

## TENDENCIES OF THE INTERNAL MARKET CONJUNCTURE OF OIL CROPS UNDER INFLUENCE OF EXTERNAL FACTORS

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In the conditions of the world economy and trade globalization every country takes part in the international process of labor division and commodities exchange. Effective integration into the world economy can take place because of informative marketing maintenance by the use of modern internet-technologies, providing the commodity quality in accordance with the requirements of international standards, monitoring the market conjuncture and prognostication of its dynamics, adjusting the internal market using of administrative and market instruments. The structure of agricultural domestic export, where raw commodities prevails, testifies the necessity of foreign trade diversification in the direction of increasing sale volumes of deep processing commodities, especially those, which have the main part in the world market. Forming the values chains is possible due to the supply to the foreign market of commodities, manufactured from oil crops seeds. It is necessary to maintain research of interdependence of the conjuncture of internal and external oil crops markets. But it is important to take into account the essence of socio-economic processes that takes place in an agrarian sector nowadays.

The research of practical and theoretical problems of the globalization influence on the agrarian market of Ukraine, questions of economic efficiency of some oil crops were reflected in the explorations of following scientists-economists: Yu. M. Lopatynckyy [1], P.T. Sabluk [2], V. Olefir [3] and others. Without regard to plenty publications and researches, the problem of domestic influence on the internal market conjuncture of oil crops has not studied enough yet.

**Research methods.** In the process of research the following methods were used: economical, statistical, comparison, abstract-logical, system of analysis and synthesis.

The purpose of our research is to investigate the external influence on the market conjuncture tendency of domestic oil crops market. The objects of research are world and internal markets of oil crops, in particular: sunflower seed, rapeseed and soybeans.

**Results of research.** Conjunctural researches is one of the major instruments of the permanent monitoring, studying and reacting on the behavior and changes of the current economic market conjuncture in the country with the developed economy. First of all, they are used to forecast, simulate and foresight the ways of business activity changes both on short-term and long-term prospects. The market conjuncture represents an economic situation, which takes place at the market now or during a limit interval of time and characterized by the value of demand, supply and dynamics of prices [4].

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A foreign market influences the internal market at such situations:

- there is a deficit at the foreign market and it stimulates the export of commodities to this market;
- there is a surplus of products at the foreign market and it stimulates the import;
- if the internal price is, so called, “tied” to the world price, so they will change synchronously.

### 1. Supply and demand of world oil crops market, million ton

Determinants	Marketing year									
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Sunflower seeds										
Stocks at the beginning of year	1,5	1,99	2,71	2,23	2,74	3,38	3,05	3,29	2,12	1,89
Production	23,92	26,83	25,25	30,27	30,35	27,44	33,48	32,18	33,46	40,30
Import	1,38	2,19	1,14	1,40	1,78	1,25	1,86	1,48	1,58	1,86
Export	1,55	2,26	1,23	1,52	1,92	1,48	2,14	1,56	1,79	2,00
Domestic consumption	23,25	26,03	25,65	29,64	29,57	27,53	32,96	33,28	33,48	40,40
Ending stocks	1,99	2,71	2,23	2,74	3,38	3,05	3,29	2,12	1,89	1,65
Stock variation	0,49	0,72	-0,48	0,51	0,64	-0,33	0,24	-1,17	-0,23	-0,24
Soybeans										
Beginning stocks	35,60	42,88	38,49	48,62	53,53	62,50	52,27	43,36	60,62	69,92
Production	196,89	186,62	215,76	220,65	235,96	219,55	211,64	260,25	263,59	238,73
Import	62,88	54,08	63,48	64,09	68,96	78,34	77,39	86,84	88,80	93,21
Export	61,34	56,04	64,75	63,80	71,09	78,63	76,89	91,86	91,12	90,42
Domestic consumption	191,15	189,05	204,36	216,02	224,87	229,48	221,05	237,96	251,96	256,18
Ending stocks	42,88	38,49	48,62	53,53	62,50	52,27	43,36	60,62	69,92	55,25
Stock variation	7,28	-4,39	10,13	4,91	8,97	-10,23	-8,91	17,26	9,3	-14,67
Rapeseeds										
Beginning stocks	2,85	2,20	2,38	5,29	5,79	5,08	3,98	7,28	8,81	7,01
Production	33,26	39,44	46,11	48,54	45,13	48,51	57,81	60,96	60,55	61,56
Import	4,02	5,14	5,00	6,66	6,99	7,54	12,12	10,73	10,46	12,92
Export	4,13	5,53	4,90	6,98	6,63	8,15	12,10	10,82	10,85	12,96
Domestic consumption	33,88	38,83	43,80	47,72	46,20	49,00	54,51	59,35	61,95	63,52
Ending stocks	2,20	2,38	5,29	5,79	5,08	3,98	7,28	8,81	7,01	5,02
Stock variation	-0,65	0,18	2,91	0,5	-0,71	-1,1	3,3	1,53	-1,8	-1,99

Source: <<http://faostat.fao.org>>

The domestic production of oil crops is mainly oriented to the export of raw materials and domestic processing.

