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"Catching Up"

*The Limits of Rapid
Economic Development*



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Contents

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Introduction to the American Edition	vii
1. The Concept of “Catching Up” Development in the Twentieth Century	1
2. Post-Industrial Trends and Prerequisites for the Crisis of the “Catching Up” Development Model	27
3. Internal Contradictions of the “Catching Up” Development Model	61
4. The Japanese Economic Miracle: A Manifest Success or a Strategic Setback?	81
5. Southeast Asia: From Boom to Crisis	109
6. China: Sharing the Fate of the Others or Going Its Distinctive Way?	137
7. Russia: Pipe Dreams and Realistic Objectives	161
Index	185

erated modernization have, indeed, led to a rise in their industrial potential but failed to produce a sustainable socio-economic system. These countries continue to depend on the Western world as a source of knowledge and as a market for their products, and decades of importing new technologies have not led to scientific breakthroughs of their own. The above cannot but suggest the conclusion that it is impossible to “catch up with” post-industrial nations by industrial methods, while mobilization-based construction of material requisites sufficient for launching post-industrial transformation causes mutations of the public mind which take more time to rectify than promoting economic progress does. In the context of the present-day reality, *the nations not belonging to post-industrial civilization at the moment may expect elements of the post-industrial system to crystallize out in their social order only given the immediate involvement of the leader nations in the process* (the eastern lands of reunified Germany are a case in point).

This conclusion will hardly go down well with those who would like to see Russia the leader of world progress in the coming century and are sure to arouse strong opposition from many quarters. In our book, therefore, we shall attempt to provide a rational explanation of why the “catching up” development doctrine—which, in various forms, has become one of the outgoing century’s most popular social theories—no longer makes scientific and practical sense as we are approaching a new landmark in human history and ought, therefore, to be abandoned by Russia and the world at large.

1

The Concept of “Catching Up” Development in the Twentieth Century

The twentieth century was full of economic, social, and political revolutions. Never before had history witnessed such disparities in the economic development of countries and nations. Within decades, the image of the world changed repeatedly and radically: in the early twentieth century, the United States pushed Great Britain aside, emerging as the leading economic power; in a few years Germany came to dominate Europe and retained its position, on and off, until 1945; in the 1930s the USSR made a serious effort to become the second strongest economic player; during the Soviet-U.S. confrontation in the 1950s and 1960s, Japan made its historic breakthrough, forcing the Western powers to make way for her on the world’s markets; finally, in recent years the countries of Southeast Asia and China made their bid to become economic leaders in the twenty-first century. As a result, “catching up” development came to be regarded almost as a universal economic paradigm to be adopted by economically less developed nations.

We do not believe that the concept of “catching up” development can be described as a complete or integral theory. Rather it is the product of an extremely complex synthesis of bourgeois views devoted to the propagation of capitalist social values and of Marxist ideas preaching the advantages of “distinctive” economic development. From the outset, this concept was highly politicized: it was directly linked to the objectives of the developed Western nations that dominated the world economy, of the newly independent Third World countries and of the Soviet bloc states that sought to spread their influence to various regions across the globe. This explains why within the concept of “catching up” development, elements of

universalism, promoted mostly by Western theorists, were oddly intertwined with propaganda of unique or distinctive types of economic progress—a brainchild of those national leaders who had only this uniqueness to take pride in. For these reasons, a review of the “catching up” development theories inevitably presents a somewhat eclectic picture, and emphasis on this or that study that contributed to the emergence of the concept will perforce be, to a certain extent, arbitrary.

Problems of accelerated development first became the subject of vigorous research back during the years of World War II, when the postwar global arrangements were discussed. The first major works in this field included “Problems of Industrialization of Eastern and Southeastern Europe,”¹ an article by P. Rosenstein-Rodan in the *Economic Journal* published in 1943, and E. Staley’s book *World Economic Development: Effects on Advanced Industrial Countries*² which appeared a year later. In a few years, the problems theoretically formulated in these two studies drew the attention of economists and political figures when, in 1948-1949, the U.S. government launched its large-scale program for the economic rehabilitation of Western Europe known as the Marshall Plan.

Until the early 1950s, however, problems of accelerated development were, in fact, never considered with respect to countries of the periphery. The rehabilitation of the Western European economies and even the strictly U.S.-controlled economic rebuilding of Japan were generally designed to cope with the destructive aftermath of the war. These efforts did not reflect the application of a fundamentally new economic paradigm to less developed countries which mostly remained colonial at the time. The developing economies’ actual rise, which combined theoretical and practical aspects of acceleration, began against the background of growing confrontation between the East and the West—the outbreak of hostilities first in Korea and then in Indochina and the upsurge of the liberation movements in Africa and Asia. The need for a new theory was chiefly connected with the operation of international organizations—at first the World Bank which, in 1948-1949, provided the initial major loans to Chile, Brazil, and Mexico, and then the United Nations which, in the early 1950s, set up specialized agencies to devise techniques of accelerated development for backward countries. In 1951, two expert commissions established by the U.N.—one to deal with “Mea-

sures for Economic Development of Under-Developed Countries” and the other, with “Measures for International Economic Stability”—published extensive reports that shaped the development of the new concept for the next decade.

Generally, the theory of accelerated development took shape in the 1940s and 1950s. W. Rostow lists P. Bauer, C. Clark, A. Hirschman, A. Lewis, G. Myrdal, R. Prebisch, P. Posenstein-Rodan, G. Singer, and J. Tinbergen among its founders and ideologues.³ However, these researchers can hardly be treated as a group because many of them held diametrically opposed ideological positions. In assessing the then state of the concept, one can also firmly assert that in actual fact none of the theorists of accelerated modernization regarded it as a component of overall historical development or suggested a clear-cut system of assumptions about the kind of economic change that could lead agrarian countries to a radically new stage of economic progress.

From the 1960s, the concepts of accelerated development gradually became polarized depending on the ideological preferences of their authors. Some Western theorists preferred to promote development which required acceptance of the values of industrial society based on private enterprise and a market economy, while experts from the developing countries stressed government intervention in the economy, self-sufficient operation of the traditional industries, and planned economy elements. We hold that from that moment on, different theories of development should be considered as relatively independent from one another.

Theories of Accelerated Westernization

In the 1950s and 1960s, the industrial society concept spread increasingly and, for obvious reasons, most Western researchers were under the sway of the ideas of technological determinism. In the late 1950s, W. Rostow proposed the concept of stages of economic growth and singled out five stages in the economic history of each nation—traditional society, the preconditions for take-off, the take-off, the drive to maturity and the age of high mass consumption. He also acknowledged the possible onset of a sixth stage that he described as “beyond consumption.” His definitions, however, were never made more specific.⁴ According to Rostow, traditional society’s “structure is developed within limited production functions, based

on pre-Newtonian science and technology, and on pre-Newtonian attitudes toward the physical world." He held that the foremost parameters of the principal stages—the take-off and the drive to maturity—were levels of investment activity amounting to 5 to 10 and 10 to 20 percent of national income, respectively.⁵ All other characteristics of any given stages were also strictly technological. In the 1960s, Herman Kahn, another prominent economist and futurologist, classifying societies by per capita income levels, divided the world's countries into five groups—pre-industrial, with an average per capita income of \$50 to \$200; partly industrialized, with an income of \$200 to \$600; industrial, at a level of \$600 to \$1,500; mass consumption (or developed industrial) societies, with a per capita indicator of \$1,500 to \$4,000, and, finally, post-industrial, averaging more than \$4,000.⁶ This was the technocratic approach at its purest because no other characteristics of a society except its economic development level were taken into account.

Within the context of this approach, Western theorists saw industrial development as an absolute value to which any ideological paradigm could be sacrificed. Their confidence was obviously strengthened by the fact that in the 1950s and 1960s, the Soviet Union made a tangible bid for leadership in technological progress and was quickly catching up with the United States, while Japan was emerging as a dangerous competitor and capturing traditional markets for U.S. and European goods. At that time, many experts in the West agreed that the United States and the USSR represented two models of an essentially integral industrial society, and "there was general optimism with respect to what could be accomplished by emphasizing planned investment in new physical capital utilizing reserves of surplus labor, adopting import-substitution industrialization policies... and central planning."⁷ That was when the ideas of convergence of Western market economies and socialist-type economic systems gained popularity. All this explains why the West regarded worldwide introduction of the Western development model as both possible and desirable.

For example, R. Aron emphasized that in the modern world, "in economic and social terms, all countries of all races at all latitudes claim to see one and the same objective reflected in essentially similar values.... Industrialization is inevitable, and it seeks to become universal."⁸ It was, in fact, maintained that the less developed coun-

tries should do their utmost to embark on the road of industrial progress and more or less follow in the footsteps of the evolution of most Western nations. This development model was usually vaguely described as "modernization." Its adherents largely adopted the monolinear sociological theory of T. Parsons who reduced all social evolution to forward motion from a primitive and archaic state to modernity.⁹ The fullest definition of modernization was offered in the 1960s by S. Eisenstadt: "Modernization," he said, "is a process of change toward those types of social, economic and political systems that developed in Western Europe and North America from the 17th to 19th century and then spread to other European countries and, in the 19th and twentieth centuries, to the South American, Asian and African continents."¹⁰ A technocratic attitude is also clearly present in the views of C. Black who saw modernization as an effort to adapt traditional institutions to new functions stemming from the unprecedented growth of the role of the kind of knowledge that made it possible to control the environment. M. Levy, Jr., another researcher influenced by technocratic ideas, regarded modernization as a social revolution going as far as possible without destroying society itself.¹¹

In the 1950s and 1960s, the most important aspects of the problems of modernization were, of course, economic, sociopolitical, and cultural.

In economic terms, modernization was seen as hinging on accelerated industrial development involving the use of new technologies and efficient energy sources, greater division of labor and the advancement of commodity and monetary markets. Such accelerated development was to apply to all sectors of the economy without exception, not just to individual export-oriented industries. Back in the early 1950s, R. Nurske said that "the general level of economic activity is raised and the size of the market enlarged [by means] of a frontal attack—a wave of capital investments in a number of different industries... through the application of capital over a wide range of activities."¹² However, the question of where such investment was to come from to assure such rapid growth remained open. Most experts held (quite properly, we believe), first, that the developing countries could not do without a significant influx of outside capital and, second, that on the way to a market economy they would have to pass through a typically early capitalist stage of acute social

differentiation. The principal recommendations were therefore limited, on the one hand, to the need for a vigorous drive to attract foreign investment and, on the other, to the idea that savings had to be encouraged as much as possible; consumption was to be curtailed and ownership differences were to be accepted: as a result, a socially heterogeneous nation would be able to create its bourgeoisie.¹³ Many researchers stressed the role of the state that was to focus investment flows in priority areas and encourage business initiative so as to increase industrial output. One should note that such modernization was designed not to create a centralized planned economy but to shape a Western-type market economy in which the leading role belonged to industrial corporations, banks, and trading and financial companies. These were to be as independent as possible from political and ideological factors; as a result, economic growth would become natural and self-sustained.¹⁴

The sociopolitical aspect of modernization was linked primarily to the emergence in the developing countries of a Western social model essentially dominated by the principles of individualism and market economics. This approach appeared so self-evident that many sociologists used the words "civilizing mission" and "Westernizing mission" interchangeably.¹⁵ Significantly, J. Tinbergen held that rapid and sustainable development hinged, first, on the creation and maintenance of a monetary equilibrium, second, on prevention of mass unemployment, third, on efforts to avoid excessive differences in incomes and, fourth, on indirect government intervention in those areas that could not develop properly on the basis of private enterprise alone. "It must be clear that programming is not an alternative to common sense; it cannot replace common sense and it should not," he said.¹⁶ Clearly, preference was expressed for the traditional market-economy techniques of self-regulation.

Obviously, in developing countries, such a mechanism can only function properly within a legal system assuring the individual's economic freedoms and rights. Therefore, Western experts maintained that in the social systems being forged on the periphery of the developed world, a person's social status should be based on one's individual qualities—skills, performance, education, and the like—and not on one's lineage or caste. In this connection, social modernization was seen as an effort to replace a hierarchy of subordination and vertical accountability with a partnership of equals based on

mutual interest. In order to create a modern society, it was also essential to modify political relations so as to protect human rights, assure proper division of powers and freedom of speech, and involve the public as much as possible in the political process.¹⁷ For the sake of fairness one should note that back in the 1960s, most theorists of modernization realized that full compliance with their recommendations was not feasible; subsequently, they kept repeating that it was important for a society undergoing modernization to create a government apparatus staffed by well-trained, competent and able administrators. It was also emphasized that, contrary to tradition, public servants should not be selected on the basis of their social background or personal connections.¹⁸

The cultural aspect of modernization was connected in the 1960s with a rationalization of human awareness on the basis of scientific knowledge and a rejection of behavior rooted in tradition; moreover, the formation of a new cultural stereotype was seen as central to the entire process of modernization.¹⁹ However, the problem was raised simplistically and the recommendations for tackling it were simplistic, too. It was commonly held that secular education, the fight against illiteracy, religious tolerance, progress in communications and the dissemination of information, as well as large-scale cultural enlightenment would automatically promote acceptance of Western values. Few analysts could afford to go beyond technological determinism and assert that "the central objective of all the countries undergoing modernization is to step up the formation of human capital."²⁰ The practical record has shown that modernization encountered its biggest problems in its political and cultural aspects: this was where the concepts of modernization had to undergo the biggest adjustments, and some of them were the reverse of the initial logic underlying these concepts.

The theorists of modernization admitted that different countries required different techniques or methods of modernization and that the rates of modernization would not be the same everywhere. The argument was that in some countries, modernization would occur naturally, in response to society's inner needs, while in others modernization would be induced by more developed nations.²¹ The list of factors impeding modernization included the sway of traditional social institutions, the reluctance of the ruling elites to share power and profits for the benefit of the nation, as well as illiteracy and

widespread absence of a rational outlook. Many champions of accelerated modernization suggested, as a radical prescription, removal of these factors; they held that, first and foremost, the traditional sector was to be destroyed or changed.²²

Modernization concepts clearly pointed the way for the countries that opted for "catching up" development, yet successful change called for a number of conditions most of which proved unfeasible. According to some researchers, specifically, G. Myrdal, the Western countries that have reached the post-industrial development level and are already enjoying obvious advantages in technology can destroy, with their cheap goods, the Third World's traditional industries. Meanwhile, cheap labor remains the only source of appeal to foreign investment in developing countries. Cheap labor implies an extremely low level of domestic savings and as such impedes effective progress.²³ Indeed, most theories of accelerated development assumed an initial impetus from the Western countries. However, the West itself saw no point in investing vast resources in Third World economies²⁴ (in contrast to the program for Western European economic rehabilitation or aid to Japan, South Korea, or Taiwan that were confronting the Communist threat in Southeast Asia). On the other hand, the Third World was not about to ape the countries it saw as colonial oppressors. Besides, the theories of accelerated or "catching up" development appeared in the West decades after the market and civil society had begun to work there in a civilized and sophisticated manner²⁵; unfortunately therefore, the idea of Westernization proved to be alien to the developing nations themselves. Its implementation called (and still calls) on them to overcome enormous resistance; therefore it could not (and cannot) become popular with the Third World. Moreover, both the developing countries themselves and the leftists in the West expectedly charged that such concepts promoted the periphery's economic dependence.

Alternative Theories of Development

The followers of the modernization theory maintained that by emulating the West, the developing countries could assure their own economic and social progress. Simultaneously, however, different concepts were suggested. One of them followed up on the ideas published, during the first postwar years, by R. Prebisch, an Argentinian economists who held prominent posts in the U.N. Economic

Commission for Latin America and in UNCTAD.²⁶ This theory, seriously influenced by Marxism, ascribed Third World problems not so much to the uneven use of the advantages offered by economic growth as to the direct and blatant exploitation of the "periphery" by the countries of the "center." As A. Foster-Carter noted at the time, the term "underdevelopment" was used to stress the steady destruction by the Western world of the economies that were dependent on it.²⁷ In 1957, these views simultaneously prompted P. Baran in the United States and S. Furtado in Brazil to advance what was called the concept of "dependentismo" (from the Spanish word for "dependent").

