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INTERNAL COMPETITIVENESS EROSION OF THE ROMANIAN AGRI-FOOD SECTOR EROSION "CATALYZED" BY THE ECONOMIC-FINANCIAL CRISIS

ABSTRACT

The paper starts from the theoretical premise that the business environment of the operators from the agri-food economy is, greater influenced by the behaviour of certain essential macro-economic variables of the market economies.

For this purpose, our methodological approach investigates the behaviour of six macro-economic variables (GDP, prices, inflation, exchange rate, budget and credit) during time periods for which relevant statistical data are available.

Starting from the incidence of economic macro-variables upon the agri-food sector, a series of factors are identified and quantified that generated a strong erosion of farmers' incomes (relative instability of production and real prices and the "aggressiveness" of real prices of non-agricultural inputs).

Key words: macroeconomic variable, agri-food sector, sectoral real prices, price scissors, relative instability.

JEL Classification: Q11, Q13, Q14, Q18, R32.

1. INTRODUCTION

It is a well-known fact that only the availability of resources is not sufficient for agriculture to become the main supplier of food security. Economic and financial capacity is needed for putting into value these resources, so that, under increased foreign competitiveness conditions, agriculture should become a small "driving engine" of the national economy.

We have also mentioned, on other occasions, that Romania's agricultural sector did not "suffer" from economic performance until 1989 and of course, after 1990. At that time, we were among the last East-European "sister" countries as regards performance; at present, we are among the last countries in EU-27 as regards the agricultural productivity.

The presentation of the macro-economic context of the economic operators from Romania presupposes the utilization of certain measurement indicators, in real terms, of the levels and trends of certain phenomena and processes characteristic to emergent economies.

2. MATERIAL AND METHODS

The support information material of the paper consists of updated relevant statistical data, partly forecast data, covering the period 1980-2007 – 2013, related to macroeconomic or sectoral indicators, expressed by volume indices or real value (deflated) indices.

The methodological tools used for the analysis of certain macroeconomic variables mainly consist of the following:

- Fixed-base volume indices (1989 = 1), for GDP and sectoral GVA, for the real exchange rate (1991 = 1), for the budgetary incomes and expenditures (1990 = 1) and the real domestic credit (1990 = 1), determined with the general relation:

$$Yq_f = \frac{Yq_i}{Yq_0}, \text{ where:}$$

Yq_f = fixed-base volume indices;

Yq_i = volume indices referring to the reference period, in any fixed base;

Yq_0 = volume index referring to the established fixed base (e.g. 1989).

- Annual chain-type indices, for the two main price deflators (GDP and CPI).

In order to investigate the incidence of certain sectoral factors that "catalyzed" the erosion of the real purchasing power of the agricultural incomes, a few methodological instruments were used, namely:

- The dynamics of the real sectoral price indices and of the relative price indices (using the GDP price deflator), as well as of the real prices of agricultural production (1989 = 1), calculated on the basis of the relation:

$$Yp_r = \frac{GVApn_i, AGOpn_i}{GDPp_i}, \text{ where:}$$

Yp_r = real sectoral price indices, referring to the reference period (1989 = 1);

$GVApn_i$ = Gross Value Added nominal price indices (1989 = 1);

$AGOpn_i$ = Agricultural Gross Output nominal price indices (1989 = 1);

$GDPp_i$ = Gross Domestic Product price indices (deflators), (1989 = 1).

- The variation coefficients of the anual volume indices of the agricultural and food production, as well as of the gross value added and of real sectoral prices (agriculture, industry and total economy), quantified according to the statistical-mathematical relation:

$$CV(Yq, p)\% = \frac{stdev(Yq, p)}{average(Yq, p)} * 100, \text{ where:}$$

$CV(Yq, p)\%$ = variation coefficient of the variable;

$stdev(Yq, p)$ = standard deviation of the variable;

$average(Yq, p)$ = mean of the variable;

• The dynamics of the real prices of the synthetic sectoral indicators (final output, intermediary consumptions and gross value added, from the national accounts) and the real price "scissors" in agriculture (1989 =1), measured by the relation:

$$PSrp = \frac{AGOrp, GVArp}{ICrp}, \text{ where:}$$

$PSrp$ = real price scissors;

$ICrp$ = real price indices of the intermediary inputs.

3. RESULTS AND DISSCUSIONS

3.1. Economic growth – fragmentary and asymmetrical

The domestic gross product dynamics (PIBT = total GDP) and the gross value added dynamics (VABT = total GVA), in overall economy and by main activities (according to CAEN classification), in the period 1980 – 2007 (1989 = 1), feature a series of characteristics, specific to Romania, which can be also found in the former communist countries (Figure 1).
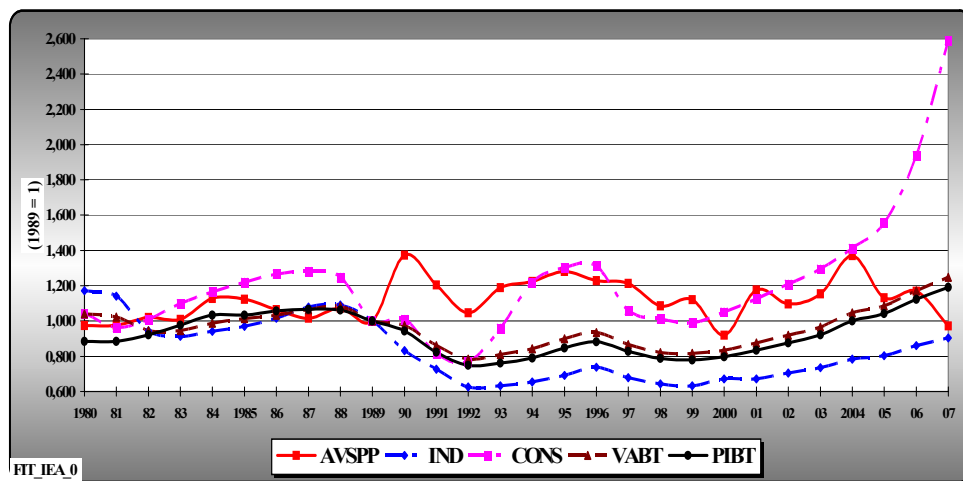
Source: own calculations, on the base of Romanian Statistical Yearbook 1995, 2000 - 2007;

Figure 1. GVA in national economy (volume indices), 1980–2007 (1989 = 1).

