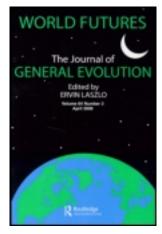
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# The Coming Epoch of New Coalitions: Possible Scenarios of the Near Future

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## THE COMING EPOCH OF NEW COALITIONS: POSSIBLE SCENARIOS OF THE NEAR FUTURE

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This article analyzes some important aspects of socioeconomic and political development of the world in the near future. The future always stems from the present. The first part of the article is devoted to the study of some crucial events of the present, which could be regarded as precursors of forthcoming fundamental changes. In particular, it is shown that the turbulent events of late 2010 and 2011 in the Arab World may well be regarded as a start of the global reconfiguration. The article also offers an analysis of some aspects of the global financial system that, according to the authors, notwithstanding all its negative points, performs certain important positive functions including the "insurance" of social guaranties at the global scale. The second part of the article considers some global scenarios of the World System's new future and describes a few characteristics of the forthcoming "Epoch of New Coalitions." The article attempts to answer such questions as the following: What are the implications of the economic weakening of the United States as the World System center? Will the future World System have a leader? Will it experience a global governance deficit? Will the world fragmentation increase?

KEYWORDS: Global economic crisis, global economy, sovereignty, world reconfiguration, world system's leader.

### "ARAB SPRING" AS A PRECURSOR OF THE WORLD RECONFIGURATION?

The turbulent events of late 2010 and 2011 in the Arab World, including revolutions in apparently successful and dynamically developing Egypt and Tunisia (see, e.g.,

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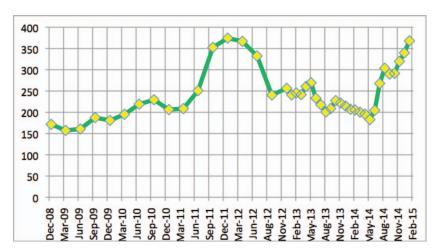


Figure 1. World wheat prices, \$/ton, 2005–2011. *Source*: Korotayev and Zinkina (2011b, 74). (color figure available online.)

Korotayev and Zinkina 2011a, 2011b) confirms that the world will encounter very serious changes in the forthcoming decades (see Grinin 2009e, 2010b). Forms of their realization may be rather different—ranging from slow and unapparent to sharp and sudden. When considering the Arab revolutions one may indicate a whole set of their factors—both objective and subjective, local and global, logical and random. On the one hand, it is clear that a certain role has been played here by the global crisis. Note that it contributed significantly to the synchronization of political upheavals in different countries (including even such prosperous countries as Bahrain). A special role here was played by "agflation" (a steep rise of the agricultural commodity prices [see, e.g., Figure 1]).

Indeed, already before the crisis, in spring 2008, the first agflation wave generated a wave of sociopolitical destabilization in a number of the third world countries, including some Arab states. For example, in spring 2008 the protests against food price growth surged in Egypt. The central event was the strike of spinning and weaving factory workers in the industrial city of al-Mahalla al-Kubra, which started on April 6, 2008. The worker's dissent was aimed first and foremost at the decrease of living standards caused by food price growth. Egyptian bloggers supporting the strikers launched a Facebook group called "April 6 Youth Movement." It is known that this movement played a crucial role in the Egyptian Revolution 2011. Still more important was social self-organization through Facebook, which was first successfully tried in spring 2008 by this youth movement and proved its efficiency in 2011 events.

Global financial—economic crisis was accompanied by bubble bursts (the only major "survivor" was the gold price bubble [Akaev et al. 2010]). Food price bubbles were not an exception; prices for many food commodities fell significantly during the crisis in the second half of 2008 and early 2009. As a result, despite some

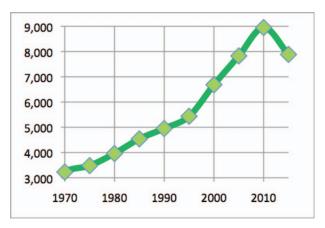


Figure 2. Number of Egyptian youths aged 20–24, thousands, with forecast till 2015. *Source*: Korotayev and Zinkina (2011b, 88). (color figure available online.)

slowdown in economic growth rates the poor people of Egypt, paradoxically, rather benefited from the crisis, and about three millions of poor Egyptian managed to come above the poverty line (see, e.g., Siam and Abdel Rady 2010).

However, global economic post-crisis recovery led to the blowing of new price bubbles in the world food market almost reaching or even exceeding the peak levels of 2008 by the end of 2010 and in early 2011, and, in our view, this certainly made a contribution to political destabilization in the Arab World in this period of time.

A number of observers emphasized the role of modern technologies in the Arab Spring (see, e.g., Tausch 2011). Of course, we should also keep in mind the diffusion of the Internet and cellular telephone networks, which supplied Arab educated youths with unprecedentedly powerful means of self-organization, as well as the Arabic satellite channels and their talented journalists who translated exceptionally vivid images of people uprisings to all countries of the Arab world.

An especially important role was played by the high proportion of the youth in the population (the so-called youth bulge<sup>2</sup>) and a sharp growth of the young population in recent years. Consider, for example, the dynamics of the number of Egyptians aged 20–24 in recent years (see Figure 2).

In absolute numbers the growth of this cohort is really astonishing, as it almost doubled during 15 years. Namely this cohort enters the labor market in more or less developed societies (including Egypt), so even for a fast-growing economy it was virtually impossible to create millions of workplaces necessary to absorb the young labor force. At the beginning of the 2011 Egyptian Revolution the unemployment level in Egypt was about 9 percent, which was not very high according to global standards. However, the most important circumstance (caused just by the "youth bulge") is that about half of all the Egyptian unemployed belonged to the 20–24 age cohort (CAPMAS 2010)! Total number of the unemployed on the eve of the

Egyptian Revolution was about 2.5 million (Abd al-Rahman 2010, 4). Accordingly, on the eve of Revolution Egypt had about one million unemployed young people aged 20–24 who made up the main striking force of the Revolution. Moreover, the investigation carried out at the end of 2010 by the Egyptian Central Agency for Public Mobilization and Statistics discovered that at the eve of the Revolution more than 43 percent of the Egyptian unemployed had university degrees (CAPMAS 2010)! Thus, the impact force of the 2011 Egyptian Revolution (and most other Arab revolutions) was not only young, but also very highly educated.

At present some political scientists even consider countries with high proportions of youth in their population as forming the "Arc of Instability" stretching from the Andes region of Latin America through Africa and Middle East to the northern areas of South Asia (e.g., National Intelligence Council 2008, 61). This forecast appears to be rather realistic now.

The Arab Revolutions should be also connected with "modernization traps" related, for example, to inflated levels of expectations (see, e.g., Grinin et al. 2010b; Grinin 2010a).

Finally, one should mention the influence of various globalization processes (in addition to the global crisis). In particular, the presence of Arab and pan-Islamic radicalism may be regarded not just a peculiarity of a certain type of modern Islamic ideology. It may well be regarded as an indicator of the growth of globalizing processes in the present-day world.

The influence of globalization may be also detected in the point that the sovereign prerogatives of the states transformed and shrank (often quite voluntarily) under the influence of objective processes, the world public opinion, and, sometimes direct coercion (see Grinin 2008a, 2009b, 2009c for more detail). The reduction of sovereign prerogatives is rather apparent within such phenomena as, for example, the imposition of democratic standards that are not always appropriate for concrete countries; in the recent events this was especially apparent in the point that, under the influence of the "world public opinion," as well as under the direct pressure governments of many destabilized countries could not apply force against rebels.

Notwithstanding all the understandable factors (including those that have not been mentioned above), it is difficult not to notice that those factors do not appear to be sufficient to account completely for a striking synchronicity of the respective sociopolitical explosions (for a partial explanation of this synchronicity see, e.g., Tausch 2011; Korotayev and Zinkina 2011a, 168; 2011b, 90). Note also that the Arab Spring turned out to be a surprise both for the absolute majority of the analysts, and for the population of the respective countries. It also appears necessary to emphasize that the level of poverty in almost all the countries affected by the Arab Spring is not really high for the third world. It is clear that we are dealing here with the effect of the revolutionary influence of some countries on some other countries (especially, the ones that are similar in their languages and cultural characteristics), which was sometimes already observed in history. For example, this effect was observed as regards 1848–1849 revolutions in Europe, national liberation revolutions in Latin America in 1825–1830, revolutions in Communist countries in Europe in 1989–1990.<sup>3</sup>

However, what is especially important for the present theme is that here we are dealing with the effect of the *start of the global reconfiguration*. The respective changes will take place in various (and sometimes unexpected) forms that can involve whole sets of social systems.

There is a certain point at which evolution leads to revolution and vice versa (see, e.g., Grinin et al. 2011). The evolution of our World System has entered such a phase when, due to a very fast rate of change, it turns out to be extremely difficult to understand what kind of processes we are dealing with—whether they are revolutionary, or evolutionary. It might be even possible to speak about some sort of synthesis of the two forms of dynamics. The forthcoming processes of the world economic, political, social, and cultural change are likely to proceed in such a way that the fast evolution in certain aspects will be succeeded by unexpected and multifarious revolutions and crises. The growing role of the financial component in the world economy may also contribute to this in a very significant way. The current crisis has altered significantly the very tonality of the world development forecasts. It has demonstrated in a very convincing way the growing role of the financial sector in economics and politics. According to many suggestions (including our own), the role of financial sector will be still growing in the forthcoming future; hence, it makes sense to analyze some estimates and forecasts of the financial sector development.

#### FINANCIAL SPECULATION: DOES IT HAVE A POSITIVE SIDE?

Financial middlemen were cursed in all epochs. And there were always certain grounds to curse them. But they exist and the modern economic system cannot reproduce itself without them, as the modern market economy depends on financial middlemen in a rather significant way, as they transform households' savings into productive investments (Greenspan 2007).

The activities of modern financial corporations and funds (which lead to the uncontrolled growth of financial assets and anarchy in their movements) are quite justly criticized (e.g., Schäfer 2009, 279–280; see also Grinin 2008b, 2009a; Grinin and Korotayev 2010a; Grinin et al. 2010a). However, it would not be correct to maintain that modern financial technologies are fundamentally deleterious, that they only lead the world economy to various troubles, that they are only beneficial to the financiers and speculators. On the contrary, both the formation and the current development of the financial sector are connected with the performance of very important functions—and just at the global scale.

