The European Union: global challenge or global governance? 14 world system hypotheses and two scenarios on the future of the Union

Paper, prepared for

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Lecture in the framework of the Colloquium:

‘Zukunft: Europa vor globalen Herausforderungen’

26/27 April 2001, University of Trier, FRG

Opinions, expressed in this article, are those of the author in his capacity as Visiting Associate Professor of Political Science at Innsbruck University and not necessarily those of the Government of the Republic of Austria

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Gernot Köhler/Emilio José Chaves Globalization: Critical Perspectives
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Introduction

This paper starts from the assumption that there are two basic scenarios for the future of an enlarged European Union in the Tsunami world system. One is an enlarged EU that would be a global challenger, a scenario which would amount to the repetition of the cycles of global challenges, this time on the part of the European Union. Such a scenario might sound very distant at the moment, both culturally and politically, but it would correspond to the logic of world capitalism over the last 500 years, re-analyzed in this paper. Although such a scenario is not applicable to the present EU-15 or, at any rate, an EU-15, enlarged by the two island economies of Malta and Cyprus, and the present 10 Central and East European candidate countries, an EU comprising up to 40 nations of the third and fourth enlargement wave indeed would be a major change in the structure of the international system and could be driven by its own internal deficient dynamics, characterized by low innovation and high government spending, and by the pressures of the world system, into such a position. Again, the European landmass, united under one leadership, would then be in the challenging position, - as happened under the Hapsburgs, the French under Richelieu and later under Napoleon, and under Germany in World War I and II, while the dynamics of flexible, sea-power oriented world leadership again would be happening somewhere else. 14 hypotheses, presented here, speak in favor of such a pessimistic scenario.

A large section of the paper is thus dedicated to show, that a global challenge option - which might be implicit in the thinking behind the trilateral competition between Europe, America, and Asia - is not only not feasible, but that it is world politically dangerous. A second scenario is the European Union as the driving force behind a movement towards global governance, the only and reasonable alternative to the workings of the capitalist world system and it’s tendencies towards inequality and conflict. This scenario is the policy-option and practical end-result of the assessment of future trends in the world system, presented by Boswell and Chase-Dunn (2000). Although there is wide agreement in the literature on the need of a transition of the world system to a system of global governance (see Kiljunen, 2000, in this volume), the ways to achieve this are more or less a theme for speculation. In their world-systems-based analysis of the spiral of capitalism and socialism, Boswell and Chase-Dunn (1999) arrive at the conclusion that the European Union would be best fitted to become an engine of socially progressive transformation of the world system. Such an analysis would find lots of sympathy among labor-oriented or social-movement oriented circles on both sides of the Atlantic and beyond, and is also reflected in various other ‘denominations’ of the world systems profession, like in the statements by Samir Amin, who - although very critical of the Union in its present form - speaks about the necessity for Europe to become an alternative pole in the world economy, characterized by the tendencies towards unfettered globalization.

Our first scenario is somber in nature, it enjoys a high kind of probability, and it has dire consequences. It shows that there is a recurrent, and shortening cycle of conflict in the international system, linked to the long cycles of economics and politics. According to Arrighi, the usual, recurrent slumps in the long, fifty year economic (Kondratieff) cycles are called signal crises; while the interaction between the end of hegemonies (1340, 1560, 1750 and 1930) and the regular Kondratieff slumps are called terminal crises or - Tsunami waves, because they have catastrophic and devastating effects on the world system and have a high probability of leading - in a shortening time period - to major power wars. Our analysis first shows, that the danger of such a more, but not too distant, Tsunami cataclysm after 2030 is real. First of all, the social consequences of the ongoing phase of globalization already have the character of a Tsunami wave in itself. This leads us to expect sharper and even deeper social effects, should a terminal crisis - like during the 1930s -
hit the world economy again. The present phase of globalization is but the continuation of earlier globalization tendencies in the world system before the major power wars. Our analysis shows that the European Union repeats the errors of the import-substitution policies like those in Latin America in the late 1950s and early 1960s, so well known to dependencia theory, and becomes - like Brazil at that time - a technologically very dependent zone of the world economy. Europe is also facing the danger of repeating the fatal errors of the land-mass based attempts at world systems hegemony, like Venice, the Hapsburgs, France and Germany. The societal and economic contradictions of technological dependence and rent-seeking interact and increase, most probably leading towards a deepening of the unequal relations between the European center and the European periphery. Migration from the periphery to Europe, partially the result of these unequal exchange mechanisms with the European center, will increase the adaptation and globalization pressure on the European economy. Unlike America, whose economy is more open and thus adapts itself to migration much faster, Europe’s structures are too inflexible and technologically dependent. The predicted downward cycle of the European position in the world system threatens to lead to a more assertive and authoritarian pattern of action vis-à-vis migration and vis-à-vis the other big trading blocs. The increasing societal role of corruption and organized crime as well as the lack of democracy within the European Union will increase, and not decrease with EU enlargement.

Our assessment of the alternative that Europe could present in the transformation of the world towards a more humane and global governance should thus contribute to showing the dangers of a repetition of the hegemonial challenge scenario, that already was practiced by the Hapsburgs, by France and by Germany. A scenario, that was characterized each time by the combination of

protectionism + imperialism.

An imperial path for a United Europe would be the last thing, that the world needs, although there are - from past experiences - lots of indicators that would warn us, that Europe will follow precisely this path. Social science has the imperative to face up to existing dangers: thus, an early socio-liberal and democratizing reform of the European Union would be the (last) alternative to renewed global power rivalry, and conflict in the 21st Century, involving the European landmass.
The Tsunami social effects of globalization

Hypothesis 1: Turbo capitalism already has the devastating force of a Tsunami wave

No question that the world economy is characterized at present, as happened in earlier periods, by a quantitative and qualitative jump in the degree of globalization (Arrighi and Silver, 1999; Boswell and Chase-Dunn, 2000). Luttwak defines this present phase as ‘turbo capitalism’ by private enterprise, liberated from government regulation, unchecked by effective trade unions, unfettered by concerns for employees or communities, and unhindered by taxation or investment restrictions. Much has been written on globalization over recent years, but clear-cut estimates of the social effects of globalization over the last decades are rather absent from the literature. We think, that it is fair to assume the following tendencies: First, there is a tendency towards rising poverty on a global scale, especially after the Asian crash of 1997. Secondly, the introduction of capitalist development in East Central Europe and the former USSR brought about 9.7 million excess mortality cases in the region (UNDP, 1999, based on research by Giovanni Cornia from WIDER). Vulnerabilities go hand in hand with the openings of markets. Thirdly, there was a real impoverishment in the world from 1988 to 1993. The following Table is based on Branko Milanovic’s calculation of the effects of changing income distribution patterns on real household per capita incomes in about 100 countries of the world:

Table 1: absolute impoverishment, 1988 - 1993

<table>
<thead>
<tr>
<th>world income group (percentile)</th>
<th>income 1988 in $ PPP</th>
<th>income 1993 in $ PPP</th>
<th>Ratio 2:1</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>277.4</td>
<td>238.1</td>
<td>85.8</td>
</tr>
<tr>
<td>10</td>
<td>348.3</td>
<td>318.1</td>
<td>91.3</td>
</tr>
<tr>
<td>15</td>
<td>417.5</td>
<td>372.9</td>
<td>89.3</td>
</tr>
<tr>
<td>20</td>
<td>486.1</td>
<td>432.1</td>
<td>88.9</td>
</tr>
<tr>
<td>25</td>
<td>558.3</td>
<td>495.8</td>
<td>88.8</td>
</tr>
<tr>
<td>30</td>
<td>633.2</td>
<td>586</td>
<td>92.5</td>
</tr>
<tr>
<td>35</td>
<td>714.5</td>
<td>657.7</td>
<td>92.1</td>
</tr>
<tr>
<td>40</td>
<td>802.7</td>
<td>741.9</td>
<td>92.4</td>
</tr>
<tr>
<td>45</td>
<td>908.3</td>
<td>883.2</td>
<td>97.2</td>
</tr>
<tr>
<td>50</td>
<td>1047.5</td>
<td>1044.1</td>
<td>99.7</td>
</tr>
<tr>
<td>55</td>
<td>1314.4</td>
<td>1164.9</td>
<td>88.6</td>
</tr>
<tr>
<td>60</td>
<td>1522.7</td>
<td>1505</td>
<td>98.8</td>
</tr>
<tr>
<td>65</td>
<td>1898.9</td>
<td>1856.8</td>
<td>97.8</td>
</tr>
<tr>
<td>70</td>
<td>2698.5</td>
<td>2326.8</td>
<td>86.2</td>
</tr>
<tr>
<td>75</td>
<td>3597</td>
<td>3005.6</td>
<td>83.6</td>
</tr>
<tr>
<td>80</td>
<td>4370</td>
<td>4508.1</td>
<td>103.2</td>
</tr>
<tr>
<td>85</td>
<td>5998.9</td>
<td>6563.3</td>
<td>109.4</td>
</tr>
<tr>
<td>90</td>
<td>8044</td>
<td>9109.8</td>
<td>113.2</td>
</tr>
<tr>
<td>95</td>
<td>11518.4</td>
<td>13240.7</td>
<td>115</td>
</tr>
<tr>
<td>99</td>
<td>20773.2</td>
<td>24447.1</td>
<td>117.7</td>
</tr>
</tbody>
</table>

Source: Branko Milanovic, World Bank, 2000
Milanovic’s data can also be presented in a graphical fashion: only 1/5 of the world population had rising real incomes since the onslaught of turbo-capitalism, while 1/2 impoverished and the rest struggled to get along or saw reductions in their absolute incomes:

Graph 1: only 20% of the world population really gain from globalization

Source: our own compilations from Branko Milanovic, 2000

Adherents of turbo-capitalism thus are confronted with the fact, that 4/5 of humankind impoverished in real terms from 1988-1993 and most probably, beyond. Four, also the University of Texas Inequality Project for inequality in over 70 countries of the world since 1963 shows that the 1990s brought along a huge increase in inequality, as measured by the Theil Index of Inequality of Sectoral Incomes:

Graph 2: globalization increases inequality
Turbo-capitalism and inequality

![Graph showing Theil-indices UTIP-Project](chart.png)

Source: our own compilation from University of Texas Inequality Project, University of Texas at Austin, http://utip.gov.utexas.edu/
For further notes on the **Theil measure** of inequality:
http://www.economics.uni-linz.ac.at/Paper/papers/9614.htm

Fifth there is a tendency towards an increase in poverty on a truly global scale - in every geographic region of the former ‘Second’ and ‘Third’ World absolute poverty increased from 1996 to 1998:

Table 2: World Poverty: the number of people living on less than 2 $ per day and capita increased sharply due to the crash economy of the 1990s

<table>
<thead>
<tr>
<th></th>
<th>E Asia + Pacific</th>
<th>Eastern Europe + Central Asia</th>
<th>Latin America</th>
<th>Middle East and North Africa</th>
<th>South Asia</th>
<th>Sub Saharan China</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>236,3</td>
<td>92,7</td>
<td>179,8</td>
<td>60,6</td>
<td>1069,5</td>
<td>457,7</td>
</tr>
<tr>
<td>1998</td>
<td>260,1</td>
<td>92,9</td>
<td>182,9</td>
<td>62,4</td>
<td>1095,9</td>
<td>474,8</td>
</tr>
</tbody>
</table>

Thus, it is fair to assume that turbo-capitalism meant increasing poverty on a global scale in the former ‘Second’ and ‘Third World’.

In the industrialized countries, however, there are - as point number six - rather mixed tendencies at work, with inequality shaping markedly the leading countries of the ‘Washington consensus’.

Table 3: income concentration in the leading countries of the Washington consensus
richest 20% to poorest 20% now | richest 20% to poorest 20% years ago | change in the top/bottom ratio
--- | --- | ---
New Zealand | 17.40 | 8.80 | 8.60
USA | 8.90 | 8.90 | 0.00
Australia | 7.00 | 9.60 | -2.60
United Kingdom | 6.50 | 6.80 | -0.30
Ireland | 6.40 | 6.40 | 0.00
Israel | 6.20 | 6.60 | -0.40
Portugal | 5.90 | 5.90 | 0.00
Switzerland | 5.80 | 8.60 | -2.80
France | 5.60 | 5.60 | 0.00
Netherlands | 5.50 | 5.60 | -0.10
Spain | 5.40 | 5.80 | -0.40
Greece | 5.40 | 5.40 | 0.00
Canada | 5.20 | 7.10 | -1.90
Germany | 4.70 | 5.70 | -1.00
Italy | 4.20 | 6.00 | -1.80
Luxembourg | 3.90 | 3.90 | 0.00
Norway | 3.70 | 5.90 | -2.20
Sweden | 3.60 | 4.60 | -1.00
Belgium | 3.60 | 4.60 | -1.00
Finland | 3.60 | 6.00 | -2.40
Denmark | 3.60 | 7.10 | -3.50
Japan | 3.40 | 4.30 | -0.90
Austria | 3.20 | 3.20 | 0.00

Legend: our own compilations from UNDP Human Development Reports, 1993 - 2000

In the United States, real hourly wages for all employees fell by 12% between 1973 and 1990 and remained flat throughout the boom of the 1990s. Longer working years, a rising inequality between the skilled and the unskilled, and a higher labor market turnover rate characterize the American ‘miracle’, that, in the end, means above all an increased wealth of the top 20% of the population (R. A. Walker, 1999).

Long cycle literature tells us, why there is a recurrent pattern of instability of social orders at the level of national societies and at the level of the international system. Long cycle literature would presume that especially out of a situation that is comparable to the de-regulatory and internationally polarizing globalization phases of the mid 1700s and mid 1800s, the evolution of a global challenge situation in the international system by the protectionist and technologically dependent losers would be the most probable outcome. Following this logic, there would be a danger, that large parts of Europe still would have to implement a large part of the agenda of the ‘Washington consensus’, which would make more authoritarian patterns, to be combined with the global challenging position, all the more likely. Thus, our scenario ‘A’ shows the logic and the dangers of such a global challenge situation, and also analyzes the European perspectives under such a scenario.

**The logic of past and future global conflict**

**Hypothesis 2: there is a Tsunami war cycle of 100 to 150 years length**
Globalization theory (see Kiljunen, 2000, in this volume) assumes that global governance must become the answer to the tendencies of polarization and poverty described above. Global conflict theory answers by saying that without global governance and peace mechanisms, the world system would threaten to drift back into deadly cycles of hegemonial challenge and global wars. History does not end, thus, only flags have changed. According to Goldstein’s empirical analysis in particular (1988), the capitalist world systems tends continuously towards wars and violent conflicts. Although such assumptions and theses are quite common in long-wave research, a thorough re-analysis of the original data presented by Goldstein is carried out here, especially to test the validity of polynomial trends as applied to the original, untransformed data series on economic (industrial) growth and battle fatalities from major power wars. We thus demonstrate that there is an inherent logic of conflict in the international capitalist system since 1450. Future research might also explore the wealth of data presented in such documentary sites as the ‘Global Financial Data’ website (http://www.globalfindata.com/) and other data resources, mentioned by the Longwave Press homepage at http://www.1-888.com/longwave/sd.html. For the purposes of the present research paper, the re-analysis of the Goldstein data seems to be sufficient.

Graph 3: The Tsunamis of global war. Tendencies of the capitalist world economy towards conflict cycles and Kondratieff cycles

The structural similarity between the world economic and political cycles

Legend: y-axis: economic growth (left hand scale) and war intensity (right-hand scale) in the world economy. x-axis: passage of time since the beginning of a cycle. For the economic cycles, moving 9-year averages, calculated with EXCEL 5.0 from Goldstein’s original data. War intensity = nat. logarithm from \((1 + \text{battle fatalities from great-power wars})^{0.10}\)
The recurrence of major power wars in the capitalist world economy from 1495 to the present is one of the most intriguing features of the existing international system. The x-axis in Graph 3 presents the number of years after the end of the major power wars, i.e. 1648, 1816, and 1945. Each world political cycle up to now corresponded to a ‘W’-pattern of untransformed annual battle fatalities from major power wars in thousands. The war cycle 1495-1648 is a polynomial expression of the 6th order; R² is 91.7%; 1649-1816 yields an R² of 33.6%; while a polynomial expression of the 6th order explains 50.1% of war intensity 1817-1945. The international system is characterized according to Goldstein by the following sequence of cycles

global war → world hegemony of the dominant power → de-legitimization of the international order → de-concentration of the global system → global war et cetera

The duration of these phases of the international order is approximately one Kondratieff cycle each, so the unit of time of the international system can be symbolized by the expression 1ₖ.

Graph 4: The war cycles from 1495 to 1975

1495-1648 - the evolution of the Hapsburg versus rest constellation
$\text{war intensity} = -9E-10 x 6 + 4E-07 x 5 - 6E-05 x 4 + 0,0039 x 3 - 0,1211 x 2 + 1,7435 x - 3,4023$

$R^2 = 0.917$

$y = \text{war intensity (untransformed)}$

**1649-1816 - the evolution of the France versus rest constellation**

$y = 3E-10 x^6 - 2E-07 x^5 + 4E-05 x^4 - 0,0045 x^3 + 0,2051 x^2 - 2,6278 x + 27,828$

$R^2 = 0.3356$

$y = \text{war intensity (untransformed)}$

**1817-1945 - the evolution of the Germany versus rest constellation**
y = war intensity (untransformed)

1946 - the evolution of a European landmass versus rest constellation?

Legend for all the above graphs: x-axis: years; y-axis: annual battle fatalities from major great power wars in thousands

As it is well known in world systems research, each such long cycle of world politics is characterized, according to Modelski, by a dominant world economic power and its challenger. Goldstein and Modelski described these world political cycles in great detail, so there is no need to repeat their reasoning here. The simple statistical evidence to support Goldstein’s theory on the basis of his own original data is surprising, though. Our tests use a very common software, available on millions of home micro-computers around the world (the EXCEL 5.0 program). The $R^2$ for the test series is between 31% and 91%; no transformation of the data was needed. The W-structure of conflict emerges clearly from all the tests. And each time, the challengers for world hegemony of a dominant seapower were members of the former winning, ruling coalition from a preceding major global war (France during the Thirty Years War, Germany during the Napoleonic Wars, Russia + China - or a very much enlarged European Union - during the Second World War), while
the challengers in the world wars (Thirty Years War, Napoleonic Wars, German Wars of our century) always were continental powers (the Hapsburgs, France, Germany) (see also: Modelski, 1987; Goldstein, 1988).

**Capitalist instability on a global scale**

**Hypothesis 3: signal crises (Kuznets and Kondratieff cycles) characterize capitalism**

The construction of theories on cyclical trends in the world economy are certainly not absent from a very long tradition of scholarship in political economy, beginning with Kuznets and Schumpeter. The very logic of industrial processes and basic innovations, as well as the societal models, connected with them, would suggest to build cyclical fluctuations into more general theories of development (Amin, 1997). Blast furnaces and other important components of the industrial process, too, have a certain life-cycle, comparable with the Juglar and Kuznets cycle, just as technical innovations are scattered in a non-random fashion along time, coinciding with the Kondratieff cycle (Bornschier, 1988; for a very comprehensive summary Scandella, 1998). There are short term instabilities of 3 to 5 years (Kitchin cycles), 8-11 years (Juglar cycles), 18-22 years (Kuznets cycles), and these longer, 40-60 year Kondratieff waves.

Although references to such theories abound, it is hard to convince the ‘non-believers’ in the social science profession that longer cycles, especially Kondratieff waves, exist. It should be kept in mind, that - in contrast to the real Kuznets cycles - Kondratieff waves are more often than not, mere tendencies, and are interrupted by the very marked ups and downs of the shorter, Kuznets cycles.

A word should also be said about our data series. As in the well-known Cambridge lecture series of Ernest Mandel (1995), our data series is based on the two Kuczynski/Kleinknecht/Goldstein **world industrial production** time series, elaborated by Goldstein (1988), augmented by data, presented in Tausch (1998) for the post 1975 period. Since 1975, we used UN ECE Economic Survey of Europe, IFRI data (world GDP growth) and IMF World Economic Outlook data (for OECD country growth as a proxy for world development. We are aware of the fact, that such time series are only estimates of the underlying, real fluctuations, and that all such data series are open to far-reaching criticisms and debates. Comparison with other data series, like the Internet data series by Terry Laundry, and other freely available Web materials (http://csf.colorado.edu/longwaves/ and also http://www.globalfindata.com/), must take into account, that our data are real production data and not data describing prices or stock market values.

Let $X_{tn+1}$ be the index value of world production for $tn+1$, $X_{tn}$ index value of world production for $tn$ then

\[
\text{(1) growth } = \frac{X_{tn+1}}{X_{tn}} - 1
\]
For the post-1975 data on OECD country economic growth we used UN ECE; Fischer Weltalmanach, and Tausch, 1998. X is the time axis.

