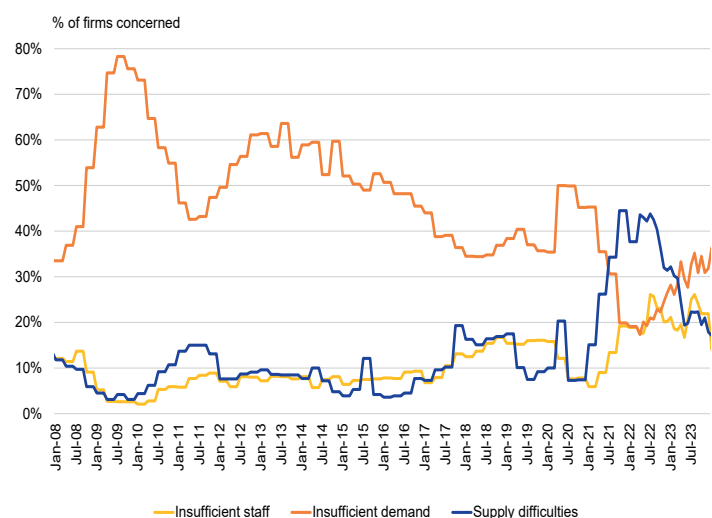


Disparities in Farm Income

Félix Bastit and Emmanuelle Poujaud

- Income disparities between farmers are significant and depend on economic parameters such as farm size and production type.
- In aggregate terms, real farm income per work unit has been growing on average since 2010, despite a dip in 2023 following a record year in 2022. Farmers' incomes are subject to acute cyclical fluctuations due to climatic conditions and global food markets. However, farm subsidies help to stabilise these incomes to some extent.
- Although the median standard of living among farm households is similar to that among all working French households, the headline figure masks significant disparities between farms and reflects a higher workload:
 - In 2020, the poverty rate among people in farm households was 16%, ranging from over 20% for livestock farmers to 12% for arable farmers. By comparison, the poverty rate among the French population as a whole was 14%.
 - In 2022, farmers worked an average of 15 hours more per week than the general population and were more likely to report working evenings, nights and weekends.
- Farmers, most of whom work on individual holdings or with a small number of partners, tend to pay themselves little, preferring instead to invest in equipment and machinery in order to build up substantial business assets and achieve productivity gains.
- There have been significant productivity gains in French agriculture over the past 60 years, but the lion's share of the benefits have flowed to the downstream sector and consumers.

Pre-tax profit/loss per non-salaried agricultural work unit by farm type (average in constant 2022 euros)



Source: Agreste, RICA.

How to read this Chart: Pre-tax profit/loss per non-salaried agricultural work unit by farm type is a measure of the funds available to the farm manager (or, as the case may be, the farm partners) per non-salaried worker in order to pay for work performed and to generate a return on invested capital.

1. An aggregate view of farm income in France¹

Farm incomes can be measured from different angles: on an aggregate basis for the French agricultural sector as a whole, or from the perspective of individual farm households² or farms.

1.1 Aggregate income across the French agricultural sector as a whole is growing on average but remains weak

In 2023, gross value added at factor cost per agricultural work unit³ was 18.4% higher in real terms than the average for 2010-2019, although it was 9% lower than in 2022 (Insee, France’s National Institute of Statistics and Economic Studies, “Compte prévisionnel 2023”).⁴ This year-on-year decline in 2023 was largely attributable to a major decoupling between trends in agricultural producer prices and in the GDP price deflator (see Table 1 and Chart 1).

Table 1: Summary of factors behind the change in gross value added at factor cost per agricultural work unit in 2022 and 2023

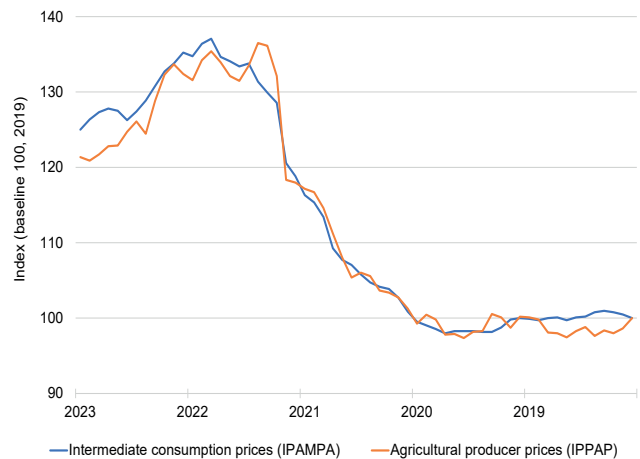
Factor		Change in 2022	Change in 2023
Production	Price	+17.3%	-3.7%
	Volume	-0.6%	+2.9%
Intermediate consumption	Value	+15.7%	+2.5%
GDP price deflator		+2.9%	+5.4%

Source: Insee, “Comptes nationaux prévisionnels de l’agriculture en 2022” and “Comptes nationaux provisoires de l’agriculture en 2023”.

