

Attractors versus virtual money

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Part one: THE ATTRACTORS

Let us imagine a human creature in such a scale that it is twice big as it is now with all its proportions maintained: it is a structure that will collapse under the weight of its very bones. The scale is important.

James Gleick
Chaos

It is difficult for human mind to comprehend phenomena that involve millions or even billions of cross-linked elements. Even good knowledge on these elements does not guarantee the view into the entirety of the phenomenon if there are no higher ordering categories established. It is these categories that modern economists, alarmed with the unstable development of world economy, reach for.

To explain the macroeconomic processes of “21st century global village” they make use of better and better scientific models. One of such models are the model suggested by the mathematicians and physicists who are known as chaos theoreticians. The central category of their description is “the attractor” – a term defining a focal length of all forces operating within a system. Let us scrutinize then how global economic processes proceed from the standpoint of chaos theoreticians viewed through the attractors prism.

Let us begin with defining the meaning of attractor in the economy. In the economist's eye it is every big cluster or intensification of economic processes currently registered most often only within memory of huge computer networks working for banks and financial stock exchanges. The attractor is a mechanism of positive feedback connected with capital circulation; it is experimentally confirmed rule of intensification of economic processes in such places where they are already intensive. Economic attractors emerge from graphic presentation of data in a form of diagrams and tables illustrating statistical results of billions financial operations carried each day.

Contemporary forms of attractors begin to take shape after 15th of August 1971 when President Nixon lifted the duty to cover production of dollars with gold reserves. The consequence of extensive budget capabilities available due to this fact was a great increase in research and intellectual potential of the Americans.

The investors assumed that intellectual potential will bring in time bigger and bigger dividend. The condition for profits was to spread a belief of the legitimacy arising from privileges connected with thoughts trade throughout the world. Such an idea has taken a form of presently effective copyright legal system according to which specialized intellectual creation, possible thanks to access of researchers to very expensive research centers, became protected in a very special way and remunerated. We shall return to this issue again.

Investments into research and intellect proved to be so profitable since great portion of world investment potential was directed to construct mental-legal infrastructure of the global market, supporting preferred schemes of circulation of world money. It is in describing and researching complicated structures, or rather visible effects of their existence the scientists make use of the attractor concept, which for the mathematician means curious feature of space and for the economist – a place where great money supply takes place.

According to chaos theory economists opting for “balanced development” the world economic system has entered the phase of “dinosauring”, the phase of uncontrolled growth. This process is connected with moving from the economics of local markets (villages, districts, countries, blocks) to the global economics where the whole world is the market. Economic research on chaos models prove that on global market unfavorable trends of capital accumulation not only are maintained but increased as well. This process cannot be slowed despite many attempts undertaken in this regard at the level of world economic organizations. The problem is serious and it concerns all people worldwide.

In human psyche such rapid transformations of world economy come out in a form of fears. It is understandable reaction for the previously unknown situations. It should be pursued to decrease these fears since they are a nourishment for the phenomena of social pathology and they block healthy activity. It is to this end – to decrease such fears – there are agendas, organizations and particularly publications established worldwide propagating alternative economic visions and explaining to people macroeconomic mechanisms using models of traditional versus “balanced” economies. The second ones include also ideas of ethics and ecology into the traditional concept of profit.

In Poland there is no alternative economic strategy to base the hope of slow down – unfavorable in the opinion of many economists since too high – pace of economic growth in a perspective of nearest ten, twenty or fifty years on propagated. There are also only few in Poland who use widely applied worldwide term “balanced growth”. In the world such “balanced growth” means in many industries reduction and drop or even complete change in forms and ways of operating. People have to be prepared to it previously with well-thought-out education. So far there are no big education campaigns in Poland, necessary in the process of global transformations.

On the other hand in economic visions widespread in media and schools a miraculous cure for all inconveniences is propagated. It is the fastest possible economic growth. The background for these visions is a mute assumption that rich countries, that achieve and propagate such growth possess a patent for worldwide happiness. It is not like that. Intellectualists, sociologists and spiritual leaders point attention to the results of the priority of money in the scale of human values and the results of scientific research prove that wealth of a country is poorly correlated with the feeling of happiness of its citizens. The feeling of happiness does not grow either along with improvement of individual wealth.

