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DIRECT SUBSIDIES TO FRENCH FARMS BEFORE AND AFTER THE CAP REFORM

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Abstract : The aim of this paper is to analyse the distribution of farm subsididies before and after the CAP reform (1994). To acheive this purpose, we use a representative sample of french farms, the Farm Accountancy Data Network. In the first part of this paper, we compair the account of subsidies of farms from three french regions, Auvergne, Centre, Pays de la Loire. In the second part, we evaluate the level of subsidies for three types of farming (cereals and crops farms, milk farms, cattle farms) by taking the economical performance into account. At the end this article, we analyse the effects of a limitation of direct payments per agricultural labour unit.

Key words : CAP - Direct Subsidies - Income - Economical Performance - French Agricultural - FADN.

Résumé : Cet article porte sur la répartition des aides directes aux exploitations agricoles françaises avant et après la réforme de la PAC. Il analyse la répartition du montant des aides directes entre exploitations d'une part de trois régions françaises, d'autre part de niveaux différents de performance économique, pour trois orientations de production (Céréales et Grandes cultures, Bovin lait et Bovin viande). Conduite à partir des données du RICA, l'étude montre que le maintien des cours des céréales et de la viande bovine a joué favorablement sur le revenu des exploitations agricoles et qu'il a eu tendance à atténuer l'effet redistributif attendu. La simulation d'un plafonnement des aides directes montre qu'à 300 000 F par actif agricole, elle aurait un impact limité sur les revenus des exploitations, alors qu'à 50 000 F, elle entraînerait des baisses importantes de recettes pour certaines orientations de production.

Mots clés : PAC, aides directes, revenu, performance économique, exploitation agricole, RICA.

Introduction

The CAP reform, adopted by the Council of the Agricultural Ministers on 21 May 1992, caused great changes in the support system to the farming sector. They decided on a substantial price reduction, compensated by direct subsidies to the farms. This decision maintained public support to agriculture, organizing a transfer of the support system from the consumers to the taxpayers (OECD 1995). While maintaining the three founding principles of the CAP (one market for all EEC countries, Community preference and financial solidarity), the new ways of conducting the common cereals and beef markets organisations aimed at giving a more important role to the market in the production direction. The Community's authorities made it a condition that in order to get subsidies, farmers must respect the rules concerning limitation of production (setting aside part of the COP area, stock-density levels for cattle) ; thus, they wanted to reach a double goal : adapting supply to demand and limiting the agriculture support costs.

The development of only comparative advantages could have caused sooner or later an even stronger concentration of production in various European areas. Through its support system, the CAP tries to control this situation and to maintain, in all countries and areas, the farms that play a part in the land-use (Bonnet, Delorme, Perraud, 1994). Started with the milk quotas, this will has now been extended to the cattle through subsidies given to the cattle farmers. The compensatory payments for cereals and high-protein oilseeds as part of a reference area for each member-state, can also be interpreted as a will to guarantee a distribution of production according to each country's potential at the time of the reform.

This new support system strengthened in all EU countries the role of direct subsidies in the regulation of the farming sector (Lehmann, Popp, Stucki, 1992). It underlined the determining contribution of public aid in the agricultural income and questioned the economists in the short term on the changes brought in the subsidies distribution and the efficiency of farms, and in the longer term on the equity of the public aid distribution and on the economic meaning of these transfers (compensatory payment for income guarantee or compensation for environmental protection by farmers). In France, the bulk of aid (44 billion FF direct subsidies as early as 1994), the diversity of the subsidied agricultural productions and the heterogeneity of production structures questioned even more the future, and thus the legitimacy of this new policy.

The aim of this paper is to assess the amount of direct subsidies to the farming sector and to analyse their weight in the farms' revenue. In the first part, the investigation is conducted on three French regions with very different main production lines. The "Auvergne", "Centre" and "Pays de Loire" regions. In Auvergne, the extensive farms play an important role ; 94 % of the area is regarded as disadvantaged. The region "Centre" is a typical cereals producing area ; and in "Pays de Loire", intensive dairy farms dominate. In the second part, the investigation will try to assess for France as a whole (in three production directions : crops, dairy farms and cattle farms) the role of the new distribution of subsidies ; the farms will be classified according to their economic performance. This investigation, which only took into account the so-called "professional" farms, was conducted thanks to the information of the Farm Accountancy Data Network (FADN) from 1991 to 1994.

