Long downward phase of the Capitalist World Economy: Potential for Crises and War: Scenarios for a Change of Global Governance

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Abstract: Humanitarian crises, catastrophe, genocide and war are preceded by an economic decline. What happens when the world economy as a whole is in a long downward phase, which may get steeper? Will conflicts escalate violence in the core areas of the world economy? In this outline of a long complex argument, I contend that on the initiative of the ever-stronger transnational management class under the leadership of the US, a worldwide framework of institutional arrangements has been created that, among other things, prevents the return of the upward phase in the world economy.

Thus, I have 1) displayed the long downward phase that started in the 1970s, 2) discussed the Kondratieff cycles and argue that they are best understood as mere trend-spotting observations, which explain very little, and 3) proposed a conceptual model that is meant to identify a number of key elements of the complex that has produced the long downward phase of the late 20th and early 21st century; this includes • the prevailing orthodox economic policies • tendencies toward rising inequality with consequent, under-consumption • decline in the marginal productivity of capital, • the uncertainty and risks caused by global finance. Furthermore, I have 4) placed these elements into a concrete world historical context with the focus on the position of the US in the global political economy, 5) explained why a new upward wave looks unlikely, 6) indicated some of the possible and likely consequences, and 7) concluded by outlining three scenarios of change of global governance. These scenarios explicate the possibility of future war and catastrophe. [1] — Keywords

Long down-phase, possible crises in the global economy as an explanatory model

Humanitarian crises, catastrophes, genocide, and wars are typically preceded by an economic decline (Nafziger & Auvinen 2003). Thus, what happens when the world economy as a whole is in a long downward phase, which may even get increasingly steeper? Will conflicts escalate to become violent also in the core areas of the world economy?

Introduction: Slowdown of economic growth after the 1960s

The oil-crisis of 1973-74 appears as the beginning of a long and gradually deepening recession. Many indicators show that decade after decade, less growth and more unemployment and under-employment of industrial and human capacities has occurred globally. For instance, Felix (1995 p. 5-9) has compared relevant figures for the G7 countries in the periods 1946-58, 1959-70 and 1974-89. In the Breton Woods era, the real *per capita* growth rate was about 4.5%, whereas for 1974- 89 it declined to 2.2%. A much larger sample of fifty-seven countries points to the conclusion that this has been a general worldwide trend. Table I displays developments for these fifty-seven countries, categorized in terms of relative changes of their growth rates.

Table 1: GDP per capita growth in different decades

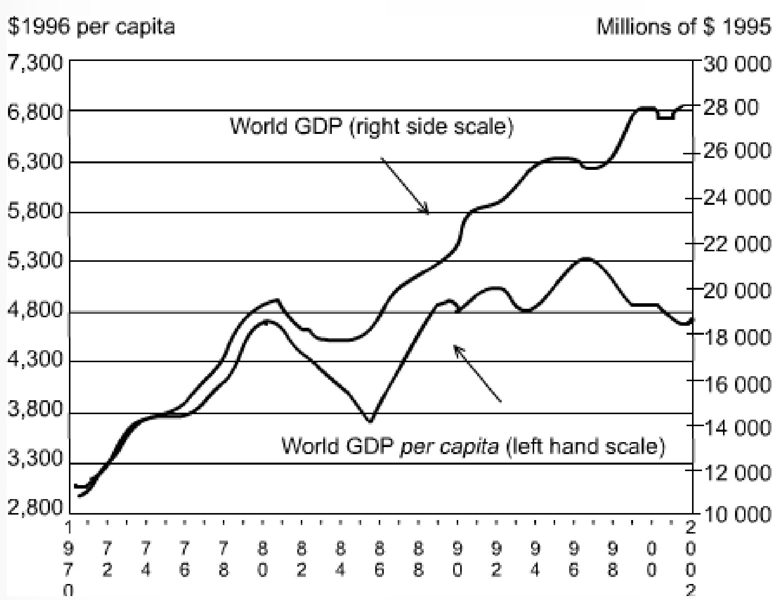
All fifty-seven countries	**1972 - 1981**	**1982 – 1991**
Higher growth than in 1960-71	18	10
Lower growth than in 1960-71	39	17
Consistently rising growth	9	4
Consistently declining growth	2	4
Negative growth: 3 countries in the 1960s	5	17

Source: Felix 1995: p. 7

In addition to the trend of declining growth rate, growth has become more volatile and sensitive to disturbances (Ibid p. 8). Moreover, in particular in the OECD countries and Latin America also the ratio of investments to GDP declined rapidly. Some oil-exporting countries and Sub-Saharan Africa were rare exceptions; however, most largely followed the trend. Only a number of Asian countries presented a true exception in this period, sustaining a high and relatively stable growth with a rising ratio of investments to GDP (Ibid p. 8-9). Furthermore, in Japan profit rates decreased by 50% compared to the period before 1970 and at the same time the growth of net capital stock, productivity and wages declined steeply (Brenner, 2002 p. 7-9). This may have been due in part to the fact that Japan was transforming its technology with massive reinvestment and early outward investment, which stimulated growth elsewhere in the region in this period.

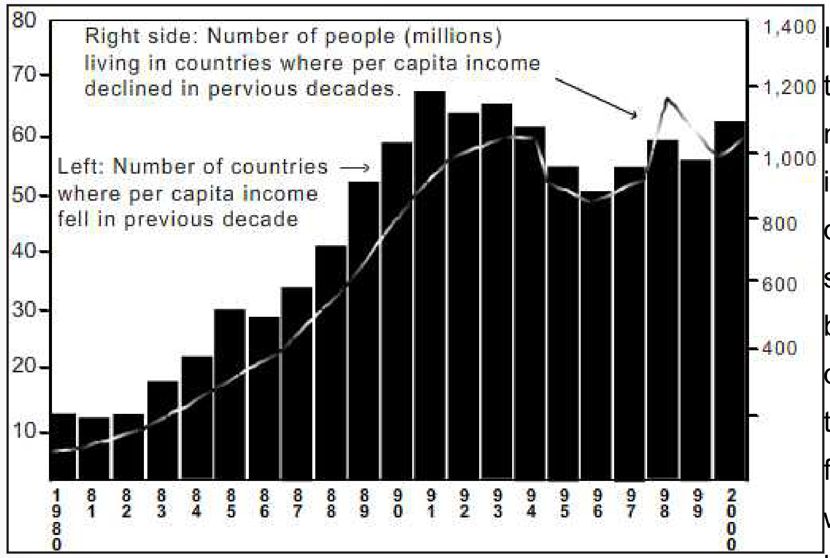
At the start of the 1990s, per capita growth formally came to a halt, which has prevailed to this day. Whereas in the 1970s, the per capita growth was, on average, more than 3.7%, it was slightly negative in the 1990s (in constant 1995 dollars, converted from national currencies at current exchange rates). In 1988, global GDP per capita was USD 4839; in 2002, it was USD 4748. The situation is, of course, different in every country; in some—particularly in OECD countries such as China and India—some real economic growth has and may continue to occur; yet, more and more people are living in countries with declining standards of living. Figures 1 and 2 display these trends.

Figure 1: Declining growth in the global economy Source: Freeman 2002 p. 1



The absolute world GDP began to decline in the mid-1990s. The Asian crisis of 1997-98 that spread into Russia and Brazil pushed a hollow in the graph, which otherwise shows steady stagnation. Per capita world economic output in 2002 was essentially the same as in 1980 and, as shown, slightly less than in 1988. A rapid rise in the disparity between the rich and poor has joined the decline of global conditions. The ratio of the richest fifth of countries to the poorest fifth was 30:1 in 1960, 60:1 in 1990 and almost 90:1 at the end of the 1990s—the poor remain as poor as they were in 1820, the fruits of industrialization have been experienced only by a selected group of countries and people. In the 1980s and 1990s, wage and income differentials grew in all OECD countries, particularly in the US and the UK, though also in such traditionally egalitarian countries as Sweden. However, the fastest ever recorded changes in income inequality took place in Eastern Europe and the CIS.—UNDP 1999: p. 2-3, 29-38

Figure 2: Declining income in the last decade Source: Freeman 2002 p. 1



In 1980, about one hundred twenty million people lived in the nine countries where per capita income declined in the previous decade. In 1998, there were sixty such countries, with 1.3 billion inhabitants. This, too, is a qualitative change as compared to the Breton Woods era. For the first time since World War II, the world economy seems to have become a constant (or negative) sum game where many are loosing in absolute terms. Although relative inequality has been rising steadily since the industrial revolution, the average citizen in the 1950s and 1960s seemed to have benefited from economic developments, at least, to some degree, in most countries. Following the second oil crisis in the early 1980s, the situation has become very different. An increasing number of countries and people have been impoverished in absolute terms. (Freeman 2002)

These kinds of GDP calculations tell only vague truths about world economic developments. Forming a statistically based picture of the world economic growth and inequalities as a whole requires a number of methodological and interpretative choices. For example:

- What is the base year?
- How should the currency conversions happen?
- What weight is thereby (implicitly) given, e.g., to the rather significant economic growth that occurred in India—three to four percent per capita per annum—and China, per capita per annum, in the 1990s?
- How should one interpret political economic developments in India and China?

India and China are among the few countries in the global South that have, to date, spared themselves the debt crisis, maintained capital controls, and developed large sectors of heavy industry. Yet, despite growth, household surveys in India do not show increased per capita consumption. In the 1990s, China's income inequality grew dramatically. In addition, it appears that only a minority of the Chinese (in absolute terms, this is, nonetheless, a huge number of people) have benefited from the era of high economic growth. [2]

It is possible, of course, to use purchase power parity (PPP) values instead of constant dollars. [3] With PPP values, the world economic growth would seem much higher and the disparities less dramatic than in either Figures 1 and 2 or in the given ratios of the GDP of the richest fifth to the poorest fifth (about the latter in particular, see UNDP 2001: p. 20). This is because the price level in poorer countries tends to be lower than in richer countries and, thus, the dollar-converted values make them look poorer than they actually are. The difference is particularly striking in the case of India and China. Nevertheless, the use of PPP values does not really change the general picture. Apart from India and China, there has been a wide-ranging slowdown of per capita economic growth. For instance, the 2004 Report of the World Commission on the Social Dimension of Globalization (2004), which the ILO set in place, uses the World Bank figures measured in PPP terms. Figure 10, on page 36, shows that the growth of world GDP per capita was four percent in the 1960s, two percent in the 1970s, one percent in the 1980s and 1990s, and declining. Similarly, according to PPP figures, there has been an increasing inequality at least between the richest ten percent and the poorest ten percent of countries. Moreover, the use of PPP values does not affect the picture of growing disparities within countries in any way. The number of people in absolute poverty keeps climbing in many, even the poorest, countries.