The Polish, having so many problems to overcome during their system transformation have not succeeded yet to construct target – not only conforming – model explaining to the situation they are in. Since our problems with adaptation to new conditions are connected not only with system transformation but also with a rapid change in external conditions we try to get adopted to. These are the conditions of global market, something which is completely new in economic history of the world. Revolutionary and requiring great adaptation efforts are also changes in the way of communication among people as a result of advancements in technologies.

All of these transformation are too fast for Poles to look around longer in the world. We are overwhelmed in our consciousness by newly connected to us - through Polish currency exchangeability - billions of businesses, trillions of trade operations, hundreds of languages, currencies and habits, tons of regulations – since this is how it translates into the language of practice. Single cent multiplied by a billion gives quite a nice sum. It is a new quality. For the Poles, who lost the habit of open priority of values based on money the mechanism of this transformation is lost in the darkness of guesswork and unverifiable hypotheses.

Our door to the global market started to open in the moment when the first acts introducing convertibility of Zloty became effective. It was only ten years ago, what is worth to remember,

since in the scale of social education it is too short a time for us as a country to be able to absorb all subtle mechanisms of world market game and learn to move smoothly in the stream of world economy running with bigger and bigger impetus.

We have not possessed such ability since popular political visions end with our prompt march to EU and world adjustment programs. Our cleverness is determined with existence of a wider perspective program, i.e. a program growing out from our locality and our uniqueness.

The result of the Poles lacking cleverness in molding the flow of the stream of world money is already 70 percent share of foreign capital in Polish banks, almost 100 percent share in hyper-market chains and many similar “facts” from the macro-scale level. All of it proves that we have not recognized the threats connected with participation in world market and we have not yet elaborated proper methods to protect our own interests. Since economic position of Poland towards new partners, who with increasing (as it is global) effectiveness implement the principle of maximizing profit and their own security is drawn very vaguely and unclearly in general consciousness of the Poles.

Particularly in the issue of the place of Poland within world economic structures we sense serious confusion. As the nation we have been brave enough to get open for the global market. It was a great effort that was a success in a tactical sense. Pride from a game won should be, however, rationally calculated to allow us noticing the perspective of the whole match, the perspective of BEING within the global system – that is so important on making – while NOT BEING YET THEREIN – any political decisions of long term international liabilities character.

It the theory of chaos that comes with assistance in elaborating such a perspective for completely new phenomena of global economy. This science deals solely in macro-scale systems thus a global system of economic relations emerging before its very eyes became – in a natural way – another experimental field for it. The objective of research of chaos theoreticians is to discover order hidden within structures. Their tools are fast computers that process vast amount of real data, collected with application of strict methods of scientific measurement. In case of economic research these data are on actual money flow in global market. They come from verifiable sources. They are bank publications confirmed by auditors, stock exchange yearbooks and statistic yearbooks – only the facts that are difficult to be doubted in.

Even the very first results of introduction of these data into the computers and presenting them in a synthetic graphic form proved to be very promising. Apparently random chains of results showed in the diagrams started to establish regular forms. More advance presentations revealed existence previously mentioned attractors, being the special places of analyzed system – poles of energy circulating within it.

It results from the analyzes of the chaos theory economists that the global economic system is molded legally and mentally (consciousness, habits) in such a way that all surpluses of money worked by people flow INEVITABLY to the attractors. In the calculations, as the basis for costs, the amount of money satisfying life standards in a given societies are accepted, including savings. The economists warn that these surpluses are greater and greater each year, since the attractor takes his share from every work provided by people as long as it is paid for with convertible currency. (There are more and more people in the world and they use more and more advanced machines - hence surplus rising.)

The conditions for the attractors to develop is continuous inflow of greater and greater money. So more and more big streams of money flow to such places and these streams should not weaken since every decrease in the flow means the vision of unemployment and growing fear of big groups in society worldwide. World economic law we, as Poland, are scrupulously and with difficulties try to adopt to has been molded during history of capitalism in such a way that the stream of money flowing to the attractor cannot be stopped while applying instruments of this law. The world class economists have been talking about it for several years. It is well know that close to the attractors the economy is “overheated” what means that money flow is too fast there as for the adaptive capabilities of a man what brings physical and emotional damages while far away from the attractors the poverty reigns, wars and conflicts explode.