Thus, the modern financial globalization should not only be cursed; it also has some positive sides. Summing up the achievements of what is called "the financial revolution" (see Doronin 2003; Mikhailov 2000; see also Held et al. 1999) we would provide our own version of the most important directions taken by the development of financial engineering (in addition to the computerization of this sphere of business). We shall also try to specify the positive influence produced by them. Those directions can be described as follows:

- Powerful expansion of nomenclature of financial instruments and products, which leads to the expansion of possibilities to choose the most convenient financial instrument.
- 2. Standardization of financial instruments and products. This creates the possibility to calculate an abstract (that is, an aggregate, unified measure based on a standard package of shares and other stocks) base (and not just concrete prices of concrete securities). This secures a considerable economy of time for those who use financial instruments; it makes it possible to purchase financial securities without a detailed analysis of particular stocks; this leads to an increase in the number of participants by an order of magnitude.
- 3. Institutionalization of ways to minimize individual risks. In addition to the aforementioned expansion of nomenclature and assortment of financial products, it appears especially important to mention: first, the development of special institutions—specialized clearing chambers—with their internal regulations (which makes it possible to avoid reliance on courts of law); second, the use of special rules and computer software, various technologies; and, third, new forms of risk hedging. All these changes help to minimize both individual risks of unfulfilled deals and also of bankruptcies in the framework of certain stock markets.<sup>4</sup>
- 4. Increase in number of participants and centers for the trade of financial instruments. Modern financial instruments have made it possible to include a great number of people through various special programs, mediators, and structures. These changes result in the diffusion of technologies among the owners of capitals with various sizes (this is similar to the development of joint-stock companies that made it possible to accumulate enormous capitals). It is also possible to observe a significant increase in the number of financial centers and their specialization, as well as in the interconnectedness of national and world financial centers. It is also extremely important that we observe the growth of the number of emitters of various financial derivatives.

The significance of the changes outlined above for the financial sector on the global stage can be described as follows:

- Enormous new capitals, actors, markets are accumulated and engaged, which
  creates a "difference of potentials" that is necessary for the activization of an
  economy that attracts capitals and investors.
- Due to enormous growth in volumes of operations, we observe the emergence of possibilities to extract profits from such operations, from which it was impossible to extract any profits earlier. Thus, a firm could earn just 3 cents from re-selling one share, but it may re-sell millions of such shares every day—and what is more, it may re-sell the same shares dozens of times within the same day (see Callahan 2002). One may compare this with the industrial concentration of low-grade ores, whose processing was not profitable before the invention of respective technologies.

- The growth of diversity of financial products, the development of specialization
  in the production of financial services, and the increase in nomenclature of those
  services make it possible to smooth the demand fluctuations and to increase
  the general volume of sales (in fact, the growth of nomenclature of products
  achieves the same results within any branch of economy).
- Financial currents and financial centers start to structure the world economy in a new way. The market economy is always structured along certain modes of communications. One may recollect how railway construction not only altered the transportation of commodities but also changed the whole organization of economic life. Within the modern information economy the financial currents start playing a role of such system-creating communications. In those zones where we observe the most important financial currents, we may also observe the most intensive economic life. Small financial streams (like, before, small streams of commodities along the railways) create a new economic network.
- The new structure makes it possible for the periphery to participate actively in the world economy. It is quite clear that the spontaneous movement of capital can lead to collapses and global crises; yet, the same was observed in the nineteenth century when the vigorous railroad construction (accompanied by unprecedented speculations) led first to enormous upswings, and, later, to collapses. Thus, the main task is to put the most dangerous and unpredictable actions under control.

#### FINANCIAL CURRENTS AS THE WORLD PENSION FUND?

Our research has made it possible to detect such global functions of the world financial sector that do not seem to have been noticed by analysts. Those functions have developed in conditions of currency not guaranteed by gold and they are connected with the necessity to protect savings in conditions of inflation against losses and risks during long periods of time. They emerged as an unintended consequence of the radical transformations in the world financial system that began in the 1970s. At that time the world financial system finally rejected the gold monetary standard as a result of the double devaluation of dollar and the collapse of the Bretton Woods monetary system. The price of gold was no longer tied to the dollar even nominally, it became free, whereas the currency exchange rate became floating.

However, as a result of the rejection of the gold standard the function of savings' protection moved finally from an "independent" guarantor (i.e., precious metals) to the state.<sup>5</sup> Yet, there was no state left, on which the capital owners could rely entirely as they could on a perfectly secure guarantor. One should add to this, the growth of inflation that especially bothered the West in the 1970s and 1980s. One should note that it was during the 1960s and 1970s that the volume of "social capitals" in the direct sense (i.e., various pension, social, insurance funds, including the medical insurance funds) grew very significantly in direct connection with active social legislation, the growth of the quality of life, and some demographic processes (first of all, the coming to age of the numerous baby-boom generation). There were some other important sources for the growth

of capitals in the 1970s and 1980s, in addition to the aforementioned ones. The general volume of capitals also grew due to the petrodollars, the increase in the emission of stocks, and borrowing (including the sovereign borrowing). In general, since that time one may observe the process of rapid growth of the volume of free capitals that should be invested somewhere.

With inflation the question of where to invest capitals and funds not guaranteed by gold or hard currency becomes extremely important. This is especially relevant for capitals accumulated by pension funds, as their designation is to be found dozens of years later preserved and multiplied. Thus, it was necessary to find new ways to guarantee the preservation and multiplication of capitals.

The actual abandonment of the gold standard led to the transformation of not only the world monetary system, but also to the transformation of the financial economy and all financial technology. The sharp increase in the quantity of capitals, the necessity to preserve them from inflation and to find their profitable application objectively pushed the financial market actors to look for new forms of financial activities. As a result, one could observe the start of the process of rapid growth of the volumes of financial operations, the number of financial assets, objects, instruments, and products. Some new instruments were already available at that time, and it became possible to apply them rapidly on a wide scale (see Grinin 2009a, 2009d; Grinin and Korotayev 2010b for more detail). A factor that contributed greatly to all these was nothing else but the information-computer revolution that occurred simultaneously with the financial revolution and that gave it a solid material basis.

Thus, in contrast with precious metals (that retained their value even if they were not invested in anything) the modern capitals do not have such an anchor; no fortune can be accumulated in a monetary form without a serious risk of a rather fast loss of a substantial part of its value (see, e.g., Movchan 2010, 49). That is why if capitals just lie still (as gold in treasuries), they risk to degrade gradually into "dust." What are the possible sources of their preservation and growth—and, hence, what are the possibilities of the fulfillment of respective financial obligations (as well as social obligations connected with them)?

The first point is a system of dynamic movements of capitals, continuous change of their forms, the engagement of new people, mediators, and services that allow them to be preserved and multiplied. The faster the movements and transformations of financial objects, the better the preservation of capitals.

The second point is the distribution of risks at the global scale. We observe the growth of opportunities to distribute risks among a larger number of participants and countries, to transform a relatively small number of initial financial objects into a very large number of financial products. This makes it possible to achieve the maximum diversification by letting people choose convenient forms of financial products and to change them whenever necessary. That is why derivative financial instruments become more and more derivative, they acquire more and more modified forms that become more and more distant from the initial money one.<sup>6</sup>

The third point is the growth of specialization (including various forms of deposit insurance) that supports diversification and the possibilities for expansion.

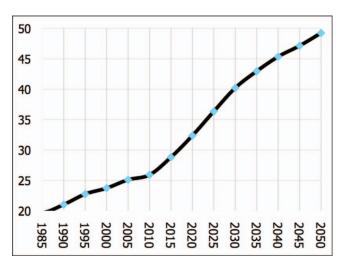


Figure 3. Number of pensioners per 100 working age adults in developed countries, 1985–2050. (color figure available online.)

The additional importance of the world finances functions—with respect to the preservation and multiplication of savings in pension, insurance, and social funds—is amplified every year by a very significant (and, in some sense, global) process of the finalization of the second phase of demographic transition in Western countries and Japan (see, e.g., Korotayev et al. 2006). It is well known that as a result of this process the natural population growth rates declined in those countries to values that are close or even below zero; depopulation began in a number of developed countries, a rather rapid population aging is observed, whereas the proportion of pensioners in total population tends to increase in a rather dramatic way. The forecasts suggest a further acceleration of this process. In 2010 one can observe 1 pensioner per 4 working-age adults, whereas in 2025, according to forecasts, there will be less than 3 working-age adult per pensioner in the developed countries (National Intelligence Council 2008), and there are even more pessimistic forecasts (see e.g., Meliantsev 2009, 30).8 Who will be filling the pension funds in the future, who will fulfill the social obligations with respect to hundreds of millions of elderly voters? Note meanwhile that, in addition to the overall growth of the number of pensioners, one can also observe simultaneously the increase in volume, complexity, and value of respective obligations (in particular, health care services) (Figure 3).

Indeed, within such a context, against the background of the slowdown of the economic growth in the West and the threatening growth of state debts in many developed countries, the guarantees of pension (and other social insurance) payments do not look perfectly secure.

Here one should take into account the point that most pension funds are concentrated not in the state pension funds, but in thousands of private (non-state) pension funds that are very active as regards the search for the most secure and

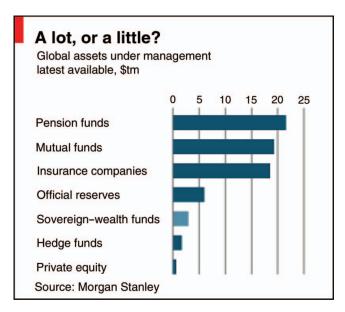


Figure 4. Assets under management of various types of funds. *Source: Economist* (2008). (color figure available online.)

profitable investments. Pension funds are important shareholders of listed and private companies. They are especially important to the stock market where large institutional investors dominate. The amounts of money concentrated in pension funds are enormous. *The Economist* (January 17, 2008) reported that Morgan Stanley estimates that (privately managed) pension funds worldwide hold over US \$20 trillion in assets, the largest for any category of investor—ahead of mutual funds, insurance companies, currency reserves, sovereign wealth funds, hedge funds, or private equity (Figure 4).

So, in sum, at the world scale pension and other social funds' total volume of money is counted in dozens trillion dollars. Note that we are dealing here not with some financial derivatives or bad debts, but, in general, with honestly earned money accumulated over three to five decades that constitute a working life. Thus, according to some calculations, the volume of the American pension funds can be estimated for the moment of the start of the world financial crisis as about 10 trillion U.S. dollars (Shtefan 2008), which is comparable with the total size of the U.S. Gross Domestic Product (GDP) (see Antolin 2008, 7). The crisis led to tangible losses and even bankruptcies of many of those funds. How to make the preservation of those resources secure? It is easy to see, that security is a rather relative notion. The best shares can suddenly turn out to be insecure, the same goes with respect to the apparently best shares, real estate, and even state obligations. The Organisation for Economic Co-Operation and Development (OECD) estimates the losses of pension funds in OECD countries to be \$5.4

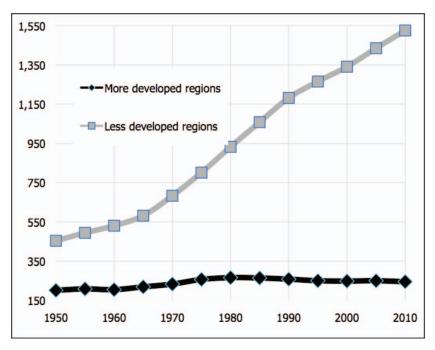


Figure 5. Young population of more and less developed regions, millions, 1950–2010. (color figure available online.)

trillion or about 20 percent of the value of assets in these countries in 2008 (Hinz et al. 2010, 3; Antolín and Stewart 2009).

