DYNAMICS OF THE PARIS REGION ECONOMY

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DYNAMICS OF THE PARIS REGION ECONOMY

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INTRODUCTION

The dynamics of the Paris Region economy

The redrawing of the map of French regions by the law of 16th January 2015 is unlikely to dilute the importance of the Paris Region within France or within the European Union. Thanks to a GDP ranking close to that of the Netherlands, the French capital-city region has retained its special role in the national economy, notably in terms of international recognition as a gateway that is more necessary than ever since the economy has become more globalised and competitive. The Paris Region's economic dynamism benefits from its position at the heart of the world economy. However, the Paris Region also faces the other side of this dynamic, i.e. increasing economic, social and geographical transformations.

You only need to travel a few kilometres in the Paris Region to realise that the economy of the capital city region has completely changed everywhere, from its core centre to its rural outer ring as well as in the areas across which the future Grand Paris Express metro system will be developed. The list of transformations is a long one: the opening of "start-up factories"; the emergence of new office districts and business parks; the development of new cultural offerings driven by the growth in cultural infrastructures and urban routes such as those for visual or street art; the introduction of methanisation units to the farms of the Paris Region, etc. This dynamic is still at work with its share of opportunities, but also its share of challenges to all stakeholders in the public, private and voluntary sectors.

On the eve of the launch of the Regional Economic Development, Innovation and Internationalisation Plan (SRDEII)[1] by the Region, the IAU îdF (Paris Region Planning and Development Agency), a regional agency unique because of its multidisciplinary experts, presents an analysis of the dynamics of the Paris Region economy.

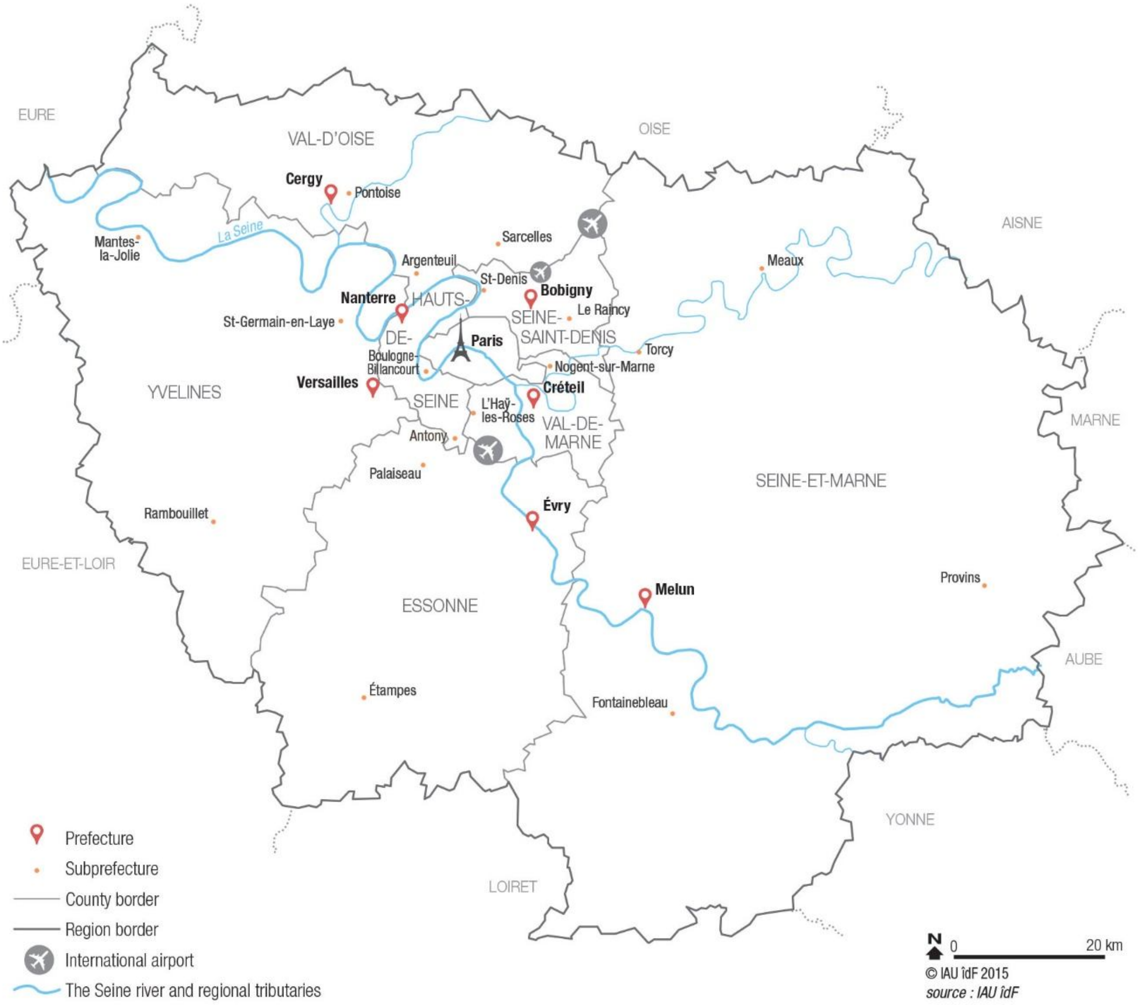
This report deals with the situation in the Paris Region and the dynamics of its economy over the last 15 years, focusing on five major aspects. First, the economic situation in this world region is described by matching up indicators and studies to answer the central question: **what is the Paris Region's true status within the world economy?** After this assessment, the report goes on to review recent trends in the Paris Region economy during times of serious economic crisis: **how resilient has the capital city region been and with what consequences?** The answers to this question are then followed by an in-depth analysis of the ongoing restructuring of the Paris Region's productive system, focusing particularly on locally supplied "in-place" or "face-to-face" activities and on the dual impact of digitalisation and "greening" on the economy. The changes in the Paris Region economy are also reflected in employment trends, which have been greatly impacted by the digital transformation of the economy and of society. **What is happening today in the Paris Region and what are the repercussions on the Region's inhabitants?** Finally, this first part ends with an analysis of the economy's localisation across the territory of the Paris Region: **how are the changes affecting the sub-regional areas?** Again, major changes are under way and, far from being passive players, the Paris Region's territorial units have emerged as protagonists of the current transformation process.

The originality of this report lies in cross-fertilising the analysis of the economy with that of its constituent territorial parts, thereby making it possible to understand the interactions between them and to provide a more systemic interpretation of the changes and issues. One of the report's main findings is undoubtedly that the economy of the Paris region remains mostly concentrated in the centre of the agglomeration, but with a core centre that is expanding because of the deep urban transformations under way in the inner suburbs. This "economic heartland" is high-performing and strategic, but cannot live without the rest of the region, which over the years has developed real driving-

[1] *Schéma Régional de Développement Economique, d'Innovation et d'Internationalisation*

forces of economic development. One of the strengths of the Paris Region's economy lies in the wealth and diversity of the links between its constituent territories, which therefore make up a single regional system.