Its adherents did not oppose the Third World's accelerated development, as such, but warned the "Westernizers" against using uniform modernization models which failed to accommodate the distinctive cultural features of the "catching up" countries.²⁸ The "dependentistas" charged that the theories of modernization ignored the social, political, and cultural aspects of the developing countries' past and present and that it was impossible to separate economic and social factors of development because "development in itself is a social process; besides, its purely economic aspects are marked by its internal social relations."²⁹

Working on the concept of "dependent development" in the 1960s and 1970s were many talented researchers—S. Furtado, F. Cardoso and T. dos Santos of Brazil, E. Faletto of Argentina, A. Monteverde and O. Sunkel, a Russian emigre, of Mexico, P. Baran of the United States, S. Amin of Senegal, A.G. Frank, a German American, and a number of others. As we noted above, they ascribed the backward state of certain countries to the evolution of world capitalism. "I believe it was the inner contradictions of capitalism and the historical development of the capitalist system that made the countries of the periphery backward: their surplus product was appropriated by the colonial powers; this assured the latter's economic progress and gave rise to a steady process [of exploitation] which is still with us," said A.G. Frank.³⁰ He also emphasized that underdevelopment should not be seen simply as nondevelopment because this distinctive social and economic system was due to its ongoing exploitation by the leading world powers whose policies, on the one hand, shaped the developing countries' orientation on exports and, on the other, kept up a constant flight of these economies' surplus value to other re-

gions. In this way, the growing exports of raw commodities and the imports of industrial goods (for the benefit of the West) kept reproducing the “vicious circle” that made it extremely difficult to boost economic development.³¹ In the view of the “dependentistas,” the biggest problem was not that it was impossible to create a dynamic sector of the Third World economies but that the social structure was shaped by dependence on the capitalist centers and the traditional foreign trade ties impeded development.

This school saw the economic situation in Asia, Africa, and Latin America not as an essential stage on the way to a developed industrial society but primarily as a result of the “invasion by modern capitalist enterprises into archaic social structures.”³² The theory of “dependentism” explained the reproduction of the developing countries’ dependence on the major centers of economic power by the need for their continued financing from abroad. In the opinion of O. Sunkel, the growing share of raw commodities in the exports and of industrial goods in the imports, as well as the ever-present fiscal shortages combined to generate “the implacable necessity to obtain foreign financing... [that] is the crucial point in the mechanisms of dependence.”³³ In this connection some of the “dependentistas” noted the developing countries’ foreign debt (which skyrocketed throughout the 1980s): this, they believed, indicated an increasingly irreversible redistribution of added value in favor of the centers of world capitalism.

Among the “dependentistas,” there were both serious scholars with excellent knowledge of history, sociology, and economics (such as I. Wallerstein) and relatively superficial researchers who declared their Marxist affiliation and tried to update some Marxist tenets (such as P. Baran). Small wonder that on a number of issues their positions differed considerably. In the opinion of I. Wallerstein, capitalism is developing naturally as a market-economy system, and therefore equally comprises both the exploited classes of the capitalist countries themselves and the countries of the “periphery” even though the strictly capitalist elements such as hired labor and nationwide commodity production are less developed there. Just as capitalist relations had spread to all social strata in Europe from the sixteenth to the nineteenth centuries, capitalism kept expanding toward the periphery.³⁴ Other “dependentistas” maintained that the great powers were only interested in the developing world because they saw it

as a source of cheap raw commodities. Some of them oversimplified world history so much that in earnest explained Japan’s success by the fact that the country had no natural resources and a small domestic market and was therefore “of no interest to the imperialist forces.”³⁵

The “dependentistas” criticized the modernization theory from several angles.³⁶ They claimed that the backwardness of today’s “traditional societies” was due to the development of international capitalism. They argued that in order to develop rapidly, the backward countries should go their own way instead of using foreign capital and adopting Western cultural values. In their view, industrialization could not raise the developing countries to a qualitatively new level of economic progress. On the one hand, the orientation toward exports merely strengthened the international division of labor that had taken shape in the colonial era, with its “overwhelming dominance of the leading countries in labor productivity in all possible fields, which compels the states of the periphery to accept their role of suppliers of not too important goods such as exotic farm produce or raw materials they are naturally in a good position to offer.”³⁷ On the other hand, even imports-substitution industrialization in most cases failed to affect the system of dependence because imports of technologies did not raise the productivity level above that of the developed countries and were therefore unable to put an end to underdevelopment.³⁸ The “dependentistas” therefore regarded accelerated development as a vicious circle which could not lead the developing countries to prosperity. As R. Preisch said in the mid-1950s, “my diagnosis of the situation of the countries of Latin America was constructed on the basis of my criticism of the pattern of outward-oriented development, which I considered to be incapable of permitting the full development of those countries. My proposed development policy was oriented toward the establishment of a new pattern of development which would make it possible to overcome the limitations of the previous pattern.”³⁹ Regrettably, one must admit that neither Preisch nor his followers have succeeded in offering a feasible alternative.⁴⁰

The “dependentistas” were particularly averse to the modernization theory advocates’ claim that the developing countries should follow in the footsteps of Western Europe and North America, but more rapidly. The “dependentistas” said this would only help establish a worldwide U.S. hegemony and sap the developing econo-

mies, exacerbate social conflicts, destroy the environment and have the international monopolies (primarily U.S.-based) dominate the Third World countries.⁴¹ Without denying the very possibility of industrial development in the backward countries, the "dependentistas" held that it would not produce any radical change and would merely serve to keep the developing countries backward and isolated from the post-industrial world.

The "dependentist" concept particularly stressed the unfairness of exchange in relations between the Third World and the industrial centers: the developed countries artificially depressed the prices of Third World commodities and inflated those of technologies and industrial articles imported by the developing nations. Also inflated were the charges for financial services, debt repayment, and so on. Unfairness was also seen in the fact that the same kind of investment (for example, in real estate development) generated far higher profits in the advanced countries than in the Third World, thus making the latter much less attractive to investors.⁴² No matter how diverse they may appear at first sight, all these elements of the concept of "dependentism" indicate that already in the 1970s, many researchers were aware that it was impossible to "catch up" with the post-industrial world, irrespective of whether the effort was based on the use of Western investment or on self-sufficiency.

It was also noted that certain social groups in the developing countries themselves wanted their nations to remain backward. F. Cardoso referred to "an internal structural fragmentation connecting the most 'advanced' parts of their economies to the international capitalist system. Separate although subordinated to these advanced sectors, the backward economic and social sectors of the dependent countries then play the role of 'internal colonies.'"⁴³ Therefore, even the slow and uncertain economic progress of the developing countries, mostly in the export-oriented sectors with their close ties to the international monopolies, was incapable of "dragging" the entire economy through a process of change. It could only push the boundary of backwardness deeper into the national economy, thus making it "dual." Largely on the basis of these views, S. Amin asserted categorically in the mid-1970s that the "economies of the periphery are without any internal dynamism of their own."⁴⁴

The "dependentistas" mostly criticized the theory of modernization but failed to indicate any ways toward creating developed sys-

tems with a market-economy infrastructure in the countries of Latin America, Africa and Asia. The failure to provide such an answer was all the more unusual in the 1970s, when the decades of colonial rule had long been past but the Third World economies showed no signs of improvement. Although they did preach proper attention to the distinctive social and cultural features of the periphery, the "dependentistas" in fact badly underrated the role of the human factor in economic and social processes and ignored the universal sociocultural aspects of social evolution. As a result, their recommendations for overcoming backwardness were reduced to minor, random and technical advice in the economic and political fields.

Essentially, the ideology of the "dependentistas" favored economic isolationism in an age of growing internationalization. According to S. Amin, "so long as the less developed country continues to be integrated in the world market, it remains helpless... [and] the possibilities of local accumulation are nil."⁴⁵ Therefore, the champions of the developing countries' "distinctive way" argued that export earnings should be used more frugally and effectively not so much to transform the industrial sector that linked these nations with the rest of the world but to modernize the traditional sectors and create a more updated infrastructure. The foremost objectives included self-sufficiency in resources, accelerated development of local industry, saturation of the domestic market reduction of imports and closer political integration of the Third World on the international scene so as to introduce the so-called new economic order.⁴⁶ In the 1970s, when the West was facing the energy crisis and commodity shortages, the demands of the Third World countries did sound seriously, yet today those years are remembered as a strange dream.

The more radical followers of the "dependentism" theory agreed on the need for structural change to expand the domestic market, yet they also suggested social democratic and even leftist socialist measures, such as more government intervention in the economy and less dependence on the centers of world capitalism.⁴⁷ Calls for a socialist revolution and for weaker ties with the West and the world market were also not unheard of.⁴⁸ In most cases, such calls were based on an obvious substitution of concepts and on the unfounded belief that "a modern economy with its high labor productivity inevitably underlies the socialist system."⁴⁹ No wonder that those ad-

hering to such attitudes maintained that backwardness and dependence could only be ended by a socialist revolution which would allegedly open the way to "self-reliance," with the existing industries giving rise to economic growth primarily to satisfy national requirements.⁵⁰

Such prescriptions highlight the limitations of the theory of "dependentism." Devised as an alternative to the concepts of modernization, it actually preached "modernization for internal consumption" and industrialization within a nation which did not permit either foreign competition or any other outside influence. The "dependentistas" proposed outdated solutions which had become a thing of the past in the developed countries, appealed to the social strata that represented the economic past, not future, and failed to accord proper attention to matters of education, science and culture. Therefore, the "dependentist" concepts did not and could not offer a realistic alternative to the theories of Westernization.

Post-Industrial Change and the Decline of "Catching up" Development Theories

The practical economic record of the 1970s-1990s showed clearly that the forecasts of the ideologues of "catching up" development came true only partially and that the advocates of Westernization proved much more accurate in their assumptions and calculations than the "dependentistas."

The main economic trends of the past three decades have noticeably narrowed the freedom of economic movement of the developing countries. The 1980s not only strengthened the conviction that both types of industrialism—capitalism and socialism—were fated to disappear from the world arena but also witnessed the collapse of the USSR which was seen as the only alternative to the Western economic model, something on which the developing countries could orient themselves. Post-industrial change radically reduced Western demand for the products of the periphery, pushing many developing countries to the brink of economic disaster. Human intellect and creative capabilities emerged as the foremost factor of economic progress. The technological revolution assured the Western powers of unprecedented prosperity—although, in the words of James K. Galbraith, "the number of winners in a winner-take-all lottery is necessarily a small fraction of those who would like to play... 'Techno-

logical revolution' is a game that only a few can win."⁵¹ Therefore, in recent years many developing countries have concentrated on the manufacture of relatively simple mass products in demand on world markets—far from the worst of the possible development options.

Still, most of the Third World countries did feel the impact of the post-industrial world's growing self-sufficiency and the weaker demand for their traditional exports. The rising efficiency of production in the West meant that this was where the production not only of industrial items but also of farm produce proved to be more profitable. From the mid-1960s, North America accounted for the entire surplus of net grain exports,⁵² the United States, Australia and South America are the leading exporters of meat and poultry. Today, the developing countries even feel like outcasts on the markets for their traditional exotic products: while in the mid-1960s Africa's share in the world output of palm oil reached 80 percent, it fell to 20 percent by the end of the 1980s. While Africa accounted for 60 to 80 percent of the world's peanut and peanut butter exports in the 1960s, in the mid-1980s this figure did not rise above 10 to 16 percent.⁵³ The developing countries have been dealt even more obvious blows on the market for raw commodities: they are facing more problems there because the costs of producing (not extracting) natural resources are in fact zero; therefore, their pricing is a subjective rather than an objective process. Meanwhile, the low value placed on the output of such industries is a consequence of the "relative power of social classes that conditions the functioning of the market; specifically, labor and capital are two powerful social classes, while resource owners... are not."⁵⁴ The 1990s saw the prices of raw commodities go down. Even the impressive industrial boom in Western Europe and the United States in the middle of the decade failed to reverse this trend. Between 1990 and mid-1999, the overall commodity index calculated by the *Economist* fell to almost 30 percent. Having become leaders in agricultural production, the developed nations imposed unfair trading prices in this field, too: the prices of the main staples—wheat, corn, and rice—increased by 29, 58, and 30 percent, respectively, from 1993 to 1996.⁵⁵ This means that the Third World's last chances of pressuring the "First World" are disappearing fast.

The developing countries' plight has never been more painful. While in the early nineteenth century, the gap between the economic

16 "Catching Up"

potential of the center and the periphery was merely threefold⁵⁶ and the difference in average incomes was 30 to 50 percent,⁵⁷ today's dichotomy is estimated to be 50- to 72-fold.⁵⁸ In 1993, the world's GNP totaled \$23 trillion, including \$18 trillion generated in the developed nations and a mere \$5 trillion in the developing countries where more than 80 percent of the population of the globe lived. The difference in the nominal incomes in the post-industrial countries and all other nations grew from \$5,700 a year in 1960 to \$15,400 in 1993. That is, the richest one-fifth of the human race appropriated 61 times more wealth than the poorest one-fifth,⁵⁹ although this figure was only 30 times back in 1960.⁶⁰ In early 1993, producing 1.4 percent of the world's GNP, the poorest one-fifth accounted for 0.98 percent of global savings and 0.95 percent of the total trade turnover.⁶¹ Against this background, living standards in many developing countries have been falling: from 1985 to 1989, average per capita food production decreased in as many as 94(!) countries, average per capita income went down in 40 nations,⁶² and 13 states now produce and consume less per capita food volumes than 30(!) years ago.⁶³ The increasingly widespread view that these economies are bankrupt leads to reductions in their share of foreign investment: from 1967 to 1990, this share fell from 30.6 to 18.9 percent of the total. This drop was particularly dramatic in the regions that are, with good reason, described as the "Fourth World"—from 17.5 to 7.3 percent in Latin America and from 5.3 to 2.1 percent in Africa.⁶⁴ These statistics not only highlight the economic ineffectiveness of the poorest regions but also indicate that the gap will keep widening.

However, the 1970s and 1980s not so much discredited the theories of "catching up" development as witnessed their revision. Although many researchers—specifically, B. Schneider—acknowledged the complete failure of all previous plans for having the nations of the periphery develop in Western ways,⁶⁵ it was clear that certain developing countries' efforts yielded quite successful and even fantastic results. In Southeast Asia, rapid economic growth did not conflict with but was rather largely rooted in the local sociocultural environment. This appeared to bear out the view of R. Bendix that he voiced back in 1967—that it was wrong to contrast tradition and modernity and that modernization did not necessarily destroy the existing social systems.⁶⁶ At about the same time, G. Myrdal

said that "awareness of history and the search for national identity do not by themselves threaten or even conflict with commitment to the ideals of modernization."⁶⁷ As a result, the advocates of "catching up" development, on the one hand, *analyzed the significance of human capital* for accelerated economic progress and, on the other, *centered on the role of the state* in the transformation of traditional economic systems into modern industrial ones.