In 2008 the Russian State Pension Fund lost 10 billion rubles because of drop in rate of these obligations (Naumov 2008). It seems that within a single developed country it becomes more and more difficult to achieve a sufficient level of the security of pension funds.

In the meantime in the developing countries we observe enormous numbers of young adults (Figure 5); and it is extremely difficult to provide all of them with jobs and education.

It is impossible to solve this task without an active integration of the peripheral economies into the World System economy, without the diffusion of capitals and technologies from the World System core, whereas such an integration cannot be achieved without the development of the world financial system. In the meantime the number of pensioners in the developing countries is still relatively small, the social obligations with respect to them are relatively low, 11 and only after a significant period of time the problem of the pensioners' support will become acute in those countries.

Against this background, the world monetary resources have already begun to take part in solving this social problem (although, naturally, they are unable to solve it completely). It appears that the redistribution of capitals throughout the whole world and the distribution of risks through investments in the diverse assets of developing countries (through numerous mediators and specialized funds) actually creates for the borrowers/recipients from the developing countries (i.e., those countries with a high proportion of young adults in their population) financial obligations that multiply the invested capitals within rather long periods of time. And those multiplied capitals will be potentially used for the payment of pensions and other social obligations in the creditor countries. The developing countries are very interested in attracting capitals that create jobs for the numerous cohorts of young adults. A considerable part of requested capitals come from pension, insurance, and social funds of the developed countries. In other words, to some extent the young adults of India, Indonesia, Bangladesh, Brazil, or Egypt will be working indirectly to support the elderly population of the core countries.

Thus, those countries that are rich in demographic resources, but that are poor in capitals are involved more and more in an extremely important (although not quite apparent at the surface) process through which they participate in the support of the elderly population cohorts living in the core countries through the vigorous unification of the world financial currents, its standardization, and increasing global mobility and anonymity.

In other words, global finances not only integrate capitals of the various regions of the world, they also contribute to the solution of an extremely important social problem<sup>12</sup>—to support the numerous elderly population of the core countries. Within such a context one can foresee a situation when a failure of one country would be regarded as a common failure. Actually, this outruns (and prepares) political and legal globalization in some very important respects. Such interweaving of interests (as soon as it becomes evident) will make the actors move more actively toward the institutionalization of some financial and social relationships, toward a more rigorous control of financial currents, toward the full security of financial technologies.

In other words, the modern financial assets and currents have become global and international, huge funds are circulating within this system (although, of course, not all its participants extract equal profits). Meanwhile, it is important to understand that a considerable percentage of the circulating sums are *social* (pension and insurance) money whose loss may lead to disasters with such consequences that are very difficult to forecast.

Thus, a more secure management of the world capital has (in addition to its evident economic and social dimensions) such a dimension as the security of the future of pensioners and those in need of social protection (there are certain respective insurance systems at national levels, but what could they mean in the situation of a global financial collapse?). Hence, the issue of the institutional support of the financial globalization becomes more and more important. However, one could wonder how many new crises are necessary in order that this problem would be solved?

The necessity of the transition from the national level of regulation to the supranational one has been discussed by some analysts for quite a long time (see, e.g., Van Der Wee 1990; Soros 1998). Lester Thurow, as well as some other analysts, finds the cause of the instability of the world stock markets in the

contradiction between the international character of operations of the world stock markets and the national nature of the stock markets themselves. However, he has very good grounds to note that, though the epoch of national economic regulation is coming to its end, the epoch of the global economic regulation has not started yet (Thurow 1996). Will radical changes in this direction take place in the near future?

The transformation of the international order starts to be discussed in an especially urgent way when the world is shaken by global crises. Hence, it is not surprising that the concepts of the "revision of the world order" (e.g., Tinbergen 1976) emerged just in the 1970s crisis years. The crises of 1969–1971, monetary crises of 1971–1973, but especially the 1973–1975 crisis were indeed periods of economic chaos without any entirely comparable precedents in the postwar era (Tinbergen 1976). This stimulated the development of new ideologies of global development; particularly with respect to the relationship between developed and developing countries or sustainable development. Many of the questions posed in this period (as well as many recommendations worked out at that time) remain rather valid today. People living in any epoch always believe that their epoch with its reforms and crises is the most unique. Still, we do not think that it is an exaggeration to say that the current global crisis has demonstrated, in an especially salient way, the necessity for major changes in the regulation of international economic activities and movements of world financial currents. These changes would include the need for the growth of coordinated actions by governments and unified international legislation regulating financial activities and movements. Actually, the world needs a new system of financial-economic regulation at the global scale.

Comprehension of the causes of the crisis may provide a push to start a new round of global transformations, but the respective path (to effective transformations) appears rather long. However, even the transition to the very initial phase of a new system of supranational regulation will imply rather profound changes (whereas many transformations can hardly be predicted today). The point that the political landscape and the balance of world power will change in the forthcoming decades is felt more and more strongly. American analysts believe that "the international system—as constructed following the Second World War—will be almost unrecognizable by 2025. . . . The transformation is being fueled by a globalizing economy, marked by an historic shift of relative wealth and economic power from West to East, and by the increasing weight of new players—especially China and India" (National Intelligence Council 2008, 1).

The variations of probable future transformations in connection with the crisis and estimations of the probabilities of various scenarios of the World System development in the forthcoming decades will be presented in the next section of the article.

#### ON THE POSSIBLE WAYS OF THE WORLD SYSTEM DEVELOPMENT

Change of Leadership or a Fundamental System Modification?

The recent events in the Arab World are of course important and dramatic; however, the main changes in the present-day world are occurring in other dimensions. First

of all, today we observe the weakening of the economic role of the United States as the World System center; in a more general sense we observe the weakening of the World System core countries as a whole. That is why there is no doubt that sooner or later (in any case in the foreseeable future) the United States's status as the World System's leader will change and its role will diminish. American analysts are worried by this more than anyone else (see, e.g., Mandelbaum 2005; National Intelligence Council 2008). The current crisis is an important step toward the present leader's weakening. As we have already spelled out (see Grinin 2008b, 2009a, 2009d; Grinin and Korotayev 2010a, ch. 4), the former priorities and foundations of the world economic order that were based on making profits for the United States will sooner or later start to transform into a new order. In the foreseeable future such a transformation will constitute collisions of relations between U.S. national interests, on the one hand, and the general world interests, on the other (see Grinin 2008b, 2009e, 2011; Grinin and Korotayev 2010a, *Conclusion* for more detail).

However, such a collision will lead to very important transformations, which, unfortunately, tend to be ignored. There is a general universal tendency to believe that in the proximate future, the United States's current tenuous leading position will be occupied by the European Union, China, or some other country (starting with India and ending with Russia [see, e.g., Frank 1997, 1998; Pantin and Lapkin 2006]). But to model the World System transformations mostly with regard to a change of its leader is a serious mistake. Today we are dealing not only with a crisis in the World System or even with a crisis of the World System core; rather, we are dealing with a crisis of the established model of its structure, which is based on having a leader who concentrates many aspects of leadership (political, military, financial, monetary, economic, technological). The United States also acts as an avant-garde of the developed countries as a whole (about some aspects of U.S. position in the world see, e.g., Renwick 2000; Nye 2002; Bacevich 2002). Thus, we are dealing with a rather complex leadership structure: the United States—leading European countries and Japan—newly industrialized countries of Asia, and so on. Besides, a special position is occupied by the United States's neighbors (Mexico,

When we speak about the United States losing their leadership status, we should not simply surmise that there will be a change in leader of the World System. We should rather presume that there will be a radical transformation of the overall structure of the world economic and political order. The simple change of the World System leader is rather unlikely already due to the fact that no country will be able to occupy the position of leadership in a way that is equivalent to the one held by the United States today, as no country will be able to monopolize so many leadership functions. Only as a result of this factor (although there is a number of other important factors), the loss of the leading role by the United States will mean a radical transformation of the World System as a whole.

First of all, one should point out that the U.S. world-leading position is unique in history. We also believe that the concentration of the world's economic, financial, military, political, and innovation-scientific potential in one center (i.e., in the United States) after World War II was a generally positive factor (and the existence

of the U.S.S.R. as the alternative political and military center even amplified its positive value in some respects). Let us recollect that the United States became the World System leader after the First World War. But even at that time the United States controlled only economic and financial power; it lacked equivalent political power, and did not even strive for it. Further, it should be emphasized that such a situation, that is, the absence of a recognized World System leader, contributed significantly to a very severe economic and political World System crisis during the period between the two World Wars and also the start of the Second World War.

In the 1960s one could observe a decrease in the economic role of the United States in the World System that led to the emergence of a three-center model of economic leadership: the United States-Western Europe-Japan. However, it is important to note that this system was formed under the political and military (recognized and desired) leadership of the United States. This structure turned out to be rather viable for almost four decades. It works even now; yet, if it turns out to be impossible to restore the economic dynamics of the Western economies, its role will weaken (whereas since the early 1970s one can observe a general trend toward the decline of the economic growth rates in all the three centers). Unfortunately, today those centers are not able to give much to each other as they have rather similar problems. The opportunity to strengthen themselves is connected to unifying their forces in order to preserve certain advantages inherent to developed countries (and that are also useful for the World System as a whole; see below). In a way this process would be similar to the one just after the Second World War through which the West strengthened itself against the backdrop of the expansion of the Communist Bloc and the simultaneous disintegration of its colonial empires, by uniting militarily, politically, and ideologically (and partly economically).

One cannot exclude the possibility, of course, that the emergence of new revolutionary technologies could give new life to the economic development of the United States (as happened in the late 1980s and 1990s), and the West as a whole; however, first, such technologies do not seem to be likely to be developed in the forthcoming decade, and in this period the problems in the American economy will be aggravated; second, in order for such new technologies to produce major results a rather long period (at least 15–20 years) would be necessary and over that time many things are bound to change; third, even such new technologies would be unlikely to help preserve military and political leadership.