It results from many measurements that present, very high pace of civilization changes is damaging to all inhabitants of Earth, both these rich and poor ones and to the planet itself and its biological life. But despite many effort undertaken this process cannot be slowed. The expression of no control over it are destruction of numerous fragments of the environment of our planet impossible to reconstruct, increase of number of crimes and civilization diseases, current wars or rising nationalisms and xenophobia.

The money current running with higher and higher speed is a threat to the whole globe since to meet requirements of the global market feeding the attractors people have to produce

more and more of useless things. And more and more often they have to throw these things away.

Such is the strategy of actually impersonal attractor and although its force is represented by real people, owners of enterprises, making particular decisions, the real subject here is a collective consciousness of the citizens of the whole world, expressing in legal systems of all countries connected into the global village. In today construction of world economics the most important objective of all efforts is to FEED THE ATTRACTOR.

A conclusion is even a fact that it is not individual people but world legal and economic system that becomes a subject of the economic game before our very eyes. It is dangerous both for the rich, who cannot control the growth of money stream that floods them and for the poor, including Poland, from where more and more money will be flowing away to the attractors each year.

In rich countries having for their disposal most modern technologies people not only do not work less than before but they also have to spend much of their time for learning after work to meet the requirements imposed by currently effective work ethos and particularly by continuously increasing level of work organization. Work, qualification improvement and necessary rest fill almost whole life of average Japanese or American. So, where is the place in such model to consume with advantage material and cultural products produced in excess? A harsh irony of this question is reflected by development of entertainment branch, particularly television, which offers hundreds of interesting programs to the global village. The effect of clash between busy man and such a abundant offer is zapping, nervous switching from one program to another. In such a way the viewer consumes everything and nothing – none of authors' transmissions is received completely.

In such conditions natural doubts arise in the citizens of rich countries regarding sense of intensive work. Since the machines are so effective and we are so fantastically organized and rich why do we work so much? – people leaving there wonder more and more often. It results from comparisons that five hundred years ago, when technology was scarce, simple villeins used to work much less than contemporary Japanese or German. Who is this today's rush and overproduction for? Does it mean that hopes of many generations put in technologies, hopes for freedom, equality and brotherhood were ruined and we are left with mad, civilization rush to unstoppable progress?

What is interesting and apparently paradox like – it results from scientific models analysis that most of elaborated energy is given to the attractors by those who live close to them, in the richest countries of the world. Their work in well organized enterprises is effective. These people earn much but their produce much more. The difference flows to the attractors. It is difficult to see it with a critic eye if one is inside the system since “feeding” attractors is performed by most accepted social behaviors in rich countries: scrupulous work and high consumption.

Someone, who earns well seldom considers the issue of equivalency in payment for work delivered. Only a few consider, either, how much the goods he purchases are worth. However, people notice somehow that their prices do not ever drop despite mad progress in technologies. It is explained with quality improvement and inflation. Whereas also here hard figures give much to think about. World economists estimate that transportation of goods for long distances and connected with it necessities to conserve, pack them and multiply levels of distributions (as they are to be transported for such great distances) takes very often over half of their values.

From the point of view of healthy, human logic, transportation of, let us say, apples from Holland to Poland is a nonsense. However, this issue looks completely different from the point of view of the attractors. It is a perspective of maximizing work effort, so if only people can be encouraged to buy Dutch apples, a company transporting the apples will have their job, together with gas filling stations, duty clearance officers and many other business entities. And finally for the money earned someone will buy something this or another way.

Let us notice, that the attractor gets richer from it but people and environment get poorer. People loose their money on work that has no social sense while the environment degrades due to robbing world economy with energy resources.

A special commodity, occupying more and more space in world commercial exchange, a commodity that does not spoil, weights nothing and is easy and cheap to transport with today technology is information. It is a perfect commodity from the point of view of the attractor. The instrument to sell it - is a copyright and patent right, which is treated by all creators as a most important devotional article. Who among from a few Polish creators making his or her living from copyright used abroad concerns how the balance of copyright in the scale of the country or world looks like? Meanwhile, copyright at the time of globalization is one of the most powerful tools of the attractor since a thought becomes a commodity in continuously increasing extent. Let us take the software market. It is almost pure information.