The results for the Kuznets type fluctuations of the untransformed growth rates are:

Table 3: Kuznets cycles since 1740

<table>
<thead>
<tr>
<th>Period</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1741-1756</td>
<td>23.5%</td>
</tr>
<tr>
<td>1756-1774</td>
<td>34.8%</td>
</tr>
<tr>
<td>1774-1793</td>
<td>39.7%</td>
</tr>
<tr>
<td>1793-1812</td>
<td>16.4%</td>
</tr>
<tr>
<td>1812-1832</td>
<td>25.7%</td>
</tr>
<tr>
<td>1832-1862</td>
<td>36.3%</td>
</tr>
<tr>
<td>1862-1885</td>
<td>56.2%</td>
</tr>
<tr>
<td>1885-1908</td>
<td>19.1%</td>
</tr>
<tr>
<td>1908-1932</td>
<td>68.8%</td>
</tr>
<tr>
<td>1932-1958</td>
<td>66.2%</td>
</tr>
<tr>
<td>1958-1975</td>
<td>19.1%</td>
</tr>
<tr>
<td>1975-1992</td>
<td>68.8%</td>
</tr>
</tbody>
</table>

Various methods will be used here to present Goldstein’s augmented data-series as Kondratieff cycles:

Graph 5: The long waves of growth and recession since 1740 - 10 year (decade) averages

Legend: average, decade-long growth rates 1740 - 1990

Graph 6: 5 and 9-year moving averages of world (industrial) growth since 1740
Cycles in the world economy

Legend: economic growth in the world system since 1740; adapted from Goldstein, 1988 and UN ECE/Fischer Weltalmanach, current issues. 5 and 9-year moving averages

The Kondratieff cycle dating game

At present, the world economy is heading for a longer world economic ascent, that might be interrupted by a Kuznets-type downswing in succession of 1958, 1975, 1992. After the economic crisis of 1825, the stock exchange collapse of 1873, the Black Friday of 1929 and the world recession starting in 1973/75, world
capitalism has experienced quite severe downswing-phases, that hit with elementary weight especially the countries of the periphery and the semi-periphery.

The data series, constructed from Goldstein’s original data, is explained quite markedly by the application of the Kondratieff and Kuznets-cycle hypotheses, even when there are no data filtering or smoothening operations being performed. And add to this the lagged movement of world prices and interest rates, which are part and parcel of the cycle structure (Scandella, 1998). Among the main theories, that explain these Kondratieff cycles, the following schools stand out (Bornschier and Suter, 1992):

(i) economic factor theories, that again have to be broken down into the sub-categories of innovation theories, capital accumulation theories, sector theories, and terms of trade approaches
(ii) socio-cultural factor theories, that explain the long cycles from the viewpoint of quantitative and historical sociology, by the social structure of accumulation, by the modes of regulation (regulatory approaches), by technological styles, by employment processes, by social inequality trends, by social movements and conflicts, by cycles of order, or by societal structural change
(iii) hegemonic cycle theories in the quantitative international relations school, that link Kondratieff cycles to international instability, war and peace.

For Bornschier’s sociology of the long cycle, there are the following phases

(i) upswing
(ii) prosperity
(iii) prosperity-recession
(iv) crisis
(v) temporary recovery
(vi) depression

The final result of our Kondratieff-cycle estimates is the following:

Graph 7: Kondratieff cycles, based on 9 year moving averages

\[ y = -7E-09x^6 + 2E-06x^5 - 0.0001x^4 + 0.0056x^3 - 0.1033x^2 + 0.9111x - 1.5558 \]

\[ R^2 = 0.5331 \]
1832-1885

\[ y = 2 \times 10^{-8}x^6 - 3 \times 10^{-6}x^5 + 0.0002x^4 - 0.0059x^3 + 0.0916x^2 - 0.5649x + 4.6244 \]

\[ R^2 = 0.2029 \]

1885-1932

\[ y = 6 \times 10^{-8}x^6 - 1 \times 10^{-5}x^5 + 0.0007x^4 - 0.0205x^3 + 0.2866x^2 - 1.5517x + 5.9934 \]

\[ R^2 = 0.512 \]

1932-1982

\[ y = 4 \times 10^{-7}x^6 + 7 \times 10^{-5}x^5 - 0.0044x^4 + 0.1379x^3 - 2.0686x^2 + 12.981x - 16.333 \]

\[ R^2 = 0.1434 \]
Legend: economic growth rates in the world system, as being estimated from Goldstein’s data series

If we let the postwar-cycle end with 1975, the functions have the following shape:

Graph 8: The cycle 1932 - 1975/1982

1932 - 1975

Legend: data about the severity of the depression in 1975 differ according to the data source used.

The following dating scheme could be suggested in the light of the Schumpeterian theory tradition and also in the light of new evidence, put forward about world inflation (Scandella, 1998; Bornschier, 1988 and 1996; Laughland, 1998). Laughland’s time series about world inflation is especially relevant here, since it attempts to cover the industrialized world. It records the world depressions, as in our approach, during the 1740s and 1740s, the 1830s and 1840s, the 1880s and 1930s. For us, 1756, 1832, 1885, 1932 and 1975-82 are the beginnings of new Kondratieff cycles, while 1756, 1774, 1793, 1812, 1832, 1862, 1885, 1908, 1932, 1958, 1975, and 1992 are the turning points of Kuznets cycles. This dating scheme contradicts in one major respect the dating attempts by Ernest Mandel and Joshua Goldstein, whose second 19th Century depression ends by around 1895, and not 1885 or 1875. However, by dating the late 19th Century depression too late, the cycle from the late 19th Century to the Great Depression of the 1930s becomes too short in duration:

Graph 9: the dating game of the Kondratieff cycle in the second half of the 19th Century ...
The late 19th Century, most probably like the early 21st Century, as a period of intensive globalization, is characterized by very strong shorter-term fluctuations.

It is important to remember that the B-phases in the Kondratieff cycles present a downswing in yearly growth rates, that can be traced even by using the original data, and not just by moving averages. However,
the B-phase tendency became more pronounced over time, while in earlier periods, the Kuznets- and Juglar cycle fluctuations overlapped strongly with Kondratieffs:

Graph 11: the downswing phases

**The Kondratieff B-phase 1740-1756**

- Equation: $y = -0.3553x + 4.395$
- $R^2 = 0.0491$

**The Kondratieff B-phase 1799-1832**

- Linear trend 1799-1832: $y = -0.04x + R^2 = 0.0031$
- Trend taking into account for the end of the Napoleonic wars: $y = -0.151x^2 + 0.151x - 2.2824x + 11.337$
- $R^2 = 0.092$

From the graphs, it can be seen that the B-phase tendencies significantly increased over time, with the Napoleonic wars and post-war period causing a notable depression and recovery phase.
The Kondratieff B-phase 1865-1885

\[ y = -0.2211x + 5.7611 \]

\[ R^2 = 0.07 \]

The Kondratieff B-phase 1915-1932

\[ y = -0.0399x^2 + 0.6039x + 2.0801 \]

\[ R^2 = 0.1254 \]
The stylized Kondratieff-functions that express a tendency, rather than a cycle in the world economy, could have the following form:

Graph 12: the stylized Kondratieff cycles since 1740

Source: our own compilations, using a cosine function (1740 = 0; 1741 = 0,85; 1742 = 0,85 + 0,85 etc.). Economic growth in the world system since 1740; adapted from Goldstein, 1988 and UN ECE/Fischer Weltalmanach, current issues. 5 and 9-year moving averages and the trend lines for these two data series

In his overview of Kondratieff cycle theories, Luigi Scandella re-interprets parts of economic theory, like the Phillips curve and the Fisher equation, in the light of the long-cycle literature and arrives at the conclusion, that **price levels** and **interest rates** fluctuate as well in the above described way, with a time-lag of 5 to 10 years between production and price levels and between price levels and interest rates. Thus the way is open
for important further empirical research, since historic price level data are far more complete than historic production data.

Contemporary world system research did not spell out as clearly as would have been necessary the interrelationship between the Kondratieff cycles and the Kuznets cycles. Kuznets cycles are especially relevant for our understanding of the ups and downs of world economics and politics: our data series, constructed from Goldstein’s original data, is explained quite markedly by the application of Kuznets-cycle hypotheses, even when there are now data filtering or smoothening operations being performed:

Graph 13: Kuznets-cycles in the world system, 1756 - 1997

\[ y = -0.0003x^6 + 0.0176x^5 - 0.3532x^4 + 3.5022x^3 - 17.774x^2 + 42.357x - 31.539 \]
\[ R^2 = 0.2325 \]

\[ y = -0.0002x^6 + 0.0102x^5 - 0.2386x^4 + 2.7089x^3 - 15.311x^2 + 39.939x - 36.574 \]
\[ R^2 = 0.3614 \]
1774-1793

\[ y = -0.0002x^6 + 0.0106x^5 - 0.2586x^4 + 3.0578x^3 - 17.768x^2 + 46.041x - 37.708 \]
\[ R^2 = 0.3478 \]

1793-1812

\[ y = -0.0001x^6 + 0.0074x^5 - 0.1768x^4 + 2.1055x^3 - 13.051x^2 + 39.691x - 40.7 \]
\[ R^2 = 0.3968 \]

1812-1832

\[ y = -4E-05x^6 + 0.0025x^5 - 0.0675x^4 + 0.9161x^3 - 6.5065x^2 + 22.222x - 23.482 \]
\[ R^2 = 0.1636 \]
1832-1862

\[ y = -6.06x^6 + 0.0006x^5 - 0.0229x^4 + 0.4224x^3 - 3.8349x^2 + 15.09x - 13.498 \]
\[ R^2 = 0.2568 \]

1862-1885

\[ y = -2.05x^6 + 0.0013x^5 - 0.0417x^4 + 0.6674x^3 - 5.6411x^2 + 22.576x - 25.604 \]
\[ R^2 = 0.3629 \]

1885-1908

\[ y = -4.05x^6 + 0.0031x^5 - 0.0905x^4 + 1.2887x^3 - 9.0431x^2 + 27.839x - 21.835 \]
\[ R^2 = 0.5622 \]
1908-1932

\[ y = 2 \times 10^{-6}x^6 + 7 \times 10^{-5}x^5 - 0.011x^4 + 0.3325x^3 - 3.9099x^2 + 17.576x - 18.931 \]

\[ R^2 = 0.4422 \]

1932-1958

\[ y = 2 \times 10^{-6}x^6 - 1 \times 10^{-4}x^5 + 5 \times 10^{-5}x^4 + 0.1011x^3 - 2.2132x^2 + 15.39x - 20.666 \]

\[ R^2 = 0.1913 \]

1958-1975

\[ y = -0.0002x^6 + 0.0116x^5 - 0.2524x^4 + 2.6843x^3 - 14.468x^2 + 36.384x - 25.495 \]

\[ R^2 = 0.6882 \]

1975 - 1992 (estimate 1)
$y = -2E-05x^6 + 0.0017x^5 + 0.0496x^4 + 0.6925x^3 - 4.7212x^2 + 14.017x - 10.136$

$R^2 = 0.6619$

Legend: EXCEL multiple regressions, based on ‘insert trend lines’; the data are the original, un-transformed growth rates of capitalist world production, according to Goldstein, 1988, as calculated in Chapter 3. The data series about industrial country GDP growth 1975 - 1997 is from UN ECE (Economic Survey of Europe), IFRI and IMF sources (World Economic Outlook). In the last graph about growth in the period 1975 - 1998, we also show 2-year sliding averages. The difference between the two data series lies in the assumption about economic growth in the 1990s. (1) is based on IFRI; (2) is based on IMF

**The shortening sequence of crises in the world economy**

The summary conclusion from the above presented evidence is the hypothesis about the shortening of the cycles:

**Hypothesis 4: signal crises and terminal crises occur at a shortening rhythm**
As it is well-known in world system research, there are signal crises of world capitalism (the usual Kondratieff depressions), and there are terminal crises of the world system, like the great crash of the early 1340s, which marked the beginning of the Genoese age (Arrighi) or Portuguese and Genoese age (Modelski), the crash of the 1560s, which marked the beginning of the Dutch era, the depression of the 1750s and 1760s, which marked the beginning of the British era, and the Great depression 1930s, which was the terminal crisis of British world capitalist dominance (Arrighi, 1995). Regulation can be successful, like after 1560, and 1930, and deregulation can be successful, like after 1340, 1760, and - most probably - the 1980s (compiled from Arrighi, 1995). The ‘logistic cycle’ of British hegemony in the capitalist world system has the following shape:
American hegemony in world capitalism

Legend: our own compilations from Goldstein, 1988

A world hegemony thus evolves and declines during two Kondratieff cycles. We think it fairly safe to assume, that there is no such early forthcoming terminal crisis of the capitalist system, but that the risk for such a crisis rapidly increases after 2020 or 2030. Even at the risk of gross oversimplification, the following scheme could be drawn:

Scheme 1: terminal crises of capitalism
Source: our own compilation from Arrighi, 1995, and Tausch, 1998. The above graph can be interpreted only as a very rough simplification.

This leaves us with the not so comfortable thought, that the next terminal crisis will affect the world by 2080 at the latest. But, as a genuinely new hypothesis in the literature, we start from the well-funded assumption that one of the most alarming features of today’s globalized casino capitalism is that cycles tend to become shorter again. It is entirely conceivable that Kuznets cycles will last in future 15 years or less, and Kondratieff cycles 30 years or less. This will mean a growth of instability in the world capitalist system, with an ever shorter sequence of ups and downs, ins and outs, past and future ‘models’ and growth and decay regions and sectors, that will change like fashions. The savings and labor of entire generations will be thrown overboard in a few days of speculative storms. The evolutionary length of cycles is the following:

Table 4: the length of Kuznets and Kondratieff cycles in the history of world capitalism

<table>
<thead>
<tr>
<th>Kuznets cycles</th>
<th>Kondratieff cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1756</td>
<td>18</td>
</tr>
<tr>
<td>1774</td>
<td>19</td>
</tr>
<tr>
<td>1793</td>
<td>19</td>
</tr>
<tr>
<td>1812</td>
<td>20</td>
</tr>
<tr>
<td>1832</td>
<td>30</td>
</tr>
<tr>
<td>1862</td>
<td>23</td>
</tr>
<tr>
<td>1885</td>
<td>23</td>
</tr>
<tr>
<td>1908</td>
<td>24</td>
</tr>
<tr>
<td>1932</td>
<td>26</td>
</tr>
<tr>
<td>1958</td>
<td>17</td>
</tr>
<tr>
<td>1975</td>
<td>17</td>
</tr>
<tr>
<td>1992</td>
<td></td>
</tr>
</tbody>
</table>

The following scheme now shows the continuation of what we interpret to be Arrighi’s thought, above:

Scheme 2: Kondratieff and Kuznets cycles - their length since 1740
The shortening of capitalist cycles

Legend: Kuznets and Kondratieff cycle length in years

Scheme 3: the length of Kondratieff and Kuznets cycles and growth rates since 1740. Cycle length in world capitalism

Legend: yearly economic growth rate in %, left-hand scale. Length of the Kuznets cycle in years (left hand scale). Length of the Kondratieff cycle in years (right hand scale). Our own re-interpretation of the length of Kuznets and Kondratieff cycles in world capitalism, based on Goldstein’s data on world growth, 1988.

The effects of Tsunami waves in history
Tsunami waves have devastating effects on the world societal system. Since we do not have, say, time-series estimates about infant mortality, life expectancy, wages and income distribution over time in countries of the world system since 1300 or 1400 we have to present crude guesses about the social effects of earlier Tsunami waves in history. We now try to present such very preliminary findings from the secondary analysis of published literature. The terminal crises of 1340, 1560, 1750, and 1930 happened before or during the 100 years Italian War, the Thirty Years War, the Napoleonic Wars and the Second World War as the culmination of the German Wars of the last Century.

**Hypothesis 5: terminal crises of capitalism are Tsunami waves, and they have a devastating effect on the world social system**

The Tsunami-like effects of terminal crises of capitalism can be assessed for earlier periods only indirectly. We stipulate here, that the devastating consequences of the crises of 1340 and 1750 manifest themselves, among others, in data about the shrinking share of Europe’s population in world population. Such a data series was provided recently by Andre Gunder Frank (1998). The astonishing results, that support our hypothesis, are printed below:

Graph 14: the devastating effects of Tsunamis in history

![Graph 14: the devastating effects of Tsunamis in history](image)

Tsunami/terminal crises always led to global wars in the capitalist world system, and the time distance between the onset of Arrighi depressions and major global wars becomes shorter, leading one to suspect that this indeed is a structural feature of the system:

Graph 15: Tsunamis and global wars
The Tsunami waves of world politics

onset of the system 1381 Peace of Turin; Genoese hegemony; Hapsburg challenge

Time distance between beginnings of major wars

R^2 battle fatalities for the global war cycle

Thirty Years War 1618-48; Dutch hegemony; French challenge

Napoleonic Wars 1795-1815; British hegemony; German challenge

WW I + II; American hegemony; whose challenge?

Length of hegemonial cycle

Time distance from the onset of an Arrighi depression to major global wars
The prediction of a Kuznets crisis in the early part of the present decade and major power conflict after 2030 is one thing. The hegemonial power debate, Vaerynen is correct on this point, is top-heavy and overlooks the effects of long cycles on smaller nations and on the world periphery and semi-periphery. 218 repressive regimes (141 state regimes and 77 quasi-state and group regimes) killed from 1900 to 1987 nearly 170 million of their own citizens and foreigners - about four times the number of people killed in domestic and international wars during that same period. Most of these deaths occurred during the ‘earthquake’ of the Tsunami wave of world politics and economics that hit the globe from 1914 to 1945. The aftermath of these upheavals on the Eurasian landmass were terrible indeed. These murderous regimes were one of the main consequences of the terminal crisis of capitalism in the first half of the 20th Century. More than 50% of the estimated violent political deaths in human history happened during the terminal crisis of the early 20th Century and its aftermath:

The statistical tables, contained in Rummel’s website (http://www.freedomnest.com) about the millions of victims of democide, war and repression in history are:

Table 5: the terminal crises of capitalism mean massive democide, war and repression

<table>
<thead>
<tr>
<th>Region</th>
<th>Democide Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soviet Union</td>
<td>61.9</td>
</tr>
<tr>
<td>All Wars 30BC-19AD</td>
<td>40.5</td>
</tr>
<tr>
<td>Wars of the 20th Century</td>
<td>38</td>
</tr>
<tr>
<td>Communist China</td>
<td>35.2</td>
</tr>
<tr>
<td>Old China (-1900)</td>
<td>33.5</td>
</tr>
<tr>
<td>Mongols 1300 - 1400</td>
<td>29.9</td>
</tr>
<tr>
<td>Chinese Leap Forward</td>
<td>27</td>
</tr>
<tr>
<td>Nazi Germany</td>
<td>20.9</td>
</tr>
</tbody>
</table>
African Slavery 17,3
American Indians 13,8
Nationalist China 10,1
Japan (1936-45) 5,9
Old India (-1800) 4,5
Chinese guerrilla (1923-49) 3,5
other 20th Century murderers 2,8
Old Iran (-19th Century) 2
Ottoman Emp. (-19th Century) 2
Pol Pot 2
Turkey 1909-18 1,9
Communism in Vietnam 1945-87 1,7
North Korea 1,7
Poland (1945-48) 1,6
Old Japan (-19th Century) 1,5
Pakistan (1958-87) 1,5
Mexico (1900-20) 1,4
Tito (1944-87) 1,1
Old Russia (-19th Century) 1
Crusades 1095-1272 1
Zarist Russia 1900-17 1
Aztecs 1
Atatürk 1919-23 0,9
Chinese Warlords (1917-49) 0,9
UK 1900-87 0,8
Portugal 1926-82 0,7
Indonesia 1965-87 0,7
Spanish Inquisition 1500-1700 0,35
French Revolution 0,26
Albigensian Crusade (1208-1249) 0,2
Witch Hunts (1400-1600) 0,1
Grand Total (regimes, wars and repres-sions 1-39) 372,11
terminal crisis 1900-1950 related victims 187,7
terminal crisis victims in % of total 50,4

Legend: democide, war and repression, that coincided with or were the effect of a Tsunami wave (terminal crisis) 1900-1950, are printed in bold letters

Who will be the groups that most violently are going to challenge the logic of accumulation on a global scale? Does capitalist globalization, that process of unequal and uneven development, in the end cause the cultural conflicts in the world system, as globalization theories would maintain (Axtmann, 1995)? Among the most murderous regimes of the 20th Century, which killed 169.2 million people from 1900 to 1987, only 2 belonged to the capitalist center - the UK as a retreating colonial power, and Germany, which might be termed as a partial semi-periphery, and not a proper center at the time of the onset of National Socialism (Pomerania, Eastern Prussia), while 37 others were countries of the periphery and the semi-periphery. Peace and survival on earth will be determined to a great degree, whether or not democratic and not authoritarian ‘reform’ models will take hold and whether or not there will be mechanisms to contain the devastating force of future Tsunami waves of world politics and economics.
The Hegemonial Challenge and Technological dependence

The most important reason, why the North America-Pacific triangle gained ground in the world market was the pattern of specialization based on co-operation with less-developed partners that significantly cut production costs (Inotai, 1993).

29 countries with a Pacific coast now already control over 53% of the world GNP, and the Pacific rim-lands tended to be the countries with the highest growth-rates in the world economy. This 'earthquake' has set free powerful forces of change on the European landmass, both East and west of the Iron Curtain, while the power of the world depression during the 1980s and beyond brought new centers of gravity of the world economy to the fore. At the same time and by the very same process, the new international division of labor restructured the old industrial centers and created new conflicts. The share of the industrial labor force in total employment in East Asia (excluding China) is now 34% and is thus higher than in the established industrial countries.