1.2 Farm households enjoy a standard of living comparable to that of the rest of the population

In 2020, the median standard of living for people belonging to farm households was €22,800, which was similar to the population-wide median of €22,400 (Givois, 2024).⁵ However, these households work much longer hours in order to earn this income: on average, in 2022, farmers worked 52.5 hours per week,

Chart 1: Change in agricultural producer prices and intermediate consumption prices



Source: Insee, “Indices mensuels des prix d’achat des moyens de production agricole” (IPAMPA); Insee-Agrete, “Indice des prix des produits agricoles à la production” (IPPAP).

compared to 37.1 hours per week across the working population as a whole. Farmers are also more likely to report working evenings, nights and weekends than workers in any other profession.⁶ It should be noted, however, that some private expenditure by farm households (such as on-farm consumption of food, or spending on energy and housing) may be included as intermediate consumption or, in some cases, as capital expenditure in the farm’s accounts, thereby excluding it from the calculation basis for cost of living.

1.3 Making private transfers and investing in equipment and machinery: a fine balancing act

As business owners, farmers can decide to allocate their farm’s operating cash surplus⁷ in one of two ways: paying themselves for their work through private transfers,⁸ or reinvesting the surplus in equipment and machinery. In a study carried out in the Massif Central region of France⁹ covering the period 2001-

(1) The authors would like to thank Agreste, the department of statistics and foresight analysis of the French Ministry for Agriculture, Food Sovereignty and Forestry, for carefully reviewing this research and producing the underlying statistics.
 (2) A farmer is defined as a professional who is engaged in agricultural work, on a farm comprising 10 people or fewer, as a farm owner, as a farm or business manager or partner, or as a family helper. Agricultural wage-earners are excluded from the scope of this study.
 (3) This indicator represents value added generated per agricultural work unit after deducting the cost of factors of production such as rent, interest and taxes. It gives an indication of estimated average income per farmer on an aggregate basis for France as a whole. It is adjusted according to the GDP price deflator.
 (4) Insee Première, no. 1977, December 2023.
 (5) S. Givois (2024), “Le niveau de vie des ménages agricoles en 2020”, Agreste, Primeur, no. 1. Note: On average, farming households derive only 34% of their disposable income from agriculture. This is supplemented by 45% from other income sources (including income earned by other household members), 15% from pensions and annuities, 22% from capital income and 4% from social benefits.
 (6) Insee (2023), “France portrait social”.
 (7) Operating cash surplus is the difference between annual income and expenditure, representing the wealth created by a farm.
 (8) Transfer of funds from a company account to the private account of the business owner or a partner for personal needs.
 (9) The study covered 1,538 farms in the Puy-de-Dôme and Haute-Loire départements, an area of France with relatively low incomes.

2018, Jeanneaux and Velay (2021)¹⁰ found that, on average, 46% of farms' operating cash surplus was allocated to private payments (amounting to €26,600 per year, or 1.09 times the minimum wage, per farm manager). According to their findings, more than half of farms' surplus was therefore reinvested in equipment and machinery, building up business assets that farm owners can sell upon retirement, rather than being withdrawn as income to cover day-to-day spending or saved in other ways.

According to Jeanneaux and Velay (2021), the average internal rate of return (IRR)¹¹ for the farms included in the study was 2.3%. They found a negative correlation between a farm's IRR and the level of private payments, with farms that withdrew too much money

from the business failing to invest enough in equipment and machinery and becoming less competitive as a result. There is also a case to be made for farmers taking money out of their business in order to invest it in other, more profitable savings vehicles. Owing to the capital-intensive nature of agricultural production, farm households have substantial net assets: a median of €437,900 in 2018, which was significantly higher than the median for the population as a whole (€117,000) and even among self-employed professionals (€385,100).¹² Yet there is no guarantee that farmers will realise the full value of their business assets when they reach the end of their careers: the disposal value may turn out to be lower than the book value, perhaps because there are not enough young farmers to replace those who are retiring.¹³

2. Sharp income disparities

There are significant disparities in the standards of living enjoyed by farm households. In 2020, annual income at the first decile point for households containing at least one farmer stood at €10,900, which was 4.1 times lower than income at the tenth decile point (Givois, 2024). By comparison, across French households as a whole, annual income at these two decile points differed by a factor of just 3.4.

2.1 Disparities between and within sectors

Farm size is a key determinant of income: in 2023, the smallest third of farms¹⁴ generated four times less income per worker than the largest quarter of farms¹⁵ (Agreste, 2023). Income disparities can also be attributed to farm type: between 2017 and 2022, income per worker averaged €20,000 for beef cattle farms, compared with close to €55,000 for arable farms and €53,000 for wine estates. In 2020, the poverty rate across farm households as a whole stood at 16%, ranging from as high as 25% for market gardeners and horticulturists, 24% for sheep, goat and other herbivore farmers, and 22% for beef cattle farmers, to as low

as 12% for arable farmers (Givois, 2024).¹⁶ However, income disparities are significant even within farms of the same type, especially in the wine-growing, market gardening and fruit-growing sectors (see Chart 2), translating into similar disparities in standards of living among farm households.

