

Logistic barter features as a new concept of supply chain management

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Abstract

A huge role in current economy is played by those who do not have any relation to a real productive activity. Speculation shows its results now. The world economy undergoes a great stress during several years. This problem may be corrected by barter relationships between producers and an integrated logistics, that is, the logistics barter. The logistic barter theory (barter logistics) does not give up money, but ignores it between manufacturers. Logistics and has reached and continues to reach such heights, when the need for such "universal equivalent as goods" between the manufacturers simply disappears. New LBP-providers are considered, who are not the serving members of the economy. They act as operators of other economic system where there is no place for money and banks between producers. At the moment, the upper limit of supply chain management are 5PL providers, but the

logistic barter needs 6, 7 ... PL providers, or they need to be called LBP providers (logistic barter providers) because it has to be a completely different, predominant view of logistic and logistic barter role in new economy. Logistics barter is a web, a spider - the LBP provider. Logistic barter operators (providers) must meet not only the requirements of logistics barter between manufacturers, but also respond to the new challenges of supply chains. LBP-provider may exceed the capacities of barter logistics standard requirements, because an operator is engaged not only in the replacement of monetary relations, but works in the field of supply chain improvement.

We must understand that a new economy theory based on logistic barter requires a developed infrastructure, i.e., a super system of supply chain management based on LBP providers.

Logistics is developing, and the possibilities of supply chain management may be completely different. In terms of prospects logistic barter may play its role in economy.

Keywords: logistic barter, principle, LBP-provider, indifference ratio, indifference threshold, added value

Introduction

An effective vision has several key distinguishing characteristics. Thus, it should not be a static, but an evolutionary one. The system of values that it represents, must have both implicit and explicit components. It can never be achieved completely, that is, there are always some areas of tension between implemented things and the things which can be achieved. And most importantly, it has a high energy, clearly formulated, consistent, inspire energy and provides inspiration [1].

A financial market feature is a speculative activity, expressed in desire to obtain quick profits only on the difference of product price fluctuations. The persistent objects of speculative market are currency, securities, exported and imported goods, real estate, etc.

Speculative activity covers all segments of the financial market (stock market, credit market, currency market), which forms a threat for a balanced economic development of society [2].

The growth reduction factors of the Russian financial market speculative component shall be presented by monetary policy through the purposeful actions of the Bank of Russia:

- At foreign exchange market - the mitigation policy concerning the ruble value volatility of bi-currency basket;

- At credit market - the policy of financial multiplication regulation in commercial banks (by increasing or decreasing reserve standards and refinancing rates;

- At stock market - the member discipline policy by standard acts [2].

But all this is impossible, since "the market as the most efficient form of management creates the best conditions for economic growth and defend the priority of economic subject freedom. A state should provide the conditions for competition and perform monitoring where these conditions are absent" [3]. The contradiction takes place here: on the one hand, a state which manages poorly market weakly, on the other hand, the conditions must be provided in the poor "areas" of economy. There is only one conclusion: a stock market in the basis is "not right" and it is not needed at the logistic barter.

Supply chain management concept was developed on the basis of logistic business process integration. Now the focus in a content interpretation of this concept is increasingly moved towards the expansion of Supply Chain Management understanding as a new business concept. Supply Chain Management is a natural continuation and the development of integrated logistics concept in terms of cross-functional and inter-organizational logistic coordination [4]. Consequently, there are no restrictions in development, including logistics as a science. Maybe it's time to break down the existing ideas of money value, the importance of banks, the domination of financiers over manufacturers But everything has its time, a pawn can also become a king over time.

The economic reality is very complex, contradictory and changeable, and economics is not entitled to an absolutely accurate, adequate reflection of real processes and trends.

In current economy a huge role is played by those who do not have any relation to a real productive activity. These are stock exchanges, debt markets, banks, etc. This speculation shows its results now. The world economy is in a severe crisis for several years. This problem can be corrected by barter relationships between producers, i.e. by barter logistics.

Logistics barter involves the negation of monetary relations between producers, therefore, the role of banks in a new system is reduced dramatically. The justice, which mankind tries to reach for centuries, is restored and a producer's domination is achieved. Society and technologies become more prepared for the introduction of this concept, and the possibilities of such implementation increase each day [5].