The former effort, as it turned out, produced no tangible results but was limited to general theoretical considerations arguing that at the close of the twentieth century, the world was becoming increasingly diverse, which called for a synthesis of universalism and the cultural distinctiveness of different nations.⁶⁸ Significantly, in discussing the human factor, the developing countries referred not so much to a higher intellectual level or promotion of creative individuality as to the immediate use of human capital so as to assure the advancement of the existing socioeconomic system. In other words, these countries identified human capital, albeit vaguely, not with something to be created according to the Western model but with what was on hand and had been created within this or that particular nation. Education was interpreted in an excessively broad cultural context. For example, the assertion that "the success of development implies, first and foremost, a strengthening of the human potential by education geared to the requirements of modernization" was accompanied by the reservation that "support for national culture aimed at preserving the nations' identity and reassert the authenticity of their development is not an excessive demand or a luxury but forms an integral element of motives for development and emerges as the basis of the specific choice that makes it possible to mobilize their energy."⁶⁹

By the late 1980s, an "improved" concept of modernization had been formed. It provided for dynamic economic and social development which did not force the particular society to accept the industrial system values widespread in the West. The new concept no longer argued that each "catching up" country should go its own separate way but preached a distinctive synthesis of universalism and particularism. The need for such a combination was ascribed to the fact that an imbalance between modernity and tradition would doom the reforms and give rise to acute social conflicts. For example, in the opinion of A. Touraine, the world's survival depended

on whether it would be possible to couple rationality and culture, modernity and national identity, development as a universal goal and the way of life as a choice of values, economic development and social reform.⁷⁰ J. Attali also spoke out for the need to reconcile rationality and spirituality in the modern world.⁷¹ Recently, the advocates of this approach have been using the term “countermodernization” (to describe accelerated industrialization as practiced in the USSR during the 1930s-1960s and in some other socialist countries where rapid industrial development led to autarky and undermined market economy values) and even “antimodernization” (to denote a radical destruction of basic social values—something that obviously pushed the productive forces backward and revived primitive economic forms, the way it happened during the “cultural revolution” in China).⁷² However, we believe that “modernization to bypass modernity” which the authors of the new concept preach testifies to the crisis of this view, just as the ideas of “post-modernity” indicate that it is pointless to juggle with post-modernist terms.⁷³

The *latter* trend proved to be much more fruitful because from the outset, working on it were not theoretical sociologists but those who deal with practical economics and politics—primarily, in the Asian countries that sought to industrialize fast by using Western technologies and in this way achieve integration in the world economic system. Central to this approach was the use, in the course of industrial development, of the potential of the state that, in most developing countries, in fact remained the only social institution capable of implementing the necessary reform.

The term “developmental state” (*“hatten-shiko-kata-kokka”*) was coined back in the 1970s, but it failed to gain currency in the English-speaking countries because the concept itself was in demand primarily in East Asia.⁷⁴ In the West, the first serious attempt to examine this system of views can be found in C. Johnson’s book on industrial policy in Japan, published in 1982.⁷⁵ Central to the “developmental state” are the considerable concentration of economic power in the hands of the state apparatus, this apparatus’ relative independence from the social processes, which enables it to intervene, as an “outsider,” in economic and social affairs, and, finally, close ties between the state and the business community, the state playing the leading role.⁷⁶ In this case the state influences the economy by way of customs policies, differentiated interest rates,

monopolist opportunities for certain groups of producers, incentives for imports of technologies and exports of finished products and a wide range of protectionist measures to keep the domestic market covered. Although the resulting economic system is highly bureaucratized and the methods of its management are very similar to those used in the socialist economy of the USSR, all developmental states nevertheless remain oriented on active interaction with the outside world. This interaction takes the form of large-scale imports of technologies and exports of finished products, efforts to attract foreign investment, the development of the stock market, and so on.

From the outset, the concept of the “developmental state” was linked with the theory of “catching up” development which was formulated by the Japanese economist K. Akimatsu in the 1930s and which was also known as the “flying geese vee formation” theory. The precept was that as technological progress advanced and spread beyond the boundaries of the developed nations, less developed countries would also be able to manufacture the finished product just as efficiently, using their own labor and the latest technological achievements. In other words, as the leading goose rises higher, it is confidently followed by the entire vee formation.⁷⁷ In the 1970s and 1980s, when Japan attained its impressive economic success, a modified version of this concept (naturally, with Japan as the “leader”) was promoted by Japanese economists and sociologists throughout Southeast Asia.⁷⁸ To this day, Western analysts keep noting that Japan (and, to a lesser extent, South Korea) has demonstrated a unique example of the way a nation committed to “catching up” development reaches a point where, instead of following the leader, itself becomes the leader and has the adjacent countries emulate its progress.⁷⁹

In subsequent chapters we will attempt to take a comprehensive view of the record of “catching up” development both in Japan and in other Southeast Asian countries. At this point however, let us note that both the Japanese and all other versions of the concept proved insufficient for the countries that opted for them to assure sustainable progress. Clearly dependent on the technological progress of the Western world, they concentrated excessively on the manufacture and export of mass-produced industrial goods. In the 1990s, the rates of the “catching up” countries’ development slowed down noticeably, and in 1997-1998 the Asian financial crisis broke out

and laid bare the limitations of this model as a whole. Although in recent years, most analysts have preferred to argue that this crisis was due to certain particular financial mistakes of the region's countries and can therefore be overcome soon, we believe—as we will try to prove—that the fundamental reason for the crisis lies in the untenable nature of the very theory of "catching up" development.

* * *

The twentieth century has seen both a number of practical attempts at accelerated development and a variety of theories suggesting different ways for the developing countries to end their age-old backwardness. Now that the next century has begun, it is becoming clear that socioeconomic realities do not fit into these theories; many of them have been proved to be mistaken. Again and again, these realities prompt the social scientists to devise a clearer picture of a just world and to formulate a more distinct question about the conditions in which this or that country can join the developed industrial economies.

As never before, the eve of the twenty-first century has placed the spotlight on the inevitable division, not inner unity of today's world. As the well-known sociologist and philosopher Z. Bauman noted two years ago, even when humanity was artificially divided into the opposite Western and Eastern blocs, into a capitalist system and a communist camp, individual parts of the world appeared much less isolated than they do today. "By dividing the worlds," he said, "the politicians created the illusion that it was whole"⁸⁰ by promoting the conviction that in the course of this confrontation, the foundations of a balance for the entire civilization would be forged. Following up on his view, we can now add that during the Cold War years, there existed two systems, each claiming to contain an independent (and sufficiently effective) economic paradigm, and the developing countries were free to adopt either model or to look for a path of their own. Now that the former socialist countries have lost their historical competition with capitalism and the developing countries (except those that sought vigorously to apply the achievements of the Western world) are lagging disastrously behind the leading post-industrial nations, the impression is that our deeply divided civilization is entering an era of dangerously exacerbating global contra-

dictions. Today, "the idea of development [on one's own] appears to be no more than a ruin against the backdrop of the modern intellectual scene,"⁸¹ and one can hardly hope that things will get any better during the next few decades.

Modern globalization has failed, in our opinion, to justify the hopes that were pinned on it. One cannot really expect, even in the future, any unity between the developed world which is benefiting from each new stage of technological and social progress and the developing countries whose position is mostly deteriorating steadily. Many experts note that the relations between these two groups demonstrate less and less interdependence which could in any way rally our civilization together; on the contrary, it is being divided into the increasingly "globalized" developed nations and the ever more "localized" poorest regions isolated from the finest achievements of civilization.⁸² Viewed from this angle, the prospects of "catching up" development appear in fact exhausted to us. The sources of technological progress remain outside the Third World—yet only access to them can make any given country industrially developed. Natural wealth such as territorial or mineral resources which, in the past, could help relatively backward countries rise above their level are ceasing to be meaningful factors of production and cannot provide their owners with a new status. The inner contradictions of the very paradigm of "catching up" development (with which we will deal in detail below) and the self-sufficiency of the Western world which does not need the developing countries as the latter need the post-industrial powers—all this proves that the concept of "catching up" development, a product of rapid industrial progress, will inevitably be relegated to the past in the era of the information society. This "almost realized" dream of the twentieth century will have no place in the twenty-first.

Notes

1. See Rosenstein-Rodan, P. "Problems of Industrialization of Eastern and Southeastern Europe," *Economic Journal*, June-September, 1943, pp. 202-211.
2. See Staley, E. *World Economic Development: Effects on Advanced Industrial Countries*, International Labour Office, Montreal, 1944.
3. For details, see Rostow, W.W. *Theorists of Economic Growth from David Hume to the Present With a Perspective on the Next Century*, Oxford University Press, New York-Oxford, 1990, p. 385.
4. See Rostow, W.W. *The Stages of Economic Growth: A Non-Communist Manifesto*, 3rd ed., Cambridge University Press, Cambridge, 1995, pp. 4, 11-12.

Post-Industrial Trends and Prerequisites for the Crisis of the “Catching Up” Development Model

Even a brief look at the modernization theories presented in the previous chapter will show their obvious limitations. Before I proceed to analyzing their basic flaws, I might as well mention the “trump cards” played by the adherents of the “catching up” development doctrine, namely, the possibility of using monopoly rights to certain types of resources or the possibility of drawing extensively on other nations’ technological advances and making a more efficient use of them than the countries of origin do. The idea of self-sustaining modernization is objectively embodied in communist practices because it inevitably calls for an actually all-out mobilization of a nation’s powers and presupposes its overt or covert isolation from the outside world. The record of the Soviet Union is the most convincing illustration of the inefficiency of this way of development. Thus, any “catching up” development strategy depends on using unique—objective or subjective—potentialities of a given country for optimizing economic industrialization.

In itself, such a practice is perfectly understandable and justified at certain junctures of history. There is no ignoring the fact, however, that the specific resources which go into a rapid development of industrial production are finite, as a rule. Mineral resources are running short, their world market prices are anything but stable, and the sectors which, under certain conditions, provided an impetus to industrial progress may end up being a drag on it. In developing countries, labor is cheap but it is not going to stay that way forever; amid a continued raise in the standard of living, labor costs are tending upwards to levels characteristic of more advanced nations. Consequently, neither natural resources, nor cheap labor can be relied

upon for a breakthrough to the post-industrial heights because the accelerated accumulation they bring has natural limits and is not self-sustainable.

A nation can assume a firm lead in the modern world only given such unique conditions of production and such a monopoly characteristic that are capable of self-reproduction and that undermine the inner powers of society by their self-reproduction. For as long as a nation's monopoly resource has no such specific features or requires social overexertion to maintain it, this nation's leading positions can easily be challenged. History offers relevant examples galore. At the height of the Middle Ages, for instance, Venice was the most powerful European state of all, with a budget three times as large as France's, because it had trade routes between Europe and Levant under its control. No sooner had Holland and Britain set up large trading companies of their own, however, than the grandeur of Venice became a thing of the past. Processing English wool into fabrics which had a ready market on the continent made Holland one the wealthiest states in Europe. As soon as the English had built up a network of textile mills of their own, Holland found itself all but crowded out of that niche, and well down the list of Europe's rich nations. Spain and Portugal offer a different example. They had to pay a dear price for having discovered the New World and flooded Europe with gold—that unprecedented achievement cost them unprecedented depopulation. The Latin American colonies of their countries won their freedom nearly two centuries ago, while their former parent-states degraded into the backyard of Europe and remained such for centuries.

The nation's intellectual potential and its citizens' emancipation are the only source of its stable prosperity, and I shall repeatedly emphasize this below. The twentieth century has borne this statement out on many occasions. Whereas in the eighteenth and nineteenth centuries Britain came out on top owing to the achievements of experimental science—some of them arrived at naturally, and others, by chance—Germany took over the lead in the industrialized world at the beginning of the twentieth century thanks to new industries only, such as chemistry and electrical engineering, where the use of theoretical rather than empirical knowledge was the pledge of success. The United States' leadership in the middle of the century was due to its breakthroughs in the sphere of information technologies where theoretical knowledge was used not for the manufac-

ing of new products but for generating new knowledge. These aspects of Western societies' progress have repeatedly received penetrating analysis.¹

Thus, in a situation where information and knowledge become an immediate productive force there emerges the monopoly resource featuring previously unknown qualities and characteristics. On the one hand, the assimilation of information and knowledge serves as a prerequisite for the production of new knowledge, while their alienation does not detract from the available amount of this resource; therefore, it becomes inexhaustible, which radically changes the nature of the missions and objectives facing mankind and forms a new system of motivations. On the other hand, the access to this resource remains limited because knowledge is distinguished from most industrial boons by its rarity and unreplicability, while the expenses involved in creating it are out of all proportion to the results obtained; therefore, the value of knowledge is regulated by the laws governing the prices of monopoly boons, and its possessors find themselves in an exclusive position with regard to the people around them. It should be stressed that the rise of the society in which knowledge and information are the most important productive assets calls for the maximum advancement of every individual, that is, it opens up new vistas turning man from a "cogwheel" of the industrial machine into a free individual and makes the progress of the social whole a derivative from individual accomplishments of the persons making it up. The resultant social system turns out to be the most dynamic one ever, and this alone dashes the hopes of the developing and industrialized countries for a successful realization of the "catching up" development strategy.

The Rise of Post-Industrial Society and the Foundations of Its Stability

Much has been said and written about the early stages of post-industrial society, therefore we shall concentrate not so much on reproducing the process of its formation as on tracing the logic of this process.

The important thing here is to look into the inner connections between the industrial and post-industrial types of development, to discern the moment of inversion which marked the outset of the former regularities giving way to new ones. Progress of scientific

knowledge ought to be recognized as the axis that both of these forms of social organization rotate on. It is precisely the said progress that conditioned an uninterrupted and accelerating rise in demand for skilled workers and the formation on that basis of a new social group—the “intellectual class” which came to account for an ever larger share of national wealth. Let us place it in this context: the rise of the society cultivating essentially post-materialistic motivations of human activity and the corresponding system of values proceeded, up to a point, on the basis of realizing perfectly utilitarian interests.

This alone explains a steady rise in industrial workers’ qualification standards throughout almost all the twentieth century. To illustrate, whereas in 1890 only seven percent of American youths aged between fourteen and seventeen went to school, in the postwar years the figure topped 90 percent.² In 1940, less than 15 percent of high-school leaders aged eighteen to twenty-one went on to college; by the year 1993, the figure rose to 62 percent.³ Such a “thirst for knowledge” was worthily rewarded: beginning with the mid-1970s, real incomes of college graduates began to grow against the background of the living standards stagnation and decline among non-college-educated persons. Over the period of 1978-1987 alone, the incomes of the latter fell 4 percent, while that of college graduates rose 48 percent.⁴ Nevertheless, a free society running on competition encourages those who achieve outstanding results against the general background. Therefore, as soon as college graduates began to fill up this “general background” in the labor market, those having earned degrees or were distinguished by their unique abilities came to be valued most. In 1987-1993, college graduates’ average pay cut constituted over 2 percent;⁵ in the meantime, those holding B.Sc. or D.Sc. degrees received 30 and nearly 50 percent raises, respectively.⁶ Experts of that caliber, however, seek not only large incomes but personal advancement as well and, consequently, the new social group they belong to develops a system of motivations essentially different from that centering on personal gain. From the moment the intellectual elite turned into the dominating class of Western societies, social transformations took on an irreversible character.