Freeman (2002: p. 13: 2003, p. 158-159) argues that an exception should in fact be made of China, particularly when the focus is on the effects of neoliberal globalization, since as Freeman states, “The Chinese state has dominated over market and global processes”. The real question, however, is whether we want to measure market welfare in the global economy as dominated by the dollar or in the local markets. The constant dollar terms are apt in measuring the former, while the PPP terms indicate the latter (Freeman, 2003, p. 152). Indeed, many contexts exist—such as budgets of states indebted to international lenders or transactions in world markets where the dollar (and, to perhaps an increasing extent, the euro) values are relevant, not domestic purchasing power. In summary, while the PPP measures may qualify the overall picture, they do not change it.

Other reasons show the insights of simple GDP/capital figures given in constant dollar-terms as suspect. We know, for instance, that the GDP/ per capita figures are unreliable and often arbitrary for the least developed countries. This opens a wide space for the manipulation of GDP statistics (Patomaki: 1999, p. 130). Then again, given how negligible these quantities are, the variances in these figures do not change the overall picture. In addition, one may assume that growth figures typically get massaged higher rather than lower. Thus, the actual picture is likely worse than what the official statistics say. Hence, this consideration should not change the qualitative conclusion either; however, it does cast a shadow of suspicion onto otherwise precise figures.

For a research problem, what matters is whether there has been a general pattern. Global GDP and income inequality data form only two synthetic series in representing the variation of a complex

monetary quantity that is, in fact, the creation of a statistician (Schumpeter, 1939a, p. 18). As such, they can only be taken as possible surface level indicators of some real processes.’

Nonetheless, based on GDP-statistics, one can conclude that the world economic growth has steadily slowed down, perhaps drastically, and that inequalities have been on the rise—in many contexts dramatically so—since the 1970s. In the following, I will try to answer three sets of questions: 1) What has caused the decline of world economic growth? 2) Do reasons exist to expect a new era of growth? Alternatively, based on the model, 3) Are there reasons to anticipate bigger crises? I shall then discuss tentatively the social and political consequences of the downward global economic conditions and growing disparities. What sorts of links exists between the long-term world recession and related economic crises, on the one hand, and conflicts, foreign policies of states, and even wars, on the other? [4]

2. The Long Wave Cycles

In the early 20th century, a number of economists noted that it seems that in the capitalist world economy there are not only various short-term cycles but also longer wave cycles. The longest waves seem to take about half-a-century. This idea found its best expression in the work of Nikolai Kondratieff, a Russian economist who published a series of articles (one key essay is available in English: Kondratieff, 1984). He discovered the long wave cycles by studying the time-series of various data. His conclusions appeared to be in line with the contentions of qualitative historians (Ibid p. 64)

However, in social and economic phenomena neither short nor long cycles are strict in any sense. The long wave cycles seem to last from forty-eight to sixty years, though even this generalization was—in the 1920s—based on the observation of a time span of only two and a half cycles. In any case, during a rising wave, booms are more frequent than recessions; during a downward wave, recessions and depressions dominate. Kondratieff’s (Ibid p. 32-59) data covered price and value-series as well as physical volume-series of production and consumption in England, France, Germany, and the US from the late 18th century until the early 1920s. To show the long cycles in their pure form, he fitted a theoretical curve to each empirical series of data (using the least square method), then processed the data, and smoothed the deviations using the method: moving an average. In addition, when possible, Kondratieff used per capita rather than absolute values. The long wave cycles were most visible in prices, interest rates, and wages. They appear in international trade, too. However, in other cases, and particularly in the physical volume-series, the data was too incomplete to allow for conclusions that were sufficiently far-reaching.

Kondratieff (Ibid p. 64-80) presumed that before the beginning of the rising wave of each long cycle a number of profound changes in economic conditions take place, including technical innovations, monetary alterations, and expansion of space for capitalist markets. Although the most severe crises and depressions take place during a downward trend:

> As a rule, the periods of the rising waves of long cycles are considerably richer in big social upheavals and radical changes in the life of society (revolutions, wars) than are the periods of downward waves. (Ibid p. 70).

Kondratieff acknowledged, however, that this is a loose empirical association. He argued forcibly, however, that a downward wave is joined by a long depression in agriculture. Table 2 summarizes the Kondratieff cycles until early 21st century, as extrapolated from both Kondratieff and later studies.

Notably, two out of three turning points in the 20th century coincided with World Wars I and II (the first cycle turned at the time of the Napoleonic wars). Moreover, the mostly *ex ante* extrapolated fourth cycle seems to fit very well with the developments in the world economy since the 1970s. The turning point of 1973-76 was relatively smooth and peaceful, however. Korpinen has pointed out that, although this was a turning point in the fourth Kondratieff cycle, it did not resonate with shorter cycles as in the most severe economic crises. In 1981, he argued that,

> The worst crisis is probably ahead of us, occurring at some point in the long downward wave, when the world economy is in recession (Korpinen 1981 p. 96).

Table 2: Kondratieff Cycles into the early 21st Century

Long cycles	Details
1st	1. Upward wave began 1844-51 and lasted until 1870-75.
	2. Downward wave lasted from 1870-1875 to 1890-96.
2nd	1. Upward wave began either at the end of 1780s through 1810-17.
	2. Downward wave lasted from 1810-17 to 1844-5 1.
3rd	1. Upward wave began 1890-96 and lasted until 1914-20.
	2. Downward wave lasted from 1914-20 to 1940-46.
4th	1. Upward wave began 1940-46 and lasted until 1973-76.
	2. Downward wave began 1973-76 and should continue until the mid-1990s or early 2000s.

Sources: Kondratieff 1984/1928: p. 62-63 Korpinen 1981: 186-9.

Joseph Schumpeter (1939a, b) agreed with many of Kondratieff's claims. Schumpeter (1939a: p. 220) suggested that the long cycles likely started in the last quarter of the 17th century. Like Kondratieff, Schumpeter (Ibid p. 100-101) associated long wave cycles with the temporal rhythm of great technological innovations:

> First, innovations do not remain isolated events and are not evenly distributed in time; on the contrary, they tend to cluster, to come about in bunches simply because first some, and then most, firms follow in the wake of successful innovations. Second, innovations are not at any time distributed over the whole economic system at random; instead, they tend to concentrate in certain sectors and their surroundings.

The industrial revolution took place during the first wave: steam power and weaving machines emerged. The second wave was associated with the building of railways; the third wave brought electricity and cars. The mass production of consumer durables and electronics began during the fourth wave. Some observers claim that the fifth wave has begun with the rapid development and expansion of the new information and communication technologies (Hamalainen, 2003: p. 80-90). Others foresee the fifth with further development of intelligent and industrial robots, critical advances in the exploitation of renewable energy sources and in biotechnology (see, e.g., Wagar, 1999: p. 19-20).

The main problem with the studies on the long wave cycles has been the lack of clear accounts of those mechanisms that could be causally responsible for producing the outcome, namely: the synthetic time series indicating long wave cycles of economic development. Kondratieff himself believed that the fact that investments with true long-term effects such as: new factories, railways, channels, large land development projects, and so forth often get clustered accounts for the temporal rhythm of the capitalist world economy and fluctuations around the long-term growth trend. The shortage of capital and rising interest rates explain the upper turning point. On the other hand, Kondratieff claimed that a long decline of the price level and the accumulation of funds, loaned almost for free, would eventually instigate a new wave of innovations and investments.

Schumpeter emphasized more than the historical uniqueness of each wave and the role of technological innovations. Elaborating upon Kondratieff's views, Schumpeter saw the key to explaining cycles in his account of the role of money and banking. He proposed a theory according to which credit creation functions, at least in a significant part, for the financing of innovations. Assuming a specific historical institutional setting of financial markets, Schumpeter (1939a: p. 109-130) made controversial claims about the bankers' rational foresight and capability to direct credit to profitable innovations, performing, as it were, the role of the rational (even if decentralized) planners of the capitalist system. Moreover, although Schumpeter ignored both the role of the uncertainty of the future and aggregate demand (the possibility of under consumption), the core of his theory has been re-proposed recently:

> Because money is available, looking for profit in the hands of non- producers, the new entrepreneurs can bring their ideas into commercial reality. Here the possibility of operating with borrowed money becomes a dynamic force. Financial capital will back the new entrepreneurs; and, it will be more likely to do so, in spite of the high risks, the more exhausted the possibilities are for investing in the accustomed directions. (Perez 2002: p. 33)

Perez's neo-Schumpeterian account is, however, a major improvement upon Schumpeter at least in one respect. She takes into account the development of socioeconomic inequalities, which also result from each cluster of innovation and from the related speculative activities. Political struggles over the adequate institutional framework, to ensure adequate aggregate demand, is very much part of her story of technological revolutions and financial capital. [5]

3. Explaining the Long Cycles

A good analogy for Kondratieff's method might be to say that it is similar to Philips' famous wage-inflation trade-off: it is mainly trend spotting. As such, the identification of long waves in the capitalist world economy explains very little. The long wave cycles are best understood as contrastive *quasi-regularities* rather than as a universal invariable. Contrasts between different times and places often reveal relatively regular patterns in the way certain phenomena occur. Quasi-regularities are interesting primarily because they demand explanation. The essential question is whether it is possible to identify relatively enduring mechanisms that have causally produced the quasi-regularities we have detected. We also know that any quasi-regularities may at some historical point be transformed or cease to exist. What's more, this kind of change would require explanation (Lawson 1997: p. 206-208).

The starting point must be the analysis of open systems with many simultaneous tendencies and complicated mechanisms. Social systems are open, overlapping and, in parts, interrelated. The effects of various tendencies and mechanisms can be delayed, overlapping, mutually reinforcing, and/or contradictory. Causal powers and processes can be contradictory in the specific sense that they may lead to conflicts and learning. These may bring about the emergence or development of new modes of agency and transformation of social structures. Causally efficacious economic mechanisms are social, i.e. they depend of social practices and institutions and their internal and external relations. Changes of practices and institutions can transform these mechanisms or, at least, their effects. Moreover, it is not necessary that the same causal complexes would be responsible for the same rhythmic tendency, or the actual and empirically observed quasi-regularities, since different causes can bring about similar kinds of outcomes. Each wave of economic development is historically unique although some of the generative mechanisms may be inherent to capitalist market economy per se (as it evolved in the 17th and 18th centuries in Europe and the Americas).