2.2 Acute cyclical fluctuations that are likely to become more pronounced

The volatility of agricultural yields is high, and could further increase as droughts, floods and other extreme climate events grow in frequency and intensity. Climate change could also create a favourable environment for epizootic and zoonotic disease outbreaks.¹⁷ Moreover, global food markets are highly unstable, especially for crops and pork products, with volatility reaching new heights in 2022 against a backdrop of heightened geopolitical tensions. These factors create great uncertainty for farmers, potentially leading to income instability and, in some cases, cash-flow problems.

(10) P. Jeanneaux and N. Velay (2021), "Capitalisation du revenu agricole et formation du patrimoine professionnel des exploitations agricoles", *Économie rurale*, no. 378.

(11) IRR is the discount rate at which the net present value (the difference between cash inflows and outflows) is equal to the value of the initial investment.

(12) *Insee Références* (2021), "Revenus et patrimoine des ménages, fiche Patrimoine net des ménages".

(13) The total agricultural labour force, as measured in non-salaried agricultural work units, declined by 1.3% per year between 2010 and 2020 (source: Agreste, *Graph'Agri 2023*).

(14) According to economic size, as measured by standard gross production (SGP).

(15) As measured by pre-tax profit/loss per non-salaried agricultural work unit. Agreste (2023), "Les résultats économiques des exploitations agricoles en 2022", Agreste, Les Dossiers, no. 6, reports presented to the French Agriculture Audit Board.

(16) S. Givois (2024), "Transformation de l'agriculture et des consommations alimentaires", *Insee Références*.

(17) Epizootics are diseases in non-human animal populations (such as epizootic haemorrhagic disease, or EHD, which affects cattle, and highly pathogenic avian influenza, or HPAI, which affects birds). Zoonoses, by contrast, are diseases that are transmissible from animals to humans.

Operating subsidies, and in particular the decoupled aid available under the Common Agricultural Policy (CAP), go some way towards stabilising farmers' incomes because they are not tied to output volumes. Moreover, they represent a significant share of farms' inflows: in 2022, farms received an average of €36,300 in subsidies (with CAP payments amounting to 82% of this figure),¹⁸ accounting for 12% of recipient farms' current income. Without subsidies, 18% of farms would have had a negative gross operating surplus in 2022. However, the actual figure – including subsidies – stood at just 3%.

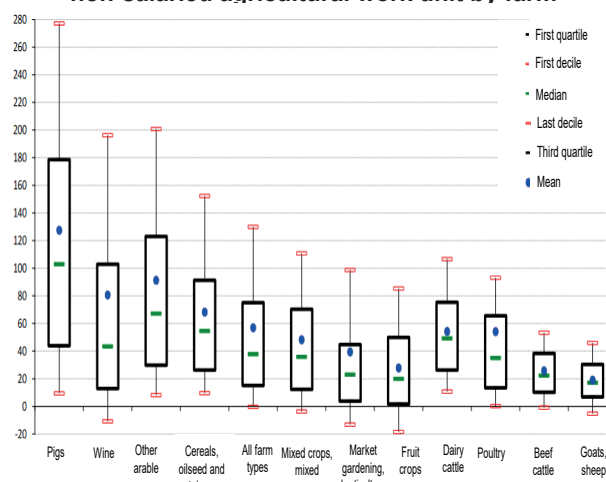
2.3 The determinants of farm performance

Beyond farm size and type, there are three other factors that explain the disparity in income across farms as a whole: labour productivity, the productive efficiency of inputs, and debt servicing capacity.¹⁹ Those farmers who perform above the median on at least two of these three criteria have the highest incomes.

Agricultural value added grew by an average of 1.26% per year between 1959 and 2017.²⁰ Some 70% of this growth was attributable to productivity gains, with suppliers, subsidies and land accounting for 15%, 11% and 4% respectively. Between 1959 and 1979,

this increase was caused by the fact that output grew at a faster pace than costs. After this point, output continued to rise as costs fell. But since 2004, output has flatlined while the pace of cost reductions has slowed. The lion's share of this value added has flowed to the downstream sector – especially to consumers (51%) – although farmers, agricultural wage-earners and equipment suppliers have also benefited (39%, 9% and 2% respectively).²¹

Chart 2: Distribution of pre-tax profit/loss per non-salaried agricultural work unit by farm



Source: Agreste, RICA 2022, in Agreste, Les Dossiers, no. 6 (2023).

(18) Agreste (2023), op. cit.

(19) V. Chatellier (2021), "L'hétérogénéité des revenus des actifs non-salariés au sein de l'agriculture française : un regard au travers de deux grilles typologiques". Labour productivity = (agricultural output + subsidies)/work units. Productive efficiency = (agricultural output + subsidies)/intermediate consumption. Debt servicing capacity = gross operating surplus/debt principal and interest payments.

(20) J.P. Boussemart et al. (2023), "L'impact de l'inflation dans la distribution des gains de productivité de l'agriculture française".

(21) Ibid.

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