No one speaks openly about the issue that the trade of copyright is of a great disadvantage for Polish commercial balance. On the other hand it is widely discussed on the issue of extending the periods of copyright protection and on expanding the scope of their applications. The paradox is in this that every legal act getting us closer to the world standards in this field is of great disadvantage in economic sense. Additionally, future views are even worse since most of laboratories and research centers are located close to the attractors. To get access to knowledge that is born therein, since it is there where most of money on research circulate we will have to spend more and more of our gross product on trademarks, copyrights, patents, registered marks and on licenses. In this area the deficit of commercial balance will be bigger and bigger each year.

Beside the above mentioned ones there are also – hidden before balancing view of the macro-economist – money transfers to cover copyrights, hidden within patented parts of imported machines, in patented chemical substances that are constituents of washing powders, medicines, food or cosmetics, in modern production formulas, enabling tender winning – virtually in everything that we may even think of. Even in Polish cow milk since the bucket and hands are also washed with some specific containing patented chemical formulas. Some portion from sale of soap goes then to the pocket of a chemist, who has invented it.

Most of this money leaves our country.

Polish copyright law is better and better in guarding our increasing negative commercial balance. Under pressure of world leaders in software and audio recording production there have been lobbying organizations established that are equipped in inspection powers and that are protect money inflow from copyrights much more effectively than before. After great campaigns of public relations type that took place in Poland against computer software piracy, after amendments to copyright law and announcements to expand it to new areas we can safely assume that we are closing to world standard in this regard. But do our Members of Parliament possess full, depicted with figures consciousness that balanced stream of money leaving our country for this reason will be even greater in future?

Disorientated with rapid changes people feel that something goes wrong with overall energetic balance of a working man. This “something” emerges from a question asked more and more often – what sense, except for earning money, has our own work for us. Is civilization development based solely on a profit criterion? And if so there is another

important issue emerging: who controls these sky-high profits flowing into the attractors, profits that are elaborated by the whole world, and what is the priority of these operations? Space flights? It is too little for everyday troubles with jobs and unemployment of billions of people. Starving people would surely prefer to leave space flights for future.

Similar questions bother heads of not only employees but also of owners of great properties that were established due to activity of attractors. They, however, despite their billion worth incomes, do not feel to be the subjects of the world wide economic game that brought them at the top of wealth. They depend on existing legal structure that is profit and safe conditions to multiply it oriented and it is difficult to image them leaving this structure even for a while. In this structure there is no mechanism allowing people to leave it since it is impossible to keep billions of dollars in a sock. They, dollars, despite the will of their owners, will continue to circulate in bank and stock exchange circulations and the only thing that may happen to them is – completely unimportant for the system functioning – change of their owner. The rich are only the puppets in this process that may be called “global consciousness of money”. Their individual philosophies of life are completely unimportant to the course of world economic processes.

For the inhabitants of the global village existence of attractors means continuously growing outflow of elaborated resources. The outflow takes place through attractive (notice how it fits the idea of “attractor”) commodities and services. To make this outflow steady and increasing, it is necessary to stimulate it with advertisements and more and more sophisticated marketing techniques that result in creating demand for only buying itself. In many environments visiting elegant shops or hyper-markets became similar to visiting places of some ultimate culture. Through media the “ritual” of buying became a principal element of our life.

Money outflow into the direction of attractors cannot be counteracted with any local actions, e.g. our action “Now Poland”. The strength of attractiveness of foreign commodities is so big that it will soak in any additional profits of citizens who will get richer on this action – Polish manufacturers and salesmen selling Polish commodities will finally spend these profits on luxury goods of foreign origin – someone will buy a house from materials coming from abroad, someone else will buy better and finally not Polish car and yet someone else will spend the last Zloty of change on the box of imported chewing gum.

The attractors are continuously fed with every purchase-sale act in which convertible currency participates. I emphasize here “convertible” since it is the condition for global

attractors to operate. And at the same time it is their Achilles heel. I shall return to it further in the second part of the article. It will be dedicated to “virtual money” that without violating economic treaties and returning back from the way to Europe may completely change economic situation that we, Poland, found ourselves as a country.

Part two: VIRTUAL MONEY

The world tends towards multitude of currencies.

Alvin Toffler (*GW interview*)

All of us depend on electricity supply; if it is stopped the whole economy is paralyzed. Presently the world starts to fall into similar dependency from telecommunication. Internet mail thanks to its great convenience of use and wide application wins more and more users. Soon it will be difficult for a man to explain to his or her friends why he or she has no e-mail account. Because of its expectations regarding soon widespread of Internet to the extent the electric current is widespread today seem to be convincing. The Internet without telephone cables or fiber wires since in nearest future it will be probably linked with its users via direct satellite connections.