Thus, it is evident that a place similar to the one held by the present-day United States cannot be occupied in the future, neither by another state nor by an alliance of states. According to Fareed Zakaria (2009), the functions of the World System leader can only be performed by a country that achieves dominance in ideas or ideology, an economic system, and military power. However, in the foreseeable future, there will be no country (nor even, an alliance of countries) that will be able to concentrate several aspects of the World System leadership.

It is often proposed that China will replace the United States as the new World System Leader (for an analysis of such views see, e.g., Wang 2010). But this function is not likely to be performed by China even if China eventually surpasses

the United States with respect to its GDP volume. Those who suggest China as such a leader do not appear to take into consideration that its economy is not adequately innovative, that it does not develop on the basis of technologies of tomorrow (and, to some extent, even of today). This is noted even by those analysts who have rather optimistic moods with respect to the China's capabilities to sustain extremely high GDP growth rates for long time in future (e.g., Mikheev 2008, 311, 319; see also Meliantsev 2009, 123-124). 13 In addition, the Chinese economy is too much export-oriented (although in 2011 the Chinese imports may exceed their exports). We believe that the economic center of the World System cannot be based on the exporting of *non-innovative* (and even not sufficiently highly technological) products. Besides, the Chinese model is very resource-intensive, which makes it dependent on the opportunities of extending the world raw materials production and their prices, whereas China becomes the leading importer of a number of commodities. And at the same time this makes the world extractive industry extremely dependent on the Chinese economy's growth (Gel'bras 2007, 29–30). And what is more important, the economic growth in China is based to a great extent on inadequate technological basis (Gel'bras 2007, 30).

In order to perform the World System center role, the Chinese economy should become, on the one hand, innovative and highly technological (which is hardly compatible with heavy industry, or conveyor industries), and ecologically advanced—on the other hand. However, China does not possess necessary conditions for this. One would need no less than 20–25 years to become an innovation pioneer. We believe that it is India that is more likely to become a technological leader (see, e.g., National Intelligence Council 2008; Meliantsev 2009, 107, 60), but India does not have many other leadership components that China has. That is why the idea that in 15–20 years many countries will be more attracted by "China's alternative development model" rather than by the Western models of political and economic development (National Intelligence Council 2008, iv), provokes serious doubts. The Western models may be criticized, whereas it is quite natural that China's successes could hardly avoid bringing attention. But it is very unlikely that any country (with a possible exception of North Korea) will try to introduce the Chinese model. 14 The point is that this model simply cannot be introduced. In order to do this one would need a totalitarian communist party. Even the U.S.S.R. was unable to copy the Chinese model. Not to mention that the Chinese polluting model of economy can hardly suit any country.

The issue of the restructuring of the model of the Chinese economy is tightly connected with the ability of China to preserve the current high growth rates, whereas the latter is extremely important for the ideological prestige of the Chinese administration (although, we seem to observe the growth of the influence of the faction that believes that it is necessary to slow down the growth rates in order to decrease the social stratification and tension). The Chinese administration has already announced that it plans to reduce the growth rates to 8–7% in 2011–2012 and in the period of 12th five-year plan: till 2015 (see, e.g., Beglaryan 2011), which is connected not only with the increase in inflation but also with the evident difficulty of supporting the previous extremely high growth rates that deform the social system. It is not coincidental that the analysts note overinvestment and

the presence of excessive production capacities in the Chinese economy that are caused by fierce competition between provinces that struggle to attract investments and to secure high growth rates in the respective regions. The transition to such an economic model focused on internal consumption and technological innovation is further complicated by the following points: (a) the growth of internal consumption implies the acceleration of the growth of the living standards and Chinese labor costs (that are growing anyway); (b) the growth of the labor costs is not likely to be compensated by an adequate increase in the labor productivity (as this happened before); (c) consequently, the costs of exported commodities may increase, their competitiveness may fall, while the attractiveness of investments in China will then decrease. This may cause a slowdown of growth rates. Thus, the transition to a new type of economy in China with simultaneous preservation of its leadership in economic growth rates is difficult. Even though home demand will continue to develop, either it will be incapable of sufficiently replacing the export demand, or this will mean a profound structural rebuilding of the economy. Investments into infrastructure, housing construction, and so on can be locomotives of development only if sufficient resources obtained through exports are present, but combining the two directions simultaneously does not seem probable in the long run. 15 A decrease in growth rate implies a state revenue decline accompanied by the aggravation of unemployment and an increase in social obligations.

Moreover, it can be assumed that in the coming decade the Chinese economy's growth rates will sooner or later, and inevitably, decline (regardless of whether the attempt to re-orient the economy from an export model to the model of internal consumption will turn out to be successful or not). As a result, the same processes may start that were observed in Japan after 1975 (see, e.g., Karsbol 2010). However, the slowing down of growth rates, particularly in an authoritarian country (where remarkable population ageing is to be observed soon), will lead to the aggravation of social conditions and changes in state priorities, which may ultimately weaken China's economic potency. The developing impulse force is still great in China, while inertia is still powerful, but it is quite obvious that all will most probably weaken. At the same time, the idea of higher living standards by the majority of China's population will be increasing at an advanced rate. This has both positive (as this inspires energy and new search motivations in some part of the population) and negative (as it increases ungrounded claims to the state and decreases the competitiveness of Chinese economy) implications.

#### Hypothetical and Real Alternatives

Thus, the future World System will not be able to possess the same structure as the current one with an equally strong center. What can be an alternative to the modern "order" in the world? Here we step on unsteady and ungrateful soil of forecasts.

Let us first consider the future structure based on the following probable but still hypothetical suggestion. Objectively, globalization leads to the appearance of some new forms of political and economic establishments of a supranational type. The European Union (EU) represents just one version of such a type, other types

and forms have just been outlined or are currently being outlined. However, they may emerge rather fast at favorable conditions. The largest states (*e.g.*, the United States, China, India) may, for quite a long time, rival such supranational establishments, but still the future lies in front of the latter, not the former.

According to this hypothesis, the new World System leader (if it emerges altogether) will hardly be a separate state, but rather a (potentially increasing) block of states. Will this alliance be headed by some of the largest states of the modern world, or will it arise from a coalition of states of medium size and power? Or will such a coalition emerge on some other bases? Obviously, neither China, nor India can unite around themselves some relevant group of countries on their political (for India also civilizational) specific features. In order to become such an integrating center, China must change its political regime. For China, changing its political regime will most probably imply a severe shock (presumably even disintegration, Tibet being the main candidate for separation 16), while the preservation of the regime requires relying on its own capacities. The regime in China will remain solid and strong until it is capable to support the process that is quite accurately denoted by Yunxiang Yan (2002) as managed globalization. This implies the ability of the government to control diverse (cultural, in particular) global influences. That is why China is not entirely ready to lead the process of the economic coordination of the region. But, at the same time, it will not agree to perform the role of "number two" (see, e.g., the opinion of a famous Japanese economist, Richard Koo [Ivanter 2009, 97]) and clearly increases the economic influence on the ASEAN countries (Kanayev and Kurilko 2010, 43-44). Still, Richard Koo's statement that China sooner or later will have to burden itself with the leadership, at least in Asia (Kanayev and Kurilko 2010, 43–44), does not look entirely convincing.

A more natural integration of the American region under the aegis of the United States (some kind of a pan-America) could theoretically revive the role of the United States as the world center. However, the disposition of political forces in Latin America is too unstable, and the level of development differs greatly among the states. Brazil has already stepped into the first line of the largest countries. Besides, quite a number of regimes are much tempted to play on confronting the United States. A union with Mexico and Canada (North American Free Trade Agreement [NAFTA]), although supplying more than 85% of the whole export for Canada and Mexico, is incapable of fulfilling such a role which could solve the aforementioned task (Kirichenko et al. 2008, 226).

Among all variants of the emergence of such hypothetical leading union the European version has the largest (though on the whole small) probability. However, the European expansion comes across natural geographical limitations, whereas the economic and political crisis in Greece, Portugal, and some other countries has demonstrated many weak points of the EU. Yet, those problems are likely to be overcome sooner or later. It cannot be also excluded that in some time we will see Turkey with its more than 70 million population entering the EU. This would turn the EU into a supra-European union. If Europe could integrate with Russia, Ukraine, and Belarus, this would give a certain impulse to restructuring the World System relations and even form some strong center. In terms of practice, this is

a highly complicated, but not impossible scenario. In any case the EU must cope with financial problems, periodically encountered by one or another member.

All the aforementioned scenarios are rather unlikely. Thus, the most real alternative to the role of the United States is currently ... the United States itself. That is why during the nearest one or two decades the United States will remain the most real leader if, of course, the Americans do not undermine their positions themselves (through a sharp change in foreign policy, strong devaluation of dollar, a default, or an economic collapse). <sup>17</sup> In the current absence of an obvious leader counterweighing the United States, the world will be obliged to support the preservation of the United States as a non-alternative, although getting decrepit, center as any weakening in the U.S. position can lead to a great extent uncontrolled transformation of the World System. A certain "imbalance cycle" arises (National Intelligence Council 2008), where imbalances support each other. On the one hand, this plays into the hands of the United States, but on the other hand, the absence of strong competition for leadership greatly weakens the capacities of the United States for renewal. There is an opinion that, although the demand for the U.S. leadership remains high, the interest and readiness of the United States to play the leading role may decrease, as American voters will reconsider their attitude toward economic, military, and other expenses of American leadership (National Intelligence Council 2008). To put it more exactly, fluctuations in foreign policy are more possible, along with variations of the struggle between isolationism and hegemony, as a result of which foreign political activity of the United States may decline for some time. However, state transition from the policy of sheer hegemony and external expansion to passive foreign policy took place a number of times in the course of history, in particular, in Japan, Germany, and in most recent times in Russia.

In uncertain conditions the number of probable scenarios can be great. Thus, the document prepared by the National Intelligence Council of the United States, *Global Trends 2025: A Transformed World* (National Intelligence Council 2008) considers four hypothetical scenarios: "A World Without the West" when new forces press the West out of its leading positions in the geopolitics; "October Surprise"—an ecological catastrophe; "BRICs' Bust-Up"—a conflict between India and China over the access to vitally important resources; "Politics is not Always Local"—when various non-state structures unite in order to develop an international program for the environmental protection and to elect a new Secretary General of the United Nations. All of them, although based on certain trends of the modernity, do not seem sufficiently real, which is admitted by the authors themselves (National Intelligence Council 2008).