From this perspective, how could one explain the long wave cycles in the capitalist world economy? In this section, I will develop a conceptual (more precisely, iconic) model, which is compatible with the ontological and methodological tenets of critical realism; this will include some of the earlier explanatory models as well as the available historical and empirical evidence.

3.1 The Power of Knowledge

Korpinen's (1981, p. 14) point gives us the opening insight:

> There is a delayed interaction between consciousness and reality. Cycles in the mainstream of economics fit into this scheme: good employment and strong inflation lead to monetarist (quantity theory) thinking, whereas long deflation and unemployment give rise to Keynesian (Banking School) type of economic theorizing and expansionary economic policies.

Korpinen assumes reasonably that economic policies have real effects and can be, in part, responsible for the phases of long cycles. Monetarist, or more generally orthodox', economic policies tend to contribute to recession and deflation. However, Korpinen's point of departure ignores power both as a transformative capacity and as relations of domination. More generally, one can posit a hypothesis that also because of the prevailing power-relations based on private property, constitutive of capitalist relations of production and exchange, there is a tendency for the economic orthodoxy to assume prevalence in policy-making. Orthodoxy assumes that capitalist markets are self-correcting and in a state of equilibrium (or getting there), which is normally beneficial to all parties. Quantity theoretical thinking and modifications of monetarism and rational expectation theory are historical variations of economic orthodoxy. Only in specific circumstances can the counter-tendencies to orthodoxy become strong enough to make a real difference in policy-making.[6]

Orthodoxy corresponds to the short-term perspective of capitalists or capitalist corporations, particularly when they operate in world markets (locally embedded and/or far-sighted capitalist firms are prone to qualify orthodoxy in a number of ways even in periods when orthodoxy prevails otherwise). Capitalists, technocracy governed joint-stock corporations and banks control private capital. Private capital means (typically exclusive and sometimes absolute) control over investments, organization of production, profits, and even wages. The social positions and related economic resources, enabled by private capital, can be translated, depending on the rules and constraints of the wider context, into resources that are relevant in educational and political contexts, such as media, political parties, schools, universities, states, systems of regional and global governance etc. (cf. Giddens, 1979, p. 88-106). Also, in liberal-democratic states, a number of mechanisms can generate the accumulation of political privileges—originating in the sphere of private capital—and lead to de facto erosion of democratic autonomy and control.[7]

Therefore, Korpinen's hypothesis should be reinterpreted. In a capitalist market society, the general tendency towards the prevalence of orthodoxy becomes stronger when: 1) the economic developments seem favorable in the world economy, i.e. when there is stable growth and high employment at least in the centers of the world economy and inflation is increasingly seen as the main problem, and/or 2) the position of private capital becomes more secure in terms of structural power and/or political positioning. Once dominant, the orthodoxy starts to repress economic growth through various mechanisms, efficacious in different world historical situations in different ways. However, the general tendency is toward a gradual deepening of deflation, which is a downward phase involving • under consumption/overproduction • unemployment • declining prices • social problems and the political reactions to them.

This does not concern only the direct effects of orthodox monetary and fiscal policies, which vary historically and can sometimes be fused with other elements, but also the emergence, triggering, strengthening and releasing—e.g. by means of deregulation and reregulation—of those mechanisms, which are characteristic to the capitalist market economy.

3.2 Effects of Orthodoxy on the Distribution of Income and Aggregate Demand

One typical consequence of orthodox policies is the concentration of incomes and wealth to relatively few while many others are either tagging increasingly behind or, particularly during a downward wave, are getting impoverished also in absolute terms. As Joan Robinson (1956: p. 78) has noted, a central paradox of capitalism is that:

> Each entrepreneur individually gains from a low real wage in terms of his own product, but all suffer from the limited market for commodities, which a low real-wage entails.

The point is that workers are also consumers: their purchasing power creates demand for the goods and services the capitalist firms are selling. Moreover, we also know that the propensity to consume is usually (much) higher in lower income groups than among the wealthy. Thus, to the extent that all capitalist employers have their short-term wish fulfilled (i.e. real labor costs are noted), to the extent that unemployment increases, and/or to the extent that growing socioeconomic disparities exist: the aggregate demand for mass products and services will decline. The result can be general under consumption and overproduction in many, if not most, industries.

More precisely, what are those mechanisms that produce the outcome of growing inequalities? Obviously, they can assume many different forms, from the structures of labor markets to the system of taxation or the characteristic functioning of global financial markets. A general hypothesis can emerge, however. A capitalist market society organized according to orthodox principles provides many opportunities to translate the positions in relations of production, constituted by private property rights, into privately appropriated incomes and wealth. This stands because the starting point of orthodoxy is that nothing should intervene in the so-called free operation of markets, including those structures and relations of power in labor markets and elsewhere that determine the distribution of profits and wages. Typically, orthodoxy also involves a Lockean sense of justice according to which:

> The results of one's own labor—including the products of labor hired by property owners—belong exclusively to oneself, i.e. the property owners, whether individual or corporate.

Therefore, the prevailing ethos is that privately appropriated wealth should be taxed, and its use limited as little as possible. The property and wealth accumulated this way can also raise and educate the next generation; and, of course, property is freely transferable and passed onto the next generation. This kind of a historical institutional context, thus, gives rise to the development and reproduction of relatively enduring socioeconomic classes and growing disparities between them.

A trend towards increasing inequalities and, thereby, towards relative decline in aggregate demand—the so-called under consumption—would, thus, seem to be one of the main consequences of the prevalence of orthodoxy. This, too, was the fundamental explanation of e.g. J.A. Hobson (1902/1988) to the poverty, recessions and imperialism of the 19th century. Social problems and insufficient demand for products and the corresponding *excess* capacity of production at home give rise to attempts to expand external markets and export surplus labor to colonies. A number of early 20th century theorists of business cycles and imperialism followed Hobson in this regard.

3.3. Uncertainty and the Marginal Productivity of Capital

The difference between John Maynard Keynes and the theorists of under- consumption is that Keynes (1936/1961: p. 324-326) stressed the role of investments and their basis, horizons of expectations and interest rates. Consumption explains business cycles only in part: the determination of investments is equally important. Uncertainty of future is a key to understanding many developments in market economy. For instance, the liquidity preference of the people's wish to hold cash instead of consuming or investing their money is caused not only by the use of cash in exchange but also by the uncertainty of future. When there is confidence in the future, people feel secure about consuming and investing. A crucial insight of Keynes was the notion that the development of financial markets changes how the capitalist market economy works. In developed money markets, one can speculate about future and changes in interest and currency exchange rates (Ibid p. 170) Then again, the marginal productivity of capital depends not only on the price of capital goods but also on expectations about future revenues. Rising prices, for instance, raise expectations about future and thereby increase the marginal productivity of capital and investments. Investments in turn have multiplying effects on other economic activities (Ibid p. 135-146).

Developed financial markets, where it is possible to buy and sell shares and other financial assets many times a day, imply the possibility of speculative investments. What is essential for speculative calculations are the short-term changes in the prices of stocks and other financial assets and the anticipation of others' expectations about changes in relative asset values; the long-term productivity of capital goods is non-essential information (Ibid p. 147-163). The development of financial markets makes the dynamics of savings, investments, and interest rates more complicated and contradictory. When speculation in this sense prevails, financial markets become increasingly volatile and crisis-prone. Increased uncertainty and crises affect anticipations of future and usually decrease the marginal productivity of capital and thereby investments. This has multiplying negative effects on other economic activities.

3.4. The Role of Almighty Finance

At the heart of Keynes' general theory is 1) the idea that economic developments often have cumulative or multiplying effects, both up- and downwards, and 2) that the so-called development of financial markets creates new sources of uncertainty and disturbances. Hyman Minsky has developed particularly the latter aspect of Keynes' theory. Roughly in accordance with the neo-Schumpeterian account of historical phases, though giving finance much more autonomy, Minsky (1982: p. 166-77) maintains that at times of long wave of growth and affluence, financial markets begin to develop into more speculative and crisis-prone direction. Capitalism innovates in finance as well as production and exchange.

New financial instruments and other innovations often presuppose deregulation and reregulation. As a result, there is a relation between the development of financial markets and the rise of orthodoxy to prevalence. Classical orthodoxy assumed that money is merely a good among other goods and therefore believes that Smith's invisible hand guides free trade of money, too. Orthodoxy also assumes that real economy determines the prices of money and financial assets. In this fashion, the neoclassical orthodoxy has maintained that financial and other markets are either in a simultaneous—Pareto-optimal—equilibrium or moving towards such an equilibrium if there have been disturbances or movements of correction. (Toporowski 2000)

Financial markets, thus, are supposed to facilitate efficient allocation of savings into investments. Therefore, orthodox theory supports and justifies the so-called liberation and development of financial markets. Thus, a connection exists between the interest of financial investors, who are trying to maximize their freedom of operation, and economic orthodoxy. (See Patomaki 2003: p. 210-16) Moreover, the vision of orthodoxy is universalizing and, thus, its wisdom is usually applied to the organization of financial markets as well. Like elsewhere, the general tendency towards the prevalence of financial orthodoxy becomes stronger when 1) the economic developments seem favorable in the world economy, i.e. when there is stable growth and high employment at least in the centers of the world economy and inflation is increasingly seen as the main problem, and/or when 2) the position of private capital becomes more secure in terms of structural power and/or political positioning.

Minsky's (1982) model about the determination of investments explains why developed financial markets themselves tend to produce economic crisis, recessions and unemployment. Banks create money when they lend against future revenues and profits. The monetary system is stable only as long as streams of revenue and profit enable firms to meet their financial liabilities (Ibid p. 22). Financial actors try to innovate new forms of profitable finance, which typically increase velocity of circulation and decrease liquidity. Many capital goods trade, at least in part, on credit. This makes their value dependent, as well, on developments in financial markets, which in turn are contingent upon actors' expectations about future, commonness of speculative orientation and general degree of involvement in debt.

