

Contemporary Crisis

Where Does the World Go? Attempt of Scientific Forecast. Article #1

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Friend of mine from Russia wrote me recently, “Len, I’m interested in other questions, and these questions should be interesting to you as US citizen, namely: influence of postindustrial world on countries, how the informational technologies affect evolution of human civilization, role of economy, including transformations of economy nowadays and in future, role of financial institutions in life of contemporary civilizations.”

My response was as follows, “Alex, I am interested in these issues, too.

However, I have to disappoint you: it seems to me that neither US, nor Russia will shift to the postindustrial world, at least in the coming decades, although for different reasons.”

This article opens the series of articles I am writing along with analysis and forecast of current crisis. This series is an attempt to stir a discussion and to improve the forecast rather than a story of “what I dreamed of.”

So, I started my response to my friend from analysis why neither America nor Russia will enter the postindustrial world soon, and why, in my opinion, can enter it, if hasn’t entered yet.

Show Your Pass to the Postindustrial World!

United States of America

USA, with its well-deserved pride for its past achievements, is going to stay in industrial world for a long time. Due to this blinding pride, America missed the quickly unfolding new trends in economy; as a result, it bravely entered the current crisis, and won’t get out of it soon – or, maybe, ever. Socialist tendencies of current federal government don’t leave even small hope to get out of this crisis soon – just like pro-socialist presidency of FDR pushed America into the depths of Great Depression and didn’t give it a chance to get out of it. Moreover, America accumulated a substantial “industrial” inertia in all areas of its life, from educational system to the business thinking; thus, readjustment to the new trends might take a lot of effort and a lot of time.

Russia

Russia, in its turn, still goes “its own way” from industrial era back to the era of gathering and hunting, passing on its way even the agricultural era, because agriculture, as well as industry, are destroyed in Russia, and I’m afraid it’s irreversible. Land doesn’t belong to farmers, and collective farms... OK, they “proved” their efficiency long ago, so that more and more grain is imported from the very same “damned capitalists.” Everything the contemporary Russia can do is gather the natural resources and spend them on “food” right away, and hunt for resources in surrounding forests (pardon, in surrounding countries), swaying the bow and arrows with nuclear warheads. Trends in Russia go in the same direction. Degradation of industry, including the “traditionally Russian” military industry, is beyond all reasonable boundaries.

Let me quote the Russian opposition internet-media:

“Russia had survived ruling of Nicolas I, Alexander III, Stalin, and, probably, it could survive Putin’s rule. The situation, however, is different: before, the brains stayed in Russia. Even under Stalin’s rule, at least, they went to Siberia, but not to Los-Angeles. In new global world the brains leave Russia, and the louder the “Nashi”¹ are crying in Seliger, the faster brains leave. The contemporary government is OK with that: as opposite to Stalin, Putin is not looking for world supremacy. Kremlin doesn’t need the world supremacy, because then there would be no place to sell natural gas, there would be no place to import Mercedes cars from. Quite contrary, the more brains leave Russia, the easier those who stayed would believe that Russia is raising from its knees.

“In global economy, this intellect outflow can guarantee that Russia will stay behind forever. Especially in the heat of crisis, which, actually, is the Kondratiev’s crisis,² and outdated enterprises, manufacturing processes, even countries and regions that live in their past will die in course of this crisis.”

- Yulia Latinina, *Petrocrathy*, <http://ej.ru/?a=note&id=9339>, August 6, 2009

As you could see, it is not only my personal opinion. I feel pain for the country, but... The everlasting Russia’s “unique way to go” couldn’t bring it anywhere else: from capitalism of 1913, through feudalism of communist kind, to the position of “energy supplier” to world economy, whatever Putin calls it, i.e. backward to the primitive society of gathering and hunting era...

¹ Russian youth movement supporting the Putin’s policies.

² Kondratiev waves—also called Supercycles, surges, long waves or K-waves—are described as regular, sinusoidal-like cycles in the modern (capitalist) world economy. Averaging fifty and ranging from approximately forty to sixty years in length, the cycles consist of alternating periods between high sectoral growth and periods of relatively slow growth. Unlike the short-term business cycle which in various forms has been familiar since the nineteenth century, the long wave of this theory does not belong within current orthodox economics and is sometimes categorized as part of heterodox economics (a catch-all term for alternative ideas).