The moment of victory over communism in Europe became, the moment of the fundamental weakness of both Europe and North America in a changing world economy. But at the same time, there was a dramatic southward shift of European productive potential, that could be threatened by a stronger 'Euro', that could ruin the European mezzogiorno’s export capacity that grew over the last years. The following materials, calculated from Le Monde, Bilan du Monde 2000 show very clearly how the current account balance of Germany becomes positive, while the Southern European surplus dwindles:

Table 6: the current account balance of the European Union with and without Germany

<table>
<thead>
<tr>
<th>Year</th>
<th>Current account EU</th>
<th>Current account Germany</th>
<th>Implicit current account non-German EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>83,7</td>
<td>-13,8</td>
<td>97,5</td>
</tr>
<tr>
<td>1997</td>
<td>118,5</td>
<td>-4</td>
<td>122,5</td>
</tr>
<tr>
<td>1998</td>
<td>83,1</td>
<td>-4,2</td>
<td>87,3</td>
</tr>
<tr>
<td>1999</td>
<td>27,5</td>
<td>-1,1</td>
<td>28,6</td>
</tr>
<tr>
<td>2000</td>
<td>22,8</td>
<td>2,6</td>
<td>20,2</td>
</tr>
</tbody>
</table>

Legend: our own calculations from Le Monde, Bilan du Monde, 2000

In trying to predict the future challenges in world politics, one is left with an amazing variety of propositions, utterly contradicting one another. We agree with Giovanni Arrighi’s and Beverly Silver’s recent contention that:

‘Abu-Lughod does not say what these rules (i.e. the relative balance of multiple centers to which the world system will return) (...) might be and who would make and enforce them. Shortly after she finished her book (i.e. Abu Lughod, 1989), the Berlin wall came tumbling down, leading to contradictory claims that the new rules would be made in Washington, or in Brussels, or in Tokyo, or in the secrecy of corporate board rooms, silent electronic networks, and noisy market places, until Huntington (i.e.
came along summoning the circling of the Western wagons lest the Rest under Chinese leadership do to the West what the West has been doing to the Rest. While we wait for the dust to settle, Abu-Lughod’s suggestion that the future may bear some resemblance to a premodern past is as good as anybody else’s guess’ (Arrighi and Silver, 1999: 20)

There is indeed a startling variety of predictions about future conflict and cooperation in the world system, even among world-systems researchers. Chase Dunn (1996) and Chase-Dunn/Podobnik fear future core war, with the United States as the declining hegemon and a united Europe as the possible future challenger. Weede (1999) scathingly dismisses the possibility of such a European threat by drawing attention to the basic weakness of the contemporary European political economy. Boswell (1999) and Boswell and Chase - Dunn (2000) see a chance, that Europe - rather like the Dutch hegemony in the world system before - becomes a force of global change and a future hegemon - without a future world war. As Weede certainly correctly predicts, peace in the Pacific depends on free trade for China - and that the US indeed will guarantee. By contrast, very sharp and bitter confrontations might arise between America and Europe over access to the Caspian Sea and its bn 150 barrels oil reserves, and over foreign policy vis-à-vis the Balkans, Turkey and the Middle East, with Europe favoring a rapprochement with Serbia after its October 2000 transition, with the Palestinians and the Kurds, while America favoring the Washington/Ankara/Jerusalem axis. A European led transition to global governance and democracy might be based, Boswell and Chase - Dunn argue, on the high social standards, prevalent in the European Union as a possible future catalyst for other regions of the world to follow. In a similar vein, Bornschier (1999) argues that the European Single Market has the potential for a positive transformation of the world system. Our argument is more down-to-earth, and in line with such divergent authors as Modelski, 1999 and Bergesen and Fernandez, 1999, trying to analyze empirically the upcoming contradictions, that the European political economy faces in the world system. In earlier publications, the present author rather tended towards predictions, modeled around the arguments proposed by Kennedy, Huntington, Weede and also Goldstein, thus excluding a rivalry between Europe and the American/Pacific economic compound. China would be the main challenging protagonist, with Russia and radical Islamic states as their main allies. We agree with Modelski (1999), that global challengers were always characterized by the interaction of

- a large army
- a large economy
- a closed, controlled society
- and weak, ethnocentric media.

Russett’s hypothesis about the great probability of peace between democracies is an all-important, further element in this debate. What is more probable, then? Democratization of China, a free trade regime for China, or a re-authoritariization of the European continent? At any rate, the future of the open society in Europe, the exact fulfillment of the Copenhagen criteria of a functioning democracy and market economy in the EU enlargement process, and the future democratization of the Union - also in face of the darker sides of the European heritage and the very idea of an economically united Europe under authoritarian premises (Laughland, 1998) - become decisive whether or not Europe will become a global challenger in Modelski’s sense, and will become a challenger of the new evolving global leadership along the Pacific axis, that could fit into the pattern, described by Modelski:

- an oceanic navy
- lead industries, fiscal strength
An intriguing subject for further world systems studies is the comparative analysis of the economic and world political mechanisms that were used by Venice, the Hapsburg Empire, France, and Germany during their hegemonial attempts. One proposition, that indeed emerges from Modelski’s research and our own reading of the world systems literature, which could be of immediate relevance for the analysis for the future conditions, which Europe faces in the world economy, is the territorial concept of power (Arrighi calls it, in reference to Venice, ‘terraferma’) on the part of challenging nations. Furthermore, a relatively closed society, not open to outside migration, especially from ethnic minorities, combined with high customs, a reliance on military land power, exploitative relations with the internal and immediate external peripheries (the hinterland of Northern Italy, the Spanish colonies and internal peripheries in Hapsburg Europe, the French internal peripheries and colonies, and Germany’s ‘Drang nach Osten’) and a relatively weak technological home-base characterize the attempts at world power, while the successful future world hegemons (the United Provinces of the Netherlands, the United Kingdom, and the United States) were the practical opposites on all or most of these dimensions: a naval, knowledge-driven and world-market concept of power, a society open to migration, low customs, a large sea power and a smaller, but mobile and disciplined and readily deployable land-army, and a strong technological home-base. Significant for hegemonic success is also the strong social role of the urban merchant class, that is in stark contrast to the ties between the land and capitalism, characteristic of the ‘rentier’ political economy of Venice, Hapsburg Europe, France, and Germany. We thus dare to venture the following additional hypothesis: the hegemonial challengers act out of a position of technological dependence and relative backwardness. We thus formulate:

**Hypothesis 6: Europe could be driven into a position of a technologically dependent challenger**

Full transition to democracy in the East and the maintenance of democracy in Western Europe would be one precondition, that an enlarged Europe remains a peaceful continent. For that reason alone, the Copenhagen criteria on stable democracy are so important for the enlargement process. A slipping back into authoritarian patterns in the EU-15 is also, at least theoretically, not excluded. Germany plays an especially crucial role here, because of its size, and its history in the first half of the 20th Century, and because of the recent transition to democracy in the Eastern part of the country after 1989 (Persky, 1999; Papayoanou, 1996). The specter of a re-transition in other member states has been debated recently. Austria and Italy are usually mentioned in this context, but the list of candidates is long. Suffice to mention here the shocking success of the Flemish bloc in Belgium. The lack of more direct democracy at the level of the Union itself did not escape the attention of neo-liberal critics and euro-sceptics, especially in Britain (for a provocative summary of this kind of interpretation, Laughland, 1998; Botsford, 1997). A more authoritarian trajectory on the European continent would further the rift between the United Kingdom, Denmark and Sweden on the one hand and the rest of the EU on the other hand. The UK, Sweden and Denmark already do not belong to the Euro zone and would drift further into the northern European United States zone of influence (Norway, Iceland, UK, Sweden and Denmark then forming, together with English-speaking Canada, a real North-Atlantic zone of influence). It corresponds to the wisdom of neo-liberal economics, that the European Union is modeled around protectionism: both revenues as well as expenditures are based largely on the protective element, and there is little room for innovation:
Graph 16: the reasons for Europe’s growing technological backwardness - EU revenues and expenditures

**EU revenues**

- member state contributions: 43%
- member states: 40%
- value added tax: 15%
- customs: 1%
- agricultural imports from 3rd countries: 1%
- sugar: 1%


Research by the Zurich school of sociology already showed that technological dependence had a negative effect on long-run economic growth and income redistribution (Bornschier et al. 1980; Bornschier and
Heintz, 1978). A new data series, presented by the World Bank WDR 1999, together with the earlier data, presented by the Zurich school, allow for a comparison of the evolution of technological dependence on a global scale.

Today, the European Union (15) controls 25% of the world resident patent applications, the United States 16%, while Japan and its regional orbits South Korea and the Philippines control not fewer than 57% of world resident patent applications:

Graph 17: the reasons for Europe’s growing technological backwardness: shares in total world resident patent applications

Graph 18 shows, how Europe - in contrast to the USA and Japan - is facing globalization from a passive perspective - as a prolonged workbench of the TNCs, which invest in Europe in pretty much the same way as the TNCs did in Latin America during the time of import substitution - to be present in a market, shielded by an average level of 7% external customs for industrial products:

Graph 18: The share of the US, the EU and Japan in world resident and non-resident patents by international comparison:
Europe - the prolonged workbench of the TNCs

Legend: our own calculations from World Bank, WDR, 1999.

Table 7 shows that Japan is by far the technologically most dominant country in the world, with over 340,000 resident patent applications per year, while in the US this figure is over 110,000. South Korea leads Germany by over 68,000 applications compared to Germany’s 56,757. With hardly a quarter of world resident patent applications, the European Union is in no position to effectively be a technologically leading center of the world economy in the 21st Century:

Table 7: technological dependence in the world system

<table>
<thead>
<tr>
<th>Country</th>
<th>Resident Patent Applications</th>
<th>Nonresident Patent Applications</th>
<th>Patent Penetration (=\frac{2\times\text{patent}}{1+2})</th>
<th>% of World Resident Patents</th>
<th>% of World Nonresident Patents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>340861</td>
<td>60390</td>
<td>15.05</td>
<td>47.4</td>
<td>2.64</td>
</tr>
<tr>
<td>United States</td>
<td>111883</td>
<td>111536</td>
<td>49.92</td>
<td>15.56</td>
<td>4.88</td>
</tr>
<tr>
<td>Korea Republic</td>
<td>68446</td>
<td>45548</td>
<td>39.96</td>
<td>9.52</td>
<td>1.99</td>
</tr>
<tr>
<td>Germany</td>
<td>56757</td>
<td>98338</td>
<td>63.41</td>
<td>7.89</td>
<td>4.3</td>
</tr>
<tr>
<td>UK</td>
<td>25269</td>
<td>104084</td>
<td>80.47</td>
<td>3.51</td>
<td>4.56</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>18138</td>
<td>28149</td>
<td>60.81</td>
<td>2.52</td>
<td>1.23</td>
</tr>
<tr>
<td>France</td>
<td>17090</td>
<td>81418</td>
<td>82.65</td>
<td>2.38</td>
<td>3.56</td>
</tr>
<tr>
<td>China</td>
<td>11698</td>
<td>41016</td>
<td>77.81</td>
<td>1.63</td>
<td>1.8</td>
</tr>
<tr>
<td>Australia</td>
<td>9196</td>
<td>34125</td>
<td>78.77</td>
<td>1.28</td>
<td>1.49</td>
</tr>
<tr>
<td>Italy</td>
<td>8860</td>
<td>71992</td>
<td>89.04</td>
<td>1.23</td>
<td>3.15</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4884</td>
<td>61958</td>
<td>92.69</td>
<td>0.68</td>
<td>2.71</td>
</tr>
<tr>
<td>Ukraine</td>
<td>3640</td>
<td>22862</td>
<td>86.27</td>
<td>0.51</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 8 shows the dramatic decline of the European technological position over time. The European Union (15) and the EU accession countries were among the countries with the highest growth rates of technological dependence, while the Pacific/Indian Ocean area nations Canada, South Korea, India, Australia and Japan had very slow or even negative growth rates of technological dependence. They, and not the present or extended European Union, are the future dynamic pole of the world economy. Although the United States also lost its former strong position (patent penetration increased from 27% to nearly 50% over the last 20 years), the European (EU 15) position is now alarmingly weak. Germany is today’s most technologically independent nation in the Union, with a patent penetration coefficient of 63.41%, followed by the UK (80.47%) and France (82.65%). Germany’s resident patent applications (56,757) were lower than those in South Korea (68,446). Within 20 years, Germany lost more than 16% of its technological sovereignty:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Romania</td>
<td>92.36</td>
<td>10.5</td>
<td>81.86</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>97.55</td>
<td>23.44</td>
<td>74.11</td>
</tr>
<tr>
<td>Poland</td>
<td>91.16</td>
<td>24.58</td>
<td>66.58</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>60.81</td>
<td>3.81</td>
<td>57</td>
</tr>
<tr>
<td>Greece</td>
<td>99.18</td>
<td>42.49</td>
<td>56.69</td>
</tr>
<tr>
<td>Hungary</td>
<td>96.67</td>
<td>56.84</td>
<td>39.83</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>98.59</td>
<td>60.37</td>
<td>38.22</td>
</tr>
</tbody>
</table>
Switzerland 96.55 72.59 23.96
Spain 96.8 73.94 22.86
United States 49.92 27.38 22.54
Finland 94.97 73.37 21.6
France 82.65 66.01 16.64
Germany 63.41 47.05 16.36
Austria 96.81 84.17 12.64
Brazil 91.73 80.35 11.38
New Zealand 94.99 85.6 9.39
Italy 89.04 79.81 9.23
Denmark 96.71 89.22 7.49
Netherlands 92.69 86.11 6.58
Belgium 97.76 91.33 6.43
Turkey 98.17 91.96 6.21
Mexico 98.73 92.74 5.99
Norway 94.3 89.04 5.26
UK 80.47 76.18 4.29
Israel 89.93 86.63 3.3
Ireland 98.27 97.78 0.49
Korea Republic 39.96 39.75 0.21
Canada 93.27 94.78 -1.51
India 79.98 85.07 -5.09
Australia 78.77 89.11 -10.34
Japan 15.05 28.46 -13.41
Egypt 58.35 95.99 -37.64
Belarus 96.67
China 77.81
Kazakhstan 95.14
Slovenia 98.64
Ukraine 86.27
Uzbekistan 95.85

Legend: countries printed in bold letters are members of the European Union; countries printed in bold and indented letters are candidates for European Union membership

Graph 19 now shows, that this assessment about an erosion of the European long-term power base in the world economy also applies to the European share in the world-wide stock of foreign direct investments and in the share of the top 50 companies of the world economy. Europe was on the rise until 1990, but has declined since then:

Graph 19a: Europe’s share in the world-stock of foreign direct investments in % since 1914
Graph 19b: Europe’s share in the top 50 corporations in the world economy by international comparison

The share of major economic regions in the world's top 50 TNCs

Legend: EU Europe excludes the Swiss transnational corporations, because Switzerland is not a member of the European Union

Graph 19c: The march towards world hegemony of the Japanese transnational corporation: 1960 - 2000
The top 50 companies were from ... in ...

Legend: our own calculations from Bornschier and Chase-Dunn, 1999; and Bergesen and Fernandez, 1999, as well as the Fortune top 50 company list at: http://www.fortune.com/fortune/global500/. The Berge-
sen/Fernandez data series had to be recalculated because of the inclusion of Switzerland in the European
total in their original table 8.2. We thus had to subtract the Swiss corporations (non-EU-member; table 8.1
of their original work) from the European figures in table 8.2 to arrive at the EU total. As to the world top 50
companies, see appendix.

Without the British and Anglo-Dutch TNCs, the European performance would be weaker still. It should be
added, that technological dependence is one important reason for unemployment, social stagnation, a lacking
human capital formation and poverty:

Graph 20: technological dependence and unemployment
Technological dependence and unemployment

![Graph showing the relationship between technological dependence and unemployment rate. The equation is given as: \( y = 1.0622x + 0.4535 \) with \( R^2 = 0.1752 \).]

Legend: industrialized western democracies without transformation country OECD members; data are from UNDP HDR 1999 and World Bank WDR 1999; our own compilations from the original tables

Table 9 now shows the most important correlations of technological dependence with social decay on the level of the industrialized and transformation countries:

Table 9: the correlates of technological dependence

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment benefits per Gov expenditures</td>
<td>0.42</td>
</tr>
<tr>
<td>Female long-term unemployment</td>
<td>0.37</td>
</tr>
<tr>
<td>Agriculture as % of GDP</td>
<td>0.29</td>
</tr>
<tr>
<td>Youth unemployment</td>
<td>0.26</td>
</tr>
<tr>
<td>Infant mortality</td>
<td>0.26</td>
</tr>
<tr>
<td>Female unemployment</td>
<td>0.24</td>
</tr>
<tr>
<td>Male long-term unemployment</td>
<td>0.24</td>
</tr>
<tr>
<td>Under five mortality rate</td>
<td>0.24</td>
</tr>
<tr>
<td>Male unemployment</td>
<td>0.23</td>
</tr>
<tr>
<td>Population below $14.40 a day</td>
<td>0.22</td>
</tr>
<tr>
<td>People not expected to survive age 60</td>
<td>0.18</td>
</tr>
<tr>
<td>Private consumption as % of GDP</td>
<td>0.18</td>
</tr>
<tr>
<td>CO2 emissions per US $ of GDP</td>
<td>0.11</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>0.11</td>
</tr>
<tr>
<td>Maternal mortality</td>
<td>0.1</td>
</tr>
<tr>
<td>Budget surplus per GDP</td>
<td>-0.1</td>
</tr>
<tr>
<td>Real earnings per employee growth rate 1980-92</td>
<td>-0.11</td>
</tr>
<tr>
<td>Gross domestic savings</td>
<td>-0.2</td>
</tr>
<tr>
<td>Labour force participation ratio</td>
<td>-0.21</td>
</tr>
<tr>
<td>Gross domestic investment</td>
<td>-0.23</td>
</tr>
</tbody>
</table>
services as % of GDP -0.3
female net secondary school enrollment ratio -0.33
real GDP poorest 20% -0.39
terms of trade (1987 = 100) -0.46
population served by public sanitation -0.56
economic size (GDP in $) -0.61
R&D scientists and technicians per 1000 people -0.61
public health expenditure (per total pub expenditure) -0.86

Legend: our own calculations from UNDP Human Development Report electronic data file

The close link between technological dependence, social stagnation and the further deterioration of the external terms of trade prepare the ground for a downward spiral, from which it will be most difficult to escape.