Given the wide range of the variants of the future, it is remarkably difficult to consider all variations. That is why it is better to select certain main parameters for the analysis of the hypotheses. Let us take such an important parameter of future development as the degree of suddenness and sharpness of geopolitical and geoeconomic changes. Obviously, if the process proceeds gradually, people get accustomed to it and try to put it under influence, and the system somehow has time to transform. If the changes occur suddenly, for some time there arises a lack of order, chaos, hasty building of temporary and thus not always successful

constructions. Let us view two such hypothetical scenarios: the one of gradual change and the one of abrupt change.  $^{18}$ 

In the first one, U.S. power would decrease not sharply, but gradually. In this case the United States, trying to preserve its leading position, would possibly be obliged to maneuver, enter some coalitions, give in sometimes in certain questions, and accept some global ideas in order not to lose leadership and to preserve the acceptable geopolitical balance. On the other hand, the United States would aspire to create something at the global scale, try to institutionalize the situation, seeking to strengthen the position of primus inter pares in some commonly accepted international and interstate agreements and interaction systems (organizations, consultations, etc.) at the same time not insisting on absolute or even evident hegemony, which is present nowadays. 19 Naturally, this would require great skill. This process would be more successful if the United States could, according to Brzezinski's recommendation, unite with Europe and Japan in important directions (Brzezinski 2004; for the analysis of American foreign policy and the U.S. position in the world see also Kagan 2003; Bacevich 2002; Jervis 2005). Given the low growth rates in developed countries, the West is objectively interested in creating such an order which would institutionally formalize some of its advantages (to some extent this would be useful for the whole World System).<sup>20</sup> It is questionable whether this necessity could be realized in time, but the success of such an institutionalization greatly depends on whether this realization occurs sooner or later.<sup>21</sup> This would be, so to say, a scenario of "planned re-building."

The second scenario will occur in case when the United States changes its position dramatically, that is, as a result of a sudden dollar collapse and especially as a consequence of an American default (say, a sudden change in the global economy resulting from a crisis sharper that one of fall 2008).

In this case U.S. public opinion may sway to folding up the global functions of the United States, which will additionally aggravate the vacuum of international governance. In this situation, the possibilities include anarchy (a less likely scenario) or hasty gathering (or "knocking together") of some system capable of supporting the collapsing world order and solving the momentary tasks, offering certain palliative solutions and agreements that on the whole can turn out to be perspective further on.

However, among all hypothetical variants the two alternative ones seem most probable to us. The first one, which is naturally more preferable, is the expansion of the "club" of leading global players up to a number that would allow them to influence somehow the course of world development (which will be considered further on). The second variant implies spontaneous uncontrolled development where main players will be mostly concerned with domestic problems, the politicians will mind only the popularity ratings, while the global problems will be solved in passing. The Japanese society is a good example of such self-isolation (although even there some trends toward integration can be observed [see, e.g., Ivanter 2009, 99]), the EU also too frequently reveals reticence with their own interests. For Western countries there exists a danger of becoming hostages to a democratic system, in which the position of politicians precludes them from thinking about more or less distant future, and this could ultimately turn them into

demagogues and state-mongers. Besides, incidents of protectionism and other anti-globalization measures are in no way excluded. In this case only unexpected shocks, such as the modern crisis, can wake Western politicians and societies up. Surges of national, civilizational, and hegemonic pride are also useful.

#### Will the Deficit of Global Governance and World Fragmentation Increase?

We have already mentioned in our previous works that economic and financial globalization greatly advances the development of international law and political globalization (Grinin 2008a, 2008b, 2009b, 2009c, 2009e; Grinin and Korotayev 2009a). Will the political component of the World System lag behind the economic one even more in the decades to come? The answer to a great extent depends on what the economic development will be in the nearest future. Numerous economists and social scientists, presenting various arguments (sometimes basing on the dynamics of the famous Kondratieff cycles), suppose that in the next 15-20 years world economic development will most probably proceed at a slower rate than in the preceding period. We support this point of view (see Grinin and Korotayev 2010a; Grinin, Korotayev, Tsirel 2011). However, if this forecast comes true, will not the political component of the World System be able to catch up slightly? Besides, the weakening of the U.S. leadership and the absence of an alternative (in any case, leader change is a lengthy and complicated process) must obviously lead to the international system transforming faster and in a more substantial way. Consequently, we are entering a period of searching for new structural and systemic solutions within the World System, which means a considerably complicated period awaiting us in the nearest future. Working out and stabilizing the model of a new political order within the World System will be a complicated, lengthy, and rather contentious process.

Somehow or other, global governance deficit is present, and in the forthcoming decades it obviously will not disappear. Supposedly, it will become more ideologically sensible, while the project of eliminating this deficit will become relatively feasible. However, global governance requires great effort and substantial sacrifices. To what extent will the states and non-state subjects wish or be able to endure the growing burden of global governance? A refusal to divide this burden will aggravate the situation of increasing institutional lack (National Intelligence Council 2008). Seemingly, there will be quite a few countries ready to take some burden of international regulation by themselves, in the same way as nowadays only a few states take obligations to make large contributions to international organizations including the UN. That is why for some time many countries will still be interested in the U.S. leadership even though, as has been mentioned earlier, the United States itself in certain conditions may not be interested or capable of continuing to be a leader. Certain large states rivaling the U.S. leadership will be most probably incapable of global governance as well.

Such a situation may reveal the most important spheres the regulation of which will be profitable, as well as certain important fields where it will be compulsory to participate according to international obligations. This should strengthen the trend toward various collective activities, formation of associations, and developing

different types of cooperation. This will also transform the global governance toward new technologies.

American analysts suppose that (a) in the nearest future politicians and the public will have to cope with the growing demand for multilateral cooperation; (b) current trends are leading to the emergence in 15–20 years of a fragmented and contradictory world; (c) multipolarity and structurelessness are the main features of the future system (National Intelligence Council 2008).

As regards the demand for multilateral cooperation, which is already high nowadays, it will continue to grow. It seems, however, that the growth of this demand (a) gives an opportunity for certain regional states and unions to strengthen their positions; (b) will contribute to faster emergence of various formats of multilateral cooperation. It should be noted that the new international order would best emerge with the formation of a sufficient number of supranational unions, coalitions, coordination centers, multilateral agreements, as well as influential nongovernmental organizations (NGOs) and networks varying in type and scale, on the one hand, and with presence of *de jure* (or at least *de facto*) accepted institutionalized leading center of the World System.

Multipolarity (though this term is interpreted differently) has become a geopolitical motto for some states and it seems to be forming (see also Nye 2002). New centers of power (first of all, economic, but also military and political) are being established, causing new configurations within the World System. However, in any case multipolarity in the context of peaceful coexistence implies the presence of some order, so multipolarity and structurelessness are opposites to each other.

Fragmentation increase would imply the World System disintegration (at least temporary). To what extent is it possible? We consider this to be unlikely due to some realities of a certain quasi-unity being customary for us. Even the crisis did not lead to disintegration; on the contrary, it united the world to some extent. Certain global conscience seems to be being formed. Let us bring just one example of unexpected metamorphoses of modern economic psychology. During the period of a particularly low fall of production indexes in 2008–2011 many economists were circulating the idea that the Chinese economy would pull the whole world out, and so things are not too disastrous.

#### The Epoch of New Coalitions and Sovereignty Transformation

We have already written on the transformation process in the context of national sovereignty, that is, on the decrease of the real volume of state sovereign powers, which is to a great extent voluntary (for more details see: Grinin 2008a, 2009b, 2009c, 2009e). The necessity to pull up the political component of the World System and to strengthen the global regulation of financial and other agents contributes to the sovereignty transformation process, as the states must voluntarily limit themselves in some spheres, and sometimes undertake additional functions (for more details see Grinin 2008b, 2009a, 2009c, 2010b; Grinin and Korotayev 2010b, 2010c). The global crisis has revealed the sovereignty limitations more clearly, showing that even the United States cannot act without real support of other countries.

"By 2025 a single 'international community' composed of nation-states will no longer exist. Power will be more dispersed with the newer players bringing new rules of the game while risks will increase that the traditional Western alliances will weaken" (National Intelligence Council 2008: iv). Indeed, the real composition of "international community" will most likely be more complicated in the next decades due to the addition of some supranational unions, official or unofficial councils of leaders of states and unions, temporary or constant coalitions, and, possibly, NGOs.

However, sovereignty transformation within the new world order creation is not a unidirectional and unilinear process. Firstly, national state will for a long time remain the leading player in the world arena, as in the foreseeable future only the state will be capable of solving a number of questions. Secondly, sovereignty may even increase in some aspects, as the modern crisis shows once more that the fate of national economies to a great extent depends on the state strength. Thus, it is quite probable that the nearest future may reveal a certain "renaissance" of the state role and activity in the world arena. In some countries sovereign powers that had previously been (sometimes thoughtlessly) given away to supranational organizations, unions, and global capital may possibly be returned. In long-term trends such ebbs and fluctuations are not only possible but unavoidable. Thus, the seemingly steady movement towards democracy in the early twentieth century suddenly made a swerve toward totalitarianism; the development of free market trade in the late nineteenth century was turned to protectionism. Thus, a return to *etatism* can be both rather lengthy and rather useful.

Nevertheless, it should be mentioned that such a return to the increasing role of state cannot be performed on the former bases, when the benefits of a state (even within the fulfillment of undertaken obligations and the observation of common international norms) were accepted in international relations as the highest cause of its activity on the world arena. We suppose that the return of the state role cannot be successful without a substantial change in the state foreign policy ideology. In other words, we can suggest that purely egoistic interests of states will to a much lesser extent underlie the foreign policy concept and performance.<sup>22</sup> Naturally, national egoism will not disappear altogether for a long time (if ever at all), but it will be more disguised by supranational interests and necessities than it is now. To put it more exactly, every action may require not only a real interest, but also an ideological grounding. Viewing the global arena as a "great chess board" (Brzezinski 1997) where the strongest wins, while small pieces may be exchanged or sacrificed will possibly not be in demand any more. The world arena will rather be viewed as a common field of interests where rules advantageous for everybody must be stated and somehow supported. The countries will more and more remarkably define not only their own security in such categories that would accord with interests of the others, as Brzezinski advises to the United States (see Brzezinski 2004), but also all their large-scale actions. That is why it is sensed that gradually the mottos of common (regional, global, group) good will strengthen in foreign policy, although the "who-represents-the-global-interests-better" formula may, as always, disguise egoistic causes.<sup>23</sup> However, this will lead to substantial changes, generally positive. In any case, the countries continuing to roughly stand up for their national egoistic interests will eventually lose, sooner or later. Radical changes will be unavoidable in the policy of large states aimed at direct and rough domineering in global or regional scale (including the most independent and egoistic sovereign, the United States).

In this case, national interests assertion, rivalry forms on the world arena, conflicts and litigations will acquire a different form from now. Rivalry will increase on directing the process of new world order formation. Rival forces will perform under mottos of a new, more honest world arrangement, for just and crisisless global development, against national (especially American) egoism, and so on. For conducting such a policy, allies and blocks are obviously necessary. Thus, regrouping of forces on the world and regional arenas will invariably start. In the struggle for a place of honor in globalization and coalitions, in organization and functioning of a new world order the phenomenon occurs which we named the epoch of new coalitions (see Grinin 2009e, 2010b; Grinin and Korotayev 2010c). As a result, new force disposition may be outlined for quite a lengthy period.