Such direction of technology development is the expression of one of basic human dreams, namely the dream of complete and safe communication with other people. The Internet fulfills this dream but only from technical side. Humanity, wishing to communicate cheaply, effectively and safely faces equally difficult task as building global internet network – it is adjusting mentality to these changes.

To make use of this huge communication potential of the world with benefit for humanity it is necessary to defeat fears making communication processes difficult, fears that are the expression of lack of acceptance of human kind for consciousness alterations that reduce its potential but are required by present money market. This fear intensifies since increasing – thanks to technical inventions – human ability to widespread communication faces more and more powerfully contradictions with economic practice of everyday life, shutting people in the castles of their egoism and their own, secret affairs. The cult of competition being the feature of present monetary system is actually a cult of making people close themselves before the world. It is difficult to agree it with global cooperation that thanks to Internet – being a window for the world – becomes real as neverbefore.

Along with development of Internet and individual creativity presented through it more and more strange seem to be all legal constructions that make spreading anything difficult. Through Internet one can present his creations to the world public by himself and directly, without a need to go through preliminary market selection. Internet provides also serious effectiveness in interdisciplinary scientific research provided the scientists are not bound in information exchange with the claws of patents and official secrets, that serve financial businesses.

Sharing one's knowledge and art is a crowning of creative processes and the cost of knowledge replication or artistic creation copying is almost none in the age of Internet.

Information is multiplied without losses.

While sharing knowledge goods one does not less of them than before.

These are more and more common opinions among people making use of modern technique.

The philosophy of copyright and patents law that are effective stands in contrary to this conclusion. The axiom of this philosophy is profit, since only in this way the riches countries of the world may defend against returning wave of exported money not covered with commodities and banks against returning wave of granted credits without coverage in deposits.

The way to multiply profit is commerce; for whole centuries of molding capitalistic system it was connected solely with material goods or services turnover. For several years of molding current system information used to be a free of charge element of supplied goods or provided services and it was not existing as itself as a commodity ready to be traded. After years of development of technology, however, the time has come for it to be self sufficient and hence the information became a commodity in itself and the virtue to turn into the commodity are copyright and patent rights. With time flow it proves that they are a big obstacle in free circulation of thoughts. Particularly in the age of Internet, against logic and comfort of artists, scientists and inventors, for who important is possibly wide reception of their ideas and works – this right separates creators from their audience (with potential students or imitators including). The result of such separation are both fears of the authors against theft of their works and ideas together with fear against unintentional violation of personal rights of other authors.

“Full nelson” of fear around Polish artists is closing with increasing strength by the virtue of foreign, commercial agencies, specialized in limiting spheres not covered with patents, protective laws and know-how payments. In the years of 1990–97 these agencies furnished in Poland 10-times more patents and inventions than the poles did themselves and they started to achieve serious incomes that in 1995-97 increased by ten times to PLN 416 million. It is one of tributaries of a river of money flowing to the attractors. Part of this money will probably be used to patent in Poland further foreign inventions.

The source of fear of not only the artists and scientists but all of the people if the sense of fragility and provisional character of current legal-financial construction of the world, since global economic alternatives are not yet improved and they only emerge from the space of common consciousness while at the same time the only widely applied construction of world money does not stand the trial of time yet now and more and more clear it is noticed as civilization threat and an obstacle on the way to balanced development and economical management of world energy resources.

As we tried to prove in the first part of the article, lack of money on the labor market for which people that are willing and able to deliver this work for may be employed is a result of outflow of wealth elaborated by people to attractors what in consequence is a result of current concept of money, law and trade customs.

Only a small portion of wealth lost to the attractors return to the places it was produced – most often in a form of aid of little effectiveness, provided by foreign funds and foundations established for this end. This a proverbial handkerchief to soak our tears after the wealth that flowed out.

Lack of such wealth, expressing itself in scarcity of money on local market makes that competition for access to a few capitals that remained there – passing the crater of the attractor – is joined by whole local population. Among people, even among the whole nations, competitive attitudes, aggression strengthen. Natural interpersonal bonds are broken. Gentleness of habits and coexistence culture disappear. Pathology intensifies.