Who Will Enter the New World? The Role of “Third’s”

Other countries will enter the postindustrial world first, those who in contemporary global competition are take the third or even fourth place. The reason for this conclusion is as follows.

I’d like to start from notion that transition to the new, postindustrial era is not a result of waving the baton, even the nuclear one, but rather a result of normal peaceful competition. And competition, in the end of the road, is reduced to the simple thing: whether or not a consumer buys your product.

This idea alone irritates many people like a red rag stirs a bull. For instance, I was reading a book written by honorable scientist:³ a lot of smart ideas, interesting facts – until he goes to his pet idea of “evil large corporations who kill small farmers and local stores.” He talks a lot about Wal-Mart, the network of supermarkets where one can buy anything necessary for daily life, at prices lower than anywhere else. The author shows painful statistic: if Wal-Mart opens a new store, the local stores in 10 mile radius go out of business – isn’t it the evil!

I’ve got the same information from another source, from owners of local stores; I met with them trying to find “what keeps them up at midnight.” The answer was always the same, and I was shocked by such like-mindedness, “Wal-Mart, because they don’t compete fairly.” Finally, I began thinking, what’s going on? Before, supermarkets and local stores weren’t competing: supermarket served the “mass consumer,” while local stores engulfed their customers with family-like atmosphere.

Then, what happens nowadays? Why Wal-Mart is so successful in “stealing” consumers from local stores, as well as from other supermarkets? Do Wal-Mart employees take machine guns and nudge people from streets into the store and force them buying? No, it is not that: people on their own drive to Wal-Mart to spend there their hard-earned dollars.

Why? There are multiple reasons for that. First of all, the broad spectrum and wide selection of products: in 90% of cases, Wal-Mart is a one-stop shopping point, anything from food to dress and garden tools can be bought within one store. Second, the prices here are substantially lower than wherever else, while quality of products is as good or even better. Local stores cannot afford these benefits, and lose competition not because Wal-Mart assaults them but rather because they cannot provide their customers with same convenience and low prices.

Prices, however, are purely economical issue. Wal-Mart, as well as other chains of supermarkets, buy products “in bulk,” at discount. However, there is another nuance, too. Wal-Mart sells its inventory quicker than others, due to the lower prices; as a result, its rotation of inventory is higher than in other supermarkets. The profit is determined by simple formula: (difference between retail price and purchasing price with internal costs)*(how many times this inventory is sold during a year). So, if others rotate their inventory 5 times a year with 4% profit,

³ Peter C. Whybrow, M.D. *American Mania: When More Is Not Enough*. W. W. Norton and Company, New York and London, 2005.

their annual profit is 20%; Wal-Mart with 2% profit and rotation of inventory 10 times a year receives the same 20% (numbers are not correct, just to demonstrate the mechanism). Local stores cannot afford such inventory rotation, cannot afford profit reduction – and lose their customers.

However, it came out that if they could use their brains, they could compete with Wal-Mart. I formulated the task to find at least one way to compete with such a giant, to repeat the Wal-Mart's result without doing things that only Wal-Mart can do; the solution was found quickly, and it was really simple. I do know from my experience as innovation consultant, as well as from experience of many colleagues of mine that if there is one solution, there are many solutions – just use your brain!

Let me deviate from this topic a little: in Detroit Ford Museum, huge museum of history of multiple technologies, I saw one scary document: a list of all American automotive companies since late 19th century; all companies that disappeared from market are crossed out. The list is huge, approximately 4 sq. feet, and companies are in small print. Only Big Three and companies acquired by them left from that long list... sad and scary document, isn't it?

A healthy competition for souls and wallets of consumers usually ends at the following “equilibrium”: there is a leader, usually with 42-50% market share, there is the #2 with 26-30%, then goes #3 with 15-20% - and many smaller companies. The leading positions of the former two are stable, because nobody can dethrone them; they cannot make too much harm to each other, too (there are the good reasons for that, I don't want to discuss these reasons here. This research had been done long ago in Japan, and Japanese companies use it in their business strategies: Lanchester Strategy). The position of #3 is very cumbersome: from the top, the leaders bite his customer base, because they have to increase their presence in the market; from the bottom, the small players bite his customer base, too, by attracting the customers with their innovative products.