It would hardly be an exaggeration to say that the intellectual class now constitutes the top stratum of Western societies. This is evidenced by a wealth of facts. Whereas at the beginning of the twentieth century only 10 percent of the U.S. industrial company

CEOs had a college education, today holders of doctorates make up over 60 percent of America’s managerial personnel. Among those constituting 1 percent of the wealthiest Americans (whose share in U.S. national wealth has increased from 19 to 39 percent over the past twenty years alone⁷), only every fifteenth makes money as profit on capital invested while more than half hold administrative posts in large companies, almost a third are practicing lawyers and physicians, the rest being professionals, university professors and instructors included.⁸ Four out of every five contemporary American millionaires are self-made men who have built up their fortunes practically from scratch rather than multiplied the assets they inherited.⁹ Another important thing is that the members of the intellectual class display a firm commitment to the values they have selected; whereas in 1980 only 30 percent of young people coming from \$67,000-a-year families had a college education, today this index amounts to 80 percent.¹⁰

Knowledge-based societies are taking shape in modern Western countries, and this process could not but have its effect on the distribution of wealth not only within these countries but worldwide as well. At present, 20 percent of the planet’s population residing in the developed states account for 86 percent of the gross world product;¹¹ back in the mid-1990s, seven post-industrial powers possessed among them 80.4 percent of the world’s computer technology, accounted for 90.5 percent of high-tech production¹² and controlled 97 percent of the world’s registered patents¹³ (notably, 80 percent of the patents issued in developing countries also belonged to citizens of the post-industrial world¹⁴). By that time, the West controlled more than four-fifths of the world services market with a total volume of business exceeding \$1 trillion in 1992.¹⁵ Over the period of 1986-1995, the U.S. intellectual property export volume grew 3.5 times, and the favorable balance of trade in this sphere topped \$ 20 billion; by 1995, the United States had accounted for 72 percent of the world’s information services and data processing market¹⁶ with a current capacity of over \$95 billion.¹⁷

Funds invested in knowledge-intensive industries have been returning a truly fantastic profit over the past few decades (from 1960 to 1999 it averaged 45 percent a year, as investment in shares yielded, on balance, a mere 13.34 percent a year¹⁸), hence the influx of funds to the appropriate breakthrough projects. In 1995, U.S. direct in-

vestment in revolutionary technologies constituted \$6.4 billion; in 1997, the figure rose to 11.5 billion; and by 1999, to 35.5 billion.¹⁹ Investment funds financing venture projects drew even more generous injections, increasing from about \$9 billion in 1995 to \$56 billion in 1999. In the first quarter of 2000 alone, they attracted \$22.7 billion. As to the annual average yield on this investment, it soared from 2 percent a year in 1990 to 20 percent in 1993; 34 percent in 1996; and 147(!) percent in 1999.²⁰ Over the past decade, U.S. institutional and private investors spent an average of about \$240 billion a year on R&D while private companies put about \$30 billion²¹ into upgrading their employees' educational standards—an equivalent of the appropriations made for all lines of research in Russia, China, South Korea, and Taiwan taken together. In 1997-1999, the United States appropriated \$635 billion a year, or double the military spending figure,²² for the promotion of all forms of education. Such generosity paid off; improved higher educational facilities alone were responsible for a quarter of the entire U.S. gross national product increment in the twentieth century.²³

The result was an unprecedented technological breakaway of the industrialized world from all the other nations. Today the United States accounts for 44 percent of the world's R&D spending as against Latin America's and Asia's 1 percent²⁴; the United States has 126,200 R&D workers per one million of the population compared with the world's average of 23,400, at the most.²⁵ In 1997, U.S. citizens constituted almost three-fourths of the world's Internet users, the total share of Americans, Canadians, and West Europeans in that index exceeding 96 percent.²⁶ This factor is of utmost importance considering that in 1998 the industry built around that global web contributed over \$236 billion²⁷ to the world gross product—an amount comparable with Russia's entire GNP in the same year. Technological progress has been accelerating steadily over the past decade; since the onset of the automobile era, it took thirty-five years before every fourth American family came to own a car; for the PC, the mobile phone and e-mail, such time intervals constitute eighteen, thirteen, and seven years, respectively.²⁸

In our opinion, this technological breakaway has to do with ever-growing differences in general economic indices characterizing the progress made by various regions of the planet—a fact which has become distinctly manifest since with the mid-1970s. The 1993

world gross product was generally estimated at \$24 trillion, of which 19 trillion dollars' worth was created in the post-industrial states and only five trillion dollars' worth by all the developing countries with a population amounting to 80 percent the world's total. Accordingly, the difference in people's nominal annual incomes increased from \$5,700 in 1960 to \$15,400 in 1993 and \$19,200 in 1999; consequently, one-fifth of mankind on one pole of development appropriated thirty times more wealth than the remaining four-fifths on the other pole;²⁹ sixty-one times³⁰ more in 1993; and an appalling seventy-four times³¹ more in 1999. Notably, this is going on in a situation where real incomes of the world's poorest countries have actually stagnated over the past 120(!) years,³² and the extrapolation of this dynamics gives certain researchers reason to claim that by the mid-twenty-first century the gap may widen 350-fold.³³ According to a U.N. commission, the world's wealthiest 358 persons own as much money as the planet's 2.3 billion poor,³⁴ while the 400 biggest transnational corporations are in control of two-thirds of all the basic production assets now in existence.³⁵ In 1975-1995, the share of the world's wealth possessed by 20 percent of the industrialized nations' citizens grew from 70 to 82.7 percent,³⁶ while the share of the Third World's poorest 20 percent shrank from 2.3 to 1.4 percent³⁷ and the chances of that situation improving look slim.

As we can see, the rise of post-industrial society had materialistic causes behind it until a certain moment. In the meantime, sociologists have long discovered that "as welfare standards go up, the need to acquire still more good things of life loses its urgency with problems of combining security and freedom, justice and responsibility coming to the forefront."³⁸ Under present conditions, the profit-gaining motive which used to reign supreme in the industrialized West before, has receded to the background,³⁹ the prospect of fast professional advancement, valued so highly in the 1980s, no longer looks attractive enough to many, especially if advancement means spending less time with one's family or giving up one's pet hobbies.⁴⁰ One prefers to concentrate on becoming a new and better self tomorrow than one is today;⁴¹ the emphasis has shifted to self-improvement, which A. Maslow refers to as the ultimate value.⁴² Western sociologists are increasingly inclined to see these processes as the emergence of post-materialistic motivations.

Post-materialistic motivations are slow to take shape and are not a linear function of affluence. A person rid of the necessity to seek means of satisfying his material needs gets an opportunity, to create and cultivate human needs⁴³ in all their diversity. This does not, mean, however, an immediate and automatic actual domination of the new system of values on the scale of the social whole. "More often than not," R. Inglehart points out, "post-materialists are those who have enjoyed all the material goods since early in life, which largely explains their arrival at post-materialism";⁴⁴ now, people who have always craved business success are much less likely to accept the post-materialistic ideals because "once selected, values come to stay."⁴⁵ Thus, the transition to the post-materialist system of motivations which goes on as generations succeed one another is bringing the outlines of the intellectual class into ever sharper focus.

On the basis of market exchange, society is redistributing an ever-larger proportion of national wealth in favor of the intellectual elite year in and year out. This means the removal of the last obstacles to the progress of a society based on a meritocratic hierarchy and post-materialistic values. The intellectuals' most important mission is to produce new knowledge, and because the latter is, by nature, inalienable from its creator (objectivized knowledge ceases to be such and becomes information), the production process turns into "inter-relationships between individuals in the course of which either party fulfills himself as a subject"⁴⁶ and loses the character of interaction with a transformed natural environment thus becoming "an interplay of humans,"⁴⁷ as D. Bell put it. From that moment on, it is not savings invested in production at the expense of routine consumption, as was the case in the industrial epoch, but, on the contrary, the very consumption of non-material assets that becomes the foundation for the progress of production, and post-industrial society gains a firm foothold for steady self-reproducing headway. Therefore, the Western nations' dynamism comes neither from the need for an answer to any external challenge, nor from inner contradictions of post-industrial society; it embodies the emancipated potential of a creative personality, man's awareness of himself as "the measure of all things" (to quote Karl Marx) under the conditions of the information economy.⁴⁸ This, in our opinion, is the best guarantee against this type of development being stopped or reversed. It is definitely more comprehensive than the industrial model; therefore, the nations ad-

hering to the "catching up" development doctrine and giving top priority to accelerated industrialization are on a wrong track—catching up with the post-industrial world using industrial methods is a hopeless task.

It ought to be borne in mind, though, that developing nations and new industrial states have repeatedly exerted serious influence on the character of post-industrial society's formation processes; therefore, a brief outline of the Western world's development over the past three decades may be of some interest in the context of our study.

Post-Industrial Society: Stages of Development

The rise of post-industrial society is usually referred to as a process which had its start in the late 1950s and which is still continuing. Over that period, however, the Western world's economic history has witnessed dramatic events dividing it into several stages: the first stage which commenced in 1973 and ended, on the whole, in the early 1980s; the second stage (1981/82–1989); and the third stage whose onset can be traced back to 1992 and which is not over yet.⁴⁹

In the 1950s and the 1960s, industrial society had its heyday in the Western world. The United States and other countries made unprecedented economic progress amid a stable market situation (to illustrate, from 1946 to 1954, the U.S. gross national product increased at an average rate of 4.7 percent a year; consumer spending rose 38 percent over the decade; the level of unemployment dropped to four percent of the able-bodied population, and the rate of inflation never exceeded 2 percent a year⁵⁰). Development proceeded against the background of a rapid restructuring of the economy: whereas in 1955 the U.S. manufacturing and construction industries employed up to 34.7 percent of the nation's aggregate manpower and accounted for about 34.5 percent of the GNP⁵¹ (with Germany, Britain, and France showing somewhat higher figures: 41.2 and 47.4; 44.4 and 42.1; 30.4 and 43.2 percent, respectively),⁵² by 1970 this proportion diminished to 27.2 percent.⁵³ Sociologists started talking about the birth of a services-based society.

The situation did not cancel industrial laws, however. Most of the services were of a pronouncedly subject-object rather than subject-subject character, while rapid economic progress made for a marked

rise in the consumption of basic raw materials, giving a superficial observer the impression that Western society remained an industrial one by nature.

It is against this background that the first stage of post-industrial society's development began. Let us take, by way of illustration, the 1973 oil shock as its point of departure, and the confrontation between industrialized nations and commodity-exporting countries as its content. Regarding themselves as the monopolists in the raw materials market, developing countries first made an attempt at a gradual price rise (in the period of 1965-1970, for example, the price of oil went up 15 percent; coal, 20; silver, 40; nickel, 60; and copper, over 70 percent⁵⁴) and then, acting on cartel agreements, inflated the prices several times over. Changes in commodity prices were so substantial that the total worth of oil arriving at the American market jumped from \$5 billion in 1972 to \$48 billion in 1975, with the volume of deliveries diminishing somewhat.⁵⁵ One of the worst economic crises ever struck: in the United States, prices rose 8.7 percent in 1973, and 23.3 percent in 1974,⁵⁶ unemployment reached 9 percent of the able-bodied population, the Dow Jones index dropped almost to a half over the period of January 1973 to December 1974, and industrial production fell nearly 15 percent.⁵⁷ Characteristically, a decline in demand spurred the price rise on instead of stopping it. That was due to the developing countries' heavy dependence on export earnings (oil exports accounted for 94 percent and 96 percent of Iran's and Saudi Arabia's currency proceeds, respectively; Zambia depended on copper for 93 percent of its export earnings; Mauritania, on iron ore for 78 percent; Guinea, on bauxite for 77 percent,⁵⁸ etc.). Over fifteen years, from 1975 to 1980, the price of a ton of bituminous coal rose from \$38.5 to \$45.3; of iron ore, from \$22.8 to \$28.1; of timber, from \$61.8 to \$137; of copper, from \$1,320 to \$2,200; of nickel, from \$4,560 to \$6,500; of tin, from \$6,860 to \$16,750; of silver, from \$1.42 to \$ 6.62 per 10 g; and of gold, from \$56.8 to \$214.4.⁵⁹ By July 1, 1980, the oil price jumped to an all-time high of \$34.73⁶⁰ (over \$60 a barrel in current prices⁶¹). A disaster seemed imminent.

Using the achievements of technological progress, however, the West prevented the establishment of the "new world economic order" the developing countries insisted on in 1976. The 1970s were the period of the most radical restructuring the United States and

Western Europe had ever undergone in the twentieth century. In 1973-1978, oil consumption in the United States diminished at the rate of 2.7 percent a year per unit of industrial production value; in Canada, 3.5 percent; in Italy, 3.8 percent; in Germany and Great Britain, 4.8 percent; and in Japan, 5.7 percent while demand for oil in 1979 became as elastic as that for most consumer goods for the first time ever.⁶² In 1973-1985, the OECD member-states' gross national product increased 32 percent, and their energy consumption, a mere 5 percent;⁶³ over the same period, the energy resources utilization efficiency factor increased more than 40 percent in the United States.⁶⁴ Against the background of the gross product increasing more than 25 percent in 1975-1987, American agriculture cut energy consumption by a factor of 1.65,⁶⁵ and as to ferrous metals, the U.S. economy is using less of them now than it did in 1960.⁶⁶ Over 20 years, from 1976 to 1996, the federal government assigned a total of about \$60 billion to subsidize the development of improved energy resources utilization technologies⁶⁷ thus speeding up the progress of non-materials-intensive industries and cutting back on inefficient production facilities. In the United States, the share of transport in the total GNP diminished 21 percent; of agriculture, 19 percent; and of construction, by nearly a third in 1970-1983, while the share of the services sphere increase nearly 5 percent; trade, 7.4 percent; and telecommunications, over 60 percent.⁶⁸ What's more, experts predict that by the year 2010 renewable sources will meet about 10 percent of the United States energy requirements, which means the beginning of a new revolution in power engineering.⁶⁹ Towards the year 1996, the gross product of the U.S. mining industry was 25 percent up on the 1947 level; of construction, 44 percent; of the manufacturing industry, 156 percent; while the relevant index for the information and telecommunications sectors amounted to 625 percent.⁷⁰ As a result, the prices of natural resources started tending downwards since the mid-1980s, hitting an all-time low for 150 years⁷¹ in 1997-1998 and coming close to the level of outlays necessary for their production, while the developing countries, burdened with enormous debts, had ceased to play any substantial role in the world economy by the early 1990s.

At the same time, the mass production opportunities opened up by the import of technologies and cheap manpower turned into an important competition factor in the 1970s. It was exactly in that pe-

riod that the nations which had opted for the "catching up" development model did best.

The second stage of post-industrial tendencies' development began with the coming to office, in 1979-1981, of right-wing conservative governments in Great Britain, the United States and Germany which launched reforms aimed at encouraging free commercial enterprise. The most characteristic feature of that stage was the struggle between post-industrial powers and new industrial nations.

Throughout the 1970s and the 1980s, high technologies were used primarily for making the production of material goods cheaper, and the information sector did not become the basis of post-industrial economies yet. Having combined the use of scientific advances with the advantages offered by mass production lines manned by cheap labor, Asian countries took the lead in the world economy for the time being.

Japan was the main rival of the United States and Europe at that time. By the mid-1980s, it produced 81 percent of the world's motorcycles, 80.7 percent domestic video systems and about 66 percent photocopiers,⁷² by 1982, Japanese companies controlled up to 60 percent of the American NC machine-tool market.⁷³ Over the period of 1973-1986, the U.S. share in the world production of goods and services diminished from 23.1 to 21.4 percent, and the E.C. share, from 25.7 to 22.9 percent, while Japan's grew from 7.2 to 7.7 percent.⁷⁴ American companies' positions worsened accordingly. Whereas in 1971, 280 of the world's 500 largest transnational corporations were American, by 1991, the figure dropped to only 157;⁷⁵ by that time, Japan actually caught up with the United States in this respect possessing 345 largest transnationals out of 1,000 (as against the America's 353);⁷⁶ at the end of the 1980s it owned the twenty-four largest banks, with seventeen of such banks left in the E.C. and a mere five in North America; nine of the ten largest service companies also represented the Land of the Rising Sun.⁷⁷ At the end of the 1980s, the Japanese "economic miracle" showed how far a country professing the paradigm of industrialization can go amidst neighbors belonging to the post-industrial world. The "new industrial countries" of Southeast Asia followed in Japan's wake.

The West's response to that challenge consisted, as had been the case before, in promoting the progress of new technologies, eliminating inefficient production units, and assuring the survival of the

fittest. This response found its embodiment in Reagan's reforms which, on the one hand, mobilized the inner sources of accumulation to the utmost and, on the other, drew an unprecedented influx of foreign investment. The July 1, 1981 tax reduction saved Americans nearly 27 percent of all the taxes they paid in the 1980-1981 fiscal year⁷⁸ and helped the corporations save funds equivalent to 58 percent of all the expenditures involved in the retooling of the U.S. manufacturing industry in the mid-1980s.⁷⁹ In 1981 and 1982, the Federal Reserve System brought the official annual interest rate close to 20 percent for the first time ever, which promptly reduced the annual rate of inflation from 9 to 4.5 percent⁸⁰ and stabilized the yield on investment in long-term government bonds at 8.1-8.2 percent which was almost thirty times the late-1970s figure.⁸¹

The measures brought immediate results. As early as 1981, private savings amounted to 9.4 percent of available incomes—the postwar period's highest.⁸² In 1983-1989, the aggregate investment constituted a steady 18 percent of the GNP⁸³ while investment in fixed assets ballooned at an average rate of 12.3 percent a year compared to a mere 1.3 percent during the Carter presidency; productivity in the national economy as a whole increased at the rate of 1.2 percent a year (3.6 percent in industry) in 1981-1984 as against 0.2 and 1 percent, respectively, under the previous administration.⁸⁴ Notably, this result was achieved in a situation where the U.S. savings-to-GNP ratio was one-fifth of the Japanese figure.⁸⁵ Restructuring continued at an accelerating rate: in 1975-1990, the share of those employed in the American industry diminished from 25 to 18 percent of the total workforce while over the previous fifteen years it had declined by a mere 2 percent—from 27 to 25 percent; in 1982-1992, the share of material assets in American companies' book cost dwindled from 62 to 38 percent whereas the share of information products and intellectual capital increased from 37 to 61 percent.⁸⁶

These efforts made it possible to stop Japanese expansion towards the late 1980s. Geared to a rapid rise in exports and fueled by financial speculations, the Japanese economy was in no position to keep its balance in an increasingly competitive environment. The real U.S. balance deficit in trade with Japan went down to the acceptable figure of 10-15 percent, while the overstatement of Japanese asset prices led to a collapse in 1989 with the result that the Nikkei index lost two-thirds of its value and economic growth rate slowed down to

zero. At the same time, the United States itself, where information technologies accounted for about three-quarters of the industry-created value added, began to demonstrate an entirely new type of the economic growth which made the Western world's impressive successes possible over the past decade.

