Master's thesis

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Geographies of Capital Income in France in 2020

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1 Abstract

Thomas Piketty documents, at the national and international level, a structural tendency toward the concentration of capital in the absence of corrective policies. Territorial economics, for its part, measures inequalities between territories on the basis of household incomes. Between the two, the subnational geography of wealth remains underdeveloped.

First, we document the absence of databases concerning wealth, its income, and its transmission at the subnational level. In particular, we document the unusability of ISF/IFI (wealth tax) data, the total absence of data on life insurance or inheritances, and the difficulties we encountered in exploiting the data we did find in order to carry out this thesis.

However, a portion of capital income declared for income tax purposes is available at the subnational level, mainly dividends and estate income. Its territorial exploitation nonetheless runs into three difficulties: a strong concentration at the top of the income distribution, a heterogeneity in nature between the financial component and the property component, and a marked sensitivity to tax reforms and cyclical shocks. This thesis therefore adopts a cross-sectional approach rather than an analysis over time, and measures the effect of wealth on territorial income inequalities observed excluding wealth. It thus draws on capital income declared for income tax at three complementary scales: the public establishments for inter-municipal cooperation (EPCI), the départements, and the IRIS, the infra-municipal scale.

Next, we show at the inter-municipal scale that capital income per capita is explained less by a territory's current level of income, whether from workers or retirees, than by a residential, touristic, and border geography, coupled with a marked concentration in large metropolitan areas. Territories with the highest earned or retirement income, close to major urban areas, do not necessarily display the highest capital income; conversely, less wealthy territories along the Atlantic coast, the south-eastern Alps, the southern Massif Central, or the Luxembourg border concentrate particularly high capital income. Wealth nonetheless amplifies, on average, territorial income inequalities: the coefficient of variation of income per capita across EPCIs rises from 0.1440 excluding wealth to 0.1491 including it, an increase of 3.5 %.

At the département level, financial income and estate income, although very different in nature, evolve jointly from one département to another, with a few exceptions. Paris, Hauts-de-Seine, Alpes-Maritimes, Rhône, and Haute-Savoie highly concentrate financial income.

Finally, at the infra-municipal scale, the breakdown of declared income reveals a weight of wealth that grows with its own level, reaching up to 41 % of total income in the most concentrated IRIS (2009). It is essential to take into account this composition when interpreting income at the IRIS level. Cross-referenced with the first round of the 2022 presidential election, this capital income recovers the expected hierarchy for most political blocs.

Keywords: capital income ; territorial inequalities ; territorial economic base ; capital taxation ; statistical secrecy ; electoral geography.

JEL Codes: D31 ; R12 ; H24 ; D63 ; D72.

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2 Introduction

Piketty documents, from *Capital in the Twenty-First Century* (Piketty 2013) to *Capital and Ideology* (Piketty 2019), a structural tendency toward the concentration of capital and its income in the absence of corrective policies. The return on capital durably exceeds growth. The capital/income ratio is climbing back to nineteenth-century levels. And the inherited share of wealth is rising.

This dynamic is well documented at the international level. It is rarely examined at the subnational level. Yet in *Une histoire du conflit politique*, Cagé and Piketty (2023) already show, for France, that territorial wealth inequalities follow the same trends as national wealth inequalities. They use land value per capita as their indicator of localized wealth, and link this geography of wealth more broadly to that of electoral divides.

We also draw on the geography literature on territorial inequalities, in particular *Les inégalités territoriales* (Talandier and Tallec 2022), edited by Magali Talandier and Josselin Tallec. We observed that this literature pays little attention to wealth and its income. Within territorial development economics, the economic base theory distinguishes the income a territory draws from its production, its residential function, the public sector, and social redistribution, in order to understand what structurally sustains it (Talandier and Tallec 2022, chap. 2). Magali Talandier has made a central contribution to this theory. This framework has been regularly extended to new objects, such as the health system or the informal economy. It has not yet fully incorporated capital and its income as a base in its own right. We hope this thesis can contribute to that reflection.

This thesis builds on both of these bodies of work. We searched for other territorial indicators of wealth, in order to observe trends over time. In the final part of this work, we revisit directly the link between wealth and voting that Cagé and Piketty sketch out, using capital income data (section 7).

Research question: what are the territorial inequalities in capital income in France in the twenty-first century?

Answering this question first requires adequate territorialized data, which is far from straightforward. The scarcity and limitations of these data are themselves a first finding of this thesis (section 3). In the absence of a direct measure of wealth at the local level, we rely instead on its income as declared for income tax, at three complementary scales. The EPCI, using Filosofi and IRCOM data (section 5.4). The département, using DGFiP statistics, the only source that distinguishes estate income from financial income (section 6.1). And the IRIS, using the 2009 localized taxable income, the last year this source still published an average income at this level. We cross-reference it with the 2022 presidential vote (section 7). A preliminary section (section 4.1) situates these data choices against national accounts and the existing literature, which remains sparse on this topic.

We privilege the EPCI as our primary scale of analysis, ahead of the département or the IRIS, for two reasons. First, the EPCI is a genuine level of political governance and economic unity, not merely a statistical grouping, which makes it a meaningful unit for studying a territory's economy. Second, it covers the whole of French territory without gaps, since every commune belongs to one, so no area, rural or urban, is left out of the analysis. Concretely, these public establishments for inter-municipal cooperation with their own taxing power (EPCI) group municipalities around shared responsibilities and a common tax base. Since the loi NOTRe (7 August 2015), they fall into four categories, defined chiefly by a minimum population threshold: the communauté de communes (at least 15,000 inhabitants, or 5,000 in low-density, mountain, or island areas), the communauté d'agglomération (50,000 inhabitants, or 30,000 around a département capital), the communauté urbaine (250,000 inhabitants), and the métropole (400,000 inhabitants) (Direction générale des collectivités locales 2025).

The empirical results show an effect of wealth on territorial inequality that is moderate on average but geographically concentrated: in large metropolitan areas for financial capital, and in a distinct touristic and residential geography for property and finance. These results converge, to an order of magnitude, across the scales studied, despite radically different sources and construction methods. At the finest scale, they further reveal a link with voting: net for most political blocs. The thesis is organized accordingly. Section 3 details the data used and their limitations. Section 4.1 establishes the national framework and orders of magnitude, drawing on national accounts and the existing literature. Sections 5.1, 6.1, and 7 present the analysis at the EPCI, département, and IRIS (cross-referenced with voting) scales, respectively. Section 8 draws out the lessons in light of the two bodies of literature mobilized here.

3 Limited Territorial Wealth Data

The Conseil des prélèvements obligatoires (CPO), a body attached to the Cour des comptes tasked with periodically evaluating the French tax system, published a report in December 2025 devoted entirely to the distortions of wealth taxation (Conseil des prélèvements obligatoires 2025). It is the most complete and most recent assessment of what the French statistical apparatus can, and cannot, say about household wealth. The report's own conclusion, stated bluntly at the opening of its methodological chapter, is direct. Declarative surveys "do not allow precise knowledge of high, and especially very high, wealth" (Conseil des prélèvements obligatoires 2025). Fiscal data coverage *shrank* with the 2018 reform, since replacing the ISF with the IFI restricted the collected scope to real estate assets alone. And inheritances and gifts suffer from a pure statistical blind spot since the DGFiP stopped its random-sample surveys in 2010. The CPO concludes: "the limitations of public statistical data [...] make designing and costing relevant reforms more difficult" (Conseil des prélèvements obligatoires 2025).

For this thesis, we carried out a complete search of the data currently available for a territorialized analysis of wealth and its income in France. Each of the sources identified and reviewed below suffers from substantial limitations: the ISF/IFI, localized fiscal data (RFL, then Filosofi), départemental-level DGFiP statistics, and Banque de France data on regulated savings. Large parts of wealth and its income are not covered by any of these sources. We document these limitations here to argue for a more usable and complete release of this data, which is technically feasible without compromising taxpayer anonymity.

In particular, no localized data exist on inheritances, on wealth holdings (outside regulated savings accounts), or on capital gains, even though all of this is technically possible to measure.

3.1 The ISF-IFI: a Concentrated but Barely Usable Source

According to the DGFiP's guidance on the real estate wealth tax (IFI) (Direction générale des Finances publiques 2025), this tax applies to tax households domiciled in France on all of their real estate assets, and to non-residents on their assets located in France only. Municipal-level localized data cover the ISF from 2002 to 2017, then the IFI from 2018 onward: INSEE code, number of taxpayers, average tax amount, and average taxable wealth.

First, by construction: only municipalities with more than 20,000 inhabitants and at least 50 taxpayers are released, which excludes between 40 and 50 % of taxpayers, taxable wealth, and tax revenue depending on the year, and reduces the number of municipalities covered from 410 in 2010 to 177 in 2018. Second, because of the 2018 reform: replacing the ISF with the IFI, already noted at the start of this section, restricts the scope to real estate assets alone and removes information on financial wealth, even though this has recently been its most dynamic component (section 4.2). Together, these two limitations make the source difficult to use for a fine-grained territorialized analysis.

Faye et al. (2016) used this same geolocalized ISF data (2009 cross-section) to study the determinants of wealthy households' location choices. To do so, they aggregated the available municipal data to the département level. As a result, just under half of taxpayers are omitted, and many départements are treated as having no taxpayers at all. Such an analysis seems to us difficult to defend.

3.2 Savings Accounts by Département: a Path Set Aside

The Banque de France releases, through its Webstat portal and its annual report on regulated savings (Banque de France 2025), département-level statistics on the main regulated savings products (Livret A, LDDS, LEP, PEL): average and total balances, holding rates, and annual growth.

These data are of real interest and could support other studies. For this thesis, however, they are not useful, by their very nature. They mainly capture households' precautionary savings, not the concentration of the largest financial estates, which are held in life insurance, PEA accounts, or securities accounts, all outside the scope of this source.

3.3 Capital Income Data: RFL, Filosofi, and Départemental DGFiP Statistics

Unlike the two sources set aside above, localized taxable income is the data we actually use throughout this thesis: it is from this source that we build the capital income variable analyzed in every section that follows. Three sources cover localized taxable income: the Revenus fiscaux localisés (RFL, 2001–2011) and its successor, the Revenus localisés sociaux et fiscaux (Filosofi, 2012–2021), both broken down at several infra- and supra-municipal levels (IRIS, commune, EPCI, département, region), and the statistics published directly by the DGFiP at the département and region level (2003–2018).

All three sources break down *declared income*: the sum of resources declared by tax households before any allowance, split into four categories:

- wages and salaries;
- income from self-employed activity (profits and losses);
- pensions, retirement income, and annuities;
- other income, including capital income.

