

Economic Reality

monthly publication of analysis and forecasts, no. 3

In this edition you can read about:

- *What is the role of Free Economic Zones in an unfree economy?*
- *Work safety and Government attempts to redress the situation*
- *Why the Industrial price index should not be ignored?*
- *National Bank interferes again in the monetary market, with more drastic measures for this time*
- *Trade deficit keeps on growing fast*
- *How efficient is financing of the technological research and development?*

Expert-Grup

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Summary: Moldovan economy during April-May 2008

The evolutions during April-May showed contradictory economic tendencies. The general trend displays a dynamics of industrial recovery. However, it is combined with the macroeconomic risks related to price increase for energetic resources and foodstuffs. The fight against inflation became the indispensable priority of the National Bank of Moldova.

During January-April the industry continued to grow. It registered a 7.2% growth in constant prices in comparison with the similar period in 2007, including 4.5% due to the augmentation of food and beverage industry. Thus, in spite of the fact that the growth was 0.5 p.p. smaller then in January-March 2008, there are good premises for the industrial sector growth: favorable climate conditions, increase in wine exports to Russia, Autonomous Trade Preferences.

The plentiful precipitations from April-May provide high chances for agricultural sector recovery from the 2007 crisis. Moreover, the agricultural areas will be larger by 1.01% in comparison with 2007 (3384600 ha). At the same time, the international meteorological institutions anticipate extreme hot weather days in this year as well, especially in the southern region of the country. According to a survey of the British Meteorological Institute, in the future high temperatures in the South-Eastern Europe will turn into a regular phenomenon. In order to cut the production costs the agriculturalists will have to strictly respect the advanced agro-technical technologies.

In the first 4 months the consumption price index increased with 5.8%, and the annual inflation exceeded the level of 16%. The increase in inflationary pressures does not only erode the consumer's purchasing power, it undermines also the Moldavian companies' competitiveness. These risks are confirmed by the accelerated increase in production costs (industrial producers' prices index). As a result, in the long-run the consumption prices index will increase as well, which will affect directly the population's purchasing power. The statistical data allow us to state that the time lag between the Industrial Price Index growth and its impact on the consumption prices is about 9-10 months. At the end of May, the National Bank of Moldova interfered with monetary policy tools and increased the basis rate for REPO up to 18.5% and the obligatory reserves norm for resources in national currency and free convertible foreign currency attracted by commercial banks increased up to 22%. It will lead to the decrease in credits amount, but the effect over inflation could be seen after 2-3 months.

The budget revenues during January-April exceeded the planned level by 11.6%. Particularly, significantly increased VAT collections from imports, inclusively due to prices increase for fuel. In spite of the unplanned increases in budgetary incomes, its utilization according to expenditure categories remains inefficient. Thus, for education were allocated only 25.6% of expected level, while for science and innovation – only 31.8%.

Taking into account the strong increase in prices for fuel and other inputs and the agriculture's disastrous situation after 2 years of trade embargo from Russia and 1 year of severe drought, the Government should seriously think about essential growth of the fund for agriculture support based on the extra budgetary incomes.

Free economy behind concrete fences

At 6th of May 2008, the Government of the Republic of Moldova proposed a project in the Parliament regarding the Free International Airport "Mărculești". In case it will be approved, we will have 8 free economic activity "enclaves" (6 Free Economic Zones plus Free International Port "Giurgiulești", the last one is still non-functional).

How reasonable is the establishment of a new free economic zone, taking into account the economic impact of the existent ones?

Firstly, we have to mention that the name "free economic zone", "free economic port" or "free economic airport" immediately creates negative associations for an investor who would be interested in placing his capital in one of these "economic paradises". The inevitable impression is that on the rest of the Republic of Moldova's territory the economic activity is not free. Besides this argument which is a psychological one, the available statistic data and economic arguments are not in favor of the free economic zones.

The free economic zones were established in order to "accelerate the social-economic development of some territories and of the country as a whole". It is achieved through: 1) attraction of foreign and local investments, 2) advanced techniques and technologies implementation, 3) development of export-led production, 4) applying advanced production and management techniques and 5) job creation¹. Let's see to what extent these objectives were achieved. We will use the data of the Ministry of Economy and Trade² and the National Bureau of Statistics (see the Table 1).

