

MANAGEMENT OF THE INDUSTRIALIZATION PROCESS IN THE REPUBLIC OF MOLDOVA

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Abstract: The industrialization process was the basis for the development of the economy of many previously underdeveloped states. But even today there are countries that do not perceive the mechanism of planning the industrialization process. To argue their lack of progress, decision-makers resort to standard excuses, which they launch in the public space. These excuses I called Myths because they have no practical coverage. There were selected 10 most widespread myths from the least developed countries and combated by statistical data, in order to create an alternative impression regarding the industrialization potential of the least developed countries. Many countries, including Moldova, perceive industrialization only as a prerogative of the state and exclude the status of the state only as a regulator of processes – and this greatly blocks development.

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Introduction

The general perception of industrialization in underdeveloped countries is full of stereotypes. In particular, they are related to the nationwide elevation of the household management model. Because the household cannot correctly perceive the sum of existing resources, the factors of production involved the segment of regulation or certification – a collective mood is formed, that only the state can do this. It is also the perception that the state must take responsibility for all risks – quality, quantities, production nomenclature, social package, provision of production factors, maintenance of equipment, etc.

Many still perceive as an unbeatable argument the phrase – "the state must create jobs", and in contradiction comes the experience of developed countries that practically explains that – "the state must make the rules of the game, and the labor market regulates itself".

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Social Economic Debates

Economic theories talk about the mechanisms by which the state can industrialize the country through minimal involvement in this process. The state should not be involved in decision-making at the enterprise level and should not make conditions for the development of monopolies. Milton Friedman, Nobel Prize Laureate in Economics, developed over time the theory of state non-involvement from *simplified distribution of money to* application of negative tax, *longing to reduce the involvement of the bureaucratic apparatus in the decision-making process*.

According to studies conducted on the basis of industrialization policies in Asian and European countries, which had this phenomenon as a priority, we can say that 6 categories of challenges need to be solved simultaneously: *legislation*, access to raw materials, and access to financial resources, staff qualification, access to infrastructure and media coverage.

The media coverage category also has several component parts. But in this paper we will explain one of the component parts – raising society's perception of industrialization. This media coverage is important to be done more than 90 days before launching any policies in the field, because during this period the population will accept policies as normality and will not put up institutional resistance. With the awareness of the processes, the population will see in these policies the logic of actions, but also will seek to find themselves in the new way of economic organization of the state. People will become active in the process of retraining in the fields of certification, raw material assurance, sorting, engineering, chemical processes, physical processes, marketing, market research, maintenance services, quality assurance services, etc. In the conditions of the agrarian economy, especially cereals, such services are rarely found.

Combating the myths of industrialization aims to present alternative sources of information for citizens and decision-makers, so that they accept the formation of a national industrialization strategy:

Applied methods and materials:

- The most common institutional excuses were accumulated, at the level of Central Public Administration, used in response in public statements. They were usually answers to questions about the standard of living in the country.
- 2. More than 70 economic programs of Germany, Ireland, Israel, Malaysia, Singapore, Georgia, USA, UK were examined.

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- 3. International statistics on the evolution of countries after applying certain categories of institutional reforms were consulted.
- 4. The World Bank's **Doing Business** system was analyzed as indicators of the country's investment attractiveness, then the comparative analysis of the country profile by existing indicators (number of population, area, presence of natural resources, etc.) was made.
- 5. The comparative analysis of countries where there is a centralized management system for the business environment and the system where the state has only regulatory status was made.
- 6. The nomenclature of imports was examined and the comparative analysis with the existence of raw material on the territory of the country, which can serve as a substitute for imports, after processing, was made.
- 7. It was examined the practice of creating local alternatives to some consumed goods, based on the existence of local production factors (the thermal agent can be produced not only from gas imports, but also by capitalizing on other categories of local resources).
- 8. We examined the correlation of all state institutions in promoting investment attractiveness, but without developing paternalistic policies and did not confront the commitments taken within the World Trade Organization.
- 9. We examined the mechanism of withdrawal of the state from the economy and the abandonment of state-owned enterprises in the UK (Margaret Thatcher reforms), Gerogia (Mikhail Saakashvili reforms), Singapore (Lee Kuan Yew reforms).
- 10. We examined the causes of the collapse of the planned economy and why in the 21st century, such models are no longer current.
- 11. We examined the evolution of states that form their Gross Domestic Product based on the export of natural resources compared to countries rich in natural resources, but which have emphasized the diversification of branches of the economy, even if they have excess reserves.