Forms, particular aims, and activity directions of the new coalitions will depend on numerous factors, in particular, on how far the process of making common decisions will go and what means and forms of common decision making will be realized. Thus, it seems that the system of simple democracy (one state/participant—one vote) on the World System level will hardly be viable.<sup>24</sup> China and India cannot be equaled to Lesotho (less than 2,000,000 inhabitants) or all the more Tuvalu with the population of less than 15,000.

Probably, for some time the mobility of partnerships within the World System will increase, the arising coalitions may turn out to be chimerical, ephemeral, or fantastic. In the course of search for most stable, advantageous, and adequate organizational supranational forms various and even rapidly changing intermediary forms may occur, where the players of the world and regional political arenas will be searching for most advantageous and convenient blocks and agreements. For example, if population number and other parameters will be taken into account at decision making (and quota distribution),<sup>25</sup> countries and participants may block with each other basing on the relative advantages of everyone in order to accept a decision advantageous to them (similar to political parties). However, some new unions and associations may eventually turn from temporary into constant ones and accept specific supranational forms.

Some new imperatives of global law will start being worked out in the same process. This idea is quite supported by the events connected with the modern global crisis, in particular the G-20 meetings. Direction toward such supranational regulation forms is obvious, although it is unclear whether namely G-20 will become a constant organ, as 20 is possibly too great a number. However, as has been stated earlier, another variant of leading players' club expansion is possible. Bringing the number of "G club" members up to at least 11, that is, 7 plus Brazil, Russia, India, and China (BRIC) countries could already make this organ more influential than it is today. However, presidential meetings once a year or even more rarely, and even ministerial meetings do not suffice. Such meetings bear more of a ritual than practical character. In order to make such an organ not just

influential, but a real global one, at least *de facto*, it is necessary to arrange the formats of negotiations, consultations, private agreements, and so on on various levels and in different combinations.

One more form, much less likely but, in our opinion, much more desirable, would be the form of certain union representation. It would be reasonable to create a certain organ representing 10–15 leading establishments of the world (EU, Organization of American States (OAS), League of Arab States (LAS), Association of Southeast Asian Nations (ASEAN), Commonwealth of Independent States (CIS), etc.). Its sessions could allow representing the whole world through a limited number of representatives, while within the frames of representatives' powers the unions and coalitions would have an opportunity for better understanding of their common interests. Even such a dialogue in itself could be useful.

The stability of new geopolitical and geoeconomic forms will depend on numerous factors. However, historical experience shows the most stable ones to be those with not only particular advantages and objective necessity, but also with certain non-political bases for uniting (i.e., geographical, cultural, economic, ideological, etc.).

As regards the particular reasons for the convergence of certain societies, it should be taken into account that in the condition of a certain bifurcation that the world is currently going through, new lines and vectors contributing to the countries uniting into supranational establishments, unions, groups, blocs, and clusters depend on a variety of reasons, among which a certain feature of proximity may turn out to be critical. Beside geographical proximity, economic relations and common political (geopolitical) interests, the proximity of culture and mentality (i.e., civilizational affinity and similarity) can be the strongest in many cases. These political, cultural, and religious specific features may lead to the creation of some special regional or even interregional supranational approximation models. For example, Chilean political scientist Talavera asks whether there is a special Latin way of action in the globalized world. He states there is such a way and quite particular indicators exist which confirm this. Further on, he points at the formation of a development variant implying the coexistence of socioeconomic order based on openness and free market relations (i.e., a purely Western phenomenon—Leonid Grinin, Andrey Korotayev), with conservative socioreligious regime (Talavera 2002) (i.e., let us add, a cultural form typical for a part of the old Europe).

Naturally, the movement toward the new world order will proceed on different levels. The regional level is very important. Regional leaders gather power very quickly; consequently, they will probably play a more significant role than now. Besides, some regional states will start playing the key role in the whole geopolitical disposition in huge territories. Nowadays, according to some opinions, Iran is starting to play such a key role (see, e.g., Bykov et al. 2009, 101–102). The eminent role of regional states will be revealed not only in geopolitical and geoeconomic aspects, but also, so to say, in geocultural aspect, which would be in no way less important than the first two. <sup>26</sup> It is not improbable that, responding to the probable deficit of global governance, nongovernmental actors will form networks concentrated on particular problems. <sup>27</sup> However, neither the role of NGOs nor networks should be exaggerated. The main part in the formation of a new world order will

most probably be played by states, while supranational unions of all formats and forms will be gathering strength.

A coordination center is desperately necessary, without which the net world will become an uncontrolled conglomerate. Besides, there is a prevailing stereotype on the necessity of some global institutions, so they will be aspired to, more or less successfully. Thus, the question of the coordination-political center of the World System remains exceedingly important. If some collective political (coordination) center (with limited rights) could be created, the coexistence of other functional centers could become more possible and systemic, interactive. <sup>28</sup> Namely states and especially supranational unions are most likely to be capable of moving toward the creation of such a center.

Search for global answers to major problems will lead to various types of solutions at highest political level, from ones aimed at forming an order capable of functioning for decades (huge experience of the twentieth century proves this to be quite possible) to a mass of non-systemic, pragmatic, and palliative ones. However, even impulsive decisions allow starting the formation of a new system of decisions and institutions, coalitions, and unions. On the other hand, the success of certain institutions will allow creating some projections on world restructuring.

Thus, we are regarding a wide range of decisions, institutional and juristically formalized, aimed at systemic building of a new world; global, but for focused narrow problems, which, along with important but less global decisions will gradually be creating the outlines of a new world order.

Thus, in 15–25 years our world will be both similar to the present and already substantially different from it. Global changes are forthcoming, but not all of them will take a distinct shape. Contrary to that, new contents may be covered by old outdated surfaces (as in the Late Middle Ages the emerging centralized state was not quite distinctly seen behind the traditional system of relationships between the crown, major seniors, and cities). One may say that these will be such changes that could prepare the world to the transition to a new phase of globalization (it will be very fortunate if there are grounds to call it the phase of sustainable globalization) whose contours are not clear yet.

#### **NOTES**

- See Grinin (2009e, 2010b) and Grinin and Korotayev (2010c) on the influence of the crisis on the forthcoming world transformations; see also Kudrin (2009).
- 2. See Moller (1968); Mesquida and Weiner (1999); Goldstone (2002, 10–11); Heinsohn (2003); Fuller (2004); Grinin et al. (2010b); and Korotayev et al. (2010a, 2010b) for more detail. Incidentally, note that in most Arab countries the "youth bulge" is now close to its end and in the forthcoming years the proportion of youth will be sharply decreasing, contributing to the sociopolitical stabilization (see, e.g., Korotayev and Zinkina 2011a, 2011b), with Yemen being a rather notable exception.
- As is said above, in the case of the Arab Spring this synchronizing effect was particularly amplified by the modern mass media and communication technologies (e.g., Tausch 2011; Korotayev and Zinkina 2011a, 168; 2011b, 90).
- However, the expansion of the operations' volume and their acceleration create a threat of global financial collapses.

- 5. Naturally, the value of gold and silver could fluctuate. One can easily recollect the so-called price revolution of the sixteenth century, as a result of which the prices grew four times (e.g., Goldstone 1988, 1991). But there has never been a single case when gold or silver lost their value momentously, or when their prices dropped close to zero (this eventually happens with prices of shares), whereas in the nineteenth and early twentieth centuries (when many states applied the gold standard [Held et al. 1999]) the value of money was sometimes surprisingly stable for long periods of time (the same is true for prices of many key commodities), and this allowed many people to live from the interest rates of their savings. It made it possible to rely on savings in the form of gold/silver coins to guarantee one's survival in old age or for any emergencies. Incidentally, this was a very important basis for the development of thriftiness. Today prices of precious metals are as unstable as the ones of any other assets, and the magnitude of their fluctuations is great. However, in the framework of instability of the financial system in the crisis period their prices generally tended to grow substantially or even explosively (see, e.g., Akaev et al. 2011).
- 6. One should take into account that pension funds, insurance companies, and so on act as institutional investors and owners within many corporations that invest in numerous stocks and projects; this way the finances of the world have been so mixed up that it is difficult to comprehend whom exactly these particular funds belong to, whether they are "good," or "toxic."
- 7. It is not coincidental that one of the main concerns of Alan Greenspan (about which he writes in his book [2007]) is connected with the point that the numerous generation of baby-boomers will become pensioners soon, whereas the extant financial sources are not sufficient for the complete fulfillment of social obligations with respect to them.
- 8. The dramatic change of the ratio of pensioners to the working-age adults may be illustrated with the following data: in 1950 in the United States the ratio of pensioners to working age adults was 1:16 while in the mid-2000s it was 1:3, that is, it had changed fivefold (Meliantsev 2009, 30).
- 9. By the end of 2005, total assets held by privately managed pension funds in the 23 countries covered in this study amounted to over US\$15 trillion (Antolin 2008, 6).
- 10. At the end of 2008, when economies throughout the world were spinning into recession, many stock markets saw gains of the past decade completely wiped out. The value of pension fund equity holdings in the United States alone fell by \$4 trillion over 2009 (Johnson and de Graaf 2009).
- 11. For example, pension fund assets in relation to respective GDP constitute 5 percent in India, and just 1 percent in China (Ravindran 2010).
- 12. Note that this problem is apparently internal from the viewpoint of a single country; however, it becomes more and more difficult to solve it in the framework of a single country.
- 13. However, one should not neglect the explosive growth of patent applications and patent grants in China (see, e.g., Korotayev, Zinkina, and Bogevolnov 2011), as well as the point that in some areas (e.g., in biotechnologies) China has certain undeniable innovation achievements.
- 14. Those capable have already introduced it (we mean first of all Vietnam).
- 15. Economy re-orienteering turns out to be very complicated even for such developed countries as Japan. Let us remember that attempts made in Russia during several decades to re-orient the export have been unsuccessful so far.
- 16. The latter, not possessing statehood traditions, most probably will go the way of Kosovo, turning into one more drug state (see, e.g., Bykov et al. 2009, 103).
- 17. The last two ones will indeed require fast decision making at the global scale. Spontaneous U.S. dollar collapse can lead to downfall of all national financial and currency systems. Along with a sharp fall of the main global currency rate the whole global economy would devalue (see Platonova et al. 2009, 88).
- 18. The process, however, will most probably be uneven: slow uncontrolled changes will be succeeded by large but not fatal collapses and crises, inspiring the transformation process and even changing its directions. As the forecasting experience shows, not a single forecasting model could be realized in its pure version; usually something arises, in which different trends can be seen in a specific combination.