Speculative activities sensitize actors on alterations in expectations about future while no one can predict the future because the development of asset values is always uncertain in open systems and determined in significant part by actors' expectations and anticipations (Ibid p. 59-69) The higher the liabilities in relation to revenues and liquidity, the more unstable the financial system becomes. Relatively small changes in interest rates or revenues may make some actors—A—insolvent and they can in turn endanger the solvency of those actors—B—who are expecting due payments from A. In the midst of mounting difficulties, many have to opt for the Ponzi scheme of finance: expensive short-term loans just to meet their financial liabilities. Rapid rise in Ponzi finance indicates a crisis in the near future. Relatively small absolute changes in interest rates, streams of revenue and wealth can thus trigger a financial crisis (Ibid p. 162-77) In other words, financial innovations and increasing involvement in debt make the financial system more chaotic.

In developed financial markets, banks and various investment funds may themselves begin to gamble on credit. They may borrow money by using the financial assets as collateral. The value of these assets is determined in stock and foreign exchange markets or real estate markets. As long as a general upward trend is extant—rapid asset inflation—most investors can indeed meet their liabilities and the system functions well, despite occasional and usually rather local crises and scandals. However, the push for success in the hectic financial markets creates incentives to increase liabilities. It may be possible to make large profits on small margins or manipulate markets to one's own profit only by increasing the advantage of one's capital manifold by taking loans. A loan taken for speculative purposes is often very short-term and can at times be pure a Ponzi-finance.

The so-called development of financial markets takes capital and resources from other sectors of economy, while increasing risks under uncertainty. Typically, at some point the distinction between speculative investments and swindle may be blurred and all sorts of scandals start to be increasingly common. For these and other reasons, confidence in the continuation of the bubble may start to falter. Some may switch to speculating on decline; and, in some contexts, these anticipations may become self- fulfilling. Small errors in calculations or unexpected changes, thus, can make some financial actors quite easily insolvent (e.g., the 1998 crisis, Long Term Capital Management, with the basic capital of four billion USD, had created liabilities worth of two-hundred billion USD that it abruptly defaulted upon, thus risking the solvency of a number of banks and other major investors). To emphasize the basic point in developed financial markets, a relatively minor problem or shift may trigger a major crisis. (See Patomaki 2001: Chapter 1; and, for an analytical and illuminating history of financial crises since the 17th century, see Kindleberger 2001).

3.5. How the Tendencies Reinforce each other

The mechanisms created, strengthened, or released by the orthodoxy often reinforce each other. For instance, under-consumption caused by rising inequalities compels firms to revise their expectations downwards. Depending on the particular geo-economic context, growing disparities may thus decrease the marginal productivity of capital and thereby investments. Corporations who must operate on terms set in part by developed financial markets tend to become increasingly short-term oriented. Instead of planning, innovations and productive investments, it is often more pressing for firms to cut down their most immediate costs, particularly labor costs. Whether this means lower wages or more unemployment, the collective outcome is reduced aggregate demand for goods and services. Firms must consider this when they adjust themselves to market developments. With lowered expectations, the marginal productivity of capital goes down and, with it, investments, with the standard multiplier effects.

In addition, the disturbances and uncertainties created by developed financial markets can reduce the propensity to invest in such productive activities that would require long-term planning. Characteristically, financial markets also enable mechanisms that tend to concentrate wealth in the hands of relatively few, thereby contributing to the problem of under-consumption/overproduction. Financial crises have also direct effects on growth, employment, and purchasing power. Since the late 1970s, there have been more than two hundred major financial crises, which often involved substantial loss of output and employment. Combined banking sector and currency crisis is usually the most expensive type in terms of loss of output. The IMF (1998: p. 79) has estimated the loss of output to be in these cases, on average, fifteen percent of national GDP. The Asian crisis led to the loss of six percent of the world GDP (UNDP 1999: p. 2).

In addition, all this affects states' tax revenues and expenditure. When tax revenues go down, it is hard to increase state expenditure, particularly if the prevalent orthodoxy requests states to: balance budgets, cut taxes, eliminate so-called price distortions, and commercialize as many activities as possible and transfer them to the maximal liberal and capitalist markets. Because states' expenditures constitute a major part of the world economy, this has obvious consequences to both aggregate demand and rising inequalities, reinforcing other tendencies. This way the world economy has become locked-in in a long downward wave since the 1970s.

4. Global Mechanisms of Power

It is unreasonable to look at consumption, savings, and investments on a national basis only. These form worldwide patterns, generated by shared practices and spaces and transnational actors. For instance, the savings for consumption and investments in the US for a long time has originated from other parts of the planet, particularly from Japan and Southeast Asia. This presupposes not only global financial markets but also a particular way of organizing them. Even more to the point, it is not possible to understand or explain the great shift from semi-Keynesian theories and economic policies to economic orthodoxy without analyzing global power mechanisms.

The Breton Woods system was a compromise between economic liberalism in trade and fixed exchange rates and strict capital controls in finance, combined with (at least partially) Keynesian economic policies and the building of the welfare state within states. Keynes negotiated this compromise for the British between he and Harry Dexter White, who led the US side, in a situation where the US economy was booming while the rest of the world economy was more or less destroyed or bankrupt. In 1944, the US economy constituted fifty percent of the world economy. This share declined rapidly in the 1950s, with the reconstruction and rise of Japan, Europe, and the Soviet Union.

In the 1960s, the performance of the US economy declined also in terms of inflation, employment, and rise of living standards. The US firms became less competitive compared to their competitors in Europe and Japan; the initial hegemonic position had turned, at least in some regards, into a burden. After 1965, it was clear that there was overproduction capacity in the US. (Brenner 2002: p. 11-24) Minsky (1982) argues that by the mid-1960s a crisis-prone financial system had re-emerged in the US. The ratios of debt to income and of debt to liquid assets had risen to levels that had ruled before the Great Depression.[8]

> As the financial system bogged down with layered private debts, the susceptibility of the financial structure to disturbances increased. With these disturbances, the economy moved to the turbulent regime, which still rules. (Ibid xiii)

As a result, a series of financial crises erupted, the first one in 1966. However, the crash of 1929 has not recurred, for two main reasons, 1) the US Federal Reserve had become a lender of last resort for other banks, and 2) the big government that had evolved since the 1930s meant that the share of public expenditure of GDP had grown significantly. Government actions and automatic mechanisms of changes in expenditure had begun to make a difference. For instance, in the late 1960s the Vietnam War led to a large government deficit, functioning as a Keynesian-type stimulating fiscal policy.

The United States could pay its bills—for military spending among others things—with IOU: issuing bonds, notes, and other forms of financial commitments. (Strange 1986: p. 6-7) Unlike the others, the United States did not need to export goods and services to pay its bills. In the 1950s and 1960s, the dollar expansion helped to revive world trade and even fund investments, particularly in Europe. Nevertheless, the parity to gold tied the hands of the United States Government. The accumulated dollar liabilities exceeded the large though declining gold reserves of the United States by 1958-59. The unpopular Vietnam War, financed largely through a further expansion of dollars and IOU, aggravated the problem. Moreover, because of the constant surplus of the US allies, a shortage of gold emerged. The dollar liabilities to foreigners exploded in the late 1960s. (Walter 1993: p. 166-168)

In 1971, the Nixon administration dissolved the constraints stemming from this situation by unilaterally de-linking of the dollar and gold. This link had been the basis of the Breton Woods system. The US also justified this move in terms of orthodox economic theory. In a 1953 landmark statement, Milton Friedman maintained that floating rates are both more efficient and more in line with monetarism at home, which was required to counter inflation (for a critical discussion, see Patomaki 2001: p. 223-231). This justification also served to give grounds for further demands to liberalize financial markets in other sectors and countries. This had both intended consequences—continuation of debt financing, reinforcement of US monetary autonomy and sovereignty, and boosting of US transnational corporations—and unintended consequences: speculative profits for US investors, while the costs of financial crises turned out to be covered by others (Ibid p. 74-79 for a detailed account).

One can claim that actions by the United States have been roughly consistent with the under consumption hypothesis of Hobson's theory of imperialism. The historical differences are apparent: whereas the past European empires expanded their markets and economic activities by colonizing overseas lands and regions, the US actions have taken place in a multilaterally organized global political economy that is thoroughly covered by sovereign states. Most of the Southern states—in Africa, the Middle East, and Asia in particular—had become full members of the international society through the late 20th century process of de-colonization that the United States and the Soviet Union at the time supported, against the old European empires.[9]

Nevertheless, in some important regards the United States has behaved in a way similar to the 19th century European empires. Overproduction capacity and insufficient demand for US products at home and the increased competition in the economic successful Europe and Japan have led to attempts to expand markets for goods and transnational investments also by political and sometimes military means, particularly in the South. In the 1970s, the situation in the United States worsened still when rising inequalities began to diminish the purchasing power of large segments

of society. The construction of conditions for further economic expansion elsewhere was justified by a particular universalism, namely: the orthodox belief that the so-called free market is the best possible arrangement for everybody everywhere. From Ronald Reagan and Margaret Thatcher onwards, this has become the explicit ideology of reconstructing systems of global governance along the neoliberal, United States and UK-centric lines.

The United States started to campaign for its increasingly narrow interests and vision in various forms. These interests were defined in terms of gaining free access for the US transnational corporations, banks and investments funds everywhere (trade, investment or whatever), on their own terms, and making their monopolistic gains as permanent and extensive as possible, e.g. through intellectual property rights. The mechanisms of global financial markets have supported this aim in a number of ways. Global financial markets discipline states to follow orthodox recipes. They enable transnational purchases, buy-outs and mergers of corporations (means of production), i.e. facilitate non-territorial economic expansion. They also re-direct a large part of global savings to the US, including into US Treasury bonds. In 2003, the net debt of the US federal state is almost USD 3000 billion and it needs more than a billion a day to fund its balance of payments deficit. Private debt in the United States is about USD 4000 billion. AR together the US debt is about a quarter of the world GDP and rising. The federal debt has mostly financed fund private consumption—as *income transfers*—or public consumption—as military spending (CE Minsky 1982: p. xxiii-xxiv). In addition, private loans have often fed consumption rather than investments.

One might see the actions of the United States as justified because the action represents particular interests as universal. The conceptual framework for this exists within the economic orthodoxy. However, even in the most charitable possible interpretation (assuming away the undue monopolistic gains, the specific position of the dollar, and other institutions of the world economy, which favor the US), this justification is based on the fallacy of composition. X may be rational choice for A in a specific historical situation, but if everyone does X concurrently, the collective outcome is counter-final, i.e. contradicts the purpose of X (Elster 1978: p. 96-122). The aim of replacing the wanting 1) domestic demand, and 2) savings and investments by exporting or moving activities elsewhere assumes that effective demand, savings and productive investment opportunities exist elsewhere. This in turn assumes confidence in future economic development, including anticipation of demand for goods and services.