Will banks agree with such a concept? No, because a huge layer of artificially created banking activities will sink in oblivion. These activities appeared with the appearance of product analog (general equivalent) - money.

Methods

Logistics barter (barter logistics) is a natural exchange of goods between manufacturers, at which one thing is changed to another one without a cash payment, based on a globally integrated business processes [6].

Why do we need to complicate the process of exchange by necessary material resources and services? Payment process can be replaced by information exchange process! It is real in the age of high technologies and Internet! Yes, there is an issue of tax legislation. But this problem can be solved. The issue of a tax base appears. It also can be solved, because no one cancels the laws of supply and demand, and the price will be formed by an end customer, i.e. a household.

Money should only among final consumers (households) and the end consumers may go to a bank if necessary.

Banks will work with "households". The basic principle (the law) of the logistic barter is that an end enterprise, the money for the goods received by a

company from a household, will be given via the supply chain to the employees and the companies of all categories in accordance with the value-added share [6], i.e. no one is going to cancel capitalism.

If we analyze the US and Russian exports, we can see that the United States export mainly only the products with a high added value (feature films, products in the field of show business, branded clothing, etc.), and Russia exports the goods with low added value - raw materials. Hence, the developed economies will have the greatest profit from the introductions of logistic barter to an economy. This was expected. The introduction of logistic barter should have an appropriate overall developed structure of economy and society. There is a lot of development trends for others.

Let's invent a time machine. After that, go to the end of the 1980-s, kidnap one of their supply chain managers, and take him back to our time. The part of things which the manager will see in the current supply chain, will be completely new for him: public and private market spaces with a web basis, the providers of logistic services at 3PL and 4PL level and the joint planning and forecasting. New ideas, backed up by new technologies, led to the emergence of some new business methods, totally different from the previous ones [6].

In recent years, the focus of many operations in the supply chain changed. Earlier the managers of supply chains were confined to domestic tasks. Now they pay a lot of attention to the external communication links, joining their organization to other parts of supply chains. The providers of 3PL and 4PL category, joint planning, e - the procurement and other developments led to the expansion of the traditional supply chain, which became possible largely due to new advances in technologies. Within the unprecedented scale the supply chain management today is aimed at the creation of relationships with other structures, the understanding of these relationship nature and their optimization [5]. At the moment, the upper limit of supply chain management are 5PL providers, but the logistic barter needs 6, 7 ... 10 PL providers, or they need to be called 1LBP, 2LBP ... providers (logistic barter provider) because it has to be a completely different, a dominant representation of logistic role and

logistic barter in new economy. Logistics barter - a web, a spider, LBP provider. Will it be a "monster" created by us? There is some probability, but there are the laws of different countries concerning anti-monopoly regulation.

4PL-provider - the system integrator of supply chain [7].

5PL-provider - a "virtual" operator using global information technology space [4].

LBP-provider - a system integrator of global business processes to an end user based on the natural exchange of goods between producers [9].

We anticipate the progress of logistic operators and logistic barter capabilities (LBP provider) in the future (Figure 1).

indifference coefficient (@) is the ratio of development level and logistic operator (provider) opportunities to a reference state (requirement) of a logistic barter [9].

$$@ = \varphi (I) / \psi (J)$$

where $\varphi (I)$ is the level of total logistic operator (logistics) possibilities, not only according to the possibility of monetary relations replacement between producers by barter (it is the similar to a full age for 18 years and for 45 years - the same level of responsibility, but the experience and the skills are different);

$\psi (J)$ – the reference condition (requirement) of a logistic barter.