- 19. Wilkinson called a somewhat similar scenario "unipolarity without hegemony," but with probable dominance of the United States (Wilkinson 1999). In our version some crucially important points have been added, including the necessity of trying to secure de jure the advantages in some relations. Securing the prevailing role of dollar turned out to be exceptionally important for the United States in its time.
- 20. An example of such securing is the definition of the five leading states having the veto right in the UN Security Council. The disposition of powers in the world is changing, while this order is not easy to alter.
- 21. One of the possible outcomes for the West implies quoting the economy growth rates in order to restrain the all too fast periphery development (on the possibilities of such quoting see Grinin 2009b). If the limitations cannot be achieved through direct limits on economic growth, they can still be pursued under the mask of struggling for the global ecology, for the rights of wage earners, against dishonest rivalry, and so on.
- 22. One of the numerous examples of such egoistic approach is the position of the United States on the question of greenhouse gases emission into the atmosphere. Outright declaration of a certain region as a zone of its special interests, intervention into the business of other states in order to weaken them, as well as supporting undisguised corrupted regimes, and so on are all examples of undisguised egoistic policy. Let us also note that foreign policy of such major countries as India, China, and Japan does not essentially possess any special ideology altogether.
- 23. For sure, in modern history different actions have been and are still carried out under the aegis of common interests, in particular, intervention into dependent countries (on the part of both the U.S.S.R. and the United States), pressure on certain countries under the mottos of defending the human rights, democracy, and so on. Ideological aspect will presumably substantially increase.
- 24. The EU experience shows that this substantially restrains the development process, while such rules in the global representations will simply block it up.
- 25. There is an index of national power measurement that integrates GDP measurements, defense expenses, population, and the state of technology. Some indexes may serve as a basis for institution at the counting of quotes and votes.
- 26. In Bernstein's (2002, 245) opinion, countries lying beyond the West and sufficiently powerful in economy, such as Japan (on the penetration of the Japanese mass culture into Asian countries see Aoki 2002), or in culture, such as India, are capable of influencing the global culture.
- One could mention as examples of such networks the Financial Stability Forum, the Carbon Sequestration Leadership Forum, and the International Partnership for the Hydrogen Economy (National Intelligence Council 2008, 85).
- 28. Such a center could rally separate centers of the World Systems differing in their innovativity, industriality, financial capabilities, and so on. Even though the rivalry between them would not disappear, it would become more productive.

#### REFERENCES

- Abd al-Rahman S.F. (ed.). 2010. Nashrat Suq al-'amal al-misriyy. Nashrah rub' sanawiyyah. I III-2010. al-Qahirah: Wizarat al-qiwa al-'amilah wa-l-hijrah.
- Akaev, A., A. Fomin, S. Tsirel, and A. Korotayev. 2010. Log-periodic oscillation analysis forecasts the burst of the "gold bubble" in April–June 2011. Structure and Dynamics 4(3): 1–11.
- Akaev, A., V. Sadovnichii, and A. Korotayev. 2011. Explosive rise in gold and oil prices as a precursor of a global financial and economic crisis. *Doklady Mathematics* 83(2): 1–4.
- Antolin, P. 2008. Pension fund performance. Paris: OECD (OECD Working Papers on Insurance and Private Pensions, 20).
- Antolín, P., and F. Stewart. 2009. "Private Pensions and Policy Responses to the Financial and Economic Crisis." OECD Working Paper on Insurance and Private Pensions

- no. 36. Organisation for Economic Co-operation and Development, Paris. http://politicalscience.concordia.ca/canadaresearchchair/officialdocuments/international organizations/documents/Hinzetal.2010EvaluatingtheFinancial....pdf
- Aoki, T. 2002. Aspects of globalization in contemporary Japan. In *Many globalizations: Cultural diversity in the contemporary world*, ed. P. L. Berger and S. P. Huntington, 68–89. New York: Oxford University.
- Bacevich, A. 2002. *American empire. The realities and consequences of U.S. diplomacy*. Cambridge, MA: Harvard University Press.
- Beglaryan, G. 2011. Бегларян Г. Итоги съезда национального собрания КНР: Чтобы сохранить власть, надо пожертвовать бурным ростом экономики. http://www.bloom-boom.ru/blog/bloomboom/10270.html
- Bernstein, A. 2002. Globalization, culture, and development. Can South Africa be more than an offshoot of the West? In *Many globalizations: Cultural diversity in the contemporary world*, ed. P. L. Berger and S. P. Huntington, 185–250. New York: Oxford University.
- Brzezinski, Z. 1997. The grand chessboard: American primacy and its geostrategic imperatives. New York: Basic Books.
- ——. 2004. The choice: Global domination or global leadership. New York: Basic Books.
- Bykov, P., O. Vlasova, M. Zavadsky, A. Koksharov, and S. Sumlennyi. 2009. The world after London. *Expert* 13(652): 100–103. *In Russian* (Быков, П. и др. Мир после Лондона. Эксперт 13: 100–103).
- Callahan, G. 2002. Financial economics for real people. Paper presented at the "Boom, Bust, and Future" Seminar at Ludwig von Mises Institute, January 18–19. Auburn.
- CAPMAS. 2010. Al-jihaz al-markaziyy li-l-ta'bi'ah al-'ammah wa-l-ihsa'. *Bahth al-qiwa al-'amilah li-l-rub' al-thalith (yulyu/aghustus/sibtimbir)*. al-Qahirah: Al-jihaz al-markaziyy li-l-ta'bi'ah al-'amah wa-l-ihsa'. http://www.capmas.gov.eg/news.aspx? nid=491 (accessed February 15, 2011).
- Doronin, I. G. 2003. The world stock markets. In *The world economy: Global trends for one hundred years*, ed. I. S. Korolyov, 101–133. Moscow: Economist. *In Russian* (Доронин, И. Г. Мировые фондовые рынки. *Мировая экономика: глобальные тенденции за 100 лет* / ред. И. С. Королев, с. 101–133. М.: Экономисть, 2003).
- Economist. 2008. Asset-backed insecurity. Economist January 17, 2008. http://www.economist.com/node/10533428?story\_id=10533428
- Frank, A. G. 1997. Asia comes full circle—With China as the "Middle Kingdom." *Humboldt Journal of Social Relations* 76(2): 7–20.
- 1998. ReORIENT: Global economy in the Asian age. Berkeley: University of California Press.
- Fuller, G. E. 2004. The youth crisis in Middle Eastern society. Clinton Township, MI: Institute for Social Policy and Understanding.
- Gel'bras, V. 2007. The Price of Chinese Economic Success. *Mirovaya ekonomika i mezhdunarodnye otnosheniya* 9: 26–34. *In Russian* (Гельбрас, В. Цена китайского экономического успеха. *Мировая экономика и международные отношения* 9: 26–34).
- Goldstone, J. 1988. East and West in the seventeenth century: Political Crises in Stuart England, Ottoman Turkey and Ming China. Comparative Studies in Society and History 30: 103–142.
- 1991. Revolution and rebellion in the early modern world. Berkeley: University of California Press.

- 2002. Population and security: How demographic change can lead to violent conflict. *Journal of International Affairs* 56(1): 3–22.
- Greenspan, A. 2007. The age of turbulence: Adventures in a new world. London: Penguin. Grinin, L. E. 2008a. Globalization and sovereignty: Why do states abandon their sovereign prerogatives? Age of Globalization 1: 22–32.
- 2008b. An unwanted child of globalization. The remarks on the crisis. *Vek Globalizatsii* 2: 46–53. *In Russian* (Гринин, Л. Е. Нежеланное дитя глобализации. Заметки о кризисе. *Век глобализации* 2: 46–53).
- 2009a. Modern crisis: New lines and classics of genre. *Istoriya i sovremennost* 1: 3–32. *In Russian* (Гринин, Л. Е. Современный кризис: новые черты и классика жанра. *История и современность* 1: 3–32).
- 2009b. Globalization and the transformation of national sovereignty. Auckland. In *Systemic development: Local solutions in a global environment*, ed. J. Sheffield, 47–53. Litchfield Park, AZ: ISCE Publishing: Goodyear.
- 2009c. Transformation of sovereignty and globalization. In *Hierarchy and power in the history of civilizations: Political aspects of modernity*, eds. L. E. Grinin, D. D. Beliaev, and A. Korotayev, 191–224. Moscow: Librocom/URSS.
- ——. 2009d. Understanding the crisis. Global crisis as the crisis of overproduction of money. Filosophiya i obschestvo 1: 5–32. In Russian (Гринин, Л. Е. Глобальный кризис как кризис перепроизводства денег. Философия и общество 1: 5–32).
- 2009e. The state in the past and in the future. *Herald of the Russian Academy of Sciences* 79(5): 480–486.
- 2010а. Гринин Л. Е. 2010. Из мальтузианской ловушки в ловушку модернизации. К прогнозированию динамики политической нестабильности в странах мир-системной периферии. // Проекты и риски будущего. Концепции, модели, инструменты, прогнозы/Отв. ред. А. А. Акаев, А. В. Коротаев, Г. Г. Малинецкий, С. Ю. Малков. М.: ЛИБРО КОМ, 2010. С. 337–356.
- 2010b. Which global transformations would the global crisis lead to? Age of Globalization 2: 31–52.
- 2011. The evolution of statehood. From early state to global society. Saarbrücken: Lambert Academic Publishing.
- Grinin, L. E., and A. V. Korotayev, 2009a. Social Macroevolution: The Genesis and Transformation of the World System. Moscow: LIBROCOM. In Russian (Гринин, Л. Е., Коротаев, А. В. Социальная макроэволюция: Генезис и трансформации Мир-Системы. М.: ЛИБРОКОМ).
- ——. 2010a. Global crisis in retrospective. A brief history of raisings and crises: From Lycurgus to Alan Greenspan. Moscow: Librocom. In Russian (Гринин, Л. Е., Коротаев, А. В. Глобальный кризис в ретроспективе: Краткая история подъемов и кризисов: от Ликурга до Алана Гринспена. М.: ЛИБРОКОМ).
- 2010b. Will the global crisis lead to global transformations. 1. The global financial system: Pros and cons. *Journal of Globalization Studies* 1(1): 70–89.
- . 2010c. Will the global crisis lead to global transformations? 2. The coming epoch of new coalitions. *Journal of Globalization Studies* 1(2): 166–183.
- Grinin, L. E., A. V. Korotayev, and S. Yu. Malkov. 2010a. A mathematical model of Juglar cycles and the current global crisis. In *History & mathematics: Processes and models*, eds. L. Grinin, A. Korotayev, and A. Tausch. Moscow: LIBROCOM.
- 2010b. История, Математика и некоторые итоги дискуссии о причинах Русской революции. *О причинах русской революции*/Ред. Л. Е. Гринин, А. В. Коротаев, С. Ю. Малков. М.: Издательство ЛКИ/URSS.C. 368–427.