The Paris Region



Findings

The economy of the Paris Region is that of a major urban region structured around the capital city and bearing all the hallmarks of an efficient metropolitan economy, namely: size, a diverse production base and real estate offering, world-class infrastructures, a cosmopolitan and qualified workforce and a wealth of cultural amenities. However, increasing poverty and unemployment combined with a housing crisis and declining quality of life make the region less attractive to some households. Finally, in a world subject to increasingly stringent environmental demands, the Paris Region is dependent on outside sources of energy and of many other resources, including food. Also, like other major metropolitan areas, it continues to face waste management and pollution issues.

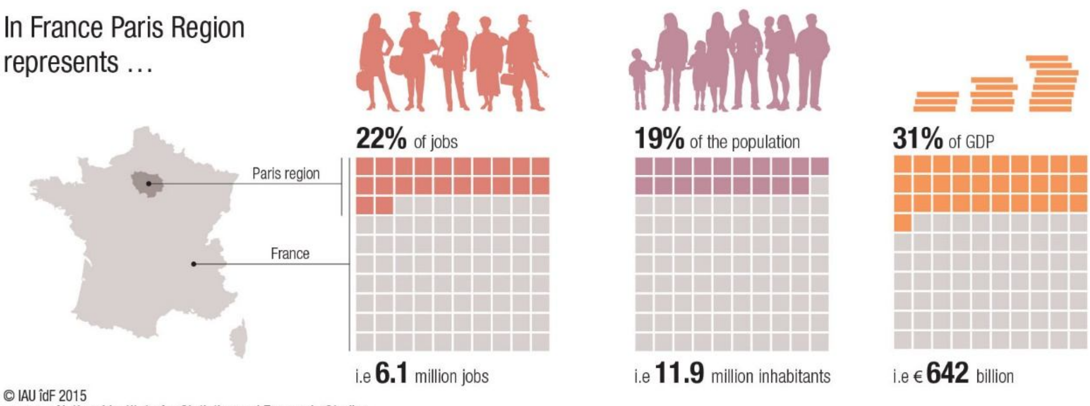
Against this background, numerous radical changes are under way - such as the large-scale migration to digital, the ecological transition and new sociodemographic trends – which are likely to continue modifying the regional context in the years to come. The economy of the Paris region will have to tackle numerous challenges in order to position itself on the new markets, create jobs and enhance its attractiveness in a situation of increased competition. Transformations and projects have already been initiated. Because of its innovativeness and many strengths, the Paris Region is well equipped to achieve its current objectives.

1. The economy of a world region

The Paris Region plays a special role in France owing to its size, its status as the capital city region and its production characteristics. It has links with the other French regions and with foreign capital cities through population migration, tourist flows, an attractive employment area, trade ties and economic cooperation ventures. The Region's specific features are not static and some trends are modifying certain aspects of its profile.

1.1 A powerful region

The first strength of the Paris Region's economy is the concentration of jobs, corporate headquarters and business start-ups. The Paris Region is home to 19% of the total population of France, but its 6.1 million jobs account for 22% of total employment in this country. All of France's very large businesses (with headcounts of over 1,500 employees each) have a location[2] in the region. They employ 39% of the Region's salaried employees and each generates revenues exceeding 1.5 billion euros. The Paris Region is also the top French region in terms of hosting foreign groups, which account for 18% of dependent employment in this region. The Region also features a high concentration of head offices of French companies. Finally, the Paris Region accounts for over a quarter of all new business start-ups in France.



source : National Institute for Statistics and Economic Studies

[2] *Exactly 228 out of 229 in 2010, according to the French National Statistics Office.*

The Paris Region generates 31% of national value added, a share that significantly exceeds its share in employment. Its GDP per job[3] is higher than that of all other French regions: 105,300 euros compared with 78,000 euros (2013).

Is the Paris Region the engine driving the national economy?

In a recent article, the economist Laurent Davezies concludes that the Paris metropolis (the heart of the heart) is the engine driving the national economy. However, according to another economist, Olivier Bouba-Olga, wealth creation by cities (in terms of GDP per job) needs to be put into perspective, because part of it is attributable to the concentration in cities of head offices and research centres. However, all stakeholders participate in value creation and some of them may be located in other regions. He also shows that less urbanised areas create value as well[4].

The Paris Region's labour market area exercises its power of attraction beyond its regional borders. Some 350,000 people have jobs in the Paris Region but reside in another region. The majority of them (240,000[5]) inhabit the Paris Basin. Movements in the opposite direction are fewer: only 73,000 residents of the Paris Region work outside it. Employment is the primary driver of arrivals of people aged 30 to 59 who settle in the Paris Region[6].

A concentration of higher educational institutions explains why the Paris Region is the region that attracts the largest number of young people aged 18 to 29: they go there to complete their studies or start their professional lives. The Paris Region has over 645,000 students, half of whom are enrolled at university. Its top business, engineering and specialised higher educational institutions (IEP, ENS, Ensad, etc.) welcome over one third of all students enrolled in such institutions in France. The Paris Region is attractive to qualified young people, to whom it offers the conditions they need in order to flourish, notably a dynamic economic and urban environment and cultural vitality.

In the eyes of new talent, culture and urban life are very appealing features, which indirectly favour city economic development. New York asserts that culture is the second vector of its metropolitan strategy. In Paris and London, culture is a factor of social cohesion and the culture-related economy is an economic driver. Paris benefits from a rich heritage and a considerable cultural offering (exhibitions, festivals, etc.), but also from something that makes it unique among world cities: attachment to diversity. All major cities now compete to attract and host major sports and cultural events, seen as catalysts for economic activity and as instruments for spatial planning and development. The Paris Region follows the same line of reasoning with its two bids to host the Olympic Games in 2024 and the World Exhibition in 2025.

With 11.9 million inhabitants, some of whom on high incomes and wages, and with two of the richest counties in France (Paris and Hauts-de-Seine), the Paris Region is a consumer marketplace of considerable importance. This potential, which benefits the region's local economy, is boosted by the number of tourists. The Paris Region as a whole and the city of Paris, in particular, exert a strong attraction on tourists both nationally and globally: they welcome 47 million tourist arrivals per year, nearly half of which from abroad, thanks to world class destinations (Paris, the palace of Versailles, Disneyland Paris) and major sports or cultural events (White Night, Heritage Day, Techno Parade, Rock-en-Seine, Roland Garros tennis championships, Paris Marathon, FIAC international contemporary art fair, etc.). In 2014, tourists spent 20.8 billion euros in the Paris Region.