The data used cover capital income declared for income tax. They therefore do not cover all capital income, only what appears in tax returns. Several types of capital income are excluded: tax-exempt or undeclared income (including part of regulated savings products), real estate and financial capital gains, which do not count as income in the national accounts sense, and undistributed profits, even though these do fall under the economic income concept defined by the Institut des Politiques Publiques (IPP (Bach et al. 2023)). Following the source documentation, the capital income we retain breaks down into four categories: financial income, i.e., income from securities and financial investments (products subject to income tax or to a declared flat-rate withholding, excluding regulated savings accounts and undeclared products); net estate income (rents, farm leases, shares of real estate civil companies); incidental income (non-professional BIC and BNC, non-professional furnished rentals, inventor's patents); and foreign income, whose treatment changed in 2013 (included in wages before that date, in the "other income" aggregate since, when exempt in France).

This decomposition is released as a share of declared income, not in levels. For RFL, multiplying these shares by the zone's average declared income, also published, is enough to obtain the average income per category. Filosofi does not publish this average declared income; it must be reconstructed using a proxy, whose method is detailed below. We reconstruct average income using the DGFiP's IRCOM source: number of tax households, reference taxable income (RFR), and amounts of wages and of pensions by RFR bracket. The definitional differences between the two sources are limited. IRCOM notably excludes lump-sum retirement pensions taxed at 7.5 %, alimony, and annuities purchased for consideration. A simple rule of three, combining IRCOM amounts with their share of declared income observed in Filosofi, is then enough to reconstruct average declared income, from which capital income can be deduced. We see no reason for the non-publication of this average income; it has made any IRIS-level analysis impossible since 2013.

To distinguish the two components of capital income, estate and financial, which are aggregated into a single variable in RFL/Filosofi, we use DGFiP statistics on the breakdown of declared tax bases by income category. This is a detailed source on this distinction, stable over time (2003–2018), with the advantage of being subject to no statistical secrecy threshold (see below), since it is published directly at the département level. The scope of the database is the same.

Statistical secrecy strongly constrains how the data can be used. At the municipal level, capital income is only released above 2,000 inhabitants; at the IRIS level, above 50 households or 200 inhabitants. This makes analysis difficult, because it no longer covers the whole country. The anonymity threshold set here looks conservative, and could arguably be lowered without compromising confidentiality.

In addition, from 2013 onward, foreign-source income exempt in France is added to the "other income" category. This makes it impossible to analyze capital income near the country's borders. This is why we choose 2020: by then, a tax treaty between Luxembourg and France works around this problem.

Data-release constraints are not the only reason behind the choice of the EPCI scale, however. Public establishments for inter-municipal cooperation with their own taxing power, communautés de communes, communautés d'agglomération, communautés urbaines, and métropoles, form a genuine tier of local government rather than a

simple statistical grid. Most of them levy their own local taxes and exercise mandatory responsibilities: land-use planning, economic development, housing, waste management. Since successive reforms of inter-municipal cooperation, in particular the 2015 loi NOTRe, they have taken on a growing share of the policies capable of acting on territorial inequalities: fiscal equalization, economic attractiveness, land-use planning. Measuring capital income inequalities at this scale therefore ties a statistical finding to a real level of decision-making, which a purely administrative division such as the canton, or a purely statistical one such as the IRIS, would not allow.

This choice comes with its own limitations, however. EPCI boundaries changed substantially until 2018, before stabilizing, which rules out any analysis over time.

4 Wealth and Its Income in France: Scale, Concentration, and Geography

4.1 An Exhaustive Macroeconomic Measure, but Blind to Territory

According to the latest national accounts (Bonomo et al. 2025), national economic wealth stood at €19,559 billion at the end of 2024. Households hold €14,953 billion of this, or 76.5 % of the national total and 8.2 times their net disposable income: €9,967 billion in non-financial assets (87.1 % of which is housing and land) and €4,986 billion in net financial assets (€7,096 billion in assets against €2,112 billion in liabilities). According to the Banque de France (Banque de France 2025), financial wealth still breaks down into three main components: bank deposits, including regulated savings (33 %), life insurance (32 %), and equities and similar assets (27 %).

Capital income received by households amounts to €420 billion in 2024 (Conseil des prélèvements obligatoires 2025). In national accounts, capital income includes imputed rents, for households who live in a home they own. Imputed rents alone account for €215 billion.

Out of the €1,501.6 billion in consolidated general government revenue in 2024 (central government, local government, and social security), or 51.4 % of GDP (Guessé et al. 2025), revenue from levies on wealth reaches €113.2 billion, or 3.9 % of GDP (Conseil des prélèvements obligatoires 2025): €64.3 billion from taxes on holding and transmission (0.4 % of households' net wealth), and €48.9 billion from taxes on capital income (11.6 % of that income).

4.2 Concentration of Capital Income

At the national level, the Conseil des prélèvements obligatoires (CPO) documents a strong concentration of wealth: the wealthiest 10 % of households hold 60 % of it, and the top 1 % hold 27 % (Conseil des prélèvements obligatoires 2025).

This concentration is even more pronounced at the top of the income distribution. Very high earners (VHE), the wealthiest 0.1 % of tax households, numbered 40,700 households in 2022. Between 2003 and 2022, their average income more than doubled (+119 %, against +46 % for other households), an increase driven by financial and estate income: VHE held 22.6 % of national financial income in 2003 and 40.6 % in 2022. This increase transforms the very structure of their income: the share of capital income rose from 31.8 % in 2003 to 51.3 % in 2022 (against 5.2 % for other households in 2022), driven mainly by financial income (26.0 %, then 47.0 %). By 2022, the highest incomes are therefore, for the most part, capital income (Arnal et al. 2025). It should be noted, however, that this discussion concerns fiscal income only: their income from wealth, realized or not, is on an entirely different scale from these figures.

As for estate income, it represented only 3.3 % of these households' income, which itself accounted for only 3.8 % of total estate income. So estate income, which is also concentrated, as we will see, is not concentrated in the same hands and does not represent a large share of income for VHE.

4.3 Some Geographic Elements

The Insee study on VHE only publishes results at the regional level: 47.7 % of VHE live in Île-de-France, against 17.9 % of other households; 37.5 % in Paris and Hauts-de-Seine alone (against 5.9 %); and 87.9 % in an urban unit (against 78.9 %) (Arnal et al. 2025). No finer breakdown (département, EPCI, commune) is provided, and no time trend of this geography is documented. This simple result is enough to keep an important distinction alive: between Paris and the rest of France.

A paper by Bonnet et al. (2025) studies the spatial concentration of high incomes, not of wealth, across the 90 metropolitan départements. Its authors write: "the dispersion has undergone a non-monotonic, U-shaped evolution; it decreased sharply until 2000 and rose afterward. In the 1960s, shares of the high earners were high in the regions of major urban areas (Paris and Lyon, namely) and the industrial regions of northeastern France. A profound spatial equalization movement then took place. In the 2000s, France was characterized by a few regions where the proportion of high earners in the local population was significantly lower than the average. A reversal then started and resulted in a historic concentration of the highest incomes, mainly in the regions of Paris and Lyon and in those bordering Switzerland, where cross-border workers reside." (Bonnet et al. 2025) Studying more detailed data may reveal a different geography, which would be interesting, because this analysis only uses total income and its brackets.

According to the Cour des comptes (Cour des comptes 2024), IFI taxpayers live mainly in Île-de-France (Paris, Hauts-de-Seine, Yvelines), along the coast (Alpes-Maritimes, Var, Gironde, Corse-du-Sud), in Alpine areas (Haute-Savoie), and in the Rhône. Their fastest growth since 2018 is observed in the coastal départements of western France (Côtes-d'Armor, Finistère, Ille-et-Vilaine, Morbihan, Charente-Maritime, Gironde, Landes, Pyrénées-Atlantiques).

If the highest incomes are indeed largely composed of capital income, the EPCI analysis in section 5.4 should reveal a geography at least partially comparable to that of these three sources, with gaps expected precisely in territories where current income and wealth diverge.

4.4 Dividends: a Real Increase, an Invisible Geography

Financial income, one of the two components of the capital income data we use throughout this thesis (section 3.3), is dominated by dividends. This subsection situates dividends within the national picture, before we turn to our own territorial data: their scale, their recent growth, and their concentration. Dividends, along with interest and financial capital gains, are the capital income eligible for the flat-rate tax (PFU) introduced in 2018 to replace the ISF. The France Stratégie note used here (Dherbécourt 2022) ranks households by reference taxable income over 2016–2020, and by construction excludes €16 to 18 billion a year in dividends (companies subject to income tax, PEA accounts, life insurance). This is a reminder that even a statistic this central depends on a choice of fiscal scope, as is already the case for the capital income used at the EPCI scale (section 3).

In 2020, dividends reach €23.6 billion, against €4.2 billion for interest and around €15 billion in financial capital gains not observed in our data. Relative to 2016–2017, they rose by €9 billion, or +60 %. This increase is real, not merely an accounting reclassification of wages as dividends. A panel analysis of the same filers between 2017 and 2020 confirms that it stems from an actual increase paid out by companies controlled by individuals (Dherbécourt 2022; Conseil des prélèvements obligatoires 2025). Their concentration is very high: 64 % of dividends go to households declaring more than €100,000, and 62 % to the top 0.1 % of recipient households, around 39,000 households.

None of these sources break their results down by territory. The geography of dividends therefore remains, to this day, entirely invisible, unlike that of VHE or the IFI (section 4.3).

4.5 Multiple-Home Owners and Rental Income

Estate income, the other component of the capital income data used in this thesis, is largely made up of rents. Unlike dividends, it benefits from a recent source built directly at the département level: an Insee study on multiple home ownership (Argouarc'h et al. 2025). In France, 9.7 million people own at least two homes, a third of all homeowners, and together hold two out of every three homes in the private rental stock. Half of all rented homes belong to owners of five or more homes, who nonetheless make up only 4 % of homeowners.

This ownership is concentrated in touristic départements and in the centers of major urban areas: in Paris,

Hautes-Alpes, Haute-Corse, Corse-du-Sud, and Lozère, eight out of ten private homes belong to multiple-home owners. Landlords most often live close to their property, in the same département in two-thirds of cases, except in Paris and its inner suburbs, where a tighter market attracts more geographically dispersed investors.

This source is the only one of the three components studied here to directly describe a fine-grained, recent geography. It therefore plays a special role in this thesis, serving as an independent, département-level confirmation of the kind of dynamic (residential and touristic concentration of property ownership) that the EPCI analysis seeks to document in even finer detail.

