The theoretical and methodological aspects of the resource and raw materials growth model

Zh S Zhangorazova, E S Bakkuev, M N Eneeva, A M Tramova and U M Talas

V M Kokov Kabardino-Balkarian State Agricultural University, 1 C, V I Lenin Ave., Nalchik, 360017, Russia

E-mail: r3bizengin@mail.ru

Abstract. Modern national economies are multilevel with many sectors, sub-sectors, sectors interconnected and competing. But the main thing in this kind of a pie is the value chain, which is a kind of industrial-economic-logistic communications, through which national economies interact both within themselves and without. But value chains have different lengths, and therefore bring different results. Until now, the discussion has been going on about what forms value chains, what is their nature, what mechanisms, and most importantly, is it possible to arbitrarily form value chains of any length and configuration? Practice shows that, firstly, even the most advanced national economies are not always able to form value chains of the desired length and configuration, and secondly, even if they somehow turn out to be created, they often scatter without bringing the desired result. Therefore, it is important for theorists to recognize not only the nature and character of economic (including production, logistics, etc.) value chains formation (with an appropriate set of issues related to their structure, internal mechanism, configuration, etc.), but also why they fall apart without creating the synergistic effect intended. The article suggests that there is "The resource predestination" imposed on the formation of value chains of a given configuration, length and marketability. To achieve this goal, the article combines two independent areas of economic research: the formation of value chains and the "resource curse/predestination".

1. Introduction

Modern national economies are multilevel and multifaceted both in industry, technology, and structural and institutional relations. [1-18] They are penetrated both vertically and horizontally by a multitude of production, technological, organizational, logistic communications and connections with access to neighboring (international) communications and communications. These communications create value chains of various lengths and configurations, determining, in fact, the effectiveness of national economies. It is believed, in this regard, that the longer and more diverse a country’s (national economy) value chain is, the more effective it is. [4, 6, 10, 12] At the same time, the formation of length and configuration of value chains is not a product of the authorities’ desire (states or national corporations and companies), but it is, apparently, an objective product, independent of the desires of non-economic agents. The formation of the value chain is based on certain principles and rules, which are as follows:

- the fewer resources the national economy has, the higher its ability to create value chains that are diverse in architecture and length is;
- the value of the value chains for the national economy is determined by the place (link) occupied by the national economy in the value chain, as well as its neighboring links;
- you can’t try to keep all the links of the value chain in your national economy; you need to make “reasonable / rational” diversification; the wider the cooperation of the national economy with advanced economies through value chains, the higher its level of development;
- it is necessary to consciously transfer some links in the value chain to developed, developing and backward national economies in order to unload (not burden) their national economy with unnecessary functions and costs; a strategy of rational egoism should be practiced;
- avoid becoming dependent on other economies through the place in the value chains.

In general, the value chains indicate the place of the national economy in the system of the world division of labor and the world economy. [12]

But there are some features in the technology of forming a value chain. The basic principles in the formation of value chains are the resource component or the resource context of the national economy. With a wide resource context, i.e. when the national economy has a sufficient volume and spectrum of resources, it forms an expanded spectrum of value chains, on the one hand, and is free to choose value chains, on the other hand. The opposite situation has to be observed in conditions of resource shortage. Moreover, if we take into account the place that the national economy occupies in the value chains, the problem of resource shortages and surpluses becomes relevant. From the position of the latter, the article studies the possibilities of developing the national economy from the point of view of resource abundance.

2. The theoretical and methodological basis of the study
The theoretical basis of this study is the work of well-known experts in the field of designing national value chains and national economies. Among modern authors, the most authoritative are: Alle [1], Tatsuno [18], Porter [12], Kaplinsky [6], Lindert [8] and others. The works of these authors constitute the theoretical basis of this study, with the help of which the statements made and hypotheses are verified. The methodological basis of this study consists of the provisions on the dependence of economic development on the resource basis, as well as the provision that there is no resource-free development. [14, 17, 24, 26] Therefore, any development, firstly, requires resources, and secondly, high-quality and diverse resources, and thirdly, a rational ratio of different types of resources, compactified into national chains values is necessary to make development efficient and competitive. The methodological basis is a systematic approach, as well as descriptive and analytical methods.