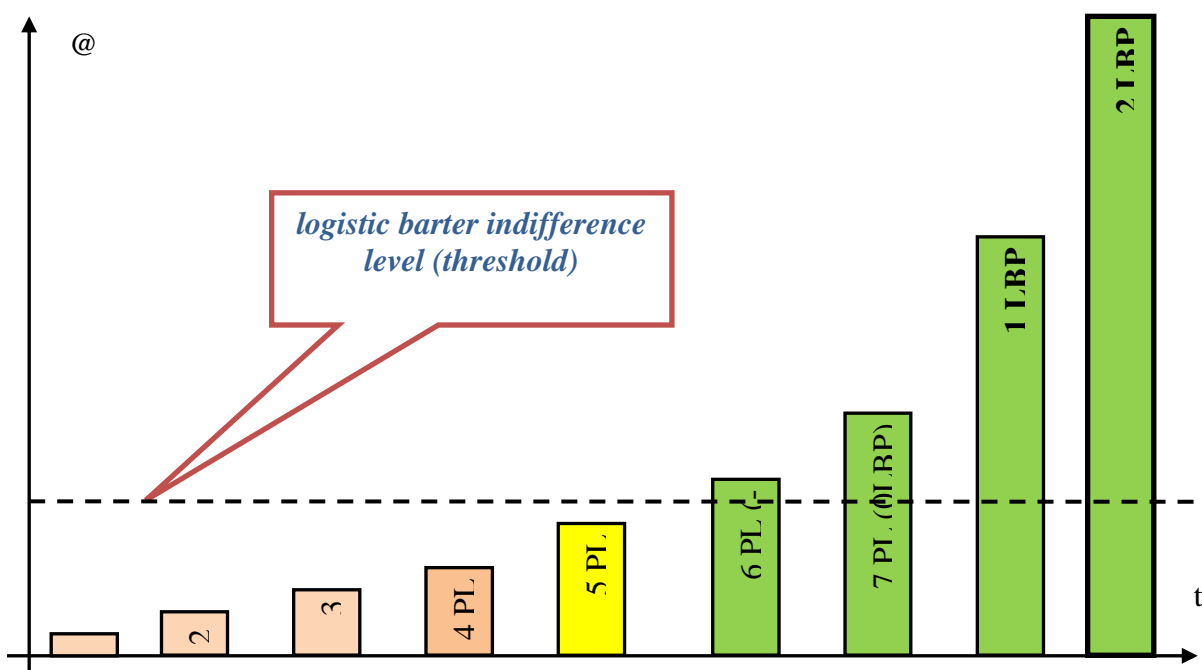


Figure 1. Logistic barter indifference level (threshold)

The ratio can be more than one, and this suggests that logistic barter operators must meet not only the logistic barter requirements between manufacturers within development, but also to respond to new challenges of supply chains. LBP provider may exceed the capacities of a standard barter logistic requirement, because an operator is engaged not only in the replacement of monetary relations, but works in general on the supply chain improvement.

The level (threshold) of logistic barter indifference is the level of logistic barter requirements in which a provider may replace all (remaining) financial-credit relations between producers by barter [9].

Undoubtedly, an LBP-provider is unimaginable without advanced IT technologies. A magnificent progress of digital technology development allows you to think of an LBP-provider creation possibility in the near future. It should be borne in mind that an LBP-provider is not a serving element of the economy. He is an operator of different economic system without money and the banks (money-lenders) between producers (b-2-b) [9].

In order to make a supply chain operate effectively, organizations need to understand the principles of market operation and the principles of customer (households) behavior influence on its dynamics. Having analyzed the customer values for a company, a final organization of the supply chain will be able to formulate clear offers for customers based on their needs and thus provide consumers an expected price. This approach enables a supply chain to offer a differentiated approach, which automatically reduces the likelihood of excess and insufficient customer service. The agreement with the market is reached [4].

There is the issue of pricing within a new system. The basis of pricing at a logistic barter (barter logistics) is added value.

Added value is mental and physical costs of staff (team) of an enterprise unit in a barter supply chain [8].

And where is an entrepreneurial ability? It is represented by an original set of mental and physical abilities.

In contrast to the prime cost of the added value rejects raw material cost, which nature provides. Why should we evaluate the things given by nature? It belongs to all humanity. Tell me simple if everything is shared. But who could have imagined at the beginning of the 90-s that everyone will have a smartphone with Internet, telephone, and a bunch of additional services?

Results. The essence, the base of logistic barter science (theory) is that natural resources are not subject to assessment. Education, intelligence, and development must reject the "division" of land pieces with natural resources and take human possibilities as the main wealth. According to this theory only supply chain management may fully appreciate the added value of each chain link.

We must understand that the theory of a new economy based on logistic barter requires a developed infrastructure, i.e., supply chain management supersystem based on LBP providers [9].