As already indicated above, the third stage of the post-industrial nations' development began in 1992. From that moment on, all the Western nations entered a period of a steady growth of the information sector of the economy that formed the basis of economic progress. It is safe to claim that this stage is marked by the invulnerability of the post-industrial world whose progress rests on a firm inner foundation.

The economic boom of 1992-2000, the longest one ever in U.S. history, heralded the stage of the Western nations' development at which they function as mature post-industrial systems. Experts estimate that in the 1980s over 70 percent of their gross national product growth was induced by a rise in the workers' educational standard, the spread of information technologies and other circumstances normally placed into the category of intangibles, rather than by material factors alone.⁸⁷ The worth of the services exported by the industrialized countries reached almost \$900 billion while in the rest of the world's regions this index did not exceed \$200 billion.⁸⁸ Since 1991, when the expenditures on the acquisition of information and information technologies amounted to \$112 billion in the United States to top the spending on fixed assets (\$107 billion),⁸⁹ the gap between these two indices has been growing by an average of \$25 million a year.⁹⁰ In 1995, almost 43 percent of the GNP came from public health, scientific research, the education sphere, and software production.⁹¹ Over the past three years, the sectors producing information goods accounted for one-third of the US GNP growth and for 37 percent of all the newly created jobs.⁹² About 28 percent of the foreign trade earnings have been payments for technologies or profits derived from their use; in the United States, patent export proceeds surpass the expenditures on acquiring similar assets abroad more than fourfold.⁹³ As intangible assets are gaining in importance, the capitalization of U.S. companies is growing at an unprecedented pace: the Dow Jones index has almost quadrupled over the past six years, while the increment in the market value of shares over the period of 1998-1999 alone made American citizens \$10 trillion richer.

Today the GNP growth rates are rising in most post-industrial countries, and the U.S. leadership in the world economy is becoming unquestionable. Whereas in 1989-1995 the U.S. economy's average annual growth rate constituted 1.9 percent, in 1996-1998 it amounted to 3.9 percent;⁹⁴ in 1999, to 4.2 percent,⁹⁵ and in the first quarter of 2000, to 5.4 percent,⁹⁶ and the trend looks steady enough. Whereas in 1973-1994, productivity in the American economy rose 1.4 percent a year on the average, in 1995-1999 this index constituted 2.9 percent.⁹⁷ Whereas in the third quarter of 1999 capital investment increased 10.2 percent relative to the corresponding period of 1998, in the first quarter of 2000 it soared to 25.2 percent relative to the first quarter of 1999, which fact promises a 7.5 percent GNP increase before the year 2000 is out.⁹⁸ Notably, this impetuous economic growth is accompanied by a steady reduction in the savings rate which became negative (-0.2 percent a year)⁹⁹ in September 1998, for the first time since 1959 (or even since 1938 considering its dynamics over 1998 as a whole). Private savings dropped below the zero mark back at the end of 1997 and hit an all-time low at the beginning of 2000 (-4.8 percent),¹⁰⁰ which signifies an extremely fast rise in demand in practically all the sectors of the economy. Accordingly, unemployment went down to 3.9 percent of the U.S. able-bodied population in April, 2000, which is the lowest level over the past thirty years.¹⁰¹ In the meantime, economic growth obviously remains impervious to external shocks (such as the 1997 Asian crisis and the 1998 Russian default); consequently, the current steady upward climb may yet go on for years to come.

To sum up, the current economic situation in the post-industrial world is characterized by a number of entirely new circumstances. First of all, the raw material and resource restrictions of economic growth have been removed, and emphasis in consumer demand has shifted dramatically from conventional mass-manufactured goods to information assets. Second, an ever larger proportion of the population is seeking employment in sectors producing high-tech goods and services thus reducing dependence on the countries which remain industrial commodity manufacturing producers. And finally, economic growth assumes a new quality, with the cultivation by people of their own abilities becoming the most effective form of accumulation and with the human being, his knowledge and talents, becoming the most profitable investment media.

Under the circumstances, the Western nations' demand for raw materials and manufactured goods offered by countries at the industrial stage of development is declining sharply. As we have already pointed out, the "catching up" development strategy is based on the import of technologies and the export of manufactured goods to the developed countries as a means of drawing hard currency in the "catching up" economies to maintain their economic growth. Consequently, the growing "closeness" of the Western world is becoming a major obstacle to implementing the "catching up" development model.

Self-Sufficiency of Western Civilization

The modern post-industrial economic system is based on the production and consumption of knowledge. This fact, along with the much-talked-about "globalization" of information flows, leads to the growing isolation of the Western countries from the rest of the world—a development which receives considerably less attention.

The expansion of the knowledge-based economy has, first of all, radically diminished the industrialized countries' demand for material elements of production—raw materials and feedstock, especially—and, second, brought about a cardinal change in man's attitude to his environment and made a stable ecological balance possible. As a result, the West has found itself potentially free to reduce the intensity of economic interaction with other states and nations.

Today the possibilities for a rational utilization of raw materials, let alone replacing depletable natural resources by man-made materials, are more extensive than ever. The copper cable laid across the Atlantic Ocean floor in 1996 could carry 138 parallel telephone calls; the fiberoptic cable installed in the early 1990s is capable of serving 1.5 subscribers simultaneously;¹⁰² the share of materials and energy costs in the overall spending on copper cable production amounted to 80 percent; in case of the fiberoptic cable, the figure does not exceed 10 percent.¹⁰³ According to a Sprint company forecast, by 2002, the transatlantic telephone communication service cost will go down to one-seventeenth of the 1998 figure making it possible to slash long-distance telephone call charges by almost 85 percent.¹⁰⁴ The range of industries dispensing with the use of rare resources keeps broadening: in the 1980s, the Kodak corporation took out a patent for a silver-free photography technique; the Ford Motor Com-

pany announced the introduction of catalysts operating on a platinum substitute; chip manufacturers do not use gold contacts and conductors any longer.¹⁰⁵ In 1991-1997, the mass of manufactured goods represented in American exports in terms of their one dollar's worth dwindled to less than a half,¹⁰⁶ while in 1967-1988 the index decreased by a mere 43 percent.¹⁰⁷ Over the next thirty years, the OECD member states are expected to reduce their natural resources requirements per \$100 of the national income earned ten times over, that is, 31 kg as against 300 kg in 1996.¹⁰⁸ One can say that the technological revolution has practically eliminated the problem of an early depletion of mineral and energy resources; as a result, the post-industrial countries are now living in a new world, the world of unlimited resources.¹⁰⁹

Owing to such changes, the ecological situation in the West has been improving steadily over the past twenty-plus years. Lately, the E.U. countries have been contributing from 4.2 to 8.4 percent of their GDP to environment conservation programs, and this trend is steadily tending upwards.¹¹⁰ Modern technologies remove from production waste and exhaust fumes up to two-thirds of their NO₂ and three-quarters of their SO₂ contents;¹¹¹ as a result, the share of North American countries in the global amount of pollutant discharges into the atmosphere is likely to decrease from 26.7 percent today to 21.9 percent by the year 2010.¹¹² In 1996, the United States became the world's only country to stop the production of ozone destroying substances,¹¹³ and the share of the OECD member states in the volume of the carbon dioxide discharges into the atmosphere worldwide has remained practically stable over the past thirty years.¹¹⁴ Most European countries put 0.5 to one percent of their gross national product, that is, about 60 billion dollars a year, into the promotion of international environment protection programs.¹¹⁵

At the same time, the development of the post-industrial economy, first of all, raised the degree of its self-sufficiency and, second, rerouted trade and investment flows from the Third World to the highly industrialized countries. As a result, the Western world has actually become closed upon itself.

Owing to secondary raw materials recycling technologies, the post-industrial world currently controls no fewer resources than the developing countries do. In the mid-1990s, the United States recovered from waste 70 million tons of steel, 3.5 million tons of alumi-

num, 1.45 million tons of copper, one million tons of tin, 22.5 thousand tons of titanium and a wealth of other mineral raw materials; the share of recovered materials in the overall consumption of raw materials constituted, in the above-mentioned categories, 68.5; 40.0; 38.6; 61.5 and 49.0 percent, respectively.¹¹⁶ In the meantime, the main centers of industrial production also remain concentrated in the post-industrial countries, and in the 1990s, the sales of cheap Asian manufactured appliances in U.S. and European markets began to decline and the supply of high-quality domestic products, to grow.¹¹⁷ Today's Texas, where farmers earn higher incomes than their counterparts elsewhere across the world, produces cheaper wheat than Nigeria, while even official statistics show that Dutch farmers' labor productivity is 100 times that of Russian ones. Over the past few decades, the post-industrial countries have become the biggest exporters of not only manufactured goods but also of farm products, such as peanuts and soybeans, which were traditionally imported from the poorest African and Asian countries.

As a result, the fast-growing volumes of commodity flows are becoming concentrated within the limits of the post-industrial world. Whereas in 1953 the more advanced industrial powers supplied to their peers 38 percent of their total exports, in 1963 the figure rose to 49 percent; in 1973, to 54 percent; and in 1990 it amounted to 76 percent.¹¹⁸ Another example: in 1959, African countries accounted for 28.2 percent of France's export deliveries and 20.3 percent of its imports; by the mid-1980s, the figures were 7.8 and 5.9 percent, respectively.¹¹⁹ On the other hand, two-way commodity and investment flows between the E.C. and the U.S. increased fivefold over the past thirty years and topped \$1 trillion in 1990.¹²⁰ The result was that in 1997 only 5 percent of the commodity flows originating from or arriving at the territory of one of the OECD member-states passed by this group of countries,¹²¹ and the post-industrial nations are now importing from the developing world goods and services worth no more than 1.2 percent of their aggregate GNP.¹²² It is noteworthy that although there do exist imbalances in the trade between individual post-industrial countries, on the whole the trade between the G-7 countries and the rest of the world is quite well-balanced: with exports being worth over \$5 trillion in 1999, the unfavorable balance of trade constituted a mere \$28 billion, that is, slightly over 0.5

percent of the export volume or less than 0.1 percent of the industrialized countries' GNP.¹²³

Considering the attempts sometimes made to overestimate the importance of the economies of new industrialized nations' one should bear in mind, first of all, the scale of their re-export operations (if the latter are left out of account it will look as if the mass of commodities China supplied to the world market at the end of 1996 was worth less than Belgium's)¹²⁴ and, second, the fact that the U.S. unfavorable balance of trade that analysts are talking so much about is of no decisive importance for as long as most of the settlements are made in U.S. dollars.¹²⁵ On the whole, the fact that in 1959-1994 international trade grew thrice as fast as the world gross product did, on the average, but only twice as fast as in the United States,¹²⁶ speaks for the post-industrial economies' self-sufficiency; as a result, the United States' export-to-GNP ratio was one-third that of Britain 150 years ago, that is, in the 1840s. If we trace the comparative dynamics of this index over the period of 1913-1987, we shall see that for the U.K. it grew only by 0.6 percent points (from 14.7 to 15.3 percent of the GNP); the corresponding figures being 1.5 percent (from 10.9 to 12.4) for Canada; 1.8 percent (from 4.1 to 6.3 percent) for the United States; and 6.6 percent (from 22.3 to 28.9 percent) for Switzerland.¹²⁷

For the Western industrialized nations in general, it has grown by 2.5 percentage points (from 11.7 to 14.3 percent of the GNP)¹²⁸ over the past 100 years—a fact which does not quite agree with all the rhetoric about "globalization" that has become current of late. As a result, experts are coming to the conclusion that from 10¹²⁹ to 18¹³⁰ percent of the goods and services produced worldwide are offered for sale in international markets; this confirms the view that "the allegation about capitalism being more transnational now than it used to be before 1914 can be called in question, with good reason, in many respects."¹³¹

Despite the formal indications characterizing the openness of the European countries' economies (for example, their aggregate turnover, made up 39.8 percent of world exports and 38.9 percent of world imports¹³² in 1994, and the ratio of the arithmetical mean of export and import volume to the GNP amounted to 23 percent)¹³³ most of the commodity flows remained restricted to the E.U. limits. In the early 1990s, for example, the proportion of the goods ex-

changed between the E.U. member states constituted 66 percent of the total, or 73.8 percent if Norway, Sweden, and Switzerland, who are not formally affiliated with the E.U., are counted in; for comparison, the share of the commodities supplied by Japan to Asian countries reached 30.1 percent during the same period, while the share of the U.S. deliveries to North and South American countries constituted 32.9 percent).¹³⁴

As a result, it turns out that the volume of the E.U. exports actually coincides with the corresponding U.S. figure.¹³⁵

The movements of world investment flows shows similar trends. Over the 1980s, the volume of direct foreign investment grew at a rate of about 20 percent a year, which was four times the international trade growth rate. Within the period of 1981-1985, the average annual volume of direct foreign investment amounted to about \$98 billion; over the four years that followed it went up to \$323 billion and climbed higher up to a record-high level of \$440 billion¹³⁶ in 1997. By the mid-1990s, the overall volume of direct foreign investment increased more than thirty-two times over compared with the 1970 figure while the volume of exports grew a mere 16.5 times.¹³⁷ As a result, international capital cross-flows (including those connected with the purchases of foreign securities, currency and various derivative financial instruments) exceed commodity flows more than sixty times today,¹³⁸ and the volume of the world gross product, twelve to thirteen times (M. Castells estimates the overall worth of such transactions at \$360 trillion as of 1997).¹³⁹

The economic system born of this investment ranks as the world's second in the amount of the gross product it turns out: as early as the beginning of the 1990s, plants owned by non-residents produced a 4.4 trillion dollars' worth of goods and services, which exceeded the volume of world trade estimated at \$3.8 trillion¹⁴⁰ and was comparable in scale with the American GNP worth about \$6 trillion then. Most of the world's investment resources is obviously concentrated in post-industrial countries. As of April 20, 2000, the aggregate capitalization of the companies listed at the leading U.S. and E.U. stock exchanges of New York, London, Paris, Frankfurt, Milan, Amsterdam, Paris, Stockholm, and Madrid topped \$25 trillion.¹⁴¹ It is small wonder, therefore, that as early as the beginning of the 1990s, the U.S., the U.K., Germany and Canada accounted for 81 percent of all the direct foreign investment.¹⁴²

Much less attention is usually paid to the fact of fundamental importance that most investment flows are also localized within the post-industrial world. In 1990, just five countries—the United States, Great Britain, Japan, France, and Germany—were responsible for 75.3 percent of direct foreign investment exports and for 76 percent of its imports worldwide. What is more, its share keeps growing owing to a steady increase in the volume of investment resources in leading post-industrial countries, the United States above all. In 1992, the U.S. took over from Japan the lead in the volume of foreign investments by almost tripling it in 1992-1995, with Great Britain and Germany placing second and third. In the 1980s, the post-industrial countries accounted for about 94, and in the 1990s, for about 90 percent of all direct foreign investment, while the share of the developing countries remained under 10 percent.¹⁴³

