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The social health of the new French regions and its evolution 2008-2016

Florence Jany-Catrice, Grégory Marlier and Amélie Lefebvre-
Chombart

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The present article updates this indicator by enriching and expanding it in order to measure the evolution of social health over time and the level attained at the end of the 2010s. It takes the reconfiguration of the “new” French regions as the basis for reconstructing statistical series. It shows that some regions (Brittany, Pays de la Loire) have a very strong social health dynamic while others, particularly the Hauts-de-France, are lagging far behind. It also sets this social health alongside an exploratory multidimensional measure of territorial environmental performance, mobilizing new tools of cartography.

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The social health of the new French regions and its evolution 2008-2016

Florence Jany-Catrice, Grégory Marlier and Amélie Lefebvre-Chombart

February 2021

The authors

[Florence Jany-Catrice](#) is full professor at the University of Lille, member of the Research Center Clersé (UMR 8019), and Richard B. Fisher Member, School of Social Science (2020-21), Institute for Advanced Study, Princeton. She works on the issues of the evaluation of public policies, on critics of the measurement of growth and inflation, and on new indicators of sustainability. She has published numerous articles (see for instance : “the French regions and their social health”, in *Social Indicators Research*, Volume 93, Number 2, pp. 377-391 (2009), and books among which : *New Indicators of Wellbeing and development*, with Jean Gadrey (2006) and *A political economy of the measurement of inflation* (2020), both edited by Palgrave MacMillan.

[Grégory Marlier](#) is in charge of Observation and Forecasting at the the Hauts-de-France Region's Foresight and Regional Strategies Department. He works on issues related to development indicators and assistance in steering regional policies. He was previously in charge of the technical coordination of the working group of the Association of French Regions, whose mission was to build new indicators on wealth and development, to better understand regional specificities and to offer a new analysis grid for territories. With a PhD in economics, Grégory Marlier has also worked on issues of fiscal sustainability and the evaluation of returns and risks of pension systems.

[Amélie Lefebvre-Chombart](#) is a Post-doctoral fellow at the chair in social and solidarity economy of the Hauts de France Region. She works on the contribution of social commons to the territory. She has a PhD in geography and is an agricultural engineer. Her doctoral thesis focused on social and solidarity initiatives in rural areas. She also published several articles among which "At the sources of the construction of territories: spatialized social and solidarity initiatives", *Géocarrefour*, 92/4 | 2018, and " Quel horizon des communs sociaux pour l'Économie Sociale et Solidaire?"(with P. Robert, F. Jany-Catrice, L. Gardin, C. Mahieu) in *Entreprise & société*, 2020 - 2, n°8, p. 49-70.

The text

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Informations et soumission des textes :

wpfmsh@msh-paris.fr

Fondation Maison des sciences de l'homme
54, boulevard Raspail
75006 Paris - France

<http://www.fmsch.fr>
<http://halshs.archives-ouvertes.fr/FMSH-WP>
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Abstract

In 2008, we constructed a multidimensional indicator that was intended to calculate the social health of the French regions in 2004. The product of much collective deliberation, this indicator was selected by the Association of the French Regions' commission on sustainable development and the environment for inclusion in 2012, and as one of the key indicators in the first draft of the Eva Sas Act in 2014.

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Keywords

Critics of GDP, French territories, New Indicators of Well-Being, Social Health, Environmental Index.

Highlights

- A Regional ISH has been constructed on a deliberative basis
- There is no link between GDP and Social Health in the French regions
- Over the last decade, the Social Health has slightly increased but has decreased in some regions
- Coupling Social Health and an exploratory Environmental Index produces new narratives on the territories

La santé sociale des nouvelles régions françaises et son évolution (2008-2016)

Résumé

En 2008, nous avons élaboré un indicateur multidimensionnel visant à estimer, pour l'année 2004, le bien-être social dans les régions françaises. Fruit de délibérations collectives, cet indicateur avait été sélectionné par la commission Développement durable environnement de l'association des régions de France dans son panorama d'autres indicateurs de richesse, permettant aux régions françaises de partager une définition commune du développement social des territoires (ARF, 2012). Il avait été retenu comme un des indicateurs clé de la première proposition de loi d'Eva Sas (2014). Ce working paper met à jour en l'enrichissant, cet indicateur pour en estimer l'évolution dans le temps et le niveau à la fin des années 2010. Il reconstruit aussi des séries à partir de la reconfiguration des « nouvelles » régions françaises. Il montre que des régions sont très dynamiques en matière de santé sociale (Bretagne, Pays de la Loire) tandis que d'autres demeurent très en retrait, en particulier les Hauts-de-France. Enfin, il confronte cette santé sociale à une mesure multidimensionnelle de la performance écologique.

Mots-clefs

délibération, indice écologique, santé sociale, nouvelles régions françaises

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Introduction

Since the beginning of the 2000s, international initiatives aimed at going beyond GDP have accelerated, even though there has simultaneously been a paradoxical trend towards shoring up GDP and growth. The territories are not immune to these tendencies. At the same time as the competences assigned to the French regions¹ were reconfigured, their number has been reduced in 2016 from 22 regions to 13.

The French media and official statistics continue to construct narratives around the “economic power” of these new regions, based essentially on their contribution to national GDP. Thus one can read everywhere that in 2019, the Ile de France accounted for almost one third of the economic wealth produced in France (29.8%), while Auvergne-Rhône Alpes produced 11.4% of national GDP, Nouvelle-Aquitaine 7.5%, Hauts-de-France 7.3%, and PACA and Occitania 7.2%. Brittany produced 4.1% of France’s national wealth, Corsica 0.4% and so on.

Is it sufficient to measure regional GDP?

Yet, the limits to GDP and growth are now well known. The studies that address these questions can be divided into three categories. Those in the first of these categories focus on the difficulty of measuring growth in economies that have become increasingly service-dominated (Gadrey, 1996; Bosworth, Triplett, 2003), digital (Mokyr, 2006; Durand, 2020) or relational (Griliches, 1992; Land *et al.*, 2011). A second category is concerned with the external limits of GDP, that is to say the limits linked to the generalised uses to which GDP and growth are put as proxies for wellbeing. Some studies in this category challenge the assumption that an increase in economic value added automatically produces an increase in wellbeing²; others note that the definition of GDP is based on conventions that do not take account of activities that are

crucial to wellbeing, such as domestic work, voluntary work and civic engagement (Putnam, 2000; Folbre, 2006). Yet others question the automatic link that is said to exist between growth and the reduction of inequalities, giving a rough ride in passing to the fantasies of “trickle down” economics. The third category, finally, undoubtedly now the largest in numerical terms, focuses on the impossible coupling of growth and environmental sustainability (Spash, 2013).

Advancing the regionalisation of public action

Following the recommendations of the Stiglitz-Sen Commission on the Measurement of Economic Performance and Social Progress, the OECD constructed a Better Life Index. Nine initial dimensions were used in this project. Three of them refer directly to the material conditions of living: income (levels and distribution), employment and housing. The other six reflect various dimensions of the quality of life: health, education and competencies, environmental quality, personal safety, civic engagement and governance and access to services. Wellbeing is measured for each region on the basis of these nine criteria and is compared to all regions of OECD member states. While these approaches have led to advances in the multidimensional measurement of quality of life or regional inequalities, they have not succeeded to going beyond GDP in terms of operational uses with the aim of changing the direction of public policies. This inadequacy arises from the fact that the major social issues of today, summarised under headings as diverse as “social health” (Miringoff and Miringoff 1999), “wellbeing for all” (Council of Europe, 2005), are all in essence multidimensional and not straightforward. When they are analysed closely, these major issues reflect difficulties in the fields of education, housing, consumption, health, work and employment, with various aspects of them quickly piling up in the processes leading to marginalisation and exclusion. Acknowledgement of this *cumulative multidimensionality* of challenges and difficulties sits awkwardly with a single variable and requires the use of a larger “battery” of variables.