However, by re-organizing the economies and economic policies in many if not most countries on orthodox principles one has created a general tendency to deflation and recession almost everywhere. Moreover, free trade benefits mostly, or only, those countries where the technologically dynamic industries are located. Specialization in stagnating industries or, even worse, primary products means that one can only compete in terms of quantity and price, implying typically declining terms of trade (Hamalainen 2003, p. 3-32; Akyiiz 2003). Many countries in many parts of the world—Latin America, Sub-Saharan Africa, Middle East, Central Asia, and even South East Asia—have experienced economic decline or even collapse, instead of growth.

Orthodox economic policies are a collaborating cause of the increasing inequalities and imply attempts to cut down state expenditure. This, however, sounds easier than it, in fact, is in a number of contexts in the late 20th and early 21st centuries. Growing impoverishment, unemployment, disparities, and social problems tend to increase public expenditure particularly in those countries with a well-functioning welfare state once flourished. As a result, the ratio of state expenditure to GDP may rise at first, even when welfare services and income transfers take drastic cuts. (CE Esping-Andersen 1990: p. 19; Clayton & Pontusson 1998) Because of this automatic Keynesian mechanism, the decrease of global aggregate demand has been gradual and contradictory, rather than assuming the form of a great crash. Moreover, central banks and the IMF have acted as lenders of last resort, tightened financial regulations in some regards after each major crisis, and, thus, have prevented 1929 from happening again, at least for the time being.

5. Why an upward Economic Wave is a Remote Possibility

Is a fifth Kondratieff cycle plausible? Perhaps a new upward wave begins in the near future, as one might expect based on extrapolations from the history of capitalist world economy. Some followers of Schumpeter might think that innovations—new technologies and new fields of economic activities—could generate a new upward trend with the help of appropriate financial conditions. Kondratieff himself believed that a long decline of the price level and accumulation of funds loaned almost interest free would eventually instigate, almost automatically, a new wave of innovations and investments. When responding to his critics, however, Kondratieff emphasized the role of massive and, at least, in part publicly mobilized investments such as construction of railways or channels or building of a system of basic education for the entire population. In the past, these have pushed the world economy into an upward wave and generated various multiplier and cumulative effects a long time after the original investments. Perhaps a more thorough, long-term economic turn in the early 21st century would require analogical collective measures.

Indeed, Kondratieff's idea is consistent with the above explanatory model of the mechanisms that have produced the long downward wave. Publicly co-mobilized or stimulated large-scale investments in a possibly new field—A—of economic activities would increase aggregate demand and generate investments in A and sectors linked to A. Both would have multiplier and cumulative effects for other economic activities. Some investments such as building a system of basic public health and education for all people would give individual actors more equality, which should increase the overall propensity to consume, and, thus, total demand. Additional new fields include

the exploitation of 1) old and new renewable energy sources, 2) information and communication technologies, including perhaps the development of a cheap and simple folk-computers, and 3) adequate public networking infrastructure for it), and biotechnology. A wave of new developments would also change the development of prices and horizons of expectations and, thus, the marginal productivity of capital, generating more investments with all the characteristic multiplier effects.

However, it also seems that a turn would occur only with a more general shift in the prevalent economic policies. Monetary and fiscal policy—as well as social and industrial policy—must be compatible, and resonate, with the effects of the productive investments. Moreover, the global financial system should be reformed thoroughly and its characteristic mechanisms re-regulated or absented. This is the core problem of the early 21st century: to at once mobilize large-scale global investments and transform the mechanisms of capitalist market economy in order to enable various heterodox economic policies.

Particularly in the 1980s and 1990s, many of the key systems of global governance have been harnessed to the project of locking-in economic orthodoxy for good. Stephen Gill (Ibid p. 997) has conceived the term new constitutionalism to describe this project: a political and legal strategy to disconnect economic policies from democratic accountability and the formation of will. The aim is to make constitutional law of the protection of absolute and exclusive private property rights and the freedom of transnational traders and investors. This is achieved through regional and global multilateral institutions such as the EU and NAFTA; the Breton Woods institutions; and the WTO. These treaties and institutions are more difficult to revise than many constitutions. Therefore, they provide a solid and firm protection against all challenges to orthodoxy. One of the consequences of the neo-constitutional project is the difficulty to mobilize public funding for the required massive investments.

In the early 2000s, the initiative of the ever-stronger transnational management class and under the leadership of the US, a worldwide framework of institutional arrangements formed to prevent a turn to a next long upward phase in the world economy. In the capitalist world economy, particularly given the prevalent structures of global governance, states are not equal in economic or political terms. Structures of production and exchange, as well as global financial markets, tend to favor actors based in particular states, while the consequent resources can be harnessed in international diplomacy and global governance to serve the particular interests of the powerful private actors and related states.[10]

The most powerful interests in capitalism tend to prefer orthodox economic policies, universalizing their particular short-term interests; though, this tends to be damaging for both the world economy as a whole and for most parts of the world citizenry. Once again, in the early 21st century, the world economy vacillates between zero per capita growth and deepening deflation and recession. Many signs point towards the latter. Of course, as I have emphasized, not all countries and regions are in the same situation. A long downward wave may perhaps be compatible with relatively sustained growth in some countries such as China at least as long as it insulates itself from global financial markets and cultivates the more heterodox arrangements at home. The downward wave is also compatible with short and weak booms in some other places, possibly in the US, stimulated by the massive though shortsighted debt financing of military spending and private consumption of the wealthiest. This could stimulate short-term economic growth in some places.

The overall global picture is rather gloomy, however. Unilateral attempts to strengthen one's position by concessions from the others and further orthodox measures only serve to strengthen the tendencies towards making the collective downhill steeper. At the same time, conflicts within and between states may likely escalate, which will threaten the post-World War II multilateral arrangements. What the world needs, instead, is a systematic revision of the institutions and formative contexts of the world economy. The world can best achieve this through global political struggles and reforms. Unfortunately, in the absence of sufficiently strong counter-tendencies, a major catastrophe seems likely to occur.

6. Three Scenarios of Change

Changes of global governance may come about through major crises or catastrophes. They can also happen by way of a well-planned strategy of peaceful changes. These are not exclusive options. It may well be that crises may make peaceful changes more feasible. Moreover, it is self-evident that these scenarios—which presuppose the overall picture of the world economy presented above—do not exhaust real possibilities. However, the point of the following tentative analysis is that based on my explanation of the long downward phase of the capitalist world economy, these three, with their possible variations, seem the most plausible scenarios. While interpretative and conditional, thus, by design, they say something important about our future possibilities.

Scenario 1: Catastrophe and Possible Change

After the Breton Woods era, the world has returned to a more pure form of capitalist market economy, accompanied by a new wave of globalization. The contradictions and crisis tendencies that are characteristic of capitalism, thus, grow stronger. These have, in tandem,caused the partial transformation of the United States into a global neo-imperial state, though, to date, without any clear attempt to recreate a formal territorial empire on the model of the British Empire: an occupation and de facto control of the failed seven: F7, the so-called rogue states may, however, be easily translated into a colonial-style administration.

In the post-Breton Woods era, particularly since the 1990s, states and regional organizations have been trying to create conditions for further growth by 1) ensuring the availability of cheap labor and raw materials, 2) opening up previously closed or new markets such as collapsed or "rogue" states for trade and investments, 3) privatization and liberalization of various forms of capital, and 4) further commodification, which implies the redefinition of new spheres of social, biological and physical being into private goods that can be sold in the markets. Commodification is particularly important, given that gross domestic product is measured in terms of market transactions. If previously public or non-commercial services, cultural products, life forms, or physical space, are redefined as private commodities, more market transactions are generated, which means further growth and more scope for private appropriation of surplus.

From this point of departure, it is possible to device three scenarios based on the hypothesis that the prevailing orthodoxy generates strong tendencies towards a major catastrophe, resembling perhaps that of World War I. Even though the multilateral push prevails at first, the unilateral leading state and the related logic of development of the world economy are usually to cause intensified competition among the super-states and major blocs.

Scenario 1a: The Neo-Imperial Competition between the Super-states/blocs

The first variation of Scenario 1 assumes that the long downward phase of the world economy will continue. The United States will stay in its new-imperial course. It is capable of rolling over and accumulating further its debts as well as maintaining its expensive military commitments all over the planet. The world economy as a whole is mostly in mild recession or, in some places, deep depression, except for some relatively weak and short-lived booms in the United States and elsewhere. However, significant growth may persist in China in particular, at least, as long as China refrains from liberalizing its financial markets and giving up its peculiar institutional arrangements.

Military interventions and wars in the global south are likely to become more widespread and some of them may escalate, thus, perhaps reversing the post-Cold War trend of fewer wars and fewer casualties in them. The EU learns to behave more and more like the United States and, thus, China may follow suit. By the early 20th Century, military doctrines have already become more oriented toward global policy and belligerent as part of the overall developments whereby economic orthodoxy as the basis of global governance has been strengthened and institutionalized. The main aim has been to secure the so-called good governance, which is free trade dominated by large transnational corporations, and respect for private property rights in every corner of the world, enforced by military if need be.

The designers of the post-Cold War military doctrines seem to be aware of the links between rising inequality and the contradictions of neoliberal governance. When a number of countries and regions are in economic decline and some face an outright collapse, local and regional conflicts may escalate and become increasingly violent. This gives rise to calls for so-called humanitarian intervention. The combination of demands of neoliberal governance, humanitarian crises, and acute economic and geopolitical interests creates a tendency towards increasingly frequent wars in the global South. Moreover, China may assume the right to intervene militarily in those developments it deems relevant.

In this scenario, one can assume that new-imperial tendencies will continue to gain strength. Some of the failed states and rogue states will, in fact, become part of a new system of mandate control. Available resources will remain constant, at least in per capita terms, or diminish at the level of the world economy as a whole. The systems of governance that were created by the United States and Britain at the end of the World War II will gradually erode, at least in part. When other states and blocs adopt tit-for-tat strategies in their responses to the unilateral policy of the United States , the systems of global governance may soon face a stalemate reminiscent of that of the UN during the Cold War. That may happen as well to the WTO. These developments may result in trade wars and tit-for-tat policies extended to other areas, too. Regional trade blocs and spheres of influence may thus replace global free trade, at least in some important regards. The United States , however, continues to strive for global domination and is, thus, likely to be in a collision course with federal Europe and other main actors such as China and Russia. This may lead to the formation of new military alliances as well, accompanied by the usual processes of mutual suspicion, enemy-construction and (possibly carefully regulated) high-tech arms-race, not unlike in the imperialist era that led to the World War I. Therefore, In the longer run, it is plausible to foresee a global catastrophe as a result of these developments.