3. Results and discussions
The modern economy is based on certain principles that make up the basic principles of the functioning of economies. These include:

- the economy is based on the interaction of consumption and production, supply and demand. Demand is not identical to consumption, supply to production. There is a discrepancy of a qualitative nature between them;
- the relationship of supply and demand is the basic. The whole economy revolves around supply and demand. Therefore, increasing demand, you provide the economy with growth, reducing demand, create slowdown. It means that in order to achieve a certain level of growth, it is necessary to increase demand, and if growth is high, then demand should be decreased. Demand is consumption. But consumption and demand are not identical. Consumption is not equal to demand, and demand is not identical to consumption.

Another pair of relationships is the relationship between production and supply. Not every production represents supply, and not every supply represents production. There is a so-called dialectical connection between them when one defines the other, but when one is not identical to the other.
The relationship between supply and demand is even more interesting. They are interconnected, but not identical. Moreover, they have different mechanisms of interconnection. But the whole system of the economy is the interconnection of supply and demand. Therefore, to revitalize the economy, they “fit” demand to supply, and supply to demand. The whole set of existing instruments and mechanisms of both market and non-market nature is aimed at this. The most important task of the economic authorities is to bring supply to demand, and demand to supply. All the problems in the economy are created by the isolation of demand from supply, and supply from demand. Therefore, the task of economic authorities (economic policy) is to establish this correspondence.

And now, in accordance with the provisions made, we will express our views on individual situations that may arise in the economy and which are solved in one way or another.

It is believed that the dynamics of the economy is determined by the state of the volume and structure of demand. Demand is consumption in potency. [1, 14] Of course, depending on the structure of the economy and its level of development, the degree of correspondence (coincidence) of demand and consumption is different. The higher the level of commodity consumption and production, the higher the degree of compliance, the lower, the higher the level of non-compliance. Therefore, the desire to increase marketability is an incentive to increase the level of compliance of demand and consumption. This is achieved by the development of the division of labor and, as a whole, by the technical equipment of production and specialization. In other words, we are talking about the so-called commodification of consumption, reducing the level of natural consumption. When the identification of demand and consumption is achieved, then market principles begin to work in full and adequately. Under these conditions, demand is identified with consumption, and consumption, as is known, is identified with growth.

So, demand is identical to consumption, and consumption is the main resource of growth. Therefore, demand increase means growth support. Demand, as consumption, is the solvent need of consumer individuals. With the growth of the solvency of the population, the economy is growing, because there is an increase in consumption. With a decrease in the solvency of the population, there is a decline in economic growth, because there is a decrease in consumption. Therefore, the whole issue of growth is increasing the solvency of the population, i.e. so that the population (and the consumer as a whole) buys as many goods produced in the economy as possible. And here the foundations of economic policy and economic practice are laid. The point is, firstly, to ensure the identity of demand to consumption, and secondly, to stimulate demand growth.

The identity of demand to consumption means that every penny earned must be sent to the market and spent on the purchase of goods and services. Then, when money incomes are identical in their volume and structure to the consumption of goods, there is no need for the release of substitute goods or, in the terminology of Baudrier, [2] simulacra. But this does not always happen. The reason is the mismatch between consumption and demand, (demand and consumption). But at the same time, the basis of this discrepancy is not consumption and demand as such, but production and consumption. In conditions where consumption and production are individualized and identified, which is the case when the consumer and producer are the same person; the producer produces only what is consumed; therefore, production is an expression of consumption; commodity is objectified in production. Therefore, there is no need for the artificial or external identification of production and consumption. But when consumption is separated from production, when one produces and the other consumes, then a discrepancy or differences are formed (although only as yet potentially), which are amplified as a result of the development of professional specialization of producers. At a certain period of a product, more is produced than can be consumed. But at the same time, there will be less other product than is required by the consumer. These discrepancies widen as the specialization of manufacturers and the remoteness of consumers increase. Therefore, manufacturers create that many benefits in which the consumer can invest his available funds. Therefore, this is a marketing problem, i.e. if you have money, then the main question for manufacturers is how to “pull” it out of your pocket and make it work for production. Practice shows to what exotic products this direction brings; in a commodity economic society, where everything is a commodity, i.e. the subject of sale, the sale is subject to everything from
the so-called objects of life to life itself. Therefore, the further economic society develops, the more the list of items to be bought and sold will expand, which means that ... the more natural the response of Vispasian to his son will seem. Thus, we will deal with an increasingly expanding assortment of the product world.