The gradual regionalisation of French public action and the three stages of decentralisation

1. The French NOTRe Act of 7 August 2015 (no. 2015-991) initiates “a regional reorganisation of the Republic” and is a central element of the third phase of the decentralisation that was put into effect in France between 2012 and 2017.

2. See an experimental proposal by Bruno Latour during the COVID-19 lockdown in France (2020).

have given legitimacy to the idea that the regions should be assessed on the basis of their own sustainability and the country's societal sustainability. This twin dynamic of regionalisation and (international and national) concern for issues of social and environmental sustainability (Harbel et al. 2016; Kramm et al. 2017; Laurent, 2015; Alaimo, Maggino, 2020) allowed to highlight the complex relations between society and nature, and have led to a proliferation of "alternative" territorial indicators (Nourry, 2008; Gadrey, Jany-Catrice, 2006; Le Roy, Ottaviani, 2015; Ottaviani, 2018).

What notions of wellbeing should underpin the index of social health?

Underlying any attempt to construct an alternative indicator is a range of different understandings of what constitutes wellbeing for all. What notions of wellbeing should underpin the index of social health (as we will define it below) that we intend to produce in this article? Bleys (2012) proposes a classification of indicators according to the concepts underlying them. He begins by making a distinction between the prospects for wellbeing, economic prosperity and sustainability. Obviously, social health stands at some distance from economic prosperity, but aligns more readily with the dual dimension of wellbeing (in its social and collective aspects) and that of social sustainability. However, the initiatives that might be included in the classification of measures of wellbeing vary in their epistemological underpinnings. Some clearly fall within the scope of utilitarianism in the sense that choices about the allocation of scarce resources are made in accordance with individual preferences, preferably expressed through the market. When preferences lie outside the scope of the market, they reflect individual perceptions and the multidimensional nature of wellbeing is self-aggregated by respondents into a catch-all notion called "life satisfaction" or even happiness. However, utilitarianism is not the only source of legitimacy for the framework used to construct indicators of wellbeing. Bleys shows that foundations epistemologically far removed from utilitarianism can be found in studies that adopt a "human needs" approach. Such studies analyse the extent

to which "basic" needs are satisfied, notably through access to certain goods and services. Amartya Sen's capabilities approach is another possible perspective: an individual's level of wellbeing is measured by what that individual is actually able to do or to be. The capabilities approach focuses on two levels – observed outcomes and opportunities. The ISH presented below is more closely aligned with Sen's capabilities approach in that it combined indicators of outcomes and opportunities with collective deliberation on the selection of indicators and weightings, as Sen's studies suggest (Jany-Catrice, Marlier, 2013). The present article re-examines the construction of that indicator and updates it. This in turn enables us to use it as the basis for a diachronic analysis that will help us answer the following question: is social health in the French regions progressing?

The structure of the article

According to researchers who recently conducted a meta-analysis of studies on alternative indicators since 1970, the indicator that has the best chance of "surviving" over time (Barrington-Leigh and Escande, 2018) would be precisely what we are aiming to do here, namely to update an indicator that was initially constructed on the basis of a panel of indicators democratically chosen with the aid of experts³ (see Box below).

We have taken as our starting point for this article the index of social health as it was produced in 2009 (Jany-Catrice, 2009). We update it for the years 2012 and 2016 on the basis of the new, reconfigured regions (I), which is a way of "enabling it to live". We present the main adjustments; in doing so, we are constrained by the availability of data but also guided by the new challenges, particularly with regard to health (II). We then compare it with GDP (III) and test the possible correlation between the level of GDP per capita and the ISH. We present an analysis of the evolution of the index of social health over the period 2008-2016 (IV)⁴.

3. However, the authors to whom we are referring here take the view in their article that the weight given to each indicator should be based on empirical studies of subjective wellbeing, which we do not do in the course of constructing this ISH.

4. This transparency is, after all, one of the guarantees

Finally, we make an attempt to combine the index of social health and an environmental index constructed on the basis of a few environmental dimensions for which data are available at the regional level (V).

1. An ISH for the new French regions

The context: need for quantified data on the direction of societal development

This growing interest in these new indicators of wealth is not apparent only at international (Stiglitz et al. 2009) and national levels (Méda 2009; Gadrey, Jany-Catrice, 2006⁵). A wide variety of projects has emerged in recent years with the aim of producing regional indicators of wellbeing. As early as 2010, the Association des Régions de France carried out a detailed study of all the French regions that provided the basis for producing regional versions of the Index of Human Development (IDH-2) and environmental footprint, in addition to a dashboard of indicators of sustainable development. These indicators, intended to “supplement GDP”, were brought together in a report vividly entitled: “Sustainable development: the wealth indicator revolution”⁶. They formed the basis for a new analytical framework for the French regions, which was necessary because the map showing GDP per capita did not coincide with those for human development and environmental footprint.

Some of these initiatives have benefited from the development of indicators intended to stimulate public debate on the purpose of development. In France, the best-known regional experiences in civic participation are

of the robustness of indicators of social health, as Floridi et al. (2011) suggest.

5. Drawing on these French studies, the French deputy Eva Sas put forward a draft bill on new wealth indicators in 2015. The legislation, which was passed by the French parliament, obliges the government to submit an annual report on the evolution of indicators of quality of life and sustainable development, as well as a qualitative or quantitative evaluation of the impact of the main reforms introduced in the previous year and those planned for the following year from the point of view of these indicators and of economic growth. <https://www.vie-publique.fr/loi/20952-statistiques-indicateurs-de-riche-pib-politiques-publiques-indica>

6. <https://base.socioeco.org/docs/rapportfinalarf.pdf> (consulted 6 July 2020).

those in the Nord-Pas de Calais region (Jany-Catrice, Marlier, op. cit.) and the one in the Pays de la Loire, which between 2010 and 2011 put into effect a joint project on the new indicators of wealth in the region with H. Combes and the Observatory of Public Decision-Making⁷. Some large urban areas have also launched various projects on indicators of wellbeing for their areas. They include the metropolitan areas of Toulouse (2015) and of Greater Lyon (which is developing a variant of the index of human development (IDH-2) more in tune with local and national realities) (Marlier 2008), the cities of Marseille, Bordeaux etc. (Boutaud, 2008). The metropolitan area of Grenoble’s IBEST project is one of those that has adopted a longer-term view, taking advantage of the unfailing support of the metropolitan area authority. Its objective is to evaluate the metropolitan area’s sustainable wellbeing, basing it on a balanced combination of objectified data and data on individual perceptions derived from ad hoc questionnaires, thereby according a place to individuals’ desires and aspirations (Ottaviani, 2019).

This burgeoning of initiatives at the regional level is rather reminiscent of the community indicators movement of the 1990s in the USA. The aim of this movement was to use batteries of indicators to supplement the dominant macroeconomic indicators and thereby provide a more comprehensive, more multidimensional view of “social progress” and, by producing these reports, create the basis for producing multidimensional indicators that would feed into the public debate on social and environmental sustainability. While the co-construction approach adopted during the development of the ISH for the Nord-Pas de Calais region might have seemed to be pioneering in 2005, this way of selecting regional indicators is now more widely used. Thus Descamps and Vicard (2010), in a review of regional indicators of sustainable development, show that more than one third of the articles reviewed highlight a co-construction approach, with local elected representatives and citizens joining researchers to construct a system of indicators.