Hence, the #3 has to run fast to stay in place: all the time innovate, develop new products and approaches, attract new consumers, fight back the competition attacks. Competitors, by the way, are attacking mostly within legal boundaries: price reduction, offers of new products and services, new creative ads, patent infringement law suits, self-advertising PR. Such #3's and sometimes #4's have enough resources to develop the new products and business models, and are motivated enough to take a risk, while #1 and #2 don't need to risk, they need to protect their turf.

As a result, these #3's and #4's often discard the current industry rules and switch to new ones. For instance, out of all horse carriage companies only one Detroit manufacturer survived emergence of cars: this company produced “bad” metal-body carriages... which were easily transformed into good car bodies. Similarly, such #3's and #4's once started developing the hydraulic excavators, while the entire industry produced cable excavators for open mining, with “pick as much as you can, throw it as far as you can.” Hydraulic excavators, naturally, couldn't

compete; they found the narrow niche: when one needed to dig a trench between two buildings. Nowadays the hydraulic excavators are the kings of the market.

The same happens in the global market. Why is #3 or #4? I see only few candidates, such as Japan, Israel and South Korea. Why? Let me explain my thoughts.

Japan

This country, after nightmare defeat in the war and ban on army and weapons, pretty soon found its own decent position in the global market. In 50's "Made in Japan" meant "throwaway junk," but in 60's Japanese quality was in line with global standards, and in 70's Japanese quality was a global standard for decades to come. In late 70's Japanese automakers outcompeted American ones for the first time in area of innovations (not in inventions, but in "novel products that better satisfy customers"): they long before the energy crisis began making the fuel-saving cars. As a result, it was the first defeat of American automakers in the US. Big Three had to "readjust their minds" to outrun Toyota on their own turf. This was the last warning, but American automakers missed it: since then, Big Three only tried to "catch with Toyota." When I came to the United States in 1995, my company consulted mostly the automakers; that's why it moved from sunny and warm California to cold Michigan. At that time, practically all projects were devoted to "noise reduction," after success of "noiseless" Lexus, with three-layer sheets metal-plastic-metal used for its body.

The most important differentiation of Japan is COMPLETE absence of natural resources, except one resource, human brains. Japan exploits this resource to the maximum extent. That's why Japanese automakers already "crossed the chasm" of current crisis of automotive transportation, and for many years are leading the global automotive industry along the new trends, especially in step-by-step automation of control over the vehicle and shift from combustion toward the easy-to-automate electric drive. I don't know if Japan is leading in similar way in other industries, because haven't analyzed them yet.

But I do know the following: Japanese are far ahead the rest of world in two areas, innovations and understanding of business strategies, and these two trends are the trends of postindustrial economy, according to my preliminary forecast (see below). Hence, Japan is already full-speed moving into the postindustrial world.

Israel

I have a personal interest and warm feelings to this country: my family and many friends of mine live there. But this is not that important in this consideration; I consider this country as a most probable candidate to lead the world into the postindustrial era for the following reason: despite the fact that its most productive population, the youth, spends three years in non-producing activity, military service; despite the fact that enormous, practically unaffordable portion of its finances and resources is diverted from economy to military industry and army; despite the fact that its citizens are, on the regular basis, under assault of Katyusha missiles – despite all that, this country manages to possess a decent place in the global economy. The country with small

population, only 7 million people, fewer than population of Moscow, only 4% of which is involved in agriculture, not only feeds the country with decent and sufficient food, but also exports 60% of its agricultural products. This country produces the world-best electronics, has world-best health care, especially in curing cancer, etc.

I have a persistent feeling that Middle East unstopping military conflict is simply a way the other countries who cannot efficiently compete with Israel in the marketplace use to keep this “way too successful” competitor back, to limit Israel’s achievements. The facts are overt: practically all countries, including USA, but except Japan and South Korea, provide the “humanitarian support” to Arab terrorists; they do know where the money and supplies go, but pretend that “this doesn’t happen.” Russia even supplies the weapons, although “indirectly,” the Russian weapons and ammo were captured by Israel in Lebanon after defeating the Hezbollah units. The great friend of the Soviet Union, Nobel laureate of Peace, bloody terrorist Yasser Arafat was acknowledged as one of ten most wealthy people in the world: he just diverted to his own wallet a small portion of Niagara Moneyfall to PLO.