In the context of the whole world single country is a local one and this is what Polish politicians should remember about particularly when trade deficit of Poland for a longer time is maintained at the level of US\$ 1 billion per month. This is the measure for the power of attractiveness of attractors. It falls as much as PLN 270 per month for single employed Pole, including the gray zone. This amount constitutes about 15% of budget of the Poles and if

instead for commodities produced abroad, it was spent on little less or even not less attractive commodities of Polish origin, we will have two principle problems solved in Poland: problem of unemployment and the problem of foreign debt. It is easy to say but how to do it?

It seems that people would manage with this task if they realize the economic mechanism of “creation of poverty” and find the way of conscious participation in passing it – by creating demand for local production. One has to realize, however, that encompassing the mechanism of the attractor with rational mind is not sufficient to stop outflow of wealth. National wealth, created within the system of convertible money, must leak and we cannot do anything about it. Poland, as the country, can only try to be “attractive”, to decrease in this way continuous outflow of money leaving our country (and this is the direction Polish economic policy goes to). If we succeed, the price of this operation will be paid by areas of the world exploited by us.

Convertibility of currency opens the economy of every market to the capitalistic priority of limiting costs of production, without taking into account social or ecological costs of this process. It is estimated, for example, that costs of exploitation of nuclear plants are lowered twice due to not taking into consideration long term costs of neutralization of wastes. It is an example of not taking into consideration ecological costs of energy production. In such, dominated with the category of profit, conditions, manufacturers making use of mechanisms of the attractor – making use of more expensive advertising and a product better studied in research centers along with the way of distributing it – win without a problem a battle for customer on any “newly capitalism converted” market, like Poland. This is them who feel as the hosts of the economic stage and they give enlightened advice to newly accepted members to various groups since in their places, in their economies, oiled with money attracted by the attractors matters go quite well.

Setting free from the system of attractors, except the awareness of their existence, requires something more and a last years discovery is a growing in rich countries conviction that this “something” is alternative money, that give the opportunity to pass traps elaborated through centuries capitalism learned to get customers into. Whereas alternative money combined with Internet is a completely new quality in the world economy – it is a chance to tame an insatiable demon of global market by its own children – independent markets of virtual money.

Until lately, i.e. by the time computer arrived in masses, alternative money used to function in a few countries on the grounds of experiments more or less tolerated by the State. Usually in

places where the State allowed for their circulation, they evolved with great success, bringing soon spectacular, economic effects.

The example of success alternative currency is Wära, money introduced experimentally to circulation in 1919, money that circulated extremely intensively in Germany at the time of crisis. Wära was banned in 1931 when their popularity started to grow alarmingly.

Also Austrian system of Shillings was accepted with success; it was introduced to local circulation by the Mayor of Wörgl city in 1932. City Shillings of the Mayor circulated with their speed double as high as national Schillings and the profitability of the city of Wörgl grew rapidly during 13 months of the experiment, providing construction of roads, sewage system, collector and skiing resort at that time. When other Austrian cities expressed their interest in implementation of similar systems, central bank forbidden the Mayor doing any further experiments. Also serious popularity gained in the 30's among Americans the system of stamp money, banned in 1933 by President Roosevelt.

With much more gentleness Swiss system of alternative WIR money was treated; it was established in 1934 and it still exists. This system makes turnover amounting US\$ two billion annually (Swiss Francs 2,52 billion in 1993) among its 60 thousand of customers-members. Is it from the will to keep alive this and similar experiments Switzerland has not yet joined European Union?

Today concept of alternative money started to mold at the beginning of the 80's, like an answer to release of technology of electronic chips from the view of the army and huge calculation centers. Thanks to personal computers it became possible to overcome the biggest problems in creating parallel to official and trustworthy monetary systems – efficient and cheap way of turnover registration.

In 1983 Michael Linton, a Canadian from Comox Valley encountered a good idea to create independent market with alternative money. It was then when the world first LETS (Local Exchange & Trading System) system was established; it was a local system of commodity and services exchange, based upon money created with the orders of inhabitants; the money existed in a form of locally maintained registers. As the rule it was accepted that LETS are inconvertible into any other money and not subjected to interest rates.

Success of LETS system from Comox Valley, namely rapid intensification of profitability in the whole region suffering mass unemployment gave the assumption to copy this sample into

other populations. Introduction of virtual money made people suddenly aware that a person creating added value is a customer ordering a service or buying a commodity since good order price will attract any number of manufacturers or service providers, ready to perform.

