'Die Bedeutung der informellen Arbeit im postindustriellen Europa', in Elmar Altvater and Birgit Mahnkopf, coord., *Die Ökonomie eines friedlichen Europa, Ziele — Hindernisse — Wege*, Münster: Agenda-Verlag, 2000.
- 51 This is the theme of a growing number of books, e.g. Kathryn Ward, ed., *Women Workers and Global Restructuring*, Ithaca N.Y: ILR Press., 1990; Altvater and Mahnkopf, *Grenzen der Globalisierung*.