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### RESEARCH IN ECONOMICS AND RURALSOCIOLOGY

# The mid-term CAP review (June 2003) and French dairy farms

The mid-term CAP review marks an important break in the way the Public Authorities intervene in the dairy sector. If the fall in the subsidized prices of butter and skimmed milk powder significantly affects the price paid to the producer, many specialised and low-efficiency French dairy farms will become economically fragile. By 2008, direct payments will play a determining role in the formation of dairy producers' income. Concerned by the modulation system to a high degree but with a low level of levy, the various categories of dairy farms will nevertheless be very sensitive to the conditions for implementation of the decoupling (partial or total decoupling, historical individual references or regionalisation).

#### Research topic

The European Council of Ministers in Luxembourg in 2003 decided to revise the Common Agricultural Policy (CAP) once again. This reform is a continuation of the measures taken in the context of the Agenda 2000 (European Council decisions of March 1999) and in the persective of the multilateral agricultural negotiations of the Doha round. It concerns the dairy sector in particular, with the programmed cut in the subsidized price of butter, for instance (-25%), and in skimmed milk powder (-15%), partially offset by direct payments granted according to the individual milk reference. In a more transversal way across various productive sectors, this reform is also characterized by the implementation of modulated compensatory payments (compulsory in all Member States) and the introduction of decoupled supports (with the creation of a single farm payment). Given these changes in the CAP, this paper proposes a prospective analysis focused on French dairy farms through simulations applied to FADN data. Four questions are successively posed: a) What is the sensitivity of the pre-tax current result of the various categories of farms to a reduction in the milk price? b) By 2008, what will be the level of dependence of these various categories of farms as regards direct payments? c) In what way does the intended modulation system concern dairy farms? d) What are the main decoupling implications (total or partial) as to the amount of the single payment and what would be the impact of a future regionalisation of this system?

#### **Tool and Method**

This prospective analysis relies on the FADN data from 2000, a statistic tool of the French Ministry of Agriculture. Built to represent French agriculture, the FADN gives harmonized and detailed data on the structure, economic results and financial situations of "professional" farms (that is to say those with a gross

margin higher than €9,600 and a workforce exceeding the threshold of 0.75 agricultural work units). This analysis concerns the 116,900 farms known as "dairy farms". Farms having an average number of milk cows higher than five heads are considered as such. This definition allows the FADN sub-sample used to be representative of global national production of milk. As a consequence, some of those dairy farms are quite different within the sample (arable crops, soilless crops and so on.).

A simulation of the CAP reform is applied to the FADN in 2000. It aims to assess the change in the amount of direct aid per farm by 2008 and their weight in income formation (that is to say when the mid-term review will be fully applied). To do so, the amounts of the various crop and livestock subsidies are re-evaluated according to the methods provided in the Agenda 2000 of the CAP reform for 2000-2002. Second, from 2004, the direct payments granted to the dairy sector are integrated (fixed at €35.50 per quota ton in 2008, an assumption which considers that the national flexible budget amounts will be allocated to the quota ton).

However, the mid-term review simulation is simplified, in the sense that the modifications brought to certain quite specific sectors, such as rice, durum wheat, dehydrated fodder or energetic crops are not included. In the same way, the potential effects of the environmental conditionality or of the development reinforcement measures not integrated at that stage. Furthermore, the simulation considers that the fall in the intervention prices will fully affect the market prices. The fall in milk prices was fixed at 20% between 2000 and 2008. Last, the future increase in the milk quota (+1.5% in three years from 2006 is simulated with, on the one hand, a rise in the volume produced and on the other hand an increase in costs.1

This simulation is carried out at constant structures and productivities. Therefore, the potential effects of the reform in terms of productivity development (production factors or intermediate consumptions) and of adaptations of technical systems (modification of cropping patterns, optimisation of declarations, and so on.) are not taken into account. The forthcoming

reduction in the number of farms should lead to an increase in the amount of the direct aid<sup>2</sup> per farm and per job which is higher than that evaluated. The rate of dependence on this aid (assessed by the "direct aid/pre-tax current result (PTCR) ratio)"<sup>3</sup> could be set at a level near the values evaluated. Very often, an increase in farm size brings an improvement in incomes, but also progress in the amount of the direct aid received. To account for the simulation results and show some of the differentiated effects, dairy farms are distributed according to various criteria. The size of the milk quota; the level of productive (assessed by the "gross added efficacy value/agricultural production" ratio); the administrative region (only those having a fairly significant number of dairy farms are presented in the tables); the technical system. On this last point, the specialised units are those which pertain to the types of farming (TF) n° 41 "beef milk" and n° 43 "beefmilk, livestock and meat", while the diversified units are those which pertain to other types of farming. For the "specialised" units, we distinguish three fodder systems: "non-limited maize" (more than 30% of maize fodder in the main forage area), "limited maize" (between 10% and 30%) and "herbage" (less than 10%).