Bravery to place orders and to create work of a person who performs such an order is primarily connected with the consciousness of state of account and fears of getting down below the line. In LET S systems new coming members receive a virtual credit card in a form of a credit of social trust and they can immediately start to create added value through placing orders for products and services available within the system. In effect of an order creating someone's work, there is a liability to perform a work at the side of the ordering person. These liabilities unite people since they can be repaid only on the local market.

LETS model has been copied since the time it was developed in hundreds of centers, mostly in wealthy countries of the world. Tested in various conditions, both urban and rural, it has one marvelous feature: it ensures locality of exchange and trade, and prevents against leaking of energy of working people from the area where they live and produce their commodities and services.

In the first LETS systems in the beginning of the 70's not all operations were possible to be carried in the memories of computers. The Achilles heel of that time systems was marketing information – it was to be printed in paper and sent to all members to make them notified.

In the age of widespread of Internet such disadvantage of alternative monetary systems disappears completely since up-to-date information on available commodities and services may be found by each member in virtual space of his or her own computer or cellular phone. In close future of magnetic cards operating alternative money routes, alternative money will be in 100% virtual – free from a burden of material carrier. Even today there are no technical obstacles against magnetic card reader to be located in every shop.

What does it mean in practice? Primarily, the possibility to DISCONNECT FROM the attractor on other markets, established in this way, that are emerging in surprising speed worldwide. Two private, electronic clearing houses started in Japan to operate lately records of special currency, known as Hureai Kippu, possession of which provides access to medical services. The market of Hureai Kippu, based upon American time-money concept, coexists with benefits for the Japanese with the market of Yen, providing services of higher standard, while benefits from existence of this new currency are felt in their majority by elder persons,

who receive their money transfers from their children living in other parties of the country in Hureai Kippu.

The mark of this tendency is also the policy of Japanese government towards Eco-currencies. Japanese Ministry of Foreign Trade and Industry (MITI) announced recently that future strategy of Japan development would be based upon specialized, regional markets, making use of own Eco-currencies. Four piloting systems of this type were tested in previous years and the results of the tests were so promising that in 1999 another forty eco-currency systems were established. Support to undertakings of such type is provided by biggest Japanese enterprises like NTT and Oracle Japan.

From news incoming from different directions of the world it results that free information overcomes all limitations. Although impossible to be seen with a naked eye a wall of regulations behind which an attractor hides is more difficult to overcome than the Berlin Wall, it systematically breaks in quiet atmosphere of home studies, accompanied by computer sounds.

Global transformation of the wall into the lack of wall is very close and economists and forecasters start to be aware of. The tool of this transformation is actually the virtual space suspended over our heads that is common consciousness of all the people.

In this space there is place not only for reliable information on products and services that people may provide to each other but also place for registration of all transactions that people make. In such conditions the level of identification of people taking part in such transaction is only a matter of accepted agreement.

In most system of virtual money, existing worldwide, openness of economic life of their members covers balance and total sum of turnover – individual transactions are confidential. It seems that it is just the beginning of the openness of economic life of people worldwide and that local systems of virtual money are just the introduction serving to elaborate more convenient to a man, and at the same time to nature, systems of exchange of goods, services and knowledge.

Along with widening of locality scale and construction of thematic or region or the whole country range virtual systems - the scale of openness of economic life of their members will have to increase. The money will stop to be anonymous and hence it will be impossible to steal it or speculate with it. What good will it do a thief from stealing someone's account

statement or a speculator from having resources for which goods and services can be bought only by a specific person.

Virtual markets, being actually electronic clearing houses, are with no doubt the future of global world. Such level of democracy ensures the citizens of global village freedom of choice of place of origin of purchased good or service or possibility to select alternative selling markets for work performed by them. Through a decision of market selection one may also consciously and directly, with everyday purchases, express his or her own political sympathies and give support to preferred funds.

Virtual money make a revolution also in the world of marketing and advertising. The sense of huge campaigns disappears when the important criterion of commodity selection for people becomes local origin of the commodity or participation of its producer in public undertaking supported by the purchaser.