1- Geographical distribution of direct subsidies

In the early 70s, the EEC created direct subsidies for cattle reared in geographically disadvantaged areas. In order to compensate for the low incomes of farmers in these areas (Bazin, 1994). This system of direct subsidies gradually extended to the whole cattle (suckler cows and male cattle subsidies) and the sheep. Before the 1992 reform, the distribution of direct subsidies did not depend on income criteria. Nevertheless, they tended to favour the less profitable farms, handicapped by their activity (sheep, cattle) or their location (disadvantaged areas). These subsidies were distributed step by step ; they expressed the mutations that had taken place in the last 25 years, as well as the political will to attenuate the income difficulties some farms have had to face.

The comparison (in the three regions) of the direct subsidies' received per farm before and after the reform clearly enlightened the extent of the change that had taken place in the regulation of the farming sector.

1-1- Direct subsidies before the CAP reform

In 1991, the direct subsidies only represented a small part (21 %) of public expenses directed to productive farming. The support for the prices of the main agricultural products (intervention system, exports refunds, storage of surpluses) was four times higher than the direct subsidies (Hairy, La Villosoye, 1994). The accountancy information[1] from the FADN allowed us to precisely estimate the amount for each type of aid and for each production sector (animal and vegetable sector) and to analyse their position in the farms' income structure.

The direct subsidies consist of a complex series of local, national and European measures, classified in four categories according to their goal. Then, the compensation payments for geographical handicaps concerned one out of five French farms. The production subsidies contained the animal subsidies, by far the highest (suckler cows, male cattle, sheep subsidies) and vegetable subsidies (small cereals farms, durum wheat, hemp, hop). The accompanying aid for restucturing the markets contributed to the support of farms which decided on a reconversion of their production (milk, grapevine...). The subsidies for difficult climatic situations were evidently exceptional and concerned in 1991 (second consecutive year of drought) almost one third of the farms and represented 35 % of the subsidies for that year. The classification by production sector (for the subsidies whose goal was clearly identified) showed the importance of subsidies to the animal sector, which corresponded to two thirds of farming subsidies (Table 1).

From the three investigated regions, Auvergne is the one where the farms received on average the highest direct subsidies. Because in this disadvantaged area stock farming was dominant, most farms were given at least two types of aid. Almost 90 % of the average 44,000 FF were animal subsidies. In the other two regions, the average amount of direct subsidies was lower (22,000 FF in Centre and 31,000 FF in Pays de Loire). The gap between these two regions was particularly due to the compensation payments for difficult climatic situations which were high in Pays de Loire in 1991 (13,000 FF). Furthermore, this region received substantial reconversion aid for milk production, and got less cattle subsidies than Auvergne. The strong cereals specialization of the Centre region must not be allowed to hide the fact that almost half of the direct subsidies to the production units in this region were animal subsidies.

Table 1. *Economic results and direct subsidies in three french regions in 1991 (in 1,000 FF per farm)*

	Centre	Pays de Loire	Auvergne	France
Farms	29 300	50 900	24 300	526 100
Total gross output	747	646	348	584
Gross farming excess (GFE)	284	221	148	224
Farming disposable income (FDI)	99	92	57	92
Total direct subsidies (A+B+C)	22	31	44	22
Animal direct subsidies (A)	10	14	39	14
- including geographical handicap	0	0	17	3
Vegetable direct subsidies (B)	3	2	1	1
Other direct subsidies (C)	7	15	4	6,8
Direct subsidies / GFE (%)	8 %	14 %	30 %	10 %
FDI 1991, no direct subsidies	77	61	13	70

Sources : FADN 1991 / INRA Nantes

A study conducted on the basis of the main production lines showed that direct subsidies represented in average in France almost the total revenue of the farms which were specialized in sheep and suckler cows. As a matter of fact, without this aid, four cattle farms out of five in Auvergne would have had negative revenue, and the conditions would be similar for suckling farms in Pays de Loire (Colson, Chatellier, Ulmann, 1995).

