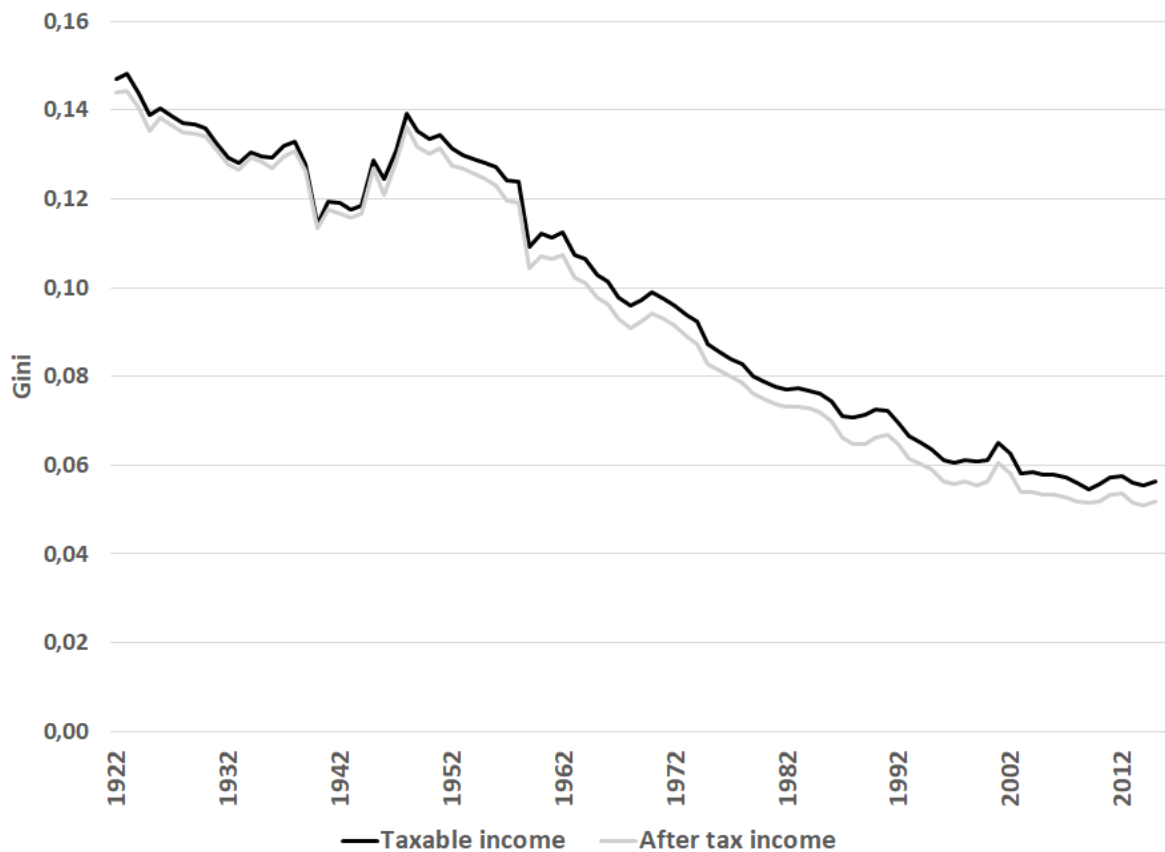


Income inequalities between French *départements*: a secular decline

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Over the past century, income disparities per adult between départements have been steadily decreasing. The low-income diagonal, which used to be very marked from the north-west to the south-east, has given way to a "low population density diagonal" which now runs from the north-east to the south-west.

Chart 1. Gini coefficient of income per adult between the 90 départements, 1922-2015



Sources: tax records and authors' calculations

Note: The Gini index shows the distribution of income in a population; it varies between 0 (perfect equality of income) and 1 (extreme case where a single individual has all the income). The Gini coefficients for average incomes per adult in the départements of metropolitan France are calculated before and after income tax, without population weighting (in order to focus on the differences between départements and not to implicitly assume that incomes are equally distributed within a département).

The question of spatial inequalities has garnered increasing interest. What is sometimes referred to as the “territorial divide” describes a divergence process between the cities that increasingly contribute to the creation of wealth and the rest of the country.

Deindustrialisation coupled with the advent of a service and knowledge economy is leading to a polarisation of activity in certain areas. This post provides a historical overview of this trend through a unique reconstruction of interdepartmental income inequalities since 1922.

The *département* scale is both useful and relevant. Useful, because their perimeter has been relatively stable since their creation in 1789, which facilitates the historical comparison of the statistical data associated with them. Relevant, because it is at this level that certain territorial development policies are implemented in the health, social, educational and regional planning domains.

