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Review

Post-communism and economic growth: an essay

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Abstract

The former communist nations of Central and Eastern Europe have come a long way since their liberation from the grasp of communism in the late 1980s and early 1990s in terms of their economic advancement. Some, like Slovenia, the Czech Republic, Hungary, Poland, Slovakia and the Baltic States are now in the upper middle level status according to the World Bank rating. Others, like Rumania or Bulgaria are still lagging behind the richest members of the European Union (EU) and have a lot more to do to close this gap.

Keywords: Communist, bank, status, liberation, economic advancement.

INTRODUCTION

The former communist nations of Central and Eastern Europe have come a long way since their liberation from the grasp of communism in the late 1980s and early 1990s in terms of their economic advancement. Some, like Slovenia, the Czech Republic, Hungary, Poland, Slovakia and the Baltic States are now in the upper middle level status according to the World Bank rating. Others, like Rumania or Bulgaria are still lagging behind the richest members of the European Union (EU) and have a lot more to do to close this gap.

This progress notwithstanding, people in the newly enfranchised countries of this part of Europe are paying a price for their newly acquired freedom. Some would say it is too high a price as memories of the past stability and security, no matter how insufficient and inadequate when compared to Western standards, are still very fresh in some minds. Little wonder that an estimated 20 percent of East-Germans reportedly believe they are now worse off than they were during the years of GDR.

However, what is more worrisome is the conflict of generations. Young Poles, Czechs or Hungarians who have few if any memories of the communist era, do not differ from their Western peers as far as the advantages of living in free countries are concerned. Where they may differ is in their misconception of living in mature capitalist societies. They want to take whatever they believe they are entitled to, but they cannot and do not always want to accept the reality of new capitalism and the vagaries of a highly competitive market economy with the lack of employment security their parents once had enjoyed.

This paper examines this new reality of the former communist states of Central and Eastern Europe with respect to what most economists and political philosophers believe is the very nature of the capitalist system – *economic growth*. Are these emerging economies condemned to growth like the post-industrial nations were during the last century, and particularly after WWII, or should they seek their distinct model of economic and social progress to avoid mistakes committed by the Western nations? Can the former communist nations think of de-growth or zero growth[1] like some of the most advanced countries in the world have had to assume or do they simply have no other choice but to grow at any cost? These are just a few questions on which this paper will briefly focus

Economic and philosophical aspects of the zero-growth theory

The issue of economic growth has always been in the center of economic, social and philosophical thought. Countless models of growth were developed but only some survived while others went into oblivion[2].

The financial crisis of 2008-2009[3], and the looming threat of the collapse in the Eurozone, have had many economists wonder whether an uninterrupted economic growth is ever achievable or whether the mankind should prepare to survive without any growth at all. The zero-growth theory has once again found itself in the center of economic debate. The questions asked by Her Majesty the Queen during her visit to the London School of Economics in the fall of 2008[4] about the very nature of the current crisis are very symptomatic in this respect.

For the majority of people growth is tantamount to economic survival. The lack of growth, and even a zero growth option, is perceived, and probably rightly so, as a lack of improvement in their economic status quo. Very often progress for ordinary people means that one is not becoming worse off, let alone his becoming much better off[5] The issue is certainly much more complex than meets the eye, since this economic status quo of an average person is obviously the result of not only the rate of growth of the national income but also, and perhaps mainly, of the distribution and redistribution of wealth.

For the neoclassical economists this uneven distribution of wealth is a natural state of affairs because some people work harder that the others, invest more of their personal wealth, are more entrepreneurial than others and less risk-averse in going into business. There is no justification for less enterprising people to receive the same share of the national income as these entrepreneurs who often risk all they possess to attain success in business. This, of course, is a very controversial issue and this paper is not going to dispute or condone such a view. It is noteworthy, however, that in the present economic environment disparities of income among particular strata of the society have become dangerously large.

The issue of the zero-growth (de-growth) theory is more than mere economics. It encompasses *inter alia* such disciplines as sociology, philosophy, political science, law or religion and ethics. The list can go on. Irrespective of which science applies, the fundamental question of whether economic growth is limitless or whether it is bound by some objective constraints, such as the size of the working population, availability of natural resources and *last but not least* the level of human consumption, remains. Most probably a combination of these factors, and others which are not addressed here, is relevant to economic growth.