Although they had an important compensating effect, direct subsidies were not able to fill the big income gaps that existed between the farms and between the regions. For one family work unit, the farming disposable income (38,000 FF) in Auvergne only reached half the FDI in Centre (76,000 FF) and two thirds of the FDI in Pays de Loire (61,000 FF). The high income farms were more numerous in the later two regions (31 % of the farms in Centre had a revenue reaching more than 100,000 FF, 18 % in Pays de Loire and only 8 % in Auvergne). A number of factors explain these differences in the income (Barkaoui, Butault, Rousselle, 1991), particularly the production directions and the economic size, which, measured in standard gross margin, was twice as big in Centre than in Auvergne ; Pays de Loire holding the central position. Direct subsidies were not given according to income criteria, yet the distribution system made it possible to balance the revenues. These direct transfers were essential for maintaining a number of farms, especially stock farming in disadvantaged areas.

1-2- Direct subsidies two years after the CAP reform

In 1994, the average amount of direct subsidies corresponded to 90,000 FF per farm, i.e. four times more than in 1991. As from 1994, almost 90 % of the farms were concerned by direct aid, and 75 % of them got specific crops subsidies (subsidies for acreage under cereals, oilseeds and high-protein plants), which represented two thirds of farming subsidies. The comparison of average accounting results showed the now essential position of COP area compensatory subsidies[2] in all three regions.

There was a general rise in the amount of direct subsidies per farm and a new hierarchy in the level of aid among regions. In national average and for all production directions, the average direct subsidies amount rose from 22,000 FF in 1991 to 90,000 FF in 1994[3]. The Centre region, which includes large cereals farms, became as from 1994 the region with the highest amount of direct subsidies per farm (181,000 FF). This was twice as high as in Auvergne (91,000 FF) or in Pays de Loire (77,000 FF).

This difference can be explained by the considerable increase in direct subsidies to cereals, oilseeds and fodder maize. Vegetable subsidies[4] were dominating in the region Centre (89 %) and Pays de Loire (72%). But they were less numerous than animal subsidies in Auvergne, where the aid for extensive farming (cattle extensification subsidies, grass subsidies) had a particularly favourable effect (Table 2). They amounted to substantial sums, but were still lower than those received in Pays de Loire for fodder maize and home-consumed cereals.

Table 2. *Economic results and direct subsidies according to the regions, in 1994 (in 1,000 FF per farm).*

	Centre	Pays de Loire	Auvergne	France
Total gross output	774	751	427	663
Gross farming excess (GFE)	322	283	210	274
Farming disposable income (FDI)	152	139	116	129
Total direct subsidies (A+B+C)	181	77	91	90
Animal direct subsidies (A)	16	24	67	25
- including geographical handicap	1	0	20	4
Vegetable direct subsidies (B)	162	50	21	61
Other direct subsidies (C)	3	3	3	4
Direct subsidies / GFE (%)	56 %	27 %	43 %	33 %
FDI 1991, no direct subsidies	- 29	62	25	39

Sources : FADN 1994 / INRA Nantes

In 1994, direct subsidies represented on average one third of the gross farming excess of the french farms and over two thirds of their farming disposable income. This proportion was much higher in Auvergne and also in Centre, where the income without the direct subsidies was negative for 1994. The new direct subsidies created by the CAP reform played their part perfectly, compensating the fall of guaranteed prices for cereals and beef. What is more, farming incomes (the gross farming excess rose in national average fom 224,000 FF to 274,000 FF) were largely higher than the simulations (Blogowski, Boyer, 1993) of the planned stabilisation of the national average, progress in the stock farming regions (+12 % in Auvergne and +6 % in Pays de Loire) and weakening in the crops regions (-11 % in Centre). The increase in income noted between 1991 and 1994 in the whole of France as well as in the three considered regions (40 % rise in the gross farming excess in Auvergne, 28 % in Pays de Loire and 14 % in Centre) was a consequence of the adapting of farms (increase in size, reduction cost of production) and of the development of market prices, which were more favourable than expected.

In 1994, the average amount of direct subsidies per hectare usable agricultural area (UAA) was higher in Centre (2,000 FF) than in Auvergne (1,500 FF) or in Pays de Loire (1,500 FF). The calculation per agricultural work unit[5] deepened the gaps in favour of the crops regions. The difference that had existed in favour of the disadvantaged region Auvergne was vanishing.