#### Main results

#### The impact of the fall in milk prices

At present, the impact of the postponement of the drop in the subsidized price of butter (-25%) and powder skimmed milk (15%) on the milk price paid to producers still remains difficult to appraise. It will mainly depend on the cumulative effect of three factors: the level of adjustment between supply and demand (under the effect of the programmed rise in quotas and the change in the trade balance of the new

<sup>&</sup>lt;sup>1</sup> As regards the rise in running costs (fixed costs are considered as being steady), it is considered that each additional Euro of milk production comes with a rise in costs fixed at 0.40 Euro (set amount).

<sup>&</sup>lt;sup>2</sup> Direct aids: they correspond to the farm subsidies mentioned in the pretax current result (PTCR) and attributed to the civil year. Beyond the CAP compensatory allowances, there are also direct aids related to rural development (compensatory allowances for natural handicaps, agrienvironmental measures) and other types of direct aids (agricultural disasters, regional direct subsidies and so on). The direct aids related to investments and installation (young farmers' grants) are however not included).

<sup>&</sup>lt;sup>3</sup> Gross added-value = annual production (net of animal purchases – intermediate consumptions (food, seeds, fertilizers, phytosanitary products and so on) – rents, farm and tenant leasing – Insurance + reductions, discounts and refunds.

Pre-tax current result = gross added value - staff costs (salaries+staff costs) = transfer of expenses and other management products + assets depreciation + production grants - financial costs.

EU Members); the content of a possible future agricultural agreement in the Doha round (fall in the returns to exports and opening of new contingents with reduced duties); the change in the balance of power inside the dairy chain (of the transfer of products used for industrial purposes to consumer products, sharing of margins between producers, processors and retailers, and so on.).

To assess the potential sensitivity of French dairy farms to a fall in the milk price (for example) it was considered that this price would be lowered by 10% immediately and not compensated (that is to say a 20% fall, half-compensated). Such a fall (deemed pessimistic by some) would involve a reduction of €6,760 in turnover per dairy farm, that is to say the equivalent of 23% of pre-tax current result (PTCR). This estimated drop in income would however be softened by a reduction in the farmer's social security contributions during the following year. The sensitivity of dairy farm income to the fall in price will largely depend on the farms' agricultural speciality (diversified units being less sensitive) and on their productive efficacy level ("gross added value/agricultural production" ratio) more than the size of the dairy quota. A 10% fall in the milk price would be translated by an average 39% reduction of the PTCR in the 17,300 milk farms having a low productive efficacy (a ratio lower than 20%), against "only" 18% in the 34,000 units having a high productive efficacy (a ratio higher than 40%). Crossed with the milk quota groups, this analysis shows that the low-efficacy big structures would be greatly weakened in such cases and very likely less resistant than the medium sized efficient units (table 1).

Because of the heterogeneity of the structures and differences in economic results, not all dairy farms are able to face a falling milk price with the same strength. This is all the more true in that the amount of the future deficiency payments per farm will be proportional to the milk quota, without any differentiation according to farm size or any other (intensification, location etc...). criteria sensitivity of a farm to a future fall in price will also depend on the national choices that will be made to distribute the flexibility budget (€267 million in France by 2006-2007). It should also depend on their geographical location: the fall in price could be sharper in the regions specialized in industrial products (such as those in the west) than in those specialized in cheese products under label (Franche-Comté, Jura, Northern Alps, and so on.).

#### The growing power of direct aid

The fall in institutional prices will be followed by a sharp rise in direct payments: these should represent around  $\epsilon$ 4.2 billion by 2008 at EC level (of which  $\epsilon$ 0.85 billion in France). Assuming a large reduction in indirect supports (returns), the overall budgeted cost of the COM milk and dairies will become significantly higher than in 2002 ( $\epsilon$ 2.5 billion).