One of the most undesired effects of the economic transformation in the former communist states of Central and Eastern Europe is their deteriorating demographic situation. Examples of this include Poland where currently four people work to support one retiree, but this ratio is expected to go dramatically down in the next 20 years or so[6]. The population of the Russian Federation is shrinking by close to one million people annually and similar situations are found elsewhere in the region. Ironically, in demographic terms the East has quickly caught up with the West.

Surprisingly, the failed experience of the so called real socialism may be helpful in the discussion of the relevance of the zero-growth theory to the newly enfranchised countries of Central and Eastern Europe. If each and every member of the society cannot be given goods according to his/her needs, neither ''according to his/her input'', after the first utopian paradigm was finally abandoned, then the question arises of how much he/she should receive. Nobody believes today that we can pursue the goal of fully satisfying human needs without regard to the availability of resources and economic potential of particular nations. Consequently, one will be right assuming that there are *objective limits* to human consumption, and therefore limits to economic growth which cannot be pursued without major constraints.

One of the limitations to growth is the much touted concept of *sustainable development,* the objectives of which will put definite limitations to economic growth. Theoretically we could possibly double or even triple the rate of economic growth now with an abusive exploitation of natural resources and in disregard to the available economic factors, but the heritage left to our children and their children would be disastrous.

The problem with *sustainable development* is that, while it can be plausible, in fact it does not set any measurable standards or parameters to growth which would clearly state how much of each and every natural resource should be used now and in the foreseeable future. *Sustainable development cannot set any measurable limits to growth*.

Energy is unquestionably one of the sectors which best fits into the model of sustainable development. At the moment, and for some time to come, the world economy will depend on the availability and supply of oil and gas. While the other sources of energy are clearly on the increase, and in particular the so called clean energies – nuclear, solar, wind and hydro – there is no doubt that under the current circumstances without oil and gas the world economy would immediately come to a standstill. And there is no secret that the reserves of these two most important sources of energy are being depleted at great speed and sooner rather than later may completely run out.

Nuclear energy and coal could be alternatives to oil and gas but they both have some obvious disadvantages. Safety is the major concern for nuclear energy and the latest bailout by Germany from its nuclear sector is the best evidence that safety issues may actually offset any potential savings compared to traditional energy production. Coal, on the other hand, could be an efficient alternative to oil had it not been an acute pollutant[7].

Consequently, energy supply could become a serious limitation to growth if the future growth is to respect the prerogatives of the sustainable development. This issue was raised after the first oil shock in the fall of 1973. Although it was later given relatively less attention, it has never been entirely dismissed. Sooner or later it will become a major concern once again.

In summing up energy is undoubtedly a factor in economic growth and should be taken into account in any discussion and analysis of limits to growth. Energy and demography are probably the two most crucial components of sustainable development, itself the chief factor of the zero-growth paradigm.

The zero-growth model does not, however, have a universal application as there exist two groups of countries in terms of limits to growth: *developed* and *developing* nations. The former have already reached a level of economic advancement that would probably allow them to stop where they are, and with an improved system of redistribution of wealth, through an adequate system of taxation, for example[8], satisfy the fundamental needs of their populations. It is hardly so with the less advanced nations who, with some notable exceptions such as China, India or certain more fortunate African countries, still have to fight for their mere survival.

To claim that the most advanced, post-industrial nations should stop their policy of pursuing economic growth at any cost would be tantamount to a fallacy, because the economic progress, or the lack thereof, in both groups of countries is interdependent. If the developed world stopped its industrial production at its current level, it would require fewer natural resources and thus put a brake on the growth of the developing nations whose economies so greatly rely on the primary sector. And conversely, if the latter countries started to produce and export less raw materials used by the industrial world, they would have fewer financial resources to purchase investment and consumer goods from the industrial countries. Their economic growth would be compromised.

Therefore one should perhaps be speaking of *two* theories of economic growth: one for the industrial world and another for the developing nations. The latter do not seem to have an alternative but to continue with their economic growth policies or else remaining forever underdeveloped.

The spheres of application of the zero-growth theory

If the zero-growth theory cannot be universally applied, with practically only the post-industrial nations who might consider such an option, then the question of what the benchmark would be as far as the per capita income is concerned arises . No one would ever doubt that this is a highly contentious issue. Should it be a GDP per capita level of $40,000 or more? Or, as it is the case of the tiny Lichtenstein, in excess of $100,000? Or $ 30,000, if evenly distributed, should suffice? There are no ready answers to these questions.