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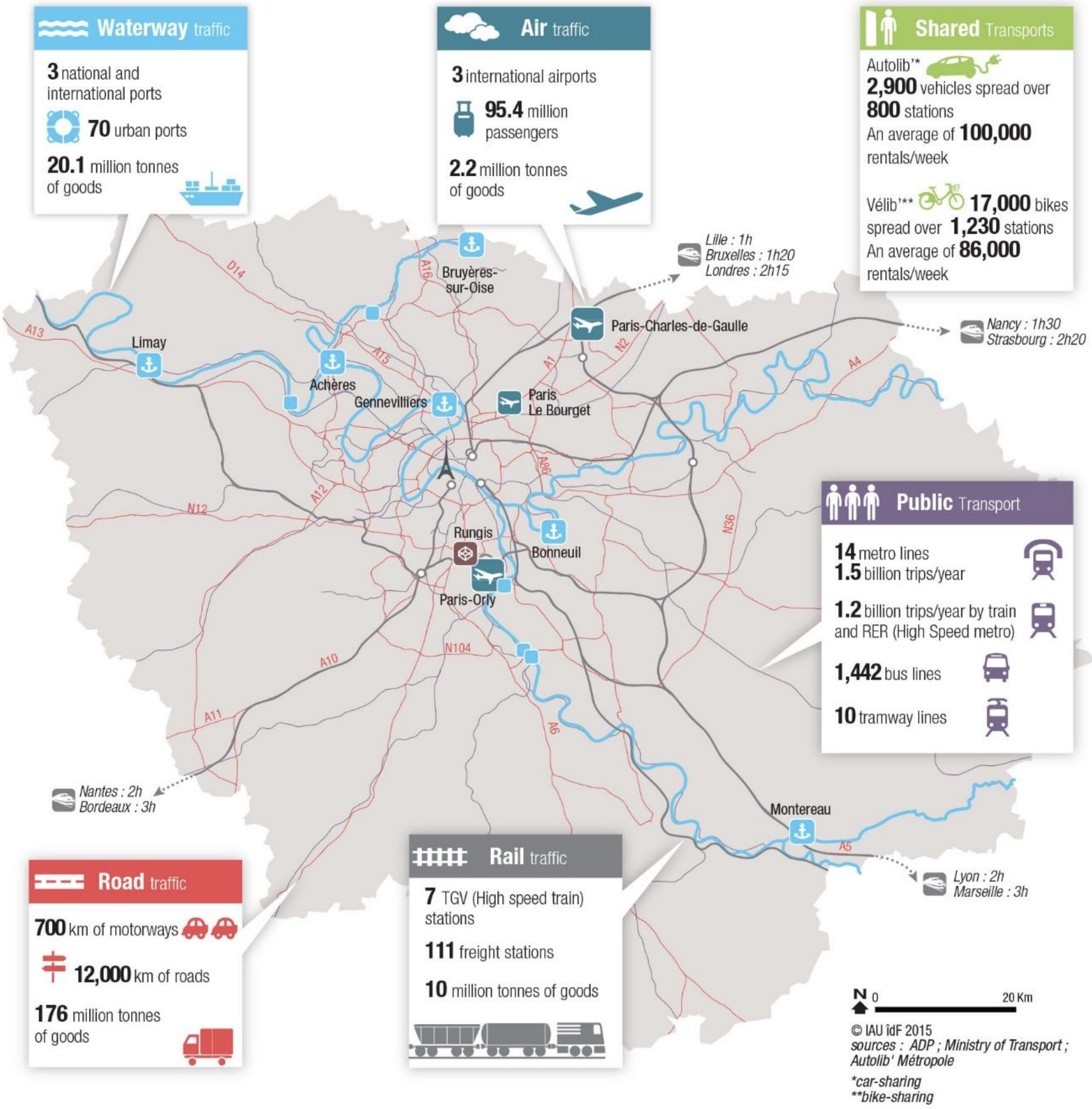
[3] *Source: INSEE, gross domestic product per job per region, historical series.*
[4] *On this subject, see: Alternatives économiques, n°351, November 2015.*
[5] *Source : Insee, RP 2012*
[6] *Augustine Nathalie, « L'emploi, moteur des arrivées en Île-de-France pour les 30-59 ans », Note rapide, n° 562, IAU îdF, August 2011.*

1.2 Efficient infrastructures

The Paris Region has major infrastructures to ensure the seamless flow of people, goods, capital and data that cannot be dissociated from the metropolitan economy. It ranks number one in Europe in terms of road network. It is Europe's second-largest airport hub and the world's 11th largest. Its air freight capability meets the need to transport perishable or high value-added products, but it is also adapting to a more flexible economy featuring lower inventories and faster flows. In 2014, 2.2 million tonnes of goods were shipped by air, of which 2.1 million via Paris-Charles de Gaulle airport. Competition with airports in Europe and the Middle East is very fierce, so ADP, the Paris airports operator, aims to densify its cargo area in the next few years in order to double its capacity. According to the OECD, the volume of worldwide air freight traffic is set to triple over the years 2001 to 2020.

The Rungis wholesale Market, which is of National Importance (MIN), is celebrating its 45th year of existence. It is the world's leading fresh produce market. Its revenues have been growing steadily, amounting to nine billion euros in 2014, and 2.6 million tonnes of produce a year pass through it or are traded in its pavilions or stored in its warehouses.

Flows of people and goods circulation

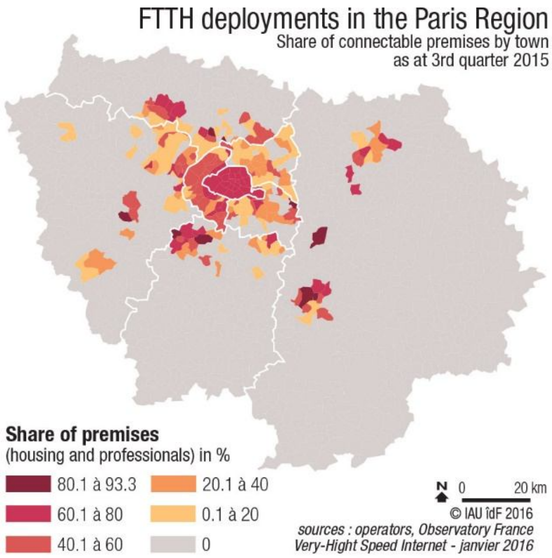


The railway network is highly developed compared with that of other metropolitan areas. In terms of passenger traffic, there are national lines, international services (featuring seven high-speed train stations and direct links with London, Amsterdam and Frankfurt) and regional networks (the Transilien with 218 stations and the RER regional rapid transit rail network with 243 stations). As part of the Greater Paris development project, these networks will be improved and complemented by a new regional metro network made up of 72 new stations. The objective is to form a denser network of interconnection stations linking both radial and circular railway lines, but also linking the railway system with the airport system (planned New Greater Paris station project at Paris-Charles de Gaulle airport and a high-speed train station at Orly airport). This major project could provide leverage to enhance the region's attractiveness to investors and improve the quality of life enjoyed by residents of the Paris Region. How? First, by reducing travel time between economic centres (e.g. to 35 minutes compared with 65 minutes today[7]) and between home and work (e.g. to 16 minutes compared with 65 minutes today); and second, by turning these new stations into showcases for and gateways to the Paris metropolis, as well as drivers of urban regeneration in the station districts concerned.

Railway freight relies on 111 freight stations and 640 facilities connected to them, which are necessary for the expected development of this mode of transport. These facilities are located as close as possible to the population, a crucial requirement for urban logistics.