5 A Residential and Metropolitan Geography of Capital Income

5.1 A Marked Inequality

Our database records €70.3 billion of capital income in 2020, or 5.9 % of declared income, spread across 1,239 EPCIs: 22 Métropoles, 13 CU, 216 CA, and 988 CC. This €70.3 billion falls far short of the €420 billion of household capital income recorded in the national accounts for 2024 (€205 billion excluding imputed rents (Conseil des prélèvements obligatoires 2025)). This gap, close to a factor of three, reflects the narrower definition of declared capital income developed earlier (section 3.3).

This total is modest on average but clearly dispersed. Relative to each EPCI's declared income, the share of capital income ranges, for the central half of the distribution, from 4.4 % to 6.2 %. In euros, capital income per capita ranges from €235 (CA Creil Sud Oise) to €5,026 (21.5 % of total declared income, CC de Cattenom et Environs, on the Luxembourg border), for a mean of €975 and a median of €860 (coefficient of variation: 0.44). The central range is tight (the central half falls between €732 and €1,077); it is the upper tail, already made up of border EPCIs and touristic territories, that carries most of the dispersion. We now detail these results and try to explain the dispersion through geography. Swiss and Luxembourg border territories, and touristic and residential territories, recur throughout this section, controlling for the territory's demographic profile (working-age or retired, section 5.4), the type of inter-municipality (with Métropoles leading), and its overall income level.

5.2 Métropoles in the Lead, Alongside Border and Touristic Communautés de Communes

Beyond the overall distribution, the structure of capital income varies by EPCI type (table 1).

Table 1: Share and intensity of capital income by EPCI type (2020)

	n	Share of population (%)	Weight in nat. capital inc. (%)	Weight in nat. income (%)	Over-conc. ratio (pop.)	Median cap. inc. share (%)	Median cap. inc./cap. (€)
Métropole	22	28.8	37.5	32.5	1.30	5.6	1,071
CA	216	34.5	30.4	33.0	0.88	5.0	851
CC	988	32.5	29.0	30.6	0.89	5.2	859
CU	13	4.3	3.1	4.0	0.73	4.3	753

For reference, across all 1,239 EPCIs: median capital income share 5.2 % (mean 5.5 %); median capital income per capita €860 (mean €975).

Métropoles hold 37.5 % of the national capital income captured by the EPCIs in our database, for only 28.8 % of the population: an over-concentration ratio of 1.30 (against 0.88 for CA, 0.89 for CC, and 0.73 for CU). Capital income per capita confirms this at the individual level: it is also highest in Métropoles, both on average (€1,100) and at the median (€1,071), ahead of CC (€975/€859), CA (€972/€851), and CU (€778/€753), a ranking that closely follows that of income excluding capital income (Métropoles: €17,910; CA: €16,669; CU: €16,365; CC: €16,270).

It is here that geography takes over as the main explanation: Swiss and Luxembourg border territories, Île-de-France, the Côte d'Azur, the Alps, the Atlantic coast, Corsica, and the southern Massif Central show the highest capital income per capita, together with, relative to their size, the Métropoles (outlined in black).

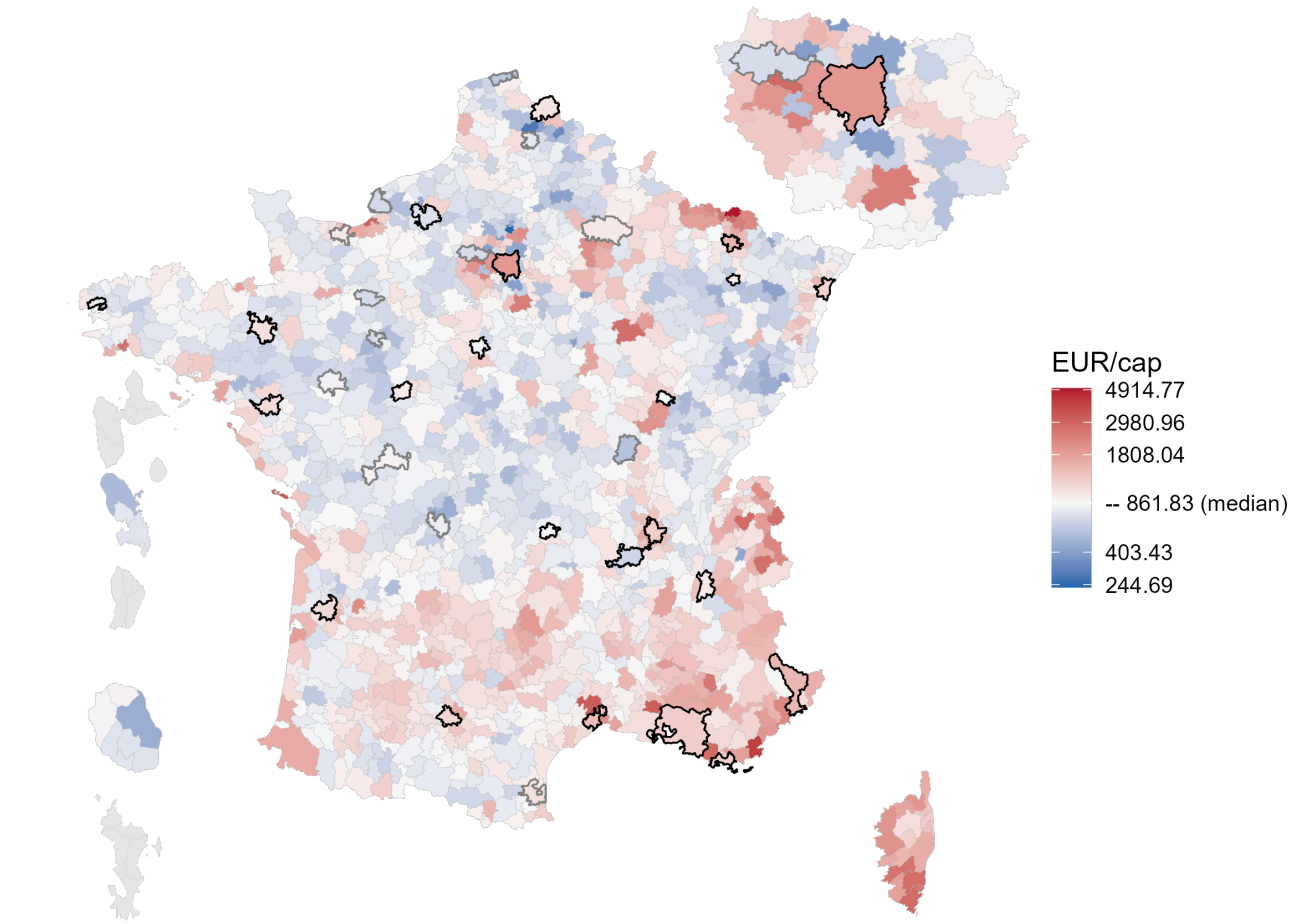


Figure 1: Capital income per capita at the EPCI level, 2020 (€, logarithmic scale). Métropoles are outlined in black, Communautés Urbaines in gray; the overseas départements (DOM) are shown as insets below mainland France. EPCIs in solid gray have no data retained (EPCIs in Guadeloupe/Guyane/Mayotte are absent from Filosofi).

We now zoom in on this above-median tier: outside Métropoles, 231 EPCIs show capital income per capita at least 1.25 times the national median (€1,074/cap.), together accounting for 20.1 % of the national total. Many of these are small Communautés de Communes, which raises a natural question: does this group actually correspond to a coherent geography, or is it just a handful of statistical outliers? The scale involved rules out the latter: both their number and their combined weight, a fifth of the national total, are far too large for a handful of statistical outliers. This is the geography of a substantial share of total capital income. In absolute terms, the Atlantic coast and the Mediterranean coast, the Alps, and the Swiss border each account for between 4 % and 5 %. The Luxembourg border territories, the west-central region, and Corsica, by contrast, each account for less than 1 %.

5.3 Does Capital Income Increase Inter-EPCI Inequality?

Capital income and total income per capita are, first of all, positively correlated across EPCIs (figure 2): a linear regression on a logarithmic scale gives a Pearson correlation coefficient of 0.62 ($R^2 = 0.38$, $n = 1,239$). An EPCI with high total income therefore also tends, on average, to have higher capital income per capita. It is this positive correlation that mechanically pushes capital income to amplify total income inequality, rather than offset it.

We will in the next subsection try to explain this dispersion and show that geography is the main explanation.

Figure 2: Capital income and total income per capita, EPCI 2020 (logarithmic scale). Regression line with 95 % confidence interval shaded in gray; dashed lines, national medians.

To measure a first-order effect of capital income on inter-EPCI inequality, we compute the coefficient of variation (CV) of income per capita, first excluding capital income (wages and pensions), then including it (total income). The CV excluding capital income stands at 0.1440 and the CV including capital income at 0.1491, an increase of 0.0051 points: +3.5 % relative to the CV excluding capital income. Despite this positive correlation and the marked dispersion of capital income per capita (section 5.1), this amplification of inter-EPCI inequality therefore remains modest in scale, a result consistent with the modest weight of capital income in total income (5.9 % on average).

Table 2 reproduces this calculation by type. Capital income is distributed most evenly among Métropoles ($CV = 0.2741$); CA (0.4422) and CC (0.4386), by contrast, show capital income distributed very unevenly among themselves.

Despite this lower internal dispersion, it is among Métropoles that the amplification is strongest (+9.5 %), which suggests a tighter correlation within this group between capital income and income excluding capital income. The next section refines this hypothesis. CA and CC both sit close to the national average (+3.5 % and +3.6 %), while CU, rarer, show the weakest amplification of the four types (+1.7 %).

Table 2: Effect of capital income on the inter-EPCI coefficient of variation (CV), by type (2020)

	n	CV excl. cap. inc.	CV incl. cap. inc.	CV cap. inc.	ΔCV (pts)	ΔCV (%)
Métropole	22	0.0779	0.0853	0.2741	0.0074	+9.5
CA	216	0.1622	0.1678	0.4422	0.0056	+3.5
CC	988	0.1408	0.1458	0.4386	0.0050	+3.6
CU	13	0.0620	0.0631	0.2059	0.0011	+1.7

For reference, across all 1,239 EPCIs: CV excluding capital income 0.1440, CV including capital income 0.1491, CV of capital income 0.4358 ($\Delta CV = 0.0051$, i.e. +3.5 %).

Figure 2 nonetheless reveals substantial heterogeneity around this regression line: some EPCIs with high total income show only modest capital income, while others, with average or even modest total income, stand out with capital income well above what the regression alone would predict. Understanding this heterogeneity requires no longer looking at capital income in isolation, but placing it alongside the two other sources of income, earned income

and pensions. That is the object of the next section.