**The myth of European future hegemony**

An enlarged Europe is even more under a motive to reflect on the kind of its political elites. High subventions, a large state sector, a weak democracy on a Union level, close links between the agro-multis and the urban business elites, and a pervasive and growing influence of transnational criminal corporations of the *mafia, n’drangheta* etc. type in major European countries and their systematic and fraudulent misuse of EU subventions would be a 21st Century type of *terra-ferma* constellation that could bloc Europe’s path towards the ‘Modelski’ constellation of global leadership:

- an oceanic navy
- lead industries, fiscal strength
- democratic potential, party system
- strong active media

Corruption is a perpetual redistribution mechanism away from economic growth, and from the poor and in favor of the rich. In the OECD, the shadow economy is already 14.2% of GDP; in the transition countries 23.2% and in the developing world, 39.2% (Schneider and Enste, 1998; for a case study about organized crime, see Viviano, 1995). Full EU enlargement (the two Mediterranean island economies of Cyprus and Malta plus the Baltic States, Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Romania, Bulgaria and Turkey) **will mean a considerable increase in the level of existing average corruption, and the average share of the shadow economy** for the European Union (the averages for the present EU 15 compared to the averages of the hypothetical new EU 15 + 13), as well as the average homicide rate, if enlargement were to take place tomorrow, and if there is no dramatic change in the present trends. The following summary table shows this:

Table 10: corruption, the shadow economy and crime in an enlarged EU

<table>
<thead>
<tr>
<th>freedom from corruption index</th>
<th>shadow economy as % of GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Corruption Perception Index</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>USA</td>
<td>6.1</td>
</tr>
<tr>
<td>population unweighted average for fully enlarged EU (15 + 13)</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>9.2</td>
</tr>
<tr>
<td>Japan</td>
<td>6.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>8.9</td>
</tr>
<tr>
<td>Norway</td>
<td>8.9</td>
</tr>
<tr>
<td>New Zealand</td>
<td>9.4</td>
</tr>
<tr>
<td>Iceland</td>
<td>9.2</td>
</tr>
<tr>
<td>Australia</td>
<td>8.7</td>
</tr>
<tr>
<td>Israel</td>
<td>6.8</td>
</tr>
<tr>
<td>Canada</td>
<td>9.2</td>
</tr>
<tr>
<td>Romania</td>
<td>3.3</td>
</tr>
<tr>
<td>Latvia</td>
<td>3.4</td>
</tr>
<tr>
<td>Turkey</td>
<td>3.6</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3.7</td>
</tr>
<tr>
<td>Lithuania</td>
<td>3.8</td>
</tr>
<tr>
<td>Poland</td>
<td>4.2</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>4.6</td>
</tr>
<tr>
<td>Italy</td>
<td>4.7</td>
</tr>
<tr>
<td>Greece</td>
<td>4.9</td>
</tr>
<tr>
<td>Hungary</td>
<td>5.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>5.3</td>
</tr>
<tr>
<td>Estonia</td>
<td>5.7</td>
</tr>
<tr>
<td>Japan</td>
<td>6</td>
</tr>
<tr>
<td>Slovenia</td>
<td>6</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>3.3</td>
</tr>
<tr>
<td>Romania</td>
<td>3.3</td>
</tr>
<tr>
<td>Latvia</td>
<td>3.4</td>
</tr>
<tr>
<td>Turkey</td>
<td>3.6</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3.7</td>
</tr>
<tr>
<td>Lithuania</td>
<td>3.8</td>
</tr>
<tr>
<td>Poland</td>
<td>4.2</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>4.6</td>
</tr>
<tr>
<td>Italy</td>
<td>4.7</td>
</tr>
<tr>
<td>Greece</td>
<td>4.9</td>
</tr>
<tr>
<td>Hungary</td>
<td>5.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>5.3</td>
</tr>
<tr>
<td>Estonia</td>
<td>5.7</td>
</tr>
<tr>
<td>Japan</td>
<td>6</td>
</tr>
<tr>
<td>Slovenia</td>
<td>6</td>
</tr>
<tr>
<td>fully enlarged EU (see above)</td>
<td>6.2</td>
</tr>
<tr>
<td>Spain</td>
<td>6.6</td>
</tr>
<tr>
<td>France</td>
<td>6.6</td>
</tr>
<tr>
<td>Portugal</td>
<td>6.7</td>
</tr>
<tr>
<td>Israel</td>
<td>6.8</td>
</tr>
<tr>
<td>USA</td>
<td>7.5</td>
</tr>
<tr>
<td>Austria</td>
<td>7.6</td>
</tr>
<tr>
<td>Ireland</td>
<td>7.7</td>
</tr>
<tr>
<td>EU 15 (see above)</td>
<td>7.7</td>
</tr>
<tr>
<td>Germany</td>
<td>8</td>
</tr>
<tr>
<td>UK</td>
<td>8.6</td>
</tr>
<tr>
<td>Australia</td>
<td>8.7</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>8.8</td>
</tr>
<tr>
<td>Norway</td>
<td>8.9</td>
</tr>
<tr>
<td>Switzerland</td>
<td>8.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>9</td>
</tr>
<tr>
<td>Canada</td>
<td>9.2</td>
</tr>
<tr>
<td>Iceland</td>
<td>9.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>9.4</td>
</tr>
<tr>
<td>New Zealand</td>
<td>9.4</td>
</tr>
<tr>
<td>Finland</td>
<td>9.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>10</td>
</tr>
<tr>
<td>Cyprus</td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td></td>
</tr>
</tbody>
</table>
The message of this Chapter is thus simple: the European Union has very powerful internal distribution coalitions at work, that threaten to make its whole policy-set up non-competitive in the world economy (see, amongst others, Nollert, 1997; Nollert and Fiedler, 1996; as to the argument about European law and democracy, see Thun-Hohenstein and Cede, 1996; also, Voggenhuber, 1995). Clearly, if the Union were to be an instrument of world economic ascent and growth, then the countries most integrated into the system should be the real tigers of the world. The very geographical center of the Union, Belgium (then a haven of growth, and freedom from scandals and corruption), with the Union capital Brussels, would have to be on an equal growth footing with Hong Kong before 1997, and the founding member nations, like Germany, France and Italy should have unemployment rates well below the outsiders, like Switzerland, Iceland, Malta, Estonia or Norway.

But looking at the figures of unemployment in the 1980s and 1990s for the European Union and the OECD countries, one has to arrive at the depressing conclusion that unemployment in the OECD region now stands at 6.4%, while in the EU it reaches 8.8% (Le Monde, Bilan du Monde, 2000).

As a comparison of key social indicators for Belgium (the EU country with the highest Human Development Index) with Canada, Norway, USA, Japan, Australia, Iceland and Switzerland, the OECD competitors and non-EU-members with a similar high level of development of productive forces shows, there is an under-achievement of the EU human development leader in terms of life expectancy (lowest among the 8 compared countries), reduction of functional illiteracy (18.4%, second highest after Switzerland), public expenditure for education (3.2%, lowest among the 8 compared countries) and unemployment reduction (9%, second highest unemployment after Canada) (UNDP, HDR 1999, our own compilations from the original sources). But Belgium was the leader - among the compared nations - in terms of corruption (Transparency International: http://www.gwdg.de/~uwvw/). Belgium scored rank 29 in the world scale, Greece 36 and Italy 38 among 99 ranks of freedom from corruption.

Authors as divergent as Andre Gunder Frank, Giovanni Arrighi and Erich Weede would predict further European relative decline in the global economy. This harsh critique by the growing number of eurosceptics among professional social scientists now precisely is, that the Union, as it is structured, is not the answer to the problems, but the very reason for them. The neo-liberal German social scientist Erich Weede put it like this:

Essential to all scenarios of renewed European greatness is European unity, i.e., a unity that overcomes bickering about agricultural subsidies, and who pays for them, and replaces it by a unity of political purpose and a unified, but purely European (rather than NATO) military structure. It is quite certain that this transcendence is not going to happen within a decade. It is uncertain whether it will ever happen, or whether even a unified Western Europe will be sufficient in the 2020s. Although I am very skeptical about European readiness to unite politically and militarily, another reason why I cannot imagine European hegemony is that a unified Europe is likely to decline even faster than a Europe of nation-states.
In principle, a united Europe on the one hand and limited government, private property rights and market exchange at freely established scarcity prices on the other could be compatible with each other. Observation of political practice makes one suspicious, however. The common agricultural policy is still the most costly endeavor of the European Community or Union. It always has been an orgy of interventionism, inefficiency and injustice. By establishing minimum prices, the European Union guarantees overproduction. Price supports benefit rich farmers more than poor farmers. Simultaneously, high food prices hurt poor consumers more than rich consumers. Moreover, exports of European farm products at subsidized prices hurt American farmers and thereby burden transatlantic relations, and hurt Third World or East European farmers, thereby reducing the chances of poor countries catching up with the rich countries. In a nutshell, professional economists would be hard pressed to invent a policy doing as much harm for as little good as the European common agricultural policy. The more general point is that the Europeanization of economic policy-making establishes the opportunity to commit policy errors on a much grander scale than has been possible in most of European history. Politicians might exploit such opportunities. European agricultural policies are also useful to make another point. Decisions are made to serve special interest groups or distributional coalitions, not to serve anything like national, European, or cosmopolitan interests. According to Olson, aging political regimes in general, and aging democracies in particular, are likely to become prisoners of interests groups and to pursue ever less efficient economic policies. Governments intervene in the market, distort prices, transfer income - and interfere with efficient resource allocation. The older an established regime - for example, a democracy - becomes, the more it suffers from institutional sclerosis and declining economic growth. Although empirical support for this proposition has been quite weak where American states have been compared with each other, Olson's proposition received fairly strong and consistent support where industrialized democracies have been analyzed. Moreover, economic decline was further reinforced by high government revenues, expenditures, or transfer payments. Some European countries, like Britain and Sweden, suffer from being old democracies (and therefore afflicted with strong distributional coalitions) and having high government expenditures simultaneously; others suffer from at least one of these ailments. Since European nations are still fairly close to the leading edge in technology, there is also little room to boost growth rates by capturing the 'advantages of backwardness'. Thus, Europe is likely to be outperformed by more dynamic regions elsewhere. If you add slowly declining economies and a proven record of not being capable of collective action in the security field, then the prospect of European hegemony displacing American hegemony looks poor (Weede, 1999).

The beginning decade of the 2000’s seems to repeat the experience of the 1990s, and 1970s and early 1980s, when the term ‘Eurosclerosis’ was originally coined:

Table 11: short-term GDP growth 1990-98

<table>
<thead>
<tr>
<th>short-term GDP growth 1990-98</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5 IRE</td>
</tr>
<tr>
<td>5.4 ISR</td>
</tr>
<tr>
<td>3.9 N</td>
</tr>
</tbody>
</table>
Fat and big government, that has been the political strategy of many European countries over the Kondratieff-B-phase of the late 1960s, the 1970s, and the 1980s, with a resulting explosion of government intervention into the economy:

<table>
<thead>
<tr>
<th>Country</th>
<th>GOVEX per GDP 1960</th>
<th>GOVEX per GDP 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>31,00</td>
<td>66,10</td>
</tr>
<tr>
<td>Denmark</td>
<td>24,80</td>
<td>60,80</td>
</tr>
<tr>
<td>Finland</td>
<td>26,60</td>
<td>59,40</td>
</tr>
<tr>
<td>Netherlands</td>
<td>33,70</td>
<td>58,10</td>
</tr>
<tr>
<td>Germany</td>
<td>32,40</td>
<td>56,00</td>
</tr>
<tr>
<td>France</td>
<td>34,60</td>
<td>54,70</td>
</tr>
<tr>
<td>Belgium</td>
<td>34,50</td>
<td>54,50</td>
</tr>
<tr>
<td>Austria</td>
<td>35,70</td>
<td>52,70</td>
</tr>
<tr>
<td>Italy</td>
<td>30,10</td>
<td>52,70</td>
</tr>
<tr>
<td>Greece</td>
<td>17,40</td>
<td>49,40</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>30,50</td>
<td>49,30</td>
</tr>
<tr>
<td>Canada</td>
<td>28,60</td>
<td>46,40</td>
</tr>
<tr>
<td>Norway</td>
<td>29,90</td>
<td>46,40</td>
</tr>
<tr>
<td>Portugal</td>
<td>17,00</td>
<td>46,00</td>
</tr>
<tr>
<td>Spain</td>
<td>13,70</td>
<td>45,40</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>32,20</td>
<td>43,70</td>
</tr>
<tr>
<td>New Zealand</td>
<td>27,70</td>
<td>42,30</td>
</tr>
<tr>
<td>Ireland</td>
<td>28,00</td>
<td>37,70</td>
</tr>
<tr>
<td>Australia</td>
<td>21,20</td>
<td>37,50</td>
</tr>
<tr>
<td>Iceland</td>
<td>28,20</td>
<td>37,30</td>
</tr>
<tr>
<td>Japan</td>
<td>17,50</td>
<td>36,90</td>
</tr>
<tr>
<td>Switzerland</td>
<td>17,20</td>
<td>36,90</td>
</tr>
<tr>
<td>United States</td>
<td>28,40</td>
<td>34,60</td>
</tr>
</tbody>
</table>
Big unemployment, big government, big taxes, big divisions in the social fabric, big wage increases for those with secure jobs, while the others wait out in the cold, big expenditures for little real redistribution (in fact, Europe could only prevent that a large percentage of the population falls under the 50% of average income poverty threshold-line, but the percentage of poor people under 14.40 $ per capita and day as well as the percentage of people who die before reaching age 60% are bigger in EU-Europe than in other western democracies), big gender discrimination, big social stagnation, marginalization of elderly women, little attraction for new generations and for new foreign investment, little emphasis on health expenditures - that’s the way how EU-Europe works, the real existing Union:

Table 13: the correlates of years of EU membership on the level of western stable democracies:

<table>
<thead>
<tr>
<th></th>
<th>∙</th>
</tr>
</thead>
<tbody>
<tr>
<td>male long-term unemployment rate</td>
<td>0.71</td>
</tr>
<tr>
<td>female long-term unemployment rate</td>
<td>0.69</td>
</tr>
<tr>
<td>tax revenue per GDP</td>
<td>0.60</td>
</tr>
<tr>
<td>central government expenditures per GDP</td>
<td>0.60</td>
</tr>
<tr>
<td>alcohol consumption per capita and year</td>
<td>0.54</td>
</tr>
<tr>
<td>young adults as % of total prisoners</td>
<td>0.42</td>
</tr>
<tr>
<td>real earnings per employee growth rate 1980-92</td>
<td>0.40</td>
</tr>
<tr>
<td>long-term unemployment as % of total labor force</td>
<td>0.38</td>
</tr>
<tr>
<td>expenditure on labor market programs as % of GDP</td>
<td>0.32</td>
</tr>
<tr>
<td>female unpaid family workers as % of total working population</td>
<td>0.30</td>
</tr>
<tr>
<td>female unemployment rate</td>
<td>0.29</td>
</tr>
<tr>
<td>prisoners per total population</td>
<td>0.29</td>
</tr>
<tr>
<td>% population below 14,40 $ per day</td>
<td>0.28</td>
</tr>
<tr>
<td>annual rate of deforestation</td>
<td>0.26</td>
</tr>
<tr>
<td>total unemployment rate</td>
<td>0.23</td>
</tr>
<tr>
<td>% people expected not to survive age 60</td>
<td>0.23</td>
</tr>
<tr>
<td>maternal mortality rate</td>
<td>0.22</td>
</tr>
<tr>
<td>unemployment benefits expenditures per GOVEX</td>
<td>0.20</td>
</tr>
<tr>
<td>real GDP poorest 20%</td>
<td>0.19</td>
</tr>
<tr>
<td>one person households headed by women aged &gt;65 per total households</td>
<td>0.19</td>
</tr>
<tr>
<td>private consumption as % of GDP</td>
<td>0.18</td>
</tr>
<tr>
<td>trees defoliated, as % of all trees</td>
<td>0.12</td>
</tr>
<tr>
<td>male unemployment rate</td>
<td>0.09</td>
</tr>
<tr>
<td>budget surplus/deficit per GDP</td>
<td>-0.17</td>
</tr>
<tr>
<td>real GDP richest 20%</td>
<td>-0.19</td>
</tr>
<tr>
<td>net foreign direct investment as % of GNP</td>
<td>-0.19</td>
</tr>
<tr>
<td>public expenditure on education as % of GNP</td>
<td>-0.20</td>
</tr>
<tr>
<td>female economic activity rate</td>
<td>-0.21</td>
</tr>
<tr>
<td>GNP growth 1980-95</td>
<td>-0.21</td>
</tr>
<tr>
<td>tertiary students per total population</td>
<td>-0.22</td>
</tr>
<tr>
<td>female tertiary students per 100.000 women</td>
<td>-0.25</td>
</tr>
<tr>
<td>weekly hours of work in manufacturing</td>
<td>-0.29</td>
</tr>
<tr>
<td>forest and woodland as % of total area</td>
<td>-0.29</td>
</tr>
<tr>
<td>female administrators and managers as % of total prof. group</td>
<td>-0.30</td>
</tr>
<tr>
<td>internal renewable water resources per capita</td>
<td>-0.30</td>
</tr>
<tr>
<td>women in government as % of total gov. jobs</td>
<td>-0.31</td>
</tr>
<tr>
<td>female professional and technical workers as % of total prof. group</td>
<td>-0.32</td>
</tr>
<tr>
<td>gross domestic investment rate</td>
<td>-0.34</td>
</tr>
<tr>
<td>labor force participation rate</td>
<td>-0.37</td>
</tr>
<tr>
<td>public expenditure on health as % of total PUBEX</td>
<td>-0.43</td>
</tr>
<tr>
<td>annual projected population growth rate 1995-2015</td>
<td>-0.51</td>
</tr>
<tr>
<td>% population below 50% income poverty line</td>
<td>-0.52</td>
</tr>
</tbody>
</table>
The following graphs underline the bivariate relationships:

Graph 21: the correlates of years of EU membership

**taxes and EU membership years**

\[
y = 0.2194x + 28.135 \\
R^2 = 0.362
\]

**EU member years and size of government increase**

EU accession brings about a big increase in government spending

\[
y = -0.0188x^2 + 0.8666x + 17.33 \\
R^2 = 0.1902
\]

The liberal western non-EU member democracies all had limited increases in their government size.
EU membership years and long term unemployment

\[ y = 0.7299x + 40.691 \]

\[ R^2 = 0.5091 \]

EU membership and long-term unemployment

\[ y = 0.7929x + 37.804 \]

\[ R^2 = 0.4751 \]
We move to the very center of the EU debate in its present form - is the Union an engine of capitalist ascent? The political project of transformation from communism in Europe is not only endangered by the contradictions, globalization creates in its host countries, it is also threatened by certain negative developments in the European 'anchor economy'. Almost all the big issues, like agriculture reform, institutional reform, structural funds, let alone a real strengthening of the Third Pillar against transnational crime, more rights for the European Parliament, a real common foreign policy, reform of the institutions of the EU, are blocked, and there seems no way out.

In order to provide a valid strategy to its member countries, the Union has to be an association of world economic ascent and not a club for joint world economic decline. Very early on, a group of European policy planning and development researchers, headed by the late Dudley Seers, challenged head-on the reigning visions of the development strategy of the Commission in Brussels towards the Third World and towards the European periphery (Seers, 1978; de Bandt et al., 1980). This theoretical challenge, still worthwhile reading today, was the first real and systematic question mark behind the policies of the Commission since 1958. The authors of that critique were a European-wide group of committed students of development and committed Europeans at the same time. Its leader, Dudley Seers, as one of the doyen of development and distribution theory among the world-wide profession of economists, having influenced the course of Keynesian economics over the whole post-war years in Britain, and above all a passionate Scotsman, took up the issue of the center-periphery relationship that characterizes the South, Northwest and east-bound relationship of the Union (Seers, 1978).

Several authors, most notably Inotai and Malcolm, developed these arguments from a later, liberal perspective. With its emphasis on structural protection, Inotai maintains, the Union increases rather than decreases the long-term cleavages between the centers and the peripheries inside and outside the boundaries of

Legend: our own calculations from UNDP HDR electronic data file, Fischer Weltalmanach, 1999 and Gwartney et al., 1998
Europe. Today, it is no secret, that 90% of all EU expenditure, union-wide, must be categorized as subventions. With each expansion to semi-peripheral regions, the protective element increases. Simple, as the diagnosis might sound, it strikes at the very heart of the conventional Union wisdom on matters of external economic relations. A good part of professional economists the world over, liberal and radical social scientists alike, have later taken up this theme. They maintain that the Union, by its market protecting arrangements with the outer rim of its orbit of influence leads to a secular negative balance of trade of the periphery regions with the Union, and thus prolongs structural underdevelopment (amongst others such divergent authors as Hickman, 1994; Inotai, 1993; Kennedy, 1993; Amin, 1994). The arguments of such Union critics cannot be dismissed a-priori and out of hand.

Western Europe lost in terms of world market shares in a secular trend vis-à-vis the countries of the Pacific; the dynamics of growth in the world economy seem to work to the detriment of the old European centers. Asia’s ‘basics’ are healthier than expected, and the tide turns to the detriment of the Europeans, now that the initial positive effects of European Monetary Union fade away and transnational capital flows again to the Pacific region. This is also the true background to the present weakness of the ‘Euro’.

Table 14: the EU in the capitalist world system. Relative share in %

<table>
<thead>
<tr>
<th>Category</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU share in top world collective service companies</td>
<td>74,60</td>
</tr>
<tr>
<td>EU share in world development aid</td>
<td>56,40</td>
</tr>
<tr>
<td>EU share in top world intermediary good companies</td>
<td>55,30</td>
</tr>
<tr>
<td>EU share in top world insurance companies</td>
<td>55,00</td>
</tr>
<tr>
<td>EU share in top world energy companies</td>
<td>50,20</td>
</tr>
<tr>
<td>EU share in OECD total unemployment</td>
<td>47,70</td>
</tr>
<tr>
<td>EU share in top world banking companies</td>
<td>45,90</td>
</tr>
<tr>
<td>EU share in top world automobile industry</td>
<td>41,60</td>
</tr>
<tr>
<td>EU share in top world chemical and pharma companies</td>
<td>40,00</td>
</tr>
<tr>
<td>EU share in top world electrical equipment companies</td>
<td>38,30</td>
</tr>
<tr>
<td>EU share in top world distribution companies</td>
<td>38,10</td>
</tr>
<tr>
<td><strong>EU share in OECD total GDP</strong></td>
<td><strong>36,50</strong></td>
</tr>
<tr>
<td>EU share in top world food industries</td>
<td>34,30</td>
</tr>
<tr>
<td><strong>EU share in OECD population</strong></td>
<td><strong>34,30</strong></td>
</tr>
<tr>
<td>EU share in top world telecom companies</td>
<td>33,70</td>
</tr>
<tr>
<td>EU share in OECD defense expenditure</td>
<td>33,50</td>
</tr>
<tr>
<td>EU share in top world electronic companies</td>
<td>25,70</td>
</tr>
<tr>
<td>EU share in the turnover of the top 45 world companies</td>
<td>21,10</td>
</tr>
<tr>
<td>EU share in top world consumer good companies</td>
<td>17,10</td>
</tr>
<tr>
<td>EU share in top world defense/aeronautic industries</td>
<td>16,80</td>
</tr>
<tr>
<td>EU share in top world mass communication companies</td>
<td>10,10</td>
</tr>
<tr>
<td>EU share in top world informatic companies</td>
<td>0,00</td>
</tr>
</tbody>
</table>

Legend: Our own calculations from Le Monde, Bilan du Monde, 2000

The European Union shortcomings vis-à-vis the Pacific in terms of world export markets for manufactured goods, in terms of comparative labor costs, in terms of technological and scientific development and in terms of employment are all too obvious and were described in the literature in all detail, the crash of 1997 notwithstanding (for a debate on these issues see Inotai, 1993; Kennedy, 1993; Tausch and Prager, 1993, IFRI 1998). I strongly agree with Andre Gunder Frank’s recent book (1998): it is the first time in world economic history, that an economic crisis began in a center outside Europe or the United States. The fundamentals of the European Union still reflect the realities of the late 1950s and still comprise the following sectors (i) the coal and steel community (ii) agricultural self-sufficiency (iii) the customs union. The new international division
of labor, that characterizes the world economy since the late 1960s, is the prime challenge to the logic of the Union, built around and evolving from the Franco-German alliance of the late 1950s (Inotai, 1993). Precisely these sectors are most seriously affected by world economic and technological changes.