Finally, the regional river network is ranked second in continental Europe, with 70 ports and 10 multimodal hubs serving 500 kilometres of waterways. Gennevilliers is France's number one river port. This network of ports could be complemented in the near future by the development of the Port Seine-Métropole Ouest (PSMO) project in the plain of Achères to the west of Paris[8].

The quality of telecommunication networks is also a factor of attractiveness. For many years, all large companies have been using optical fibre. Today, the challenge is to deliver the service to all the homes and work premises of subscribers in the Paris Region. In 2015, over 2 million premises were connected, an overall coverage rate of 33%, but with significant contrasts (reflecting differences in urban geography) ranging from 50% or more in Paris and les Hauts-de-Seine to 4% in Seine-et-Marne. Deployment is now under way on an industrial scale: 470,000 premises were declared as connectable between July 2004 and 2015. The Paris Region aims to be the first region in Europe to be entirely equipped with fibre-optic cables by 2020/2025[9].



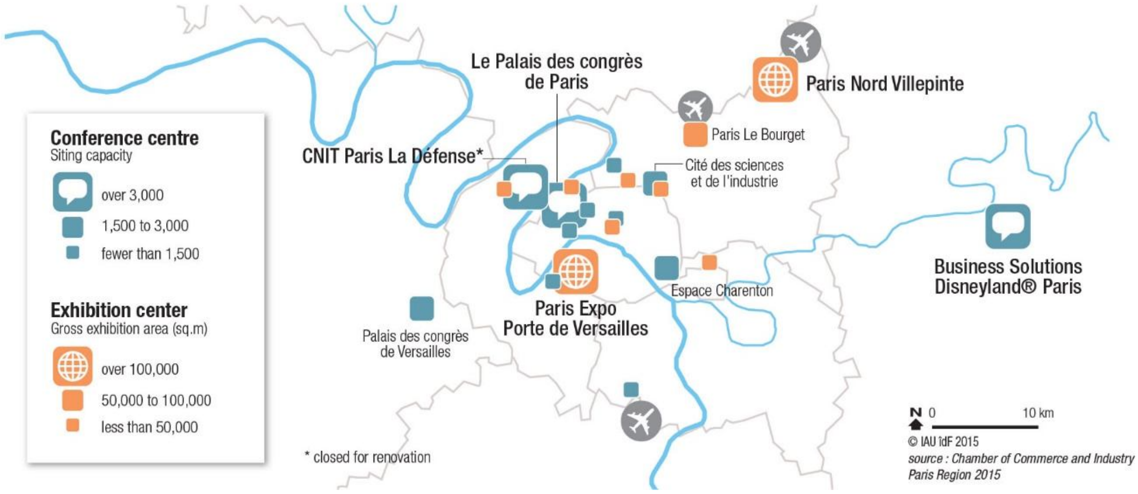
Today, data centers are indispensable to the economy and are another factor of the attractiveness of the Paris Region, in which around one third of all French data centers are located. On a European level, the region is ranked behind London and Frankfurt in this respect. However, it is attractive to data center operators for the following reasons: the size of its economy, its geographical immunity from the main natural hazards, the significant availability of land in flood-free zones and high quality power supply at currently attractive prices.

In Europe, the Paris Region is a leading location for meetings and business events. In 2013, 12 million people attended events in the Region's main conference and exhibition centres. Numerous

[7] *According to the Greater Paris Company (SGF).*
[8] *This project was the subject of a public inquiry in 2014.*
[9] *Government authorities (the state, the region, the county) and telecom operators have undertaken a joint programme for generalising the deployment of fibre-optical networks.*

trade fairs are organised in the Region such as the Paris World Motor Show, the Paris International Agricultural Show and the Paris Fair.

Conference and exhibition centers



1.3 At the centre of world trade flows

Various rankings of cities have identified Paris as one of the top world cities in terms of ability to attract decision-making centres and to play an active part in globalisation. A benchmarking study of such rankings[10] in 2015 confirmed that when they refer to Paris they mean the Paris Region (known as l' Île-de-France) and that it is often ranked third.

Paris Region in three international rankings

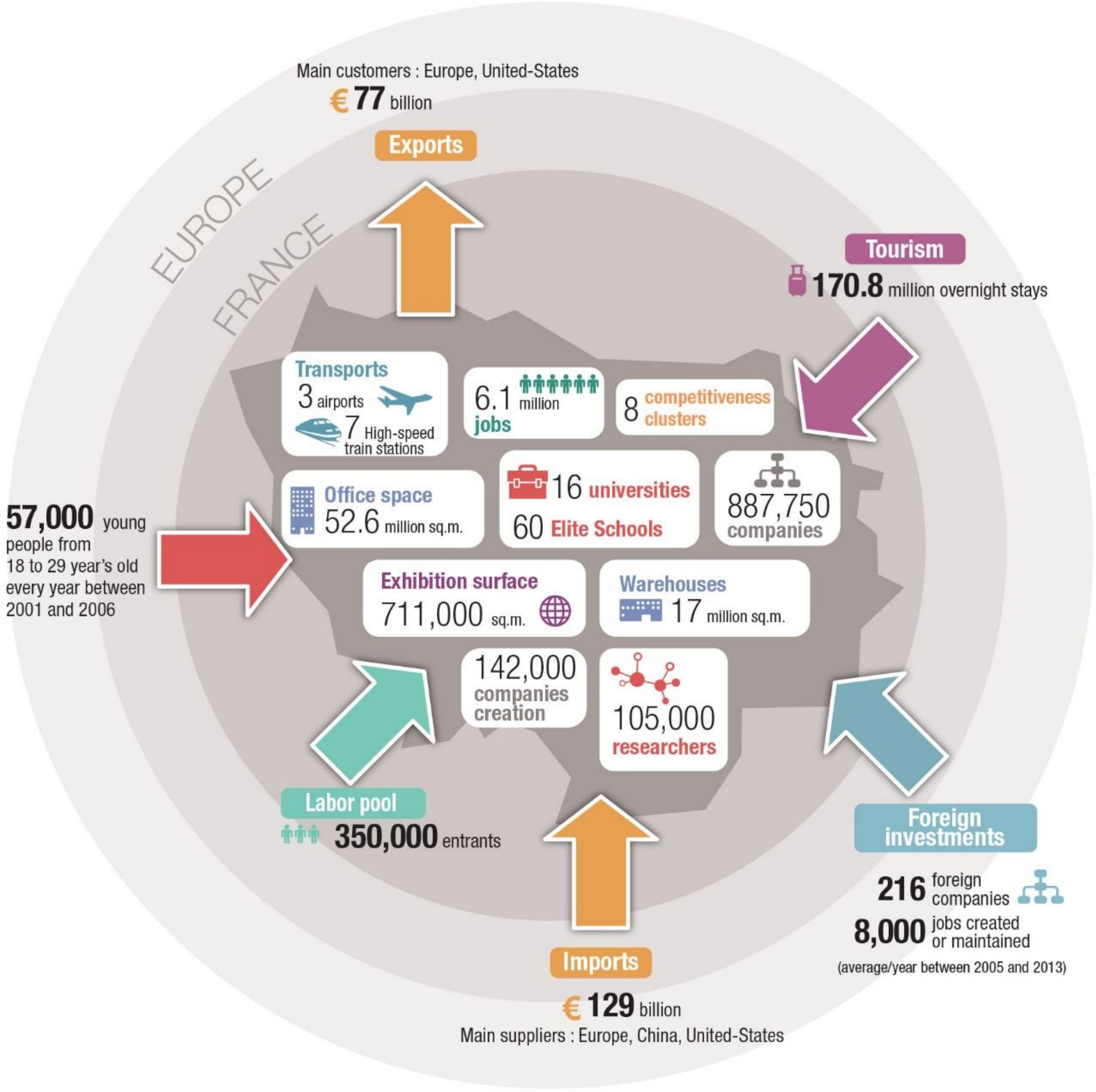
The market reach of businesses in the Paris Region also enables Paris to rank among the top three world cities after London and New York in terms of integration into global corporate networks. Paris plays a special role in coordinating interactions between European cities and as the leading conduit of investment outflows from Europe to the rest of the world, particularly to Japan[11].