However, even high per capita incomes are not the only factor that will determine whether the zero-growth paradigm is applicable. There are other factors of an equal, if not greater, importance and the distribution of income mentioned earlier is probably one. If the developed world stopped at the present level of economic development without changing its social policies it would simply mean legitimization of the status quo whereby there exist problems of exclusion of large strata of population. The OECD research mentioned earlier[9] clearly indicates that the income gap between the haves and haves not is not shrinking but increasing instead in the majority of the developed countries.

When one looks at GDP data for the major industrial countries, such as G-7 or G-20, it is easy to observe that their long-term growth rates are relatively modest. In any case they do not compare with those of China or India or some other emerging economies[10]. But even with their impressive rates of growth the emerging economies will need decades to catch up with the leading industrial nations in terms of wealth per capita. Furthermore, with their typically large populations they may never be able to do so. Even if China doubles or triples its gross domestic product, having 5 times more people than the U.S. it will still be unable to attain the latter's GDP per capita[11].This means that economic indicators are not and cannot be the sole criterion for the applicability of the zero-growth theory.

In general the concept of the zero-growth requires that, in the absence of a continuous growth in real terms, populations also need to remain stable; otherwise there will be a decline in the wealth per capita indicators. While demography is not the main thrust of this essay[12] it certainly is a major factor in the discussion on the zero-growth theory.

Consequently, *demography* and sustainable *development* are the two principle factors that will shape the future economic development and can support or rule out the practicability of the zero-growth theorem. But they are not the only factors. Even if there is a cap on population growth, and the economic progress respects the call for a sustainable development, there will still be nations, and most likely the majority of the world's population, for whom growth at any cost will remain the main objective. The zero-growth theory cannot ignore this fact because when pushed to the limits poorer nations will be left with no other choice but to attempt to change the existing status quo, and this is the option nobody wants. So regardless of whether we like it or not, there seems to be no other choice but to maintain the policy of economic growth, at least for the poorer nations.

That does not mean that this grow should remain uncontrolled or misguided, for uncontrolled growth may be as harmful as a lack of economic growth. If we imagine the resource and environmental impact of every Chinese or Indian family having a car, the number ofmotor vehicles in the world would double or triple. Then the gas emissions coming from these vehicles would greatly offset the absorbing power of the world's rain forests and that would be synonymous to an environmental Armageddon.

There are, however, neither moral nor institutional grounds to stop the Chinese or Indians, or any other emerging nations for that matter, from getting what they want and what is believed to be a normal thing in the developed Western countries. Neither by persuasion nor by retaliation. Or by any other forceful means. All such measures will undoubtedly fail and only could backfire. The only way to persuade the developing nations not to repeat the mistakes of the developed world is by finding a better system of re-defining the priorities of economic growth at a global scale. Nobody has yet determined how to achieve a balance of such a finesse.

The main reason for being unable to balance economic growth with environmental and resource implications seems to be the fact that economists have almost always focused on growth as a panacea for all our problems. From Keynes to Kalecki, Schumpeter to Lucas we had always been speaking of growth and not the lack of growth, and it was not until the 1970s, and in particular after the first oil shock of 1973, that we started to think of a world where growth at any cost may no longer be the only goal of the mankind.

Capitalism, post-communism and relevance of the zero-growth theory

Someone may ask why we should even bother about ***a*** theory of zero- growth if we know in advance that it cannot have a universal application, particularly in the less developed parts of the world, and as such the concept only has a purely academic relevance. In our opinion, however, the concept of zero-growth is more than pure theory. It certainly has practical aspects as well, particularly for the emerging economies of the post-communist countries of Central and Eastern Europe.

The demise of orthodox communism removed all the doubts about the goals of humanity- the best use of resources to yield the most benefit to the society. That is equivalent to profit maximization and profit maximization is the main goal of capitalism; every student of economics knows that. The intellectual challenge now is to consider whether capitalism, and a re-introduced capitalism of the above-mentioned countries are compatible with the zero growth theorem.