7. more than 150 citizens’ debates were conducted on “what counts most” for inhabitants

This often takes the form of participatory workshops. As in the case of the ISH, these co-construction approaches are an attempt to circumvent the difficulties in reconciling frequently divergent points of view and interests at regional level. It is also a means of ensuring that decision-makers appropriate the evaluation tools and that stakeholders support the implementation of the policy on sustainable development. The Nord-Pas de Calais region's project embarked on just such a dynamic (see Box), while at the same time assisting in its construction.

The origins of the ISH: the Nord-Pas de Calais region's 21 indicators project and its revisiting

As early as 2003, the Nord-Pas de Calais Regional Council was seeking to equip itself with new tools for evaluating the region's human development. It first thought to do so by regionalising indicators that had already acquired international legitimacy. To this end, it chose the indicators developed by the UNDP, which were originally intended to estimate the inequalities in development between countries, namely the indicators of human development (IHD, indicator of human development, IHP, indicator of human poverty and IWP, indicator of women's participation) (UNDP 2006). The first commission for an ISH arose out of dissatisfaction with the IHD, which was limited to an analysis of human development based on just three dimensions, whereas other indicators (such as the BIP40) turned out to be difficult to regionalise because of the lack of social data at regional level (Jany-Catrice (coordinator, 2009, see Box).

The indicator of social health (ISH): origins and method of construction

The origin of the ISH of the French regions is as follows. The Nord-Pas de Calais region had commissioned Florence Jany-Catrice to regionalise a barometer of inequalities and poverty. Faced with a lack of available data when the crucial decisions on selection and choices had to be taken, the economist decided to conduct, with the assistance of the regional authorities, an experiment in participatory consultation around the construction of an index of social health. Thus the first point of interest in the construction

of the ISH lies in the dynamic of its construction. Eager to have this approach validated by organised civil society, the Regional Council and the researchers established a number of heterogeneous working groups that counted among their members experts, collectors of social data at regional level, regional officials, and representatives of voluntary associations. Many voluntary associations (the organisations called on were involved in projects relating to poverty, housing inequalities, and gender inequalities); it gave these associations an opportunity to talk about the complex realities they observed in micro-social environments. The approach advanced through a series of iterative innovations:

(i) The starting point for the project was the identification of an object that had acquired legitimacy and was a vehicle for values (the UNDP's IDH at the international level). The IDH's aggregative method was adopted for the construction of the composite indicator.

(ii) The starting point for the project was the identification of an object that had acquired legitimacy and was a vehicle for values (the UNDP's IDH at the international level). The IDH's aggregative method was adopted for the construction of the composite indicator.

(iii) The third stage involved working towards a gradual collective understanding of a few limited, common priority objectives.

This approach led to the production of an indicator that was both manageable (because it was limited to a restricted battery of variables) and diffusible (because it constituted a form of social benchmarking by means of which the French regions could be compared with each other). This ISH is based on an "assumed vision" of society, in the sense that the quantified data always embody political visions and can subsequently serve as collective reference points. However, it did not totally escape the problem of data availability. Some of the participants in the process implicitly accepted the sometimes severe constraint of a lack of regional social data.

Source: based on Jany-Catrice, Marlier, 2013.

2. Presentation of the ISS

The ISH is a composite indicator that has been partially revisited in this article in order to take account of the reconfiguration of the French regions, on the one hand, and, on the other, its evolution over time. This revision is linked essentially to breaks in statistical series between 2004 and 2016 that necessitated partial adjustments in its construction and updating.

The index is made up of the following dimensions: income, work and employment, education, housing, health and social cohesion. The idea that initially underlay its construction was that, if the regions were to be on an upward social health trajectory, they would have to be actively engaged in the following dimensions: an income for all, sustainable work and employment, access for all to education, housing and healthcare and strong social cohesion. This is summarised in the figure below.



Figure 1. The dimensions of the ISS – 2016

Source: the authors

Each dimension of the region’s social health is made up of one or more variables that serve to embody the dimension as a whole. It is self-evident, as has often been noted, that the index’s political positioning hinges on the choice of variables. Thus, for example, the working groups set up to construct the ISS (Box) adopted several variables for the income dimension that were intended, for the sake of the region’s social health, to bring about

a reduction in extreme wealth, in equalities and in the poverty of families with children.

Dimensions	Variables
Income	Household insolvency: number of case files submitted to the Banque de France per 1000 inhabitants
	Wealth tax: number of households that pay the wealth tax divided by the number of taxable households, multiplied by the average payment per household
	D9/D1: inter-decile ratio of disposable income
	Rate of poverty among families with children
Work and employment	Unemployment rate adjusted by the ratio of female to male unemployment
	Incidence of workplace accidents with working days lost (per 100 employees)
	Number of cases brought before the industrial tribunals per 1000 employees
	Share of part-time jobs in all waged jobs
	Share of precarious jobs in all waged jobs
education	Share of those without qualifications or at most primary or lower secondary school certificates in the population not in education and aged 15 or over
	Share of those aged 18 to 24 who are neither in employment, education or training (NEETs)
health	Life expectancy at birth
	Number of doctors (generalists and specialists) per 1000 inhabitants
housing	Number of actions taken under the DALO (enforceable right to housing) legislation per 1000 households
social ties and safety	Number of crimes recorded per 100 inhabitants
	Number of voluntary associations established per 100,000 inhabitants
	Share of employment in the social and solidarity economy

Table 1 – The ISS : dimensions and variables

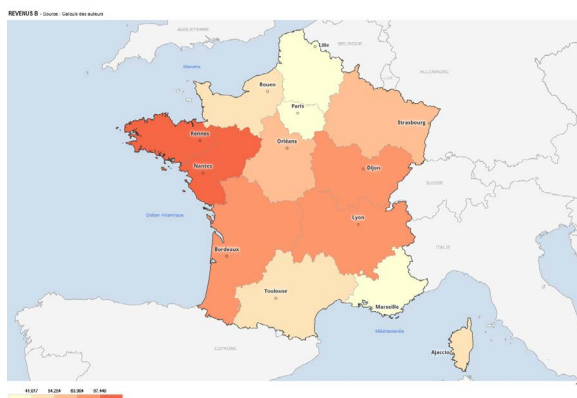
Source: the authors

The income dimension

In the indicator of social health, the income dimension is made up of four variables, each with the same weight: the rate of household insolvency (as a variable expressing consumption), an adjusted wealth tax index and the inter-decile ratio of disposable income per consumption unit (the variables expressing inequalities) and the share of poor families with children (the variable expressing poverty). The two regions with the highest “income” dimension are Brittany and the Pays de la Loire and the regions with the lowest “income” dimension are Hauts-de-France, Ile-de-France and PACA.