Table 3. *Evolution of the direct subsidies per unit area and agricultural work unit (AWU) in the three regions, from 1991 to 1994 (all types of farming, in 1,000 FF).*

	Centre	Pays de Loire	Auvergne	France
Direct subsidies 91 per ha UAA	0,3	0,7	0,8	0,5
Direct subsidies 94 per ha UAA	2,0	1,5	1,5	1,6
Direct subsidies 1991 per AWU	12,9	18,4	29,6	13,1
Direct subsidies 1994 per AWU	108,8	45,1	58,2	52,3

Sources : FADN France, sliding sample 1991-1994 / INRA Nantes

Although the compensation payments for geographic handicaps had been revaluated, they were low in comparison to the whole of the new subsidies. According to the FADN, they represented 4 % of the 1994 direct subsidies to French farms, as against 14 % three years ealier. The grass subsidy, which was a subsidiary measure to the reform, was not reserved for disadvantaged areas. Nevertheless, it complemented the compensation payment for geographic handicaps, and in the geographically disadvantaged areas, it helped to fill a part of the gap existing with the more intensive regions.

2- Direct subsidies and economic performances

In a situation, in which the potential development of today's public support to the farming sector is questioned, it is important to assess if the most successful farms would be able to do without the compensatory subsidies created in 1992. This question largely depends on the future evolution of market prices and on the ability of farms to adapt to the new situation. As we cannot make reliable hypotheses in these fields now, we have only considered the weight of direct subsidies[6] on the revenue of farms for each category of economic performance. In our investigation, we used a five-category typology, based on the combination of four result ratios, as follows :

Method : Defining the categories of economic performance

The following typology is based on the combination of four result ratios : (i) the production efficiency (gross added value / gross output), which allows us to show the internal efficiency of the production system. (ii) The ability to cope with the loan repayments (debt service / gross farming excess), which assesses the weight of financial charges (financial costs and repayment of loan capital). (iii) The income per family worker (farming disposable income / family work unit), which is one of the key-indicators of the future of the farms. (iiii) The ability of farms to self-finance new investments (net self-financing / total assets), which includes the national insurance contributions paid by the employer, and all that the family needs to live from day to day.

For each of these four indicators, the position of a farm compared with the medium value allows us to assess its performance in relation to the other farms in the same group. Thus, each farm (j) gets a mark (Nj) corresponding to the sum of the marks (nij) which characterizes its position compared with the medium value (M) of each of the four ratios (ri). The mark equals zero if the farm's position is bad (nij=0 if rij =Mri) and equals 1 if it is good (nij=1 if rij Mri)[7]. The adding of the marks (Nj= nij) allows us to define five categories in order to characterize the economic performance[8] : "very weak" (cat.1) when Nj=0 ; "weak" (cat.2) when Nj=1 ; "medium" (cat.3) when Nj=2 ; "high" (cat.4) when Nj=3 ; "very high" (cat.5) when Nj=4. Correlations exist between the chosen ratios, the farms are equally distributed in the five performance categories (Colson, Chatellier, 1995).

A first analysis of all French farms was complemented by deeper studies into the following three productions : "cereals and crops" (farming type 11+12), "milk" (farming type 41) and "cattle and beef" (farming type 42).

The distribution of the farms into five categories once more underlined the big gaps existing within the French farming sector. These differences, which were not related to the age of the farmer or to his educational level, mostly resulted from the joint effects of the gaps existing in technical efficiency and in work productivity on the one hand, and of scattered financial charges on the other hand. In 1991, the direct subsidies (10 % of the gross farming excess in average) generally had a compensating effect on the income inequalities for the "weak performance" farms, in which the cattle and sheep farms from disadvantaged areas took a proportionnaly larger part (Table 4).

As againts the results of the 1992 simulations on the same FADN sample, the CAP reform did not seem to have had yet a real income distributing effect in favour of the economically weakest farms. The former income hierarchy was maintained and the 1994 gross farming excess for all performance categories was by far higher than in 1991. The part of direct subsidies in the income increased in the considered five categories and the dependence on public support remained bigger since the economic performance was weak (Table 4). Yet the average aid amount per farm (from 67,000 to 101,000 FF according to the categories) covered a very strong scattering within each category.