5.4 An Income-Based Typology, Geographic in Practice

5.4.1 Method: Principal Components and Clustering

We build a typology of EPCIs based on capital income, the average income of retiree households and of worker households, and an indicator of the demographic weight of retirees. These additional variables come from the IRCOM data, and averages are computed over tax households declaring retirement or earned income; these two categories are not mutually exclusive.

These four variables are not independent of one another. On their logarithmic transformation, wage and pension per household are moderately correlated ($r = 0.66$), and both are strongly anti-correlated with the share of retired households ($r = -0.77$ for wages, $r = -0.41$ for pensions): a single axis of income and demographic composition runs through these three variables. Capital income per capita stands apart from this: it is only moderately correlated with pension per household ($r = 0.42$), weakly correlated with wage per household ($r = 0.18$), and barely correlated at all with the share of retired households ($r = 0.02$).

This correlation structure motivates the choice of a principal component analysis (PCA): classifying EPCIs directly on these four correlated variables would risk letting the single axis of income and demographics dominate the classification, effectively repeating the same information three times under different names. PCA instead recomposes them into synthetic, mutually uncorrelated axes, ordered by variance explained. This lets us formally check whether capital income forms a separate axis or merges with current income, instead of simply assuming it. The first two axes alone account for 85.7 % of total variance (58.0 % for the first, 27.7 % for the second, table 3).

Table 3: PCA of wage/household, pension/household, capital income/capita, and share of retired households: variance explained and loadings, 2020

	PC1 (58.0 % var.)	PC2 (27.7 % var.)
log(wage/household)	0.61	−0.19
log(pension/household)	0.55	0.27
log(capital income/capita)	0.25	0.82
log(share of retired households)	−0.52	0.46

These loadings sketch a structure dominated by a single axis (table 3): PC1 (58 % of variance) loads wage and pension per household in the same direction, and the share of retired households in the opposite direction. This is a general axis of income, which declines as a territory ages demographically. Capital income, by contrast, stands apart: its loading on PC1 (0.25) is markedly lower than that of the other two income sources, and it is PC2, the second axis and nearly half as important (28 %), that carries most of its variation (0.82), with the share of retired households as the second contributor (0.46). Capital income is therefore not reducible to a territory's current income: it constitutes a largely separate dimension.

A hierarchical agglomerative clustering (Ward's method) is applied to the scores of the first two components. We choose $k = 6$: the gain in within-class variance explained drops sharply up to this point, then flattens out, and beyond 6 classes the typology fragments into patterns too local to remain legible on a national map.

5.4.2 Six Income Profiles

Table 4: Profiles of the six classes in the territorial typology, median / coefficient of variation (2020)

Color	Class	n	Wage/household (€)	Pension/household (€)	Capital income/cap. (€)	Share retired (%)
	High income, high capital income	78	39,075 / 0.18	27,638 / 0.12	1,332 / 0.45	30.8
	Above-average income, moderate capital income	189	31,229 / 0.10	23,709 / 0.06	859 / 0.19	33.5
	Above-average income, high capital income	168	26,421 / 0.11	23,933 / 0.11	1,471 / 0.34	40.3
	Average income, low capital income	316	27,078 / 0.07	21,419 / 0.06	726 / 0.21	37.1
	Below-average income, low capital income	342	24,272 / 0.05	20,851 / 0.06	825 / 0.19	43.3
	Low income, moderate capital income	146	21,505 / 0.06	20,095 / 0.08	918 / 0.26	49.5

For reference, across all 1,239 EPCIs: median wage per household €26,052 (CV 0.20); median pension per household €21,827 (CV 0.12); median capital income €860/cap. (CV 0.44); median share of retired households 39.5 %.

Among these six classes, two stand out for high capital income per capita, yet correspond to very different profiles. "Above-average income, high capital income" (navy blue, 168 EPCIs) carries the highest capital income per capita of the six classes (median €1,471/cap., 71 % above the national median of €860/cap.), with wage and pension per household close to the national median (+1 % and +10 % respectively) and a share of retired households slightly above the national median (40.3 % against 39.5 %). "High income, high capital income" (red, 78 EPCIs), by contrast, shows somewhat more modest capital income per capita (median €1,332/cap., 9 % below the previous class), but wage and pension per household well above the national median (+50 % and +27 % respectively) and the lowest share of retired households of the six classes (30.8 %, 22 % below the national median).

The remaining four classes, by contrast, rank in an almost continuous order from the highest to the lowest income: wage and pension per household decrease steadily, from "above-average income, moderate capital income" (orange, €31,229 and €23,709) to "low income, moderate capital income" (medium blue, €21,505 and €20,095), while the share of retired households increases symmetrically, from 33.5 % to 49.5 % (table 4). Capital income per capita does not follow this income hierarchy: it is highest in the poorest class, which also has the oldest population (medium blue), and second-highest in the second richest and second most active class of the classification (orange).

How could geography explain this?

5.4.3 A Geography of Two Kinds

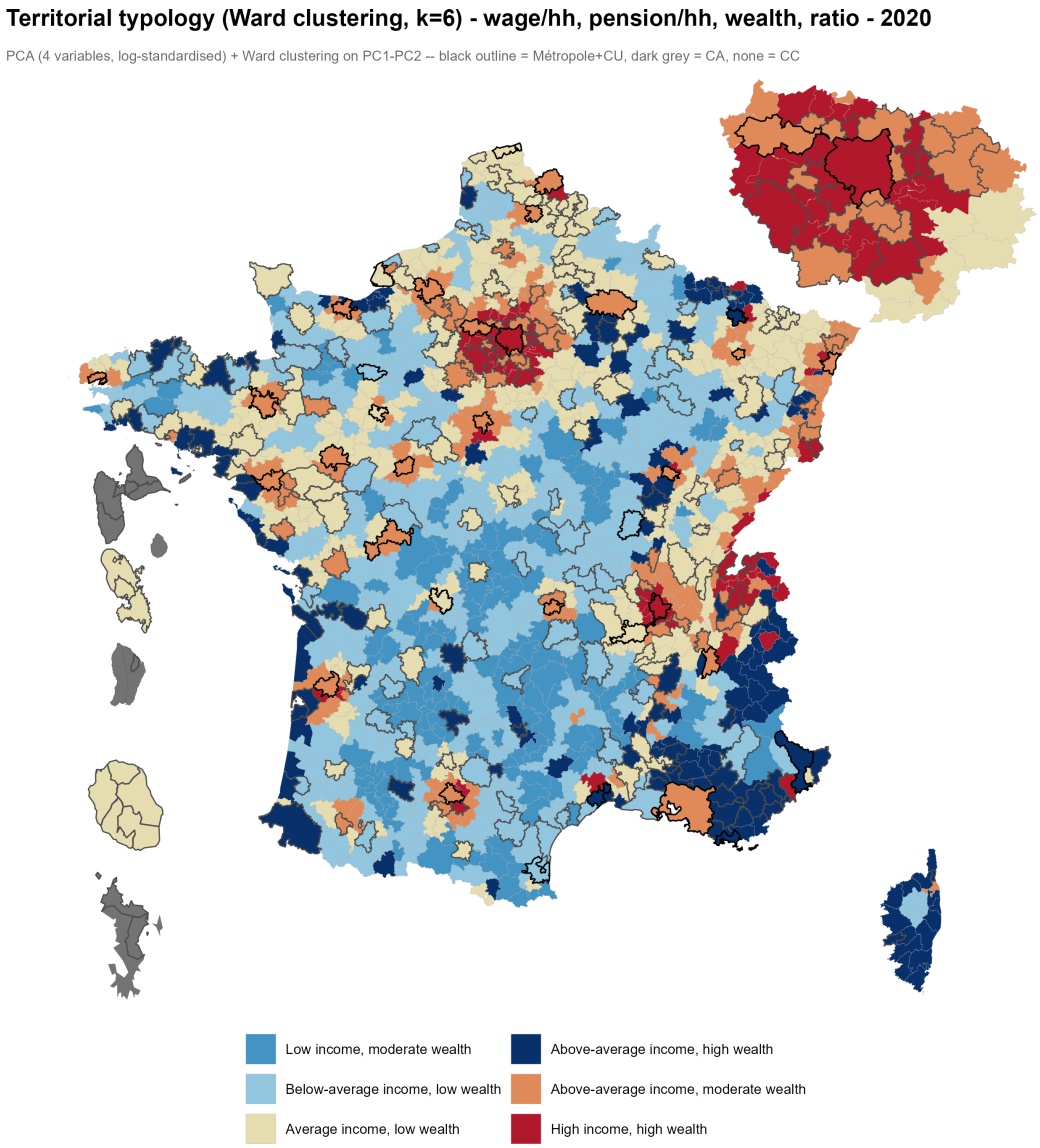


Figure 3: Six-class territorial typology (PCA + hierarchical clustering, Ward's method), wage/household, pension/household, capital income/capita, share of retired households (2020). Black outline = Métropoles and Communautés Urbaines, dark gray = Communautés d'Agglomération, no outline = Communautés de Communes (too numerous to remain legible).

The two highest-capital-income classes trace a clear geography, but of two different kinds. Navy blue ("above-average income, high capital income") is a touristic and residential profile, concentrated on the coasts and around the Luxembourg border. Red ("high income, high capital income"), by contrast, is an agglomeration profile, concentrated around Paris, Lyon and the Swiss border.

Orange ("above-average income, moderate capital income") is clearly an urban category that follows the red one: high income, but capital income lower than that income level would predict. It is the biggest loser in the capital income competition. Beige ("average income, low capital income") follows the same logic in poorer territories, one step down from orange. Medium blue ("low income, moderate capital income"), at the other end of the income scale, shows the opposite pattern: a capital-income boost similar to navy blue's, but with far less of a touristic character.

Within medium blue ("low income, moderate capital income"), a subset of 47 out of its 146 EPCIs individually clears 1.25× the national median capital income per capita, without this setting them apart in the classification.

This subset is not spread evenly across the territory: close to two-thirds of it concentrates in the southwest, in and around Aveyron, Dordogne, Gers, Lot, Tarn, Tarn-et-Garonne, and Lot-et-Garonne, with a secondary cluster in the pre-Alps (Ardèche, Drôme, Alpes-de-Haute-Provence, Pyrénées-Orientales). Capital income can therefore emerge locally within an otherwise modest territory, where tourism has an important impact on the economy. Our classification is hiding this southwest effect, which is small at the national level, representing only one percent of capital income.

5.4.4 Capital Income versus Total Income

Thanks to this typology, we can now see that same geographic dissociation directly in the data.