So, in my opinion, if Israel finally manages to get rid of those dirty bloodsuckers, it has a substantial chance to move to the postindustrial era, because it mainly invests in innovation, and invests there much more than other countries.

South Korea

This country just recently entered the global market and began liberating itself from cultural and technological influence of Japan. 14 years ago I was consulting the South Korean company: they wanted to reduce the noise produced by air conditioner. The designers of this air conditioner were very proud that this was their first design not copied from Japanese one. I was a designer in the Soviet Union, and know this copycatting approach firsthand, because participated in such “development” projects. So, I understood their feelings with all my heart.

Korean cars entered the American market about decade ago; then, they were the cheapest and their quality was below any standards. In the following mere 6 years, the quality of these cars reached the American level, while prices had not increased; nowadays, they approach the Japanese quality. Korean automakers were the first who offered to Americans 10 year or 100,000 miles warranty, while others still had 3 years and 35,000 miles.

On the other hand, the Korean companies hire more and more experts in structured innovations, i.e. TRIZ (theory of inventive problem solving, the Russian innovation method), mostly from Russia; Samsung published a year ago an article in the Business Week with acknowledgement that TRIZ produced multimillion profits. Utilization of systematic innovative approaches is another postindustrial era trend, according to my forecast.

Nowadays, South Korean economy is among the fastest growing ones in the world, which fits the image of #4 company that is capable of dropping the obsolete industrial-era beliefs and accepting the new viewpoints.

Are There Other Candidates?

Yes, of course, there are. For instance, Singapore, the country that seriously invests in brains of its citizens. Probably, there are other countries that fit the same portrait. It is difficult to guess which one will lead; probably, each country will lead in some industries. Or, perhaps, they will lead the world together, in efficient cooperation of people, companies, and industries who already live in the new era.

Postindustrial Era: Attempt to Look Into the Future

The competition for the future leadership in the postindustrial world, in my opinion, has nothing to do with military and political clash of “superpowers.” The nature of this competition is rather economical, while the current economical power is rather break than engine. The engine to this “vehicle into the future” is simple: innovations, more innovations, and even more innovations.

A few years ago, two employees of Ohio Federal Reserve Bank had conducted an interesting research: which indicators determine the economical success of any state? They began with the most “obvious” ones, such as presence of strong industries and taxation. To their surprise, no correlation was found. Then, they considered all available statistical indicators documented since 1934. And, finally, they found out that economical success or failure of any state correlates with number of patents and high-education diplomas per capita. That’s enough about role of innovations in economy, isn’t it?

Now, I’m going briefly describe the findings of my initial research.

What Is the Purpose of Economy?

Any cooperation between people, any economy is aimed at satisfaction of some human needs. Human society has no other goal than satisfy human needs, period. (This statement is, of course, very controversial, but think a bit: what else goals beyond human needs one could formulate? I mean not only the basic needs, i.e. food, water, sex and shelter, but ALL the needs, including the need in self-actualization, the top of pyramid of needs, according to Abraham Maslow). However, there is one “strange” need omitted by most of researchers, and this need brings complexity to the situation: the need in continuously growing degree of satisfaction of needs. If a consumer is today satisfied with available means, tomorrow it wouldn’t be enough for him, he will want more, better, for less, and with less hassle. As a result, people expect that products that hit market tomorrow will satisfy their needs better, with smaller efforts and total cost, and will be accompanied with fewer problems.

Now, let’s look at the other side of this coin: development of these improved products. Industrial era process was as follows: information on “what consumers don’t like in products they liked yesterday” is collected in multiple ways; this information goes to the new product developers, and they create a new product that might satisfy the consumers; the product’s production begins. This process, naturally, takes a lot of time. Finally, the product reaches the consumers, and they decide whether or not this product satisfies their needs better than the old one. If it does, it

becomes a commercial success; if not, it simply dies. This process worked OK in good old times when consumers' expectations changed slowly, and there was plenty of time to shift from current generation of product toward the next generation.