Naturally, most of the investment goes to the countries in a class with the donor nations in the level of basic economic performance indices. In 1996, for example, only seven countries—Great Britain, Japan, Canada, France, Germany, Switzerland, and the Netherlands, accounted among them for 85 percent of all the foreign investment made in the United States. In 1996 and 1997, European transnational corporations channeled \$107 billion into purchasing American companies; in 1998 and at the beginning of 1999, the amount increased to \$280 billion, with the leaders of U.S. industry, such as Chrysler, Amoco, and Airtouch Communications, featuring among the Europeans' larger acquisitions.¹⁴⁴ The same holds true for the United States itself which placed about a third of its total foreign investment in Europe¹⁴⁵ and has by now increased the share of its aggregate investment in the E.U. nations to 60 percent (with Asian countries accounting for no more than 8 and Mexico, for less than 3 percent of U.S. investment in foreign countries).¹⁴⁶ The developing countries' share in the overall volume of world capital investment was shrinking steadily (from 25 percent in the 1970s to 17 percent in the 1980s).¹⁴⁷ As a result, the reciprocal investment of the United States, Europe, and Japan in one another and, besides, in Singapore, China, Malaysia, Indonesia, Thailand, Hong Kong, and Taiwan were accounted for 94 percent of the total volume of direct foreign investment;¹⁴⁸ whereas the countries not affiliated with the OECD of received no more than 5 percent foreign investments.¹⁴⁹ In the 1990s, corporations registered in one of the nerve centers of the post-indus-

trial world—the U.S., the E.U. or Japan—accounted for over 90 percent of all investment made in the form of mergers and takeovers.¹⁵⁰

Moreover, even amid the ongoing internationalization of the economies and a steady increase in the share of moneys invested by private individuals in stocks and other securities (in 1997, households' assets in stocks and securities exceeded the value of their real estate holdings for the first time in U.S. history),¹⁵¹ most investors prefer to invest in national corporate debentures. Thus, 95 percent of the stocks and 97 percent of the bonds owned by Americans today have been issued by U.S. companies, with foreigners owning a mere 6 percent of the American stocks traded on the market and 14 percent of corporate bonds.¹⁵² On the whole, despite the growing interpenetration of the post-industrial economies, in the mid-1990s, foreign investors possessed no more than 10 percent of the securities listed at the leading Western stock exchanges¹⁵³ (a recent update puts the figure at 11.2 percent).¹⁵⁴ Be that as it may, today's situation differs strikingly from that in 1913 when nobody talked about globalization yet but when about 60 percent of all the securities listed at the London Stock Exchange had been floated by foreign issuers.¹⁵⁵

Before I conclude this chapter, I must say a few words about the phenomenon of human as well as financial flows “closing upon themselves” within the more advanced world. Significantly, it was not the post-industrial but industrial epoch that saw the most active migration of the population between countries of near-equal economic development levels and, moreover, emigration from more advanced to less-advanced countries. In the second half of the nineteenth century alone, more than 60 million Europeans immigrated to the United States, Canada, Australia, or colonies of European powers.¹⁵⁶ In 1870–1910, it was largely European immigrants who increased the U.S. population 17 percent and the U.S. aggregate workforce 24 percent.¹⁵⁷ Accordingly, Europe's population decreased more than 12 percent in 1850–1930 as against the figure 1900.¹⁵⁸ On the contrary, in the post-industrial epoch, as living standards are rising and information exchange methods improving, there is no intensive migration within the bounds of the post-industrial world, which is particularly true of Europe where, with no restrictions imposed on the freedom of movement, only 2 percent of the workforce seek and find employment outside the national borders (except for a relatively

backward Portugal where the figure is over 10 percent).¹⁵⁹ At the same time, tensions on the advanced world's outer boundaries are mounting as immigrants from poorer countries, urged on by purely economic considerations, seek to partake of the blessings of Western civilization.

It is important to note in this context that modern migration processes are marked by a steadily widening gap between the immigrants' and the hosts' educational and cultural standards. At the end of the 1980s, most immigrants to the U.S. came from ten countries—Mexico, the Philippines, Korea, Cuba, India, China, the Dominican Republic, Vietnam, Jamaica, and Haiti.¹⁶⁰ In 1995, the standard of education of a legal immigrant was inferior to that of an average statistical American by a factor of four.¹⁶¹ In the mid-1990s, the number of foreign workers who had arrived in the E.U. countries from the outside amounted to over 10 million or to about 11 percent of their total workforce,¹⁶² which equaled the share of the unemployed in the population of Europe's leading countries. Prepared to work for pay not exceeding 55–70 percent of the Europeans' average wage rate in analogous job categories,¹⁶³ immigrants create competition in the labor market. As a result, anti-immigrant feelings are growing in the United States and in the E.U. countries. In 1998, these feelings were shared by 27.3 percent of the French, 39.6 percent of the Germans and 41 percent of the Belgians.¹⁶⁴ Politicians speculating on ethnic problems are becoming ever more popular and there is reason to presume that their coming to power in Austria as members of the coalition government in February 2000 will stir their kindred spirits elsewhere in Europe into more vigorous action. The rumor about strict restrictions to be imposed on the employment of foreign labor in the United States and the E.U. within the next few decades¹⁶⁵ is not far removed from reality because such restrictions would be quite in line with the post-industrial world's trend to “close upon itself” which has become strongly manifest over the past few years.

* * *

Summing up, let me point out once again that the rise and development of post-industrial society has accelerated world economic progress to an unprecedentedly high rate in the last third of the twentieth century. Over four decades, from 1960 to 2000, the West has

maintained higher GNP per capital growth rates than the developing countries, despite the success scored by the East Asian economies.¹⁶⁶ In the 1990s, the lead became still more obvious as the U.S. economic growth doubled that of Japan.¹⁶⁷ There is reason to believe that this trend will firmly persist in the near future: in 1999, international financial institutions repeatedly adjusted upward their forecasts concerning the U.S. and E.U. economic growth rates. According to these forecasts, the U.S. growth rate will constitute 4.4 percent in 2000 and 3.0 percent in 2001, and that of the E.U. member-states, 3.2 and 3.1 percent, respectively, while the Japanese economy will continue to stagnate.¹⁶⁸ The impressive progress being made by the post-industrial nations will lead to an ever great lag of those remaining in the industrial phase of development (let alone those in the pre-industrial phase). We see three principal causes for the growth of such disproportions.

First of all, the turning of scientific knowledge into an immediate production resource has, on the other hand, made the developing world, which is in need of new technologies, more dependent on the post-industrial countries where the production of such technologies is concentrated today and, on the other hand, produced new models of reproduction which maximize the consumption of information and knowledge and speed up the post-industrial society's strengthening and development processes. That compelled the developing countries to curtail their domestic consumption for the sake of accumulating material resources necessary for acquiring new technologies; conversely, the character of post-industrial scientific and technological progress urged Western society to broaden consumption to the utmost and to cut the share of accumulation in the national income. In the meantime, developing countries exchanged their non-reproducible natural resources or products embodying the efforts of thousands of people for new technologies. As to the post-industrial world, it supplies high technology and knowledge-intensive products without detriment to the amount of resources left at its disposal. The exchange of products of work for products of creative endeavor, of industrial goods for knowledge—this is what underlies, in the final analysis, the split in modern civilization which has clearly manifested itself on the eve of the twenty-first century.

Second, the shift of emphasis from the consumption of mass-produced creature comforts to the consumption of services and infor-

mation, a decline in the requirements for natural resources and energy, and an ever more extensive use of recoverable resources and man-made materials—all this is the result of the modern scientific and technological revolution which has radically reduced the demand for the agrarian and industrial countries' products. As a result, the market for their goods is narrowing down, and they are running short of the funds necessary to buy the latest technologies on which their future actually depends. The nations seeking to "catch up" with the post-industrial world have found themselves in a situation where they have nothing to offer it by way of an equal and mutually beneficial exchange.

Third, having gone through its formative stage and entered the period of internal stability, the post-industrial nations have established themselves as the most attractive investment media all along the line. In 1999, the prices of the shares issued by the U.S. high-technology companies rose over 80 percent, something which is incommensurate with the indices of the developing markets characterized, apart from sporadically high yields, by steadily excessive risks, political and social instability. An analysis of the biggest corporations' investment policy in 1996-2000 cannot but lead one to the conclusion that the developing countries are now being looked upon as assembly shops for international monopolies, as nations incapable of independent development and not unappealing for major portfolio investors.

An analysis of the processes under way in the world throughout the past decade has led most Western analysts to most unambiguous conclusions. Proceeding from the view that the 1990s have been, on the whole, a period of competition between the American and Asian capitalist systems and between the developed and "catching up" countries, A. Giddens states, for example, that that the victory of American capitalism leads to "the further spread of globalization processes meeting the American interests in particular and the interests of the Western model of capitalism in general."¹⁶⁹ P. Volcker is of the opinion that on the eve of the twenty-first century, the U.S. remains the only player of real influence in the international business sphere.¹⁷⁰ T. Friedman claims that the "onward globalization calls for a stable structure of international power" and that "no nation can do more than the U.S. for building it up"¹⁷¹. M. Hardt and A. Negri go even further than that. "The United States," they write,

"is the only nation capable of maintaining justice in relations between countries and nations by acting not from its narrow national motives but in the name of international law."¹⁷² Today such categorical statements may be disputed, and even disagreed with on some point or other, but rejecting this position outright would not make sense, to my mind.

On the eve of the twenty-first century the countries following the road of "catching up" development have discovered that this road has not led them to their coveted objective. Individual external circumstances and a set of accidental factors which interfered with their steady progress are hardly to blame for that. This is precisely why we are now proceeding to examine the most important contradictions inherent in the "catching up" development model of whatever form.

Notes

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2. See Bellah, R. N., Madsen, R., Sullivan, W. M., Swidler, A., Tipton, S. M. *The Good Society*, Vintage Books, New York, 1992, p. 146.
3. See Mandel, M. J. *The High-Risk Society: Peril and Promise in the New Economy*, Times Books/Random House, New York, 1996, p. 43.
4. Winslow, Ch. D., Bramer, W. L. *FutureWork: Putting Knowledge to Work in the Knowledge Economy*, Free Press, New York-Toronto, 1994, p. 230.
5. See Madrick, J. *The End of Affluence: The Causes and Consequences of America's Economic Dilemma*, Random House, New York, 1995, p. 110.
6. See Judy, R. W., D'Amico, C. *Workforce 2020: Work and Workers in the 21st Century*, Hudson Institute, Indianapolis (Ind.), 1997, p. 63.
7. See Nelson, J. I. *Post-Industrial Capitalism: Exploring Economic Inequality in America*, Sage Publications, Thousand Oaks-London, 1995, pp. 8-9.
8. See Frank, R. H., Cook, P. J. *The Winner-Take-All Society: Why the Few at the Top Get So Much More Than the Rest of Us*, Penguin Books, London, 1996, pp. 88.
9. See Dent, H. S., Jr. *The Roaring 2000s*, Simon & Schuster, New York, 1998, p. 280.
10. See *Economist*, February 8, 1997, p. 57.
11. See *Human Development Report 1998*, Oxford University Press for the United Nations Development Programme, Oxford-New York, 1998, p. 2.
12. See Braun, Ch.-F. von. *The Innovation War: Industrial R&D :: the Arms Race of the 90s*, Prentice Hall PTR, Upper Saddle River (N.J.), 1997, p. 57.
13. See Friedman, T. L. *The Lexus and the Olive Tree*, Anchor Books, New York, 2000, p. 319.
14. See *Human Development Report 1999*, Oxford University Press for the United Nations Development Programme, Oxford-New York, 1999, p. 3.
15. See Rosecrance, R. *The Rise of the Virtual State: Wealth and Power in the Coming Century*, Basic Books, New York, 1999, p. 188.
16. See Toynbee, P. "Who's Afraid of Global Culture?" in Hutton, W., Giddens, A. (eds.) *On the Edge: Living with Global Capitalism*, Jonathan Cape, London, 2000, p. 206.
17. See *World Economic and Social Survey 1996*, United Nations Publication, New York, 1996, p. 283.
18. See Sherer, P. M. "Venture Capital Is Hedge Tool," *Wall Street Journal Europe*, March 24-25, 2000, p. 24.
19. See Preston, H. H. "Internet Spurs Rumblings of a Venture-Capital Revolution," *International Herald Tribune*, March 25-26, 2000, p. 118.
20. See *Economist*, May 27, 2000, p. 85.
21. See Davidow, W. H., Malone, M. S. *The Virtual Corporation: Structuring and Revitalizing the Corporation for the 21st Century*, Harper Business, New York, 1992, p. 189.
22. See Miklethwait, J., Wooldridge, A. *A Future Perfect: The Challenge and Hidden Promise of Globalization*, Crown Business, New York, 2000, p. 92.
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24. See Brown, L. R., Renner, M., Flavin, Ch. et al. *Vital Signs 1997-1998: The Environmental Trends That Are Shaping Our Future*, Earthscan Publications Ltd., London, 1997, p. 112.
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27. See Perkins, A. B., Perkins, M. C. *The Internet Bubble*, Harper Business, New York, 1999, p. 5.
28. See *Business Week*, European Edition, April 10, 2000, p. 72.
29. See Ayres, R. U. *Turning Point: An End to the Growth Paradigm*, Earthscan Publications Ltd., London, 1998, p. 125; for details see Sandler, T. *Global Challenges: An Approach to Environmental, Political, and Economic Problems*, Cambridge University Press, Cambridge, 1997, p. 20.
30. See Brown, L. R., Renner, M., Flavin, Ch. et al. *Vital Signs 1997-1998*, p. 116.
31. See Miklethwait, J., Wooldridge, A. *A Future Perfect: The Challenge and Hidden Promise of Globalization*, p. 257.
32. See *Human Development Report 1999*, p. 38.
33. See Adams, N. A. *Worlds Apart: The North-South Divide and the International System*, Zed Books, Atlantic Highlands (N.J.)-London, 1997, p. 238.
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35. See Robinson, W. I. *Promoting Polyarchy: Globalization, U.S. Intervention, and Hegemony*, Cambridge, 1998, p. 384.
36. See Porter, G., Brown, J. W. *Global Environmental Politics*, 2nd ed., Westview Press, Boulder (Colo.), 1996, pp. 109-110.
37. See Ayres, R. U. *Turning Point: An End to the Growth Paradigm*, p. 125.
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39. See Chatfield, Ch. A. *The Trust Factor: The Art of Doing Business in the Twenty-first Century*, Sunstone Press, Santa Fe (N.M.), 1997, pp. 54-55.
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3

Internal Contradictions of the “Catching Up” Development Model

By the end of the twentieth century it became obvious that the prosperity of Western societies based on liberal tradition is largely due to the natural course of their evolution. That explains the setbacks suffered by both socialist and developing countries that have never developed in a natural and self-sufficient way.

The twentieth century has witnessed the emergence of two types of the “catching up” development model. One of the models, strictly industrial, was adopted by the USSR in the 1930s; Germany in the 1930s and the 1940s; and the socialist countries in the 1950s and the 1960s. The other model reproduced, to some extent or other, features of the Western societies’ post-industrial development; the latter model was adopted by Japan in the 1970s and the 1980s, and by the Southeast Asian countries in the 1980s and the 1990s. Inherent in either model was a fundamental conflict between self-sufficiency and naturalness of development which, far from generating constructive solutions, interfered with a successful accomplishment of the objectives set.

In the former case, the principle of self-reliance predominated (for ideological or political reasons, mostly), and a self-sufficient economy generated autarchy maintained by the toughening of authoritarian regimes. That involved the use of harsh mobilization measures which triggered either open protest or entailed social apathy, and ended up producing a backward and stagnant economy incapable of competing with market-oriented ones.

In the latter case, a certain degree of openness, combined with principles of accelerated development, and readiness to draw upon Western experience found its embodiment in wholesale technologi-

cal and organizational borrowings and manifest gravitation of the nations in question towards external markets as capital suppliers and "insatiable" consumers of finished products. In this version of the model, a much more natural course of development which called for no harsh political pressure failed to make up, however, for a nation's dependence on external factors and slowness to respond to the post-industrial world's new development trends. Considering that the nations which adhered to the latter model have achieved considerable successes over the past decades, we shall concentrate here on the contradictions inherent in the "catching up" development pattern realized in Japan, Southeast Asia and China. In this Chapter we shall examine six such contradictions and the sets of circumstances that give rise to them.