• Compared to the year 1989 (as reference year "in decline" compared to the historical "peak year" 1987), the general economic growth (total GDP and

total GVA) and the sectoral growth (IND and CONS) experienced significant fragmentation (decline in the periods 1990–1992, 1997–1999, and increase in the periods 1993–1996 and 2000–2007);

- The only sector where the transition began by economic growth was agriculture (AVSPP), yet its low yearly dynamics featured strong oscillations;

Since 2000, one of the economic growth "engines" was the constructions sector (CONS), this sector dynamics being much ahead the overall economy aggregate (in the year 2007, the index was about 2.6 times higher compared to 1989, while PIBT index only about 1.2 times).

A practical modality to reflect the macro-economic framework where agriculture evolved, as main activity of national economy, is given by the dynamic "behaviour" of the gross value added – as condensed expression of the remuneration of production factors – in this branch (AVSPP), compared to industry (IND), constructions (CONS), overall economy (total GVA and total GDP).

Compared to the reference year 1989, the dynamics of the five mentioned variables experience quite contradictory "behaviours", conferring genuine, "original" characteristics to the "Romanian transition pattern":

- After a very sharp increase (up by 37.3 % in the year 1990), the gross value added in agriculture (AVSPP) was larger than one until 1999, great yearly oscillations following, to become by almost 3% lower compared to its 1989 level by the year 2007;

- The gross value added in industry (IND) had quite an opposite evolution, which throughout the transition period (1990–2007) was under its 1989 level, with two considerable "declines" (by 37.4 % in the year 1992 and by 36.6 % in the year 1999), to recover at only 90.4% by the year 2007;

- The inertia of the early decline of the gross value added in constructions (CONS) was a little lower (by 23.1 % in 1992 and by about 1 % in 1999); the sector experienced a boom starting with the year 2000; following this trend, in the year 2007, the gross value added in this sector was by about 2.62 higher compared to that in the year 1999; it has to be mentioned here that the "backbone" of the boom experienced by the sector was not the "productive-infrastructural" component in its general sense, but rather the "real estate" component;

- The internal trade had only one "moment" of maximum decline (by 35.1 % in the year 1994), and its subsequent evolution partially contributed to the economy "overheating", as the gross value added index of this sector was 2.47 times higher in 2007 compared to that in 1994.

- As expressions of the national "production" aggregate, the gross value added of all branches (total GVA) and the gross domestic product (total GDP) experienced lower decline compared to industry; minimum level

pairs were noticed in 1992 (78.3 % and 75.0 %) and in 1999 respectively (81.7 % and 77.9 %); after this, both synthetic indicators had a continuous progression trend, to be 1.53 times higher in 2007 compared to 1999;

Hence, the general regressive trend of the gross value added in agriculture (AVSPP), compared to other branches and the national economy aggregate, can be considered as a first support – phenomenon of the economic power erosion of the Romanian agriculture and farmers in the transition period.

As a matter of fact, in the last 18 years, the real contribution of the Romanian agriculture was rather of social nature, i.e., by the private land ownership reconstitution and constitution in agriculture, a large number of people could ensure a great part of their food from their own production, being careless about or indifferent to the agri-food market signals from the urban area.

It is here that the true side of the problem appears. From the perspective of modern, competitive economy, performant agriculture is able to obtain enough agricultural production so as to cover the domestic and foreign aggregate demand with a decreased labour force. This means that agriculture contributes, by increased productivity, to the real economy relaunching.

When the command economy began to dismantle in agriculture, this sector had a significant share in some of the main synthetic indicators of national economy: 27.5% in the active employed population, 10.9% in the productive fixed capital stock, 16.8% in investments, 54.8% in the private consumption expenses of the population, and finally, 15.2% in the gross value added.

After 18 years of transition to market economy, from the official statistics we can find out that increased shares are present in three of the five mentioned indicators (employed population, consumption expenses and gross value added), while the shares decreased in two indicators (investments and fixed capital stock).

The diminution of the share of this branch in two of the resources by which the productive force of agricultural labour could be increased (fixed assets and investments), together with the increased share in labour, represents the clearest expression of capital substitution by labour, and not inversely, as it would be normal, and as things happen, in fact, in almost all the countries with performant economy and agriculture.

The decline of the relative importance of agri-food economy, in general, and of agriculture, in particular, in the fixed capital stock and net investments, was due, on one hand, to the "eruption" of a destructive attitude with regard to almost everything "reminding" of socialism, through the former agricultural cooperatives: stables, agricultural buildings, land reclamation systems, sheds and storage rooms, etc. This attitude was also found in the case of fruit and vine plantations, livestock herds, breeding animals etc.

3.2. Inflationary "shocks" – more and more temperate

The net difference between the command economy and the competitional economy, with regard to prices, consists of the following aspects (Figure 2):