The second problem is how to stimulate and maintain demand growth? In part, we have already answered this question - by expanding the marketability of consumption. But there are two fundamental directions. One, is associated with increasing the solvency of the population (its citizens) and consumers. But at the same time, it turns out to be maximum both in marketing and in technological terms. It is noted that with the growth of income, the growth of expenses occurs only to a certain level, after which the reverse process may occur or, at least, the expenses will not grow at the same rate as the income grows [9]. Domestic (domestic) consumers begin to switch their demand either to imports or to foreign markets. National production begins to suffer from this, because it does not receive the required monetary (demand) resources. (Such a situation was observed in the Russian (and generally post-Soviet) economy in the 90s; see [13, 21, 22] about this). National production is gradually starting to stagnate. How to achieve growth under these conditions?

We know that the growth is the main source of demand. But demand within the national market is falling, stagnating. It is necessary to stimulate domestic demand. The first option does not work, i.e. it works the other way around: the more you pay your workers (citizens), the less they spend on the consumption of national products. Therefore, there is another direction - export development. Export, in essence, is the consumption of an external consumer [8, 17]. But due to this, the national producer receives an incentive to develop. The latter happens in two ways. It can act as a direct stimulation of domestic demand; its expansion is both structural and large-scale. But it can act as a factor and condition an amortizing drop in domestic demand. Thus, export promotion is an important factor in ensuring the economic dynamics of the national economy and an important resource for its development. However, it is associated with the formation of the export segment in the national economy, which is the most important direction of stimulating the national economy in the context of stagnation of domestic demand and consumption. All developed countries resort to this resource - export; it seems that the formation of the export segment in the national economy is a kind of immanent feature of economic development. But at the same time, access to export is also a condition for overcoming the crisis of the national economy. Apparently, under the existing conditions for the Russian national economy, the formation of a developed export segment is a condition and a factor not only for ensuring growth (as in other developed industrial and post-industrial countries), but also a condition for its development. But it should be borne in mind that the export segment has long been formed in the national economy of Russia. Moreover, it operates in all sectors of the national economy. True, in the 90s, as a result of the breakdown of economic ties between the territories of the former USSR and the CMEA countries, many segments of the export sector collapsed. In particular, the machine-building, agroindustrial, and other sectors of finished industrial products were most affected. In the 2000s, as a result of the favorable global environment for liquid hydrocarbons (oil, gas) and primary commodities, the country recovered and began to actively develop its raw materials export, the income from which becomes the dominant article of budgetary replenishment, and the national economy itself takes on the character of a “raw materials appendage of developed industrial and post-industrial countries. ” A problem arose of the further development of the country and the state of its national economy.