Between 2000 and 2008, the CAP reform should lead to an average rise of 53% in direct aid across all French dairy farms. The global amount of the direct aid per milk farm which, as a national average, went from €2,600 in 1990 to €17,000 in 2000, could reach €26,100 in 2008 (without taking into account the impact of a continued restructuring of farms, which could be high). In 2008, it is comparable to the direct aid granted to "beef-meat" farms (€29,100), as a national average. Higher than the "sheep-goat" units (€21,300), it remains lower than the "arable crop" units. As far as the direct aid per farm is concerned, the observed regional hierarchy must be compared, on the one hand, with the structure size (direct payments being granted on a quota basis), and on the other hand, with the scale of cereal cropping and beef-meat livestock. In the mountains (Auvergne, Franche-Comté, Rhône-Alpes, Midi-Pyrénées and so on.), the credits granted for rural development (mainly compensation for natural handicaps and agroenvironmental measures), which were not integrated in the fixing of the single payment, will always represent more than one third of the total amounts of the direct aid at the end of the mid-term review. The "PTCR4/direct aid" ratio also increases very quickly in dairy farm businesses: from 14% in 1990 to 58% in 2000, it could reach 125% by 2008. This rate of dependence on direct aid, though sensitive to the intensity of the milk price drop considered in the simulation (20%), is higher than 100%, in 2008, in all the areas (table2). This rapid, sharp increase in direct aid has caused concern among many milk producers, historically linked to the system of guaranteed prices. They naturally fear this change all the more in that the implementation of direct payments to the dairy sector

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<sup>&</sup>lt;sup>4</sup> Formation of Farm Income

will interfere with the progressive implementation of other measures which will have the effect of reducing payments (modulation, national ceilings) or transforming their status (decoupling).

#### The impact of the modulation system

The mid-term review of the CAP also provides for the implantation of a compulsory modulation system of the direst aid in all the Member States. This system will replace the optional one applied in some countries (France, United Kingdom) since 1999 according to the 4<sup>th</sup> article of the Agenda 2000 horizontal rule. The modulation will be applied above an exemption of €5000 of direct aid per farm. The levy rate is set at 5% in 2007.

According to the simulation made to the horizon of 2008, in France this new system of modulation will concern three quarters of farm businesses (all types of farming included (TF)) for a financial levy of about €310 M (a third of it will come from milk farms). In the dairy sector, 94% of farms will be modulated for an average cut assessed at €960 per farm. This quite low cut represents 3.5% of total direct aid in 2008 or 4.4% of the pre-tax current result (PTCR) in 2008 (see table 3). The lower level of levy in the extensive areas and/or mountainous understandable in two ways: the measures of the second pillar of the CAP (among which agrienvironmental measures and compensatory allowances for natural handicaps), which play an important role in these areas, are not subject to modulation; because of an often-limited dairy reference per farm, the amount of the direct payments relative to the dairy sector is lower.

The system of modulation retained must be like a generalized digressive system of credits rather than a system of financial cut focused at the most aided farms. It differs from the system implemented in France between 2000 and 2002, which was based on a variable rate of levy according to the economic dimension of the farms. The redistributive impact of the modulation, which will be low, will only be estimated once the redistributions of credits are performed via rural development. The farms located in the mountains could become the winners of this operation because they will make a small contribution to the financial cuts, but will be well located to benefit from the rural development measures.

#### Decoupling and possible regionalization

To accentuate the level of decoupling, the direct aid (or a part) currently granted within the framework of the COM will be replaced by a single payment to the farm (European council, 2003). As for subsidiarity, the Member States have a certain amount of room for manoeuvre to apply this system: the effective date (2005, 2006 or 2007); the degree of decoupling (total or partial); the way references of the rights to premiums are determined: individual historic references relative to 2000-2002 or application of a regionalization which could cause the amount of the single farm payment to correspond to the product of its surface area by a lump sum per hectare, a sum common to all the farmers in the same area.

The simulation pursues two objectives: the first one consists in assessing the amount of the 2008 single payment for various categories of dairy farms (amount related to the farm, to the hectare and to the PTCR). The second measures the impact of the application of the regionalization principle of the single payment on the PTCR (100% ratio). Two assumptions are made: H1 corresponds to the implementation of total decoupling; H2 corresponds to the implementation of partial decoupling: the coupled supports include 25% of the direct aid in arable crops (except for fallow), 100% of the suckler cow premium (SCP), 40% of the slaughter premium and 50% of the ewe and she-goat premium.