- In the period 1981–1989, the oscillation of the yearly indices of the two general price deflators ranged from 0.991 to 1.121 (with the GDP deflator - YpTa) and from 1.009 to 1.176 (with the consumer price deflator – CPIa);
- In the 19 years of the transition period (1990–2008), the variability margin of the two deflator indices considerably grew, from 1.102 (2008) to 3.274 (1993), with the implicit GDP prices, and from 1.048 (2007) to 3.561 (1993), with the consumer prices of the population;
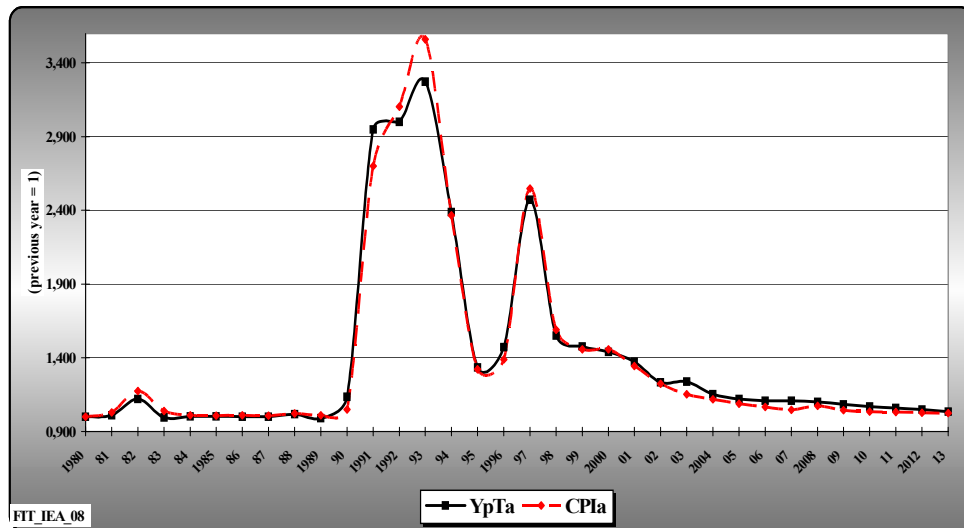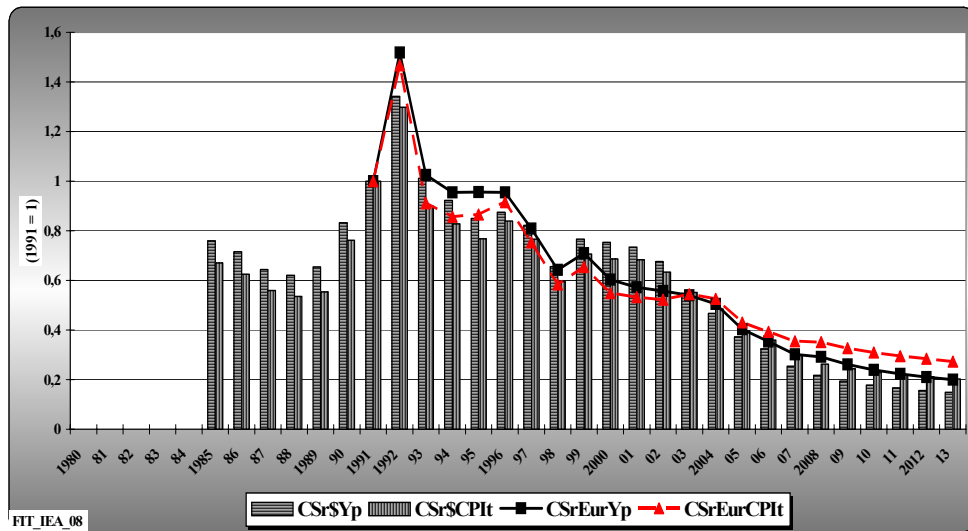

Source: own calculations, on the base of Romanian Statistical Yearbook 1995, 2000 - 2007;

Figure 2. Annual GDP and CPI price deflators, 1980–2013.

- The larger amplitude of the increase in consumer prices could be also explained, partially, of course, by the psychological component of the producers' and consumers' behaviour;
- The presence, in the command economy period, of a single inflationary "shock" (named price "settlement" at that period), unlike the period of transformations, when two great inflationary "shocks" were produced (1991–1994 and 1997);
- The expected gradual diminution trend of the amplitude of price increase in the economy as well as of the consumer prices, up to the 2013 horizon, comes to facilitate the business plans predictability of economic operators, with favourable consequences upon the improvement of their competitiveness on the domestic and world markets.

3.3. The exchange rate – mainly unfavourable

As one of the main prices in the economy (national currency price), the real exchange rate largely experienced a depreciation phenomenon in the reference period (1985–2007) (Figure 3).

Source: own calculations, on the base of Romanian Statistical Yearbook 1995, 2000 - 2007;

Figure 3. Real exchange rate of national currency, 1985–2013.

The quasi-general decline of the national currency purchasing power compared to the main reference currencies (USD and EURO) adversely impacted the capacity of the Romanian economic entities to get connected, under competitiveness conditions, to the European and international commercial flows.

Several aspects are worth mentioning referring to the evolution of the real exchange rate in the period 1991–2007:

- Increasingly strong depreciation trend of the real exchange rate of our national currency compared to the US dollar, versus the exchange rate compared to the European single currency (euro). Thus, through both usual price deflators (GDP and CPI), the real RON/USD exchange rate represented, in the year 2007, only 25.4 % and 29.8 % respectively of the 1991 level;
- In relation to the European single currency (euro), the real exchange rate experienced, under the general depreciation trend in the period 1991 – 2007, several recovery "moments" (1991, 1995, 1999, using the GDP deflator and 1991, 1995, 1996, 2003, respectively, using the CPI deflator), the indices reaching 30.2% and 35.5% respectively in the year 2007 compared to 1991;

- The prospective evaluations of the real exchange rate until 2013 are not optimistic at all, as the national currency depreciation trend will systematically continue to reach indices ranging from 14.9 % to 27.3 %;
- For the economic entities, the direct consequence of the national currency depreciation consists of cheaper exports and more expensive imports, corrosive phenomena of the financial equilibrium at micro- and macro-economic level.

3.4. The real budgetary deficit – quite unstable and unpredictable

In the period 1992 – 2006 (1991 = 1), the regressive dynamics of the real incomes to the public budget outstripped the dynamics of real expenditures (**Figure 4**), the yearly oscillations of the two indices being very sensitive, generating a very unstable and unpredictable behaviour of the real budgetary deficit (the indices ranged from 0.501, in the year 2004, to 2.830, in 1996).
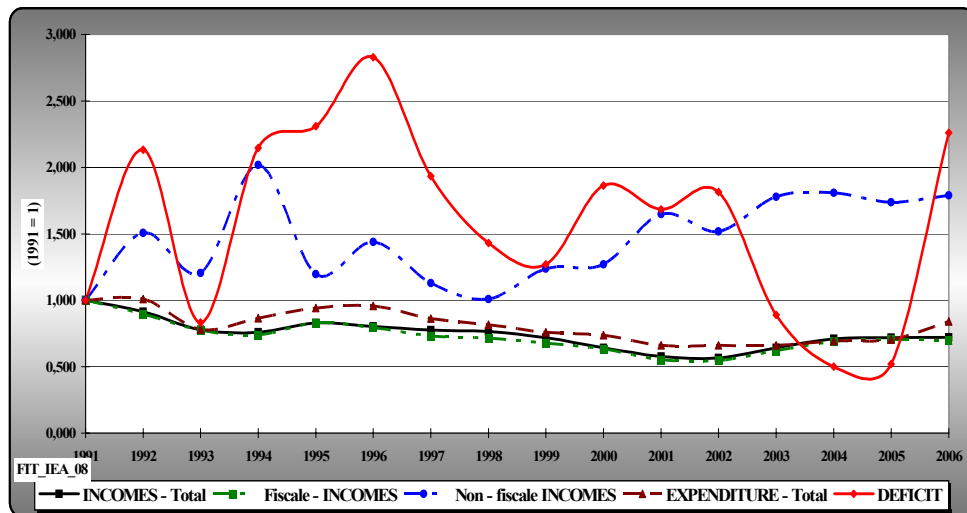
Source: own calculations, on the base of Romanian Statistical Yearbook 1995, 2000 - 2007;

Figure 4. Budgetary incomes, expenditures and deficit, 1992–2006 (1991 = 1).