The Paris Region is at the centre of world trade flows: its main trading partners are Europe, which accounts for 58% of its exports and 63% of its imports, followed by America and Asia (with which it has a large trade deficit). The Paris Region's main customers are Germany, the United Kingdom, Italy, Spain and the United States. The most exported products reflect the specialisation

[10] Sciences Po, Apur, Benchmark: Paris parmi les grandes villes du monde, novembre 2015.
[11] Petit Thierry, « L'aire urbaine parisienne dans les réseaux mondiaux des entreprises multinationales », IAU îdF, Note rapide, n°641, February 2014.

of the Paris Region's industrial base (in the automotive, aeronautical and pharmaceutical sectors) and its important contribution to the luxury goods sector (leather, perfumery, cosmetics, etc.)[12].

Some figures on the Paris world Region's economy



© IAU îdF 2015
sources : National Institute for Statistics and Economic Studies (population, jobs, companies) ; PRE/AFI (foreign investments) ; French Ministry of Higher Education and Research (Research) ; French customs (Imports, exports), CRT (tourism) ; Grecam (real estate) ; ORIE (office)

[12] *Sources: Key Figures for 2015, IAU îdF, Insee, CCI Paris Île-de-France.*

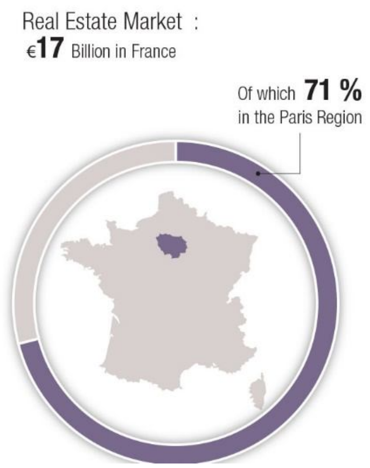
The integration of the Paris Region into the global economy can also be seen from the presence in the region of foreign businesses. One third of the world's major multinational groups have a head office in the region. The main investors are European and American. On average, between 2005 and 2013, two hundred and sixteen foreign businesses a year located to the Paris Region. Their number tended to increase over the period, peaking in 2013 at 279. New jobs directly linked to foreign investments (8,000 a year on average between 2005 and 2013) tended to diminish. However, according to Paris Region Entreprises, in 2014 investments in the Paris Region by international corporations increased by 32%, a much higher figure than in the rest of the whole of Western Europe.

The Paris Region is also open to foreign populations. One third of people who have recently arrived in France have settled there and nearly 17% of the Region's inhabitants are immigrants. Close to half of them come from the African continent, while almost a third come from Europe. Most of the newly arrived immigrants are young adults who are students or economically active people with higher qualifications than among previous generations[13]. The presence of a cosmopolitan population has a positive impact on the economy because of its cultural diversity, international networks and trade relations with the countries of origin. For example, Paris is the world's leading city in terms of relations with African cities.[14]

1.4 An attractive commercial property offering and market

Since the mid-1990s, the commercial property market in France has entered the era of financialisation. Real estate used to be based on its asset or heritage value. Today, it is managed in the same way as financial assets that generate rental income and capital gains on resale. The market has become a global market and there are two types of investors: institutional investors (insurance companies and pension funds) and "opportunistic" investors (property and real estate investment companies) that seek out higher yields.

In this context, businesses have been increasingly choosing to rent standardised real estate products such as high-rise buildings and business parks for office space, shopping centres, retail parks and logistics facilities. Investors are also interested in warehouses and new products such as apartment hotels. In spite of slower growth, considerable amounts of money have been invested in these products. France in general and the Paris Region in particular, are very attractive to investors owing to the quality and variety of the commercial property offering and to the transparency of the real estate market. In 2014, 71% of all the amounts committed to France[15] (totalling 17 billion euros) were invested in the Paris Region. The market is dominated by trading in office real estate (which accounts for three quarters of acquisitions), followed by trading in retail space. Although the majority of investors are French, the market is very internationalised thanks to European and, to a lesser extent, American investors. Finally, the property sector is a major regional employer: according to the Chamber of Notaries, which refers to the existence of "a genuine real estate industry", 300,000 people are employed in this sector.

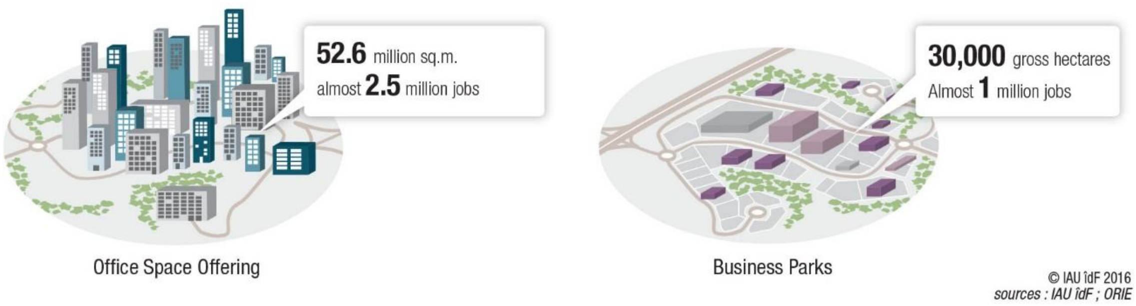


The commercial property offering also helps enhance the good image of the Paris Region. With 52.6 million sq. m. of office space, it has the largest stock of commercial property in Europe ahead of Greater London's: it hosts half of the Paris Region's total employment and has a high concentration of service-related businesses. A distinctive feature of the Paris Region's market is the great diversity of

[13] *Sagot Mariette, « Arrivées de l'étranger : l'Île-de-France attire des jeunes qualifiés », in Atlas des Franciliens, 2013 Edition, IAU IdF, January 2013.*
[14] *Petit Thierry, « Positionnement de l'aire urbaine parisienne dans les réseaux mondiaux des entreprises multinationales », IAU IdF, September 2013.*
[15] *Source: Cushman & Wakefield, January 2015 data.*

its offering in terms of both type and location. Furthermore, property expenses borne by businesses are very competitive compared with those in other world-class metropolitan areas.