While the answer to this question is probably a simple ''no'', it is more a ''no'' with some qualification. What about the Chinese ''socialism'' and the Swiss or Scandinavian capitalism to quote the two extremes that readily come to mind? There is no doubt that the Chinese ''socialist'' capitalism is much more aggressively growth-driven than the Swiss or Scandinavian model of capitalism. The main difference lies in quality rather than quantity.

The capitalist system is based upon several pillars that can be summarized as follows:

- *Private ownership* of resources. Indeed in the leading industrial economies the major share of GDP is usually generated by the private sector. But what about some major economies, such as France for example, where the public sector provides a substantial part of the national income? Does this different ratio make the country less ''capitalist''?

Most economists would argue that the public sector is as a rule less efficient than the private sector. But would the private business get involved in these sectors of the economy which provide public services if these services were not heavily subsidized? Most likely not.

- *Self-interest*. Both the companies and households pursue the goal of their profit and utility maximization. If the companies were not profit-driven they would be philanthropists rather than businesses. The consumers likewise want to maximize their satisfaction when buying products and services. While the two goals are to a large degree mutually exclusive, they are eventually reconciled through market mechanisms.
- *Sovereign role of markets and competition*. Under pure capitalism the markets are the ultimate judge in terms of price determination and consequently they eventually lead to resource allocation. But we all know that market mechanisms are increasingly distorted by all kinds of price controls; explicit and implicit. Thus the role of governments is crucial in preserving the competitive nature of these markets and this is achieved with different degrees of success in particular countries. The latest financial crisis and the abuses by corporate elites are good examples of such market distortions.

These are just a few features of the ''classical'' capitalist model of the economy. Is therefore such a model compatible with the zero-growth paradigm?

If the zero-growth, or de-growth, is understood as a reduction of production and consumption in physical terms through down-scaling and not only through efficiency improvements , then the answer is a ''no''[13].

Some protagonists of de-growth theory, such as S. Latouche[14] , link growth to other causes besides those of purely economic nature, such as cultural or psychological ones, or even fads which result from manias, fashion, fetishism, etc. But these thinkers obviously overlook the fact that growth is inherent in the very nature of capitalism, whose major, if not the only, motive consists in making the optimum use of one's assets. To put it bluntly – in making money and profit and turning them into more capital[15]. And this is the essence of the capitalist system. Thus if making profit is the main goal of capitalist entrepreneurship, then the system cannot operate without growth. Therefore, *capitalism is not compatible with the zero-growth theory.*

However, this conclusion may prove too simplistic and it certainly needs some refinement.

The neoclassical view that growth is inherently built into the capitalist system may be overlooking one essential factor: that is human needs. Consequently our consumption which may, after all then, have some limitations. Consumption, as everyone knows, is the chief engine of growth. Two thirds of GDP in the post-industrial countries is made up with consumption. Increased consumption means more production and the increased production means more investment and more money. Conversely, decreasing consumption means declining demand, overproduction, slumps, recessions and economic crises.

Charles Siegel in his brilliant article on the limits to growth[16] puts this very eloquently: *''We often hear that we are reaching the limits of growth because of ecological constraints, but we rarely hear that we are also reaching the limits of human needs……..Many Americans have become disillusioned with economic growth during the last few decades, not only because of the environmental problems it causes but also because the rising standards of living seem to bring diminishing satisfaction''* .

The above innocently looking statement is a proverbial monkey-wrench thrown into the well-oiled market economy machine. If mankind starts reducing its consumerism, stops buying excessive , and for the most part, useless items, eating mountains of junk food, exercising more and pursues healthier life styles, this could have an impact on the very reason for unlimited growth.

However, to put forward such an idea to people in the emerging economies, such as Poland, or any other member nation of the former Soviet Bloc, would be equivalent to heresy. Critics will be quick to raise a uniform voice that we have not yet attained a level of consumption of the most advanced nations so we have nothing to be concerned about.

That may be so but do people in the emerging economies have to follow the same Western path of irrational consumption patterns? It is no longer unusual in Poland and elsewhere throughout the region for some better-off families to buy a second, or even a third car, which they can ill-afford. But even more often, they hardly need it. This is similar to the trend of the 1950s and 1960s in the USA with the outburst of growth of suburbia and the never-ending need for more transportation to get to work, college and home.

Ch. Siegel puts it very bluntly. ''In the United States we have already gone **beyond** (emph. I.Ch.) the limits of human needs. Growth is no longer improving the average American's well-being17 .