Table 1 Free economic zones' (FEZ) role in the national economy

	2001	2005	2007*
FEZ in total investments, %	8,3	1,9	1,5
FEZ in total exports, %	5,1	8,9	7,1
FEZ in total employed population, %	0,25	0,52	0,59
Sales in the Republic of Moldova, % from total sales of FEZ	28,2	29,2	20,2

Note: * - January-September

Source: Expert-Grup estimations based on the data of MET and NBS

- The free economic zones have a very modest role in the investment process. According to our calculations, the share of capital investments in free economic zones from total investments per economy decreased from 8.4% in 2001 until 1.5% in January-September 2007 (table 1). Thus, the first objective of the law hasn't been achieved, since the situation at present is worse than it was in 2001.
- The 2nd objective can not be evaluated since the free economic zones residents do not report on the degree of implementation of techniques and advanced technologies. However, the industrial production range was traditionally

¹ According to the article 1, paragraph 3 from the Law regarding the free economic zones nr. 440 from 27/07/2001.

² The reports regarding the activity of free economic zones can be viewed using the link <http://mec.gov.md/ep.aspx>

dominated by alcoholic beverages production where the advanced technologies inflow was a modest one. According to some governmental reports, in 2007 in the free economic zones were produced goods with more advanced inputs (technological modules, PVC granules), but their share was very small.

- The development of export-led production represents an unachieved aim for the free economic zones. Their share in country's total exports has grown up to the maximum of 8.9% in 2005 and then it started to decrease. During 2001-2007 the total net sales of the free economic zones production (in nominal value) grew by 3.3 times, whereas the export-led sales – by 3 times.
- As in the 2nd case, the assessment of the 4th objective achievement is very complicated. At the same time, it is hard to understand that within the free economic zones could be achieved a transfer of advanced managerial practices since the companies-residents are interested mainly in fiscal and customs facilities and not in those based on managerial performance.
- The 5th objective was accomplished speaking about the increasing number of jobs as an absolute value. However, there is a minor impact of the free economic zones over the total amount of people employed within the economy. During January-September 2007 the resident companies employed about 3874 people, which is less than 0.6% from the total population employed within the economy. We have to mention that 70% from the total amount of people employed activate in two economic zones only (Chişinău and Ungheni).

Two economic zones are almost non-operational...

In reality, 2 of 6 economic zones are practically not functioning. Thus, we can hardly speak about “an acceleration of social-economic development of some territories and of the country as a whole” which would presumably result from the free economic zones' activity. Moreover, the free economic zones have an adverse effect on the free and equal competition. According to statistical data, about 30% of products made in free economic zone are not sold on foreign markets, but inside the country. It creates unjustified competitive advantages for companies located in the free economic zones in comparison with the non-residents.

The anti-competition risks from the law project regarding the Free International Airport Mărculeşti are even bigger than in the present free economic zones

The law project regarding the Free International Airport Mărculeşti contains much more risks for the free competition. According to the provisions from the 2nd article, 6th paragraph, the Residents have the right to undertake the following activities: a) supply of land servicing and air transport services; b) wholesale trade; c) industrial production of goods for export; d) processing agrifood production; e) assortment, baling, marking and another such kind of operations with the goods transited through the Free Airport; f) supply of services for charge for the Free Airport's residents and foreign companies; g) other auxiliary activity types, e.g. utilities,

... and the National Agency for Competition Protection must interfere in order to prevent the appearance of new concrete fences in the national economy

During the period 2001-2006 the rate of work accidents has increased by app. 10% and the number of employees working in harmful labor conditions has grown by app. 33%.

services of depositing, construction, renting, public alimentation etc., which are necessary for the activities mentioned in points a) – f). Thus, in this formula, only the point c) stipulates that the resident companies must orient their production towards exports, whereas the rest of activities can have as a final consumer the residents out of the Free Airport. It would represent a striking violation of honest competition principle and an obvious occasion for the National Agency for Competition Protection to interfere in discussing the law project.

We can remark another symbolic aspect from the informative note to the law project regarding the International Free Airport Mărculești. In this note, the law project's authors wrote in bold that "the airport area is isolated across the perimeter, with a concrete fence with a height of 2 m and length of 5200 m". It is an excellent anecdote for the way in which in the Republic of Moldova can evolve a free economic activity (behind concrete fences and closed perimeter).