What's New In This World?

However, the world changes, and last couple decades brought some substantial changes in our lives and in satisfaction of our needs. The major changes could be formulated as follows:

1. The frequency of replacement of current products with next-generation one increased substantially;
2. The amount of information available to anybody grew enormously; and
3. The speed of information exchange increased a lot (there is no comparison between speed of mail exchange over the internet and over the "normal" mail, even delivered by airplane).

As my research showed, these factors created and aggravated the problems within the process of "continuous improvement of products for continuous increase of degree of satisfaction of consumers' needs." For instance, one such problem is time-related: due to increased amount of information and speed of information exchange, the consumers quicker than ever "discover" the new products that better satisfy their needs; as a result, they expect even faster replacement of old generation of products with next generations. However, the time period between a moment of recognition of "what product the consumers will expect" and moment when such a product hits the market remains practically the same: the idea of a new product should be realized and acknowledged, then it should be translated to the drawings and prototype for testing and correction, then the manufacturing process should be prepared and product launched, produced and delivered to the selling points – and all this takes time, while companies nowadays don't have that much time. The innovations, i.e. products that better satisfy the consumers' needs, should appear in the market faster than they could be developed and launched – that's the real problem!

Let's take the automotive industry as an example. Imagine that Japanese automakers in 2000 or even earlier somehow miraculously managed to guess that consumers by 2007 will want the adaptive cruise control in their cars – so that a car can keep a safe distance from another car in front of it. They began developing it and testing its parts in the way that prevented American automakers to find out what's going on. In 2004, Japanese informed the world about this development to create the anticipation among the consumers; by that moment, everything had been tested and improved, and launching process already started. American automakers woke up, but it was too late to catch with Japanese rivals: the normal cycle takes at least 5 years, so American cars had this new feature on in 2009, while Japanese cars had it in 2007. (Disclaimer: the dates are for illustration purpose only and have nothing to do with real events). My point is that nobody who doesn't possess this Japanese ability to "guess ahead of time" (I need to admit that this is not the "guess," because they are right more often than not) cannot compete with

them; it might even happen that Japanese will pretty soon face the problems caused by insufficiently long sight.

Hence, companies and industries in the postindustrial era won't have a luxury of researching the consumers' experience with current product; rather they will have to know, foresee ahead of time, actually several generations ahead, what consumers will want in the future, and invest money, resources and labor in these "genius insights." People of industrial era considered – and still consider – this as a risk far beyond any reason, risk verging on insanity and stupidity. However, even nowadays those who don't dare to invest in such "stupidity" win big. Here, I need to mention that the socialist / statist principle "eat what we give you" doesn't work in the world on free market: people buy only products that better satisfy their needs rather than products imposed on them. Lack of understanding of this simple rule has killed the Big Three: they assumed, and still assume, that people will buy their cars always, simply because they are the American cars. It came out that reality differs from such assumptions: consumers prefer the Japanese cars, and don't want American cars even for free...

Major Eras of Evolution of Human Society

I use the following indicator as a sign of one or another era: what is the main subject for investment:

1. Efforts and resources are not investing in anything: what is gathered or killed, is eaten immediately; this is the **gathering and hunting era**;
2. Efforts and resources are invested in food: substantial time and effort is needed to grow food (plants and animals), then this food can be eaten, but part of it is singled out to be reinvested in the next cycle; this is the **agricultural era**; during this era, the tools for growing the food are produced on demand by craftsmen;
3. Efforts and resources are invested in production of products, i.e. tools for growing the food, as well as for satisfaction of other needs: substantial time and effort is needed to prepare and run the manufacturing of products that will be purchased later, then the profit is reinvested in further improvement of products and expansion of manufacturing process; this is the **industrial era**; during this era, the information on next generations of products, i.e. innovations, is developed and "consumed" on demand by engineers and consultants;
4. Efforts and resources are invested in development of information on future generations of products, i.e. in future innovations: substantial time and effort is needed to reveal for several generations ahead which products will be expected and demanded by consumers, and prepare their manufacturing long before consumers begin feeling the need in these products – so that these products hit the market exactly at the moment when consumers are "ripe" to buy them, not earlier or later; profits are reinvested in development of next innovations; this is the **informational era**.