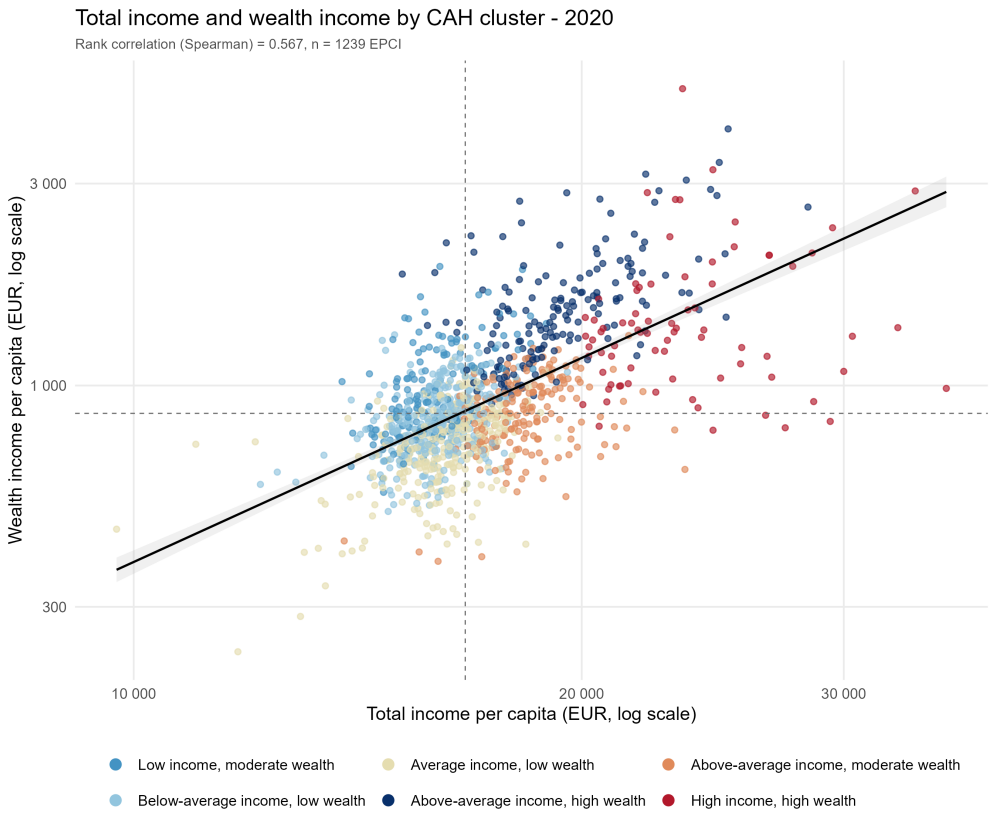


Figure 4: Total income and capital income per capita, by EPCI, colored by clustering class, 2020. Dashed lines: national medians. Solid line: the same log-log regression as in figure 2, with its 95 % confidence interval shaded.

The scatter plot (figure 4) makes this dissociation visible against the regression line already established in figure 2: the navy blue and medium blue class sit systematically above it, reaching high capital income despite moderate total income, while the red and orange classes (active profiles) track it closely, their capital income rising in step with total income rather than exceeding it.

Comparing current income alone makes this contrast concrete. Navy blue's current income (wage and pension per household, €50,354) is clearly below red's (€66,713, −24 %), but close to orange's (€54,938, −8 %), an order of magnitude smaller gap. Yet navy blue's capital income per capita is nearly double orange's (€1,471 against €859/cap., +71 %), and even edges out red's (€1,332/cap.). Navy blue and orange are therefore comparable in current income, but not at all in capital income: it is capital income, not the rest of their income, that sets these two classes apart.

The national typology aggregates different logics depending on EPCI type, already anticipated in section 5.2. Figures 5 and 6 reproduce the same reading of the six classes for Communautés d'Agglomération and de Communes combined ($n = 1,204$), and figure 7 does the same for Métropoles and Communautés Urbaines ($n = 35$).

5.4.5 Touristic EPCIs Have a Very High Capital Income

The following scatter plots (figures 5 and 6) make it possible to visualize these disparities EPCI by EPCI, within Communautés d'Agglomération and de Communes only.

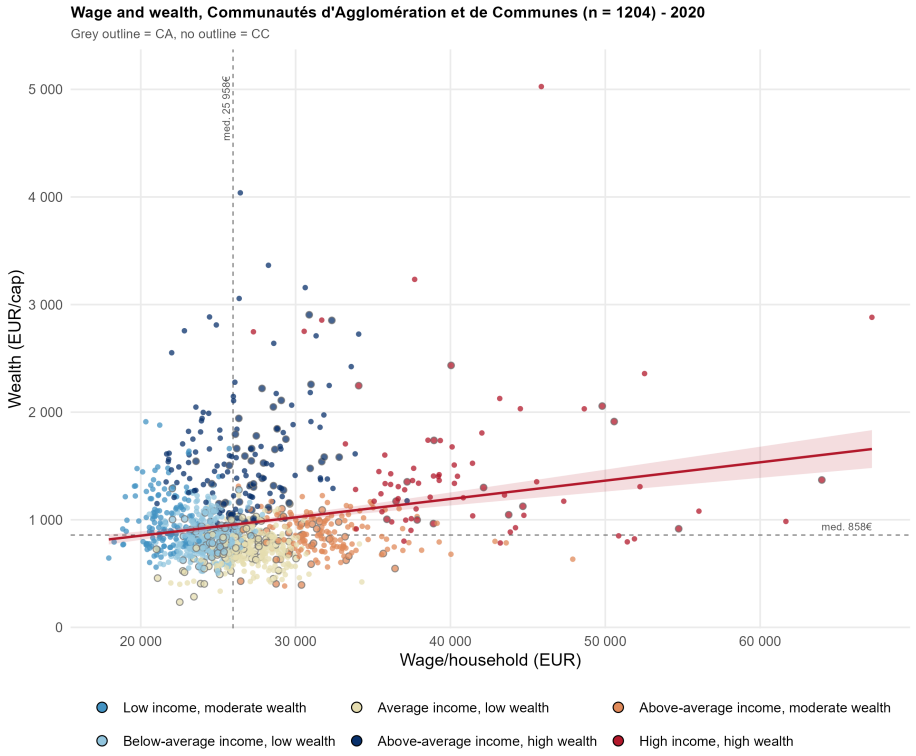


Figure 5: Clustering typology, wage per household and capital income per capita, Communautés d'Agglomération and de Communes combined ($n = 1,204$), 2020. Gray outline: Communautés d'Agglomération; no outline: Communautés de Communes.

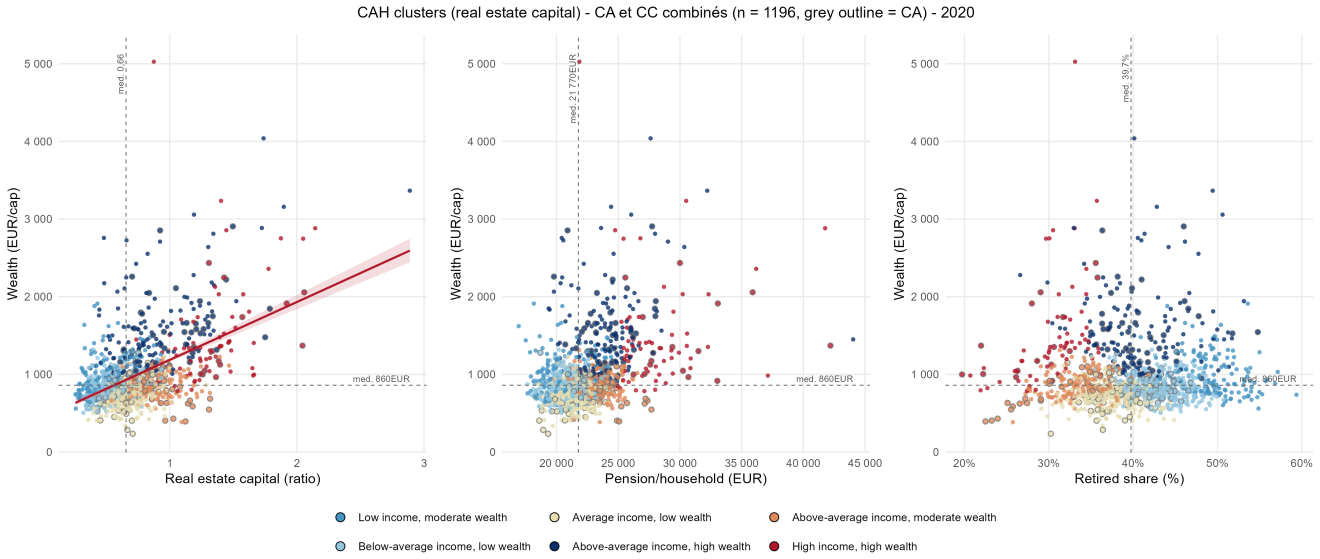


Figure 6: Clustering typology by income pair (real estate capital × capital income, pension/household × capital income, share of retired households × capital income), Communautés d'Agglomération and de Communes combined ($n = 1,204$), 2020. Dashed markers: group median on each axis; gray outline: Communautés d'Agglomération; no outline: Communautés de Communes.

The scatter plot crossing share of retired households with capital income per capita (third panel of figure 6) sharpens the contrast between the two high-capital-income classes. On this subset of CA and CC, the navy blue class ("above-average income, high capital income," 164 EPCIs) spans a relatively wide range of retiree shares, from 26.6 % to 54.8 % (median 40.4 %), while the red class ("high income, high capital income," 76 EPCIs) stays concentrated at lower values, from 19.7 % to 36.2 % (median 31.0 %). The two distributions overlap slightly at their extremes, but the navy blue class is, overall, clearly the older of the two.

Yet it is this class that gains the most in capital income, despite markedly more modest current income: €1,471/cap. at the median, against €1,332/cap. for the red class, which is nonetheless far richer in wage and pension per household (section 5.4). The gap is even sharper with the orange class ("above-average income, moderate capital income"): its capital income per capita (€853/cap. on this subset) remains well below the two previous classes, without its current income, comparable to that of the red class, justifying this. Conversely, the poorest and oldest of the four intermediate classes, "low income, moderate capital income" (already noted in section 5.4), nearly catches up with the orange class in capital income (€918/cap. against €853/cap.), despite starting from a much lower current income.

Retiree income itself is not higher in navy blue: pension per household is nearly identical to orange's (€23,933 against €23,709, table 4), despite navy blue's capital income being 71 % higher and its retired share seven points above orange's. This likely reflects a residential preference: retirees are simply more numerous in these coastal, touristic locations (figure 3), chosen for reasons unrelated to income. The higher capital income of navy blue therefore looks like a geographic effect rather than a retiree-wealth effect: capital income widens inequality between territories with similar current income, such as orange and navy blue, once their geography differs. Between the intermediate profiles, the pattern is more straightforward: orange and medium blue, its poorest and oldest counterpart, nearly converge in capital income (€853 against €918/cap.) despite a wide gap in current income.