Work Safety and Health: reforming or stagnation??

On the 26th of May, after many debates, the Government of the Republic of Moldova proposed to the Parliament for examination the law project regarding the work safety and health. It is clear that in the previous version³, the law did not correspond to the new requirements, mentioned in the point 11 of the "Moldova - EU" Action Plan (work standards improvement), as well as in the Convention No. 155 of the International Labor Organization, approved by the Parliament 9 years ago⁴. Therefore, for far too long time the authorities didn't make any efforts for elaboration and implementation of an advanced institutional framework in this domain.

That is why this law project is just one of the many actions from the authorities' agenda. During the period of 2001-2006 the work accidents rate grew up to 10%. In 2007 the situation was even worse – approximately 52 lethal work accidents, which is by 6.1% more than in 2006. The situation of employees who activate in new working conditions remains absolutely unchanged. Their number increased by app. 33% during the period of 2001-2006. These data are sufficient in order to make the authorities to undertake efficient measures for increasing the level of employees' professional safety.

The first analysis of the article 1 of the law project denotes the replacement of the notion "work protection" with "work safety and health", according to the European terminology. In the article 2 (Law Object) we can observe its "prophylactic" character. At the same time, several important notions are lacking: work accident⁵, event⁶, professional disease⁷, dangerous incident⁸.

³ Law no. 625-XII from 02.07.1991 regarding the work protection, Moldova Suverană, 1991, No. 169;

⁴ Parliament decision no. 755-XIV from 24.12.1999 effective since 28.04.2001

⁵ According to Eurostat, „body violent prejudice, as well as professional acute intoxication, which take place during the working process or execution of the professional obligations and which cause temporary working disability for at least 3 days, invalidity of death”;

In the new law regarding the work safety and health there are not adequately defined a series of basis notions...

The notion "labor equipment" must be replaced with "working equipment", according to the terminology of the European Agency for Safety and Health at Work. Also, it is necessary to modify the notion "work security and health" in the following form: "ensemble of institutionalized activities with the goal to ensure the best working conditions, law protection, defending life, physical and psychological integrity, employees' health and of other persons who participate in the working process".

The State policy in the field of work safety and health is stipulated in the section 2 of the law. Unfortunately, the Ministry of Economy and Trade, which is a coordinating body of the national policy in this field, has too little coordinating functions. We consider that the Ministry of Economy and Trade should have a series of attributions which should be indicated in the paragraph 2 of the article 7, as follows:

- *Delegates and supervises the activity of testing laboratories and institutions which function in the related field;*
- *Coordinates with the Ministry of Education and Youth the elaboration of research programs and specialists' professional formation programs in the work security and health domain.*
- *Informs social participants about good practices and approves the promotional materials (study materials, brochures, films etc.) of the juridical and physical persons in order to adjust them to the actual legislation standards in the work security and health domain.*

The competences of the Ministry of Health and of the Ministry of Economy and Trade have to be elaborated further.

There are no stipulations regarding the Ministry of Health competences, which is a national body of the public health assistance domain. The work safety and health represent a component part of the public health. We consider that the law has to stipulate for the Ministry of Health a series of functions, the most important from which would be the following:

- *Administration of the work medicine activity and ensure the continuous professional formation in the work medicine domain;*
- *Authorizes and monitors the medical services supplied to employees at their work places;*
- *Administrates the declaration, research and evidence of professional diseases within the organization;*

⁶ According to the European Agency for Safety and Health at Work, „the accident which implied the death or bodily prejudices, which took place during the working process or the execution of professional obligations”;

⁷ A disease is considered to be „professional” if it represents a direct consequence of employer's exposal to professional risks (physical, chemical, biological, cancer etc) related to its labor conditions

⁸ The identifiable event, (fire, explosion, injury, technical accident, major noxious emissions), caused by malfunction of an activity or a working equipment or/and human factor inadequate behavior which did not affect the employees, but it was possible to have the same effects and/or it caused or it would be possible to produce material injuries.