Banks will work with households. The graphic principle of logistic barter can be represented on Figure 2.3 [10].

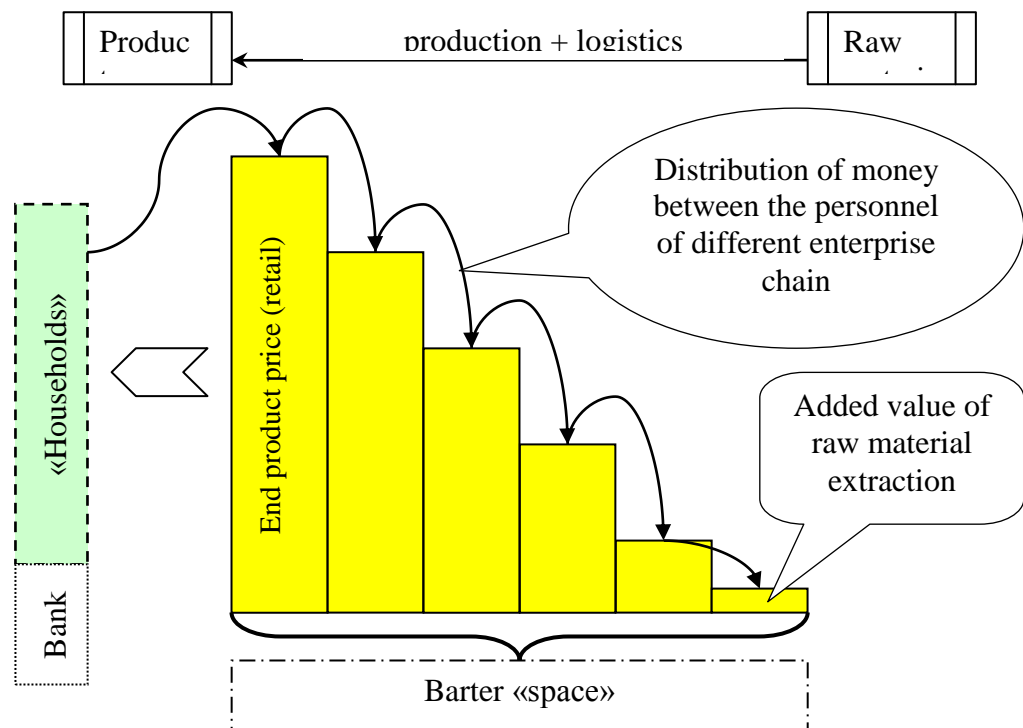


Figure 2. Logistic barter principle

Conclusions. Logistics is developing, and the possibility of supply chain management may be completely different. In terms of future prospects logistic barter

can play its role in the economy. If the logistic barter theory plays a role, it will play the main role.

Summary. Let us try to understand why money is not constant and replace each other over time: natural products - precious metals - paper money - "substitutes" for money (futures, options ...) - electronic money. What's next? You can trace the pattern - more modern money becomes cheaper to produce and now they have only information aspect. If money is only information, why the information about products, materials and components (means of production) can not also be informative between producers? It may be after all. That is, a mediator ("a loan shark") is not necessary during the barter logistics between manufacturers with the money! Then a logical question arises concerning the need of money for "households", i.e. for end consumers. That's where the money need is justified by the need to delay the consumption of all goods and the market economy stimulus in the form of demand for finished goods of consumption.

The benefit of logistic barter implementation will be "stunning". Maybe there is no perfect tool of logistic barter today and goods cannot be produced on request and delivered quickly. Therefore, the money is necessary as a temporary deferral tool. Yes, of course, a temporary tool in a man's century was long enough, but science does not know limits. It is developed, including logistic aspect.

The theory of logistic barter (barter logistics) does not give up the money, but ignores it between manufacturers. Logistics has reached up and reaches such heights, when the need for "universal equivalent goods" between the manufacturers simply disappears. An ideal option of money cancellation between producers and logistic barter implementation is "teleportation" technology or "teleportation" theory. Is it fantastic? Yes, it is!

May logistic barter (barter logistics) replace the monetary relations between producers? Yes it may over time. But everything has its time. In conclusion I would like to note that "the development of a unique vision is an extremely difficult task, but it must be solved necessarily and proper [11]".

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