Table 4. *Economic results and direct subsidies in 1991 and 1994 according to the economic performance categories (all types of farming, in 1,000 FF per farm).*

	Economic performance categories					Total
	Very weak [1]	Weak [2]	Medium [3]	High [4]	Very High [5]	
GFE 1991	125	162	218	275	330	222
FDI 1991	5	33	78	136	198	89
Direct subsidies 1991	30	26	23	19	14	22
Direct subsidies / GFE 1991	24 %	16 %	10 %	7 %	4 %	10 %
GFE 1994	161	196	279	339	397	274
FDI 1994	23	55	127	191	257	129
Direct subsidies 1994	86	88	101	96	67	90
Direct subsidies / GFE 1994	53 %	45 %	36 %	28 %	17 %	33 %
FDI 94, no direct subsidies	- 63	- 33	26	95	190	39

Sources : FADN France, sliding sample 1991-1994 / INRA Nantes

In 1994, the average income without direct subsidies was negative for the typology's first two categories. Yet, it remained positive in the group of the most successful farms, where more farms had not been affected by the changes due to the reform (horticulture, viticulture, vegetable cropping). The consequences of a potential deletion of the compensatory payments could only be assessed in the study into the production directions most concerned by these aids.

2-1- Cereals farms cannot do without direct subsidies

From 1992 onwards, the farms specialized in cereals and crops (22 % of French farms) benefited from higher market prices than expected when the reform was decided (Brimbaum, 1995). The fall in the incomes that had been forecasted in the simulations did not take place. As the cereals compensatory payments were fixed and standard sums[9] and as the farmers adadpted quickly and efficiently (Blogowski, Boyer, Ronssin, 1995),
the farms, especially the most successful ones, benefited from a rise in their annual income (Table 5).

The amount of direct subsidies represented less than 5 % of the gross farming excess of crops farms in 1991, whereas it corresponded to over 50 % in 1994 (89 % of the GFE for category 1 and 37% for category 5). With an average subsidy of 177,000 FF per farm, this amount, which was considerably higher than in the other productions, greatly rose in relation to the economic performance. Actually, the most successful farms were the slightly larger ones and these were more numerous in the areas where the production reference for cereals yields were the highest.

Table 5. *Economic results and direct subsidies in 1991 and 1994 according to the economic performance categories (farming type "cereals", in 1,000 FF per farm)*

	Economic performance categories					Total
	Very weak [1]	Weak [2]	Medium [3]	High [4]	Very High [5]	
GFE 1991	184	190	257	343	352	266
FDI 1991	6	25	81	147	177	87
Direct subsidies 1991	17	15	12	13	10	13
Direct subsidies / GFE 1991	9 %	8 %	5 %	4 %	3 %	5 %
GFE 1994	163	213	323	449	510	330
FDI 1994	23	68	148	234	302	153
Direct subsidies 1994	145	146	180	214	189	177
Direct subsidies / GFE 1994	89 %	68 %	56 %	48 %	37 %	54 %
FDI 94, no direct subsidies	- 122	- 78	- 32	20	113	- 24

Sources : FADN France, sliding sample 1991-1994 / INRA Nantes

Although 1994 was already a favourable year, as far as cereals market prices were concerned, the value of direct subsidies represented in average more than the income. This dependence on public aid was particularly strong for the farms belonging to the first three categories. Yet, today even the most successful cereals farms could not do without the subsidies if they want to keep a balanced financial situation.

2-2- Dairy farms got high indirect aid through quotas

The average disposable income of dairy farms (17 % of all French farms) increased between 1991 and 1994 (+80 %) in the same proportions as cereals farms. This development is due to the joint effect of important reorganisations (enlargement, increase of the average quota), of the maintaining of market prices (cereals and beef) and of the creation of subsidies on the acreage under home-consumed cereals and maize silage (Table 6).

Table 6. *Economic results and direct subsidies in 1991 and 1994 according to the economic performance categories (farming type 41-"milk", in 1,000 FF per farm)*

	Economic performance categories					Total
	Very weak [1]	Weak [2]	Medium [3]	High [4]	Very High [5]	
GFE 1991	122	151	168	208	223	174
FDI 1991	22	51	70	105	127	75
Direct subsidies 1991	21	17	18	17	16	18
Direct subsidies / GFE 1991	17 %	11 %	11 %	8 %	7 %	10 %
GFE 1994	156	202	261	294	327	249
FDI 1994	44	93	141	180	218	135
Direct subsidies 1994	39	41	45	49	40	43
Direct subsidies / GFE 1994	25 %	20 %	17 %	16 %	12 %	17 %
FDI 94, no direct subsidies	5	52	96	131	178	92

Sources : FADN France, sliding sample 1991-1994 / INRA Nantes

The amount of direct subsidies per dairy farm increased on average from 18,000 FF in 1991 to 43,000 FF in 1994 (in which 58 % were compensatory aid for the vegetable sector). The total amount of subsidies varied slightly according to the economic performance category. Due to their low profitability, the less successful farms depended more on public transfers. Actually, the part of direct subsidies in the gross farming excess represented 25 % for category 1 (as against 17 % in 1991) and 12 % for category 5 (as against 7 % in 1991).