Of the 27448 reports, that are stored in the Reuters Business Briefing information system over the last 5 years, dealing with the word ‘Mafia’, 10652, i.e. more than 38%, were dealing with events in countries of the European Union. The agricultural subvention system, an invitation to kleptocracies of all sorts, dominates the Union's external trade policy, and is distorting the world market and preventing the poor countries from exporting (our own compilation from Reuters Business Briefing). Together in Europe, the electronic newsletter of the Commission for Central Europe, already noted in 1997:

In the case of common transit, the "archaic and bureaucratic" nature of the system, as well as its complexity, was one of the causes of these abuses, and Parliament as well as the European Commission recognized this. (...) The common transit system was extended to the Visegrad countries without much political debate, while, as the report by the Committee of Inquiry states, in the future it will have to be the subject of a serious political discussion.

A major problem, which has to resolved first and foremost, is Germany's apparent inability to comprehend and play its role as a highly developed Mexico in the world economy. Similar in population size to that of Mexico, and with a share of roughly only 8% of world GNP, Germany's first and foremost role would be that of a highly specialized trade and current account surplus economy in the heart of a Europe, oriented towards the West and towards the Atlantic and the Pacific, still the major centers of the world economy. Germany is estimated - via its share of Brussels expenditures - to have spent up to $bn 30 thousand million alone to prop up in vain - in concert with the other Europeans - the Italian Lira on Black Friday, 1993. In that disaster year, Germany poured another 9.1 thousand million $ down another sink - this time German aid to Russia. Insiders estimate, that only 10% of Western aid to Russia reached its targets. How Germany projected in vain her dreams to become a democratic 'Weltmacht' (world power) is to be judged from the fact, that it took over 43.7% of the burden of reconstruction of former communism - from Frankfurt at the Oder to Wladiwostock during the period 1990-1993. If Lohengrin only were to be an economist, after all: Germany's official and private Eastern flows amounted to 32.7 thousand million $, out of a total of 74.8 thousand million $ (our own compilations from OECD, GD (95) 41: 'Aid and other resource flows to the Central and Eastern European countries and the new independent states of the former Soviet Union in 1992 and 1993', Paris 1995). But the foundations of Germany's dreams to become a Weltmacht were shaky indeed, as the meager position of Germany's transnational corporations vis-à-vis their international competitors, and the losses of even companies like Mercedes-Daimler-Benz to the tune of more than 1 thousand million $ and the economic malaise in the middle of 1990s all too clearly showed. Only of lately, German transnationals could recover some of their positions (Le Monde, Bilan du Monde, 2000). Add to this the disaster of the Mercedes Smart car, developed at great costs, but practically knocked off from the market by a single test series of an automobile magazine in Sweden. $bn 700 for German unification, DEMbn 160 for Russia’s pullout from East Germany - enough is enough. For the transformation countries nearer to the European center, such economic management means lost opportunities to stabilize democracy at a vital moment of world history: the Polish GNP amounted to just 75 thousand million $ in 1992 and is today $bn 157.0 (UNDP, 1995; Malcolm, 1995; Business Central Europe, April 2000), viz. only about five times the sum that Germany lost in the casino of world finances in 1993. Germany with its current account balance of $bn - 13.8 in 1996, $bn - 4.0 in 1997 $bn - 4.2 in 1998, $bn - 1.1 in 1999 and $bn +2.6
in 2000 is in a too weak position to be the European ‘growth engine’ anymore (Le Monde, Bilan du Monde, 2000):

Graph 22: current account balances in the world system, 1996/97, in millions of $

Legend: current account balances in the world system, 1996/97, in millions of $; compiled from the international press

According to our analysis, the terraferma-type of economic interest groups and philosophy is in the last resort responsible for the stagnation and mismanagement, that led - among others - to the unprecedented resignation of the entire Commission of the European Union in 1999:

Graph 23: the structure of world trade (in % of total world trade; for the ‘triad’ of Asia, North America, and Europe: percentage of regional per total trade of the ‘triad’ countries)
From an analytical viewpoint, one might even maintain that western Europe betrayed the chance of transformation in the East by dumping highly subventioned agricultural products on the Eastern markets and by prolonging the explicit and implicit trade barriers against Eastern exports, especially in agriculture. At any rate, East Central Europe did not receive the economic support it needed during the crucial transformation years:

Table 15: did Western Europe betray Eastern Europe at the finest hour?

| the Eastern current account balance in $m |
|---|---|---|---|---|---|---|---|---|---|
| Croatia | 1053 | -589 | 823 | 599,8 | 785,9 | -1283,2 | -880,8 | -2434,9 | -1553,8 | -3480 |
| Czech Republic | -900 | 300 | -305,1 | 114,6 | -49,7 | -1362,3 | -4292,2 | -3155,8 | -1000 | -10651 |
| Estonia | 36,1 | 21,6 | -166,5 | -157,9 | -397,9 | -563,4 | -478,1 | -1706,1 | | |
Hungary 127 267 324 -3455 -3911 -2480 -1678 -981 -2300 -14087
Latvia 25 314 -9 -159 -217 -345 -713 -1298 -3593
Lithuania 203 -85,7 -94 -614,4 -722,6 -981,3 -1298 -3593
Poland 600 -2000 900 -600 2300 5500 -1300 -4268 -6800 -5668
Romania -1290 -1518 -1239 -516 -1732 -2600 -2159 -3019 -14073
Slovakia -767 -768 173 -601,2 664,9 -713 -1104 -3593
Slovenia 0,5 131 926 -22,8 39 36,6 -3,8 1898,6
Ukraine -2900 -600 -800 -1400 -1200 -1100 -1500 -1200 -10700

Total, 12 -1066,5 -7255 186 -6924,9 -1998,3 -3179,2 -15131 -17871 -20677 -73917


In view of the present low exchange rate of the EURO and the high prices of energy, a linear downward trend is the most plausible projection:

Graph 24: the downward trend in the Eastern external balances, 1990 - 1999
The East European external balances

- Current account balance = -2,285x + 3,2028
  \( R^2 = 0.6461 \)

- Trade balance = -3,9139x + 1,9867
  \( R^2 = 0.5963 \)


Strictly speaking, there was not only a transformation, but above all a transformation recession in the region, which persists to this day. Only Poland and Slovenia reached a real GDP level, that is higher than the level in 1989:

Graph 25: only Poland and Slovenia had a real transformation

Real gross domestic product, 1989-1998

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UKR</td>
<td>36.6</td>
</tr>
<tr>
<td>LAT</td>
<td>59.3</td>
</tr>
<tr>
<td>BUL</td>
<td>65.9</td>
</tr>
<tr>
<td>EST</td>
<td>75.7</td>
</tr>
<tr>
<td>ROM</td>
<td>76.1</td>
</tr>
<tr>
<td>CRO</td>
<td>77.8</td>
</tr>
<tr>
<td>LIT</td>
<td>79.5</td>
</tr>
<tr>
<td>CZ</td>
<td>95</td>
</tr>
<tr>
<td>H</td>
<td>96.2</td>
</tr>
<tr>
<td>SLK</td>
<td>99.6</td>
</tr>
<tr>
<td>SLV</td>
<td>104</td>
</tr>
<tr>
<td>PL</td>
<td>117.1</td>
</tr>
</tbody>
</table>
Hypothesis 7: European Union extension threatens to repeat the errors of the ‘terraferma’ strategies in history before (Venice, the Hapsburgs, Napoleonic France, Germany). One has especially to watch the unequal exchange relationships between the European center and the East European periphery. Low growth, big government, big corruption are all part of the social problem dimension that Europe’s political economy nowadays faces.

Several authors, including Chase-Dunn and Podobnik, and Chase Dunn and Hall, too, are also fairly pessimistic about the future trajectory of the United States of America. They cite international capital investment abroad in those countries, where profit rates are highest, as the main reason, why the ‘internationalized capitalists’ in the core no longer have a vested interest in their home economy. Capital investment abroad becomes, the argument goes, the driving force for hegemonic decline (Chase-Dunn and Hall, 1997).

Table 16: hegemonic decline in the United States of America

<table>
<thead>
<tr>
<th>Year</th>
<th>Current Account Balance as a Percentage of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961-73</td>
<td>+0.4%</td>
</tr>
<tr>
<td>1974-80</td>
<td>+0.0%</td>
</tr>
<tr>
<td>1981-90</td>
<td>-2.0%</td>
</tr>
<tr>
<td>1993</td>
<td>-1.5%</td>
</tr>
<tr>
<td>1994</td>
<td>-2.2%</td>
</tr>
<tr>
<td>1995</td>
<td>-2.0%</td>
</tr>
<tr>
<td>1996</td>
<td>-2.2%</td>
</tr>
<tr>
<td>1997</td>
<td>-2.3%</td>
</tr>
<tr>
<td>1998</td>
<td>-2.4%</td>
</tr>
<tr>
<td>1999</td>
<td>-3.7%</td>
</tr>
<tr>
<td>2000</td>
<td>-4.2%</td>
</tr>
</tbody>
</table>


The hegemonic decline of the USA will most probably set in slowly, cushioned by the present weaknesses of Japan and of the European competitors. In Europe, economic stagnation and unemployment will significantly rise due to rising interest rates and rent-seeking that is enhanced by the way European institutions are built at present. In terms of the environment, government subventions to declining productive branches (36.8% of the budget of the EU are for the structural funds) will increase technological backwardness and preserve transport intensity, and hence, pollution. Economic inequalities threaten to increase with such a structure, and in turn will form a block of its own against world economic ascent.
Inexorably, the centers of gravity of the world economy will be shifting towards the LDCs, here most notably during the 1970s and 1980s to the countries of the Pacific, and after the Asian currency crisis 1997, most likely to India and China. The effect of the *Europe-agreements* between the EU and the countries of Eastern Europe seem to repeat the experience of Lomé and can be summarized in one word: a massive positive balance of trade in favor of the Union and to the detriment of the partners in the East, that leads to political and economic friction (Hickman, 1994; Inotai, 1993). A growing number of academic critics of present Union economic policy maintain that the EU-approach to foreign trade and relations with the semi-periphery and the periphery is based on two fatally erroneous assumptions. First, the *gradualism of trade liberalization*; second, the protectionist answer to the current economic *malaise* in Western Europe.

Samir Amin (1994, 1997) puts a heavy blame on the Europeans for prolonging the underdevelopment and stagnation of their own ‘backyards’. The experience of East and Southeast Asia during its heyday has precisely shown, that *ceteris paribus* three conditions for successful capitalist development hold (i) the existence of a reliable anchor economy (ii) substantial net transfers (iii) free market access to exports (Inotai, 1993). The failure to realize such a strategy *vis-à-vis* the Central and East European countries results in the growing trade balance problems of the transformation region (Hickman, 1994; Tausch 1998). By enlarging the Union to the South, the protective tendencies precisely in those sectors, which are also important for the semi-periphery and the periphery, have grown. The effect of this was a growing world economic inefficiency (Nuscheler, 1993). The most visible result of this is the high unemployment in many Union countries (17 to 18 million people in the late 1990s, last time that the Union had less than 8% unemployment was in 1990). In the *Eastern European* countries most likely to join the Union (CEEC 5 + Slovakia) early on, another 2.3 million unemployed persons would have to be provided with jobs. Austria, Finland and Sweden, which joined the Union on January 1st 1995, are not free from employment problems themselves and added roughly another million unemployed persons of their own to the army of European unemployment (UNDP, 1997-99). To put the proportions of unemployment in even more drastic words: the unemployed workers of the EU - *excluding* their families - would already be the 6th biggest state in the Union with more than 18.2 million inhabitants - bigger than any of the 10 smaller European Union countries. The up to 40 million persons, affected by unemployment (i.e. the unemployed and their households), probably would form the 5th biggest state in Western Europe, only surpassed in size by Germany, the UK, France, and Italy. With around 40 million inhabitants, like Spain, this ‘country’ should play a major role in the EU and should one day be in a position to take up at least the EU-Presidency...

**The (in)efficiency of the European Union at the level of stable western democracies**

Nollert (1996) has shown that the efficiency of an interest group at the Union level is largely determined by the age of an interest group, by the relative efficiency of the internal decision making mechanism, by the low number of members, restricted to Union countries, and by the ‘Unionization’ of the central policy concern of the respective interest group. The basic democracy deficit of the Union, that is evident in the powerlessness of the European Parliament, actively enhances the power of these narrow distribution coalitions. Among the most powerful ones, the European Roundtable of Industrialists emerged, closely linked to Etienne Davignon, the long-term EU Commissioner for the Internal Market, linked to key Western capital groups like Rockefeller, Standard Oil, Asea-Brown-Bovery, Deutsche Bank, Fiat, Volvo, Renault, Société General, Unilever, and later on also to the Trilateral Commission (Nollert and Fielder, 1997). The case of the Roundtable shows, that European capital integration is far more advanced than that of its countervailing power, organized labor. Johannes Voggenhuber, an Austrian member of the European Parliament for the
labor. Johannes Voggenhuber, an Austrian member of the European Parliament for the Green Party, and an impassioned - if perhaps not always error-free critic of the ‘real existing Union’ - , has summarized the development blocks that the Union faces as follows:

‘The law-makers of the European Union are organs of the Executive. Laws are being passed in the Council, that is to say, by Government representatives of member states. Exclusively the Commission holds the right for law-initiatives, which is a non-elected (...) administrative body. Its suggestions can be altered by the Council only unanimously. Even that, the Commission can prevent this, by simply withdrawing its proposal (...) Laws are deliberated and passed under the exclusion of the public (...) Two Hundred Years after the French Revolution, laws again go into effect in Europe, which were not passed by an elected, lawmaking assembly’ (Voggenhuber, 1995, our translation)

The very center-piece of the European Union is its agricultural policy, which, throughout the ups and downs of European integration, swallowed more than 50% of its budget. 6% of grain producers produce 60% of Union grain; 15% of milk-producing entities produce more than 50% of total production. 10% of cattle breeders possess 50% of all cattle in the Union. 20% of producing units receive 80% of all subventions. Such a monopolistic system, Voggenhuber correctly argues, has its heavy economic price: stagnation, 50 million poor people, three million homeless, millions of unemployed, a threatening and recurring tendency towards a growing gap between the rich and the poor regions. Over the last years, there has been a certain shift in favor of the South, aided by a policy of soft currencies in countries like Italy or Spain, thus counter-balancing the inherent internal tendencies of the Union. One of the main arguments for the EURO was that it will rule out once and for all such a world economic adjustment; the wage rate, or worse, if that is inflexible, the unemployment rate or migration will be the only adjustment mechanism left open for the European mezzogiorno after introduction of the Euro.

We now start our multivariate analysis of the basic problems of the European Union. The basic equation can be expanded in the following fashion:

equation (1.2) stagnation and development blocks in western democracies (lack of economic growth; inflation; lack of human development; unemployment) = constant + b1 * age of democracy + b2 * state sector influence (like state sector expenditures per GDP), t, (+ b3 * years of European Union membership (like state sector expenditures per GDP))

Variables:

- agricultural employment (UNDP, 1998)
- central government expenditures 1985 (Source: World Resources Institute, 1992)
- democratic age within stable world political boundaries by 2000 (Source: Weede; Tausch, 1993a; Fischer Weltalmanach; United States Department of State Internet Country Documentation)
- gender empowerment index (GEM) (UNDP, 1999)
- human development index (HDI) (UNDP, 1999)
- human development index (UNDP, 1999)
- labor force unionization rate (UNDP, 1998)
- Labour Force Participation Rate (UNDP, 1998)
- PC’s per 1000 inhabitants (UNDP, 1998)
• share of consumption of the richest 20% in comparison to the share of the poorest 20% (UNDP, 2000)
• unemployment rate (UNDP, 1999)
• unionization rate (UNDP, 1998)
• years of Union membership by 2000 (Fischer Weltalmanach, 1999)

Table 17: the primary data for a statistical analysis of the development efficiency of the European Union

<table>
<thead>
<tr>
<th>Country</th>
<th>Unemployment</th>
<th>Short-term GNP per capita growth 1990-98</th>
<th>Long-term Growth</th>
<th>Top 20% Bottom 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWE</td>
<td>8</td>
<td>0.5</td>
<td>1.2</td>
<td>SWE 3.6</td>
</tr>
<tr>
<td>ISR</td>
<td>7.7</td>
<td>2</td>
<td>1.8</td>
<td>ISR 6.2</td>
</tr>
<tr>
<td>USA</td>
<td>5</td>
<td>1.8</td>
<td>1.9</td>
<td>USA 8.9</td>
</tr>
<tr>
<td>SF</td>
<td>14.5</td>
<td>1.2</td>
<td>2.0</td>
<td>SF 3.6</td>
</tr>
<tr>
<td>B</td>
<td>9</td>
<td>1.7</td>
<td>1.9</td>
<td>B 3.6</td>
</tr>
<tr>
<td>DK</td>
<td>5.4</td>
<td>2.5</td>
<td>2.1</td>
<td>DK 3.6</td>
</tr>
<tr>
<td>IRE</td>
<td>10.5</td>
<td>6</td>
<td>4.4</td>
<td>IRE 6.4</td>
</tr>
<tr>
<td>A</td>
<td>5.2</td>
<td>1.6</td>
<td>2.2</td>
<td>A 3.2</td>
</tr>
<tr>
<td>NZ</td>
<td>7.2</td>
<td>1</td>
<td>0.7</td>
<td>NZ 17.4</td>
</tr>
<tr>
<td>N</td>
<td>4.1</td>
<td>3.4</td>
<td>2.9</td>
<td>N 3.7</td>
</tr>
<tr>
<td>AUS</td>
<td>8.5</td>
<td>2.7</td>
<td>1.9</td>
<td>AUS 7</td>
</tr>
<tr>
<td>ITA</td>
<td>12.5</td>
<td>1</td>
<td>2.2</td>
<td>ITA 4.2</td>
</tr>
<tr>
<td>UK</td>
<td>7.1</td>
<td>1.6</td>
<td>1.9</td>
<td>UK 6.5</td>
</tr>
<tr>
<td>GER</td>
<td>9.8</td>
<td>1.6</td>
<td>1.2</td>
<td>GER 4.7</td>
</tr>
<tr>
<td>NL</td>
<td>5.6</td>
<td>2.1</td>
<td>1.8</td>
<td>NL 5.5</td>
</tr>
<tr>
<td>CH</td>
<td>4.2</td>
<td>-0.2</td>
<td>0.9</td>
<td>CH 5.8</td>
</tr>
<tr>
<td>CND</td>
<td>9.3</td>
<td>0.9</td>
<td>1.5</td>
<td>CND 5.2</td>
</tr>
<tr>
<td>J</td>
<td>3.5</td>
<td>1.1</td>
<td>2.6</td>
<td>J 3.4</td>
</tr>
<tr>
<td>F</td>
<td>12.4</td>
<td>1.2</td>
<td>1.8</td>
<td>F 5.6</td>
</tr>
<tr>
<td>ICE</td>
<td>3.8</td>
<td>1.6</td>
<td>2.3</td>
<td>ICE 3.3</td>
</tr>
<tr>
<td>LUX</td>
<td>3.3</td>
<td>1.9</td>
<td>3.4</td>
<td>LUX 3.9</td>
</tr>
<tr>
<td>SP</td>
<td>20.9</td>
<td>1.8</td>
<td>1.9</td>
<td>SP 6.4</td>
</tr>
<tr>
<td>P</td>
<td>6.9</td>
<td>2.4</td>
<td>2.9</td>
<td>P 5.9</td>
</tr>
<tr>
<td>GRE</td>
<td>9.8</td>
<td>1.4</td>
<td>1.6</td>
<td>GRE 5.4</td>
</tr>
</tbody>
</table>

Legend: the short-term growth for Germany is the growth of the GDP. The income differential in Iceland had to be estimated from the best fitting EXCEL-trendline using the best correlating predictor variable, unionization rate.