The first of them consists in the patent one-sidedness of all the "catching up" countries' industrial development. For example, the Soviet bloc states or Nazi Germany were dominated by either the military sector or the heavy industry, neither of which had made the nation any better off despite's achievements. On the other hand, Japan and, to a still greater extent, Southeast Asian countries strongly emphasize engineering and electronics. Buying up American and European patents en masse, Japanese and Southeast Asian manufacturers boosted up the production of relatively inexpensive items of everyday use and flooded the Western countries' markets with them. As already indicated, Japan accounted, in the mid-1980s, for 82 percent of the world output of motorcycles; 80.7 percent, of home video systems; and about 66 percent of photocopiers,¹ which, however, does not tell the whole story about the Asian economies' narrow specialization. In the same period, the share of engineering in South Korea's overall industrial output reached more than 25 percent, and that of electronics, 17.8 percent;² these two sectors were responsible for more than 60 percent of South Korea' exports.³ In Malaysia, the proportion of those employed in the electronic industry which constituted no more than 0.2 percent the total industrial workforce in 1970 swelled to 21 percent towards the late 1980s, and the share of that industry's products in the overall volume of exports topped 44 percent.⁴ Taiwanese became the world's fifth biggest microprocessor manufacturer and the leading Taiwan companies' proceeds from their sales skyrocketed from all but zero in 1989 to \$2.5 billion in 1993.⁵ Whereas in 1970 the share of agriculture in the

GNP of South Korea, Thailand and Indonesia constituted 29.8; 30.2; and 35.0 percent, respectively, and was 3 to 7 percentage points larger than that of the industrial sector, in 1993 these indices attained the levels of 6.4; 12.2 and 17.6 percent, respectively, which is 40; 28 and 22 percent short of the industry's share.⁶

Such a progress of industrialization might have been regarded as successful had it not been for the obvious failure of those "catching up" nations' domestic markets to absorb their products. It is a well-known fact that at the end of the 1960s when no more than 165,000 passenger cars were found in South Korea, a plant with a rated output of 300,000 cars a year was put into operation there;⁷ in the 1980s, Singapore's, Malaysia's and Hongkong's output of electronic equipment steadily exceeded those countries' domestic market demand for it 6 to 7 times over, while 60 to 70 percent of the immovables erected in those countries were acquired by foreign investors. It stands to reason that accelerated industrialization could not but demand that the "catching up" nations should concentrate on certain lines of business, but the likely negative side-effects of such a strategy are not to be ignored, either.

The second important set of circumstances is connected with the public underconsumption stemming from the industrial type of the "catching up" development model applied and putting up a practically insurmountable barrier to the rise of a capacious domestic market. It is common knowledge that the standard of living in developing countries which have opted for the "catching up" development strategy used to be low. As a rule, all of them decided for an accelerated industrial growth policy in a situation where the volume of the gross national product constituted \$300 per capita a year, at the most. Whenever a new economic policy was adopted (in Malaysia, Singapore and Taiwan it happened at the end of the 1940s; in South Korea and Indonesia, in the early 1960s; in Thailand, in the late 1960s; in China, at the beginning of the 1980s; and in Vietnam and Laos, at the turn of the 1990s), this index did not exceed the level indicated. In Malaysia, it constituted no more than \$ 300 in the early 1950s;⁸ in war-ravaged Korea, about \$100 at the end of the 1950s;⁹ in Taiwan, \$160 in the early 1960s;¹⁰ in China, which embarked on the road of sweeping transformations in 1978, \$ 280; and in Vietnam, the \$220 mark was attained only in the mid-1980s.¹¹

Such low income levels were a factor in launching accelerated industrialization which required measures to hold them down. In the mid-1990s, when in the more advanced countries an industrial worker earned from \$12 to \$30 an hour, in Korea and Singapore a highly skilled expert was salaried at the rate of no more than \$7, and in Malaysia, \$1.5 per hour. In China and India, workers were paid about \$3, and Vietnam, no more than \$1.5 a day¹² in the same period. In Thailand, Malaysia and Indonesia, real wages were actually frozen from the mid-1970s to the late 1980s;¹³ even in a relatively more successful South Korea, average wages in industry constituted 15 percent of the Japanese and 11 percent of the US level in the late 1980s.¹⁴ As a result, the per-capita GNP index in Thailand, Malaysia and Indonesia went down 7, 23 and 34 percent, respectively, compared to the analogous index computed for the G-7 countries.¹⁵ The boom of the 1990s had no effect on the plight of those countries' population at large: in Thailand, for example, the incomes of the 10 percent top-income bracket tripled over that period, while the lowest-paid ten percent got no rise at all.¹⁶ Most researchers concerned with problems of modern competition agree, however, that the "companies the *only* competitive advantage of which is low production costs do not dismiss executive managers of this or that sector from their posts too often".¹⁷ This rule, in our view, fully applies to entire states rather than individual companies alone. The developing countries cannot gain a firm foothold on the post-industrial world's markets for the only reason that their economies are relatively primitive; and without securing a niche in the said markets, they can get no stimuli for further progress.

For all the apparent affluence of the East Asian countries and their upper class' high incomes (in 1996, for example, Singapore attained the world's highest per-capita GNP index; Indonesia, Malaysia, Thailand and the Philippines took the lead in Asia for the number of billionaires by mid-1997, each of these countries having twice as many of them as a higher developed and more densely populated South Korea,¹⁸ and the people of Hongkong consumed more brandy and expensive wines and owned more cars and furniture, before that British colony reverted to China, than their aristocratic parent state with a 60-million population did),¹⁹ the middle class, which is the mainstay of industrial nations, remained numerically small in Asia. As of the early 1990s, no more than four percent of the Indo-

nesians identified themselves with the middle-class; in Thailand, the proportion of skilled workers, technicians, administrators and executive managers constituted no more than 7.6 of the population; in South Korea, the middle class accounted, according to various expert estimates, for 10.5 to slightly over 11 percent of the population.²⁰ So, the assertion that no country of Southeast Asia has a middle class of the kind which took shape in the 1960s to 1970s as the basis of the post-industrial nations' stability²¹ appears to hold water, and Southeast Asia's lag behind the Western world remains enormous. If the annual income of \$25,000 per family is taken as a welfare standard common to post-industrial countries, 79 percent of the world's 181 million families in this income bracket are found in the more developed countries, whereas their number, in the five leading new Asian "tigers"—China, South Korea, Taiwan, Indonesia and Thailand, whose aggregate population is six times that of the United States, does not exceed one-fourth of the number of such families found in the United States.²² It is small wonder, therefore, that domestic demand in the newly-industrialized countries is fairly limited and there is no stable groundwork for their further economic progress.

The third set of circumstances which cannot be ignored within the framework of our analysis is connected with the predomination in the "catching up" economies of extensive development factors, which retards their economic progress substantially. We have already pointed out above that in the 1990s the post-industrial nations' steady advance proceeded against the background of their citizens' growing consumption of material and information goods, with the share of accumulation in national incomes shrinking continually. In Southeast Asia, a diametrically opposite trend is at work. The countries of that region have been compelled to channel a substantial proportion of their per capita gross national product, small as it is, into the development of production because industrial growth is unthinkable without a proportionate increase in the volume of the resources used. As a result, even at a relatively advanced stage of industrialization in the early 1990s, the share of savings in the gross national product amounted to 24 percent in Taiwan; 30 percent in Hongkong; 35 percent in Malaysia, Thailand and South Korea each; 37 percent in Indonesia; 47 percent in Singapore; and, at some observers' estimates, to an fantastic 50 percent in China.²³ As distinct from the rest of the world, South and East Asia remained the only regions where,

over the period of 1965-1993, the share of savings in the gross national product markedly tended up rather than down (from 12 to 21 and from 22 to 35 percent, respectively).²⁴

The way we see it, this tendency cannot be regarded as absolutely positive. There is no denying the need of large-scale investment in production facilities at the early stages of industrialization; it is over-emphasis on investment that may bring negative results. "Despite the fact that investment is more likely than not, the factor the most closely correlating with [the developing countries'] growth rates over the past four decades," the World Bank's experts point out, "it does not fully account for a spread in the said growth rates"²⁵ which remains quite considerable. Although they cannot very well qualify this or that country for entry into the industrialized nations' community, high accumulation rates are capable, nevertheless, of radically narrowing down the domestic market and depressing the popular consumption level, thus certainly retarding progress.

Low per capita incomes and high savings rates were not the only sources of an impressive industrial breakthrough achieved by the nations which had adopted the "catching up" development doctrine. As is the case in any agrarian country, developing industrial production demanded extra labor which was recruited from among peasants and artisans. An increase in the share of industrial production in the gross national product was accompanied, characteristically, by a proportional increase in the share of the active population employed in industrial sectors. In Singapore, this index increased from 27 to 51 percent²⁶ over the period of 1996-1990; in South Korea, from 22 to 48 percent from the early 1960s to the early 1990s; in Taiwan, from 17 percent in 1952 to 40 percent in 1993.²⁷ That was paralleled by a steady increase in the share of women in the total number of those employed and by the lengthening of the working day. As a result, industrial workers put in an average of almost 2,500 hours year in South Korea and Taiwan in the first half of the 1990s while in most European countries 1,500 hours a year was the statutory limit.²⁸ While contributing to the Southeast Asian countries' impressive achievements at the first stage of their industrial breakthrough, such a numerical expansion of the industrial working class made the local economies strongly dependent on low labor cost; as a consequence, the commencement of the per capita income rise in the mid-1990s cost those countries' eco-

nomic systems their vital competitive advantage and landed them on the threshold of a crisis.²⁹

All this goes to show that despite an extensive use of technological borrowings from post-industrial nations, the Asian economies developed using exclusively extensive methods until the 1997 crisis³⁰. A comparison between the contributions of the productivity factor to the overall gross national product growth dynamics in various countries in the 1950s-1970s will show that in Taiwan only 2.6 percent of the annual GNP increment was achieved through an increase in productivity at the average growth rate of 9.4 percent; in South Korea, only 1.2 percent at the average GNP growth rate of 10.3 percent; in Singapore, a mere 0.2 percent at the annual growth rate of 8.7 percent; while in France these indices were 5.0 and 3.0 percent, respectively.³¹ So, notwithstanding a number of fundamental differences between the nations which opted for the first, closed, or the second, relatively open to the outside world, "catching up" development models, the methods they used to accelerate industrial progress remained largely similar. Admittedly, therefore, P. Krugman's opinion to the effect that "the young industrial nations of Asia achieved high growth rates, just as the Soviet Union did in the 1950s, chiefly though an amazing mobilization of resources; their progress, just as that of the USSR in the high growth rate period, was stimulated, first and foremost, by an unprecedented increase in labor and capital inputs rather than by stepping up production efficiency"³² discloses the basic difference between the post-industrial mode of development and the "catching up" development practice in a most objective way.

The fourth set of circumstances which further aggravated the problems facing the "catching up" countries has to do with the large-scale import of capital which accompanied this type of development from the very outset. Back in the 1950s and in the early 1960s, the United States rendered South Korea and Taiwan massive economic aid the amount of which constituted 5-6 and 10 percent of those countries' gross national product, respectively.³³ Later, the influx of foreign capital began to grow on a commercial basis and got to be so active (especially, the 1980s and early 1990s) that previous loans were returned from new ones, and investors bought up securities of East Asian companies often without taking the trouble of analyzing their financial status. As such, foreign investment should under no

circumstances be regarded as a negative phenomenon; on the contrary, it is the most efficient means of transferring post-industrial production technologies to the Third World. In the countries which have opted for the "catching up" development model the expansion of foreign investment has often served to deepen their economic one-sidedness. From the very outset of its accelerated development period, Southeast Asia began to turn into international corporations' assembly shops: in the 1980s, South Korea's computer output increased twentyfold, but 95 percent of the computers it produced were manufactured under licenses; the cost of South Korean-made components did not exceed 15 percent, and all the software was imported.³⁴ The reverse side of foreign investment is the recipient countries' monstrous dependence on the supplies of components and technologies: by 1995, the imports of the ten Asian new industrial nations were worth \$748 billion which was \$12 billion in excess of the EU figure³⁵.

According to modern Western researchers, however, the laws governing economic progress are such that "for the Third World nations to catch up with the West, they will need the moneys by an order of magnitude larger than what they are actually capable of generating within themselves."³⁶ Therefore, the road taken by Southeast Asia, far from envisaging a gradual transition to self-reliance, called for ever larger supplementary investment, and its influx kept swelling up—for the time being. In 1987-1992 alone, the volume of direct foreign capital investment in the Malaysian economy increased almost ninefold;³⁷ in the Thai economy, twelvefold to fifteenfold;³⁸ and in the Indonesian economy, sixteenfold.³⁹ The influx of enormous funds to those countries (foreign investment growth rates steadily exceeded that of those gross national product in the 1980s and in the 1990s) actually obviated the need for raising production efficiency because the import of technological novelties kept increasing. The result was a decline in growth rates by the mid-1990s which passed unnoticed by most investors: foreign companies' direct investment in that region amounted to \$93 billion in 1996 alone, growing more than threefold over the previous five years.⁴⁰

Those "giddy successes" made many nations of the region overly confident of being on the right track—so much so that Japan, Singapore, Hong Kong and Taiwan, the leaders of the "catching up" development strategy, kept boosting their investment even after the

riskiness of such practice had become only too obvious. In 1993, they accounted for 59.7 percent of foreign investment in Thailand while the U.S. share never rose above 20 percent; the corresponding figures for Malaysia were 62.2 and 11.6 (1994); and for Vietnam, 68.1 and 5.9 percent (as of the end of 1995). Moreover, whereas Japanese and Singapore investment in the region's countries grew at a rate of up to 30 percent a year in 1994-1996, American investment stagnated and even decreased (as was the case in Indonesia).⁴¹ Money flows channeled into local stock markets grew at an incredible rate. Whereas in 1990 their volume did not exceed \$2 billion, in 1990-1994 it totaled \$42 billion.⁴² As a result, in 1994 when the market capitalization of Chinese companies representing the country with a billion-plus population and a colossal economic potential amounted to about \$44 billion, the corresponding index for Malaysia (population: 19 million) reached \$200 billion or 300 percent of the GNP which was 2.5 times the G.B. and U.S. indices.⁴³ In the investment boom year of 1995, the market capitalization of Southeast Asian countries amounted to 58 percent of the developing world's total.⁴⁴

That led to a considerable overestimation of all the national assets and contributed to an artificial rise in demand for land, immovables and durable consumer goods. Under the circumstances, the production efficiency problem receded to the background, with quantitative growth and production for production's sake, the expansion of which depended on supplementary investment, coming to the fore. Hence a vicious circle which had to be broken sooner or later. Notably, over the 1990s the composition of the investment made in developing countries underwent substantial changes: in 1996, despite the stock market boom, total capital investment in shares and commercial loans turned out to be smaller than direct foreign investment;⁴⁵ thus, the post-industrial West changed over from the policy of making speculatively high profits in developing markets to the expansion of production activities. From that moment on, industrial development of the East Asian nations largely turned into the development of the potential of Western companies operating in these countries.

The fifth group of factors determining the nonselfsufficiency of the "catching up" development pattern looks particularly important to us because they made the "catching up" nations dependent on the export of their products. The external market orientation concept

has been and remains a cornerstone of the Asian industrialization model. In the meantime, this concept suffers from at least two fundamental flaws.

On the one hand, the nations professing this concept find themselves extremely sensitive to demand fluctuations in Western markets; a classical case in point is the aftermath of a sharp fall in the demand for raw material resources in the first half of the 1980s which hit hard most Third World economies⁴⁶ and gave the world economic system a new look at the close of the twentieth century. On the other hand, there comes the need for a harsh protectionist policy which may result not only in precipitous domestic price raises (in the late 1980s, for example, food prices in Japan were twenty times higher than those in the United States, on the average,⁴⁷ which cost Japanese consumers \$40 billion a year)⁴⁸ but even in downright dumping intended to strengthen the positions of a country's goods in the post-industrial community's markets. In the 1990s, this policy ceased bearing fruit because keeping export sales volumes high demanded, first, extra investment (and low-yield one, into the bargain) and, second, added to the exporter's dependence on changes in the world market situation.