Three main findings stand out from the analysis of the simulation results (tables 4, 5 and 6):

a) Conversely to what was shown for the other types of farms (beef, sheep and she-goat meat), the gap observed between total and partial decoupling is quite low for dairy farms. In the case of total decoupling (H1), as a national average the single payment rises to €23,000 per dairy farm in 2008, that is to say the equivalent of €319 per hectare (fodder areas and areas of cereal, oilseed and industrial crops are concerned), 88% of the direct aid and 110% of the PTCR. With the partial decoupling (H2), this amount is taken to €19,100 per farm (or €266/ha, 73% of the direct aid and 92% of the PTCR. As the future direct payments related to the COM in milk are necessarily and entirely decoupled, the vast majority of milk producers could have no interest in keeping the partial

decoupling option. Protected by the preservation of quotas (which limits the arrival of new incomers in the sector), the application of total decoupling would be likely to open new productive opportunities to dairy farmers (for example the development of suckler herds or the abandonment of cereal crops, etc.). In a more collective and less corporatist vision of the evolution of French agriculture, milk producers could however support partial decoupling through their professional organizations.

b) The amount of the single payment per dairy farm significantly increases with size and the degree of intensification. Aside from the premium for areas of maize fodder, intensive units also very often benefit from direct aid for their areas of arable crops and their young-beef cattle. So, for example, in 2008 the amount of the single payment per farm amounts to €37,900 in the unit system of "unlimited maize" having a quota higher than 300,000 kg, against only €8,200 in the units of the "grassy" system having a quota between 100,000 and 200,000 kg (table 4). The fixing of the individual historic references of the rights to premiums would protect these big gaps between intensive and extensive systems. They would then have a more limited global amount of direct support to offset the fall in milk prices and turn to other productions in the future. As for intensive units, they will have the possibility of abandoning certain productions (cereal and/or young cattle) while mobilizing the direct payments historically acquired to develop other agricultural or rural activities.

c) The amount of the single payment per hectare differs greatly across productive systems. With assumption H2, it is about €140 as a national average in the 23,500 dairy farms specialized in the "grassy" system against €348 in the 26,500 units specialized in the unlimited "grassy system". Because of the geographical concentration of these technical systems, these gaps also exist between regions (table 5). From €144 per hectare in the dairy farms located in Auvergne, this amount rises to €182 in Rhône-Alpes, €283 in Pays de la Loire, €322 in Brittany and €335 in Picardy. The application of a regionalization of the single payment (at a 100% rate) would, in all regions, have some particularly negative consequences for the dairy farms specialized in the unlimited maize system (-21% of the 2008 PTCR, as a national average, in H1 and -32% in H2). The situation would be reversed for the farms with the "grassy" system (+64% in H1 and +40% in H2). If regionalization seems difficult to envisage as it is because of an excessively high redistribution of credits between the categories of farms (table 6), other, more progressive and less radical systems could be investigated. The implementation of a hybrid system could be used, taking into account a certain (time-varying) equilibrium between the individual reference of the farm and the regional or national references.

#### Conclusion

Two decades after the implementation of the dairy quotas, the mid-term review represents a substantial break for dairy farms. While the number of dairy farms has already decreased sharply in France over the last thirty years (from 700,000 units at the beginning of the seventies to approximately 115,000 in 2003), the intensity of the future restructuring has not yet been fixed. Beyond the classic demographic phenomena, it is important to consider two other key factors: the evolution of the milk price paid to producers and the national decisions which will be taken according to subsidiarity (total or partial decoupling, distribution criteria for flexibility funds, management of the national reserve of rights, total or partial mutualisation of the single payment, and so on). The implementation of decoupling should modify the economic equilibria in dairy farms and encourage some producers to specialize in the most profitable productions. However, the geographical location of the farms (conditions of production, industrial frame, etc.), the scale of fixed costs and the farmers' aspirations will slow down the major reorientations of the productive systems.

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#### For further information

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## **Tables**

Table 1: Impact of a 10% decrease in the milk price on dairy farms' current result