Dairy farms were less dependent on direct subsidies[10] than crops or cattle farms, yet they remained particularly receptive to the variations in milk price. If you consider that consumers indirectly support milk price for about 10 % of its value - in addition to the direct received from subsidies - (see Mac Sharry's project), you come to a total amount per dairy farm which is very near the average direct aid (90,000 FF) received by French farms.

2-3- The cattle sector : direct subsidies make up the whole income

The farms which specialiazed in beef production represented 9 % of all French farms and were mostly located in the disadvantaged areas. The first consequences of the CAP reform's implementation were particularly favourable to this type of farming, in which the average income per farm rose from 44,000 FF in 1991 (which was a catastrophic year as regards beef prices) to 121,000 FF in 1994 (Table 7). This development led to a sharp tightening of the income hierarchy between cattle farms and the other type of farming.

The results followed the trend foreseen in the simulations made three years earlier. But the redistribution effect expected within the economic performance categories was only slight, as the extensification subsidy was available to most cattle farms (Colson, Chatellier, Boyer, 1994).

Table 7. *Economic results and direct subsidies in 1991 and 1994 according to the economic performance categories (farming type 42-"beef", in 1,000 FF per farm)*

	Economic performance categories					Total
	Very weak [1]	Weak [2]	Medium [3]	High [4]	Very High [5]	
GFE 1991	79	82	138	163	179	128
FDI 1991	1	2	49	74	92	44
Direct subsidies 1991	49	45	53	58	55	52
Direct subsidies / GFE 1991	62 %	54 %	38 %	35 %	30 %	40 %
GFE 1994	117	162	186	267	318	210
FDI 1994	42	69	108	168	221	121
Direct subsidies 1994	90	99	106	120	127	109
Direct subsidies / GFE 1994	77 %	61 %	57 %	45 %	40 %	52 %
FDI 94, no direct subsidies	- 48	- 30	2	48	94	12

Sources : FADN France, sliding sample 1991-1994 / INRA Nantes

Before the CAP reform's implementation, direct subsidies already made up the average income of cattle farms. With the reform, the average amount of direct subsidies doubled (from 52,000 FF to 109,000 FF per farm), but the very strong increase in the average income in 1994 weakened its relative weight (40 % of the GFE in 1991 and 52 % in 1994). The 1994 direct subsidies mostly came from the animal sector (93,000 FF of which 47,000 FF was for suckler cows subsidies and 16,000 FF for male cattle subsidies). The amount of subsidy was higher in the more successful farms because they had more suckler cows (the average herd counted 55 herbivore livestock units in cat. 1 and 71 in cat. 5).

In average as well as for each performance category, the part of subsidies in the gross farming excess was similar for specialized cattle farms (farming type 42) and crops farms (farming types 11+12). However, related to a unit area or a work unit, the average amount of direct subsidies was higher in crops farms (2,000 FF per ha UAA and
120,000 FF per Agricultural Work Unit) than in cattle farms (1,700 FF per ha and 80,000 FF per AWU). The subsidies were given according to the unit area, directly for the standard aid per ha COP area, and indirectly for the subsidy per head of livestock which varied according to the stock density.Thus, in order to maximize the amount of aid, farmers had to quickly get access to more land as the new evolution of surface area per worker showed (Table 8).

Table 8. *Direct subsidies per unit area and per work unit according to the types of farming (in 1,000 FF) and evolution of the UAA per worker between 1991 and 94.*

	11+12	41	42	France
Direct subsidies 1994 / ha UAA	2,1	0,9	1,7	1,6
Direct subsidies 1994 / AWU	120	28	80	52
Ha UAA / AWU (1994)	57,5	31,2	48,4	32,2
Variation 94 / 91 (%)	+ 18 %	+ 12 %	+ 20 %	+ 16 %

Sources : FADN France, sliding sample 1991-1994 / INRA Nantes

Today the very high levels of direct subsidies to farms are doubly questioned as regards their social acceptability and their economic efficiency. Both questions raise the problem of the opportunity of putting an upper limit to the aid. This solution had already been considered but was put aside when the reform was implemented.