For some time now, a stable idea has been formed in the research and project (strategic decision-making) communities: prospective development should be non-resource-based or that the raw material component in prospective development should be minimized or completely absent. This paradigm in different ways - from the so-called post-industrial society to the service one - now constitutes a kind of mainstream design of national economies. - In the domestic economic thought, the term “resource curse” was used actively (perhaps even more actively than in the foreign one), more often in a negative connotation. For example, [5, 11, 15, 19, 20, 23-27] and many others. Other competent criticism of this area of research among domestic researchers was presented in the work of V. Sadovskaya and V. Shmat [16]. But it appears when resources monopolize transnational (and even national) companies, i.e. when
the resources and their use do not belong to the people and even the population, but to a separate company. (By the way, this feature was recorded in the Constitution of the Russian Federation, where it is indicated that the subsoil belongs, including to private individuals, etc.). Therefore, companies receive profit and income, and losses (and primarily environmental damage) fall on the population of the territories. In this sense, in poverty, poverty, etc. not the resources and their excess are to blame, but the form of ownership of the resources. European countries that do not have a surplus of resources can afford private property and monopolies in the field of non-use of land, because there, the bowels are already depleted, and also because they create their own European (generally Western) companies, which monopolize the bowels in developing countries due to the specific legislation of these states. Therefore, monopolies draw all the profits from the raw material territories, and the damage remains on the share of those who live there. This is done not only by European or American, but also Canadian, Russian, Chinese and other multinational companies. Is it possible to somehow get out of this situation, i.e. is it possible if not avoided, then at least eliminate the unfair distribution of income and loss? Apparently, it is possible even in the existing situation. Of course, the most radical way is to nationalize and transfer all activities of non-mining companies under national jurisdiction. As has been the case in Venezuela recently in the field of oil production. But international corporations and capital do not give up so easily, as can be seen in neighboring Bolivia. Therefore, you can play by their principles. It is about creating value chains in which national enterprises participate in the “work” with raw materials, i.e. it is necessary to break up the existing value chains by highlighting the national segment in them. Moreover, in such a way that the national segment is not only limited to mining, but also to its processing and sale, i.e. It is necessary to obtain not only production chains, but also logistics. Technologically, this operation can be carried out by creating national, joint ventures, etc. Need to get an exchange of technology. Those. Get technology in exchange for resources. This practice is shown / demonstrated by China [3, 7]. For this, special provisions must be adopted at the national level to diversify existing value chains. According to it, it is believed that promising national economies, developed economies should be non-extractive. Therefore, all countries striving to become developed must get rid of the raw material component as actively and quickly as possible. The attractiveness of this paradigm, formed not only and not so much by scientific research as by typical and atypical PR tools, has led many countries to simply mechanically get rid of their resource and raw material sectors and actively form service sectors in their national farms, translating into the latest core resources. As a result, many of those who adopted such a paradigm in the design of national economies found themselves in crisis with subsequent collapse (or approximation, which is more common. True, the second happens only because the collapse itself is veiled in many draperies. But in reality, we are seeing the loss of sovereignty in whole or in part, its transfer to other states; a sort of overlord) of statehood, etc.

In connection with the foregoing, two tasks deserve attention: 1) what are the objective foundations and ideological roots of this paradigm, 2) how to avoid this attractiveness or not fall into the trap of the attractiveness of this paradigm - the “resource curse”? The objective basis, which will then be ideologically and scientifically formulated and substantiated, is the reduction of the resource and raw materials component in the reproduction process while increasing the growth of the withdrawal of the resource and raw materials component of economic development. In other words, the lag of reproduction by the natural system of the resource and raw material component of the territory from the activity of their withdrawal into economic activity, due to the ratio of the reproduction and conversion mechanism of the natural environment (biogenic process) with the process of removing raw materials and resources from the natural system and their introduction into the economic process is not in favor first. It is about reducing the so-called resource rent. That is, a decrease in the volume of raw materials, their concentration in the hands of individual monopolies, leads to a drop in raw material rents in incomes. Therefore, it is required to expand the so-called revenue context. The other, less visible, but not changing, significant, but hidden, side of this foundation - the so-called countries of the "golden billion" as a result of active (predatory) exploitation of their natural resources, brought their territories (historical or state) to complete depletion in raw materials. The solution to the problem, which was designated at the beginning of a new era, and then with new force
appeared in the Middle Ages and manifested in colonization, crashed in the 20th century as the collapse of the policy of colonialism. But at the same time, high living standards were created in these countries, for which huge raw material resources are needed, which are no longer in these territories. Then it was made, as a forced response, a roll towards the formation of a new model of the economy based on the priorities of non-resource development. But at the same time, the entire commodity sector was beyond the national jurisdiction of these economies. But the most paradoxical is that all these economies, the perfection of which would not be discussed, can exist only under the natural condition - if they supply them with raw materials. (By the way, that is why the cosmonautics industry is so actively developing today, related to the delivery of raw materials from outside the Earth). Ideologically, this process can be interpreted as the process of inefficiency of economic conversion, as well as the lag of the natural mechanism of reproduction of the resource component of the territory.