Table 18: further data for the analysis of the development efficiency of the European Union

<table>
<thead>
<tr>
<th>Country</th>
<th>Age of democracy in 2000</th>
<th>Central state sector strength 1985</th>
<th>Years of EU membership</th>
<th>GEM</th>
<th>HDI</th>
<th>Pop growth 70-95</th>
<th>Agricultural employment</th>
<th>Unionization</th>
<th>PCs per 1000</th>
<th>Central state sector strength, 1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWE</td>
<td>83</td>
<td>41.3</td>
<td>5</td>
<td>0.742</td>
<td>0.923</td>
<td>0.35</td>
<td>4.41</td>
<td>91.1</td>
<td>192.55</td>
<td>42.7</td>
</tr>
<tr>
<td>ISR</td>
<td>52</td>
<td>48</td>
<td>0</td>
<td>0.496</td>
<td>0.883</td>
<td>2.51</td>
<td>4.13</td>
<td>23</td>
<td>99.84</td>
<td>49</td>
</tr>
<tr>
<td>USA</td>
<td>96</td>
<td>23.5</td>
<td>0</td>
<td>0.708</td>
<td>0.927</td>
<td>0.96</td>
<td>2.84</td>
<td>14.2</td>
<td>327.99</td>
<td>21.1</td>
</tr>
<tr>
<td>SF</td>
<td>83</td>
<td>30</td>
<td>5</td>
<td>0.737</td>
<td>0.913</td>
<td>0.41</td>
<td>8.39</td>
<td>79.3</td>
<td>182.07</td>
<td>35.3</td>
</tr>
<tr>
<td>B</td>
<td>55</td>
<td>50.1</td>
<td>42</td>
<td>0.61</td>
<td>0.923</td>
<td>0.19</td>
<td>2.63</td>
<td>51.9</td>
<td>138.27</td>
<td>47.6</td>
</tr>
</tbody>
</table>
The final results underline the basic arguments, explained above:

Table 19: the development efficiency of the EU

<table>
<thead>
<tr>
<th></th>
<th>1975-1998</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>average</td>
</tr>
<tr>
<td>DK</td>
<td>1975-1998</td>
</tr>
<tr>
<td>IRE</td>
<td>1975-1998</td>
</tr>
<tr>
<td>A</td>
<td>1975-1998</td>
</tr>
<tr>
<td>NZ</td>
<td>1975-1998</td>
</tr>
<tr>
<td>N</td>
<td>1975-1998</td>
</tr>
<tr>
<td>AUS</td>
<td>1975-1998</td>
</tr>
<tr>
<td>ITA</td>
<td>1975-1998</td>
</tr>
<tr>
<td>UK</td>
<td>1975-1998</td>
</tr>
<tr>
<td>GER</td>
<td>1975-1998</td>
</tr>
<tr>
<td>NL</td>
<td>1975-1998</td>
</tr>
<tr>
<td>CH</td>
<td>1975-1998</td>
</tr>
<tr>
<td>CND</td>
<td>1975-1998</td>
</tr>
<tr>
<td>J</td>
<td>1975-1998</td>
</tr>
<tr>
<td>F</td>
<td>1975-1998</td>
</tr>
<tr>
<td>ICE</td>
<td>1975-1998</td>
</tr>
<tr>
<td>LUX</td>
<td>1975-1998</td>
</tr>
<tr>
<td>SP</td>
<td>1975-1998</td>
</tr>
<tr>
<td>P</td>
<td>1975-1998</td>
</tr>
<tr>
<td>GRE</td>
<td>1975-1998</td>
</tr>
</tbody>
</table>

long-term economic per capita income growth 1975-1998

a) the original neo-liberal growth equation

western democracies without Spain, Portugal, Greece

<table>
<thead>
<tr>
<th>age of democracy</th>
<th>central</th>
<th>constant</th>
<th>state sector strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>in 2000</td>
<td></td>
<td></td>
<td>1985</td>
</tr>
</tbody>
</table>


0.007301 0.016896 0.197379 0.321356 0.432115 -1.78203 T-Test
### b) the neo-liberal growth equation including the effects of European Union membership

**western democracies without Spain, Portugal, Greece**

<table>
<thead>
<tr>
<th>age of democracy in 2000</th>
<th>central state sector strength in 1985</th>
<th>years of EU membership, 2000</th>
<th>constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.00266</td>
<td>0.009389</td>
<td>-0.01348</td>
<td>2.69851</td>
</tr>
<tr>
<td>0.012356</td>
<td>0.019883</td>
<td>0.007937</td>
<td>0.981547</td>
</tr>
<tr>
<td><strong>0.199565</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.412818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-0.2155</td>
<td>0.472218</td>
<td><strong>-1.69828</strong></td>
<td>T-Test</td>
</tr>
</tbody>
</table>

**western democracies with Spain, Portugal, Greece**

<table>
<thead>
<tr>
<th>age of democracy in 2000</th>
<th>central state sector strength in 1985</th>
<th>years of EU membership, 2000</th>
<th>constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.00077</td>
<td>0.011302</td>
<td>-0.00917</td>
<td>2.239416</td>
</tr>
<tr>
<td>0.011588</td>
<td>0.019224</td>
<td>0.006045</td>
<td>0.839811</td>
</tr>
<tr>
<td><strong>0.16041</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.273715</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-0.06644</td>
<td>0.587941</td>
<td><strong>-1.51683</strong></td>
<td>T-Test</td>
</tr>
</tbody>
</table>

**unemployment rate**

<table>
<thead>
<tr>
<th>age of democracy in 2000</th>
<th>central state sector strength in 1985</th>
<th>years of EU membership, 2000</th>
<th>constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.0177</td>
<td>0.013462</td>
<td>0.001201</td>
<td>0.399204</td>
</tr>
</tbody>
</table>
economic inequality between the richest 20% and the poorest 20%

<table>
<thead>
<tr>
<th>age of democracy in 2000</th>
<th>central state sector strength in 1972</th>
<th>years of EU membership in 2000</th>
<th>constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00709</td>
<td>0.011761</td>
<td>0.003698</td>
<td>0.513804</td>
</tr>
<tr>
<td>0.269904</td>
<td>2.464555</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>-2.49601</td>
<td>1.144583</td>
<td>0.324727</td>
<td>T-Test</td>
</tr>
</tbody>
</table>

Legend: as in all EXCEL 5.0 outprints in this work, first row: unstandardized regression coefficients, second row: standard errors, last row: t-Test. The values immediately below the standard errors are $R^2$ (third row, left side entry), $F$, and degrees of freedom (fourth row).

All these reprinted equations confirm the basic argument, put forward by Erich Weede, quoted above. State sector expenditures, and above all, years of European Union membership block against economic growth and the redistribution of incomes. We thus formulate:

**Hypothesis 8**: years of EU membership significantly contribute towards a low economic growth rate, and significantly increase economic inequalities. Societies, under the discipline of old democratic mechanisms, are still more immune against unemployment. The Union, at the same time, is like a person riding on a bicycle: standstill is impossible. Without the enlargements of the 1980s, the described effects would be more pronounced still.

Without enlargement, the negative internal European Union blocks against capitalist development would even increase, thus turning the tide further in favor of the original neo-liberal Weede equation. Union enlargement, new world political borders or a new political order for a nationally organized society at home would take away some of the most detrimental effects of distribution coalition building. The basic reason for such results is the emergency support philosophy of the Commission, that strengthens the euro-wide rent-seeking mentality.

Upon closer inspection, also the much hailed development breakthrough in Ireland, Spain and Portugal upon EU accession is a myth: all countries in the developed world experienced an acceleration of their human development after 1985, when the Kondratieff A-phase set in, while some of the earlier joiners, most notably Greece and Denmark, harvested a period of stagnation upon EU-accession, from which they recuperate now during the latest Kondratieff cycle upswing:
Analytically, we might ask ourselves who were the best ‘accelerators’ of their development pattern since 1975. To this end, we calculated the linear regression predicted values (EXCEL 5.0 program, routine ‘Trend’) of the industrialized democracies in the period 1990-98 from their past human development performance, 1975 - 1990. The countries, whose real value was much above the expected developed democracy country trend, were exceptionally good human development performers, while the countries, very much below the trend, were bad human development performers. It turns out, that countries both outside and inside the Union had exceptionally good and exceptionally bad performances:

Table 20: human development in western democracies, 1975-1998

<table>
<thead>
<tr>
<th>Human Development Index growth</th>
<th>1975-80</th>
<th>1980-85</th>
<th>1985-90</th>
<th>1990-98</th>
<th>predicted 90-98 performance</th>
<th>residual (how development accelerated in comparison to the values, expected from the performance 1975-90)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUS</td>
<td>0.017</td>
<td>0.012</td>
<td>0.013</td>
<td>0.045</td>
<td>0.02724738</td>
<td>0.01775262</td>
</tr>
<tr>
<td>IRE</td>
<td>0.013</td>
<td>0.015</td>
<td>0.024</td>
<td>0.05</td>
<td>0.03622739</td>
<td>0.01377261</td>
</tr>
<tr>
<td>N</td>
<td>0.019</td>
<td>0.011</td>
<td>0.012</td>
<td>0.039</td>
<td>0.02576014</td>
<td>0.01323986</td>
</tr>
<tr>
<td>MAL</td>
<td>0.035</td>
<td>0.027</td>
<td>0.035</td>
<td>0.053</td>
<td>0.04087268</td>
<td>0.01212732</td>
</tr>
<tr>
<td>SWE</td>
<td>0.01</td>
<td>0.01</td>
<td>0.009</td>
<td>0.037</td>
<td>0.02601221</td>
<td>0.01098779</td>
</tr>
<tr>
<td>UK</td>
<td>0.008</td>
<td>0.009</td>
<td>0.02</td>
<td>0.044</td>
<td>0.03321503</td>
<td>0.01078497</td>
</tr>
<tr>
<td>POR</td>
<td>0.023</td>
<td>0.027</td>
<td>0.03</td>
<td>0.051</td>
<td>0.0409859</td>
<td>0.0100141</td>
</tr>
<tr>
<td>NZ</td>
<td>0.008</td>
<td>0.011</td>
<td>0.009</td>
<td>0.032</td>
<td>0.02686634</td>
<td>0.00513366</td>
</tr>
</tbody>
</table>
The integration of the European East

Having contributed almost bn$ 200 to the economic well-being of the developed regions of the world, especially western Europe, by its secular negative balance of trade since 1989, the East’s intention to join the European Union is justifiable on all grounds. And here, an additional argument comes in that speaks very much in favor of the European semi-periphery both in the East and the South, and against the ideology of a ‘fortress Europe’:

Hypothesis 9: any serious indicator analysis will show that the social distance between the European center and the East European periphery is smaller than usually pretended, and yet there are important tasks ahead. One of them is the export of corruption from the centers to the peripheries via the mechanisms of unequal exchange and exploitation; the other is the overcoming of the raw-material, environment- and energy-intensive extractive economy of the East.

For an empirical test of the hypothesis about the social distance between Western and Eastern Europe, that can be bridged, we used the following indicators:

- < 1 $ a day (percentage of population living from an income which is equal to or lower than 1 $ expressed in real purchasing power parity rates a day, UNDP, 1997)
- < Grade 5 (children not reaching grade 5 in school; UNDP, 1997)
- Early Death (percentage of people not expected to survive age 40; UNDP, 1997)
- Gender empowerment shortfall (UNDP 1997; ((1 - Gender Empowerment)*10)
- Gender related development shortfall (UNDP 1997; ((1 - Gender Development)*100)
- Human development shortfall (UNDP 1997; ((1 - Human Development)*100)
- Lack of modern communication (UNDP 1997; ((Swedish (record) value for main telephone lines per 100 people (=68.3) - main telephone lines per 100 people in the country)/2)
Unemployment (conventional labor office data taken from Bundesministerium fuer Arbeit, Gesundheit und Soziales, Vienna (EU countries), UNDP, 1997 (Eastern Europe), Globale Trends, 1998 (Eastern Europe))

Calculating simple unweighted means from these indicator series, we get the final results for our poverty indicator:

Table 21: poverty in a wider Europe by international comparison

<table>
<thead>
<tr>
<th>Country</th>
<th>Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>4.13</td>
</tr>
<tr>
<td>DK</td>
<td>5.76</td>
</tr>
<tr>
<td>F</td>
<td>6.04</td>
</tr>
<tr>
<td>SF</td>
<td>6.05</td>
</tr>
<tr>
<td>A</td>
<td>6.16</td>
</tr>
<tr>
<td>ITA</td>
<td>6.82</td>
</tr>
<tr>
<td>LUX</td>
<td>7.07</td>
</tr>
<tr>
<td>GER</td>
<td>7.12</td>
</tr>
<tr>
<td>GRE</td>
<td>7.16</td>
</tr>
<tr>
<td>CYP</td>
<td>7.2</td>
</tr>
<tr>
<td>NL</td>
<td>7.43</td>
</tr>
<tr>
<td>UK</td>
<td>8.06</td>
</tr>
<tr>
<td>CZ</td>
<td>8.48</td>
</tr>
<tr>
<td>B</td>
<td>8.84</td>
</tr>
<tr>
<td>POR</td>
<td>9.8</td>
</tr>
<tr>
<td>SLO</td>
<td>10.02</td>
</tr>
<tr>
<td>HRN</td>
<td>10.48</td>
</tr>
<tr>
<td>SLK</td>
<td>10.64</td>
</tr>
<tr>
<td>ESP</td>
<td>11.42</td>
</tr>
<tr>
<td>IRE</td>
<td>12.19</td>
</tr>
<tr>
<td>PL</td>
<td>12.76</td>
</tr>
<tr>
<td>BUL</td>
<td>16.04</td>
</tr>
<tr>
<td>EST</td>
<td>16.72</td>
</tr>
<tr>
<td>LAT</td>
<td>17.52</td>
</tr>
<tr>
<td>ROM</td>
<td>18.13</td>
</tr>
<tr>
<td>LIT</td>
<td>19.13</td>
</tr>
</tbody>
</table>

Source: our own calculations from the sources, mentioned above

Faced with a growing trilateral competition between economic power blocs (Japan + Pacific/USA/Europe), that could even one day become a bilateral competition between the Pacific and an expanded Europe, the danger arises, that the losers in the trilateral economic power struggle are unable to provide their 'spheres of influence' with the kind of advantageous economic relationships, that would be necessary to be able to break the deadlock of semi-peripherization and partial underdevelopment in regions like Latin America, Africa and Eastern Europe. Germany in particular will assert with all means possible its own backyard ‘sphere of influence’ in East Central Europe.

Instead of letting ‘them’ participate in global welfare, the existence of such exploitative power blocs - and not the vicissitudes of the ‘East’ or ‘South Europeans’ or ‘Latin Americans’ or ‘Asians’ or ‘Africans’ will create the conditions, so that corruption and crime in the East and South of the world system persist also:
Table 22: the chains of international exploitation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>94.35</td>
<td>521.40</td>
<td>615.75</td>
<td>6.00</td>
</tr>
<tr>
<td>USA</td>
<td>-155.38</td>
<td>442.24</td>
<td>286.87</td>
<td>7.50</td>
</tr>
<tr>
<td>Germany</td>
<td>-2.77</td>
<td>240.99</td>
<td>238.22</td>
<td>8.00</td>
</tr>
<tr>
<td>France</td>
<td>39.47</td>
<td>95.31</td>
<td>134.78</td>
<td>6.60</td>
</tr>
<tr>
<td>Italy</td>
<td>33.42</td>
<td>64.50</td>
<td>97.93</td>
<td>4.70</td>
</tr>
<tr>
<td>NL</td>
<td>21.99</td>
<td>64.97</td>
<td>86.96</td>
<td>9.00</td>
</tr>
<tr>
<td>UK</td>
<td>10.30</td>
<td>61.57</td>
<td>71.87</td>
<td>8.60</td>
</tr>
<tr>
<td>Belgium</td>
<td>13.94</td>
<td>35.53</td>
<td>49.47</td>
<td>5.30</td>
</tr>
<tr>
<td>Switzerland</td>
<td>23.71</td>
<td>20.25</td>
<td>43.97</td>
<td>8.90</td>
</tr>
<tr>
<td>South Korea</td>
<td>-8.17</td>
<td>44.38</td>
<td>36.22</td>
<td>3.80</td>
</tr>
<tr>
<td>Spain</td>
<td>2.49</td>
<td>29.42</td>
<td>31.91</td>
<td>6.60</td>
</tr>
<tr>
<td>Sweden</td>
<td>7.30</td>
<td>15.46</td>
<td>22.76</td>
<td>9.40</td>
</tr>
<tr>
<td>Singapore</td>
<td>14.80</td>
<td>3.42</td>
<td>18.22</td>
<td>9.10</td>
</tr>
<tr>
<td>Austria</td>
<td>-5.00</td>
<td>19.37</td>
<td>14.37</td>
<td>7.60</td>
</tr>
<tr>
<td>Australia</td>
<td>-12.59</td>
<td>19.95</td>
<td>7.35</td>
<td>8.70</td>
</tr>
<tr>
<td>Ukraine</td>
<td>-1.34</td>
<td>-0.87</td>
<td>-2.21</td>
<td>2.60</td>
</tr>
<tr>
<td>Slovakia</td>
<td>-1.36</td>
<td>-1.25</td>
<td>-2.61</td>
<td>3.70</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.43</td>
<td>-6.08</td>
<td>-5.65</td>
<td>3.30</td>
</tr>
<tr>
<td>Hungary</td>
<td>-0.98</td>
<td>-6.68</td>
<td>-7.67</td>
<td>5.20</td>
</tr>
<tr>
<td>Greece</td>
<td>-4.86</td>
<td>-3.72</td>
<td>-8.58</td>
<td>4.90</td>
</tr>
<tr>
<td>Argentina</td>
<td>-9.43</td>
<td>-1.05</td>
<td>-10.48</td>
<td>3.00</td>
</tr>
<tr>
<td>Romania</td>
<td>-2.34</td>
<td>-9.87</td>
<td>-12.21</td>
<td>3.30</td>
</tr>
<tr>
<td>Turkey</td>
<td>-2.68</td>
<td>-16.48</td>
<td>-19.16</td>
<td>3.60</td>
</tr>
<tr>
<td>Czech R</td>
<td>-3.27</td>
<td>-18.40</td>
<td>-21.67</td>
<td>4.60</td>
</tr>
<tr>
<td>Poland</td>
<td>-5.74</td>
<td>-19.89</td>
<td>-25.63</td>
<td>4.20</td>
</tr>
<tr>
<td>Russia</td>
<td>2.57</td>
<td>-32.56</td>
<td>-29.99</td>
<td>2.40</td>
</tr>
<tr>
<td>Philippines</td>
<td>-4.35</td>
<td>-25.73</td>
<td>-30.08</td>
<td>3.60</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.52</td>
<td>-49.72</td>
<td>-49.20</td>
<td>1.60</td>
</tr>
<tr>
<td>Brazil</td>
<td>-33.84</td>
<td>-24.10</td>
<td>-57.94</td>
<td>4.10</td>
</tr>
<tr>
<td>India</td>
<td>-5.81</td>
<td>-56.23</td>
<td>-62.04</td>
<td>2.90</td>
</tr>
<tr>
<td>Malaysia</td>
<td>-4.79</td>
<td>-61.97</td>
<td>-66.76</td>
<td>5.10</td>
</tr>
<tr>
<td>Thailand</td>
<td>-3.02</td>
<td>-63.97</td>
<td>-66.99</td>
<td>3.20</td>
</tr>
<tr>
<td>Mexico</td>
<td>-7.45</td>
<td>-84.11</td>
<td>-91.56</td>
<td>3.40</td>
</tr>
<tr>
<td>Indonesia</td>
<td>-4.89</td>
<td>-98.67</td>
<td>-103.56</td>
<td>1.70</td>
</tr>
<tr>
<td>China</td>
<td>29.72</td>
<td>-351.81</td>
<td>-322.09</td>
<td>3.40</td>
</tr>
</tbody>
</table>

Legend: Unequal exchange is - according to G. Koehler - defined here in the following fashion:

In order to determine the relative value of one currency in comparison with another, two conflicting concepts and measurement procedures exist, namely:
(1) currency exchange rates between two countries (i.e., the rates at which units of one currency are exchanged for units of another currency; e.g., how many dollars do I get for 100 rupees; how many rupees do I get for 100 dollars?)
etc.); and
(2) purchasing power parity rates (PPP rates) between two countries (i.e., the ratio of the purchasing power of money in countries A and B; e.g., how much money do I need in order to buy a pair of shoes in country A; and how much money do I need in order to buy an equivalent pair of shoes in country B?).

The proposed estimation method is, as follows: (a) calculate the distortion factor \( d \) (see above, exchange rate deviation index); and (b) apply it to the volume of trade, giving (c) the loss or gain due to unequal exchange, according to the formula:

\[
T = d \times X - X
\]

where:
- \( T \) = magnitude of unrecorded transfer (loss or gain) due to unequal exchange
- \( X \) = volume of exports from a low-wage country to high-wage countries, and
- \( d \) = the distortion factor (i.e., the deviation of the nominal exchange rate from the PPP rate, also known as ERD).

The formula means, in words, that the unrecorded transfer \( T \) resulting from unequal exchange is equal to the difference between the fair value of the export \( (d \times X) \) and the unfair (actual) value of the export \( (X) \). For low-wage countries this magnitude \( T \) is a loss. For high-wage countries the same magnitude \( T \) is a gain.