- Grinin, L. E., A. V. Korotayev, and B. H. Rodrigue. 2011. Introduction evolution and big history: From multiverse to galactic civilizations. In *Evolution: Big history perspectives*, eds. Leonid E. Grinin, Andrey V. Korotayev, and Barry H. Rodrigue, 5–19. Volgograd: 'Uchitel' Publishing House.
- Grinin, L. E., A. V. Korotayev, and S. V. Tsirel. 2011. Cycles of development of the modern World System. Moscow: Librocom. In Russian (Гринин, Л. Е., Коротаев, А. В. Циклы развития современной Мир-Системы. М.: ЛИБРОКОМ).
- Heinsohn, G. 2003. Söhne und Weltmacht. Terror im Aufstieg und Fall der Nationen. Zürich: Orell Füssli Verlag.
- Held, D., A. McGrew, D. Goldblatt, and J. Perraton. 1999. Global transformations. Politics, economics and culture. Stanford, CA: Stanford University Press.
- Hinz, R., Heinz P. Rudolph, Pablo Antolín, and Juan Yermo. 2010. *Evaluating the financial performance of pension funds*. Washington, DC: The International Bank for Reconstruction and Development/The World Bank.
- Ivanter, A. 2009. Why does everybody avoid loans like the plague? *Expert. The Best Articles. The Anatomy of Recession:* 97–99. *In Russian* (Ивантер, А. Все как от огня шарахаются от кредитов. Эксперт. Лучшие материалы. Анатомия рецессии: 97–99).
- Jervis, R. 2005. American foreign policy in a new era. New York: Routledge.
- Johnson, K. L., and F. J. de Graaf. 2009. Modernizing pension fund legal standards for the 21st century. Network for Sustainable Financial Markets: Consultation Paper No. 2. http://www.oecd.org/dataoecd/28/62/42670725.pdf
- Kagan, R. 2003. Of paradise and power. America and Europe in the New World Order. New York: Knopf Publishers.
- Kanayev, Ye., and A. Kurilko. 2010. South-Eastern Asia in the conditions of world financial-economical crisis. *Mirovaya ekonomika i mezhdunarodnye otnosheniya* 2: 38–46. *In Russian* (Канаев, Е., Курилко, А. Юго-восточная Азия в условиях мирового финансово-экономического кризиса. *Мировая экономика и международные отношения* 2: 38–46).
- Karsbol, D. 2010. I have a "bear" view on China. *RBK. Final Issue* 1: 100–103. *In Russian* (Карсбол, Д. У меня «медвежий» взгляд на Китай. *PБК. Итоговый выпуск* 1: 100–103).
- Kirichenko, E. V., V. I. Martsinkevich, E. K. Vasilevsky, L. I. Zapadinskaya, Ye. A. Lebedeva, G. K. Nikolskaya, and M. K. Perova. 2008. The United States of America. In *World Economy: Forecast till 2020*, ed. A. A. Dynkin, 185–230. Moscow: Magistr. *In Russian* (Кириченко, Э. В., Марцинкевич, В. И., Василевский, Э. К., Западинская, Л. И, Лебедева, Е. А., Никольская, Г. К., Перова, М. К. Соединенные Штаты Америки. *Мировая экономика: Прогноз до 2020 год*/ред. А. А. Дынкин, с. 185–230. М.: Магистр).
- Коготауеч, А. V., D. A. Khaltourina, S. V. Kobzeva, and J. V. ZinKina. 2010a. Коротаев А.В., Халтурина Д.А., Кобзева С.В., Зинькина Ю.В. Ловушка на выходе из ловушки? О некоторых особенностях политико-демографической динамики модернизирующихся систем. Проекты и риски будущего. Концепции, модели, инструменты, прогнозы / Ред. А. А. Акаев, А. В. Коротаев, Г. Г. Малинецкий, С. Ю. Малков. М.: Красанд/URSS, 2011. С. 45–88.
- Korotayev, A. V., D. A. Khaltourina, A. S. Malkov, J. V. Bogevolrov, S. V. Kobzeva, and J. V. ZinKina. 2010b. Коротаев А.В., Халтурина Д.А., Малков А.С., Божевольнов Ю.В., Кобзева С.В., Зинькина Ю.В. 2010. Законы истории: Математическое моделирование и прогнозирование мирового и регионального развития. М.: ЛКИ/URSS.

- Korotayev, A., A. Malkov, and D. Khaltourina. 2006. *Introduction to social macrodynamics: Compact macromodels of the world system growth*. Moscow: URSS.
- Korotayev, A., and J. Zinkina. 2011a. A demographic structural analysis of the Egyptian revolution. *Entelequia. Revista Interdisciplinar* 13: 139–169.
- 2011b. Egyptian revolution: A demographic structural analysis. Middle East Studies Journal 2(5): 57–95.
- Korotayev, A., J. Zinkina, and J. Bogevolnov. 2011. Kondratieff waves in global invention activity (1900–2008). *Technological Forecasting and Social Change* 78: 503–510.
- Kudrin, A. 2009. The world financial crisis and its impact on Russia. Voprosy ekonomiki 1: 9–10. In Russian (Кудрин, А. Мировой финансовый кризис и его влияние на Россию. Вопросы экономики 1: 9–10).
- Mandelbaum, M. 2005. The case for Goliath: How America acts as the world's government in the twenty-first century. New York: Public Affairs.
- Meliantsev, V. A. 2009. Developed and developing countries in the age of transformations. Moscow: Klyuch-C. In Russian (Мельянцев, В. А. Развитые и развивающиеся страны в эпоху перемен. М.: Ключ-С).
- Mesquida C. G., and N. I. Weiner. 1999. Male age composition and severity of conflicts. *Politics and the Life Sciences* 18: 113–117.
- Mikhailov, D. M. 2000. The world financial markets. Trends and tools. Moscow: Ekzamen. In Russian (Михайлов, Д. М. Мировой финансовый рынок. Тенденции и инструменты. М: Экзамен).
- Mikheev, V. V. 2008. China. In *World Economy: Forecast till 2020*, ed. A. A. Dynkin, 303–329. Moscow: Magistr. *In Russian* (Михеев, В. В. Китай. В: Дынкин 2008: 303–329).
- Moller, H. 1968. Youth as a force in the modern world. Comparative Studies in Society and History 10: 238–260.
- Movchan, A. 2010. The gold rush. *Forbes* (Russian Edition) January: 49. *In Russian* (Мовчан, A. 2010. Золотая лихорадка. *Forbes* январь: 49).
- National Intelligence Council. 2008. *Global trends* 2025: A transformed world. Washington, DC: Author.
- Naumov, I. 2008. The Pension Capital Fund of Russia (PFR) in the current year sustained 10 billion roubles of losses from the investment of funds in the state securities. Nezavisimaya gazeta 19.12. http://www.ng.ru/economics/2008-12-19/4\_pensia.html. In Russian (Наумов, И. Пенсионный фонд России [ПФР] в текущем году зафиксировал убытки в 10 млрд руб. от размещения средств в государственных бумагах. Независимая газета 19.12. http://www.ng.ru/economics/2008-12-19/4\_pensia.html).
- Nye, J. S. Jr. 2002. The paradox of American power. Why the world's only superpower can't go it alone. New York: Oxford University Press.
- Pantin, V. I., and V. V. Lapkin. 2006. Philosophy of historical forecasting: Rhythms of history and the perspectives of the world development in the first half of the 21st century. Dubna: Feniks +. In Russian (Пантин, В. И., Лапкин, В. В. 2006. Философия исторического прогнозирования: ритмы истории и перспективы мирового развития в первой половине XXI века. Дубна: Феникс+).
- Platonova, I. N., A. G. Nagovitsin, and V. M. Korotchenya. 2009. Rearrangement of the world monetary system and the position of Russia. Moscow: LIBROCOM/URSS. In Russian (Платонова, И. Н., Наговицин, А. Г., Коротченя, В. М. Перестройка мировой валютной системы и позиция России. М.: ЛИБРОКОМ/URSS).

- Ravindran, M. 2010. Global pension funds: Overview. Market in Motion. Vol. 1, No. 32, October 25, 2010. http://www.ftkmc.com/newsletter/Vol1-32-oct25-2010.pdf
- Renwick, N. 2000. America's world identity. The politics of exclusion. Basingstoke: Macmillan Press.
- Schäfer, U. 2009. Der Crash des Kapitalismus. Frankfurt: Campus Verlag.
- Shtefan, Ye. 2008. American pension capital funds have lost 2 trillion dollars. *Novyi region* 2. 08.10. http://www.nr2.ru/economy/199830.html. *In Russian* (Штефан, Е. Пенсионные фонды США потеряли два триллиона долларов. *Новый регион* 2. 08.10. Интернет-ресурс: http://www.nr2.ru/economy/199830.html).
- Siam G., and H. M. Abdel Rady. 2010. The impact of the global food crisis and the economic crisis on poverty in Egypt. Paper presented at Inauguration Conference for Launching the Working Paper Series of the Information and Decision Support Center of the Egyptian Cabinet of Ministers (Cairo, March 28, 2010).
- Soros, G. 1998. The crisis of global capitalism. Open society endangered. London: Public Affairs.
- Talavera, A. F. 2002. Trends toward globalization in Chile. In Many globalizations: Cultural diversity in the contemporary world, ed. P. L. Berger and S. P. Huntington, 250–295. New York: Oxford University.
- Tausch, A. 2011. On the global political and economic environment of the current Al Jazeera revolution. *Middle East Studies Journal* 2(5): 7–55.
- Thurow, L. C. 1996. The future of capitalism: how Today's Economic Forces Shape Tomorrow's World. New York: Morrow.
- Tinbergen, J. 1976. Reshaping the international order: A report to the Club of Rome. New York: Dutton.
- Van Der Wee, H. 1990. Histoire economique mondiale 1945–1990. Paris: Academia Duculot.
- Wang, H. H. 2010. Myth of China as a superpower. http://helenhwang.net/2010/04/myth-of-china-as-a-superpower/
- Wilkinson, D. 1999. Unipolarity without hegemony. *International Studies Review* 1(2): 141–172.
- Yan, Yunxiang. 2002. Managed globalization. State power and cultural transition in China. In Many globalizations: Cultural diversity in the contemporary world, ed. P. L. Berger and S. P. Huntington, 19–47. New York: Oxford University.
- Zakaria, F. 2009. The post-American world. New York: Norton.