The correlation analysis of the dynamics of the two "balance pans" of the public budget (incomes and expenditures) in relation to the total GDP dynamics can reveal a relative degradation of the economic activity driving effect of this macro-variable.

This statement can be supported by two indicators measuring the GDP budgetary intensity:

- By the ratio of real budgetary incomes index to GDP index, which in the year 2006 (compared to 1991=1) was 0.528 (minimum level), with a variation range up to 1.004 (1992);

- By the ratio of the real budgetary expenditures index to the GDP index, which in the year 2006 (compared to 1991 = 1) reached 0.614, with a variation range from 0.555 (2005) to 1.106 (1992);
- The regressive trend of the real budgetary incomes was mainly determined by the fiscal incomes, and within these, by the indirect taxation (VAT, excise taxes, customs duties etc.) and less by the non-fiscal incomes;
- The slower regression trend of the real budgetary expenditures was mainly determined by two great budgetary chapters (i.e., social-cultural and financing the economic actions);
- The gap between the dynamics of the real budgetary incomes and expenditures, in real terms (using the GDP price deflator), may suggest either a certain weakness in the administrative capacity collecting the incomes, or a relative dilettantism in the substantiation of budgetary priorities.

3.5. Domestic credit – a relative "jammed engine" of the economy

In a fully functional market economy, the credit represents an essential macro-economic variable for financing the economic units.

In real terms, the total domestic and non-governmental credit trends (Figure 5) experienced, in the period 1991–2006 (1990 = 1), inflexion points, in the years 2000–2001, when a slight revigoration began, after the systematic decline of the period 1991–2000.
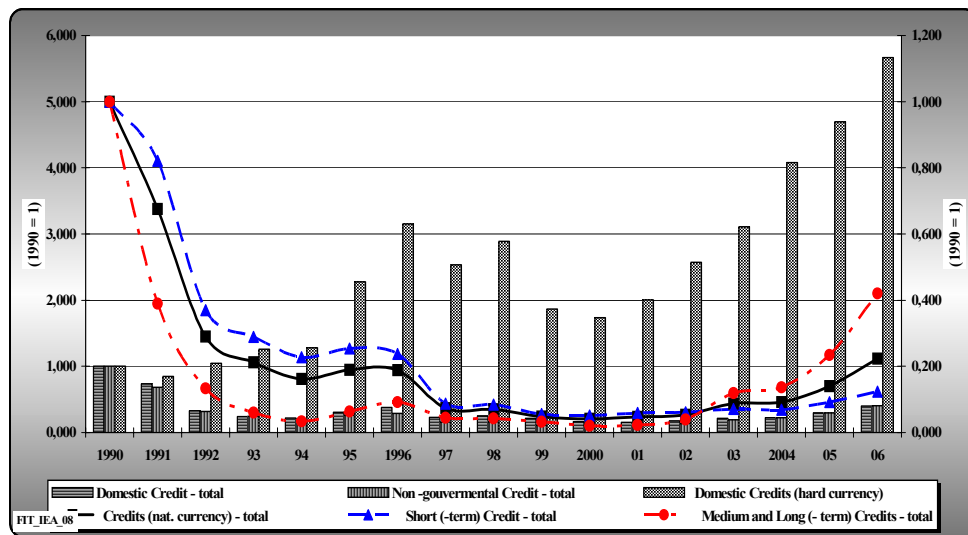
Source: own calculations, on the base of Romanian Statistical Yearbook 1995, 2000 - 2007;

Figure 5. Real domestic credit – total and non-governmental, 1990–2006.

Related to the GDP dynamics, the dynamics of the real domestic and non-governmental credit features inflexion points at about the same "moments" (1999 and 2000), which coincide, in fact, with the years from which the general economic growth was resumed, after the two periods of severe contraction of the Romanian economy (1990–1992 and 1997–1999).

The almost unusual dynamics of the credit in foreign currency is quite surprising, which, in real terms, was over 5.6 times higher in the year 2006 compared to 1990, while the domestic credit in RON was about 5 times lower.

At the same time, a stronger revigoration of the medium and long-term credit can be noticed, compared to the short-time credit.

3.6. Severe decline of real sectoral prices

Compared to the relative rigidity of prices in the command economy period (1980–1989), in the transition period, the quasi-general decreasing trend of the real prices of the economic activities generating agricultural, industrial, construction, etc. goods was accompanied by a quasi-continuous increase of real prices for services (RRAM) (Figure 6).
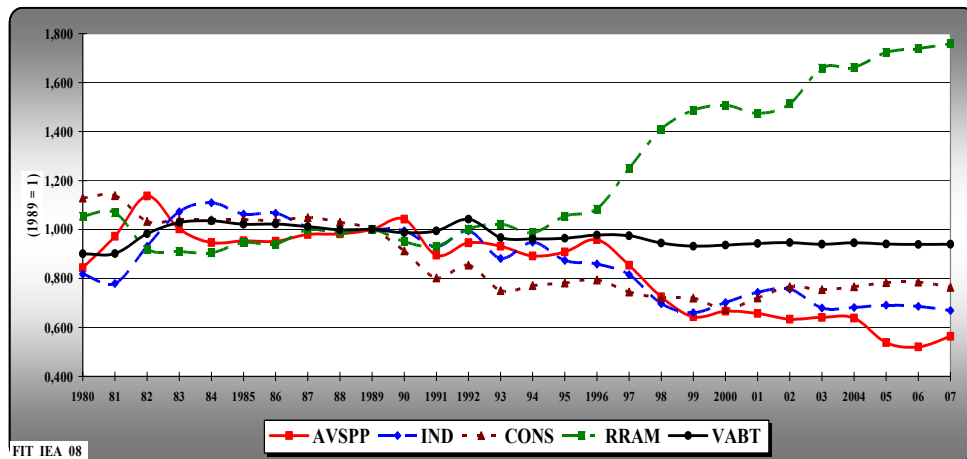
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Figure 6. Real GVA price indices in national economy, 1980–2007 (1989 = 1).