According to production efficiency and the milk quota size per farm (in France)

|                       |                       | value added/Agr   |                    |               | Total   |  |  |  |  |  |  |
|-----------------------|-----------------------|-------------------|--------------------|---------------|---------|--|--|--|--|--|--|
| Milk quota size       | -20%                  | 20% - 30%         | 30% - 40%          | +40%          | Total   |  |  |  |  |  |  |
|                       | Number of dairy farms |                   |                    |               |         |  |  |  |  |  |  |
| -100,000 kg           | 4,100                 | 4,800             | 5,000              | 5,700         | 19,700  |  |  |  |  |  |  |
| 100,000 - 200,000 kg  | 8,800                 | 9,300             | 15,500             | 15,000        | 48,600  |  |  |  |  |  |  |
| 200,000 - 300,000 kg  | 2,700                 | 7,400             | 10,300             | 7,100         | 27,400  |  |  |  |  |  |  |
| +300,000 kg           | 1,700                 | 4,800             | 8,500              | 6,200         | 21,200  |  |  |  |  |  |  |
| Total                 | 17,300                | 26,300            | 39,300             | 34,000        | 116,900 |  |  |  |  |  |  |
|                       | Pre-tax cu            | rrent result (PTC | R) per family in 2 | 2000 (in euro | os)     |  |  |  |  |  |  |
| -100,000 kg           | 6,600                 | 9,100             | 12,200             | 14,700        | 10,900  |  |  |  |  |  |  |
| 100,000 to 200,000 kg | 6,500                 | 12,600            | 15,700             | 20,000        | 14,800  |  |  |  |  |  |  |
| 200,000 to 300,000 kg | 9,300                 | 15,100            | 19,900             | 25,100        | 18,800  |  |  |  |  |  |  |
| +300,000 kg           | 16,000                | 20,300            | 23,400             | 30,700        | 24,300  |  |  |  |  |  |  |
| Total                 | 8,400                 | 14,800            | 18,800             | 23,200        | 17,600  |  |  |  |  |  |  |
|                       | Impact of a           | 10% decrease in   | the milk price (in | stantaneous   | and     |  |  |  |  |  |  |
|                       |                       |                   | npensated)         |               |         |  |  |  |  |  |  |
|                       |                       | on the 200        | 0 current result   |               |         |  |  |  |  |  |  |
| -100,000 kg           | -21%                  | -16%              | -13%               | -12%          | -14%    |  |  |  |  |  |  |
| 100,000 - 200,000 kg  | -48%                  | -27%              | -22%               | -18%          | -23%    |  |  |  |  |  |  |
| 200,000 to 300,000 kg | -44%                  | -31%              | -24%               | -19%          | -25%    |  |  |  |  |  |  |
| +300,000 kg           | -34%                  | -29%              | -25%               | -20%          | -24%    |  |  |  |  |  |  |
| Total                 | -39%                  | -28%              | -23%               | -18%          | -23%    |  |  |  |  |  |  |

Source: FADN 2000/ INRA ESR Nantes

Table 2: Estimated evolution of direct support to French milk farms between 2000 and 2008

per administrative region

| Average results per farm | Number of dairy farms | Direct support<br>2000 (euros) | Direct support<br>2008 (euros) | Variation<br>2000-2008 |      | Direct support<br>2000 / PTCR | Direct support<br>2008 / PTCR |
|--------------------------|-----------------------|--------------------------------|--------------------------------|------------------------|------|-------------------------------|-------------------------------|
| F                        |                       |                                |                                | Euros %                |      | 2000                          | 2008                          |
|                          |                       |                                |                                |                        |      |                               |                               |
| Aquitaine                | 4,960                 | 14,500                         | 21,900                         | +7,400                 | +51  | 72%                           | 145%                          |
| Auvergne                 | 9,640                 | 13,300                         | 19,400                         | +6,000                 | +45  | 58%                           | 115%                          |
| Basse-Normandie          | 12,540                | 15,800                         | 25,100                         | +9,300                 | +59  | 60%                           | 142%                          |
| Bretagne                 | 22,320                | 12,300                         | 21,900                         | +9,600                 | +78  | 40%                           | 100%                          |
| ChampArdenne             | 2,990                 | 38,100                         | 51,200                         | +13,100                | +34  | 93%                           | 165%                          |
| Franche-Comté            | 5,510                 | 14,800                         | 22,800                         | +8,000                 | +54  | 52%                           | 119%                          |
| Hte-Normandie            | 4,030                 | 25,400                         | 36,400                         | +11,100                | +44  | 63%                           | 124%                          |
| Lorraine                 | 5,010                 | 29,600                         | 43,400                         | +13,700                | +46  | 62%                           | 123%                          |
| Midi-Pyrénées            | 4,910                 | 13,400                         | 20,200                         | +6,800                 | +51  | 62%                           | 130%                          |
| Nord-Pas-de-Calais       | 6,290                 | 16,300                         | 25,300                         | +9,000                 | +56  | 56%                           | 122%                          |
| Pays de la Loire         | 16,040                | 15,900                         | 25,400                         | +9,600                 | +60  | 55%                           | 123%                          |
| Picardie                 | 3,620                 | 28,600                         | 40,900                         | +12,300                | +43  | 91%                           | 197%                          |
| Poitou-Charentes         | 2,750                 | 31,100                         | 42,900                         | +11,800                | +38  | 78%                           | 148%                          |
| Rhône-Alpes              | 9,920                 | 12,200                         | 18,400                         | +6,200                 | +51  | 53%                           | 118%                          |
| France                   | 116,930               | 17,000                         | 26,100                         | +9,100                 | +53% | 58%                           | 125%                          |