In Table 1 there are data, that characterizes the world market of oil crops during 2002/03 - 2011/12. Production of sunflower seeds, soybeans and rapeseeds during 10 years had a small tendency to the increase. From 2002/03 till 2011/12 the production of sunflower seeds increased on 68 %, soybeans - on 21 %, rapeseeds - on 85 %. Thus, it testified that oil crops had a stable supply during the investigated period at the world market.

Together with the increase of oil crops production, the domestic consumption also increased (mainly it is recycling on vegetable fats and oils, rapeseeds – on a biodiesel).

It is important to distinguish the periods of improvement and worsening of the market conjuncture, to investigate how the world market of oil crops influences the market of Ukraine. A concept of worsening and improvement of the market conjuncture is relative enough. There is a salesman and a customer at every commodity market, who do not divide their opinion on the market situation. A salesman is interested in the income increase due to the demand increase and the increase of prices on a commodity, while a customer expects quite opposite tendencies. In this research we will consider the oil crops market from the salesman's point of view. That is why the market conjuncture will improve due to the increase of demand relatively to supply.

The most universal index of the market conjuncture is a ratio between demand and supply. Proportionality, namely optimal ratio is a major pre-condition of normal market development. Disproportions, deformations of separate component parts of market cause crises, complicate market relations. The balance of oil crops market can be estimated by the index of the market conjuncture [5], which is accounted by the formula:

$$K_K = \frac{P}{Q} , \quad (1)$$

where  $K_K$  – index of the market state ;  $P$  – volume of current demand;  $Q$  – volume of supply.

In Table 2 we can see a correlation between the world consumption of oil crops and its production. The market state for the producers of these crops was unstable during 2002/03 - 2011/12 marketing years, there was not a clear dynamics of the index.

A world price is one of important indexes for the estimation of foreign market conjuncture. Table 2 shows that prices on oil crops used to increase during the investigated period, at the same time there were some rejections: in 2007/08 MY prices on all groups of oil crops increased sharply, while a production of soybeans declined. The substantial reason for the price increasing was the beginning of world economic crisis during 2008-2010.

Disparity of tendencies to changes of world price and market conjuncture explained by the fact, that the world price is formed on the basis of market expectations.

## 2. World market conjuncture of oil crops

Index	Marketing year									
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Sunflower seeds										
Coefficient of market conjuncture	0,97	0,97	1,02	0,98	0,97	1,00	0,98	1,03	1,00	1,00
Price, USD/T*	286	321	313	291	401	745	364	452	661	593
Soybeans										
Coefficient of market conjuncture	0,97	1,01	0,95	0,98	0,95	1,05	1,04	0,91	0,96	1,07
Price, USD/T*	267	323	277	261	335	550	421	429	549	562
Rapeseeds										
Coefficient of market conjuncture	1,02	0,98	0,95	0,98	1,02	1,01	0,94	0,97	1,02	1,03
Price, USD/T*	285	317	262	292	375	644	393	419	647	661

\*Rotterdam CIF

\*\*Hamburg CIF

Source: <<http://faostat.fao.org>>; author's calculations.

The next stage of the research is to analyze the internal market conjuncture of oil crops during 2001-2009 and to estimate the external influence on its functioning. Table 3 shows that production of oil crops had a tendency to the increase during 2001-2009. Production of sunflower seeds increased almost in 3 times; production of soybeans presented 1044 thousand T in 2009 against 74 thousand T in 2001; the croppage of rapeseeds increased in 14 times during 9 years. It testified that the demand on domestic oil crops increased at the internal and external markets. It characterizes relative stability of supply at the world market.