Modern marketing formula based upon alternative money consist in advertising agencies collecting funds on objectives accepted by principals. The carrier of the advertisement most often is money circulating around. The model of such formula is ROMA system elaborated in Ireland; it was tested in 1999 in Irish town of Balluhaunis, or American SHARE systems, that facilitate start of many socially supported initiatives.

Transformation of monetary system is inevitable and for some time, thanks to new technologies, finally possible. Such inevitability is a result of great waste of energy that takes place in a world ruled with the principles of capitalism. People work more and more since it costs them more and more to upkeep what they already have. Members of most wealthy societies are forced to exceptionally effective work with credits that they must repay regularly. Liabilities taken towards creditors are like iron balls chained to one's leg – carried often throughout one's life, in great psychological discomfort. On the global market of attractors the burdens and loads are greater from year to year, constituting increasing price of being wealthy.

Not only single people know about it but also whole nations possess such knowledge. Great overhang of burdens resulting from repayment of credits prisons in mind clinch the whole American nation and many wealthy societies. Relation of granted credits to deposited savings in many richest countries oscillates around the proportion of 20:1 what means that bank reserves are finished when 5% of their customers come to withdraw their money.

The vision of crash ruining elaborated pensions and dividends is probable and it is even quite real – particularly when facing the process of widespreading simple methods serving separation from dollar circulations; members of the establishment of the riches countries are begin to be aware of it with increasing uneasiness; they are the ones who have the most to loose. As it was perfectly expressed in a “Fate” poem by Polish poet Cyprian K. Norwid, the world is luckily made in such a manner that it gives occasionally the chance “to face the bad luck”. This occasion comes now as Internet gives the chance to face the bad luck of capitalistic money system.

Despite widely distributed myth that in the American model human dream came true about the perfect system that has just been fulfilled there, many economists believe that continuous keeping this system in full readiness is the greatest threat to humanity.

This system is aimed on progress and production getting cheaper, on export of its own money abroad and on selling for highest price possible this copying of what costs almost nothing – i.e. knowledge. The price of copying this system is paid by biological environment of the planet – including man as a creature – exploited more than it is necessary or needed.

Virtual money is the way to “avoid suffering” and there is no intent here to point out disadvantages of any systems. Poles are already in great extent full rights citizens of “global village” and we will not bite our hand off. Inevitable progress of techniques will result however, that soon the Poles will start to participate in local, regional or specialist (for example: animals rights protectors or a group acting against commodities from some particular region) systems of exchange of commodities and services, settled with aid of virtual money. In other words, we will soon be able to select currencies and markets we earn and spend money on.

Specialists claim that there will be several currencies present on markets at one time. Plastic magnetic card can manage them all at one time in identical way it manages single now. It will simply contain parallel access to the registry of several currencies and the customer, through specialized clearing houses will finally have the opportunity to create added value where he wishes, through supporting the currency (and hence societies) that serves best the objectives and ideas supported by him or her. In this way through everyday shopping people will have real influence on politics.

In alternative economic models covering the whole world there is a concept drawn to connect world currency with energy production limits appointed to individual countries in regard to

energy from non-renewable resources. These limits would be distributed among individual countries proportionally to agreed population limits. Areas that would save energy, maintain balanced development, would be able to sell it to highly industrialized areas, that consume much energy, getting resources for balanced development with smaller turnover.

These concepts seem to be dreams regarding the only one, global market, but when there are many markets, similarly to today television programs, and choice of the market one wants to belong to will depend on a consumer who would finally become a real subject in political game – political powers system in the world could be dramatically changed and global decisions that seem to be dreams now will be of completely different character. It is though belonging to this or another sale network one will be able to choose political options. The election will be held everyday – in virtual world of shopping.

No revenue Office will be able to stop virtual settlement of accounts since it is the right of Internet users to exchange information on every subject, also regarding liabilities taken towards each other. Virtual money is the way to realize a vision of balanced world through utilization of world telecommunication network that knows no boundaries, duties or habitual barriers and that develops so dynamically since people, particularly the young and very young ones feel and understand more and more that this space offers possibilities that have existed never before. These are unlimited possibilities of experience exchange, cooperation and collective, exceptionally effective thinking.

It is thanks to this way of thinking and cooperation many people from different parts of the world the new paradigm is created, also in economy, taking into account collective consciousness of Internet and knowledge of greater and greater masses of people on being a part of it. The challenge perfectly suiting the beginning of new century and new era.

Krzysztof Lewandowski