Source: FADN 2000/ INRA ESR Nantes

Table 3: Impact of the direct support modulation (in 2008) for French dairy farms per administrative region

| Average results per | Modulo    | ted dairy farms     | Levi                       | Levies due to the modulation |               |  |  |  |  |
|---------------------|-----------|---------------------|----------------------------|------------------------------|---------------|--|--|--|--|
| farm                | Modula    | ied dairy rarms     | (only for modulated farms) |                              |               |  |  |  |  |
|                     | Number of | As a % of the total | In euros per               | As a % of the                | As a % of the |  |  |  |  |
|                     | farms     | number              | farm                       | 2008 direct                  | 2008 current  |  |  |  |  |
|                     |           | of dairy farms      |                            | support                      | result        |  |  |  |  |
| Aquitaine           | 4,810     | 97                  | 760                        | 3.4                          | 5.0           |  |  |  |  |
| Auvergne            | 7,950     | 82                  | 390                        | 1.8                          | 2.1           |  |  |  |  |
| Basse-Normandie     | 11,540    | 92                  | 860                        | 3.2                          | 4.6           |  |  |  |  |
| Bretagne            | 21,530    | 96                  | 790                        | 3.5                          | 3.4           |  |  |  |  |
| Champ-Ardenne       | 2,990     | 100                 | 2,210                      | 4.3                          | 7.1           |  |  |  |  |
| Franche-Comté       | 4,970     | 90                  | 680                        | 2.8                          | 3.4           |  |  |  |  |
| Haute-Normandie     | 4,030     | 100                 | 1,540                      | 4.2                          | 5.2           |  |  |  |  |
| Lorraine            | 5,010     | 100                 | 1,750                      | 4.0                          | 4.9           |  |  |  |  |
| Midi-Pyrénées       | 4,770     | 97                  | 590                        | 2.9                          | 3.7           |  |  |  |  |
| Nord-Pas-de-Calais  | 6,290     | 100                 | 970                        | 3.8                          | 4.7           |  |  |  |  |
| Pays de la Loire    | 15,540    | 97                  | 1,000                      | 3.8                          | 4.8           |  |  |  |  |
| Picardie            | 3,620     | 100                 | 1,720                      | 4.2                          | 8.3           |  |  |  |  |
| Poitou-Charentes    | 2,750     | 100                 | 1,790                      | 4.2                          | 6.2           |  |  |  |  |
| Rhône-Alpes         | 8,360     | 84                  | 460                        | 2.3                          | 2.7           |  |  |  |  |
| France              | 109,980   | 94                  | 960                        | 3.5                          | 4.4           |  |  |  |  |

Source: FADN 2000/ INRA ESR Nantes

Table 4: estimated amount of the single payment in French dairy farms (in 2008)