Indeed, with regard to consumption, the indicator adopted, namely household insolvency, is a proxy for budgetary constraints or even restrictions on consumption. A high rate is an indication of great economic precarity. The data show that in 2016 the Hauts

de France region had the highest rate of insolvency, with 5.42 case files submitted to the Banque de France per 1000 inhabitants, the average for metropolitan France being 3.68. Conversely, the wealth tax rate is a measure of the very large fortunes in a region. The indicator adopted is the wealth tax index, that is the number of households paying the wealth tax divided by the number of households – combined with the average amount paid per household liable for income tax. The Ile-de-France has the highest wealth tax index (15.00 in 2016), a long way ahead of the PACA region (with 2.85). The index is lowest in Bourgogne-Franche-Comté (0.38). These economic inequalities are augmented by the inter-decile ratio of living standards, which expresses part of the inequalities in households’ disposable income adjusted by the number of consumption units. Household disposable income here includes earnings from economic activity, retirement pensions and unemployment benefits, income from assets, transfers from other households and social security benefits. Four direct taxes are taken into account: income tax, local residents tax, the generalised social contribution and the tax on income from movable property. This inter-décile ratio indicates that in 2016 inequalities in living standards were greatest in the Ile-de-France ($D9/D1=4.45$) and lowest in the Pays de la Loire ($D9/D1 = 2.81$) and Brittany (2.86). The differences vary significantly: the inequalities are 58% greater in the Ile-de-France than in the Pays de la Loire.

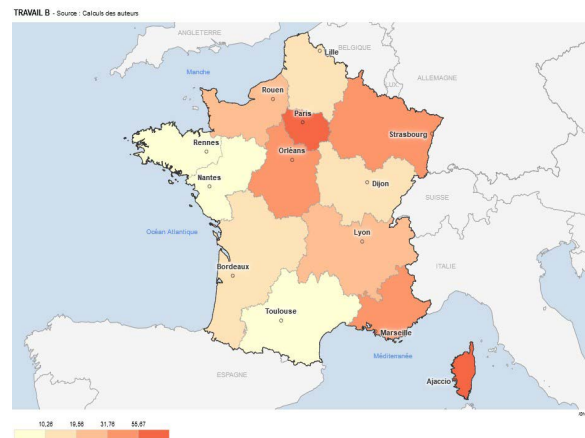


Mapping 1– Income dimension of the ISS by régions of France
Source : the autors (data available on request)

The poverty indicator adopted is the share of poor households with children. The data suggest that in 2016 the share of poor households with children in metropolitan France was 17.9; this average figure concealed disparities between regions ranging from 13.5% in Brittany to the highest rate of 22.9% in the Hauts-de-France.

Employment and work

In order to take account of the variety of employment and working conditions, five variables were adopted in order to get as close as possible to those adopted during the 2008 collaborative exercise. They are: the adjusted unemployment rate (as the variable expressing the level of unemployment), the incidence of workplace accidents (the variable for working conditions), the rate of precarious employment and the part-time rate (the variables for precarious employment) and the number of cases brought before the industrial tribunals as the variable expressing the turbulence of industrial relations. In aggregate, it is in the Ile-de-France that the “work and employment” dimension is at its most sustainable, while it is least sustainable in Occitania.



Mapping 2 – The work and employment dimension of the ISS of the regions, 2016
Source : the authors. Data on request.

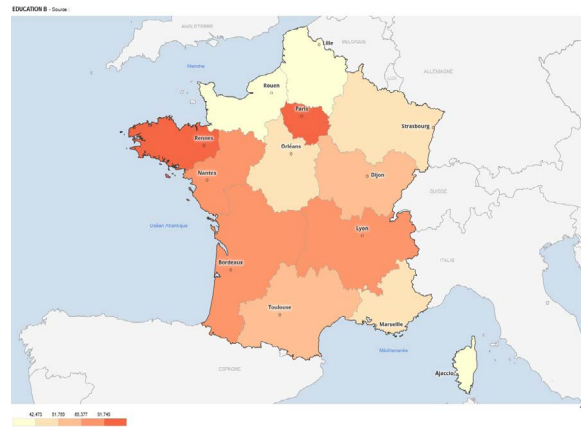
More specifically, the unemployment rate was adjusted by multiplying it by the ratio of the female unemployment rate to the male unemployment rate in order to take account of gender inequalities. This so-called “adjusted” unemployment rate varied in 2016 from 12.9% in Brittany to 19.2% in

Corsica, with an average rate for metropolitan France of 15.4%. Working conditions are expressed here by the incidence of workplace accidents with working days lost. The incidence was highest in Brittany (4.4%) and lowest in Ile-de-France (2.3%). Precarious employment is expressed by an indicator of precarity, namely the share of precarious jobs, defined as the share of fixed-term contracts, agency work, apprenticeships and work placements in waged work. According to the INSEE data, employment precarity in 2016 was lowest in Ile-de-France (13.1%) and highest in Brittany (16.5%). We supplemented this indicator with the share of part-time work in wage work, as a measure of the precarity of women's work and of some service occupations. Finally, we used the rate of recourse to the industrial tribunals as an indicator of labour disputes. Academic studies show that since the beginning of the 2010s the lowest level of recourse to the tribunals could indicate a very serious breakdown in workplace relations and employment protection (Serverin, 2019⁸).

Education, health and housing

Education

Two education variables were adopted with the same weights, namely the share of those without qualifications (stock variable) and the share of young people aged between 18 and 24 who are not in education, training or employment (flow variable expressing the difficulty young people experience in accessing the labour market or the institutions that should facilitate access for them). At the aggregate level, the distribution of this education dimension produces the following results for 2016: the two regions with the best education performance are Brittany and the Ile-de-France, while the two worst performing regions are the Hauts-de-France and Normandy.



Mapping 3 – The education dimension of the ISH for the French regions, 2016

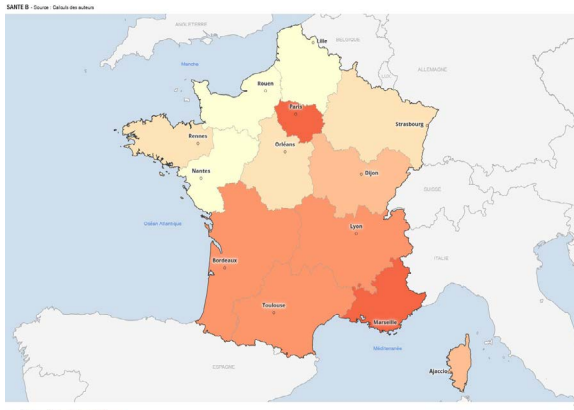
Source : the authors. Data available on request.

More specifically, levels of education differ very significantly from region to region. In terms of stock, the share of those without qualifications is highest in Hauts-de-France, where 33.7% of individuals not in education and over 15 years of age have no formal qualifications, compared with 25.5% in the Ile-de-France. As for the share of young people aged between 18 and 24 who are not in education, training or employment, it is 21.1% in Hauts-de-France but 10 percentage points less in Brittany ...

Health

With regard to health, the indicators adopted are life expectancy at birth and medical density. At the aggregate level, the geographical distribution of this health dimension differed fairly significantly between the northern and southern regions of France in 2016 due to the effect of the medical density variable. As can be seen from the map, the worst performing regions in terms of health are the Hauts-de-France, Normandy and Centre-Val de Loire. The best performers are Ile-de-France and the PACA regions, but generally speaking all the regions south of the Loire perform well in terms of health.

8. Serverin S., 2019, "Les affaires prud'homales dans la chaîne judiciaire de 2004 à 2018. Baisse des demandes, concentration des litiges, juridictionnalisation de leur traitement", Direction des affaires civiles et du scea. Pôle d'évaluation de la justice civile.



Mapping 4 – The health dimension of the regional index of social health, 2016

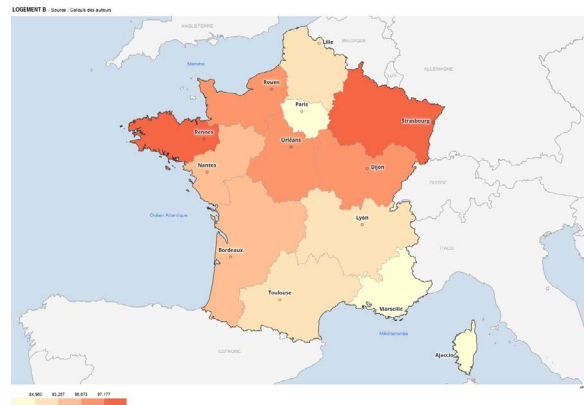
Source : the authors. Data available on request.