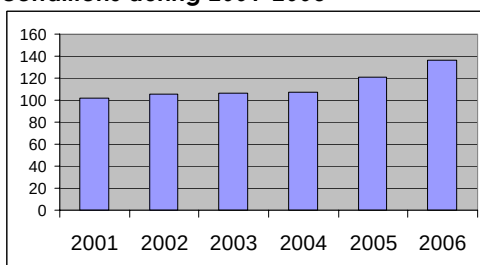
Also, there are not exactly stipulated the functions of the Work Inspection and insurance companies which will insure against work accidents

- Approves and monitors the implementation of various regulations regarding the health protection and promotion at work places and work medicine;
- Cooperates with various structures whose activity directly affects the employees' health.

Hereinafter, it is stipulated that the Labor Inspection is the control body of this law implementation. However, its functions are not specified and it is made a reference to the Work Inspection Law⁹. Also, there is nothing specified about the Insurer whose importance should not be underestimated since it is the body which calculates the probability of insured cases occurrence for various professional groups of employees (based on work accidents and professional diseases) and the treatment and rehabilitation costs. Therefore, it is necessary to include a supplementary point containing the insurer's competences:

- Supporting the activity of work accidents and the employees' professional diseases prevention
- Medical and psychological rehabilitation and compensation the work accidents victims and professional diseases;

Figure 1. Evolution of the number of employees working in harmful labor conditions during 2001-2006



Source: Calculated by Expert-Grup based on NBS

We would like to mention that in the developed world the insurers are more interested in insured cases prevention. In the Republic of Moldova this mechanism does not exist due to the low development of life insurance and work accidents insurance market.

In order to elaborate and re-examine the state policy in the work safety and health domain (art. 4 of the law project), it is necessary for a Consulting National Committee for Work Safety and Health. At the same time, once again it is made a reference to a regulation of committee activity which will be approved afterwards. We can admit that the Government, independently elaborating this regulation, will follow its own visions regarding the committee functioning. Moreover, it is not stipulated the extent to which the trade-unions will directly (actively) participate or act as consultants at the elaboration and re-examining of the national policy in this domain. The conception of the national policy has to be modified based on the convention No. 155, art. 4, p. 1 and the legislative Resolution of the European Parliament from the 23rd of May 2007 regarding the promotion of decent work¹⁰.

We consider that it is the authorities' interest to take into account the mentioned objections, according to the Directive No. 89/391/CEE regarding the introduction of promotion measures for employees' safety and health improvement at their work places.

⁹ Law no. 140-XV of 10.05.2001 regarding the Labor Inspection, O.M. of R.M., 2001, No. 68-71

¹⁰ <http://www.europarl.europa.eu>.

In spite of the precious information contained in the Industrial Price Index, its signals are often ignored.

Why the Industrial Price Index should not be ignored?

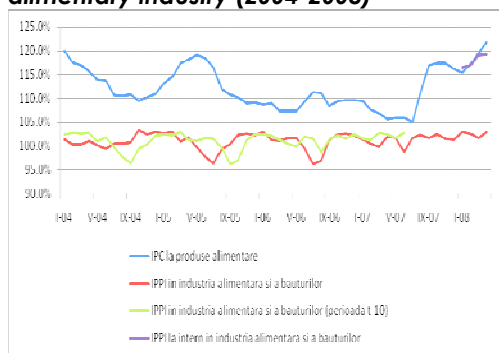
In May the National Bureau of Statistics published the data regarding the industrial price index. It decreased by 0.1% in April in comparison with the previous month and amounted to 112.2% in annualized expression. However, what does it say to the population which is not so informed about this index? It is not so popular then the well known Consumption Price Index (CPI) which causes so many troubles for the National Bank of Moldova, Government and the international financial institutions. The Industrial Price Index (IPPI) measures the aggregate evolution of the prices for industrial goods and services when they are in the first stage of commercialization and which are produced and delivered by the local enterprises. IPPI measures the increase of production costs within an economy.