| Accordi           | According to the farm type, decoupling intensity (H1: Total, H2: partial) and the quota milk size |          |        |        |             |              |           |             |           |        |         |        |
|-------------------|---|----------|--------|--------|-------------|--------------|-----------|-------------|-----------|--------|---------|--------|
|                   | Specialized   |          |        |        |             |              |           |             |           | sified | To      | tal    |
|                   | Corn ur   | nlimited | Corn 1 | imited | Fod         | Fodder Total |           |             |           |        |         |        |
| Quota milk size   | H1  | H2       | H1     | H2     | H1          | H2           | H1        | H2          | H1        | H2     | H1      | H2     |
| in kg             | Number of dairy farms   |          |        |        |             |              |           |             |           |        |         |        |
| -100,000          | 70  | 00       | 5,8    | 800    | 7,5         | 500          | 14,       | 000         | 5,6       | 500    | 19,700  |        |
| 100,000 - 200,000 | 9,7   | '00      | 15,    | 000    | 11,         | 800          | 36,       | 500         | 12,       | 100    | 48,     | 600    |
| 200,000 - 300,000 | 9,3   | 300      | 7,4    | 100    | 2,6         | 500          | 19,       | 300         | 8,2       | 200    | 27,     | 400    |
| +300,000          | 6,8   | 300      | 5,0    | 000    | 1,5         | 500          | 13,       | 300         | 7,900     |        | 21,200  |        |
| Total             | 26,   | 500      | 33,    | 200    | 23,         | 500          | 83,       | 200         | 33,800    |        | 116,900 |        |
|                   |   |          |        | Amoun  | t of the 20 | 008 single   | payment p | er farm (ir | euros)    |        |         |        |
| -100,000          | ns  | ns       | 11,200 | 7,400  | 7,200       | 4,600        | 9,100     | 6,000       | 16,300    | 12,200 | 11,200  | 7,800  |
| 100,000 - 200,000 | 15,400  | 13,200   | 14,200 | 12,000 | 9,900       | 8,200        | 13,100    | 11,100      | 25,500    | 20,700 | 16,200  | 13,500 |
| 200,000 - 300,000 | 22,900  | 19,900   | 23,200 | 19,800 | 15,900      | 13,600       | 22,100    | 19,000      | 35,300    | 29,400 | 26,000  | 22,100 |
| +300,000          | 37,900  | 32,800   | 36,300 | 31,300 | 23,300      | 21,200       | 35,600    | 30,900      | 62,300    | 51,900 | 45,600  | 38,700 |
| Total             | 23,800  | 20,500   | 19,000 | 15,800 | 10,600      | 8,500        | 18,100    | 15,300      | 34,900    | 28,700 | 23,000  | 19,100 |
|                   |   |          |        | Amount | of the 200  | 8 single p   | ayment pe | r hectare ( | in euros) |        |         |        |
| -100,000          | 395   | ns       | 295    | 195    | 181         | 117          | 236       | 155         | 300       | 224    | 259     | 180    |
| 100,000 - 200,000 | 391   | 337      | 275    | 234    | 164         | 136          | 256       | 217         | 343       | 279    | 285     | 237    |
| 200,000 - 300,000 | 398   | 346      | 292    | 249    | 183         | 156          | 316       | 272         | 367       | 306    | 335     | 285    |
| +300,000          | 414   | 359      | 318    | 274    | 188         | 170          | 344       | 298         | 380       | 317    | 361     | 307    |
| Total             | 403   | 348      | 293    | 245    | 174         | 140          | 293       | 247         | 360       | 295    | 319     | 266    |

ns: non significant

Source: FADN 2000/ INRA ESR Nantes

Table 5: Estimated amount of the single payment for French dairy farms (in 2008)

According to 2 decoupling hypotheses (H1: total, H2: partial) and per administrative region

|                    | 2008 single pa | yment by farm | 2008 single          | payment by                           | 2008 single | e payment / | 2008 single payment / |     |  |  |
|--------------------|----------------|---------------|----------------------|--------------------------------------|-------------|-------------|-----------------------|-----|--|--|
|                    | (euros)        |               | hectare <sup>3</sup> | hectare* (euros) 2008 direct support |             |             | 2008 PTCR             |     |  |  |
|                    |                |               |                      |                                      | (in         | %)          | (in %)                |     |  |  |
|                    | H1             | H2            | H1                   | H2                                   | H1          | H2          | H1                    | H2  |  |  |
| Aquitaine          | 20,000         | 16,500        | 381                  | 314                                  | 91          | 75          | 133                   | 109 |  |  |
| Auvergne           | 11,300         | 8,700         | 187                  | 144                                  | 59          | 45          | 67                    | 52  |  |  |
| Basse-Normandie    | 20,800         | 17,900        | 328                  | 282                                  | 83          | 71          | 118                   | 101 |  |  |
| Bretagne           | 20,100         | 17,400        | 371                  | 322                                  | 92          | 80          | 91                    | 79  |  |  |
| ChampArdenne       | 49,200         | 40,000        | 308                  | 250                                  | 96          | 78          | 159                   | 129 |  |  |
| Franche-Comté      | 17,200         | 14,700        | 194                  | 165                                  | 76          | 64          | 90                    | 77  |  |  |
| Haute-Normandie    | 36,300         | 30,400        | 377                  | 316                                  | 100         | 83          | 123                   | 103 |  |  |
| Lorraine           | 39,900         | 34,000        | 298                  | 254                                  | 92          | 78          | 113                   | 96  |  |  |
| Midi-Pyrénées      | 16,500         | 13,400        | 303                  | 246                                  | 82          | 66          | 106                   | 86  |  |  |
| Nord-Pas-de-Calais | 24,400         | 20,700        | 391                  | 332                                  | 96          | 82          | 117                   | 99  |  |  |
| Pays de la Loire   | 24,300         | 19,500        | 353                  | 283                                  | 96          | 77          | 118                   | 95  |  |  |
| Picardie           | 39,500         | 33,000        | 401                  | 335                                  | 97          | 81          | 190                   | 158 |  |  |
| Poitou-Charentes   | 41,200         | 33,400        | 372                  | 301                                  | 96          | 78          | 142                   | 115 |  |  |
| Rhône-Alpes        | 12,600         | 10,500        | 218                  | 182                                  | 68          | 57          | 81                    | 68  |  |  |
| France             | 23,000         | 19,100        | 319                  | 266                                  | 88          | 73          | 110                   | 92  |  |  |