If this dimension is now decomposed by the two variables, it can be seen that in 2016 there was a *gap of more than 3 years* between the highest life expectancy (Ile-de-France, life expectancy at birth of 83.4 years) and the lowest (Hauts-de-France, 80.4 years). This flagship indicator was supplemented by two further variables, the first of which was the average density of general practitioners and medical specialists in each region. The sanitary crises of 2020 have, after all, demonstrated the importance of establishing robust region-wide healthcare systems. Even though this indicator is still debatable (it should actually be supplemented by an indicator of hospital density), the figures show that the average for metropolitan France is 339 doctors per 100,000 inhabitants. The highest density is in the PACA region (406 per 100,000 inhabitants) and the lowest in Centre-Val de Loire (265 per 100,000 inhabitants). It was further supplemented by an indicator estimating the ability of healthcare systems to cope with health crises. The indicator adopted in this 2016 version of the index of social health is the number of hospital beds per inhabitant. As this is an enrichment that has not been validated in a participatory process, we decided to give it a relatively low weighting in the ISH (the same weighting was given to medical density and to the number of beds); this two-variable sub-index was then aggregated in equal parts with life expectancy at birth⁹.

9. These choices could absolutely (indeed should) be discussed again as part of a democratic process.

Housing

The indicator adopted for housing is the number of actions taken under the DALO (enforceable right to housing) legislation per 1000 households; the co-construction process had previously led to the adoption of the eviction rate as the housing indicator. Enacted in 2008, the DALO legislation enables individuals who do not have access to housing to institute legal proceedings which, if successful, will force the state to find suitable accommodation. Thus, a large number of actions taken will reflect a deterioration in access to housing. The DALO rate is defined here as the number of actions taken per 1000 households. The national average in 2016 was 2.99 actions taken per 1000 households; the rate varied from 0.27 for Brittany to 9.97 for the Ile-de-France.



Mapping 5 – Housing dimension in the regional index of social health, 2016

Source : the authors. Data available on request.

Social cohesion

Social cohesion and safety were considered together in the same group. The number of crimes and misdemeanours was adopted to encapsulate the physical safety dimension. The Ile-de-France had the most mediocre performance in 2016, with recorded crimes and misdemeanours of the order of 7.7 per 100 inhabitants, compared with 3.4 in the Centre-Val de Loire, which was the best performing region. Social cohesion is approximated by two variables: the share of voluntary associations set up in the year and the share of employment in the social and solidarity economy. The number of voluntary associations (per 100,000 inhabitants) set up in

2016 varied from 2.0 in Centre Val-de-Loire to 4.9 in Corsica, with a national average of 2.9.

In this 2016 version of the ISH, a new socioeconomic variable was adopted, namely the share of employment in the social and solidarity economy. This variable was placed alongside social cohesion, since the social and solidarity economy, although very heterogeneous, is one of the expressions of the alternative economic structuring of social solidarities. At national level, employment in the SSE accounted for 10.5% of all jobs in 2015. However, this share varied considerably from region to region, from 7.1% in the Ile-de-France to 14.3% in Brittany.

3. The level of social health according to the ISS in 2016

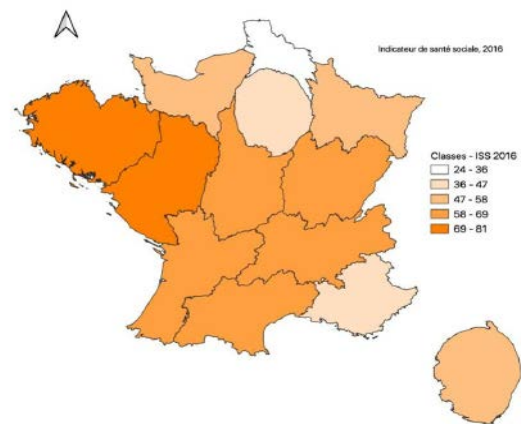
Drawing on all these data, a composite indicator is constructed. The six dimensions are given equal weighting and, with the exception of health (see above), the individual variables within each dimension are given equal weighting as well.

The general results

The ISH map for 2016 is not very far removed from that produced for 2004. It shows that the western regions of France have high levels of social health, while the Hauts-de-France, Normandy, the Ile-de-France and the PACA region have lower relative levels of ISH.

So far, we have retained a traditional or “mainstream” cartographic presentation, as if these representations were axiologically neutral (Harley, 1989; Biggs, 1999). To bring a new perspective on the French space in terms of social health, we have chosen not only to build this social indicator but also to present these composite results using the cartogram methodology. While preserving the typology of the base map, the areas of the map now reflect the weight of social health in each French region. The anamorphism, often used for a presentation of the weight of the inhabitants (Lévy, 2017), and therefore to highlight the strong concentration and power of the metropolises, here shakes up our conventional representations. In this

cartogram, we symbolically emphasize the unprecedented nature of the relative multidimensional social inequalities. The Brittany and Pays de la Loire regions stand out visually, reflecting (relatively) good social performances. On the contrary, the Hauts-de-France region sees its surface area decrease with a social indicator more than three times lower than Brittany. This new type of map representation highlights a new social geography of French regions in the light of their multidimensional social health.



Mapping 6 – Cartogram of the French ISH: 2016

Source : the authors. Data available on request.

On the basis of the results of the indices for 2016, the French regions can be divided into several groups. The first group includes Brittany and the Pays de la Loire, which have a significantly higher ISH than the other regions, than the average and than the regions at the bottom of the classification. The Hauts-de-France region is definitely the straggler in this social classification. Regardless of which dimensions one chooses to focus on, the Hauts-de-France always performs relatively less well than the western regions of France, as the radar chart below shows. In other words, it is impossible, in analysing this result, to point to potential compensatory effects between dimensions, with some of the more mediocre dimensions dragging down some of the relatively better performers.

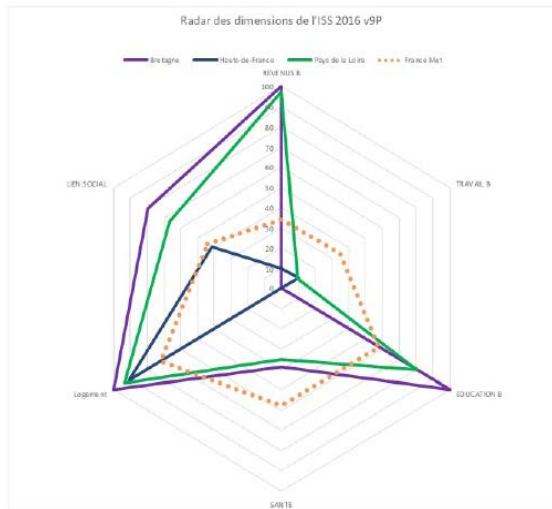


Figure 2 – Radar chart of the various dimensions of the ISH by the most contrasting regions, 2016
Source : the authors

A decorrelation between GDP per capita and the ISH

The data presented above also provide some thought-provoking results. Thus there is a decorrelation between the level of GDP per capita and the ISH, as was the case in 2008 (Jany-Catrice, Marlier, 2013). If the particular situation of the Ile-de-France is left to one side, a scatter of points and a non-significant correlation coefficient are obtained (+0.113). Therefore, beyond a certain level of income or GDP per capita, there is no longer any link between them and the various dimensions of wellbeing (Spash, 2013). These results will not fail to surprise sustainability sceptics, who are generally very optimistic about the capacity of natural and social assets to endure the major changes of capitalism. In the case of the French regions, we are unable to show that an increase in one (GDP) takes place to the detriment of the other (ISH), except in the case of the Ile-de-France. One of the reasons is linked to the capacity of a country like France to arrange its own artificial decoupling by offshoring those parts of its production processes that are most troublesome in terms of work, income, health etc., as it does with regard to environmental problems as well (Laurent, 2015; Harbel et al. 2016; Kramm et al. 2017; Kalimeris et al. 2020). On the other hand, our results clearly show that there is no longer any link between these variables, which encourages us to seek the levers of

social health elsewhere than in economic growth¹⁰.