Not all countries will move into the postindustrial era – exactly like nowadays not all countries have moved into the industrial era: for instance, Arab countries mostly have remained in the gathering era: they pump oil, sell it and consume the money; Russia, under yoke of irresponsible rulers, has degraded to the same level; many countries are still in agricultural era. On the other hand, several countries, at least those I have listed above, are already shifting to the postindustrial, informational era that had been predicted by Alvin Toffler more than 20 years ago in the *Third Wave*.

One can, with high accuracy, distinguish the companies and countries that are already shifting or are preparing to the shift to the postindustrial era; the distinguishing criterion is their sustaining and substantial investment in innovations. Accordingly, one can predict the “vector of faith” of other companies, and maybe countries by what they are investing their efforts and resources in.

Competition in Postindustrial World

Next reasonable question is, what happens with countries that will be left behind and won't shift to the postindustrial era? They will allocate all their resources to fierce competition with countries that already have shifted to the new era, they will use all available means and approaches to pull those “smart alecks” up, put them in their place, or even destroy them. Similar processes take place within any individual industry; naturally, nobody shoots cannons and machine guns, but means involved aren't less merciless.

For instance, here is the story of Microsoft who peacefully and in civilized way “killed” Netscape in the mid-1990's. Then, Internet was out of immediate interest of Microsoft; Microsoft was busy developing the operational systems and office software like Word and PowerPoint. Netscape, in its turn, was developing the first nice-looking and reliable Internet browser that was sold for \$50 apiece. Everything was OK until president of Netscape told something to the journalists he shouldn't tell under any circumstances. He said, “We are going to kick Microsoft out of the market. What is the Internet protocol? It is the way the keyboard communicates with remote hard drive. But what is the difference, whether this hard drive belongs to the server or to your own computer? Believe me, the Internet protocol will soon render the operational systems obsolete; my programmers are already working on it. Look for breaking news soon!” Nobody took this threat seriously, but Bill Gates. The Microsoft Internet division grew from 8 to 4,000 engineers in two months, and Internet Explorer was born. Since it was integrated with Windows, its price was \$0, nada, zippo, for free. What the not-so-smart consumers were buying, \$50 Netscape Navigator or \$0 Internet Explorer? The answer is clear. By the way, I should admit that Internet Explorer was more convenient to use; I valued that a lot! In Netscape Navigator simple act of sending or receiving email needed going through three menus, and every time I had to guess which ones. When I finally managed to find this sequence, I could understand the logics – but it wasn't my logics, and I couldn't remember it. Explorer, however, had a huge button “Send and Receive” in the center of toolbar; later, this button was transferred to Microsoft Outlook. That simple! Microsoft redistributed the costs of Internet

Explorer among its other products, and Netscape simply couldn't sell its only product, Navigator, for free; accordingly, Netscape disappeared from the market. RIP! No gut shot, nobody was hurt, but company doesn't exist anymore...

There are some less civilized methods, such as filing the patent infringement lawsuit; attorneys will do the rest by draining the pockets of "too smart" small competitor...

Global, international market offers even more tools for competitive wars: one can donate to terrorists, like other countries do with Israel; one can support the opposition going to develop socialism; one can boycott the products or increase the custom tariffs so that "bad competitor" lost all profits.

For example, in early 1990 Ukrainian Central Bank brought many manufacturers to their knees by simple trick: it held all financial flows between Russian and Ukrainian manufacturers, and in the end of the year said, "Russia is even with Ukraine, so we shouldn't pay anybody." Ukrainian economy was momentarily in ruins. I heard this story from mother of my friend; she was Chief Economics Officer of large manufacturing company, the victim of this trick. Same could be done with any importer, because nobody would care of his fate.

One can establish the floating currency rate, as America made to Japan; founder of Sony Akio Marita was furious, "I spend a lot of effort to reduce product cost by 5%, and Americans take this profit away with a stroke of the pen, by changing the yen-to-dollar rate by same 5%." I lived in Moldova when I read that, and lei-to-dollar rate changed by 20-30% a day; first, I was just laughing, then I felt a compassion.