5.4.6 The Standout Métropoles of the Mediterranean Coast

Among Métropoles and Communautés Urbaines, capital income first follows the income of workers: the figures below confirm a clear link between wage per household and capital income per capita. A few métropoles, however, stand out clearly from this relationship, with capital income per capita well above what their wage level would predict, all located on the Mediterranean rim, a clear sign of a geographic effect. The same gap affects the Communauté urbaine of Perpignan, even though it is one of the least favored of the group in terms of wages. The opposite contrast is observed for the Communauté urbaine Grand Paris Seine et Oise: a high wage per household,

driven by its proximity to Paris, without capital income per capita following in the same proportions.

This distinctive geography is confirmed by varied, unremarkable retiree standards of living and shares of retirees. These three métropoles rank among the highest in real estate wealth, without standing out on that measure specifically.

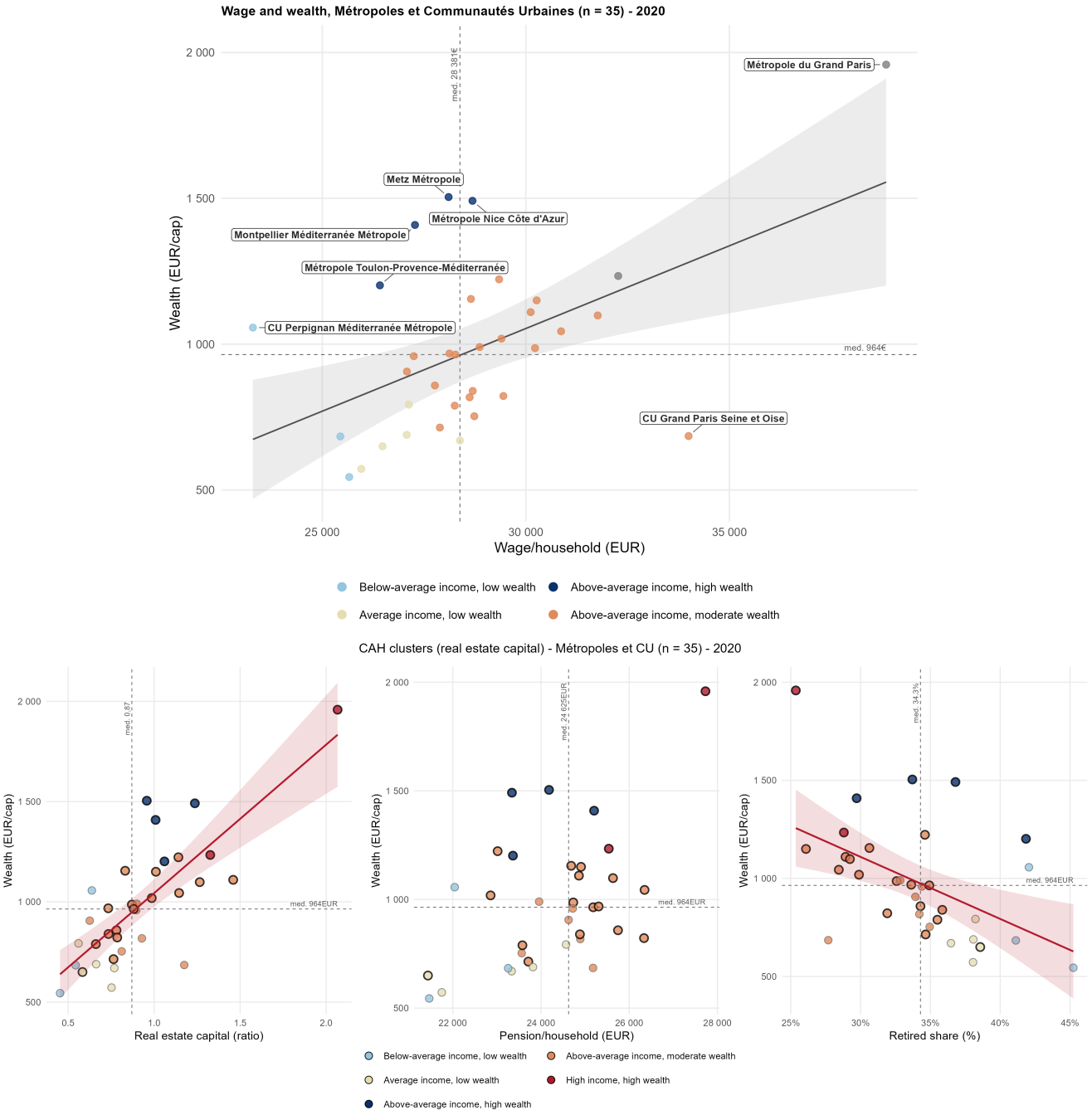


Figure 7: Clustering typology by income pair (wage/household × capital income, pension/household × capital income, share of retired households × capital income), Métropoles and Communautés Urbaines only ($n = 35$), 2020. Dashed markers: group median on each axis; black outline = Métropoles, gray outline = Communautés Urbaines.

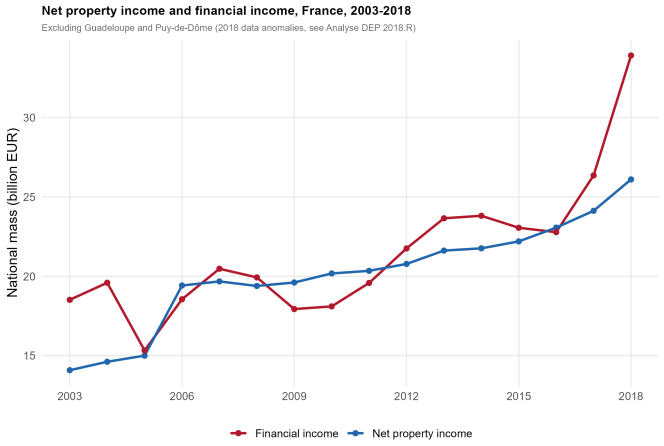
6 Financial Income and Estate Income

6.1 A Separate Dataset, but Consistent with the EPCI Analysis

The data cover all 101 French départements. Mayotte, which became a département in 2011, appears in the data from 2013 onward.

We study two components of departmental wealth: financial income, mostly dividends and non-exempt interest, excluding capital gains, and net estate income. Financial income is highly sensitive to tax arbitrage and cyclical shocks, which makes year-on-year analysis over time delicate. Estate income, by contrast, reflects property rents and depends on two more stable factors: the rental value of homes owned by the territory's residents, and the amount of housing rented out locally. The data also record a third component, labeled "other non-professional income" by the DGFiP (the non-professional share of business and non-commercial profits). This is the département-level analogue of the residual bundled, indistinguishably, into the EPCI wealth-income proxy. Its small size here, -2.4 % of total capital income (net), confirms that this residual does not meaningfully distort the EPCI variable as a measure of capital income properly speaking.

For reference, the data record €26.1 billion of net estate income in 2018, against €34.1 billion of financial income (excluding Guadeloupe and Puy-de-Dôme, see below). Financial income clearly exceeds estate income here, whereas the two totals had historically remained of a comparable order of magnitude over 2003–2017. The 2018 shift corresponds to the introduction of the flat-rate tax (PFU, the "flat tax") on capital income, which encouraged an increased distribution of dividends.



Net estate income in Guadeloupe is negative and has kept deepening since 2010 (from -€24 million in 2010 to -€87 million in 2018). Tarn-et-Garonne is the only other département to show negative net estate income over the period, but for a single year (2009).

Puy-de-Dôme is excluded for a different reason: its 2018 other/miscellaneous income deficit reaches €1.478 billion, against only €11.2 million in corresponding gross income, a factor of 130 with no counterpart in the 2003–2017 series.

6.2 Estate and Financial Income Move Together

Estate and financial income per capita are positively correlated across départements ($r = 0.55$ excluding Paris and Hauts-de-Seine, $r = 0.59$ including them, figure 8): a département with high estate income also tends to show high financial income. The question that remains is whether they respond to a common factor: the territory's underlying income level.

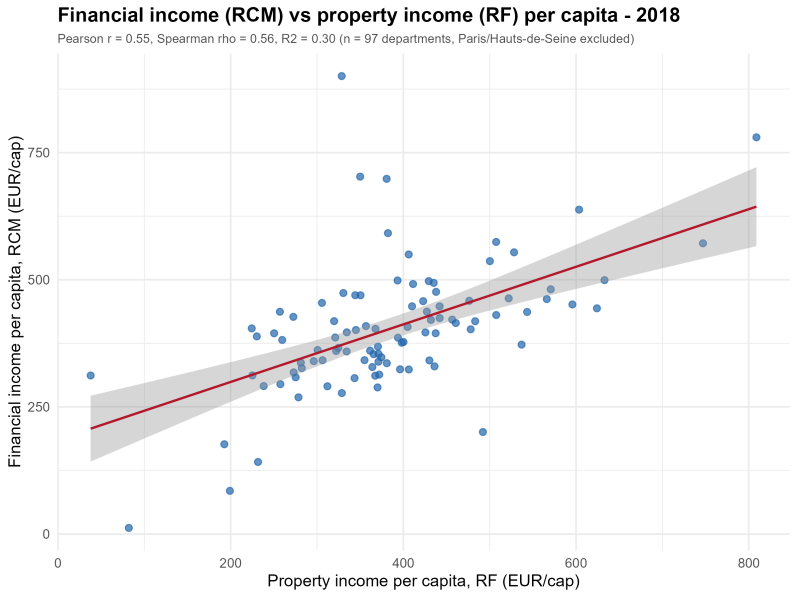
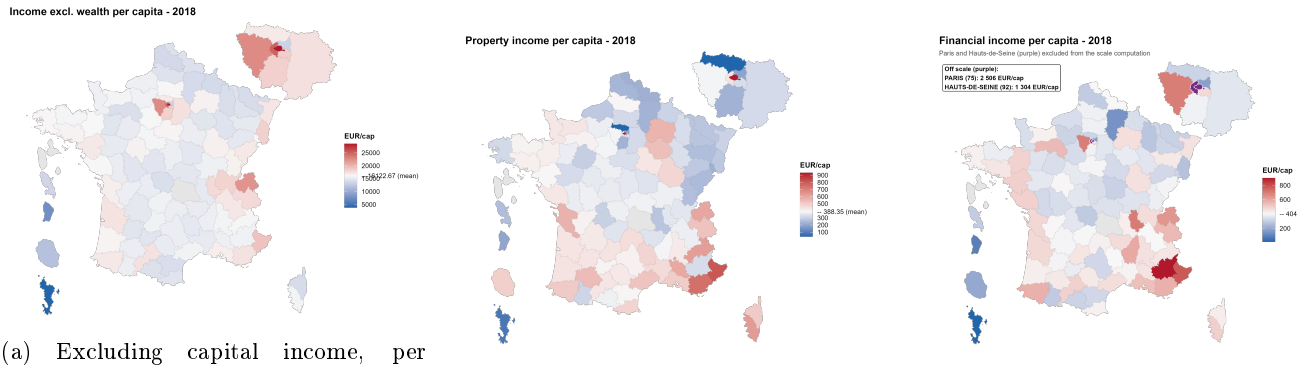


Figure 8: Financial income per capita as a function of estate income per capita, by département, 2018. Paris and Hauts-de-Seine, far detached from the rest of the distribution, would follow the same trend but would visually dominate the plot, and are excluded.