Scenario 1b: The US Economy will Collapse and the US will React with Aggression

According to many analysts (e.g. Todd 2003; W. A. Herstein 2003), Scenario 1a is not particularly plausible because, for economic reasons, it is unlikely that the United States could continue in the current course; this is particularly true if the long downward phase continues. The military occupations of two developing countries of about 20 million people each, Afghanistan and Iraq, and the setting up of military bases all over the world, have already overstretched the military and economic capabilities of the US. It is impossible to keep paying what one cannot afford by just accumulating more debt. The weak and short-lived boom of 2004-2005 may be over by 2006. The Chinese, Japanese, and other Asian investors may loose confidence in the dollar-denominated IOU. The US dollar could, thus, fall and/or inflation rise. The Federal State will lose in an acute financial crisis, which will affect its military capabilities.

Obviously, the United States will not face the depression alone, for it will drag most parts of the world economy with it. China and the EU, nonetheless, may benefit, at least in relative terms, if the investors envisage them as more secure places for investments. The Euro may replace dollar to a significant degree as the most important currency of world trade. It is likely that the unilateral MO of the United States will react rather aggressively to this new situation. It may demand far-reaching concessions and even fees for its superior contribution to the so-called world security.[11]

Concurrently, the perception of the United States as a menacing tyrant is likely to become increasingly widespread, as part of the process of mutual enemy-construction. The often-heard analogy of political realists between the United States and the fate of Athens before and during the Peloponnesian Wars, in this sense, may become real. The United States has its allies and vassals in Europe and Asia, and it will try to use them, as well as its military capabilities, to put increasing pressure on the others. Again, this may lead to the formation of new military alliances as well, accompanied by the usual processes of mutual suspicion, enemy-creation, and (possibly carefully regulated) high-tech arms race. Indeed, in this scenario, a global catastrophe is plausible by now in the mid-run.

Scenario 1c: The New Imperial Growth will Generate Conflict

Perhaps one or more of the following are true:

- My pessimistic interpretation of the prospects of the world economy is wrong
- The partial re-regulation of financial markets that has occurred after every major crisis, albeit in accordance with the orthodox aim of ensuring the right conditions for the self-regulation of the markets, has made them more stable
- The marginal productivity of capital is not as low as I have assumed
- It is possible to overcome the tendencies towards under-consumption by combining the late 19th century neo-imperial recipes, military consumption, and further commodification in every possible field
- Military control can help to ensure cheap energy and raw materials, at least in the short to middle run (in the longer run, there are also obvious physical and ecological limits)
- low interest rates and availability of finance makes a new series of technological innovations possible, in accordance with Schumpeter’s theory, or
- all these together will suffice to turn the capitalist world economy into a new upward phase. This is a real possibility, although in my judgment — based on the above economic explanation of the downward phase — definitely less likely than scenarios Ia and Ib.

Many analysts, in particular world-system analysts such as Wallerstein (2003: p. 57) and Warren Wagar (1999: p. 20), seem to have fate on the possibility of a fifth Kondratieff cycle. In Wagar’s scenario, however, the new upward phase does not reverse the basic tendencies of capitalist world economy toward:

- Rising inequalities
- Formalized liberal democracy
- Rising crime rates, and
- A concentration of the means of production
- Population growth,
- Ecological crises.

Eventually, the new downturn will foment violence, which will result in the deepest world depression ever. In Wagar's scenario, when the great depression of the late 2030s occurs, no one tries to make the governance of capitalist world economy more democratic or conducive to economic recovery. To the contrary, every country or regional federation attempts to avoid the economic crisis by its own means and typically, it seems, by following simplistic orthodox recipes. In this kind of context, uncertainty, large-scale unemployment, and widespread impoverishment foment manifold and often deep-seated conflicts. These, in turn, will lead to drastic political changes in the US, enmity between the EU and its allies, and, finally, to nuclear war in the summer of 2044.

However, an analogy to the developments before the World War I may be more plausible than Wagar's scenario. Depending on the context, growth also may lead to collision between different identities and interests, to armament races, and eventually even to war. In particular, in the contexts of neo-imperial orientation and geopolitical competition such as those of pre-World War I and Cold War worlds, growth may also generate or intensify conflicts, suspicion and armament races (Choucri & North 1975; Ashley 1980). Moreover, growing relative inequalities and political economic insecurity may lead to hardening of political identities and wills, which may further deepen suspicions and enmities between states (including the EU) and their alliances. In addition, in this scenario, the global arrangements of free trade and investments may erode and be partially replaced by regional arrangements. This brings about the formation of new military alliances as well, accompanied by the usual processes of mutual suspicion, enemy-creation, and (possibly carefully regulated) high-tech arms race. Given these developments, a major global catastrophe is plausible in the mid to long run.[12]

What will have Changed after the Catastrophe?

A catastrophe might trigger a profound change in world politics. Some think it may be the only possibility. Wagar (forthcoming) goes as far as to argue that the world has had more than half a century to get it right. After what, to many observers, appeared to be the greatest catastrophe in human history—World War II—humankind may have enjoyed an unprecedented opportunity to build a stable, just, and integrated world order; it did not. The catastrophe was apparently not great enough: too much had survived intact. For the most part, though not entirely, we went back to business as usual. Capitalism, which had begun to globalize in earlier centuries, resumed its

globalization, and every nation went back to pursuing its so-called vital national interests. Now the last and only chance for humankind is—in all likelihood—a catastrophe that will shake civilization to its foundations.

In Wagar's (1999) own apocalyptic scenario, the countries surviving the nuclear war of 2044 will build a new world order, though at first they begin on the old basis. However, the World Party—secretly founded well before the catastrophe—starts to gain ground. Gradually, countries and regions join a new democratic and socialist Commonwealth, occasionally, only after a violent struggle. The last skirmishes between Commonwealth militias and local resistance groups take place in 2068. A democracy elects world parliament, which governs the new world order. In addition, it has a more sustainable ecological basis than its predecessor.

In my view, there is no guarantee that humanity would survive a nuclear war. Moreover, one has no reasonable basis to anticipate what the survivors of catastrophe of that magnitude would do and what kind of a world they would build. Perhaps it is true that the main historical lesson would be that capitalist world economy is indeed a contradictory and unstable system, which has inherent tendencies to produce catastrophes. Therefore, something better must replace it. However, what kind of a world system would be better? Wagar outlines a model of a centralized even though democratic world state and socialist system of production and exchange, without really specifying any details or demonstrating their viability.

Of course, a catastrophe can also assume forms other than a nuclear war that destroys half of the planet and kills seventy percent of the world's population. Many different outcomes of a major catastrophe are possible. At this point in history, however, we have an obligation to think about alternatives to a catastrophe rather than possibilities after it.

Scenario 2: Peaceful and Democratic Reforms of Global Governance

As ever, we may accommodate ourselves to the apparent necessities of world history (to take it as it comes). Alternatively, it is also possible to analyze following the basic tenets of realist social *sciences*, the rhythmic processes and causal mechanisms of the world in order to understand the main tendencies and potential causes of various possible futures. These processes and mechanisms are dependent upon actions. To the contrary, social structures and mechanisms are causally efficacious only through social actions. To the extent that there is adequate knowledge about the relevant tendencies, processes and mechanisms, it is therefore feasible to plan actions and try to make a difference in world history.

Is it possible to reform global governance in order to make it conducive to world economic and ecological recovery? Would it be possible to break the dual hegemony of orthodox economics and the US so to refashion the principles of global economic governance? This raises the question of change. There seem to be obstacles to changes. Not everything is possible. At the heart of the problem lie relations of domination and mechanisms of power that would somehow seem to prevent reforms from happening. Perhaps those social forces arguing for well-grounded substantial changes are not powerful enough. Perhaps the relevant relations of power should restructure to make these actors equal. In other words, the problem of reforming global governance is, largely, the problem of democratization. Then again, we also know that the condition for a global security community is that there are legitimate procedures to resolve conflicts by means of peaceful changes. In practice, attempts to open up social contexts for transformations, and developing their self-transforming capacity, amounts usually to their democratization (Patomaki 2003b: p. 365).

In the early 21st century, what might be a feasible strategy for democratizing and refashioning global governance to make it more peaceful and conducive to an (ecologically sustainable) economic upturn? Based on systematic analysis and evaluation of different proposals (see Patomaki & Teivainen forthcoming), it seems nearly impossible to democratize the UN system or, in particular, the undemocratic Breton Woods institutions. The WTO seems to be the existing multilateral arrangement that is most susceptible to democratic change. The one-country/one vote principle —upon which, in theory, the WTO functions—makes changes possible, however difficult they may appear at any given moment.

The WTO is central to the global project of locking in orthodox economic policies. The scope and powers of the WTO have been rapidly expanding. In principle, almost any issue, transnational corporate need, or want now relates to trade and, thus, the process of WTO law making cover the world corporate whims. Ultimately, trade is absolutely and perfectly free only in an idealized and universalized model of orthodox free market capitalism. In practice, the WTO also has a bias towards serving the particular commercial interests of the powerful. Democratic reforms of the WTO should, thus, focus, primarily, on reducing and redefining its scope and, secondly, on democratizing its preparatory process, decision-making procedures, and dispute settlement mechanisms. For the poorest countries, a mere GATT-type trade regime would be quite enough. For the other member-states, there should be opt-out mechanisms and room for different economic and developmental policies. Regulation of trade in services should disconnect itself from the project of liberalization and privatization of services. Agreement on Trade-Related Intellectual Property rights should reform to be more conducive to diffusion of technologies and free communication and move out of the WTO, possibly back to the UN Agreement on Trade-Related Investment Measures should give way to a new investment regime, holding foreign direct investors, and transnational corporations accountable to elected and liable global authorities.

However, the establishment of a debt arbitration mechanism with global taxes—and the currency transaction tax (CTT) in particular—should be the first priority for two main reasons: 1) global financial markets are at the heart of those causal mechanisms producing the tendency towards deflationary development, including • under consumption and overproduction • unemployment • declining prices • social problems, and the political reactions to them, and 2) many crucial mechanisms of power in the global political economy are based on financial dependency, both the creation of a debt arbitration mechanism and the CTT would be a great helpp They would relieve the dominance of global finance over states and, thereby, enhance the rule of law and democratic politics. Concurrently, they would create new and enabling sources for financing investments, development and other priorities.