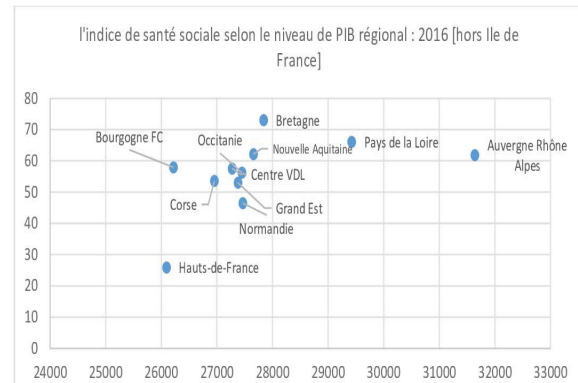


Figure 3 – Link between ISH and GDP per capita – 2016: “scatter of points” effect
Source : the authors. Due to its specificity, the Ile de France is not included in this graphic.

4. Evolution of the ISH over time: 2008-2016

We can now compare the evolution of the ISH over a longer period. We adopted another standardisation convention in order to be able to compare the regional results with each other not only at a given period but also over time : we adopt a *dual spatio-temporal standardisation procedure* whereby, for each variable, a score of zero is attributed to the worst performance by one of the 13 regions in one of the years in the observation period (between 2008 and 2016), while a score of 100 is attributed to the region’s best performance in the best year. In other words, the changes over time are not simply an indication of a change in one region relative to another but are indicative of an absolute evolution of the variables.

A spectacular decline in the ISH in certain regions after the 2008 financial crisis

Across metropolitan France as a whole, the ISH remained stable over the entire period. On the other hand, some regions saw a drastic reduction in their social health over the

10. When the Ile-de-France is added to this graphic, the correlation is just as weak and non-significant but with a negative sign (-0.175), which is explained by the fact that the Ile de France region is very rich economically but has a relatively low index of social health compared with most of the other French regions.

years following the financial crisis, particularly the Ile-de-France. The PACA region and the Pays de la Loire coped best over this period between 2008 and 2012, adding several “points” to their ISH. Some but not all of the regions were able to make up for part of this social deterioration during the following period (2012-2016).

	Differential 2016-2008
Ile-de-France	-12,7
Centre-Val de Loire	-7,3
Grand Est	-0,4
Metropolitan France	0,3
Brittany	0,8
Occitania	1,6
Bourgogne-Franche-Comté	1,7
Nouvelle-Aquitaine	2,3
Auvergne-Rhône-Alpes	2,3
Normandy	4,1
Hauts-de-France	6,1
Provence-Alpes-Côte d'Azur	7,1
Corsica	7,4
Pays de la Loire	7,5

Tableau 2 - The index of social health over time by region 2008-2016
Source : the authors.

Thus the Ile-de-France saw its index decline over the whole of the period 2008-2016 (as if the region had not recovered socially from the 2008 crisis), as did the Centre-Val de Loire. In the case of the Ile-de-France, this decline of almost 12 percentage points is linked to deteriorations in the income dimension, the work and employment dimension and the housing dimension.

The other regions all saw their ISH increase between 2008 and 2016. It is interesting to note that the four regions recording the strongest increases (PACA: + 7.3 points; Pays de la Loire: + 7.5 points; Corsica: + 7.4 points; Hauts-de-France + 6.1 points) all have strong dynamics in the education, health and housing dimensions that, temporarily at least, make up for stagnation or decline in the income and/or work and employment dimensions.

The regions by ISH level and its evolution over time

On the basis of ISH levels and their progression over time, four groups of regions can be identified. The first is the Ile-de-France, which has an ISH score lower than the national average and saw a decline in its social health over the period between 2008 and 2016. The second is made up of Centre-Val de Loire and the Grand Est, whose ISH scores are average but which also suffered a decline in their social health. The regions in the third group, which include Normandy, PACA and the Hauts-de-France, have ISH scores below the national average but their social health tends to be dynamic. As for the other regions, they saw their ISH evolve positively. The best performer in this group of regions is the Pays de la Loire, which recorded a high level of ISH and a strong dynamic over the period.

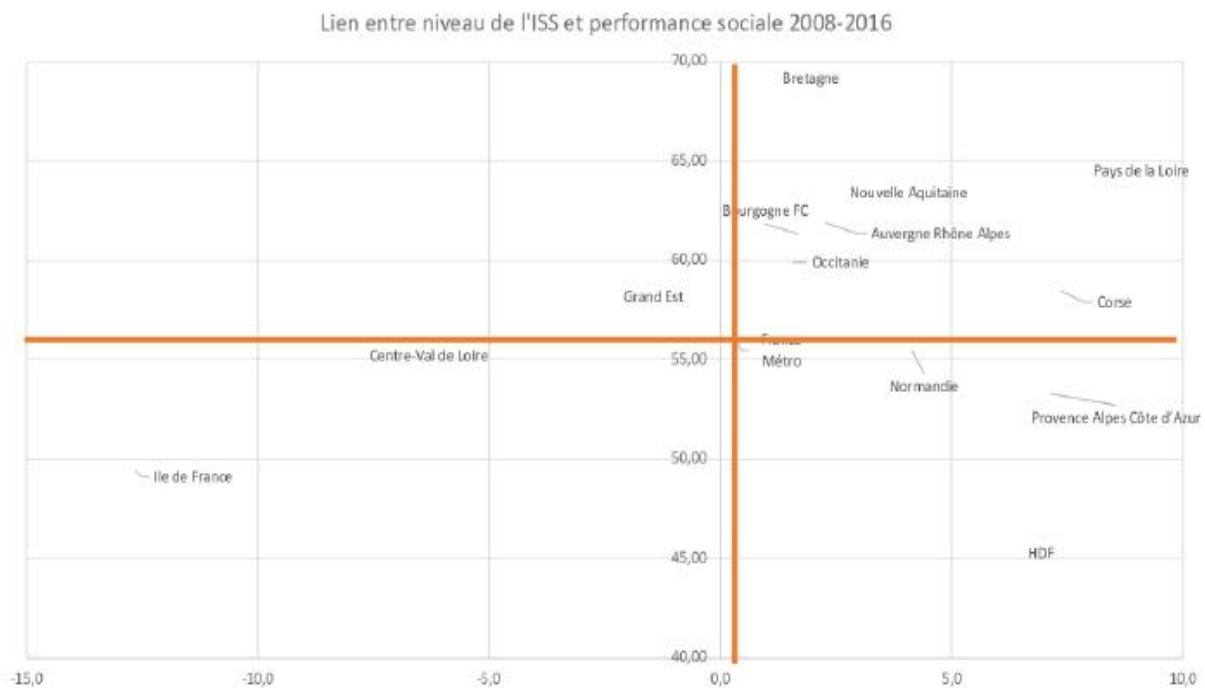


Figure 4 – Link between level of ISS and its evolution over the period between 2008 and 2016