Their central tendencies are close: the median département records €372 of estate income per capita against €397 of financial income. Their dispersion is not: the coefficient of variation reaches 33.9 % for estate income against 60.0 % for financial income. This dispersion is concentrated in a handful of départements built around large urban and cross-border poles: financial income per capita reaches 6.3 times the median in Paris (€2,506), 3.3 times in Hauts-de-Seine, west of Paris (€1,304), 2.0 times in Alpes-Maritimes, around Nice (€780), 1.8 times in Rhône, around Lyon (€703), and 1.6 times in Haute-Savoie, on the Swiss border (€638). Estate and financial income move together on average, then, but financial income concentrates sharply around a few large agglomerations and the Swiss border, a first hint of the geographic contrast developed in the next section.



(a) Excluding capital income, per capita.

(b) Estate income per capita.

(c) Financial income per capita.

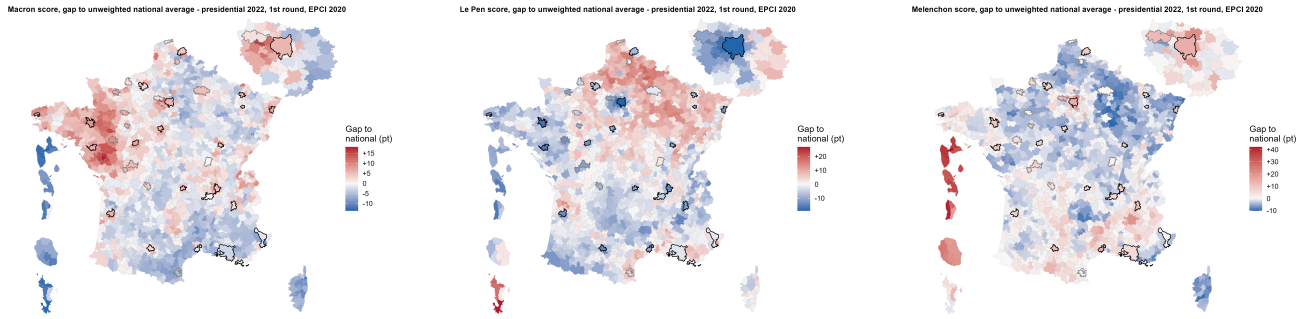
Figure 9: Average income per capita excluding capital income, estate income, and financial income, by département, 2018. Linear scale, specific to each map. For financial income, Paris and Hauts-de-Seine, far detached from the rest of the distribution (€2,506 and €1,304/cap., against €901/cap. for the 3rd-ranked département), are excluded from the scale and colored separately (purple), with their value given in full; estate income requires no such treatment, since Paris exceeds the next département by only 15 %.

7 Voting and Capital Income

7.1 An Analysis Impossible at the EPCI Level

We want to carry out an analysis of voting based on our study of capital income. At the EPCI level alone, however, this analysis proves difficult: we observe a very strong regional determination. In addition we find little work on voting at EPCI level (Audebert 2024).

The map of gaps to the national score gives a first, raw geographic reading, before any ranking by income level (figure 10). The Macron score is clearly over-represented in the greater West (Brittany, Pays de la Loire, Vendée) and in Île-de-France, and under-represented in the northeastern quarter and across much of the Mediterranean rim. The Le Pen score traces an almost exactly inverse contrast, strong in the northeastern quarter and weaker in the greater West and Île-de-France. The Mélenchon score follows a different geography from the other two: it dominates overseas, in the Métropole du Grand Paris, and in a few isolated urban centers, but stays generally weak across the rest of mainland France, including in regions where Macron is also weak. Within these broad regions, Métropoles and Communautés Urbaines, outlined in black and gray, often stand apart from their immediate rural periphery on all three maps, particularly in the South and East.



(a) Macron. (b) Le Pen. (c) Mélenchon.

Figure 10: Macron, Le Pen, and Mélenchon scores (2022 presidential election, 1st round), gap to the unweighted national average, by EPCI, 2020. Scale specific to each map. Métropoles are outlined in black, Communautés Urbaines in gray.

7.2 Capital Income and Vote at the IRIS Level

7.2.1 Descriptive Findings: Share and Concentration of Capital Income

The IRIS (îlot regroupé pour l'information statistique) is Insee's smallest infra-municipal reporting unit: a division of roughly homogeneous demographic size, about 2,000 inhabitants, which applies only to municipalities large enough to be subdivided; the others each form a single IRIS matching their municipal boundary. France has around 48,000 of them in total (section 3.3). The RFL 2009 sample used in this section covers 12,052 of them, spread across 1,066 municipalities, essentially cities large enough to be split into several IRIS.

Before cross-referencing income level and voting, two descriptive findings frame this scale, finer than the EPCI. First, the share of capital income in tax households' total income (computed as at the EPCI level: average capital income divided by average total income) sits close to the inter-municipal figure (5.9 % in 2020, section 5.1): across the 12,052 IRIS, it averages 5.2 % (median 4.4 %, 5.4 % weighted by tax households), close to the national aggregate ratio (6.3 %).

Second, of the 50 IRIS with the highest capital income, 35 are within Paris proper, mostly in the 16th arrondissement (15 IRIS), the 7th (11). Of the remaining 15 IRIS, 14 are in the wealthiest municipalities of western Paris: Neuilly-sur-Seine (10 IRIS). Only one IRIS in this ranking lies outside the Paris region: Croix, an affluent residential municipality in the Lille metropolitan area. The geography of capital income at the top of the IRIS distribution is therefore, mostly but not exclusively, that of Paris and its immediate western periphery, consistent with the geography already documented for very high earners (47.7 % in Île-de-France, section 4.3), but even more concentrated

at this finest level of the distribution.

The geography of capital income at the IRIS level (figure 11) is only available for a fraction of the territory: localized taxable income publishes an infra-municipal breakdown only for municipalities large enough to be split into several IRIS, around 12,000 IRIS out of the 48,000 in all of France. The map therefore shows patches concentrated around large cities and the coastline rather than a continuous tiling of the territory, an effect of how the data are published rather than an absence of capital income in the rest of the country.

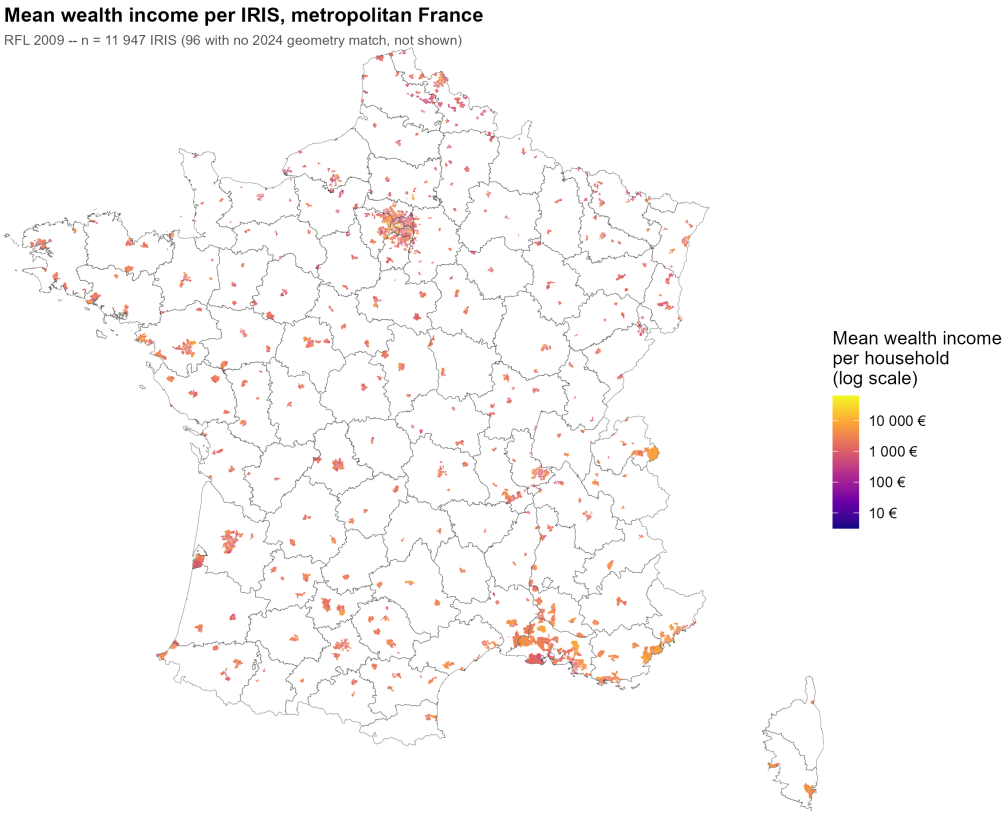


Figure 11: Average capital income per tax household, by IRIS, mainland France, 2009 (logarithmic scale). Coverage limited to the IRIS published by localized taxable income, around 12,000 out of 48,000.

7.2.2 Matching 2009 Income to the 2022 Vote

Vote is only available at the polling-station level, not directly at the IRIS; we use Jérémy Perrin's correspondence table between polling stations and IRIS to bring it down to that scale. The year 2009, the last one available with this indicator, is therefore used. The result that follows therefore compares a 2022 vote to a 2009 geography of capital income, at the finest level where income and voting can be cross-referenced. A closer pairing in time was considered, using the 2007 presidential election instead of 2022, which would have reduced this gap to only two years. This option was tested and set aside: the IRIS–polling-station correspondence table, built on 2024 municipal boundaries, no longer reliably locates 2007 polling stations, whose code embeds that of their home municipality.

7.2.3 A Strong Income–Capital Income Correlation

The two income variables are strongly correlated (figure 12, Pearson coefficient of 0.80 on the logarithms, $n = 12,043$ IRIS excluding the DOM): capital income grows more than proportionally with total income, with an

elasticity of 2.3 in a log-log regression ($R^2 = 0.64$). This correlation remains partly mechanical, since capital income is by construction a component of total income, but its strength confirms that the hierarchy of capital income largely follows that of overall income, even at this very fine scale.