Sources: our own compilations from World Bank, World Development Report, 1999; Gernot Koehler and Arno Tausch (2000); and Transparency International - Corruption Perception Index, from their Internet Website: [http://www.transparency.de/](http://www.transparency.de/)

We fully agree here with recent analyses in *Le Monde Diplomatique*, April 2000 (especially Guilhem Fabre) who states that dirty money is already 1 to 5% of global gross domestic product. The UNDP HDR 1999 states, that organized crime already has a turnover of **1.5 trillion $ a year** (UNDP, HDR, 1999: 5).

Corruption, - the *World Development Report 2000* states - is a means to redistribute from the poor to the rich in the countries of the world system - yes, but transnational crime is a very efficient method to re-distribute from the poor to the rich countries and from the poorer to the richer strata. The more exploited a society is, the more corrupt it has to be, in order to be more easily exploited in future. Corruption drastically re-distributes. But the super-exploiters themselves also become infected by the virus of corruption:

Graph 27: exploitation and corruption
For Europe, faced with the danger to fall behind in the global power race, the temptation is great to increase unequal exchange with its own 'backyard' in Africa and Eastern Europe (Amin, 1994). And in Europe itself, the North will try to shift to the South the burden of negative current account balances. 1988, the year before the Berlin Wall fell, old Federal Germany had still a current account surplus of 60.3 thousand million $. More and more, Germany’s role will also depend on its ability to impose and to prolong the structures of unequal exchange in East Central Europe.

Secular negative trends in the trade and current account balances of nations are seen to be very strong motivations for international conflict. A possible rise of nationalism, anti-Westernism and anti-Germanism could receive a powerful ammunition by the ongoing sluggish post-transformation economic performance of most of the reform countries of Eastern Europe, dominated by the inability to find a (legal) export-oriented growth model, which is the underlying cause of the official chronic negative current account balance of the region.

Even the integration of the 'Near European East' - that is to say, EU 5 + 1 extension, will be a painful process. For a long time to come, their balance of trade and the balance on the current accounts will be negative, a powerful force in the motivation of economic and political nationalism.

The ‘extractive economy’ (Tausch and Prager, 1993) is a term used to describe a situation, when exorbitant energy consumption is used to produce a shrinking or stagnating, or at least not very rapidly growing amount of welfare. Our hypothesis is that Poland and other former communist countries play precisely such an ‘extractive role’ in the emerging cycle of the world economy. The structures of unequal exchange determine that the raw material exporting sectors in the periphery receive only a low and declining share in the global distribution of wealth. The consequence could be a rising working class raw material exporting and heavy industry sector radicalism against the whole project of westward political and economic integration. The hardening work of the producers gets lesser and lesser international rewards.
The East, unable to reap the benefits of technical progress and being forced to export what there is, is thrown back to the old patterns of the extractive economy. No major advances in the energy/income balance are in sight. We witness a heavy or even increased reliance of the export sector on the extractive branches of the economy, and the inability to change the price mechanism, partially because losses in the terms of trade and the 'scissors' of lagging (legal) exports and rising imports dictate that the urban and rural poor cannot pay higher energy bills. The result is one more reason for a possible rising tide of nationalism.

Research and technology should be at the center of a development path, together with savings creation and (legal) exports. Savings and (legal) exports in Eastern Europe are small compared to the 'tigers' of Asia during the heyday of their development 1955-95.

The role of labour migration and unemployment

Our view of migration and unemployment in the context of this essay is also fairly radical. We propose to view migration from a world systems perspective in the framework of the following hypotheses:

**Hypothesis 10**: both global leaders and hegemonial challengers were and are the recipients of large-scale migration

**Hypothesis 11**: unemployment is the consequence of deficient past human capital formation, high tax burdens, the saturated markets of transnational corporations, and overaging. World economic openness, a sufficient population growth and investment in research and development in the long run reduce the danger of unemployment

**Hypothesis 12**: large-scale migration leads to social disruption and a polarizing income distribution, outward migration is typically the characteristic of a country of the world periphery and semi-periphery.

**Hypothesis 13**: by its very trade-deficit creating interaction with the surrounding semi-periphery, the Western European center will most likely induce more migration from Eastern Europe instead of less. But in contrast to America and other OECD countries, that are on average world economically more open than the European Union countries and are institutionally more flexible, Europe does not have the institutions and social flexibility to adapt itself to large-scale migration. Still, the 'Le Pen'-equation of

more immigrants = more unemployment

is not true. In institutionally inflexible environments, migration leads to more inequality than in more open economies, initial inequality levels being equal

The proof of our hypothesis is to be found in our earlier research (Köhler/Tausch, 2000) as well as in the statistical materials reprinted below:
Table 23: labor migration

<table>
<thead>
<tr>
<th>World human development rank</th>
<th>non-nationals economically active as % of total labour force, beginning of the 1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 Luxembourg</td>
<td>33.1</td>
</tr>
<tr>
<td>16 Switzerland</td>
<td>29.6</td>
</tr>
<tr>
<td>15 Australia (foreign-born)</td>
<td>24.7</td>
</tr>
<tr>
<td>1 Canada (foreign-born)</td>
<td>21.9</td>
</tr>
<tr>
<td>4 USA (foreign-born)</td>
<td>9.4</td>
</tr>
<tr>
<td>19 Germany</td>
<td>8</td>
</tr>
<tr>
<td>12 Belgium</td>
<td>7.3</td>
</tr>
<tr>
<td>2 France</td>
<td>6.7</td>
</tr>
<tr>
<td>13 Austria</td>
<td>6.2</td>
</tr>
<tr>
<td>10 Sweden</td>
<td>5.8</td>
</tr>
<tr>
<td>7 Netherlands</td>
<td>3.7</td>
</tr>
<tr>
<td>14 United Kingdom</td>
<td>3.4</td>
</tr>
<tr>
<td>11 Spain</td>
<td>2.2</td>
</tr>
<tr>
<td>21 Italy</td>
<td>2.1</td>
</tr>
<tr>
<td>33 Portugal</td>
<td>1.8</td>
</tr>
<tr>
<td>8 Japan</td>
<td>1.1</td>
</tr>
<tr>
<td>20 Greece</td>
<td>0.7</td>
</tr>
<tr>
<td>52 Poland</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: our own compilations from Stalker/ILO, 1994

Table 24: The determinants of unemployment in the industrial countries of the world

<table>
<thead>
<tr>
<th>Correlations of ... with</th>
<th>unemployment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>functional illiteracy</td>
<td>0.49</td>
</tr>
<tr>
<td>net foreign direct investment as % of GNP</td>
<td>0.45</td>
</tr>
<tr>
<td>tax revenue per GDP</td>
<td>0.41</td>
</tr>
<tr>
<td>% If in agriculture</td>
<td>0.33</td>
</tr>
<tr>
<td>central government expenditure</td>
<td>0.3</td>
</tr>
<tr>
<td>energy waste (CO2 emissions per $ GDP)</td>
<td>0.21</td>
</tr>
<tr>
<td>% population aged &gt;65</td>
<td>0.11</td>
</tr>
<tr>
<td>absolute population size</td>
<td>-0.11</td>
</tr>
<tr>
<td>unionization rate</td>
<td>-0.12</td>
</tr>
<tr>
<td>women in government</td>
<td>-0.13</td>
</tr>
<tr>
<td>weekly hours of work in manufacturing</td>
<td>-0.14</td>
</tr>
<tr>
<td>budget surplus/def per GDP</td>
<td>-0.14</td>
</tr>
<tr>
<td>female share of adult labor force</td>
<td>-0.15</td>
</tr>
<tr>
<td>total health expenditure per GDP</td>
<td>-0.22</td>
</tr>
<tr>
<td>export/import ratio</td>
<td>-0.22</td>
</tr>
<tr>
<td>exports per GDP</td>
<td>-0.25</td>
</tr>
<tr>
<td>% If in services</td>
<td>-0.27</td>
</tr>
<tr>
<td>market size (absolute GDP)</td>
<td>-0.32</td>
</tr>
<tr>
<td>domestic savings rate</td>
<td>-0.34</td>
</tr>
<tr>
<td>total fertility rate</td>
<td>-0.35</td>
</tr>
<tr>
<td>annual population growth 1995-2015</td>
<td>-0.36</td>
</tr>
<tr>
<td>R&amp;D scientists and techn. per 100.000</td>
<td>-0.43</td>
</tr>
</tbody>
</table>
Table 25: the correlates of labor migration

<table>
<thead>
<tr>
<th>Correlations of ... with</th>
<th>migration labor per total employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>involuntary part-time workers</td>
<td>0.65</td>
</tr>
<tr>
<td>CO2 emissions per capita</td>
<td>0.58</td>
</tr>
<tr>
<td>real GDP richest 20%</td>
<td>0.56</td>
</tr>
<tr>
<td>services as % of GDP</td>
<td>0.51</td>
</tr>
<tr>
<td>annual population growth, 1970-95</td>
<td>0.49</td>
</tr>
<tr>
<td>service employment per total employment</td>
<td>0.46</td>
</tr>
<tr>
<td>exports as % of GDP</td>
<td>0.45</td>
</tr>
<tr>
<td>municipal waste kg per person</td>
<td>0.44</td>
</tr>
<tr>
<td>trade as % of GDP</td>
<td>0.43</td>
</tr>
<tr>
<td>budget surplus/deficit per GDP</td>
<td>0.37</td>
</tr>
<tr>
<td>total fertility rate</td>
<td>0.3</td>
</tr>
<tr>
<td>male suicide rate</td>
<td>0.21</td>
</tr>
<tr>
<td>labor force participation rate</td>
<td>0.18</td>
</tr>
<tr>
<td>weekly hours of work in manufacturing</td>
<td>0.13</td>
</tr>
<tr>
<td>Human Poverty Index</td>
<td>0.11</td>
</tr>
<tr>
<td>female economic activity rate</td>
<td>-0.1</td>
</tr>
<tr>
<td>real GDP poorest 20%</td>
<td>-0.11</td>
</tr>
<tr>
<td>expenditure on labor market programs per total GDP</td>
<td>-0.19</td>
</tr>
<tr>
<td>growth of real earnings per employee p.a.</td>
<td>-0.29</td>
</tr>
<tr>
<td>female unemployment</td>
<td>-0.34</td>
</tr>
<tr>
<td>population aged &gt;65 per total population</td>
<td>-0.34</td>
</tr>
<tr>
<td>unemployment rate</td>
<td>-0.35</td>
</tr>
<tr>
<td>inflation rate 1995</td>
<td>-0.35</td>
</tr>
<tr>
<td>long-term (6 months) unemployment</td>
<td>-0.38</td>
</tr>
<tr>
<td>long-term (6 months) female unemployment</td>
<td>-0.38</td>
</tr>
<tr>
<td>unemployment, &gt;12 months, female</td>
<td>-0.4</td>
</tr>
<tr>
<td>youth unemployment</td>
<td>-0.41</td>
</tr>
<tr>
<td>net foreign direct investment per GDP</td>
<td>-0.43</td>
</tr>
<tr>
<td>female youth unemployment</td>
<td>-0.44</td>
</tr>
<tr>
<td>unemployment &gt;12 months, male</td>
<td>-0.45</td>
</tr>
<tr>
<td>gross international reserves per months of import coverage</td>
<td>-0.58</td>
</tr>
<tr>
<td>central government expenditure as % of GDP</td>
<td>-0.63</td>
</tr>
<tr>
<td>tax revenue as % of GDP</td>
<td>-0.67</td>
</tr>
</tbody>
</table>

Graph 28: Labor migration and unemployment
Labor migration and unemployment

Legend: our own compilation from UNDP data-set and Stalker/ILLO, 1994

Europe is not a winner in the new model of global capitalism

Modernization theories (So, 1990), dependency and world system theories (Amin, 1975), and socio-liberal reform theories (Tausch and Prager, 1993), were used here for the world-wide comparative analysis of the basic patterns of the short and long-run tendencies of economic and social development (Kentor, 1998; Tausch, 1998).

In order to determine, why some nations developed so differently from the others, we used the following data-set in accordance with the basic explanatory patterns of modernization, dependency and socio-liberal reform:

The data set, based on 134 countries

- % labor force participation ratio (UNDP, 1996)
- % of the labor force in agriculture (UNDP, 1996; Fischer Weltalmanach, 1996)
- % of the labor force in industry (see: labor force agriculture)
- absolute GNP (UNDP, 1996)
- absolute income growth (growth in the sense of Arrighi’s and Amin’s theory) 1960-1990.
- Agricultural share in GDP (UNDP, 1996; Fischer Weltalmanach, 1996)
- average population growth (UNDP, 1996)
- economic growth 1960 - 95, per capita and year (UNDP, 1998)
- economic growth 80 - 93, pc. and year (UNDP, 1996)
The results are fairly consistent with earlier research findings and again confirm the dangers for the European political economy, described above. Only the most important results in the context of this volume are mentioned here. First of all, MNC penetration (UNCTAD measure, 1985), traditionally high in EU Europe, significantly lowers the human development index, and increases - ceteris paribus - infant mortality, and - as we show below, is also related to early death (percentage of people dying before age 40). Both the saturation effects of Europe’s ‘mature capitalism’ with a high labor force participation rate as well as it’s semi-periphery capitalism’s blocked rural transformation (Spain, Greece, Southern Italy) are responsible for slow economic growth. Countries with a large labor force participation ratio (the saturation effect of mature capitalism), and hence, a relatively smaller industrial de-facto reserve army of employment, grow slower than countries at the middle income level with a still larger industrial reserve army. Neoclassical theory would mention here wage flexibility in the urban sector as one of the main underlying processes. But on the other hand, predominantly rural societies at the present stage of globalization are being negatively affected by the ongoing urban bias in world development (M. Lipton). Another factor works against a European growth model. Especially those countries, that were once or still are characterized by big landholding and or extensive agriculture, implanted in the world system during the Long 16th Century, like most of the nations of the world’s East and South are still doomed to very slow economic growth, slow human development, and relatively higher infant mortality rates. Even if other factors work in the direction of rapid economic growth, this factor could play a role in European stagnation in the 21st Century, since countries like Spain, Austria and Poland are also affected by it, and the EU agricultural policy could not redress this imbalance. In terms of measurement, all this boils down to the same effect: disarticulation, urban bias, structural heterogeneity - they all happen, whenever agriculture has a much larger...
share in national labor than in national product, reflecting the relative discrimination of the rural sector in society.

Some of the most surprising data from this comparison about the urban bias on a world level are:

<table>
<thead>
<tr>
<th>Country</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>4.0</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.09</td>
</tr>
<tr>
<td>Germany</td>
<td>4.0</td>
</tr>
<tr>
<td>India</td>
<td>2.06</td>
</tr>
<tr>
<td>Israel</td>
<td>1.33</td>
</tr>
<tr>
<td>Japan</td>
<td>3.5</td>
</tr>
<tr>
<td>NL</td>
<td>1.25</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1.11</td>
</tr>
<tr>
<td>Poland</td>
<td>4.5</td>
</tr>
<tr>
<td>UK</td>
<td>1.0</td>
</tr>
<tr>
<td>USA</td>
<td>2.14</td>
</tr>
</tbody>
</table>

Legend: employment share of agriculture, divided by product share of agriculture. For the ongoing debate about this ‘urban bias’, ‘structural heterogeneity’ or ‘disarticulation’ see Huang, 1995; Rothgeb, 1995, Wickrama and Mulford, 1996, as well as the earlier theoretical advances by Amin, 1976; Cordova, 1973, and Lipton, 1977. Our data analysis is based on EXCEL 7 and UNDP, 1996.

Hence also the negative effect of agricultural employment on growth. The process of bourgeoisie nation formation (Amin does not use the term ‘nation building’) before the First World War is also a crucial determinant of today’s growth and development chances in the world system, and works in favor of the old members of the EU, but not in favor of an EU, integrating the new countries of former Yugoslavia and the former USSR. Those nations, that were founding members of the UN in 1945 - and hence have a high UN membership age - disproportionately reap the benefits of economic growth today. The international system indeed seems to work like a single, huge, distribution coalition, in which the EU participates as long as it’s majority of states are nations, forming part of this distribution coalition. Economic growth disproportionately favors countries with a long-established record of UN-membership. Participation in the ‘distribution coalition’ of world power allows still a better access to distributed goods, while the predominantly rural or semi-rural societies of the ‘Fourth’ and ‘Fifth’ World, but also new nations of the ‘East’, now willing to join the EU, are being excluded from the benefits. Those, that have access in the established networks of distribution coalitions, accumulate even more economic power.

State sector size affects growth in a way, as predicted by both conventional and radical economic theory. Again, Europe is not on the winning side. The economic burden of the military sector today also significantly and negative affects economic growth at the level of the 134 nations under analysis. Amin’s theory would allow for such a hypothesis: the state class, and bureaucracies all block against development; militarization, first and foremost, is bureaucratization; while only a handful of nations might reap (if at all?) the benefits of militarily controlling the globe. The effect of militarism must be further qualified: growth is hampered by high military expenditures, and employment is hampered by state sector expenditures. There is a negative employment, and a negative growth effect of monopoly number five in the world system, state capitalism and militarism.

Former communist countries could grow rapidly, but often stagnate, not because they are former communist nations, but because their peripheral state is too bureaucratic and too big, because their reserve army
is too small, because their military burden rate is too high, and because their rural populations are being discriminated against. But per se, the tendencies of world society after 1980 during the new cyclical set-up seem to suggest, that a world political experience as a former communist nation does not block against subsequent economic growth. Absolute market size is not a precondition of subsequent economic growth anymore, as successful island nations like Mauritius show impressively. Our equation determines 46.6% of economic growth from 1980 onwards; the F-statistic for the whole equation is 8.05, with 120 degrees of freedom. What flexible specialization has to offer to the megalomania of current European center thinking, would be open for a debate.

Human development, on the other hand, is positively determined by a high agricultural share, and hence the absence of what Michael Lipton once called the ‘urban bias of world development’. It is being negatively determined by a high ratio of foreign direct investment penetration. Thus, findings of earlier cross-national development research, most notably Huang (1995) are being confirmed anew. Our two statements are very well compatible with the essence of dependency theories. A development, that is dependent on foreign capital, is socially polarizing and regionally exclusive. The rural regions stagnate relatively, while the rich urban centers are receiving disproportionate shares of the newly created wealth. But ceteris paribus, it also emerges, that a concerted effort in only one area of human capital formation - education - without the proper health policy effort can also be negatively affecting human development. This same effect also holds for the determination of infant mortality rates. A policy of high labor force participation ratios, and hence, full employment, less urban bias and chances for rural employment all reduce infant mortality rates significantly, while communist power experience, foreign capital penetration and a one-sided human capital policy, concentrated on schooling, and neglecting health, all contributed significantly to higher infant mortality rates. Foreign direct investment penetration pushes up the labor force participation rate, while human rights violations, state sector expenditures and past communist experience all determine the labor force participation rate - and hence employment - downward. The effect is of course significant, with an F-value of 8.13 and 42.3% of total variance explained.

The most important multivariate results are in detail:

Table 26: the determinants of employment and infant mortality
As was mentioned elsewhere (Tausch, 1997, 1998), the logic of world development 1932 - 1982 was determined by the ‘fordist cycle’ of production, based on corporatist inter-mediation between capital, wage labor and the state, strong and encompassing trade unions, mass demand, and a thorough ‘etatist’ regulation of the process of capitalist production. The new order, that seems to emerge out of the crisis of the 1980s, that destroyed the ‘fordist’ model of (state) capitalism, based on mass production, heavy industry, the arms sector, the ‘transmission belt’ between state capital and dominated wage labor, and all-pervasive state control, is based, above all, on the electronic communication revolution, tele-working, new forms of production, and a thorough de-regulation of financial markets. Now, why are the front runners the front runners during the growth marathon, 1960 - 1995? The empirical results are the following:

Table 27: the determinants of the growth marathon, 1960-1995

Legend: our own calculations with EXCEL 4.0 and 5.0. As in all EXCEL 5.0 outprints in this work, first row: unstandardized regression coefficients, second row: standard errors, last row: t-Test. The values immediately below the standard errors are $R^2$ (third row, left side entry), $F$, and degrees of freedom (fourth row).

The following variables have a significant effect on victory or defeat in the development marathon: \% labor force participation ratio (UNDP, 1996) (-); average population growth (UNDP, 1996) (+); mean years of schooling, population aged >25y (+); and the trade-off described in equation (3) above. TNC penetration impedes long-term growth at the 10%-significance level (significant almost at the 5% level), while the communist legacy - per se - is not necessarily connected with a bad growth performance (this effect is also significant at the 10% level).

Our answer is very much patterned around the Irish experience after the 1960s: abundant labor reserves do not impede economic growth, especially in highly developed countries, but only under the additional condition of a proper human capital policy. Capitalism ‘transplants’ its dynamism to the regions, which are characterized by a still lower per-capita income, to regions which have ample supplies of labor, and whose reserve army is not yet dried up, but which invested heavily in education. Neither neo-liberalism nor a classic form of ‘social Keynesianism’ are the model to achieve growth. The mobilization of internal savings for growth is more important than the inflows of transnational capital, which, in the long run and by their very oligopolistic structure, block against growth.