Results obtained and discussions:

1. We have a clear perception on how to industrialize a state – we submitted to AGEPI our own model for structuring industrialization processes, called – **Stages of Industrialization**. This model allows sectorial identification of untapped resources, analysis of indicators, policy offer assigned to the given stage of industrialization, management of future risks with the implementation of industrialization.

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2. We have developed the model of delegation of responsibilities within institutions subordinated to the government, for nominal verification of the industrialization process. At the same time, there is nominal identification of system problems (duplication of responsibilities, incompatibility of the regulatory system, surplus of permissive acts, artificial delay of decision-making processes, inconsistency of the schedule of implementation of state programs, etc.).

3. We have nominally identified which Laws, Government Decisions, Operating Regulations, need to be adjusted in order to start the industrialization process in the private investment base.

4. We have nominally identified the categories of economic and industrial programs that can be imported into the Republic of Moldova, in order to obtain a greater impact on the country's competitiveness at regional level. Especially in the areas of increasing the coefficient of equipment use, increasing the speed of money circulation, mechanisms of state withdrawal from the economy, alternative business financing systems, etc.

5. We have identified the 10 most widespread myths of industrialization and refuted by international statistics of the results obtained.

We explain the general elements that are included in myth:

Myth No. 1: The state has no money for industrialization

Especially in the post-Soviet states, this argument is one of the most often used by the authorities, but also accepted by society, because there is still a perception that the state makes investments, the state creates jobs and assumes all risks. This perception is also fueled by the tens of thousands of failed businesses since 1991.

The principles of activity in the capitalist world bring the role of the state more towards a symbolic presence in the regulatory system, rarely in the control system. The private sector aims to invest, select its frameworks, create competitive products and services, form pricing policy and communication mechanism with society.

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The world leader by the number of satellites launched into space in 2020 is owned by a private company¹. SpaceX also holds the new world record² for the number of rockets launched into space. Plans for the future are to exceed 42,000³ satellites in space to carry out one of the most important communications infrastructure projects in human history. These figures confirm that the private sector can find the necessary resources for any level of ambition for projects, even if they cannot compete with the state budget.

The standard excuse of lack of financial resources is used especially by officials who are satisfied with the status quo and do not see the need to undertake new projects, which will create additional work for their team and lead to involvement in a process of refinement or verification, which may put their own status at risk. By changing the legal framework, the opportunity is formed to attract more investors in a field and, respectively, to form the premises to develop the quality of services or finished products.

The legal framework deserves to be viewed widely, because there have been several attempts to start the industrialization of the Republic of Moldova, but scientifically correct no one has created the action plan and, respectively, there are only half of projects (industrial parks without residents). In the case study on recycling we will explain in detail the categories of legislation and regulations that must be taken into account for a good functioning of the system related to the industrialization of a sector.

The legal framework is meant to stimulate investments, but much more important is to eliminate future artificial barriers that may arise in the industrial activity process such as:

- Exclusion of the possibilities of artificially creating monopolies in the supply of raw materials, but also of the sales process.
- Clear regulation and simplification of procedures for interaction of economic agents in the field of reporting, ecology, labor security, policy for accessing financial resources, equal conditions in procurement processes, etc.
- Permanent certification and active assistance in the process of creating new products and services.
- The existence of a General Urban Plan and convenience in accessing industrial commodities.

¹ https://spaceflightnow.com/2021/01/05/u-s-companies-led-by-spacex-launched-more-than-any-other-country-in-2020/

² https://www.bbc.com/news/science-environment-55775977

³ https://www.businessinsider.com/spacex-starlink-internet-satellites-itc-filing-30000-additional-42000-total-2019-10

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Pro-active policies in export policies (involvement of the diplomatic apparatus, use of mass-media, development of inbound tourism, support in organizing international exhibitions, support in opening international representations and branches, privileged status for businessmen in the field of border crossing or communication with diplomatic institutions).

Others

After a good organization of the action plan and consistency in actions, a large number of private investments (foreign direct investment, diaspora investments, residents' investments, other categories) will come to the country that will solve in parallel several national problems – added value produced by a citizen, unemployment rate, quality of infrastructure, schooling of society, stability of the national balance of payments, energy independence, food independence of the country, etc. Industrialization can be organized much faster than general perception tells us, and this happens through the inertia generated by investors.

Myth No. 2: There is not enough market for goods and services.

The world's population is constantly growing⁴, in 1960 there were 3.032 billion people living on the globe, and in 2021 it reached 7.9 billion people. Under these conditions, there is a steady increase in demand for any type of goods and services.