Hence, international global market provides more "tools" for competition, both legal and not so much legal, including the last resort, to wage a war. The novices who went too far are, mostly, the small countries; victorious blitzkrieg is a good solution to all problems with competition.

On the other hand, the substantial social tension will develop within the countries that lose the competition. Shrinkage of uncompetitive companies in all industries at the same time creates massive overt or covert unemployment; young generation, without an opportunity to find a decent job and get promoted, diverts its energy and self-actualization toward crime and elevated bellicosity – and appropriate ideology emerges momentarily. Here is the "pressure from within" to wage a victorious blitzkrieg.

The countries that haven't managed to enter the industrial era and thus feel themselves deprived and cannot forgive that to the "fat Western countries," with emergence of postindustrial-era countries will run berserk. Especially if demand on oil would reduce drastically because it is used exclusively for chemical industry, and oil prices fall down, the Arab countries quickly become poor, like Russia became after recent reduction of oil prices. They will become furious and mad at "those infidels who don't believe in Allah and don't buy our oil." So, I'm afraid that the wars will follow; I hardly believe that America will start them, rather the Arab / Muslim countries incited, as usually, by Russia. Of course, they will cry that this is America's fault, like

they cried that 9/11 was America's fault because it provoked the "fighters for justice." Yeah, sure, "he felt on the knife on his own, and so he did 11 times in a row"...

The conclusion is simple: redivision of the world is inevitable. I'm afraid that peaceful shift toward the new era won't happen. What a pity...

Stock Exchange and Other Economy Indicators

Another friend of mine asked me, "What is the very bottom for stock exchange, especially for Dow Jones?" My answer was, "Stock exchange as we know it now won't exist in the postindustrial era; something similar will exist, but it will operate by absolutely different rules." The reason for such answer was, the stock exchange is a perfect reflection of real state of industrial-era economy, in form of investors' confidence in potential success of one or another company, industry or country, even of economy as a whole.

This tool is very good, but it possesses a few inherent problems. Before, when company could risk implementing an innovation "once in a while, and its indicators depended on quarter-to-quarter growth of sales and profits, price of company stock was an accurate indicator of company's health. The stockholders expected that company shows quarterly improvement of profitability, and that forced the company executives and management to increase labor efficiency and reduce costs.

It was OK until the new times came, and company had to implement several new products every year to urge the profits. But in such efforts the company got into the dilemma: either reinvest the profits into the risky innovative projects, or show and distribute profits to shareholders. Accordingly, at least in last two decades, the companies were less and less inclined to risk with innovations, despite cries, "Innovate or die!" When company's financial situation worsened, they first cut the budgets of innovation projects. As a result, the stock exchange steadily became the obstacle to innovations.

Postindustrial countries will need a similar tool to measure the "economical health" of companies, industries and entire countries; however, this tool should reflect the confidence of investors in success of risky innovations.

Summary

Let's make the preliminary conclusion. Analysis of contemporary crisis showed that this is the crisis of transition of global economy from industrial era into the postindustrial, informational era. This new era is characterized by investing of efforts and resources in the long-term innovations so that new products are developed long before the customers feel the need in them and hit the market just in time when customers are ripe to buy them.

This key criterion suggests that countries like Japan, Israel and South Korea will be the first to move into the postindustrial era. Current global market leaders, USA and Europe, probably will stay for a long time in boundaries of industrial era, while Russia, probably, finishes its slide into the gathering era.

The gap between leaders and those who are late with transition to the postindustrial era will grow, thus the losers will use all available means and resources to stop the "arrogant novices," and this might result in substantial political and, probably, military conflicts.

There are many significant changes associated with transition to the postindustrial era; drastic changes in the nature of stock exchange and investing is one of them: the shift from short-term toward long-term indicators. Those companies, industries and countries will succeed in the new era who can forecast several generations of product improvement and implement their forecasts.

Next article is supposed to describe multiple crises accompanying the current global crisis of transition from industrial toward postindustrial era.

My dear readers, I'm looking forward to get your comments, objections, questions. Thank you very much for your time and effort spent for reading of this article and thinking!