2-5- The effect of putting a limit to direct subsidies

Going over from price support to compensatory payments guaranteed a process which curbed the production intensification per unit area. Yet, the regionalisation of production plans and the creation of areas designated as irrigated surfaces slowed down this process. The studies into the farmers' supply action within these new rules (Guyomard, Mahé, 1994) concluded on a factorial distribution of the incomes in favour of land and to the prejudice of work. The modulation of the compensatory subsidies to cereals producers, which had been proposed in the first draft of Mac Sharry's plan, was not accepted. Its consequences were relatively minor (Allanson, 1993), but prejudiced the bigger producers in France and in England. The very high level of aid per farm (in France, 1 out of 10 farms received over 200,000 FF in 1994) raised the discussion again - within the farmers' unions as well - on the basis of limited aid per farm.

This debate on the future of direct subsidies to the farming sector has existed as well at the level of the European authorities (Agra Europe, 1995). After the transition period, they will have to look for a new justification for the level of these aids. Farmers are obliged to consider also new criteria in relation to the environment (landscape and natural resources conservation). Recognizing the "multifunctional" role of agriculture will mean that public policies will have to favour employment in rural areas. In this resspect, limitation of the subsidies per agricultural worker (family or salaried work) would be more efficient than a limitation per farm or per unit area.

We have tried to simulate this hypothesis for France on the basis of 1994 FADN information. We chose three limitation thresholds for the farming subsidies per agricultural worker : 300,000 FF ; 150,000 FF ; 50,000 FF (50,000 FF being near the net amount of the French minimum wage). The simulations we made showed that almost 1 out of 2 French farms would have been concerned by a direct subsidy limitation per worker at 50,000 FF ; 1 out of 10 at 150,000 FF and 1 out of 100 at 300,000 FF (Table 9).

Table 9. *Simulation concerning the income variations according to three limitation levels of direct aid per agricultural work unit (in 1,000 FF per farm).*

France	Direct subsidies per AWU (1994)				Total
	50 000 FF <	50 000 to 150 000 FF	150 000 to 300 000 FF	> 300 000 FF	
Farms	257 400	156 200	41 500	5 900	461 000
Direct subsidies 1994	33	124	261	463	90
Farm disposable Income 1994	110	133	197	317	129
- Limitation 300, 000 FF	---	---	---	233	127
- Limitation 150, 000 FF	---	---	133	44	119
- Limitation 50, 000 FF	---	83	2	- 82	89

Sources : FADN 1994 / INRA Nantes

A study into the different types of farming indicated a very low sensitivity of dairy farms or of farms which were little concerned by direct public subsidies (pigs and poultry, grapevine, horticulture, fruits and vegetables). But on the other hand, it showed that the farms which specialized in "cereals" and "cereals and crops", which represented 1 French farm out of 5, strongly depended on direct subsidies. In the most restrictive hypothesis, almost all of them would have been touched by the limitation and would have had to bear nearly two thirds of the budget savings. Their average income would have fallen from 153,000 FF to 40,000FF : only the most successful ones, whose resources depended mainly on the productions that were not concerned by this reform (sugar beets, field vegetables) would have to stayed in production and made a profit. In order to avoid large distortions between the types of farming, especially regarding milk production, a reasonable policy of aid limitation would mean taking into account the differences in the protection rates, particularly in the aid amount through quotas.

An analysis based on the typology of the economic performance categories showed that the farms with "high" or "very high" economic performance would be little affected by the limitation measures (Table 10). But on the other hand, the farms with "medium" or "weak" performance would bear an important part of the support cuts, in the case of a 50,000 FF threshold per worker. The farms located in "intermediary zones", i.e. situated between the high potential production areas, which benefited from evident comparative advantages, and the disadvantaged regions, which received specific aid, seemed likely to be the most affected by an aid limitation per worker or per farm.

Table 10. *Simulation on the effects of a direct aid limitation per AWU on the farms' income (in 1,000 FF).*

(All farming types)	Economic performance categories					Total
	Very weak [1]	Weak [2]	Medium [3]	High [4]	Very High [5]	
FDI 1994	23	55	127	191	257	129
- Limitation 300, 000 FF	23	54	125	189	256	128
- Limitation 150, 000 FF	19	45	113	180	254	119
- Limitation 50, 000 FF	- 8	15	77	145	236	89

Sources : FADN 1994 / INRA Nantes

As the limitation of aid per agricultural worker first concerned the regions with high work productivity and the large farms. It would certainly have had consequences on the support distribution between the EU countries. In order to avoid this limitation being interpreted as a distortion in the sharing of community aid, it would be necessary that the budget savings remained in the country where they were realized and would be used for the financing of actions in favour of employment in that country.