And there are explicit and implicit costs to that growth; health care costs, accidents, pollution and climate change. Nearly 75% of adult Americans are overweight or outright obese[18]. The economic cost of that is enormous.

Ivan Illitch[19] was quite right when he first spoke of the counter- productivity of growth or the situation where further economic growth starts to decrease our well-being. If the growth is counter-productive, should it stop for the sake of preserving this well- being? Whilst most positively thinking people would subscribe to this opinion, very few would be able to determine the actual limits to this growth.

Neither is this short essay, simply because it would be extremely difficult to empirically demonstrate the preponderance of benefits over the costs of economic growth without dedicated and time-consuming studies. But this is not to say that such studies should not be undertaken or that they would be meaningless. It is one of the most exciting scientific challenges of our time.

In conclusion to this paragraph, neither ''mature'' capitalism nor the ''re-invented capitalism'' of the former communist countries of Central and East European countries is totally compatible with the theory of zero-growth. Growth is necessary for capitalism given its primary objectives such as profit maximization. Likewise growth is indispensable for the countries mentioned above simply because they still have a long way to go before even they start thinking of reducing their rate of growth to a minimum.

The position of post-communist countries of Central and Eastern Europe in terms of economic advancement

All this discussion leads us to one particular all-important question: should people in the emerging economies follow the same consumption patterns as the richest post-industrial nations? The answer to this question will also provide an answer to the question of whether the economies of these countries warrant the application of the zero-growth paradigm.

Tables 1 and 2 below clearly demonstrate that despite the spectacular progress the FCS made once they removed their communist regimes, the distance that separates them from the richest nations of the world is still very large. Poland is the largest economy in this group but her GDP of US$ 438,884 million (2010 estimates by IFM staff)[20] places Poland at 22nd position in the world, just outside the G-20 Group. In terms of GDP per capita Poland ranks 44th in the world, just ahead of both Hungary and Estonia. But the richest of the group Slovenia has a GDP per capita of US$ 27,899, i.e. 48 per cent more than Poland.

However, with a similar population Poland has a GDP that represents only 31.9 per cent of Spain's GDP. The differential between Poland and the richest nations of the G-20 Group is huge. The same is true of other post-communist nations of the region.

Table 1. World largest economies and the new members of EU by decreasing order in 2010 (million $US)*

Country or group of countries	GDP nominal	% of total	Former communist States of Central and Eastern Europe(FCS)	GDP nominal	%of total
World	**61,963,429**	**100.0**	**Total**	**1,181,371**	**1.91**
of which			of which		
European Union	16,106,896	26.0	Poland	438,884	0.71
United States	14 624,184	23.6	Czech Republic	195,232	0.31
China	5,745,193	9.3	Romania	158,393	0.26
Japan	5,390.897	8.7	Hungary	132,276	0.21
Germany	3,305,898	5.3	Slovakia	86,252	0.14
France	2,555,439	4.1	Slovenia	46,442	0.07
U.K.	2,258,565	3.6	Bulgaria	44,843	0.07
Italy	2,036,687	3.3	Lithuania	35,734	0.06
Brazil	2,023,528	3.3	Latvia	23,385	0.04
Canada	1,563,664	2.5	Estonia	19,920	0.02
Russia	1,476,912				

Source: Compiled from Estimates of World GDP by International Monetary Fund, February 2011
*All figures in International Geary-Khamis dollars

Table 2. GDP per capita of 10 richest countries against FCS in 2010 (million $US)*

Rank	Country	Dollars	Rank	Country	Dollars
1.	Qatar	88,232	31	Slovenia	27,899
2.	Luxembourg	80,304	36	Czech Republic	24,987
3.	Singapore	57,238	42	Slovakia	22,267
4.	Norway	52,238	44	Poland	18,837
5.	Brunei Darussalam	47,200	45	Hungary	18,815
6.	United States	47,123	47	Estonia	18,274
7.	Switzerland	41,765	49	Lithuania	16,997
8.	Netherlands	40,777	60	Latvia	14,330
9.	Australia	39,692	68	Bulgaria	12,052
10.	Austria	39,454	70	Romania	11,766

Source: as in table 1

The emerging economies still have a long way to go before they attain the level of prosperity of the richest countries of the world. The open question is whether they will ever be able to attain it.