Inequalities between *départements* have been decreasing for a century

Our geographical scope covers 90 *départements*, as we exclude the overseas *départements* and include the *départements* of Ile-de-France and Corsica which were defined prior to the changes of the 1960s (an increase from three to eight *départements* in the Paris region) and 1970s (an increase from one to two *départements* in Corsica).

For each *département*, we have collected and digitised from the archives and official publications of the Ministry of Finance the number of taxable households, the taxable income they declared and the total amount of tax they paid. We also use the departmental distributions of income per taxable household for the periods 1960-1969, 1986-1998 and 2001-2015 calculated by [Bonnet and Sotura \(2020\)](#). Lastly, we use the annual departmental populations by age calculated by [Bonnet \(2020\)](#). Based on these statistics, we reconstruct the average taxable income - nominal excluding purchasing power parity - by *département*, before and after payment of income tax, for each year since 1922.

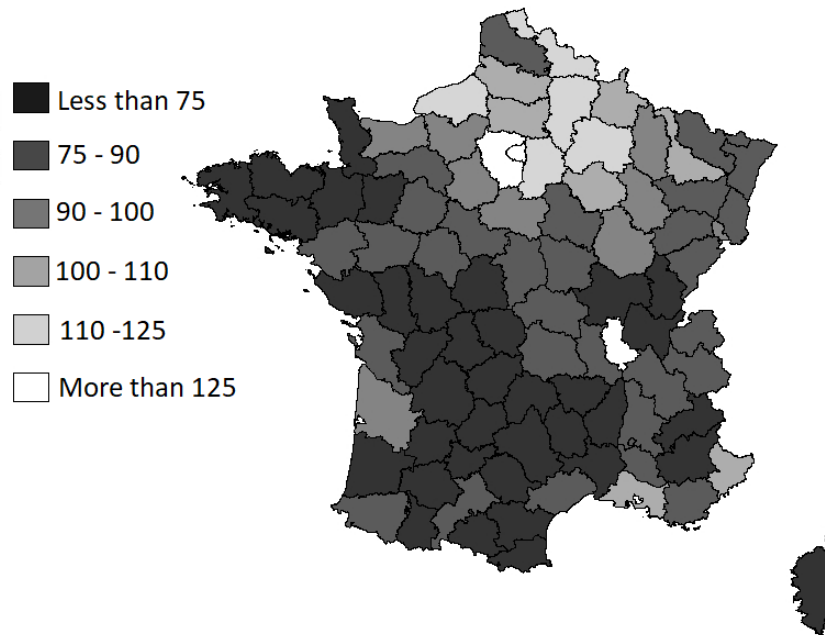
Interdepartmental inequalities in average taxable income have clearly been declining for a century (see Chart 1). At the start of the period, the Gini coefficient was above 0.14, whereas it is now below 0.06. There are two periods of almost continuous decline: between 1922 and 1939 and between 1948 and 2015. Between 1948 and 1990, the rate of decline was almost constant at 1.4% per year. A slowdown is then observed: since 2000, the decline continued but at an average rate of 0.3% per year.

From a low-income diagonal to a low-density diagonal

How does this convergence manifest itself, *département* by *département*? In 1922, the north of France was particularly rich: with the exception of Pas-de-Calais, all the *départements* had an average taxable income of above the national average, with the highest levels in the *départements* of Seine and Seine-et-Oise (see Chart 2). The neighbouring *départements* (Eure, Eure-et-Loir, Loiret, Meuse, Haute-Marne and Côte-d'Or) had an average taxable income of close to the national average. To the south of this region, almost all the *départements* had an average taxable income of less than 90% of the national average. The geographical areas with the lowest incomes (i.e. an average taxable income of 75% below the national average) were in Brittany, the South-West, the Southern Alps and Corsica. In the

south, the significant exceptions were the Rhône and Bouches-du-Rhône, home to major regional cities, as well as the Alpes-Maritimes.

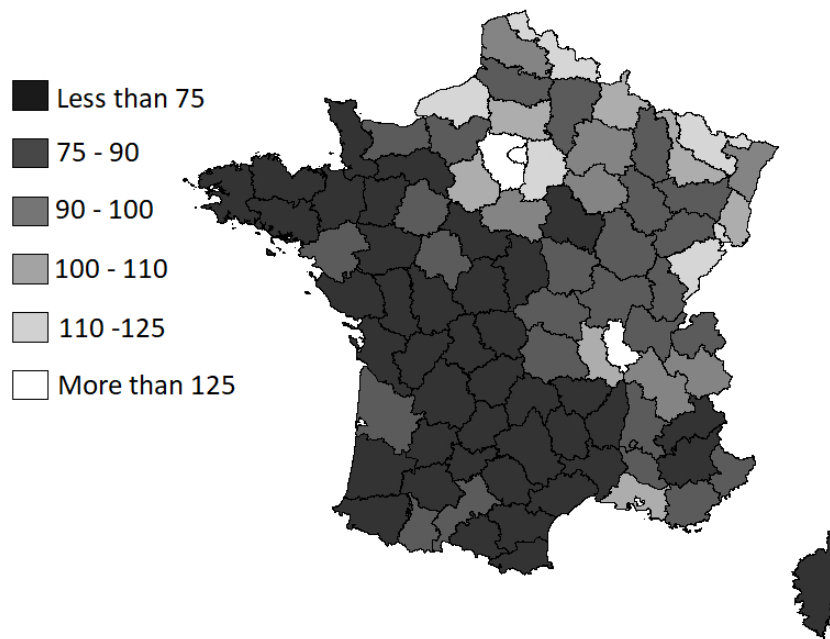
Chart 2. Relative average incomes of the départements in 1922