By relieving the effects of debt and short-term finance on the policies of states, the debt arbitration mechanism and CTT would make a number of states more autonomous in the WTO negotiations. UN reforms will become more likely once new sources of funding the UN system become institutionalized. In this way, partial reforms will create new opportunities for further transformations.

Both the financial and the WTO reforms will be uncertain and contingent on the process of building political and social support. The precondition for this strategy is, therefore, the empowering of new political forces. A strong transnational movement for global transformations must exist. The World Social Forum (WSF) process stands out as a new major space created by and for global civil society. It is noteworthy that the WSF process has been independent of any state (except for the support of the Brazilian state of Rio Grande do Sul). In a relatively short time, it has built the capacity to generate new projects and alliances. The further empowerment of the democratic elements of the global civil society, especially via the WSF process, would seem to be a fundamental component of a strategy for global democratization. However, only coalitions of states can create international law. Thus, global civil society would have to learn to create and cultivate alliances with states, as well.

Scenario 3: Economic Crises and War Reaffirm the Need for Reform

If the movement for heterodox and democratic reforms of global governance does not succeed in achieving any of its (main) aims in the next five to ten years or so, it looks likely that the long downward wave will continue and new economic crises and conflicts between the main actors will occur. Moreover, the wars fought by the West—primarily by the US, though possibly by the NATO and the EU, too—in the global South are likely to expand and/or become more frequent. The planners of the new US and Western military doctrine seem to be aware of the problems of world economy. Usually the growing disparities and their potential role in creating or feeding conflicts are conceptualized either as the widening gap between haves and have-nots (see, e.g., US Space Command 2001) or in terms of the failed states (see e.g. Solana, 2003). Under the circumstances created by the continuation and possibly deepening of the downward wave in the world economy, a number of states will indeed fail or collapse, while the population of many others will be impoverished and, thus, possibly radicalized, depending on the context. As a result, many local or regional conflicts may escalate. Therefore, more requests for Western interventions will likely emerge. Furthermore, the new system of global security arrangements also means that the US and the West have the authorization to use military force whenever they see fit, also for furthering their particular—and increasingly imperially defined—interests. These developments seem to imply that Western wars in the South will expand and/or get more frequent.

Crises and wars will cause resistance to the means with which the economic orthodoxy and Western elites have framed the problems of global economy and security. Actors always have some knowledge about the circumstances of their own actions; and, they have the capacity, at least to a certain degree, to grasp the method by which social systems work. Therefore, they do not just accept any framing or interpretation, however homogeneous the official truth in the media, parties, schools and universities, bodies of states, regional integration organizations, or global governance may at that point appear.

The dialectic of control stems from the fact that power relations are always two-way. Every form of social power presupposes the cooperation of a large number of actors; and, this cooperation may or may not continue. Those in subordinate positions may convert whatever resources they possess into some degree of control over the reproduction of social systems, by resisting or by organizing collective, transforming actions (Giddens, 1979 p. 6, p. 146-9). Based on this, one could posit a hypothesis that the future crises and wars will, as expected, strengthen the worldwide counter-hegemonic reform-movement.

The consequences of the Asian crisis can indicate the likely scheme of the global dialectic of control. The Asian crises provided an opportunity for the US, the IMF, and the ideologues of economic orthodoxy to impose their preferred model on the so-called Asian tigers. Their accusation was that the Asian capitalism has been the crony style, which is corrupt and based on intimate but illegitimate networks of close friends. This is the alleged cause of the Asian crisis. (For a discussion about the problems of this explanation, see Patomaki 2001: p. 25-29) The solution was, of course, to replace the Asian model of crony capitalism with the so-called free markets, in order to make capitalism work properly. This was also the condition of the IMF rescue loans. Concurrently, the Western corporations and banks had the opportunity to buy Asian means of production at a great bargain (e.g., the dollar-valued price of Indonesian factories and enterprises in 1998 was only about four percent of their previous value [Singh 1999: p. 18]). Because of the Asian financial crises, Western actors and the economic orthodoxy disciplined the Asians countries more strongly than before.[13]

Then again, the global political movement opposing neoliberal globalization gained strength as a reaction to the Asian crisis. This movement demanded, among other things, drastic reforms of global financial markets, including establishment of the CTT. The ATTAC movement began in France in June of 1998. ATTAC has been a central force behind the development of the World Social Forum as well. The WSF is the first network of transnational networks that has been able to generate cooperation also across Southern continents. In other words, while the Asian crisis strengthened the grip of the orthodoxy over the countries facing the crisis (that until the crisis had formed the key exception to the rule of slackening global conditions), it also led to a new phase in the development of the global reformist movement. Wars can work in a similar fashion. The WSF has coordinated worldwide demonstrations protesting the war against Iraq, though the force of these demonstrations emerged from the spontaneous reaction of citizens around the world.

To what extent should one expect future crises and wars to strengthen the political movement for global reforms? Could it become such a strong factor that it could initiate and help to realize essential reforms of the governance of world economy? This is possible; however, in open systems there are always many kinds of forces and processes, often contradictory. The global dialectic of control may also take rather different forms than what the reformists might wish (Worth 2002). It is impossible to predict or anticipate all consequences of economic crises or wars. In other words, even though it is possible that scenario 3 will eventually merge with scenario 2, it is equally possible that it will degenerate into an early phase of scenario 1.

Conclusions

It is impossible to rule out that a fifth Kondratieff cycle would begin at some point because of a combination of neo-imperial policies. Those include securing cheap raw materials and energy to open new markets, military consumption, further commodification, and partly autonomous technological innovations, possibly aided by mechanisms and processes that have been ignored in the explanatory model presented in this paper. However, the iconic model of the geo-economic mechanisms and processes I have presented here makes this possibility look rather unlikely. To the contrary, because the problem seems to lie in the structurally determined under consumption/overproduction, low propensity to invest and the essentially connected orthodox orientation of economic policy, it is very difficult to see what is it that could generate a long-term upswing. The world economy will likely stay in recession or sink into a downward spiral in the absence of global structural reforms and a worldwide re-orientation of economic policies.

The future crises and wars depend also on the development of the world economy. My three scenarios do not exhaust world historical possibilities but they attempt to summarize a number of key issues regarding global economic governance. The first scenario, in its three variations, is based on the hypothesis elucidates in this paper that the prevailing orthodoxy generates strong tendencies towards a major catastrophe, resembling in some regards that of the World War I. Even though the multilateral prevails at first, the unilateralist policy of the leading state and the related logic of development of the world economy are likely to cause intensified competition among the super-states and major blocs. They may increasingly fall into military interventions and wars in the global South. The result of related geopolitical and geo-economic competition may be a major catastrophe.

The starting point of the second scenario is that a plan political actions and strategies based on plausible and realistic models of the relevant forces and mechanisms, seen to operate in open systems where strict predictions are impossible. The future also depends on our actions, however the identity of ‘one’ is specified. However, a realist strategy of change must be based on a systematic analysis of power mechanisms. The key is to deal with, first, the immediate causes of crises and forms of financial dependency by establishing a debt arbitration mechanism and the currency transaction tax. They would also release funds or, in the case of taxes, establish new public sources of funding for investments and development. Both can emerge via a group of willing countries, supported by local, national, and transnational civil society organizations. This would also empower a number of weak parties in the WTO to adopt independent positions. Because the WTO allows for the possibility of majority decision-making (one country, one vote), this would open up the prospect for drastic but carefully prepared WTO reforms. Without a strong global political movement, these changes are impossible.

The third scenario focuses on the dialectic of control, assuming that future crises and wars can strengthen the reform movement. It is not possible to generalize too far based on the Asian crisis, however. It is also noteworthy that the current reform movement has not been able to realize a single reform of the world economic governance. Rather, the grip of the orthodoxy has become even tighter than before. The familiar 19th century scheme—frustration and repression is seen as evidence that peaceful changes are impossible, that the only way to change is anything is through violence—may well be repeated in world politics in the 21st century. The long-term consequences might be as tragic as they were in the 20th century Russia. Nevertheless, it is clear that the counter-hegemonic movements may also assume nationalist, fascist, or fundamentalist forms. The third scenario might, thus, serve as a transition towards the first scenario.

Reference

1. Thank you Jarnic Morgan for your important qualification that, whereas, China does have a relatively low (but rising) debt service ratio with international banks, World Bank etc, it has a massive internal debt problem in terms of non-performance loans. These loans (mainly to state

owned enterprises) are estimated at up to 60% of the current valuation with the domestic banks. Because most of these are effectively state owned banks (though now quasi-privatized), this is state debt that affirms the capacity to pay international debt. In addition, the GDP growth estimates for China may be partially dubious, the Chinese tax system seems to be in a state of disarray, and budget problems and their debt service situation may be much worse than it currently looks from just the numbers. China is steadily reducing capital controls and, thus, foreign firms can now trade domestic financial instruments, domestic firms can now list directly on the Hong Kong and London exchanges, although the Chinese currency RMB remains pegged to the USD.

2. Fischer (2003: p. 9) accepts a technique of statistical manipulation of the household survey date to indicate, “Spectacular declines in poverty in India”. Galbraith (2003) criticizes Fischer for ignoring concrete developments within countries and the economic policies they have been following.

3. Parity refers to the exchange rate between the currencies of two countries making the purchasing power of both currencies equal. Purchasing power is the extent to which a given monetary unit can buy goods and services. Purchase power parity compares living standards in national economies independent of currency variations.

4. In this paper, I have to leave aside the question of the meaning of GDP measures. It has been emphasized by the so called ‘new economies’ that adequate growth in welfare measures should not take GDP figures at the face values, but should rather extract market-transactions generating social ills from it. For instance, “an Index of Sustainable Economic Welfare for the UK” shows that although GDP per capita has increased by about a third since 1979, sustainable economic welfare has fallen by a fifth during the same period (Robertson 1999, p. 132). In fact, the argument of this paper should be refashioned not only in terms of qualitative and sustainable welfare but also by taking into account the effects of commodification. Moreover, commodification indicates more market-transactions. The question whether commodification is good in any sense needs its own analysis.