Obviously, the prices paid by the final consumers include the production costs. Therefore, the increase in IPPI affects the purchasing power of the final consumer. Thus, IPPI is a useful indicator for macroeconomic indicators forecasts and it is widely used in other countries. It is an important element of the analysis which shows the future evolutions of retail prices and supplies information about the CPI. It is mainly used for indexing long-term employment contracts, as a deflator of value services used for recalculations in constant prices of the national accounts system components. Also, the IPPI is used for evaluation in constant prices of the industrial production volume produced within the current period. However, in the Republic of Moldova the IPPI is rarely used or even ignored by authorities. Thus, in spite of the increase in IPPI by 19.4% in February 2007, the National Bank of Moldova decreased by 1% the basis rate for REPO operations in April 2007, without taking into account that IPPI highlighted the growing prices were a long-term trend.

During the last months, the IPPI has decreased in annualized expression. However, a more detailed analysis shows an increase in index for the production sold on the local market resulting in increasing the inflationary pressures. It can be observed in all industries: extracting, processing, foodstuffs and beverages industry. The most significant increase in prices could be seen in the electrical and thermic energy sector, gas and water, as a result of price increase for imported energy resources. Additionally, the prices of food industry producers have significantly increased since the beginning of the year – by 7.2%, in comparison with 10.3% increase in foodstuffs prices for consumers (figure 2). The impact on CPI of the IPPI increase has some time lag. Thus, in the future, the food prices will continue to grow (approximately in 8-10 months).

Since the Republic of Moldova is a net importer country, it depends on the industrial production prices in the main trade partner countries. This aspect does not make us optimistic as well. During this year the IPPI has increased in the first 5 countries which export in the Republic of Moldova, in 3 of them it increased even higher than in the Republic of Moldova (table 2). Thus, the IPPI

Figure 2. CPI for foodstuffs and IPPI in alimentary industry (2004-2008)



Source: NBS

Table 2. IPPI in exporting countries in the Republic of Moldova

	I-2008	II-2008	III-2008	IV-2008
Rus.	125,2	126,4	127,4	-
Ucr.	123,3	125,5	131,8	137,6
Ital.	105,2	105,9	106,4	106,3
Rom.	113,0	114,5	115,6	-
Germ.	103,3	103,7	104,2	105,2

Source: Federal State Statistic Service of Russia, Ukrstat, Istat, INS România, Destatis

increase should not be ignored. It should be efficiently used for further CPI forecasts and for the monetary policy implementation.

The National Bank of Moldova is alarmed by the increase in prices

In March, the National Bank of Moldova, through its interventions, confirmed its rigid monetary stance and firm intentions to realize its major objective (prices stability maintenance). However, in April it took a short break.

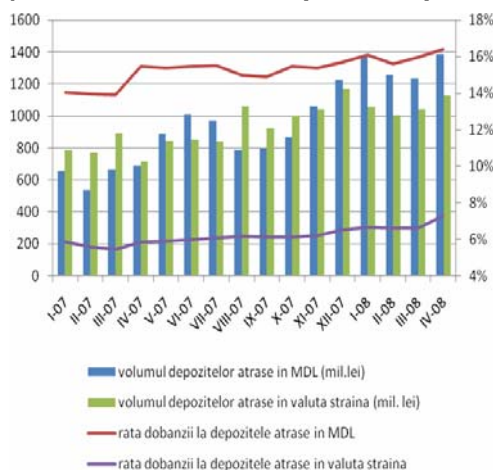
The published data pointing at the continuous increase in inflation, has determined the National Bank to intervene once again on the monetary market and with much more strict modification at this time. On the 30th of May the NBM decided to increase the basis rate for REPO operations up to 18.5% and the mandatory reserves for commercial banks in Moldavian lei and free convertible currency gradually up to 22%. The rate for "overnight" credits increased up to 21%, which makes the Republic of Moldova the country with the highest interest rate for "overnight" credits among the countries from the region (Turkey - 19.75%, Belarus - 20%).

The previous actions of NBM brought the expected effects: the interest rates for credits and deposits attracted by the commercial banks increased, but the credits volume diminished during March and April (Graph 2.3). Moreover, the share of consumption credits in the total amount of credits diminished within the first trimester by 0.2%. Nevertheless, it didn't diminish the money in circulation. Quite contrary, within this period the monetary aggregate M0 has increased due to the remittances. Within the first trimester the money transfers from abroad increased by 50% in comparison with the same period of the previous year, but the deposits at commercial banks are increasing slower, even that of the natural persons.