The increase is also generated by the increasing degree of urbanization of the world⁵, from 33.6% of the population in 1960 to 56.1% in 2020. Living in urban regions generates additional demand for services and goods to maintain the comfort of living. There is a progressive increase in needs, starting with infrastructure and ending with transport insurance.

One of the general principles of economics is that "needs are limited and desires are limitless." For this reason, the role of creativity as a determining factor in increasing demand can be argued. 20 years ago, the role of mobile phones was much smaller, and now they have replaced or merged a set of related industries, at the same time increased the development of new branches of the adjacent economy.

Another principle of economics, that the total volume of exports equals the total volume of imports, must not be perceived as a factor that hinders the development of its own industrial production capacities. It

⁴ https://data.worldbank.org/indicator/SP.POP.TOTL

⁵ https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS

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only needs to be perceived macroeconomic and included in risk management, especially to provide solutions for companies that had as activity the import of those finished products, which are now already produced on the territory of the country. Free competition will serve as a mechanism for regulating quality and prices. But it should be understood that there will be a structural change of the Gross Domestic Product and budget revenues. One company will decrease by X tons the import of some goods, while another company will increase local production by X tons (if the export and re-exports component is not taken into account). Respectively, VAT receipts from customs will decrease and VAT receipts from local production will increase.

The permanent excuse that the market does not exist is refuted by statistical data and, respectively, cannot be perceived as a serious argument. Most often the lack of market is caused by much simpler factors:

- Quality of finished products (after the wine embargo in 2006, most local companies invested in quality and have already won over 840 quality medals in 2019⁶).
- Modest investments in promotional campaigns, ⁷after the strategic partnership with Coca Cola,
 Purcari winery increased sales on the foreign market.
- Low interest in creating innovations, perfecting frameworks, organizational processes, cost optimization. New Zealand is a model worth examining because it has managed to become developed and full of tourists despite the fact that its geographical position and other factors stand as barriers to development. Innovation in wine production allows them to sell⁸ wines worth over 2 billion USD (NZ exports 286 million liters to ⁹ 2 billion USD, RM exports 156 million liters to ¹⁰ 174 million USD figure adjusted according to the Euro vs. USD exchange rate at the date of publication of statistics).

Turnover consists in marketing a quantity of products (services) at a certain price (if the nomenclature of products sold is higher, then the sum of sales for each category is made). <u>It is important to educate entrepreneurs to sell unique and rare products</u>, so they will have increased turnover with the same amount of raw material. And the misperception of selling products in quantity will dissolve by itself.

⁶ https://wine-and-spirits.md/ro/top-15-vinuri-medaliate-cu-aur-din-moldova/

⁷ https://purcari.wine/static/projects/purcari.wine/dist/pdf/Purcari RO raport curent Decembrie 2018.pdf

⁸ https://wine.lovetoknow.com/wiki/New Zealand Wine

⁹ Page 26 https://www.nzwine.com/media/20163/nzw annualreport 2021 final web lr.pdf

¹⁰ https://balkaninsight.com/2020/01/28/moldova-hits-new-records-in-wine-exports/

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Myth No. 3: The small area of the country blocks the industrialization process

The general perception related to the country's surface is related to the possibility of capitalizing on agricultural land, as the case may be, to capitalize on some categories of resources such as forests, sand reserves, clay or other minerals.

But historical experience has enough arguments that this perception does not have applicative confirmation. The UK has a relatively small area, being 78th in the world by size¹¹, but has the ambition to maintain the 5th place¹² in the world by the nominal Gross Domestic Product indicator.

Industrialization and the development of industries related to the industrialization process allow states to develop much faster than intuition tells us it is possible.

Another example would be the State of Israel. It has a smaller area than the Republic of Moldova (SE – 20.7 thousand km2 vs RM – 33.8 thousand km2)¹³ at the same time Israel has a huge economic power. The Nominal GDP indicator¹⁴ of USD 446 billion, which is compared to the sum of the nominal GDPs of Ukraine (USD 164 billion) and Romania (USD 289 billion).

The area of Romania is 238 thousand km2, the area of Ukraine is **603 thousand km2**, and the area of Israel is **20.7 thousand km2**. The land area argument can be categorized as a standard excuse of certain categories of officials, who have the impudence to hide their inability to plan industrially with unfounded excuses. The industrialization process distances itself from the desire to process extensively, on the contrary the principle of conveyor belt production implies a permanent need to reduce production costs and often distances from one technological process to another.