Several aspects are worth mentioning, among which the following:
- in the main sectors producing goods taken into consideration (agriculture, industry, constructions), the real specific prices were not stimulating enough so as to ensure the internal and external sectoral competitiveness; in the year 2007, their real price indices ranged from 0.564 (agriculture) to 0.764 (constructions), compared to the 1989 level;

- the real prices of domestic trade (COM) and of services (RRAM) are much above those in 1989, being the main contributors to inflation "feeding".

In relation to the "historical inflexion" year 1989, the real prices of agricultural products (which are sometimes named, a little forced, of course "farm gate prices"), have three perceptible "stages" (Figure 7):

- a relative ceiling, in the period 1990 (beginning of transitional "de-freezing") – 1996, when the governmental administration intervened on the agricultural market through the direct or indirect producer or consumer price support; in this period, the general level of real agricultural prices ranged from 1.253 (1992) to 1.144 (1994);
- a considerable decline of Romanian farmers' real prices, in the period 1997–1999, when the so-called public power "intervention through non-intervention" in the "moderation" of market disequilibria generated a decline in the real prices of agricultural products by 45.3 % compared to 1996; practically a bizarre situation was reached, i.e., each ton of additional agricultural production became a damage multiplier for farmers;
- a regressive trend, less accentuated, of real prices after the year 2001, which culminated with the lowest level in the last 18 years (58.5 % compared to 1989, in the year 2006);
- a certain "practice" of stronger stimulation of crop production (which can be explained, up to a certain level, by the presence of certain products so-called "sensitive" or "strategic" – wheat, maize, sunflower, soy bean) to the detriment of livestock products, which would "feed" the fracture produced between crop production and livestock production.
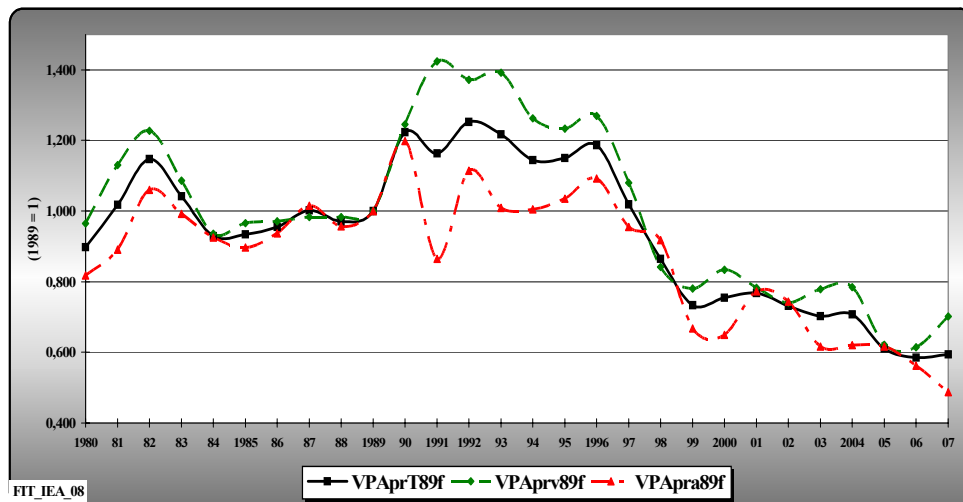
Source: own calculations, on the base of Romanian Statistical Yearbook 1995, 2000 - 2007;

Figure 7. Real price indices of the agricultural gross output in Romania, 1980–2007 (89 = 1).

Yet, as in the case of other sequences, the transition in prices was characte-rized[1] by sectoral asymmetry in relation to other branches of the economy as well.

The dynamics of real prices (using the implicit GDP price deflator) in Romania's economy, in the period 1980–2007 (1989 = 1) reveals several tendencies and characteristics:

- in the whole period taken into consideration, only in three years (1982, 1983 and 1990) the real GVA price indices in agriculture were larger than one (that is agriculture operated with more remunerating prices), their variability ranging from maximum 1.137 (1982) to minimum 0.521 (2006);

- it can be thus concluded that in the command economy period, in two of nine years, the real prices were stimulating for agriculture, while in the remaining seven years agriculture experienced additional taxation through real prices; in the transition period, only in one year from the 18 years, i.e., 1990, the farmers "received" real prices, in the remaining 17 years the purchasing power of real agricultural prices (essential factor, together with production, in income generation in agriculture) was significantly eroded, up to the level at which, in the year 2006, from each RON of GVA, through the general inflation in the economy and through the non-agricultural intermediary inputs, the agricultural income was "eroded" by 47.9 % (compared to 1989);

- in the other branches of national economy, the GVA real price indices also experienced regressive trends, yet not of the same size as in agriculture; we have in view here industry (IND), where the maximum "erosion" level reached 33.9 % (1999), the constructions (CONS), with a maximum decline of real prices by 32.6 % (2000) and the remaining branches (RRAM), services included, which cumulated the real price "erosions" coming from the commodities generating activities (the real price increase was 75.8 % in 2007, compared to 1989).

The inferiority position of agriculture, from the perspective of real sectoral prices purchasing power, compared to other branches of national economy, can be revealed by the so-called "inter-sectoral price ratios" (*internal terms of trade*), by which the real price gaps can be measured between agriculture and industry (AVSPP / IND), constructions (AVSPP / CONS), internal trade (AVSPP / CONM), remaining branches (AVSPP / RRAM) and total economy (AVSPP / VABT) (Figure 8).