As a result, the "catching up" countries bring about a situation where their development parameters differ entirely from those of the countries they are trying to catch up with. Indeed, the post-industrial nations' exports constitute no more than 7 to 8 percent of their GNP; the corresponding index for China being 21.2 percent, for Indonesia, 21.9 percent; for the Philippines, 24.4 percent; for South Korea, 26.8; for Thailand, 30.2 percent; for Taiwan, 42.5 percent; for Malaysia, 78.8 percent. Hong Kong and Singapore merit special mention in this context: their exports amounted to fantastic 117.3 and 132.9 percent, respectively.⁴⁹ The absolutized principle of the developing economies' export orientation resulted in that South Korea and Taiwan owed their 42- and 47-percent economic growth indices, respectively, to American purchases of their manufactured products only;⁵⁰ U.S. imports were responsible for more than a half of Brazil's and almost 85 percent of Mexico' favorable balance of trade.⁵¹ Plainly, the developing countries' dependence on the post-industrial world is assuming a strikingly disproportionate character. The share of those countries' exports supplied to the United States, Western Europe, and Japan fluctuates, as a rule, over the range of

45-60 percent while the share of developing countries' exports in the trade turnover of France and Italy constitutes 4.3 percent; of Germany, 5.5 percent; Great Britain, 7.7 percent; the United States, 16.3 percent; with Japan only maintaining this index at a much higher level: 30.4 percent.⁵² It follows from the above that today the loss of developing markets would have been much less painful to the post-industrial countries than a reduction in goods deliveries to Europe and the US for the "catching up" nations. That was confirmed by the developments of the mid-1990s: in 1995, the volume of exports from South Korea increased more than 30 percent; from Malaysia, 26 percent; from China, 25 percent; and from Thailand, 23 percent; in 1996, the corresponding indices were: 4.2; 4.0; 1.5; and 0.5 percent, respectively.⁵³ At the same time, they remained heavily dependent on the supply of patents and standard components; this dependence resulted in industrial progress being financed at the expense of making up for the deficit with borrowed funds, which spelled an imminent crisis. By 1996, the Southeast Asian nations' current balance of payments deficit amounted to \$36.5 billion, increasing more than 10 percent within the space of one year of which South Korea accounted for nearly two-thirds.⁵⁴

By the mid-1990s, the record of the economic development of the "catching up" countries—be it Southeast Asian nations, Latin American states, or the transitional economies of Eastern Europe—had made it perfectly clear that they fully depended for their progress on the import of Western technologies and capital and on the export of their own products to post-industrial countries. Now even the apologists of the "catching up" development doctrine have come to realize that they could catch up with the post-industrial world only as fast and as far as that suited the latter itself.

And finally, the sixth set of circumstances important in the context of this chapter determines the "catching up" nations' absolute technological, intellectual and cultural dependence on the post-industrial world. All these countries have an unfavorable balance of trade in technologies with the West. A rudimentary middle class cannot serve as the basis for the formation of a social stratum in which education would be perceived as a significant value and the quest for creative work would be a pressing need, as is the case in post-industrial societies. Although in Japan or South Korea almost all children go to school today, this is rather a tribute to tradition with-

out any underlying motive behind it; otherwise, how one would explain the fact that 60 percent of U.S. CEOs hold doctoral degrees while 30 percent of their Japanese counterparts have never gone to college.⁵⁵ In China and Indonesia, only 45 to 50, and in Thailand, less than 40 percent of the youth attend school.⁵⁶ Moreover, whereas in France 44 percent of students go on to college and in the United States this index amounts to 65 percent,⁵⁷ in Malaysia it does not rise above 12 percent⁵⁸ with the result that college students account for no more than 5 percent of the youth aged 20-24.⁵⁹

The industrial model of progress rules out the possibility of investment in education being profitable; therefore, while in the United States, for example, the wages of men having no college education fell 12 percent in 1973-1987, in Japan high-school graduates boosted their incomes 13 percent,⁶⁰ with vocational competence improvement closing the list of the ten vital components of economic growth.⁶¹ Having partaken of the values of the information society, gifted young people from developing countries give a decided preference to them; in the early 1990s, more than a quarter of South Korean, a third of Taiwanese and 95 (!) percent of Chinese students who had received their education abroad did not return home after graduation.⁶² The cardinal objectives involved in the rise of post-industrial society—a radical improvement of living standards and the spread of scientific knowledge as a fundamental social value—have been set, at best, but far from accomplished in the newly industrial states today. One cannot but agree with F. Fukuyama's observation to the effect that "the experience of the Soviet Union, China and other socialist countries shows that centralized economic systems, effective enough to achieve a standard of industrialization conforming to the European model of the 1950s, proved altogether unequal to the task of creating an organism as complicated as the post-industrial economy in which information and innovation have a much more important role to play."⁶³ The source of economic breakthrough so efficiently used by the Western nations in the 1990s was left actually untapped by these countries.

Such are the basic explanations of why the "catching up" development model is not self-sufficient, contradictory, and incapable of delivering the nations adhering to it from under the post-industrial powers' control. Another important circumstance common to all the "catching up" countries stands by itself, as it were. It both ensues

from, and determines all the six groups of circumstances named above; therefore, we should not put it in a class with them and study it out of context of each country's development. I mean a very special role played by the state which inevitably participates in any development mobilization scheme.

The importance of this factor was great enough to call for the coining of the term developmental state, made current in the West in the 1980s, which means a state professing and sustaining accelerated development. Toward the mid-1990s, however, it became obvious that theoretical construction built around this notion fails to provide the answers to many questions, including such fundamental ones as: which sectors of the economy gain most from within the framework of this model; which social strata should such a state lean upon; and finally, is it capable of effecting a transition to natural self-replicating development requiring no artificial stimulation?⁶⁴ Today most researchers are inclined to divide all the existing economic systems into three basic kinds: comprehensive, self-depend ing for whatever they need and generating technological innovations; transferring industrial production to other countries and specializing in exporting services and importing the results of material production and, finally, those capable of acting only as recipients of production facilities brought in from more advanced countries.⁶⁵ Over the past few years, however, the following school of thought has been confidently gaining ground: no matter how hard a state may try to speed up its economic progress, "no nation across the world has ever succeeded so far in accomplishing a genuine *advance* along the lines of carrying out individual *projects* (my italics.—V. I.);"⁶⁶ we share the view that modern *post-industrial society* can take shape only along the lines of natural (harmonious, if you will) economic progress going on in parallel with changes in social attitudes and motivations for human activities and that, consequently, this society is *taking shape in an evolutionary way and cannot be built according to plans drawn up by the economic headquarters in advance*.

Historical experience shows that the state has interfered in economic affairs in various ways; it is precisely the state that initiated the "catching up" development doctrine and set the vital economic priorities; it is precisely the state that largely interferes in private companies' affairs using both restrictions and subsidies and arbitrarily emphasizing this or that industry or development program.⁶⁷

Suffice it to recall that in the early 1960s Japan's Foreign Trade and Industry Ministry set up an association which incorporated such giants as Sony, Hitachi, Toshiba, NEC, and Mitsubishi and granted the new consortium an enormous low-interest credit, which marked the beginning of the Japanese computer industry.⁶⁸ It is precisely the state that encouraged underconsumption either by drawing funds from the public to the banks under its control or by triggering controllable inflation to reduce the public's purchasing power. In Indonesia, for example, minimum wages grew at a rate of 10 percent a year in 1990-1995 but their USD equivalent—30 cents per hour⁶⁹—remained practically unchanged; in China, the situation is much the same. The state was largely responsible for extensive methods of industrial development professed in Asia. Suffice it to recall that the Korean government deliberately pursued the policy of subsidizing the largest companies despite their low performance efficiency: in the early 1980s, for example, more than 70 percent of all the credit resources were channeled into a few biggest corporations marked for their minimum profitability (in 1988, Samsung sold a 32 billion dollars' worth of its products making a profit of a mere \$439 million, which corresponds to the profitability level of 1.5 percent); in Taiwan, credits for the production of export items were granted at half the interbank interest rate and at nearly a fourth of the credit market's accepted average.⁷⁰ While encouraging foreign investment, the state took measures to restrict free competition in the domestic market. Finally, the state has built up an enormous but inefficient bureaucratic machine (in relatively successful Japan, for instance, there are 170,000 farmers and 420,000 local-level managers and 90,000 Agriculture and Fisheries Ministry officials)⁷¹ which often retards economic progress or poses an immediate threat to the country's economic security (suffice it to recall the establishment of a far-flung network of semi-government companies in Indonesia which permitted President Suharto's family to amass the largest fortune in Asia estimated at \$40 billion).⁷² The crisis which broke out in the region in 1997 revealed, first and foremost, the inefficiency and frailty of the statist model of industrial progress which had looked optimal just a few years before.

* * *

The foregoing cursory review of the more fundamental problems facing the nations which have opted for the "catching up" development model shows that even those of them which have made the most of it proved unequal to a number of vital tasks such as, especially: overcoming non-susceptibility to scientific and technological progress; establishing a research base of their own and changing over to the intensive type of economic progress; overcoming dependence on the capital and technology markets; learning to develop production without exporting their products on an ever larger scale; overcoming the backwardness of the social structure, lowering the savings rates which prevent the formation of the modern middle class; and finally, doing away with dependence on the intellectual potential found outside the limits of the industrially developing nations.

Two important circumstances are worthy of special note in this context.

First, various centers of the world economy have come to be more closely interdependent over the past decade, but this dependence is tending to be increasingly one-sided. The 1997 crisis was caused, mostly, by the developing countries' domestic problems such as production inefficiency; overvaluation of national currencies; weakness of the banking system; overbureaucratization; excessive short-term borrowing practice⁷³—and, last but not least, by the fact that the post-industrial world had gained an unprecedented investor appeal. Many experts note that whereas previously capital gravitated toward the United States and Western Europe for reasons of their being relative secure against political uncertainty and catastrophic crises, today it is attracted by the obvious technological and economic leadership of those countries.⁷⁴ It is the emergence of an unprecedented technological gap between the First and Third Worlds and the rise of the new post-industrial economy in the West that have made the prospects for the "catching up" development model all but hopeless.⁷⁵

Second, the successes achieved along the lines of "catching up" development look most dubious today. We cannot wholly accept the view taken by more radical researchers who maintain, in particular, that "globalization ... marks the limit to development, ... producing economic marginalization and political instability in the countries found beyond the triadic system [the United States, the EU and Japan.—V.I.]."⁷⁶ There is no denying, however, that "catching up"

development does not, on the whole, narrow down the gap between the centers of the post-industrial world, on the one hand, and the peripheral regions, on the other. There emerge economic systems sometimes referred to as subordinated economies and commented upon as follows: "The assertion that subordinated economies make no progress does not mean that they are immune to change or incapable of growth; it implies that they remain subordinate with regard to the global system and, therefore, will never attain the much-coveted status of dominant and fully developed economic structures."⁷⁷ The record of the Southeast Asian countries is most indicative in this respect. In 1976, Hong Kong's and Singapore's GNP constituted \$2,790 and \$2,860 per capita; in Malaysia, the Philippines, Thailand, and Indonesia, the figures were \$ 950; 410; 380 and 270, respectively. In 1996, on the eve of the crisis, the former two countries attained the GNP level of \$21,600 and \$23,400 per capita while the latter increased it to \$3,520; 960; 2,210 and 880, respectively.⁷⁸ As we see, the nations which had been at a higher level of development a quarter of the century ago boosted their GNP eightfold, and the others, 3.6; 2.3; 5.9; and 3.6 times. No comment.

In conclusion, let me repeat: post-industrial society cannot be built; it can only be arrived at through evolutionary development proceeding on its own basis, its most important component being the liberation of the personality potential of its members who have attained high living standards. Where post-materialistic values are sacrificed to industrial development, no such society can see the light of day. The drama of the present-day situation is (as illustrated by the chapters which follow) that none of the countries capable of following the road of "catching up" development is unable to generate and control on its own the amounts of information and knowledge which Western European nations and the United States currently depend on for their advance, and that decades of borrowing new technologies produce no technological breakthroughs. It is impossible to catch up with post-industrial society using industrial methods; feverish attempts to lay the material groundwork for it induces mutations in the public mind which will take longer to put right than speeding up economic progress may take; such is the conclusion that ensues, to our mind, from research into the "catching up" development practice represented in its most explicit form by the record of Japan, newly industrial nations, and China.

Notes

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2. See Hobday, M. *Innovation in East Asia: The Challenge to Japan*, Edward Elgar, Cheltenham (U.K.)-Lyme (U.S.), 1997, pp. 31, 57.
3. See Bello, W., Rosenfeld, S. *Dragons in Distress: Asia's Miracle Economies in Crisis*, A Food First Book, San Francisco, 1990, p. 59.
4. See Robinson, R., Goodman, D. S. G. (eds.) *The New Rich in Asia: Mobile Phones, McDonald's and Middle-Class Revolution*, Routledge, London-New York, 1996, pp. 57-58.
5. See Yip, G. S. *Asian Advantage: Key Strategies for Winning in the Asia-Pacific Region*, Addison-Wesley, Reading (Mass.), 1998, p. 119.
6. See Islam, I., Chowdhury, A. *Asia-Pacific Economies: A Survey*, Routledge, London-New York, 1997 p. 8.
7. See Yergin, D., Stanislaw, J. *The Commanding Heights: The Battle Between Government and the Marketplace That Is Remaking the Modern World*, Simon & Schuster, New York, 1998, p. 170.
8. See Mahathir bin Mohammad. *The Way Forward*, Weidenfeld & Nicolson, London, 1998, p. 19.
9. See Yergin, D., Stanislaw, J. *The Commanding Heights*, p. 169.
10. See Robinson, R., Goodman, D. S. G. (eds.) *The New Rich in Asia*, p. 207.
11. See Murray, G. *Vietnam: Dawn of a New Market*, St. Martin's Press, New York, 1997, p. 2.
12. See Boyett, J. H., Boyett, J. T. *Behind Workplace 2000: Essential Strategies for the New American Corporation*, New York, 1996, p. xv; Garten, J. E. *The Big Ten: The Big Emerging Markets and How They Will Change Our Lives*, Basic Books, New York, 1997, p. 45; Naisbitt, J. *Megatrends Asia: The Eight Asian Megatrends that are Changing the World*, Nicholas Brealey Publishing, London, 1996, p. 110.
13. See Phongpaichit, P., Baker, Ch. *Thailand's Boom and Bust*, Silkworm Books, Chaing Mai (Thailand), 1998, pp. 31-32; McLeod, R. H., Garnaut, R. *East Asia in Crisis: From Being a Miracle to Needing One?* Routledge, London-New York, 1998, pp. 56-58.
14. See Bello, W., Rosenfeld, S. *Dragons in Distress*, p. 24.
15. See Palat, R. A. (ed.) *Pacific-Asia and the Future of the World System*, Westport (Conn.), 1993, pp. 77-78.
16. See Phongpaichit, P., Baker, Ch. *Thailand's Boom and Bust*, pp. 284-285.
17. Porter, M. E. *The Competitive Advantage of Nations*, Macmillan, Hounds-mills-London, 1990, p. 64.
18. See Hiscock, G. *Asia's Wealth Club*, Nicholas Brealey Publishing, London, 1997, pp. 107, 161.
19. See McRae, H. *The World in 2020: Power, Culture and Prosperity: A Vision of the Future*, Harper Collins Publishers, London, 1995, pp. 7, 20.
20. See Robinson, R., Goodman, D. S. G. (eds.) *The New Rich in Asia*, Routledge, London-New York, 1996, pp. 84, 143, 187.
21. See Rowen, H. S. "The Political and Social Foundations of the Rise of East Asia: An Overview," in Rowen, H. S. (ed.). *Behind East Asian Growth: The Political and Social Foundations of Prosperity*, Routledge, London-New York, 1998, p. 29.
22. See Morrison, I. *The Second Curve: Managing the Velocity of Change*, Nicholas Brealey Publishing, London, 1996, pp. 122-123, 167.