Why do the populations of the different countries of the world system suffer under such a divergent degree of early death, poverty, and low human development? The results are the following:
Table 28: structural violence, poverty and human development in 134 countries

<table>
<thead>
<tr>
<th>EARLY DEATH</th>
<th>(STRUCTURAL VIOLENCE)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FDI per GDP</strong></td>
<td>Years of population growth</td>
</tr>
<tr>
<td>0.832</td>
<td>0.2914</td>
</tr>
</tbody>
</table>

| CPM POVERTY |
|-------------|---------------------|
| **FDI per GDP** | Years of population growth | State sector | % labor force | ln PPP | ln agr.shares | MILEX | UN memb yrs | viol pol | constan |
| 0.771 | 37.28 | 122 | **2.325** | -0.3957 | 1.0128 | 1.1625 | 1.4269 | -2.099 | 0.3249 | -0.0955 | 0.4498 | **-3.584** | -0.5166 |

<table>
<thead>
<tr>
<th>HUMAN DEVELOPMENT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FDI per GDP</strong></td>
</tr>
<tr>
<td>0.935</td>
</tr>
</tbody>
</table>

Legend: our own calculations with EXCEL 4.0 and 5.0. As in all EXCEL 5.0 outprints in this work, first row: unstandardized regression coefficients, second row: standard errors, last row: t-Test. The values immediately below the standard errors are R^2 (third row, left side entry), F, and degrees of freedom (fourth row).

The following significant influences hold, in comparison to the other dependent variables:
Table 29: the analytical conclusions drawn from the statistically significant effects in our recent research

<table>
<thead>
<tr>
<th></th>
<th>reduction of structural violence</th>
<th>reduction of poverty</th>
<th>human development</th>
</tr>
</thead>
<tbody>
<tr>
<td>dependency</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>labor force participation rate</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>agrarian share</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>military</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>expenditures</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>years of UN membership</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Source: our own compilation from recent research results

Thus, the capitalist world economy assigns, more than 500 years after its initialization, the length of life of the poorest sectors of the population according to an easily discernible process: The long-run members of the UN afford longer life, the newer nations shorter ones, irrespective of the level of the logarithm of income per capita and its square. Long-established nationhood and the position of a country as a world investor rather than a world investment recipient country are nothing but a reflection of what Francois Perroux once called the ‘dominant economy’ as opposed to the dominated ones (Perroux, 1961). Apart from that, the transformation of the rural sector achieves overriding importance. The potential of economic growth originally is enhanced by ‘unlimited supplies of labor’, but - as Sir William Arthur Lewis has shown so clearly half a century ago - the backward rural sector urgently needs reform, combined with a policy of population quality rather than quantity alone, in order not to socially overburden the growth process. For that reason, our proposed strategy of development does not differ from the one, envisaged by Aghion and Williamson - investing in human capital, and trying to avoid excessive inequalities. Especially when capital markets are imperfect - as they are - inequality is bad for economic growth. Redistribution to the poor, i.e. to individuals who exhibit higher marginal returns to investments, will be growth-enhancing (Aghion and Williamson, 1998: 18). A large share of the rural sector enables economic growth, but is a burden on social development, as measured by the variable ‘early death’. The way out from this abyss, dependent militarization, or dependent industrialization (high labor force participation ratios), provide no long-term solution to the problem of social transformation, because they both impede a long life of the poorest sectors of the population. Thus we are able to formulate Hypothesis 14:

**Hypothesis 14:** there are chances of a policy of capitalist ascent in the 21st century, based on human capital formation, and the overcoming of the ‘urban bias’ of world development. But Europe, with its huge state sector, its high tariff walls against foreign competition, and its large scale penetration by foreign capital, its slow process of technological innovation, is destined to become the ‘Argentina’ of the 21st Century. Also, its small future population base and rigid migration regime do not qualify it for a rapid 21st Century economic growth. There is a great risk that the European West will treat the newly democratic East as a reservoir of surplus-value and exploitation.
Scenario (2) starts from the assumption, that anyway, Europe is not in a position to become a global challenger. Our scenario is a radical, socio-liberal, and globalistic approach, directed against nationalism, protectionism, and social decay. Instead of accumulating world power, Europe should accumulate competence in problem solving, in modeling the future, and in treating better the tormented environment. Thus, the enlarged European Union should concentrate it’s still existing, considerable economic and world political energies on creating the conditions for global governance and global innovation. Thus, Europe at last would show a real greatness - foregoing the concept of power in benefit of the concept of global well-being and welfare. The scenario shares with the German Foreign Minister Joschka Fischer the vision of a fully democratic Europe, presented in his speech at the Humboldt-University in Berlin on May 12, 2000 (see for the official version, http://www.auswaertiges-amt.de/6_archiv/2/r/r000512a.htm). Of course, a European constitution is necessary, as well as a true European constitutional and administrative court, that would substitute and enlarge the present legal bodies. Our federal and socio-liberal vision is incompatible with the vision of a Europe of nations, which - in the ultimate instance - leads to the distribution coalition building at the level of the European institutions. A Europe of nations will always, in one way or the other, lead to a blockade of the European institutions - the small nations versus the big ones, the South against the North; the Euro ins against the Euro outs, the wine drinkers against the beer consumers, the friends of pasta and salami against the adherents of sausage and so on. The number of combinations is infinite, and a Europe of 21, let alone many more member states is simply ungovernable on the basis of the present institutions. Ideas of a ‘small reform’, with some shifting going on between the small and the large states, using endless number games in terms of commissioners, voting rights and what have you do not resolve the basic conflict and are simply idiotic: Parliament must be the locus of politics, and not the counting of the numbers behind the scenes, and trading - as before - measure $x$ for support of measure $y$ in coalition with $z$. Parliament must be strengthened, and there should be a second chamber of the European parliament as well - one ‘House of Representatives’ based on roughly equal electoral districts, with 1 million inhabitants electing 1 MP (for the smaller states with a population of less than 1 million, there must be an exception), and one ‘upper house’, a European Senate, giving each member country exactly 2 seats, irrespective of the population size of the country. To avoid the kind of distribution coalition building so typical for many European political systems, based on proportional representation, there should be at least a mixture of proportional and direct representation, based on the present German electoral model, if not an outright copy of the British electoral system altogether.

By allowing for full-fledged democracy on the European level, combined with a socio-liberal social policy, based on a market economy, an active human capital formation, gender empowerment, an economic policy, that largely ends state subventions for energy misuse and private transport, and an open system of migration policy, generally modeled around the existing patterns of migration policy in countries like Australia, Canada, and the United States of America, there would be enough room for a real economic and social recovery on the level of the European states. It goes without saying, that the insane agricultural policy of the European Union and all forms of other protectionism must be ended, in favor of a large-scale policy of ‘negative income taxation’ and a basic social minimum, that at the same times abolishes most other forms of state intervention in the economy. The horrific indirect tax burdens, existing in Europe, must be ended in favor of a system of regressive direct taxation, that - on the other hand - is not too regressive, and would foresee a tax burden of around 35% for the top 20%, 25% for the next quintile, 15% for the middle income group, 10% for the next income group, and no taxes at the bottom and a negative income tax for the unemployed, Europe-wide. It goes without saying, that knowledge production and knowledge consumption should be fully opened to privatization, with the abolition of the state monopoly on Universities as the most urgent reform measure for the coming decade, and a full system of Universities on the market in place, as in the United
States of America. The central European state would receive a limited amount of the financial resources, raised, with 7.5% of European government revenue concentrated in the center. This is very much above the present resources, but very much below the centralism of states like Belgium, that control over 50% of the national economy. The 7.5% proportion should be fixed on a permanent basis. Since federalism is one of the most important preconditions of a successful long-term development strategy, the new European constitution would have to be approved by a European-wide referendum and the national parliaments.

The establishment of a European democratic federal state would be the first and most important step in the direction of a socio-liberal world democracy, to be modeled pretty much on the same two-chamber pattern (with the UN General Assembly becoming the World Senate, with only two elected Senator from each state sitting in the World Senate). The executive organs of the United Nations become the world government, with the main agencies becoming the world ministries. The World House of Representatives could be modeled around the same pattern as the European House of Representatives, with 10 million inhabitants electing 1 representative; and in the smaller states, 1 representative from each country. Needless to say, that the same arguments that we used for the European case, should become valid on a world level. The world state should finance itself at the beginning by a symbolic flat 0.5% direct tax on all incomes, irrespective of their size. The highest tax level, that the world legislature could impose, would be 3% of incomes.
**Appendix**

**The Fortune Global 500 List 2000**

<table>
<thead>
<tr>
<th>Global 500 Rank</th>
<th>Company</th>
<th>Revenues $ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Motors (USA)</td>
<td>176,558.0</td>
</tr>
<tr>
<td>2</td>
<td>Wal-Mart Stores (USA)</td>
<td>166,809.0</td>
</tr>
<tr>
<td>3</td>
<td>Exxon Mobil (USA)</td>
<td>163,881.0</td>
</tr>
<tr>
<td>4</td>
<td>Ford Motor (USA)</td>
<td>162,558.0</td>
</tr>
<tr>
<td>5</td>
<td>DaimlerChrysler (EU)</td>
<td>159,986.0</td>
</tr>
<tr>
<td>6</td>
<td>Mitsui (J)</td>
<td>118,555.0</td>
</tr>
<tr>
<td>7</td>
<td>Mitsubishi (J)</td>
<td>117,766.0</td>
</tr>
<tr>
<td>8</td>
<td>Toyota Motor (J)</td>
<td>115,671.0</td>
</tr>
<tr>
<td>9</td>
<td>General Electric (J)</td>
<td>111,630.0</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Itochu (J)
109,069.0

11
Royal Dutch/Shell Group (EU)
105,366.0

12
Sumitomo (J)
95,701.6

13
Nippon Telegraph & Telephone (J)
93,591.7

14
Marubeni (J)
91,807.4

15
AXA (EU)
87,645.7

16
Intl. Business Machines (USA)
87,548.0

17
BP Amoco (EU)
83,566.0

18
Citigroup (USA)
82,005.0

19
Volkswagen (EU)
80,072.7

20
Nippon Life Insurance (J)
78,515.1

21
Siemens (EU)
75,337.0
22
Allianz (EU)
74,178.2

23
Hitachi (J)
71,858.5

24
Matsushita Electric Industrial (J)
65,555.6

25
Nissho Iwai (J)
65,393.2

26
U.S. Postal Service (USA)
62,726.0

27
ING Group (EU)
62,492.4

28
AT&T (USA)
62,391.0

29
Philip Morris (USA)
61,751.0

30
Sony (J)
60,052.7

31
Deutsche Bank (EU)
58,585.1

32
Boeing (USA)
57,993.0
33
Dai-ichi Mutual Life Insurance (J)
55,104.7

34
Honda Motor (J)
54,773.5

35
Assicurazioni Generali (EU)
53,723.2

Literature

Abu - Lughod J. (1990), ‘Restructuring the Premodern World-System’ Review (Fernand Braudel Center, SUNY Binghamton), 13, 2: 273 - 86.
Agence France Press English Wire, Dialog - online.
Allen, C. and D. Vines (1993) "Should Clinton Cut the Deficit or is there a Global Paradox of Thrift?" The World Economy, no. 2, vol. 16 (March 1993), pp. 133-158
Amin S. (1994a) 'The Future of Global Polarization', Review (Fernand Braudel Center, USA), XVII, 3 (Summer), p. 337-347
Amnesty International (current issues), 'Jahresbericht' Frankfurt a.M.: Fischer TB.


Bank Austria East - West Report. Business Information for the Central European Investor (current issues), Vienna: Z - Laenderbank Bank Austria AG.

Bank Austria Report (current issues), Vienna: Z - Laenderbank Bank Austria AG.


BBC World Service (current news broadcasts) short - wave, 31 - m - band.


Bellofiore, R. (1997) memorandum, pkt mail archive, 13 Nov 1997, online: http://csf.colorado.edu/mail/pkt/nov97


Berry A. et al. (1981), 'The Level of World Inequality: How Much Canada One Say?' Document 38, Laboratoire d'Economic Politique, CNRS, 45, rue d'Ulm, F - 75230 Paris Cedex 05.


Berryman, Ph. (1987), 'Liberation Theology: The Essential Facts about the Revolutionary Movement in Latin America and Beyond' New York: Pantheon Books.


Botsford D. (1997), ‘Britain and the European Union: How we got in and why we should get out’ Foreign Policy Perspectives, 28; also available on the Internet at: http://www.capital.demon.co.uk/LA/foreign/britieuro.txt


Brady, J. and T. Costello (1994) 'Global Village or Global Pillage'. Boston, USA: Southend Press


Çakmak, A. (1998), *living peoples*, memorandum to wsn mailing list, September 1998, online: http://csf.colorado.edu/mail/wsn


Central European Quarterly (current issues). Vienna: Creditanstalt.


Chaloupek G. (1999): Arbeitsmarktauswirkungen einer EU-Erweiterung, Unterlagen zum Vortrag bei der IDM Summerschool Arbeitsmarkt und Beschäftigungspolitik in einer erweiterten EU, Juli


Clad J.C. (1994), 'Slowing the Wave' Foreign Policy, 95: 139 - 150.


Commission of the European Communities (1995); ‘White Paper. Preparation of the Associated Countries of Central and Eastern Europe for Integration into the Internal Market of the Union’ Brussels, 10.05.1995, Com (95) 163, final.

Commission of the European Communities (current issues), 'Employment Observatory Central and Eastern Europe’ Brussels: EU, DG Employment, Industrial Relations and Social Affairs.


Dialog (current issues) (electronic archive, containing practically the entire English-language world press, the main international news agencies and newsletters and the Social Science Citation and Arts and Humanities Index, as well as the possibility to order on-line or fax copies from the international social science journals at http://www.dialogselect.com)

Die Presse (current issues) (free electronic archive at http://www.diePresse.at)


Economist Intelligence Unit, Dialog - online.


Financial Times, Dialog - online.


Goedings S. (1999), ‘EU Enlargement to the East and Labour Migration to the West’ International Institute of Social History Amsterdam, Research Paper 36


Handelman St. (1994), The Russian 'Mafiya' Foreign Affairs, 73, 2: 83 - 95.


Huber P. (1999a), 'Wirtschaftliche und soziale Folgen der Erweiterung der EU' in 'Zukunft ohne Grenzen' Wien: Institut für den Donauraum und Mitteleuropa

Huber P. (1999b), 'Labour Market Adjustment in Central and Eastern Europe: How Different?' Vienna: WIFO


ILO World Labor Yearbook (current issues).


Institute of Labor and Social Studies (current issues), 'Occasional Papers' Warsaw: Institute of Labor and Social Studies, Ministry of Labor and Social Policy.


Internationale Politik (current issues).

IOM (1999), 'Migration Potential in Central and Eastern Europe' Geneva: IOM

IOM (International Organization for Migration) (1999), 'Migration Potential in Central and Eastern Europe' Geneva: IOM


Janowska Z. et al. (1992), 'Female Unemployment in Poland' Warsaw: Economic and Social Policy Series, 18, Friedrich Ebert Foundation, Poland.


Köhler, G. (1978a) ‘Disarmament and Global Apartheid’, Humanity Calls (New Delhi, India), (June): 9-14,47-50

Köhler, G. (1978b) ‘Global Apartheid’, Alternatives (Institute for World Order/World Policy Institute, USA), vol. 4, no. 2 (October), pp. 263-275


Le Monde (current issues).
Lengauer R. et. al. (1999), ‘Arbeitsmarkt und Osterweiterung’ IOS-Management, A-1010 Wien, Babenbergerstraße 1
Longerich et al. (1993), 'Der neue alte Rechtsradikalismus' Munich: Piper.
Microsoft Excel (1992), 'Microsoft Excel. Verzeichnis der Funktionen' Microsoft Corporation.
Monatsberichte des Oesterreichischen Instituts fuer Wirtschaftsforschung (current issues).
Morawska E. (2000) ‘International Migration and Consolidation of Democracy in East Central Europe: A Problematic Relationship in a Historical Perspective’ University of Pennsylvania, emorawsk@as.upenn.edu


Penn World Table (Mark 5.6a) (1999); online: http://datacentre.chass.utoronto.ca:5680/pwt
Piore M. (1990), 'Work, labor and action: Work experience in a system of flexible production' in 'Industrial Districts and Inter-Firm Cooperation in Italy' (Pyke F. et al. (Eds.)), pp. 52 - 74, Geneva: International Institute for Labor Studies.
Pradetto A. (1991b); 'Politik und Oekonomie im postkommunistischen Polen’ Osteuropa, 41, 10: 941 - 952.

Research Centre for Economic and Statistical Studies of the Central Statistical Office and the Polish Academy of Sciences (current issues), 'Research Bulletin' Warsaw: Central Statistical Office.

Reuters Textline, Dialog - online.

Riggs F. (1990), 'Presidentialism in the USA A Comparative Perspective' Honolulu: Department of Political Science, University of Hawaii at Manoa.


Rozov, N.S. (1992) 'Structure of Civilization and World Development Trends.' In Russian; for a book note, see memorandum by Rozov, dated 16 Sept 1998, to wsn mailing list, online: http://csf.colorado.edu/mail/wsn/98.III


Salt J. et al. (1999): 'Assessment of Possible Migration Pressure and Its Labour Market Impact Following EU Enlargement to Central and Eastern Europe'. Migration Research Unit, Department of Geography, University College, London


Senghaas D. (1994) 'Wohin driftet die Welt?: uber die Zukunft friedlicher Koexistenz' Frankfurt am Main: Suhrkamp.


Shaw T. M. (1992), 'The South at the end of the twentieth century: rethinking the political economy of foreign policy in Africa, Asia, the Caribbean, and Latin America' New York: St. Martin's Press.


Sheahan M. D. (1995), 'Aspects of Health Policy in Poland' Public Health Reports, May (available to the author only without pagination).


Sunkel O. (1973), 'El subdesarrollo latinoamericano y la teoria del desarrollo' Mexico: Siglo Veintiuno Editores, 6a edicion.


Tausch A. (2000), 'Sozialwissenschaftliche Markierungen zum EU-Erweiterungsprozeß' Government research paper for the Austrian Ministry of Labour, I/D/13, Arno.Tausch@bmsg.gv.at


Tazi-Breve et al. (1999), 'Bevölkerung in Österreich' Hrsgb. vom Institut für Demographie der Österreichischen Akademie der Wissenschaften


The Times, Dialog - online.


Tokeks R.L. (1992), 'From Visegrad to Krakow: Cooperation, Competition, and Coexistence in Central Europe' Problems of Communism, 40, Nov. - Dec.: 100 - 114.


Tomasson, G., and A.M. Daastol (1998), 'Letter to the Editor, Wall Street Journal Europe, Tuesday Nov. 17th 1998' (here quoted from a memorandum by Arno Mong Daastol to the wsn mailing list, online: http://csf.colorado.edu/mail/wsn/98.III)

Transition (current issues) OMRI Prague.


UN ECE (1996); ‘International Migration in Central and Eastern Europe and the Commonwealth of Independent States’ Geneva: UN ECE Economic Studies, 8 (entire)


UN Economic and Social Council (1993), ‘International Migration Flows among ECE Countries’ New York: UN ECE CES 778, 27 May


United Nations (1948) Universal Declaration of Human Rights


United Nations (1998), The causes of Conflict and the Promotion of Durable Peace and Sustainable Development in Africa’ report of the Secretary- General to the UN Security Council, 16 April 1998.


125


Wallerstein I. (1998), 'Is Japan Rising or Declining?' Commentary 3, 1, Fernand Braudel Center, Binghamton University.


Weede E. (1986a), 'Catch - up, distributional coalitions and government as determinants of economic growth or decline in industrialized democracies' The British Journal of Sociology, 37, 2: 194 - 220.


Weede E. (1990), 'Wirtschaft, Staat und Gesellschaft' Tübingen: J.C.B. Mohr


Weltgeschehen (current issues), Sankt Augustin: Siegler&Co. Verlag fuer Zeitarchive.


WIIW (1999): 'Potential size of migration from Poland after joining the EU' WIIW monthly report, 2


Williamson J. A. (1998), Harvard Institute of Economic Research, Internet site (with link-up to the data base on wages in the world periphery 1820-1940): http://www.economics.harvard.edu/~jwilliam/


World Economy Research Institute Warsaw (current issues), 'Poland International Economic Report' Warsaw: Warsaw School of Economics.
World Economy Research Institute Warsaw and International Centre for Economic Growth, San Francisco (current issues), 'Transforming the Polish Economy' Warsaw: Warsaw School of Economics.
Zeitpunkte (current issues) Hamburg: Die Zeit.

36  
Nissan Motor (J)  
53,679.9

37  
E. ON (EU)  
52,227.7

38  
Toshiba (J)  
51,634.9

39  
Bank of America Corp. (USA)  
51,392.0

40  
Fiat (EU)  
51,331.7

41  
Nestlé (CH)  
49,694.1

42  
SBC Communications (USA)  
49,489.0

43  
Credit Suisse (CH)  
49,362.0

44  
Hewlett-Packard (USA)  
48,253.0

45  
Fujitsu (J)  
47,195.9

46  
Metro (EU)  
46,663.6
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<th>Company</th>
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<tr>
<td>47</td>
<td>Sumitomo Life Insurance (J)</td>
<td>46,445.1</td>
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<td>Tokyo Electric Power (J)</td>
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<td>Kroger (USA)</td>
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<td>Total Fina Elf (EU)</td>
<td>44,990.3</td>
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