The banking system was able to manage the interventions from March due the availability of financial resources as a result of the increase in deposits of individuals. However, the increase in interest rates was inevitable in the case of CPI growth. For this time, the dissatisfaction of the commercial banks is higher due to the increase in the mandatory reserves norm which will limit the possibilities for crediting and for developing new offers of credits by the commercial banks. The obligatory reserves norm is much higher then in other states from the region, such as Russia or Poland. At the same time, in some countries with a regime of direct targeting of the inflation the mandatory reserves norm is very high. For example, in Romania the mandatory reserves norm is 20% for RON and 40% for deposits in foreign currency.

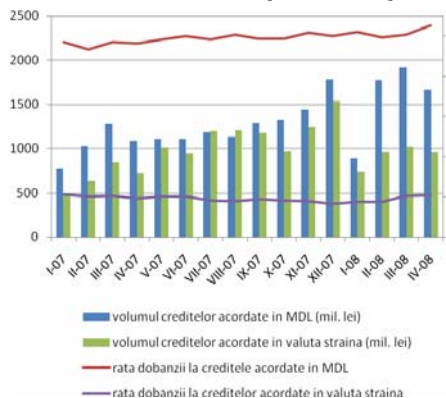
The actions of NBM are legitimate if we take into consideration its aspirations of switching to direct targeting of the inflation during the period of 2-3 years. Also, the financial indicators for the banking system denote a situation which is still favorable for the whole banking system. However, the situation for each bank is different, that is why the banks will feel unevenly the effects of

Figure 3. The volume and average monthly interest rate for deposits attracted by the commercial banks (2007-2008)



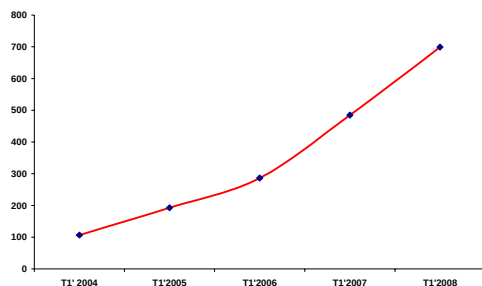
Source: NBM

Figure 4. The volume and average monthly interest rate for credits offered by the commercial banks (2007-2008)



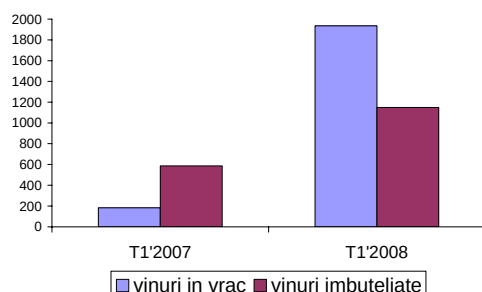
Source: NBM

Figure 5. Trade deficit evolution within the first trimester, 2004-2008



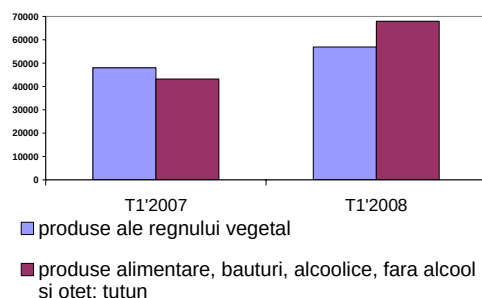
Source: NBS

Figure 6. Exports of bottled wines and wines in wrack, thousands USD



Source: Agro-industrial Agency "Moldova Vin"

Figure 7. Imports of "vegetables" and "foodstuffs", mil. MDL



Source: Expert-Grup calculations based on the NBS data

NBM interferences. The increase in the interest rates for credits offered by the commercial banks can not be avoided. It will reduce the possibilities to invest in the economy as well.

Excessive export of alcohol causes dependence

The statistical data regarding the Republic of Moldova foreign trade confirm a continuous aggravation of trade deficit in the first trimester of 2008. Although the exports continue to grow at a briskly rate (+26.4%), the increase in imports is much more fast (+37.8%). The trade deficit amounted \$698.9 mil., which is more by 44.2% then in the first trimester of the previous year. It can be partially explained by the exogenous shocks suffered by the Republic of Moldova during 2006-2007: wine embargo, increase in prices for energy resources and the drought. Elimination of "wine embargo" had marginal effects on trade deficit aggravation. Another explanation is the low competitiveness of Moldovan exports, even for the goods for which the local producers have (apparent) competitive advantages.