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[1] The analytical approach to price "de-freezing" may feature a few premises: **"ignorant linearity"** – many times promoted on purpose – of considering the agricultural prices as 'fixed' in the command economy period (in reality, in the period 1980–1991, there were four agricultural price 'thresholds' – 1981, 1982, 1984, 1990 – at that time defined as price 'settlements'); asymmetric **'administration'** of prices in agriculture, in quite a large transition period, which was characterized by control in the case of agricultural outputs and liberalization in the case of agricultural inputs, on one hand, or by inconsistent and relatively discriminating subsidies, on the other hand; almost equally linear "**worshipping**" of agricultural price liberalization after 1996; resources "**allocation criterion**" function played by prices in a normal, consolidated market economy.
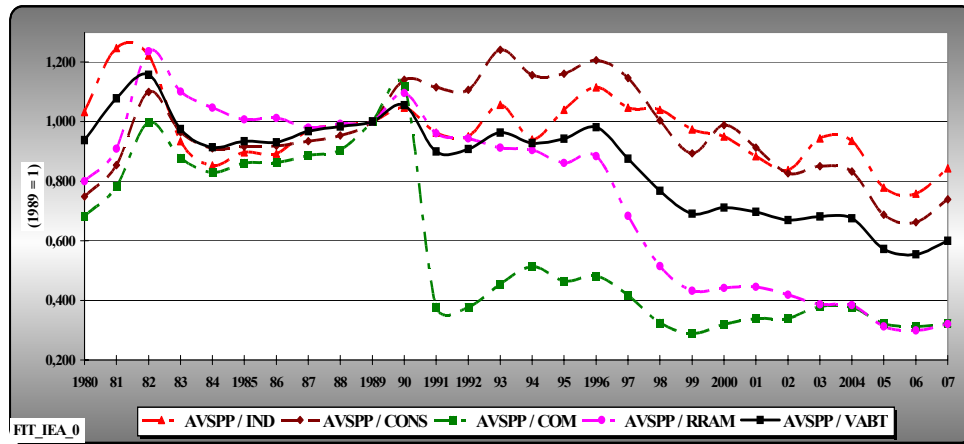
Figure 8. Intersectoral real price ratios in Romania's economy, 1980–2007 (89 = 1).

As there is an obvious asymmetry between the configurations of intersectoral real price "fascicles" until 1989 and those after 1989, it can be easily deduced that the farmers were not much "gratulated" with at least decent prices, if not remunerating prices.

3.7. Strong instability of production and real prices

The purchasing power of farmers' real incomes is deteriorated not only by the size of agricultural output and related real prices, but also by the relative stability of agri-food production. In this respect, a modality to measure the relative instability is given by the variation coefficients (Figure 9).
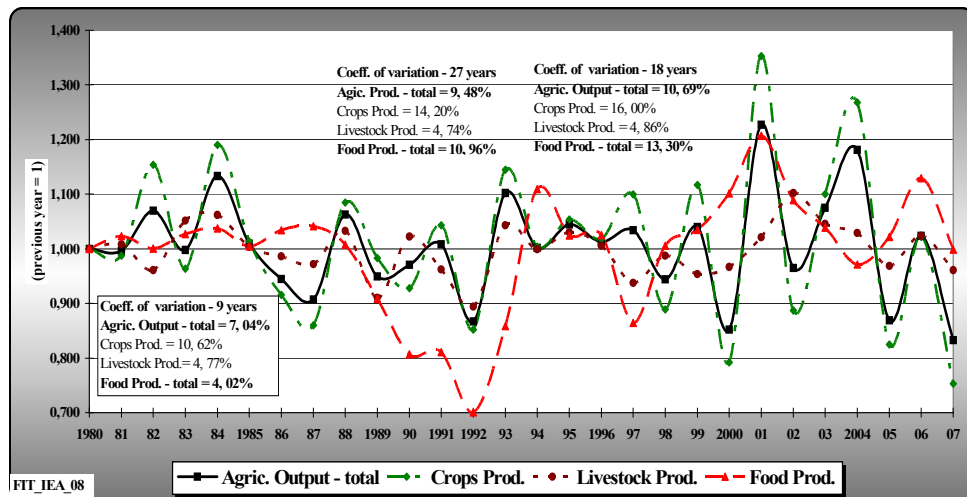
The increase of the relative instability of agri-food production is quite significant in the period 1981–2007, with differentiated levels in the two periods (1981–1989 and 1990–2007):

- out of the eight extreme (minimum or maximum) levels of the 108 yearly indices of agri-food output volume modification (agricultural production – total, crop production, animal production and food production), for the period 1981–2007, only one annual index reached a maximum level in the command economy period, i.e. livestock production (1.062 in the year 1984), the remaining seven extreme levels being found in the transition period 1990–2007;
- the agri-food output instability ranged from a minimum level of 16.8 % in livestock production to a maximum level of 60.0 % in crop production; the total agricultural output and food output aggregates ranged from 39.4 % to 50.7 % respectively;

- in the three decades taken into consideration, the relative instability intensity (measured by the variation coefficient) ranged from 4.65 % (in livestock production) to 13.94 % (crop production); the relative instability of food production is quite surprising (10.75 %), higher than that of total agricultural output (9.31 %);
- the relative instability along the whole investigated period was decisively influenced by its intensity in the transition period, when the margin of variation coefficients ranged from 4.86 % (livestock production) to 16.00 % (crop production); similarly, food production features a much larger instability (13.30 %) than the total agricultural output (10.69 %);
- it is thus proved, by both analysis procedures (range of annual indices and variation coefficient), that for farmers, the transition period featured great agri-food production instability, which, together with the erosion of real agricultural prices, consistently contributed to jeopardizing the purchasing power of agricultural incomes.

The relative instability of production and real prices is significantly greater in agriculture (Figure 10), compared to industry and overall national economy.