5. Schumpeter’s contrastive point is the general ‘equilibrium’ of the neoclassical model of perfect competition. In that model, an invisible hand, managing a situation that is optimal to everyone, guides capitalist market economy, as it were. All units are in equilibrium and the world is stationary; there are also no profits. Schumpeter (1939a: p. 98) writes,

> What are doing amounts to this: we do not attack traditional theory, Walrasian or Marshallian, on its own ground. In particular, we do not take offence at its fundamental assumptions about business behavior—at the picture of prompt recognition of the data of a situation and of rational action in response to them. We know of course that these assumptions are far from reality; nevertheless, we hold that the logical schema of that theory is right in principle, deviations from it can be accounted for by introducing friction, lags, and the like, and they are being taken care of, with increasing success,

> by recent work developing from the traditional bases. However, we also hold that this model covers less ground than is commonly supposed.

Schumpeter's basic point is that the historical dynamics of capitalism is entirely based on innovations, guaranteeing a more or less permanent "non-equilibrium" in most markets, and making it possible to gain monopolistic profits, particularly in the new and most dynamic areas and from activities related to them. This seems to open up the problem of order anew. If non-equilibrium prevails, how is a chaos—and the possible collapse of the system—avoided? His answer is that there is in fact a visible hand managing the system, namely that of the bankers.

Schumpeter assumes a historically specific institutional setting (as he himself acknowledges on p. 118-119): the banks and their officers must not have any stake in the gains of enterprise beyond what the loan contract implies (p. 118). However, the basis of this model is long-term ties between the bankers and the entrepreneurs:

> It should be observed how important it is for the functioning of the system which we are trying to construct a model, that the bankers should know, and be able to judge, what his credit is used for and that he should be an independent agent. (p. 116)

Furthermore:

> The banker must not only know what the transaction is which he is asked to finance and how it is likely to turn out, but he must also know the customer, his business, and even his private habits, and get, by frequently talking over things with him', a clear picture of his situation. (p. 116)

The group of autonomous, knowledgeable, and virtuous bankers becomes, in a sense, the decentralized planner of the capitalist system, directing credit to innovations, thus rationally financing the positive dynamics of capitalism. However, in the latter part of the 20th century, public authorities often assumed just this kind of role: institutionalized in various ways (consider for instance the institutional differences between France, Finland, Japan, Singapore or Korea).

6. The basic ideas of orthodox economic theory developed in 18th century Britain. David Hume, for instance, put forward theories of self-correcting markets. He was a well-known early representative of the quantity theory of money. This theory says that —the prices of commodities are always proportioned to the plenty of money—(Hume 1955 (1752a]: 33); and it presupposes that the price-mechanism works perfectly in capitalist markets, balancing supply and demand automatically. Consequently, the meaning of quantity theory of money changed to imply that free capitalist market economy always tends to full employment. Hume's famous hypothesis of the price specie mechanism (Hume 1955 [1752b]) is an application of his quantity theory of money. This hypothesis says that the gold standard ensures that international free trade is always balanced. Markets are

self-correcting. Notably, Adam Smith and his *Wealth of Nations* (Smith 1910 [1776]) followed Hume. Smith invented, even if just in passing, the famous metaphor of—the invisible hand. Others soon generalized the metaphor to characterize all self-correcting markets, the basic idea that individual self-interested actions can lead, through self-correcting markets, to order and progress. The quantity of orthodox economic theory, by design, defends this notion. The so-called neoclassical revolution of the late 19th century falls within this perspective as well. Auguste Comte, Stanley Jevons, Leon Walras, Alfred Marshall, and Vilfredo Pareto developed notions such as marginal utility and marginal costs, elasticity of supply and demand curves, and general equilibrium analysis of price-determination. From the outset, the standard was to start from the assumptions, however arbitrary, which reinforced the laissez-faire conclusion of Hume and Smith. The success of the neoclassical revolution stemmed from the fact that it simultaneously safeguarded the kernel of the classical laissez faire orthodoxy and made it appear scientifically grounded and rigorous.

7. See e.g. Rawls (1973: 226), who argues that there is a tendency that "political power rapidly accumulates and becomes unequal; and making use of the coercive apparatus of the state and its law, those who gain the advantage can often assure themselves of a favored position. Thus, inequities in the economic and social system may soon undermine whatever political equality might have existed under fortunate historical conditions."

8. Obviously, there are a number of possible explanations for the development of overproduction and the excess capacity of production in different industries. Up to an extent, the building of excess capacity is part of normal investment, for production plants are designed with significant excess capacity and to work at high efficiency from low to full capacity (Keen 2001: p. 55). Furthermore, one may concur, at least in part, with Schumpeter (1939a: p. 86).

> Innovation is the outstanding fact in the economic history of capitalist society ... and that it is largely responsible for most of what one would, at first sight, attribute to other factors.

In addition, constant innovation means that, over both time and increased quantities, production costs tend to go down for each unit produced. Schumpeter (Ibid p. 88-89) even claims that:

> Whenever at any time a given quantity of output costs less to produce than the same or smaller quantity did cost or would have cost before, one may be sure, if prices of factors have not fallen, that there has been innovation somewhere.

Moreover, a variation of neoclassical analysis shows that monopolistic competition, in particular, can, and often does, give rise to the *excess capacity of production*. Arguably, the capitalist world economy has been increasingly characterized by monopolistic competition. This takes form as product differentiation generated by product development and systematic marketing campaigns, reinforced by the global institution of intellectual property rights (the TRIPS agreement in the WTO as the highest stage in the development of that institution). Global oligopolies (liberation of trade and investments and deregulation of financial activities have led to the concentration of many markets in the hands of a few global mega corporations. In monopolistic competition, changes and competition may trigger firms to opt for improved quality or more efficient production methods, instead of reduction in price (see Schumpeter 1939a: p. 67). Various forms of economics of scope and scale, combined with constant innovation, can in turn also reinforce the tendency toward oligopoly and monopoly.

Similarly, it is possible to presume that, independently of the details of the underlying economic dynamics, drastic or revolutionary technological development—such as the IT revolution of the 1990s—can in itself result in excess capacity of production relative to a given socioeconomic determined level of aggregate demand (Hamalianen 2002: p. 93). Moreover, it is possible that during a downward phase there is concurrently a low rate of aggregate investments—in accordance with the Keynes-Minsky hypothesis discussed soon in the main text—and relatively high level of productivity growth. This is due to an increasingly monopolistic competition and continuous technological improvements, particularly in those countries where the new and/or expanding sectors of industry are mostly concentrated in the global geo-economic division of labor. A systematic comparison and assessment of these prima facie plausible hypotheses goes beyond the scope of this paper.

9. The argument of young Schumpeter that imperialism proper presupposes export a monopoly and an absolutist state, the revenues of which depend on tariffs, is, at best, a partial truth (for a discussion, see Doyle 1995: p. 84-88). 19th century British Empire aimed precisely at furthering free trade as long as it served the interests of the British best. They also advanced free trade by destroying unsuitable modes of production in Africa and India in particular, often violently. However, the time of more exclusive imperial preferences did not arrive before the British were out-competed by other industrial producers, towards the end of the 19th century. In a similar fashion, albeit in a different context, the US at first supported free trade within the confines of the Breton Woods system, even when the system was not reciprocal but, in fact, favored the producers from other countries. Gradually, the US administrations and Congress began to interpret the conditions of free trade with an increasing unilateral slant, while developing a system of double morality in trade related matters. The US has also begun to demand the change of all those practices and institutions perceived as making the (privileged) access of US corporations, banks, and investment funds somehow difficult or less favorable. This is an analog of the British actions in Africa and India: a project about destroying all different economic systems, including historical variations of capitalist market economy. Instead of territorial expansion, however, the US has been content with controlling de facto the economic policies of other states and their means of production by relations

of ownership and other arrangements. One may interpret the military intervention into Iraq in 2003 as the next phase. Military force, once again, has become an explicit means to expand markets and control through ownership, while those who employ it justify it in terms of something analogical to the—white man's burden: civilizing the uncivilized others.

10. For a systematic analysis of the development and structures of the principal global regimes (the UN, the Breton Woods institutions, and GATT and WTO), see Patomaki & Teivainen forthcoming: chapters 1-3. See also the comprehensive and deep analysis of the history of the rules, practices, and mechanisms of global economic and environmental regulation in Braithwaite and Drahos 2000. They have summarized their findings in forty-four general conclusions (Ibid p. 27-33). The first one of them is that:

> The United States has been by far the most influential actor in accomplishing the globalization of regulation. Today the European Commission is beginning to approach US influence. When the United States and EU can agree on which direction global regulatory change should take, that is usually the direction it does take.

Their second conclusion:

> The states have been objects as well as subjects of regulation, regulators, and the regulated entities.

Third: The most recurrently effective actors in enrolling the power of states and the power of the most potent international organizations, e.g. the WTO and the IMF, are large US corporations.

Fourth: The International Chamber of Commerce is an important actor in the process of the globalization of commercial regulation.

Fifth: Individual legal entrepreneurs sometimes exert enormous power by selling a regulatory idea to the Chief Executive in Office (CEO) of a large company and persuading the CEO to enroll the power of a pivotal state actor, such as the US President.

11. For an interesting discussion about the unique institutional arrangements in China's economy, see Unger 1998: p. 105-12. However, constant pressure from Washington, Chinese policy-makers increasing socialization into the neoclassical orthodoxy and related belief in the inevitable convergence with the standard Western model, and China's entry into the WTO may mean that in a short-to-medium run China will follow suite the rest of the world by Anglo-Americanizing its institutions and liberalizing transnational finance. We have every reason to believe that this will cause an increased susceptibility to financial crises and the deterioration of conditions for further growth.

12. During the Cold War, many conflicts transformed into moments in the Cold War struggles between the superpowers (in addition to those that were, in fact, instigated either by the United

States or the Soviet Union). The United States and the Soviet Union often provided strong financial support and heavy weaponry to the warring parties, thus, making conflicts and wars more violent and often prolonging them. In addition, they used their veto in the United Nations to prevent the international community from taking any action. Since the end of the Cold War, it has been more difficult to fund wars and the interventions by the UN, OSCE, various NGOs, and third parties have been numerous.

13. The United States is struggling hard to keep its dollar as the currency of world trade and finance. As suggested elsewhere, this was one of the reasons for the military occupation of Iraq (Clark 2003). Iraq decided in November 2000 that it would switch its oil export revenues from dollar to euro; and, in 2002, there were serious discussions in Iran and even in OPEC to adopt the same policy. The heavily indebted United States could not have afforded to loose the privilege of controlling the main currency of global finance; the consequences to the United States economy might have been catastrophic.

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