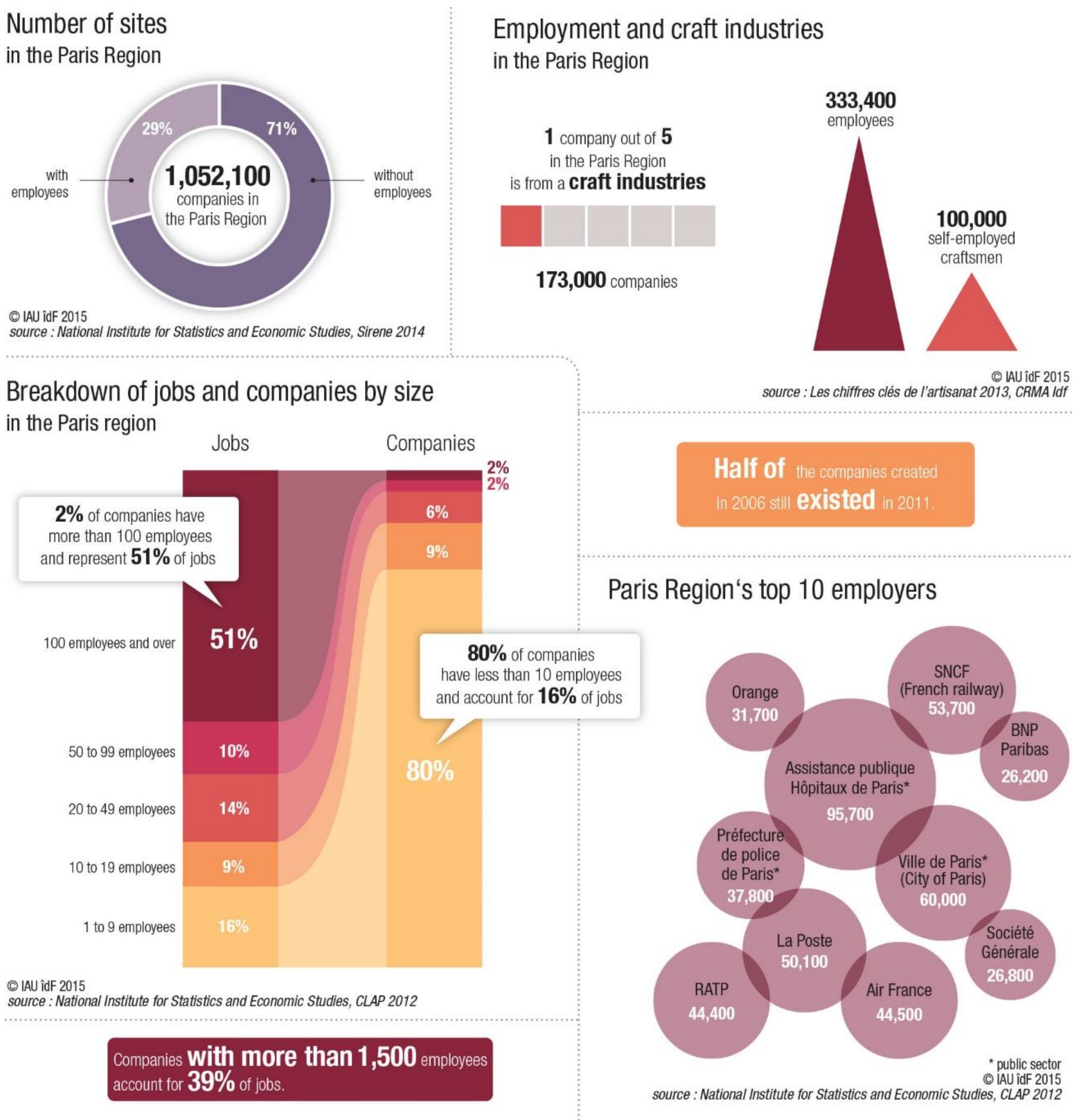
The Paris Region also has a diversified offering of business parks featuring 1,300 developments that represent 30,000 hectares of gross surface area and one million jobs. In recent years, corporate demand for property has evolved rapidly due to major economic changes, globalisation of markets, expansion of the tertiary sector, international competition and the increasingly important role of international standardisation. A new generation of business parks has been developed including office parks, prestige developments, and upmarket "products" with high-class sustainable buildings that come with a comprehensive package of integrated services and amenities, as well as mixed or specialised business parks (e.g. logistics facilities). Examples of these developments are Ecopôle in Combs-la-Ville/Lieusaint, the Aérolians Paris business park in Tremblay-en-France, the planned Triangle de Gonesse business park and the QOX sud development in Palaiseau.
The offering of warehouse space in the Paris Region has been very significantly renewed and redeployed to the outer suburbs of Paris since the end of the 1990s, as a result of a dual trend: first, the outsourcing by companies of their logistics; and second, the professionalisation of construction activity. Most new facilities feature class A warehouses (i.e. fully compliant with EU standards) and logistics parks. With 17 million sq. m. of warehouse space, the Paris Region has become France's number one logistics market.



Economic and societal changes have deeply transformed retailing. Paris is a metropolitan magnet that attracts consumers from all over the world: French-style fashion is concentrated in the capital city's department stores, luxury shops and main shopping streets. In the rest of the Paris Region, a dozen very large shopping centres provide a mix of shops, catering facilities and, increasingly, leisure amenities. The Quatre Temps shopping centre is the busiest in Europe. Retailing is being renewed by the development of new concepts, such as, notably: shopping routes around stations and airports and factory outlets located on the outskirts of the city along major roads. The dynamics of creation and renewal are powerful: between 2005 and 2014, planning permission was granted for the development of 360,000 sq. m. of retail space per year on average.

1.5 A diversified production base

There are over one million business establishments in the Paris Region, seven out of ten of which have no employees. Sixteen per cent of Paris Region salaried employees work in establishments employing less than 10 people. Over half of them work in large establishments with 100 or more workers. Among the region's major employers are public sector organisations such as the Paris hospitals, the city of Paris, transport companies (SNCF French Railways, Air France), communication companies (the French Post Office, Orange), banks (Société Générale, BNP Paribas), vehicle manufacturers (Peugeot, Renault) or hypermarket chains (Carrefour).
Around one business out of five in the Paris Region is a small craft business. According to the Regional Chamber of Trades and Crafts (the CRMA ÎdF), there were 173,000 small craft businesses in 2013, 38% of which were individual undertakings, one third of these being small entrepreneurs[16].