## 3. Supply and demand of domestic oil crops market in Ukraine, thousand ton

Index	Years								
	2001	2002	2003	2004	2005	2006	2007	2008	2009
Sunflower seeds									
Production	2251	3271	4254	3050	4706	5324	4174	6526	6361
Import	1	3	1	4	3	4	7	8	5
Stock variation	700	-870	-300	1170	-550	-420	1130	-2180	600
Export	583	68	868	354	35	230	370	99	728

Total recourses	2368	2335	3088	3870	4124	4679	4941	4255	6238
Consumption:									
Feed	290	180	170	150	150	150	100	150	120
Seed	28	40	35	37	40	36	42	42	50
Processing	2000	2100	2850	3644	3876	4440	4750	3990	5990
Soybeans									
Production	74	125	232	363	613	890	723	813	1044
Import	0	1	1	0	0	2	1	1	1
Stock variation	0	0	0	0	0	-90	90	0	0
Export	1	4	46	39	175	271	320	202	263
Total recourses	73	122	186	325	438	531	493	612	781
Consumption:									
Feed	5	24	53	136	101	377	268	330	231
Seed	8	16	20	32	60	45	45	50	70
Processing	59	81	112	153	271	100	171	224	470
Rapeseeds									
Production	143	88	120	297	332	627	1057	2912	1992
Import	0	1	3	0	1	2	3	5	2
Stock variation	12	37	-9	-65	35	-5	50	-180	180
Export	84	28	65	152	252	500	921	2406	1899
Total recourses	70	98	49	81	115	123	190	331	275
Consumption:									
Feed	7	20	12	26	12	12	31	71	125
Seed	4	6	10	10	13	26	37	32	30
Processing	58	70	26	42	86	79	111	199	99

Source: <<http://faostat3.fao.org/home/index.html>>

In Table 4 there are shown indexes which characterize the internal oil crops market: correlation between the average annual consumption and production; and also index of internal price.

As we can see from Tables 3 – 4, the internal market conjuncture of oil crops was favorable to the producers during the investigated period. The production of seeds were increasing, at the same time the export and domestic consumption increased. The amount of sunflower seeds and soybeans increased on domestic processing. It was a positive moment for development of oil brunch. As for the rapeseeds the export increased considerably, and the internal processing declined.

#### 4. Domestic market state of oil crops

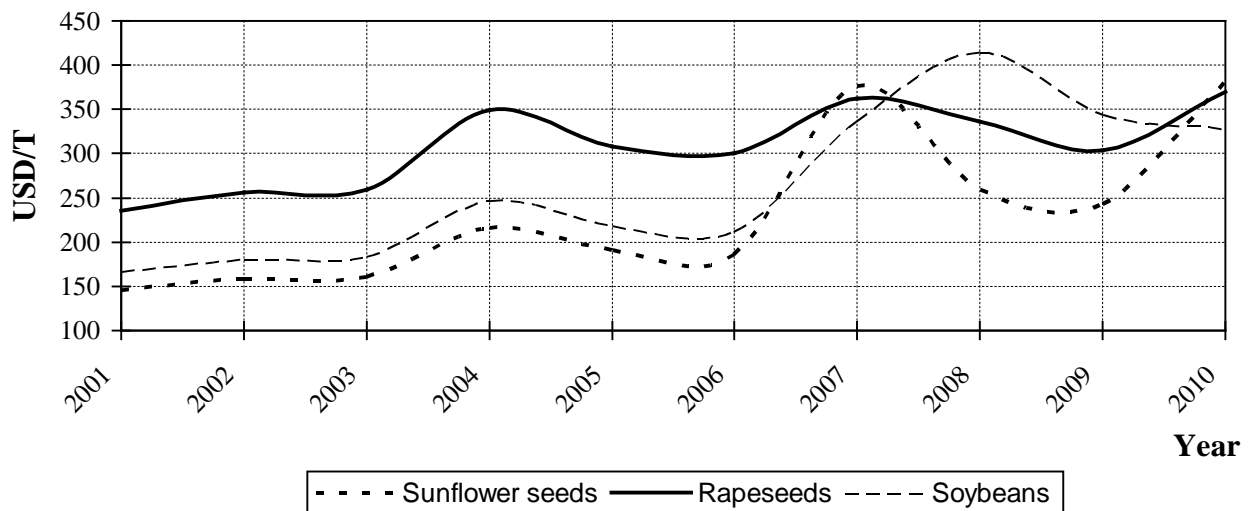
Indexes	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sunflower seeds										
Coefficient of market conjuncture	0,98	0,99	0,99	0,99	0,99	0,99	0,99	0,98	0,99	
Index of internal price,%	100,0	108,6	110,2	148,4	130,9	127,5	257,9	178,0	167,0	260,8
Soybeans										
Coefficient of market conjuncture	0,99	0,99	0,99	0,99	0,99	0,98	0,98	0,99	0,99	
Index of internal price,%	100,0	108,7	110,2	148,5	131,0	127,6	202,4	249,1	206,7	197,5
Rapeseed										
Coefficient of market conjuncture	0,99	0,98	0,98	0,96	0,97	0,95	0,94	0,91	0,92	
Index of internal price,%	100,0	108,7	110,2	148,4	131,0	127,6	154,0	142,9	129,2	157,1

Source: <<http://faostat3.fao.org/home/index.html>>; calculations of the author.