If we regard industry as an art of selling the same kg of raw material at a much higher price, then we understand that it is much more important to increase the utility and price of a small amount of material processed through the stages of industrialization, than to rely on the massive sale of raw material.

Myth No. 4: The presence of natural resources is a decisive factor

¹¹ https://en.wikipedia.org/wiki/List_of_countries_and_dependencies_by_area

¹² https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(rated)

¹³ https://en.wikipedia.org/wiki/List_of_countries_and_dependencies_by_area

¹⁴ International Monetary Fund https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal)

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The collective perception of the population is that the presence of natural resources on the territory of the country and their right to extract would somehow guarantee the welfare of the nation. In this thesis we presented the effects of the presence of resources and which can degenerate into stagnation of the country, if there is no public management culture at a developed level. This effect – The Resource Curse persists in most countries on the African continent, which is considered one of the richest continents.

On the other side of the balance is Japan, the country that has practically no natural resources, but which continues to be the third world economic power according to the Nominal GDP indicator. But if we examine the GDP per capita rating for each country of the world¹⁵, we will notice that 70% of the countries included in the TOP 20 cannot enjoy natural resources in abundance. Other categories of goods and services make a much higher contribution to the Gross Domestic Product than the export of raw materials.

With each argument it is possible to confirm that industrialization is possible to organize practically in any country where there is a vision of the action plan to structure institutional responsibilities.

Each raw material represents the resource that can be passed through 6 stages of industrialization and to commercialize it with high added value. But to ensure this process, qualified staff and high-performance machinery are needed. A large part of resource owners are not ready to invest in the R&D component, so they remain at the initial degree of economic activity and eventually lose competition. The Republic of Moldova is not an exception, through the economic model of grain growth and the omission of the post-harvest industry, a permanent dependence on creditors (financial resources, fuel, fertilizers, agricultural equipment, etc.) is formed and there is a permanent risk of bankruptcy if the climatic conditions had an unfavorable impact. Most farmers in developed countries assume the implementation of at least one stage of industrialization and have the opportunity to diversify their risks by selling at a high price a semi-finished product created from their own raw materials.

Myth No. 5: The cost of factors of production decisively influences the location of investments.

The price¹⁶ of electricity and other factors of production is permanently used as an argument in arguing the lack of will of a government. The perception that electricity influences the cost of finished production is erroneous. Low prices mean low distributor reserves, which are perceived as lack of resources for new

¹⁵ https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal)_per_capita

¹⁶ https://www.globalpetrolprices.com/electricity_prices/

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investments and, respectively, decrease investment attractiveness in this sector and distribution infrastructure cannot cope with the challenges of increased demand in case of intensive industrialization.

Similarly, in this table it can be seen that the most developed countries have high energy costs, and investment attractiveness is not affected. Even in the Doing Business system, there is no emphasis on the cost of inputs. Countries used as outsourcing services (especially textiles, wiring production, footwear, leather processing, etc.) are often chosen because of low demands on mandatory social packages, local environmental regulations and labour costs. The cost of factors of production often accounts for no more than 1% of the value of the finished product, i.e. does not present a determining factor in the selection of location.

Myth No. 6: There will be an enormous increase in energy consumption.

Most often, this argument is used in discussions by those responsible for reforms, only as an excuse. It is easy to perceive, easy to argue – but it is not directly related to reality. It is true that countries with strong industrialization have higher energy consumption than countries with agrarian economies, but it is not the determining factor. Analysis of the structure of electricity consumption for each country¹⁷ (kWh per capita indicator) We understand that the geographical factor is a determining one, but not the industrial one. The Nordic countries have a higher consumption than the global average, which is due to the average length of the day and the need for lighting, but also to the need to district heating public and private institutions for a longer period.

For example, China ranks 51st in the world in terms of kWh consumption per capita, even though it is the second largest economy in the world. India is ranked 150th in the world by the same consumption indicator, and in 2021 it is the 5th economy of the world by Nominal GDP indicator.

Electricity is directly related to machine maintenance, lighting, and maintenance of Big Data processing servers. But the best answer can be given by analyzing the structure of electricity consumption:

- % of household energy consumption
- % of industrial energy consumption
- % energy consumption for street lighting and advertisements
- % energy consumption for district heating

¹⁷ https://en.wikipedia.org/wiki/List_of_countries_by_electricity_consumption

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- % energy consumption for transport (trains, trolleybuses, buses, metro, tram, electric cars, etc.)
- % consumption for leisure and maintenance of public and private spaces (irrigation, security, entertainment, traffic lights, district heating streets, etc.)