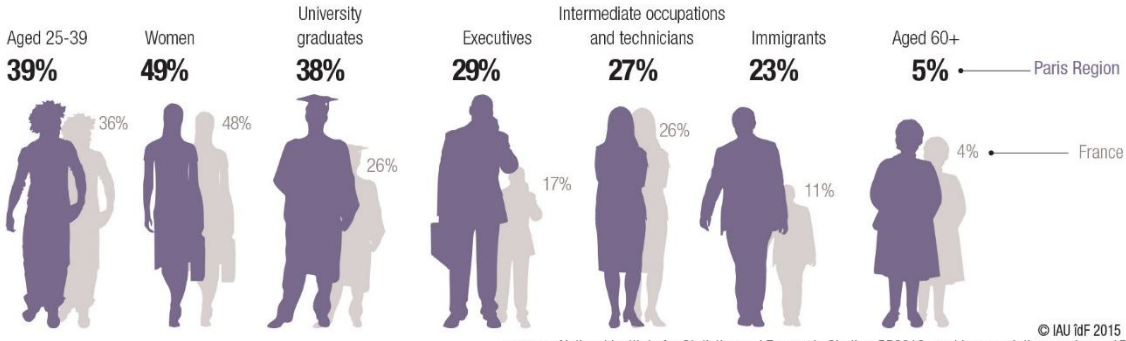


[16] *Les chiffres clés de l'artisanat 2013, CRMA ÎdF.*

1.6 A cosmopolitan and qualified labour force

In 2012, there were nearly six million economically active people in the Paris Region. Excluding young people undertaking lengthier studies, the proportion of economically active people is higher in the Paris Region compared with the average for France: 75% of people aged 15 to 64 are economically active in the Paris Region compared with 71% in the rest of France. The working age population in the Paris Region is young: 31% of those aged 15 to 64 are under 30 compared with 17% in the rest of France.[17]

Characteristic of the working population in the Paris Region compared with that of France



source : National Institute for Statistics and Economic Studies, RP2012, working population aged over 15

The strong participation of women in professional life and their high fertility rate are two features that distinguish France from other members of the European Union[18]. In the Paris Region, women are more economically active than the average for women in France. After exploding in the 1970s and 1980s, the female participation rate has continued to progress, albeit at a slower pace. The participation rate of females aged 15 to 64 in the Paris Region (71.4% in 2012) has tended to get closer to that of men (77.7%).

Compared with the national average, the labour force in the Paris region has more young adults (aged 25 to 39) and more higher education graduates. As a result of education policies that favour longer periods of study, the younger generations are better and better qualified: in the Paris Region in 2012, 48% of workers aged 25 to 45 and 54% of workers aged 25 to 34 were higher education graduates[19]. Several studies, notably on a European level, have concluded that improving the qualifications of the population fosters economic growth.

Another characteristic of the Paris Region is the higher proportion of immigrants in the labour force. The number of women in this section of the population has greatly increased and its level of qualification is rising: 32.2% of members of the labour force who arrived in France in the early 2000s are higher education graduates[20]

The participation rate of senior citizens has risen and is higher in the Paris Region, but remains below the Lisbon objectives. The Paris Region's labour force is likely to age in the coming decades. According to a demographic trend scenario, the proportion of people aged 60 and over among members of the labour force should reach 6.8% in 2030, whereas that of young people aged 15 to 24 should remain almost stable over the period (10.8% in 2030). The participation rate of 60 to 64 year old people, which had been declining for over 30 years, could rise again significantly as a result of the combined effects of later retirement and lengthier studies[21].

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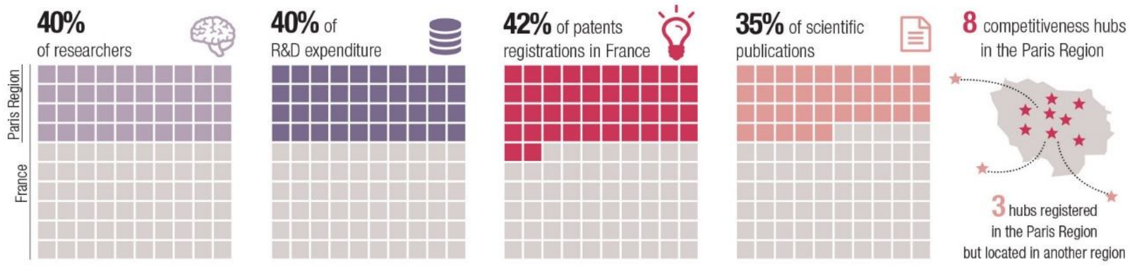
[17] Kesseler Estelle, Leroi Pascale, « Avoir moins de 30 ans et travailler en Ile-de-France », in Atlas des Franciliens, 2013 Edition, IAU IdF, January 2013.
[18] Camors Carine, Leroi Pascale, « L'emploi des femmes, plus qualifié, plus contrasté », in Atlas des Franciliens, 2013 Edition, IAU IdF, January 2013.
[19] Source: INSEE, RP2012, 15-64 ans non scolarisés.
[20] Sagot Mariette, « La place des immigrés dans l'emploi francilien », in Atlas des Franciliens, IAU IdF, January 2013.
[21] De Biasi Kévin, Louchart Philippe, Simonin Bernard, « En 2030, plus d'un actif francilien sur quatre aurait 50 ans ou plus », Note Rapide, n° 610, IAU IdF, October 2012.

1.7 A leading region in research and innovation

The Paris Region benefits from a rich and high-class economic ecosystem, which brings together universities, specialised higher education institutions, laboratories and research centres, enterprise incubators, business clusters and competitiveness hubs. A real hotbed of innovation, it features a high concentration of managerial functions, business services, financial institutions and talented people in the fields of science and technology, but also in the arts, culture and entrepreneurial ventures.

The Paris Region is a worldwide leader in terms of research and innovation and is number one in Europe in terms of R&D expenditure, patent registrations and scientific publications. It accounts for 7% of total European expenditure on R&D (ranked 1st ahead of Stuttgart and Munich). This potential shows its capacity for creativity and innovation, which is crucial to France's international competitiveness.

Research and innovation



© IAU îdF 2015
sources : Ministry of Higher Education and Research; National Institute for Research and Innovation; Thomson Reuters - WoS et Eurostat, Statistical treatment

The Paris Region accounts for 40% of domestic R&D expenditure in France and 42% of patent registrations. It leads the nation in terms of the number of jobs and their share of total national employment: over 150,000 people work in public or private sector research in the Paris Region, two thirds of whom as researchers. Over one third of people employed in national public-sector research work in the Paris Region, most of whom being employed by major French public-sector organisations such as the CNRS[22], the CEA[23] and INSERM[24]. In terms of location, these institutions are highly concentrated in Paris and the inner suburbs, but some of them are located on the outskirts in centres of excellence such as Orsay and the Saclay plateau or in towns such as Evry, Cergy-Pontoise and Marne-la-Vallée.