Some research suggests that with their current economic structures and economic policies they may never be able to close that gap[21]. With some exceptions perhaps, such as Slovenia which is already in the upper-middle group, and the Czech Republic which is closely following the latter nation, most of the former communist states, Poland included, are much poorer than the ‘’old’’ members of EU.

There are certainly many reasons for this sad reality, and in particular the fact that few of the emerging economies demonstrate an export-driven growth. Evidence actually indicates that only the Czech Republic has this kind of economic structure with exports being an important contributor to growth[22].

This is a problem that requires more attention. For the purpose of this paper the main question is whether these nations should follow the exact paths of development that characterized in the past the most affluent countries. In our opinion the answer is a categorical ‘’no’’.

Again we are not going to argue in favour or against this statement. It is an excellent topic for a separate contribution to the discussion on the nature of Central and East European nations’ newly acquired capitalism.

The more pressing issue is what should be done to put these nations on the right path to prosperity while avoiding mistakes of the countries in which excessive consumerism has taken over sound economic thinking.

For some people it may already be too late because there is not much one can do about the *buoyant consumerism* that seems to be the *mot d'ordre* for the vast majority of people in these countries. What is even more troubling is the fact that the consumption-obsessed people can actually ill-afford such a way of life and are totally oblivious to some blatant truths. *Firstly*, that in order to spend more one has to be more productive, and, *secondly*, that more indiscriminate consumption does not necessarily make people happier as research in some post-industrial countries clearly indicates[23].

Consumption patterns need to be changed. People must be made aware that indiscriminate buying, or ''shop till you drop'' pattern will lead these countries to a *cul-de sac* end.

There are definitely limits to growth, be they environmental issues, pollution, climate change, etc., or factors lying on the demand side. Being aware of these limitations is one of the greatest challenges of the theory of zero-growth (de-growth) which at this time of economic worldwide slowdown seems to be gaining in popularity once again.

SOME CONCLUSIONS

The issue of zero-growth or de-growth, as it is sometimes called, is one of the most challenging problems of our time. No wonder countless contributions to the theory and valuable statistical evidence have been gathered and even listing the more important ones would need a separate volume.

This paper has attempted to look at this question mainly from the perspective of the post-communist Central and Eastern Europe. Having embarked upon the road to capitalism these nations will sooner or later be confronted with a similar dilemma the post-industrial societies, and in particular the United States have known for decades: should economic policies put some kind of a brake on the vicious circle of relentless growth with all the potential negative socio-economic and political consequences it carries.

Economic wisdom is not just about making the right decisions. It is also, and perhaps more importantly, about avoiding *wrong* decisions. Although the mere 20 years or so that mark the fall of the Berlin Wall is perhaps too short a period to set trends, one generation of the newly enfranchised people in this part of the world is probably sufficient to observe that consumer behavior patterns of Central and East European nations very much resemble those of the post-industrial societies.

The issues raised in this paper should perhaps constitute the field of research for sociologists and even psychologists as they go beyond the simple economics. But even for an economist the conflict between the goals of sustainable development and human pursuit of endless consumption is obvious.

While we have no moral or any other right to deny more than half of the world's population a decent life we must be aware that the world just cannot afford to give everyone what he or she would want because *l'appetit croit en mangeant,* as the French saying goes.

The nations of former communist states of Central and Eastern Europe bear their historical responsibility; to enjoy decent lives without falling into the traps of indiscriminate consumerism.