4. Conclusion

The resource component of the economy is one of the most important elements of national economies. Depending on the capacity of the resource-raw material matrix, the efficiency of the national economy, its growth and, most importantly, the degree of sovereignty are determined. Aware of the importance of this component for national security and the development of the national economy, countries and states, developed countries seek to create, directly or indirectly, within themselves or outside their state territory, sufficient volumes of raw materials. For these purposes, they use the entire arsenal of funds from commercial, diplomatic to military. In recent decades, China has actively begun to invest in Africa and Latin America in order to provide its future development with a resource and raw material base. The USA, Japan, and also European countries are developing various plans for the exploration of the Moon, Mars, Venus, as well as asteroids with the same goal - to create the necessary volume of the resource-raw material component of the national economy. At the same time, the capitalist countries are pursuing an active policy of forcing them to abandon the resource component behind a mask of the attractiveness of non-resource development. For this, both traditional forms of ideology are used: at the regional, subregional levels, and internationally through the UN and other international institutions (IMF, IB, EBRD, etc.) controlled by these countries. When ideological forms do not work, more frank forms connected with the seizure, military coups, etc. come into play.

The analysis of modern world and local cross-country contradictions shows that the main reason is the struggle for the resource component. States are trying to ensure resource-based self-sufficiency as a way to transform raw materials and technological development into effective development strategies.

At present, the ideology of the political and economic mainstream and resource and raw material motives are working against the development of the resource and raw material component of the economy. The latter is in every possible way frustrated: presented as “backwardness”, “archaism”, “degradation”, etc. However, a closer examination shows that the basis of such an ideology is a trivial fact - “enrichment at the expense of others”, known from biblical times, but currently thoroughly hidden behind attractive words about humanism, caring for the poor, etc.

As a result of these transformations, Russia faced the fact that the resource and raw material potential really exists, but it cannot be effectively applied as a result of the chosen strategy, which is based on a monetarist vision. We believe that a paradox has been formed - the potential exists, but the results are insignificant, the costs are high, and the achievements are insignificant.

What is the reason for the mentioned paradox of the development of the Russian economy? A state that has the most powerful resource and raw material potential in the world cannot convert this power into an adequate result. Therefore, the question arises: how to achieve the latter? It is about optimizing a multi-layer resource and raw material potential. The following are currently being observed: (1) a shift in the resource and raw materials potential towards export, which was facilitated by the favorable situation in the early 2000s to hydrocarbons and other raw materials; (2) the export of raw materials instead of the export of finished products and high technologies, which negatively affected the development of processing technology and, in general, the development of manufacturing industries, but, most importantly, science and innovation; (3) transfer of domestic production to the residual
resource and raw material principle, which is reflected in an increase in the level of domestic prices for basic resources to world prices and the creation of a resource and raw material deficit within the national economy in its individual sectors; (4) the erosion (and in some places even destruction) of the institutional environment that stimulates the country’s resource and raw materials potential, which resulted in the development of the so-called non-primary (speculative) sectors and types of industries with high international competition in these sectors; (5) the restructuring of the resource-raw material and technical-technological matrix of the national economy from self-sufficient and sovereign to “subordinate” and dependent.

The ideology of the “resource curse” is the ideology of resource-poor states that have created large multinational companies. Most often, the so-called weak states and regimes with corrupt governments are subject to enslavement. Large transnational corporations penetrate the structure of such economies and states by bribing officials, changing national legislation, etc. Therefore, it seems that there is no other way but to surrender positions, because resistance is futile. However, a closer look at the problem shows that there may be a solution. Currently, as a result of the collapse of the unified socialist system, a vacuum has been formed in the regional development management system. Weak manifestations are observed in the so-called Non-Aligned Movement, which could solve these problems, i.e. since a solution is possible only together, then some kind of common international institution with certain powers is needed. It doesn’t exist currently not only among Asian countries, but also among African and Latin American states. In this situation, apparently, the UNO could be responsible for these functions. Moreover, not in the political, but in the humanistic aspects - as a planetary problem. For this, the UNO structures must plan resource and raw potential at the planet level as a whole, giving a certain place to various countries in accordance with their resource potential. Of course, such a decision "draws" to socialism, which the so-called developed countries will object to, but not because of the lack of humanity of this decision, which will be refuted by its ideologists in any way, but because of the decrease in the efficiency of using the resource and raw material potential. In this situation, the only solution remains - the development of extraterrestrial space in terms of resource potential. And in this situation, a new direction is being formed related to the interplanetary economy. Apparently, this is one of the promising ways out of the resource crisis of the planetary system.