Indeed, the alcoholic beverages exports to the Russian market amounted, within the first trimester 2008, to \$10.77 mil., which is twice bigger then the alcoholic beverages exports in EU within the same period. Generally, the alcoholic beverages exports (including wines) are increasing much more rapidly towards the Eastern direction, rather than to the Western one... and it is not only due to dismantlement of the Russian "wine" embargo.

According to the data of the Agro-industrial Agency "Moldova-Vin", the alcoholic beverages exports to the CIS market (excluding Russian Federation) increased by 2.5 times and the exports to the EU market increased by 55%. Besides Russian consumers, in the CIS fan club of Moldavian wines take part the Ukrainians, Kazakhs and Byelorussians. From EU countries, our wines are mainly preferred by Poles, Romanians and Czechs. Noteworthy is also the reduction in alcoholic beverages exports to Great Britain, one of the most competitive European markets. Within such circumstances it is hard to omit the sharp increase in raw wine exports, which has increased 10 times in comparison with the first trimester 2007, whereas the bottled wine exports has increased only by 2.2 times. This dynamics is caused mainly by the elimination of the barriers for raw wine exports which existed a year ago. Also, it is caused by big stocks of un-exported wine due to the "wine" embargo. At the same time it shows the complicated problems faced by the Moldovan exporters with saling the local alcoholic production on foreign markets within the more costly segments of bottled wines. The final chord is the fact that almost all raw wine is exported to CIS and Romania is the single country in EU which imports insignificant quantities of this product.

Some trends of the Republic of Moldova foreign trade evolution patently show the decline of international competitiveness of Moldovan companies. The issue consists in the sharp increase in imports of products for which the Moldovan companies apparently possess competitive advantages. Particularly, during 2007-2008 has been observed a significant increase in imports of

products from such categories as “vegetables” and “foodstuffs” (Figure 6).

In the case of trade flow evolutions with foodstuffs, if we exclude such products as beverages and tobacco, the tendencies are quite interesting. After the period of 2005-2006 when the Republic of Moldova registered a trade deficit for foodstuffs, in 2007 the exports became almost equal with the imports (see the Figure 7). It is interesting that this balancing act was achieved in the same time with a deceleration of the food industry.

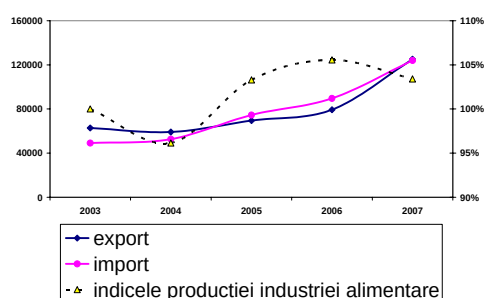
“The products made of vegetables and fruits” started to have a significant role in foodstuffs exports, which amounted in 2007 approximately 64% from the foodstuffs exports (excluding beverages and tobacco). Our hypothesis is that a series of Moldovan enterprises manage to identify and to explore new competitive advantages on the international markets and they increase the exports of these products. At the same time, other sub-sectors are not so competitive. It causes the accelerated increase in imports of foodstuffs, as well the lower increase in Moldovan exports in general.

How efficient is financing of the technological research and development?

The importance of the technological research and development (R&D) sector for the economic and social progress is obvious. Therefore, a priority of our decision makers should constitute the optimal financing of this sector. It is based on diversification of financing sources and objective and reasonable allocation of these resources. However, the financing have to be adjusted to the implementation capacity of innovations in our economy obtained within the R&D projects. This condition will bring added value to the local products.