Myth No. 7: The negative environmental impact is too great.

Perhaps it is the biggest scarecrow used in industrialization. Even though we are in the twenty-first century, this problem is a big one. Many who speak of industrialization have in mind only heavy industry, from stage 3 of industrialization, where to increase the return on cost per unit it is necessary to use high-capacity facilities. It's a dose of truth and communities are feeling the impact of industrialization. There are changes in air quality, water quality, in the structure of fauna and flora in the region.

Awareness of these problems has created mechanisms through which limitation of these problems takes place or, as the case may be, permanent prophylaxis.

For example:

China has a tree planting policy¹⁸ of 36 000 km2 annually until 2025, and this area is comparable to the area of the Republic of Moldova.

The European Commission¹⁹ has proposed that Europe become economically neutral by 2050.

Petrol and diesel cars will disappear²⁰ from Berlin, Germany, in 2030.

The Kyoto Protocol²¹ in Japan regulated the mechanism for reducing emissions in the years 2008-2012 compared to 1990.

The 2015 Paris Agreement²² regulated the mechanism for reducing carbon emissions, including through the procedure of additional taxation of "dirty" industries – oil, gas, metallurgy, cement, etc.

 $[\]frac{18}{https://www.reuters.com/world/china/china-step-up-tree-planting-campaign-help-reach-net-zero-2021-08-20/2012-08-200/20$

¹⁹ https://ec.europa.eu/clima/eu-action/climate-strategies-targets/2050-long-term-strategy_en

²⁰ https://www.iamexpat.de/expat-info/german-expat-news/petrol-and-diesel-vehicles-disappear-berlin-2030

https://unfccc.int/process-and-meetings/the-kyoto-protocol/what-is-the-kyoto-protocol/kyoto-protocol-targets-for-the-first-commitment-period

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Renewable²³ energy in 2019 accounted for 19.7% of the total energy consumed by the EU-27, which speaks of a significant evolution of technologies that can provide equipment for institutions willing to invest in this sector.

The Odyssey energy efficiency index (ODEX)²⁴ shows an efficient increase in energy use by 24% between 1990 and 2009, but this trend is constantly evolving ²⁵positively. In parallel go the process of urbanization and the process of efficiency of individual use of household resources.

In Tokyo ²⁶ There are 23 household waste incineration plants and all of them are equipped with high-performance filters, so the population does not suffer, even if they have one of the highest densities in the world. Existing technologies make it possible to prevent environmental risks and ensure the proper functioning of a Community scheme. Such examples can be found in several countries, which say about the technical readiness of the world to implement environmentally friendly technologies and not admit a negative ecological impact.

Myth No. 8: The industrialization process is strictly tied to the population of a country and small countries are compromised as investment potential.

The indicator of a nation's well-being is GDP per capita, and the richest countries at this indicator are rarely the countries with the largest number of populations²⁷. The privilege of small countries is that they have to solve far fewer infrastructure problems, training of the population on the new economic model generated by industrialization, smaller challenges related to the management of the administrative apparatus,

Small countries are spared massive Community resistance in the process of vector change, from agriculture to industry in particular. Singapore, Ireland, Finland, Monaco, Liechtenstein, Luxembourg are rich countries, but without important natural resources. Many of them at the beginning of the last century had no premises to be perceived as future world leaders by standard of living, sometimes they were perceived as the

5/assessment

²³ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Renewable_energy_statistics

²⁴ <u>https://www.eea.europa.eu/data-and-maps/indicators/energy-efficiency-and-energy-consumption-</u>

²⁵ https://www.eea.europa.eu/data-and-maps/daviz/energy-efficiency-index-in-households-2#tab-chart_1

²⁶ http://www.union.tokyo23-seisou.lg.jp.e.de.hp.transer.com/kojo/index.html

https://en.wikipedia.org/wiki/List of countries by GDP (nominal) per capita

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least developed in the region. National leaders had the wisdom to make a set of financial, fiscal, business regulatory reforms, thus generating enormous profits for all branches of the economy and attracting investment.

Luxembourg is a top country in the number of satellites in Earth orbit²⁸ and that's hard to believe. Singapore is one of the world's financial centers²⁹, ranking 4th globally. Ireland³⁰ has developed thanks to policies to attract Diasporas into the local economy and massive investment in infrastructure.

Myth No. 9: We are depleting resources and harming the planet.