References
[1] Alle M et al. 1998 Conditions of efficiency in the economy (Moscow)
[2] Baudrillard J 2015 Simulacra and simulation (Moscow: Ripol-classic)
[3] Boroch O and Lomanov A 2018 New era of China: from enrichment to amplification World economy and international relations 62(3) 59-70
[4] Grossfeld T et al. 2015 Logic of open innovation: creating value by combining networks and knowledge Foresight 1(2)
[5] Guriev S and Sonin K 2008 Economics of the “resource curse” Issues of economics 4 61-74
[6] Kaplinsky R 2002 The distribution of the positive effects of globalization. What conclusions can be drawn from the analysis of the value chain? (Moscow: HSE)
[7] Kiva A V 2015 Reforms in China and Russia: a comparative analysis (Moscow: Center for Strategic Conjuncture)
[8] Lindert P H 1992 Economics of world economic relations (Moscow: Progress)
[9] Marshall A 1983 Principles of political economy (Moscow: Progress)
[10] Meshkova T A and Moiseichev E Ya 2015 World trends in the development of global value chains and Russia's participation in them Bulletin of the Financial University 1(85)
[11] Polterovich V M, Popov V V and Tonis A S 2007 Economic policy, the quality of institutions and the mechanisms of the “resource curse” (Moscow: Publishing House of the Higher School of Economics)
[12] Porter M 2008 Competitive advantage: How to achieve a high result and ensure its stability (Moscow: Alpina Business Books)
[13] Radygin A D 1994 Property reform in Russia: on the way from the past to the future (Moscow:
8

Republic)

[14] Rakhaev B M and Rakhaev H M 1998 Economics of Permanent Profitability Text (Nalchik: KBGSHA)

[15] Ross M 2015 The Oil Curse. How rich hydrocarbon reserves determine the direction of development of states (Moscow: Publishing house of the Gaidar Institute)

[16] Sadovskaya V and Shmat V 2018 The paradox of the “resource curse”: cross-country analysis MEMO 61(3) 25-35

[17] Samuelson P 1997 Economics (Moscow: NPO Algon Mechanical Engineering)

[18] Tatsuno S 1989 Technopolis: technology of the XXI century (Moscow: Progress)

[19] Travin D 2015 World History of the Resource Curse Retrieved from http://www.rosbalt.ru/blogs/2015/05/05/1395430.html

[20] Hovavko I Yu and Shvedov K I 2017 The Resource Curse: A Survey of Perspectives Public Administration Electronic bulletin 64 Retrieved from https://cyberleninka.ru/article/n/resursnoe-proklyatie-obzor-tochek-zreniy

[21] Gaidar E T 1998 The economy in transition. Essays on the economic policy of post-communist Russia (1991–1997) (Moscow)

[22] Gaidar E T 2003 The economy in transition. Essays on the economic policy of post-communist Russia (Moscow: Delo)

[23] Acemoglu D and Robinson J 2013 The Economic Nature of the Resource Curse: Mechanisms Retrieved from http://whynationsfail.com/blog/2013/5/23/the-economic-nature-of-the-resource-curse-mechanisms.html

[24] Acemoglu D and Robinson J 2008 The Role of Institutions in Growth and Development Working paper No 10. World Bank, Commission on Growth and Development Retrieved from https://siteresources.worldbank.org/EXTPREMNET/Resources/489960-1338997241035/Growth_Commision_Working_Paper_10_Role_Institutions_Growth_Develop.pdf

[25] Acemoglu D and Robinson J 2012 Why Nations Fail (New York: Crown Business)

[26] Auty R 1993 Sustaining Development in Mineral Economies: The Resource Curse Thesis (London: Routledge)

[27] Canuto O and Cavallari M 2012 Natural Capital and the Resource Curse Economic Premise 83 Retrieved from http://siteresources.worldbank.org/EXTPREMNET/Resources/EP83.pdf