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ENDNOTES

[1] These two terms are used interchangeably and have basically the same meaning.
[2] Of the more prominent economists dealing with this issue one should mention for example: R.J. Barro; D.K. Foley; O. Galor; R.F. Lukas; D.Weil; M.Weber; R.M. Solov; N. Kaldor; to name just a few.
[3] After the last financial crisis the rate of growth in the industrial world came sharply down: 0.5 percent in 2008 and – 3.2 percent in 2009. It subsequently recovered to 2.3 percent in 2010 but lags behind the emerging economies which recorded a 6.3 percent rate of growth in 2010 (IMF forecast).
[4] The British Academy of Science in their reply to the Queen's questions about the real causes of the credit crunch stated that although signals of credit abuse were evident much earlier no one took them seriously enough and no public or private body had enough authority to react in a concerted and complex manner
[5] What we mean here is, of course, growth in real and not nominal terms
[6] For more details see the population projections by the Central Statistical Office, or GUS.
[7] A leading Canadian expert on global warming has found out that burning of coal produces much more global warming than oil sands. For more detail see B. Weber(2012): Coal, not oil sands, the true climate change bad boy study says. The Canadian Press. February 21, 2012.
[8] President Obama's initiative to tax more the wealthier groups of American is a significant step towards a more just system of distribution of national income. Interesting arguments on that are found in the OECD(2012) publication: Reducing income inequality while boosting economic growth: Can it be done. Economic Policy Reforms 2012. Part II, Chapter 5, p.4 and subsequent.
[9] See footnote 8
More on growth and demography see: Bloom D.E; Canning D; Sevilla J (2001): Economic Growth and the Democratic Transition. Working Paper 8685. National Bureau of Economic Research. Cambridge, Massachusetts. December 2001.
[10] Although China has recently revised downward its growth rate for 2012 it is still in excess of 9 percent. What it practically means is that ion less than 10 years its GDP will double.
[11] We are used to thinking that China may soon become the world's leading economic power .However, few people remember that China had already been the world's leading economic power and is just regaining this status once again. For more on the economic history of China see A. Madison: Chinese Economic Performance in the long run 960-2030 AD. Second Edition. www.ebook 3000 com.
[12] The UN has for some time now revised their projections of the world population. There exist some consensus that the strong growing trend will of this population will remain for some time and subsequently, towards the second half of the 21st, it will level off. See also Bloom D.E et al. op.cit.
[13] See for instance A. Nadal (2010): Is DeGrowth (Zero Growth) Compatible with Capitalism? "The Global Realm" July 10, 2010, p.1. Nadal mainly repeats the arguments raised earlier by G.Kallis, F.Schneider and J.Martinez Allier: Sustainable De-Growth. The way forward."Journal of Cleaner Production". www.eco.2bcn/es/index 3httm
[14] S.Latouche (2006), emeritus profesor at the University of Paris South is the author of some best-selling books and studies, such as: A bas le developpement durable. Vive la decroissance convivale. Institut d'Etudes Economiques et Sociales pour la decroissance soutenable. Paris 2006 ; S.Latouche (2003) : Justice sans limites. Le defi de l'ethique dans une economie mondialisee. Fayard 2003, and others
[15] S.Nadal: op.cit; p.1k
[16] Ch.Siegel (2006): The End of Economic Growth. Preservation Institute. Berkeley, California 2006, p.5
[17] Ch. Siegel: op.cit; p. 5
[18] See : World Fattest Countries. Forbes.com. Also see: Nancy S.Wellenon, Barbara Friedberg (2000): Causes and consequences of adult obesity: health, social and economic impact in the United States ."Asia-Pacific Journal of Clinical Nutrition". Vo.II, Dcember 2000, p.705-709. It is seldom mentioned that the U.S. spends more on health care than its defence budget (US$ 793 billion or 23 per cent of the total budget against US$ 689 billion o 20 per cent of the total budget). See: Office of Budget Management(2011). Summary tables S-3.
[19] I.Illitch (1926-2002), the Austrian-born catholic priest and philosopher, was the first to hammer out the term" counter productivity". In his book: Medical Nemesis (1975). Panteon, NewYork 1975, p.72 and subseq., he speaks of counter productivity in the health care. He believed we needed convivial tools rather than machines and a private car was a complete wastage of resources with its practical speed of only 6 km per hour if all the total times lost while using it were accounted for.
[20] See : Estimates of World GDP by International Monetary Fund, February 2011, tab. 1
[21] See : Ivan O.Kitov(2011) : Modelling the transition from a socialist to capitalist economic system. JEL classification 012, P10, P27. Ikitov@mail.ru.recovered February 10, 2011.
[22] Oscar Bajo-Rubio and Carmen Diaz Roldon (2010) contend that for the vast majority of the new members of the EU, only the Czech Republic demonstrates some degree of correlation between exports and growth. The remaining nations in this group depend on other factors of growth. See: O. Bajo-Rubio and C. Diaz Roldon: Do Exports Cause Growth? Some Evidence for The New EU Members. A paper presented at the 2010 Vilnius Conference: The Global Challenges for Economic Theory and Practice in Central and Eastern European Countries. Conference Proceedings. Vilnius, September 16-17, 2010, p.15.
[23] See for instance Ch.Siegel : op. cit; p. 7