It is worth mentioning that the relative instability of the volume indices of GVA in agriculture is more than 2.6 times higher in the transition period than in the command economy period. The explanation may partially come from the very high yearly production variability that has been already mentioned above.
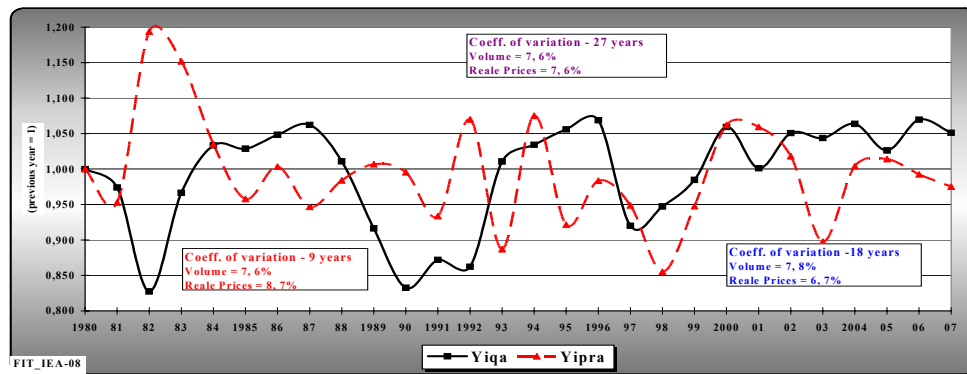

Figure 9. Relative instability of agri-food production in Romania, 1980–2007.
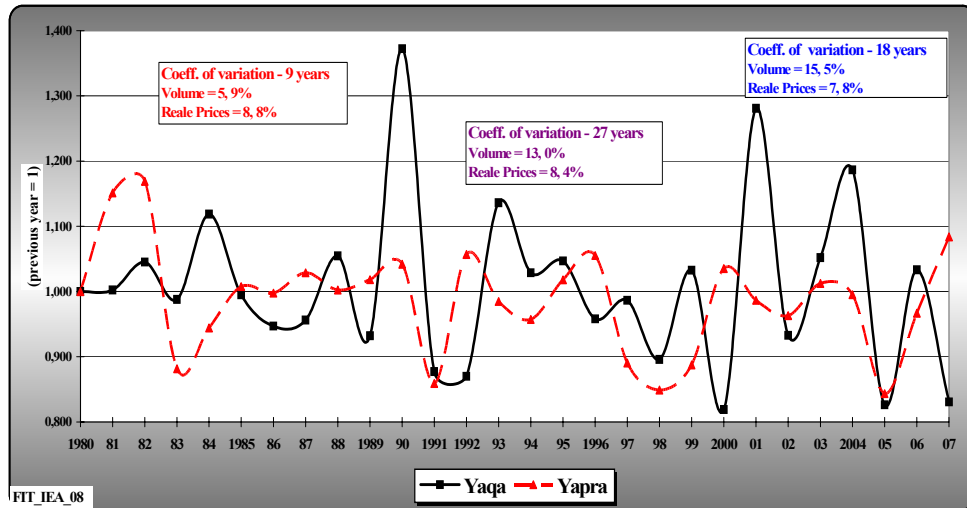
Source: own calculations, on the base of Romanian Statistical Yearbook 1995, 2000 - 2007;
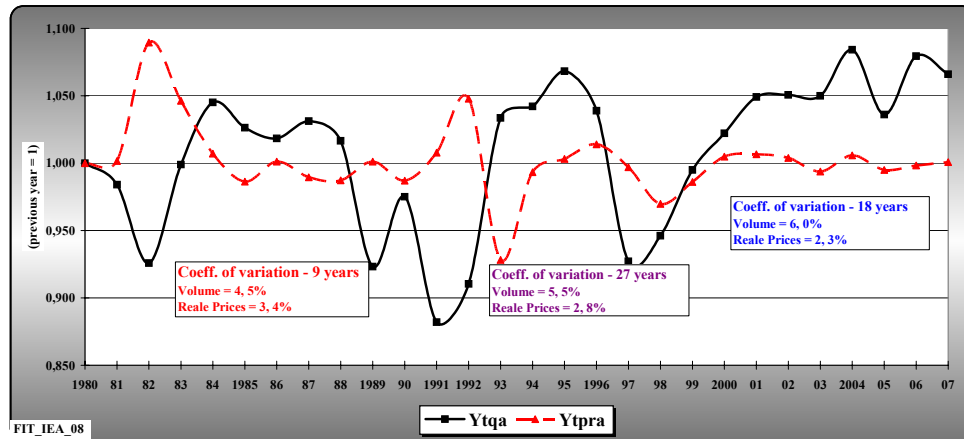
Figure 10. Relative instability of GVA (Yaqa) and of its real prices (Yapra) in agriculture, 1980–2007.

While in agriculture, the GVA variation coefficients have two digits in the transition period (15.5 %), in industry (Figure 11) and in overall national economy (Figure 12), the average variation of the pair of the two indicators is only 7.6% in industry and 5.5% per total economy throughout the whole statistical period for which information exists.

Source: own calculations, on the base of Romanian Statistical Yearbook 1995, 2000 - 2007;

Figure 11. Relative instability of GVA (Yiqa) and of its real prices (Yipra) in industry, 1980–2007.

Source: own calculations, on the base of Romanian Statistical Yearbook 1995, 2000 - 2007;

Figure 12. Relative instability of GVA (Ytqa) and of its real prices (Ytpra) in economy, 1980–2007.

### 3.8. Real price scissors – still unfavourable for farmers

In reality, after 18 years of economic changes, the real agricultural prices represented about 65% of those from 1989 (year that did not stand out with remunerating agricultural prices).

Starting from the hypothesis that, in essence, the gross value added (at market prices) represents the gross remuneration of the primary agricultural production factors (land, labour and capital) and that, on the basis of the axiom of the so-called "circularity" theory (the sum of flows getting into a system is equal to the sum of flows that get out of the system), the circuit of the economic-financial flows of the bipolar agricultural sector (crop production and livestock production) represents an aggregate of intra-sectoral interactions of production and inter-sectoral flows with other segments of the economy.

Deciphering these income generating flows and measuring their capital formation potential imply the most accurate individualization of the sectors "supplying" capital transfers, as well as of the sectors "receiving" capital flows.

It is considered that, even in the countries with developed market economy and agriculture, agriculture is confronted with unfavourable internal terms of trade, resulting from the low remuneration of the "labour" factor in the sector, industrial protection, relatively inelastic demand of agri-food products, and above all, by the low rate of return on investments made in the agricultural production; the consequence is that, in the "agriculture – non-agricultural sectors" ratios, the latter impose so-called "supra prices" on agriculture.