<sup>(\*)</sup> Hectares of SFP+SCOP+industrial crops

Source: FADN 2000/ INRA ESR Nantes

**Table 6: Impact of regionalization of the single farm payment in French dairy farms (2008)**Variation of the 2008 PTCR according to the farm type, decoupling intensity (H1: total, H2: partial) and administrative region

|                    | Specialized |          |        |        |     |      |      |      |       | sified | То   | tal  |
|--------------------|-------------|----------|--------|--------|-----|------|------|------|-------|--------|------|------|
|                    | Corn ur     | nlimited | Corn 1 | imited | Foo | lder | To   | tal  | Diver | silled | 10   | itai |
|                    | H1          | H2       | H1     | H2     | H1  | H2   | H1   | H2   | H1    | H2     | H1   | H2   |
| Aquitaine          | ns          | ns       | ns     | ns     | ns  | ns   | -8%  | -47% | 1%    | -16%   | -1%  | -21% |
| Auvergne           | ns          | ns       | 5%     | -17%   | 35% | 11%  | 30%  | 6%   | 17%   | 1%     | 24%  | 4%   |
| Basse-Normandie    | -19%        | -22%     | 15%    | 5%     | ns  | ns   | 1%   | -6%  | 1%    | -1%    | 1%   | -5%  |
| Bretagne           | -6%         | -11%     | 11%    | 5%     | ns  | ns   | 0%   | -5%  | -2%   | -5%    | 0%   | -5%  |
| Champagne-Ardenne  | ns          | ns       | -1%    | -6%    | 50% | 38%  | 16%  | 9%   | -3%   | -9%    | 3%   | -3%  |
| Franche-Comté      | ns          | ns       | -13%   | -12%   | 35% | 22%  | 26%  | 15%  | -16%  | -18%   | 11%  | 3%   |
| Haute-Normandie    | -20%        | -23%     | 3%     | -2%    | ns  | ns   | -3%  | -8%  | -5%   | -9%    | -5%  | -8%  |
| Lorraine           | ns          | ns       | 17%    | 2%     | 38% | 22%  | 19%  | 5%   | -9%   | -13%   | 8%   | -3%  |
| Midi-Pyrénées      | ns          | ns       | 26%    | 0%     | ns  | ns   | 30%  | 2%   | -12%  | -25%   | 10%  | -11% |
| Nord-Pas-de-Calais | -30%        | -35%     | -2%    | -10%   | ns  | ns   | -19% | -26% | -9%   | -11%   | -12% | -15% |
| Pays de la Loire   | -14%        | -27%     | 23%    | 7%     | ns  | ns   | 6%   | -8%  | 0%    | -13%   | 4%   | -10% |
| Picardie           | -61%        | -75%     | ns     | ns     | ns  | ns   | -51% | -64% | -17%  | -22%   | -23% | -28% |
| Poitou-Charentes   | -6%         | -23%     | ns     | ns     | ns  | ns   | 13%  | -5%  | -13%  | -22%   | -5%  | -17% |
| Rhône-Alpes        | ns          | ns       | 0%     | -10%   | 44% | 28%  | 20%  | 8%   | 1%    | -7%    | 13%  | 2%   |
| _                  |             |          |        |        |     |      |      |      |       |        |      |      |
| France             | -21%        | -32%     | 15%    | -2%    | 64% | 40%  | 12%  | -5%  | -3%   | -14    | 3    | -7   |

ns: non significant

Source: FADN 2000/ INRA ESR Nantes