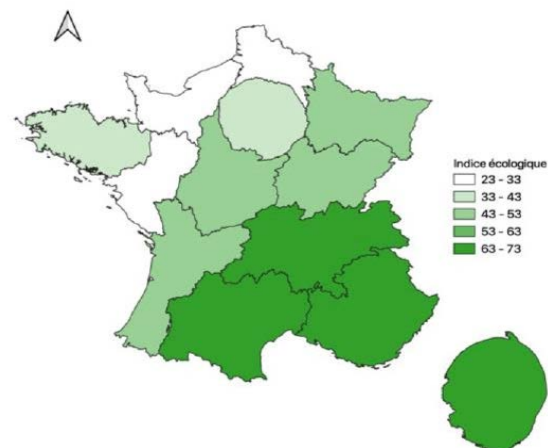
5. An attempt to combine the index of social health and an environmental index

Studies conducted at international level that combine the environmental and social dimensions but *without merging them* completely are interesting, since they enable us to identify countries that could possibly be positioned on an environmentally and socially sustainable trajectory. UNDP's attempts to combine without merging them the UNDP's human development index and the environmental footprint, are a thought-provoking example. Following this seminal work, we combine the index of social health with a quantified representation of the regions' level of environmental performance. This is a challenge, since there is little regional data available on certain dimensions of environmental performance that are, nevertheless, important. Apart from a few isolated initiatives, there are, for example, no data on the French regions' carbon or environmental footprints¹¹. We adopted the following five dimensions: the rate of land take, greenhouse gas emissions per 10,000 inhabitants, share of organic production in the area of land under cultivation, share of renewable electricity in gross final consumption of electricity and the evolution of biodiversity in common generalist and specialist birds¹². Unlike the index of social health, these five variables were not selected by means of a consultative or deliberative process. The dimensions selected are consistent with the environmental dimensions included in an official France Stratégie/CESE's dashboard of "new wealth indicators". The

11. In France, according to Adème, the French environmental protection agency, only the Hauts de France region has calculated a regional carbon footprint. The Nord-Pas de Calais region was the first region to calculate its environmental footprint in the 2000s.

12. The data on the evolution of biodiversity cover the 2003-2013 period. Since the data applied to the "old" regions, an average figure was calculated by weighting the regions on the basis of their surface area. In order to take account of the very high level of dispersion in the evolution between generalist and specialist birds, standardised indices were adopted for each category, which were subsequently merged into a weighted average of the standardised indices. This index of biodiversity can be regarded as having undergone a dual process of standardisation in order to obtain an index ranging from 0 to 100, the same as for the other environmental dimensions.

environmental index constructed by means of a process of comparative standardisation produces the following results: Occitania, PACA and Auvergne-Rhône-Alpes are the highest scorers, while Hauts-de-France, Normandy and the Pays de la Loire are the least good performers.



Mapping 7 – A cartogram of an experimental territorial ecologic index (five variables) - 2016
Source: the authors

This index of environmental health is the result of some initial spadework. However, its construction remains highly debatable, since the standardisation enables us primarily to classify the regions in terms of their relative environmental performance in these five dimensions. It tells us nothing about any possible irreversibility thresholds that might have been exceeded, such as those defined at the international level by Rockstrom et al. in 2009. A region that is very highly placed here on the basis of its environmental dimension could very well be in a parlous environmental state in absolute terms. Despite these important limitations, we present the combination of this regional environmental indicator and the indicator of social health. On this basis, a number of differing *relative* positionings for the French regions in the mid-2010s can be suggested.

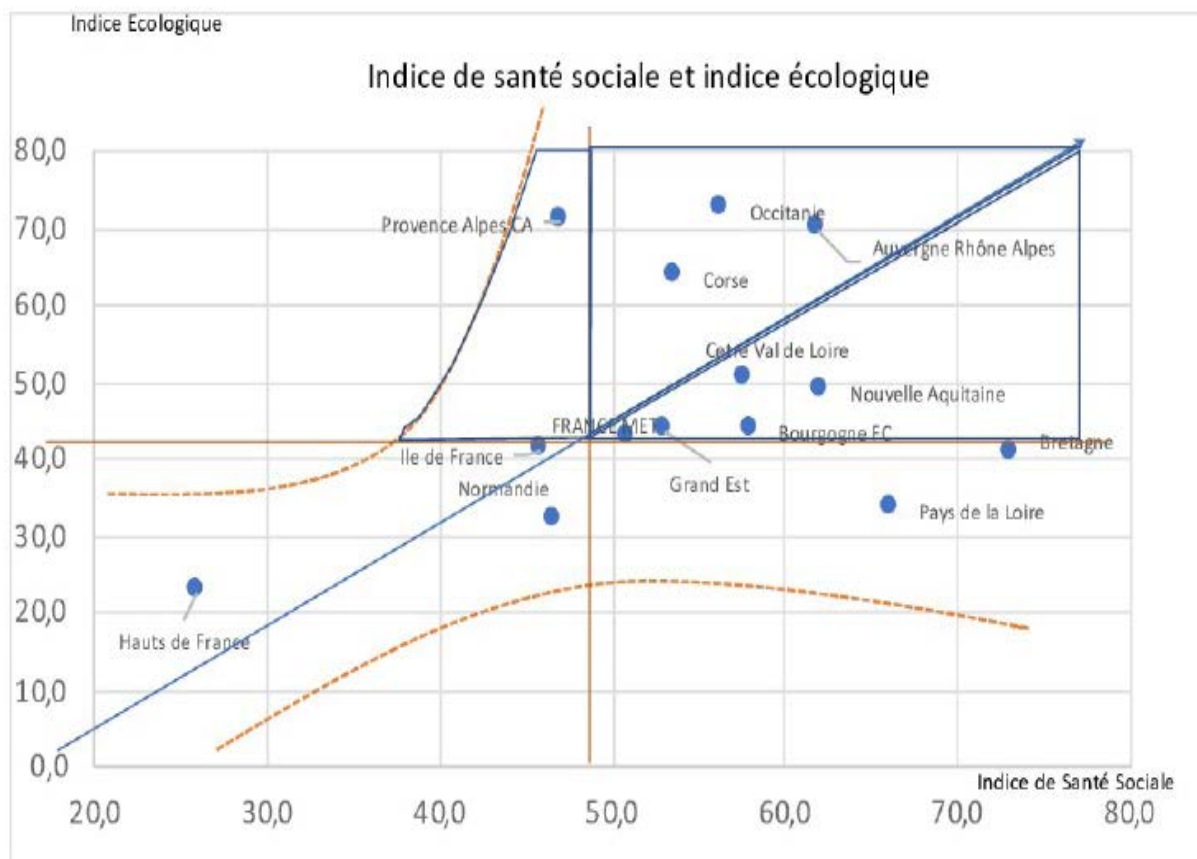


Figure 6 – Link between the index of social health and the regional environmental index, 2016

It can be seen from the graphic above that some regions, namely Auvergne-Rhône-Alpes and Nouvelle-Aquitaine, come close to a balanced relative score between the two dimensions. Some regions whose strong social health dynamic has already been identified, such as Brittany, are relatively poor performers in environmental terms. Finally, some regions perform poorly in both dimensions; this is true – spectacularly so – of the Hauts-de-France and to a lesser extent of the Ile-de-France.