In terms of national accounts in agriculture, the intensity and asymmetry of the real prices dynamics of final agricultural output (PFprf) and of related intermediary consumptions (CIprf) largely contributed as catalysts to the erosion of internal competitiveness of agriculture (Figure 13).
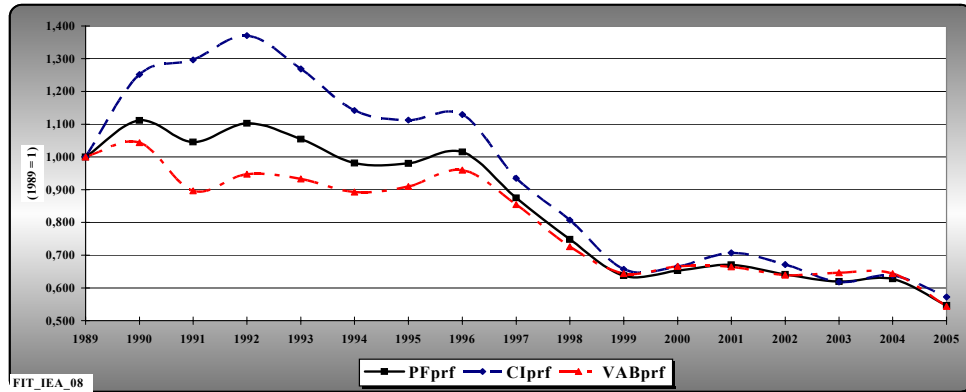
Figure 13. Real price indices of final output (PFprf), of intermediary consumptions (CIprf) and of gross value added (VABprf) in agriculture, 1989–2005 (1989 = 1).

The real price "scissors" in agriculture, revealed on the basis of national accounts data, reached the 1989 level only in the year 2003; up to that moment, it was systematically unfavourable for farmers, as the erosion level of farmers' incomes reached more than 30% of the 1989 level (Figure 14).
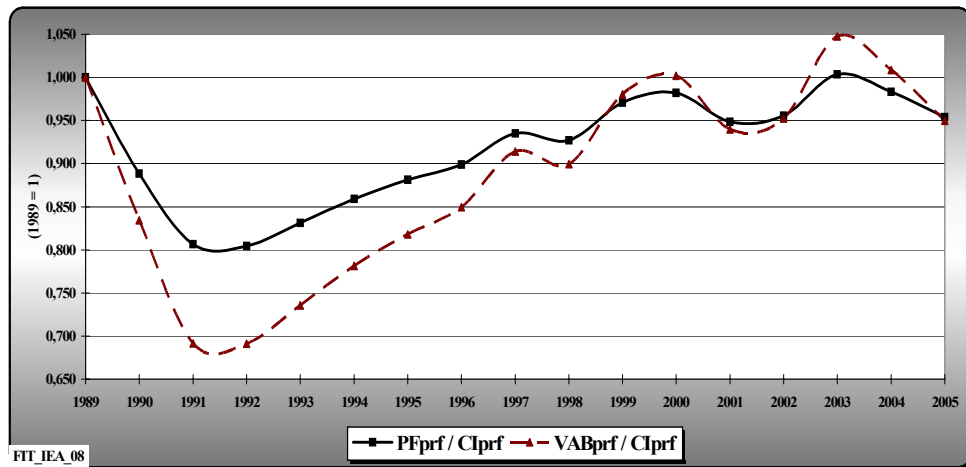
Figure 14. Real price "scissors" in agriculture, 1989–2005 (1989 = 1).

4. CONCLUSIONS

The analysis of trends experienced by the six macro-economic variables taken into consideration in the paper, in the period 1990–2006, as well as the prospective evaluations of some of them for the period 2007–2013 make it possible to formulate a few conclusions:

- The macro-economic context of the agri-food economic entities in the reference period was neither very friendly nor fully hostile to strengthening the capacity of agri-food entities to generate economic-financial performance, under tough competition conditions on the European Single Market;
- Compared to 1989, the general and sectoral economic growth featured considerable fragmentation;
- Beginning with the year 2000, the constructions sector became one of the economic growth engines, the dynamics of this branch outstripping by far the overall economy aggregate;
- In the main commodity producing branches taken into consideration (agriculture, industry, constructions), the real specific prices were not stimulating enough for ensuring internal and external sectoral competitiveness;
- The gradual diminution trend of the price increase amplitude in the economy and of the consumer price increase facilitates the predictability of business plans of the economic entities;
- The quasi-general decline of the real exchange rate of national currency adversely impacted the capacity of the Romanian firms to be connected to the European and international commercial flows, under competitiveness conditions.
- In the period 1992–2006 (1991 = 1), the regressive dynamics of real incomes to the public budget outstripped the dynamics of real expenditures, the yearly oscillations of the two indices being significant, generating a very unstable and unpredictable behaviour of the real budgetary deficit;
- In real terms, in the period 1991–2006 (1990 = 1), the trends of the total domestic credit and of the governmental credit had inflection points in the years 2000–2001, when a slight revigoration began, following the systematic decline from the period 1991–2000.
- The quasi-general decreasing trend of the real prices of the commodity generating economic activities (agricultural, industrial, constructions etc.) was accompanied by a quasi-continuous increase of the real prices of services;
- In the main branches producing commodities taken into consideration (agriculture, industry, constructions), the real specific prices were not stimulating enough so as to ensure internal and external sectoral competitiveness, their real price indices ranging from 0.564 (agriculture) to 0.764 (constructions) in 2007, compared to 1989;
- The asymmetry between the configurations of inter-sectoral real price ratio fascicles until 1989 and those after 1989 obviously reveals that farmers were not much "gratified" with at least decent prices, if not remunerating prices;

- The relative stability of agri-food production, together with the level of the agricultural production and related real prices acted as "catalysts" in the deterioration of the purchasing power of farmers' real incomes;
- Both analysis procedures presented (the amplitude of annual indices and the variation coefficient) reveal that the transition period was for farmers a period of great instability of agri-food production, which, topped up by the erosion of real agricultural prices, significantly contributed to jeopardizing the purchasing power of agricultural incomes;
- In terms national accounts in agriculture, the intensity and asymmetry of the real prices dynamics of final agricultural output (PFprf) and of related intermediary consumptions (CIprf) largely contributed as catalysts to the erosion of internal competitiveness of agriculture.

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