Sources: tax records and authors' calculations

Note: The average taxable income per adult is calculated in relation to the 90 metropolitan départements in 1922. A dark colour indicates a low taxable income compared to the national average.

In 1948, the geography of income in France had hardly changed compared with 1922 (Chart 3). Overall, the départements with an average taxable income higher than the national average were still in the north of France. This area was nevertheless much less homogeneous than in 1922; départements such as the Somme, Aisne, Marne or Aube had an average taxable income that was lower than the national average, while départements bordering Switzerland such as the Doubs or the Haut-Rhin had an average taxable income that was higher than the national average. In the south-west, almost all départements were characterised by an average taxable income of below the national average. A large homogeneous area stretching from Brittany to the southern Cévennes also had an income of well below the national average. The Bouches-du-Rhône and the Rhône were always exceptions, and also of note was the development of the Loire, home to Saint-Etienne and its industries.

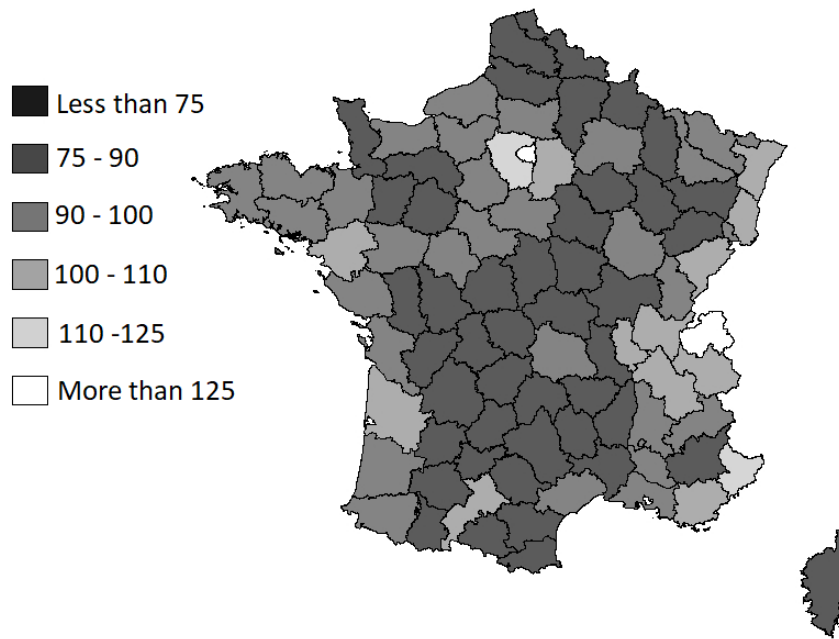
Chart 3. Relative average incomes of the départements in 1948

Sources: tax records and authors' calculations

Note: The average taxable income per adult is calculated in relation to the 90 metropolitan départements in 1948. A dark colour indicates a low taxable income compared to the national average.

What was the situation of the départements in 2015? First, we observe that relatively low-income areas had disappeared: there were no longer any *départements* for which the average taxable income was less than 75% of the national average, which confirms the decrease in inequality mentioned above. Second, it appears that the *départements* with an average taxable income of above the national average are no longer in the north of France, but near the Swiss border, in the Paris region and in the *départements* with cities such as Lyon, Nantes or Toulouse. We also note that the départements with an average taxable income of between 75 and 90% of the average income were located along a diagonal running from the Spanish border to the Belgian border, with two exceptions in the north of the country and in the Normandy interior. These *départements* correspond to those of the 'empty diagonal' (low population densities), even though it is a matter of low income here. Conversely, the Atlantic coast has become a homogeneous area where living standards are close to the national average. The three maps shown in Charts 2, 3 and 4 clearly show the shift from a 'low income diagonal', which used to run from the north-west to the south-east, to a 'low density diagonal' which now runs from the north-east to the south-west.

Chart 4. Relative average incomes of the départements in 2015



Sources: tax records and authors' calculations

Note: The average taxable income per adult is calculated in relation to the 90 metropolitan départements in 2015. A dark colour indicates a low taxable income compared to the national average.