Conclusion

The literature on regional indicators suggests that retaining growth as the flagship indicator of public policies is one way in which the public authorities can obtain results that are always positive (Strunz and Schindler, 2018) – however weakly positive they may be. Adopting different indicators of social sustainability or environmental may result in significantly less advantageous assessments than those based on “growth”, whether it is a question of the state of the environment (loss of biodiversity, climate change, water quality etc.) or the social situation (social and health inequalities, cohesion), and its *evolution*, with which politicians have to deal. From this point of view, the picture we have painted here, which focuses primarily on the question of social health, is a halftone image. It suggests that some regions have progressed socially, but also that the social dynamics vary considerably from region to region and that there are strong inter-regional inequalities.

The experimental combining of this index of social health with a regional environmental index enables us to identify new regions with good scores and to map the results in an original way. The most striking result is still the complicated situation in the Hauts-de-France, regardless of the dimension under investigation. These findings call into question the capacity of some regions to deal with the challenges they still face, whether they be related to health, their social situation or the environment.

General bibliography

- Alaimo L., Maggino F., 2020. "Sustainable Development Goals Indicators at Territorial Level: Conceptual and Methodological Issues—The Italian Perspective", *Social Indicator Research*, 147, p. 383–419.
- ARF (association des régions de France), 2012, « Développement durable : la révolution des nouveaux indicateurs », <https://base.socioeco.org/docs/rapportfinalarf.pdf>.
- Barrington-Leigh C., A. Escande. 2018. « Measuring Progress and Well-Being: A Comparative Review of Indicators ». *Social Indicators Research* 135(3): 893 925.
- Biggs M., 1999. "Putting the State on the Map: Cartography, Territory, and European State", *Comparative Studies in Society and History*, Apr., Vol. 41, No. 2 p. 374-405
- Bleys B.. 2012. « Beyond GDP: Classifying Alternative Measures for Progress ». *Social Indicators Research* 109(3): 355 76.
- Bosworth B., Triplett J., 2003, "Productivity measurement issues in services industries: "Baumol disease" has been cured", *Economic Policy Review*, issue Sep, vol 9, n°3, p. 23-33.
- Boutaud A.. 2008. « Quelques études sur les indices synthétiques territorialisés en France ». *Institut pour le développement de l'information économique et sociale*.
- Council of Europe, 2005, *Concerted Development of Social Cohesion Indicators. Methodological Guide*, Strasbourg : Council of Europe Publishing. https://www.coe.int/t/dg3/socialpolicies/socialcohesiondev/source/GUIDE_en.pdf
- Décamp, M, et F. Vicard. 2010. « Mesurer le développement durable : jeux d'indicateurs et enjeux locaux ». *Revue d'Économie Régionale & Urbaine* (4): 749 72.
- Floridi M., S. Pagni, S. Falorni, et T Luzzati. 2011. « An Exercise in Composite Indicators Construction: Assessing the Sustainability of Italian Regions ». *Ecological Economics* 70(8): 1440 47.
- Folbre N., 2006, "Measuring care: gender, empowerment, and the care economy", *Journal of Human Development*, Vol. 7, n°. 2, July
- Gadrey J., 1996. « *Services : la productivité en question* », Paris : Desclée de Brouwer, Sociologies économiques.
- Gadrey, J., et F. Jany-Catrice, 2006. *The New Indicators of Well-Being and Development*, Palgrave McMillan.
- Griliches Z, 1992. *Output Measurement in the Service Sectors*. Studies in Income and Wealth, vol 56. Chicago: University of Chicago Press, for the National Bureau of Economic Research
- Haberl, H., Fischer-Kowalski M., Krausmann F., Winiwarter V. (eds), 2016. *Social Ecology. Society-Nature Relations across Time and Space*, ed. Springer.
- Habermas J., 1990. "Discourse ethics: Notes on a program of philosophical justification."
- Harley J.B., 1989. "Deconstructing the Map", *Cartographica*, vol 26, n°2, p. 1-20.
- Jackson T., 2019, "The Post-growth challenge : secular stagnation, inequality and the limits to growth", *Ecological Economics*, Volume 156, February 2019, p. 236-246
- Jany-Catrice F., 2009. "The French regions and their social health", *Social Indicators Research*, Vol. 93, n° 2, p. 377-391
- Jany-Catrice F., et G. Marlier. 2013. « Évaluer la santé sociale des régions françaises : entre enjeux économiques, épistémologiques et politiques ». *Revue d'Économie Régionale & Urbaine* octobre(4): 647.
- Kalimeris, Panos, Kostas Bithas, Clive Richardson, et Peter Nijkamp. 2020. « Hidden Linkages between Resources and Economy: A "Beyond-GDP" Approach Using Alternative Welfare Indicators ». *Ecological Economics* 169: 106508.
- Kramm J., Zimmermann M., Pichler M., Schaffartzik A. (eds), 2017. *Social Ecology State of the Art and Future Prospects*, ed. MDPI Multidisciplinary Digital Publishing Institute.
- Land, K., Michalos A., Sirgy J., 2011, *Handbook of Social Indicators and Quality of Life Research*, New-York : ed. Springer

- Latour, B., 2020, « Imaginer les gestes-barrières contre le retour à la production d'avant crise », *AOC*, 30/03/2020. <https://aoc.media/opinion/2020/03/29/imaginer-les-gestes-barrieres-contre-le-retour-a-la-production-davant-crise/>
- Laurent, E.. 2015. « La social-écologie : une perspective théorique et empirique ». *Revue française des affaires sociales* 1(1): 125.
- Laurent, E. 2019. *Sortir de la croissance: mode d'emploi*. Les Liens Qui Libèrent.
- Le Roy A., et F. Ottaviani,. 2015. « La diversité des expériences locales d'indicateurs alternatifs ». *Revue d'Économie Régionale & Urbaine* (3): 533 55.
- Lévy, J. (dir.). 2017. *Atlas politique de la France. Les révolutions silencieuses de la société française*. Paris : Éditions Autrement.
- Marlier G., 2008. Calcul d'un Indice de Développement Humain territorialisé. In *Document de travail Conseil Régional Nord Pas de Calais*. Direction du Développement Durable, de la Prospective et de l'Évaluation, Service Observation Régionale et Analyse Spatiale.
- Méda, D., 1999. *Qu'est-ce que la richesse ?* Paris: Aubier.
- Miringoff, M. L, M-L Miringoff, et S Opdycke. 1999. *The Social Health of the Nation How America Is Really Doing*. New York: Oxford University Press.
- Mokyr, J., 2014, "Secular stagnation? Not in your life". *Geneva Reports on the World Economy*, (August), p.83-89
- Nourry, M., 2008. Measuring sustainable development: Some empirical evidence for France from eight alternative indicators, *Ecological Economics*, vol. 67, issue 3, p. 441-456.
- Ottaviani, F., 2018. « Time in the Development of Indicators on Sustainable Wellbeing: A Local Experiment in Developing Alternative Indicators ». *Social Indicators Research* 135(1): 53 73.
- Putnam, R., 2000, *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster
- Rockstrom J. *et al*, 2009, « A safe operating space for humanity », *Nature*, n° 461, p. 472-475.
- Spash C., 2013, « The Shallow or the Deep Ecological Economics Movement? », *Ecological Economics*, Sept. vol. 93, p. 351-362.
- Stiglitz, Joseph, Amartya Sen, et Jean Fitoussi. 2008. *Report of the Commission on the Measurement of Economic Performance and Social Progress (CMEPSP)*.
- Strunz, S., et H. Schindler. 2018. « Identifying Barriers Toward a Post-Growth Economy – A Political Economy View ». *Ecological Economics* 153: 68 77.

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