For clarity it is necessary to return to structuring the categories of resources:

- Inexhaustible wind energy, solar energy, flowing water energy, geothermal energy (geysers), ebb-flow energy.
- Recyclable stone, sand, clay, plastic, paper, glass, metals, textiles, household waste, livestock waste, etc.
- Vineyards forestry, agricultural, livestock, all plantations.
- Exhaustible oil, gas, coal, especially fuels.

One of the principles of physics speaks of the fact that "nothing arises from nothing and disappears without a trace." This physical principle applies to any category of resources. In the Republic of Moldova there is no cult of recycling, respectively the perception of society is erroneous. A large part of jobs in developed countries are based on the principle of recycling, which brings back from stage 6 of industrialization to stage 2 of industrialization a large part of household goods.

China's self-destructive economic model³¹ is based on several general principles, which allow permanent renovation of housing stock, but also of transport units. The houses are built and put into operation for a period of 70 years. With the approaching deadline for the exploitation of housing, there is also their decrease in price. After the completion of these 70 years, the destruction of housing, its recycling and the construction of new apartments takes place. In the case of commercial establishments, this period shall be 40 years. Old tenants do

²⁸ https://www.weforum.org/agenda/2019/03/chart-of-the-day-the-countries-with-the-most-satellites-in-space/

²⁹ https://en.wikipedia.org/wiki/Global_Financial_Centres_Index

³⁰ https://www.irishtimes.com/business/economy/ireland-on-course-to-be-fastest-growing-economy-in-world-in-2020-1.4427464

³¹ https://zen.yandex.ru/media/id/5e274bc843863f00acd7ed97/doktrina-samounichtojaiusceisia-ekonomiki-kitaiskaia-model-5ee09020dfea160d6b7b2b8c

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not receive compensation from the state. This economic model is argued by the fact that there is moral and material wear and tear of construction, but also of communications. The entire branch of construction occupies up to 30% of the Gross Domestic Product, but also provides jobs horizontal industries – recycling (all categories), production of construction materials, institutions of design, transport, construction, finishing, design, spatial planning, etc.

This model is also valid for the automotive industry, where the term of operation of local cars is 10 years. The model itself allows maintaining at high levels the coefficient of useful use of generation capacities, which have a high efficiency and, respectively, a marginal cost of production per unit is much lower than in the case of other economic models. Most of the population, being involved in the permanent modernization process, obtains the necessary income to invest in a new home, transport unit or other conveniences.

In the Republic of Moldova there is a wide range of categories of untapped resources, especially with recycling potential. Creating a clear strategy to stimulate recycling will create tens of thousands of well-paid jobs, substitute large quantities of imported products and address more environmental problems. In this paper we will examine several such categories of resources.

Myth No. 10: All that is needed is selective industrialization, oriented towards advanced technologies and omitting the lower stages of industrialization.

Some voices insist that we only need to focus our attention on high technologies, with high commercial mark-up — nanotechnologies, pharmaceuticals, information technologies, etc. Their arguments are again based on a theoretical vision of the industrialization process and will stall after a short period of action.

Conclusion

For the proper functioning of an industrial system it is necessary to have several categories of guarantees. Starting with the continuous supply of raw materials and ending with the development of the distribution system. The pandemic crisis of 2020-2021 presented a strong argument that any delivery of semi-finished products can be stopped for reasons of force majeure or, as the case may be, redirection of priorities. Many pharmaceutical companies, supplied with Chinese companies, had to procure high-priced active components for the manufacture of medicines at a high price. The situation was similar for some companies in

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the European automotive industry, which closed some subsidiaries indefinitely, due to the lack of semi-finished products coming from China.

One of the factors that were not taken seriously was – the container crisis – generated by the asymmetrical movement of packaging spaces to and from Asia. More loaded containers came from Asia, and far fewer came back. The demand increased continuously until it exceeded the existing production capacities and at some point speculative actions to artificially increase transport services appeared.

There are enough arguments to maintain the entire circuit throughout the country. It is a better communication between supplier and buyer, reducing the terms of adjustment of some parameters for semi-finished products, long-term planning of production factors, correlation of staff requalification policies, maintenance of money supply on the territory of the country, etc.

In addition, experience shows that the lack of specialists at the lower stages of industrialization cannot generate highly qualified specialists at the higher stages of industrialization. In these cases, the company cannot claim the status of developer of other products, functions in the management of investing corporations, but will be content with only a secondary role in technical-scientific progress.

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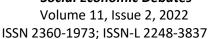
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