Figure 12: Average capital income and average total income per tax household, by IRIS, 2009 (logarithmic scales, $n = 12,043$ IRIS excluding the DOM).

7.2.4 Capital Income Is a Non-Negligible Share at the IRIS Level

This hierarchy is not limited to the level of capital income: its share of total income also rises with its own level, and does so nearly proportionally once both axes are on a logarithmic scale (figure 13, Pearson of 0.96 in log-log, Spearman of 0.96). The IRIS with the highest average capital income are also the ones where it weighs most heavily in total income: a handful of IRIS exceed 30 % (against 5.2 % on average across the whole sample), and the single highest, in Cannes, reaches 41 % a level also approached by an IRIS in Paris (40.9 %) and several in Neuilly-sur-Seine.

That a handful of small, wealthy pockets can push capital income to nearly half of local income, an order of magnitude above the national average, suggests it structures a real and economically significant geography of its own, one this thesis can only sketch, but that would reward closer study, possibly through the lens of a capitalist spatial segregation, in the spirit of Michel and Monique Pinçon-Charlot's work on how the wealthy organize their own residential space.

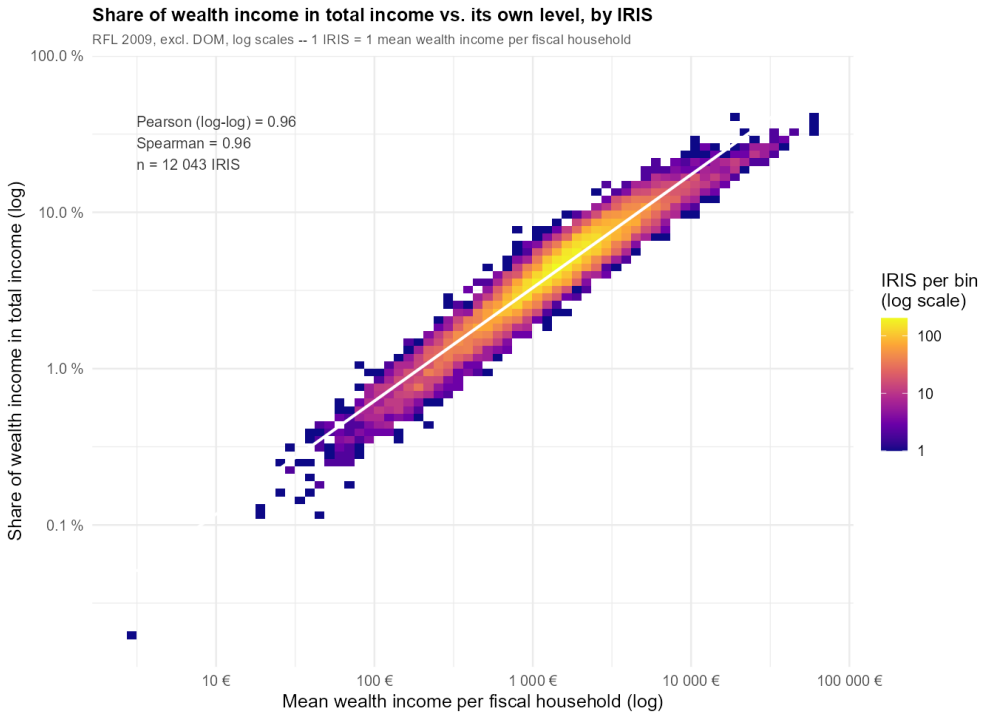


Figure 13: Share of capital income in total income as a function of average capital income per tax household, by IRIS, 2009 (logarithmic scales, $n = 12,043$ IRIS excluding the DOM).

7.2.5 The Vote Follows a Classical Income Divide

The central result applies the same income-group ranking method as at the EPCI scale, but on the five political blocs from Cagé and Piketty (2023) rather than on three candidates, and weighted by each IRIS's tax population for both rank and score. Because the capital-income composition of the wealthiest IRIS calls for caution, the same ranking is reproduced in parallel on income excluding capital income rather than on total income, which mechanically includes capital income among its components. This second variable thus fully isolates the effect of the rest of income, to check whether capital income captures an effect of its own or only the current income level already measured by the rest of income (figure 14).

On the common sample of 11,830 IRIS, the result is clear: the left-wing bloc goes from +20 points at the first decile to −21 points at the top percentile of income, the centrist bloc traces an almost exact mirror image (−11 to +19 points), and the classic right-wing bloc rises more moderately (+8 points at the top percentile). For these three blocs, as for the center-left, the two curves, the one obtained from income excluding capital income and the one obtained from capital income, are nearly superimposed at every rank group: at this level of the distribution, ranking IRIS by capital income or by the rest of their income comes down to ranking roughly the same territories, consistent with the strong capital-income composition of the wealthiest IRIS established above. We find no vote specificity tied to capital income as such: this is not surprising, since capital income evolves closely with total income at this scale (figure 12), and so mostly retraces the vote's ordinary income divide rather than tracing a political geography of its own.

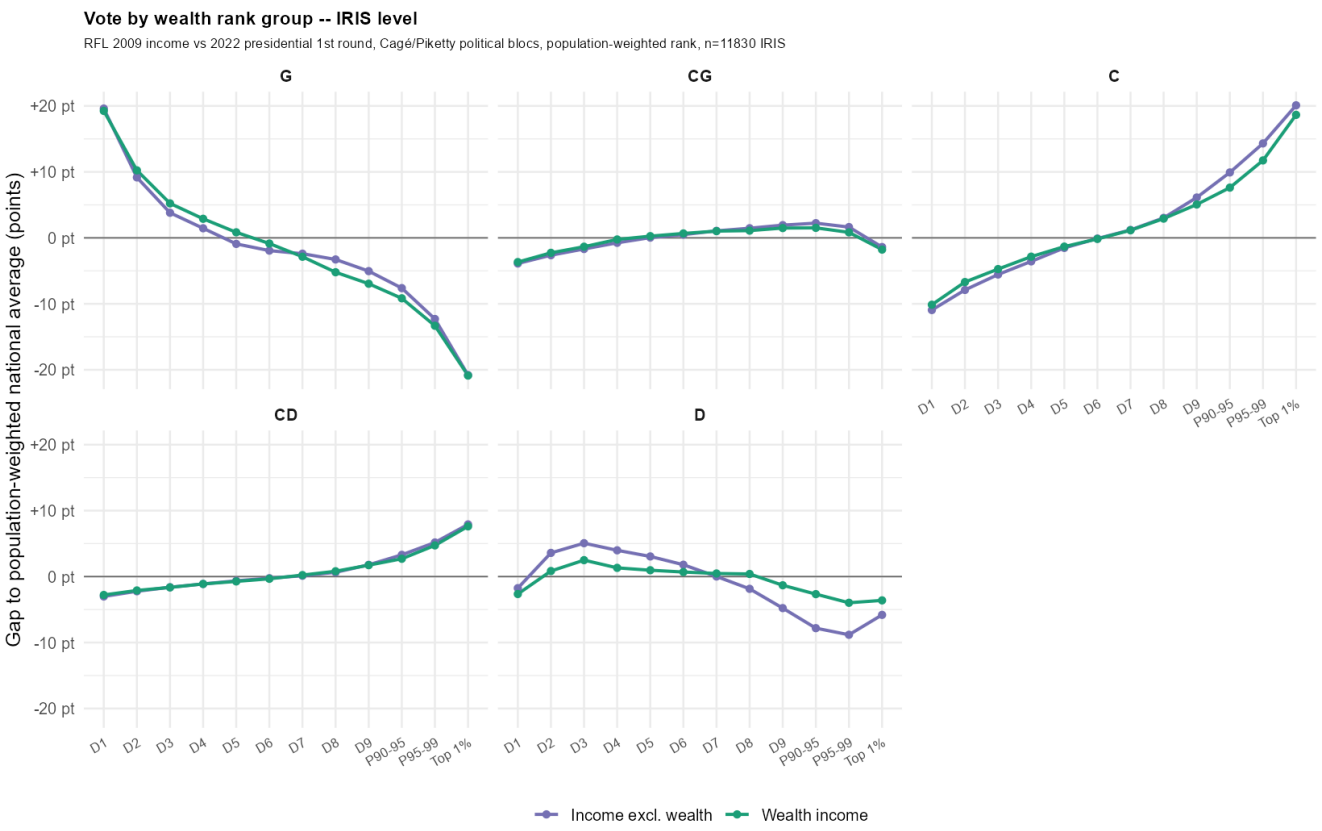


Figure 14: Score of each political bloc (2022 presidential election, 1st round), gap to the weighted national average, by rank group, RFL 2009, rank weighted by tax population and score weighted by registered voters, $n = 11,830$ IRIS. Ranking by income excluding capital income (purple) and by capital income (green).

8 Conclusion

This thesis emerged from an observation: the study of capital concentration and the study of territorial inequality rarely intersect. Looking for data, we mostly ran into statistical secrecy and empty datasets. Much of the relevant statistical apparatus is locked away, though we believe the administrations in charge could lift many of these limitations. These data cover only a fraction of capital income. They do not let us measure concentration over time, or the return on capital. Capital gains, tax-exempt products, and inheritances are all invisible at this scale.

Even so, we built an interesting analysis of capital income using these data. First, at the inter-municipal scale: capital income amplifies inequality between EPCIs, but only modestly (+3.5 to 3.6 % of the coefficient of variation). This average effect masks specific geographic patterns.

The Paris region, Lyon, the Swiss border territories, and the touristic Atlantic and Mediterranean coasts are the clear winners of the capital income competition. The first group holds very high total income and financial income. The second group depends on residential preferences and tourism. The losers in that competition are poor, non-touristic, and suburban territories that fall outside any touristic geography.

At the infra-municipal scale, finally, the IRIS is the finest level where income and voting can be cross-referenced. It first confirms how important capital income is: it can reach up to 41 % of total income (RFL 2009). Cross-referenced with the 2022 vote, capital income traces a political geography that matches expectations for most blocs, though not one specific to capital income itself: because capital income evolves closely with total income at this scale, it mostly retraces the vote's ordinary income divide rather than adding a distinct geography of its own.

We hope this thesis helps bring capital more clearly into the territorial economic base theory. Our findings suggest it may not deserve its own separate base. Instead, it seems to fold into the residential base in touristic places, and into the productive base in large agglomerations.

Broader work would also be worthwhile once data become available. It would be interesting to link the territory where capital owners live to the territory where their capital is actually invested, to analyze the capital relations between territories within France.

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