Figure 1 shows the dynamics of internal price on oil crops during 2001-2010. During this period we can differentiate the phases of increasing and decreasing of prices: during 2001-03 was slow price increasing on all crops; in 2004 was sharp price increasing; during 2005-06 was a great decreasing of prices; in 2007 was a sharp price increasing on a sunflower seeds and rapeseeds; 2008 was characterized by a sharp price increase on soybeans; 2009 was a period of price reduction on all crops with next increase in 2010 on a sunflower seeds and rapeseeds. Thus, price dynamics at the internal market was unstable enough. Basic factors, which influence the internal price, are world demand and world price that “tied” to the internal price with corresponding signals to the production and consumption.

**Conclusion.** All over the world Ukraine is known as a powerful producer and supplier of oil crops to the international market. Judging from our research, the products of domestic industry are in demand and have tendencies to the increase of production with following export increase.

The process of pricing does not have spontaneous character at the market of oil crops. In the conditions of globalization, dependence of the internal market conjuncture of oil crops on external factors considerably grows. The external factors have a considerable influence on demand, supply and cost of commodities of internal market and development of export-import relations. The world price influences the domestic price as they have a straight proportional connection.



**Figure 1. Dynamics of the average prices of oil crops in Ukraine.**

Source: <<http://faostat3.fao.org/home/index.html>>

But, to develop the export-import relations at the market of oil crops, it is necessary to promote and support the competitiveness of products on national and international levels. It is a pre-condition of successful development of industry.

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**Н.Б. Побережец**

**Тенденции конъюнктуры внутреннего рынка масличных культур под влиянием внешних факторов**

*Структура экспорта отечественных сельскохозяйственных товаров, где преобладает сырье, свидетельствует о необходимости диверсификации внешней*

торговли в направлении увеличения объемов продажи товаров более глубокой переработки, в данном случае это семена масличных культур. Необходимо осуществлять исследование взаимозависимости и взаимосвязей конъюнктуры внутреннего и внешнего рынков масличных культур с учетом особенностей социально-экономических процессов, которые ныне происходят в аграрном секторе.

В процессе исследования применялись следующие методы: экономико-статистические, сравнения, системного анализа и синтеза, абстрактно-логический.

Цель статьи — исследовать влияние внешних факторов на тенденции конъюнктуры внутреннего рынка масличных культур. Объектами исследования были избраны мировой и внутренний рынки масличных культур, в частности: семена подсолнечника, рапса и сои. Проанализированы изменения конъюнктуры мирового и внутреннего рынка масличных культур за 2001 – 2010 года.

В результате исследования были сделаны выводы, что процесс ценообразования на рынке масличных культур не имеет спонтанного характера, для него свойственны определенные закономерности. В условиях глобализации зависимость внутренней конъюнктуры рынка масличных культур от внешних факторов значительно возрастает. Внешние факторы имеют значительное влияние на спрос, предложение и цену товаров внутреннего рынка. Наибольшее влияние имеет цена, так как масличный рынок характеризуется “привязанностью” к ценовым тенденциям внешнего рынка.

**Ключевые слова:** конъюнктура внутреннего рынка масличных культур, мировой рынок, показатели конъюнктуры рынка, динамика внешних и мировых цен на семена подсолнечника, сои и рапса.

**N.B. Poberezhets**

***Tendencies of the conjuncture of internal oilseeds market under influence of external factors***

*The structure of agricultural domestic export, where raw commodities prevails, testifies the necessity of foreign trade diversification in the direction of increasing sale volumes of deep processing commodities, in our case it is oilseed crops.*

*It is necessary to maintain research of interdependence of the states of internal and external oilseeds markets. But it is important to take into account the essence of socio-economic processes which take place in an agrarian sector nowadays.*

*In the process of research the following methods were used: economical statistical, comparison of system analysis and synthesis, abstract and logical.*

*The purpose of our research is to investigate the external influence on the market state tendency of domestic oilseeds market. The objects of research are world and internal markets of oil crops, in particular: sunflower seed, rape seed and soybeans.*

*The changes of the market state in world and internal markets of oilseeds were analyzed during 2001 – 2010.*

*As a result of research some conclusions were done: the process of pricing does not have spontaneous character at the market of oilseeds. It has some sequences. In the*



*conditions of globalization dependence of the internal market state of oilseeds on external factors grows considerably. The external factors have a considerable influence on demand, supply and cost of commodities of internal market. The price has a great influence, because oilseeds market is characterized by “attachment” to the price tendencies of external market.*

**Key words:** *conjuncture of internal oilseeds market, world market, indexes of market conjuncture, dynamics of external and world prices on sunflower seeds, soybeans and rapeseeds.*