Conclusion

The speed with which the farmers adapted and the relative market price maintaining for cereals and beef in the first years of the CAP reform's implementation produced better results than expected by the simulations. The farms' average income increased in all economic performance categories, yet the differential effect was favourable to the less successful farms. The income structure between the different types of farming and in the regions remained, but one could observe an increase in the revenue of the cattle farms.

Through the reform, direct payments strongly rose and their role became essential to numerous farms, including the most successful ones, yet, the production efficiency and the weight of financial charges was significant in determining the results and in the farms' ability to adapt to this new situation.

In France, the position of the farmers' unions contributed to the following reality. The amount of compensatory subsidies per ha COP area was dependant on the potential of the region, in order to attenuate the consequences of the drops in price during the transition period on the income of the more intensive farms. They refuse to limit the aids per farm. The resulting subsidies distribution which was favourable to the farms with a high production potential (especially in areas under irrigation) was contrary to the principle of separation between public support amount and agricultural profitability. Moreover, through the direct subsidies, this distribution confirmed the profits realized thanks to the heterogenity of the soils'agronomic potential (Loyat, 1994). Continuing, after the transition period, of this distribution mode would result in a bad distribution of resources and thus wasting part of the public support system to the farming sector.

The non-limitation of the aid amount per farm was detrimenta to employment in the farming sector and the cost of land increased. The increase in the size of farms per work unit that was observed between 1992 and 1994 confirmed this. The limitation of the direct payments' amount for large farms per work unit seemed to be a means of restraining the technical inefficiency and helped avoid an increase in the ground rent.

The extension of the transition period, initially planned by the reform, was indispensable to guaranteed the survival of most French farms. After 1996, the future of the direct payments are in question because of current economics policy. We must ask the question if the direct payments are stopgap measure to cut the social costs of a structural adjustment or if they are the tools of a new farming sector regulation ? This debate between the government, the farmers and the taxpayers has just started. The future system of aid distribution between farmers and regions depends on the outcome of this debate.

Notes

[1] This study is limited to the direct subsidies for the production activities (account nb 745 of the agricultural accounting plan) ; the direct subsidies to investments (aid to young farmers...) are not taken into account).

[2] This analysis is conducted thanks to FADN sliding samples from 1991 to 1994.

[3] Two thirds of French farms receive less than 100,000 FF direct subsidies. The ones which receive over 200,000 FF are proportionnaly few (11 % in France as a whole). They represent 5% of the farms in Pays de Loire, 6 % in Auvergne and 34 % in Centre.

[4] The direct subsidies distribution between the three mentionned categories was realized as follows: the vegetable sector subsidies are made up of subsidies to acreage under cereals (including maize silage), oilseeds, high-protein plants, set-aside of farmland, and more marginally, the sector's other specific aids. The animal sector subsidies are made up of subsidies for the maintaining of suckler cows herds, special subsidies for male cattle, compensation payments for geographic handicaps and other subsidies (including the grass subsidy). The mention "other subsidies" is made up of compensation payments for difficult climatic situations, other state subsidies and local aids which don't concern the other two mentions.

[5] The evaluation of a subsidy equivalent for milk quota production means for Pays de Loire to assess a support amount per unit area as well as per work unit ; This figure lies between that for Auvergne and that for Centre.

[6] Due to the determining weight of the subsidies related to the CAP reform, the analysis covers all direct subsidies.

[7] For the debt costs indicator (debt service / gross farming excess), a favourable position for the farm corresponds to a mark lower than the medium.

[8] The following 1991 results come from farms distributed according to economic performance categories on an average of three years (1990, 1991, 1992). On the other hand, the 1994 results come from farms distributed according to their economic performance for 1994 only.

[9] In opposition to the compensatory payments on acreages under oilseeds, which vary according to the market price evolution of oilseeds.

[10] Contrary to the first reform draft, presented in 1991 by R. Mac Sharry, who expected a fall in milk price by 10 %, compensated by the creation of subsidies to suckler cows according to the stock density thresholds, dairy farms still get strong support from the consumers (high price of the produce) and a limited support from the taxpayers (direct aid) compared to the cattle farms.

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