From this point of view, Moldova has many shortcomings. The State Agency for Intellectual Property (SAIP) states that the Republic of Moldova is the country with one of the biggest numbers of inventions per capita in Eastern Europe. Additionally, the Agency of Innovations and Transfer under the Academy of Science of Moldova points at increasing number of implemented innovative projects: in 2005 – 8, in 2006 – 27, in 2007 – 43. Still, the investors' interest in for the R&D sector is a moderate one. The share of private funding of the R&D sector expenditures during 2007 constituted 17.3%¹¹, whereas in the developed world the share of private investments in the R&D sector exceeds 50%. The main cause of the lack of investors' interest in this sector is that it is not adjusted to the tendencies and real necessities of the industry. Thus, a vicious circle is created which negatively affects the competitiveness of the local companies, as well as the R&D sector's capacity to supply technological innovations. It could significantly influence the industry's competitiveness.

Figure 8. Trade with foodstuffs (mil. USD) and alimentary industry increase, %



Source: Expert-Grup calculations based on the NBS data

Table 3: Research personnel, 2007

	% from total	Increase 07/06, %
Main researchers	39,7	94,7
Engineers	6,4	103,5
Auxiliary personnel	14,1	98,2
Other employees	10,1	70,9
Researchers with teaching activity	29,7	104,4
total	100	95,1

Sources: Expert-Grup calculations based on NBS

¹¹ According to the Informative Note of the National Bureau of Statistics regarding the research and development activity during 2007

In Moldova, the research and development sector is not adjusted to the industry's tendencies and real necessities. In 2006, the R&D sector was financed with 0.46% of GDP only. The EU is to increase the sector's financing up to 3% of GDP.

Half of the Moldovan researches are people with the age exceeding 50 years.

Financing based on research projects, free, open and transparent competition could be a combination of solutions for solving the issue...

The inefficient financing of this sector is proven by the high share of current expenditures in comparison with capital ones (87% and 13%). This proportion is absolutely inadequate for recovering the technological advantages losses which happened during the transition period and for renovation the laboratory and research equipment. The high share of current expenditures is mainly explained by the lack of internal restructuring of the research and development institutions. In many of them there is an excess of auxiliary, technical and administrative personnel (appreciatively 1/3 from the total employees). This is a specific characteristic for all countries where the research and development sectors are dominated by state entities (table 3).

Besides the fact that the R&D sector funding is inefficient, it is also insufficient. Thus, the share of budgetary allocations in GDP has represented in 2006 – 0.46%, in 2008 it increased up to 0.7% and for 2009 and 2010 it is planned an increase up to 0.8% and 0.9%¹². According to the international experience, the countries in which the R&D sector financing does not exceed 1% of GDP 5 years in a row, it irreversibly loses the technical and scientific potential. Nowadays, almost all European countries adhered to the Lisbon Strategy objective to increase the R&D sector financing up to 3% of GDP. Since 1991 the Republic of Moldova has not exceeded the level of 1% which contributed to the increased physical and moral depreciation of this sector.

Another problem related to the efficiency of R&D sector funding consists in the way of distribution of the financial resources. Since 2004 the budgetary allocations for this sector are distributed according to decisions made by the Supreme Council for Technological Science and Development (SCTSD) which is an executive body of the Academy of Sciences of Moldova. Therefore, ASM is the institution which decides on its own the direction and amount of the sector's financing. Is it good or bad? It would be good if the budgetary resources allocation would be transparent and based on a free and honest competition. Most of the budgetary financial means are allocated based on institutional projects (which can be proposed by the accredited institutions only) and few of them are based on research project.

Today, the R&D sector in the Republic of Moldova represents a closed, conservative and auto-sufficient body. The common financial problems of the institutions from this sector diminished the human potential. Half of researchers are people over 50 years old. At the same time there is a lack of efficient exchange of experience for young researchers, since only 28% of personal have teaching activity.

The major cause of the R&D sector situation is the insufficiency and, especially, inefficiency of funds implementation. In order to improve the situation it is necessary to increase the budgetary allocations for the R&D sector, so that these would exceed the 1% level in the next year and continue its growth in the following years. In the same time it is necessary to amplify the funding based on research projects, free, open and transparent

¹² According to the Frame of Medium Term Expenditures 2008 - 2011

competition in which the main criteria are the innovation and credibility of the proposed research topic and the scientific or innovational performances proved by the researcher or innovator. In Romania this experience, which has been in place since 1995, increased the performance and changed the mentality regarding the access to resources. However, the Government and the ASM have to make maximum efforts in order to ensure a better access to the international grants and European research and technology innovation programs.