In France, competitiveness hubs have been set up to encourage academic research to focus more on applied research. Each hub brings together into a network higher educational institutions, research centres and businesses involved in innovative projects. In order to enable research to benefit from larger budgets, the hubs rely on several means of action: technology transfers, relationships and synergies between economic players. This enables the hubs to gain international recognition on the world economic and scientific stage and to position themselves at the same level as other centres of excellence of worldwide renown. Today, the Paris Region hosts eight competitiveness hubs:

- Advancity (sustainable city and urban ecotechnologies);
- ASTech (aeronautics, space and on-board systems);
- Cap Digital (digital transformation);
- Cosmetic Valley (perfumery and cosmetics);
- Finance innovation (finance);
- Medicen (high tech healthcare and new therapies);

[22] National Centre for National Research
[23] Atomic Energy Commission
[24] National Institute of Health and Medical Research

- Systematic (design, production and mastery of complex systems);
- Mov'eo (transport and mobility).

The development of scientific campuses and their integration into the economic fabric are key challenges facing metropolitan areas, which are seeking to foster R&D activities in their regions. Such activities are based on exchanges of interdisciplinary knowledge, cross-cutting collaboration and new practices. Scientific campuses contribute to the development of dynamic clusters. Their high quality architecture and urban planning foster technological and societal innovations. Today, in the Paris Region, several locations, some of which are still under construction, reflect this approach, such as the Paris-Saclay campus, the Cancer Campus in Villejuif, the Condorcet Paris-Aubervilliers campus, etc.

2. A strained context

As just mentioned, in many respects, the Paris Region's economy performs well. However, although it has been more resilient than the average for French regions, it has also been adversely affected by the economic crisis, which has resulted in increasing unemployment and social inequality. At the same time, like other metropolitan areas, the Paris Region faces major environmental issues owing to its energy dependency on certain resources and to pollution caused by a high concentration of human and economic activities.

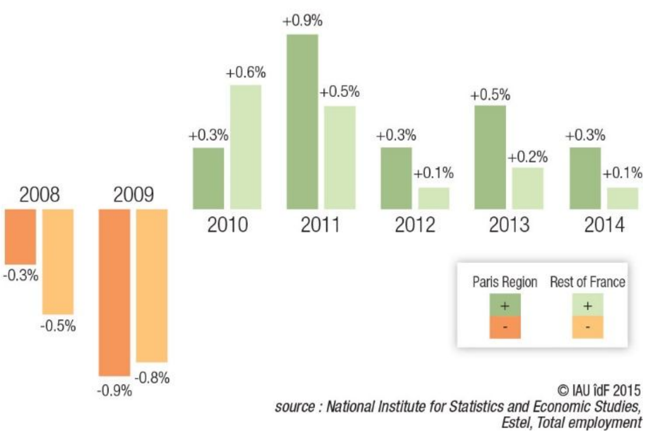
2.1 The Paris Region in the face of the crisis

Between the years 2000 and 2013, employment rose by 6.2% in the Paris Region, broadly in line with the average for France. Over this period, GDP per job grew by 1% compared with 0.5% in the other regions, while employment declined at a slightly slower rate. Within two years, the Paris Region reached the level of employment recorded at the end of 2007. This improvement continued in 2014[25], buoyed notably by the dynamism of business services.

In the 1990s, employment had grown more slowly in the Paris Region compared with the other major French regions, but the gap narrowed between 2000 and 2010. Since 2011, the employment rate has evolved more favourably, with higher annual rates than in the rest of France.

The factors that have contributed to these outcomes are: the Paris Region's positioning in high value added activities; earlier deindustrialisation; a slower decline in the market services sector; growth in self-employment; and sustained activity in the construction sector.

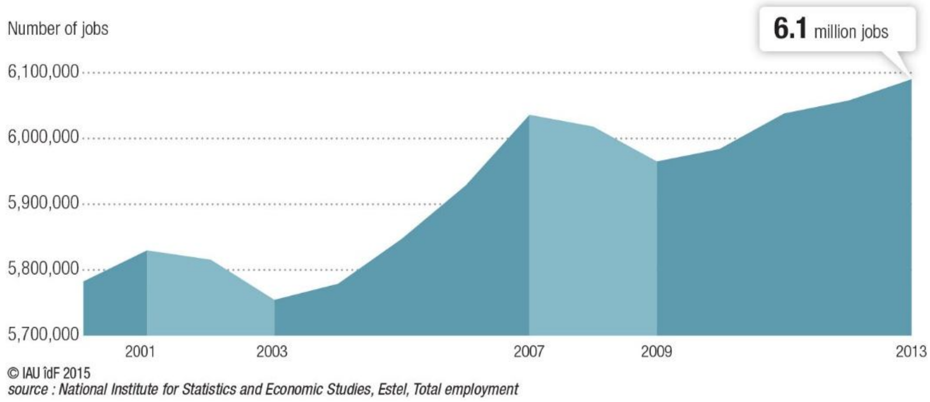
Annual change in employment rate 2008-2013



25 *Créations et destructions d'emplois en France, FIE, 2014.*

Employment cycles in 2000-2013

Since the year 2000, there have been three stages in the employment cycle: a period of employment growth (2000-2007), during which employment growth was slower in the Paris Region than in the rest of France; in the throes of the crisis (2008-2009), two years of decline in employment, which was less marked overall in the Paris Region; and then, since 2010, a period of moderate employment growth.

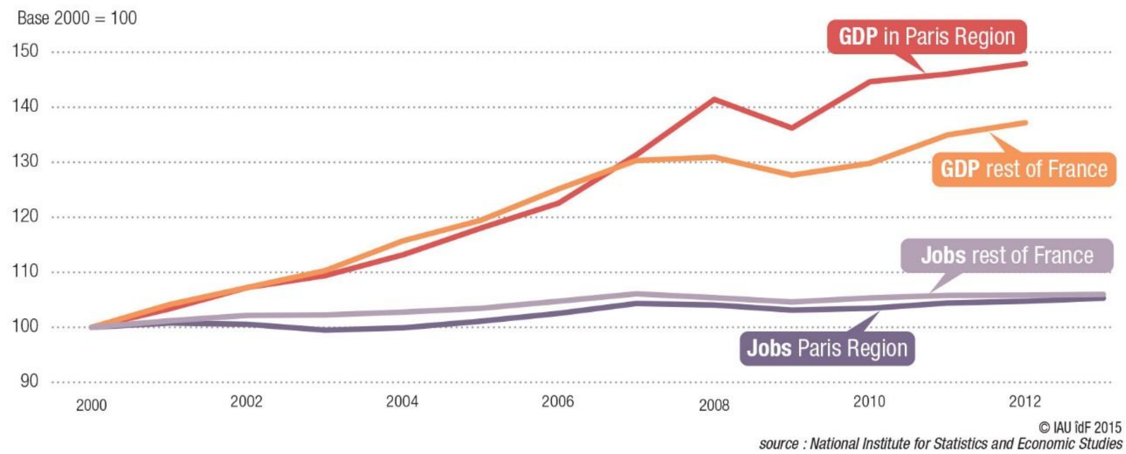


2.2 An economy that creates few jobs

In spite of crisis-related reductions in the labour force, the trend growth in job creation rose from 5.8 million in the year 2000 to 6.1 million in 2013. However, census data show that over a long period the economically active population increased faster than job creation. Between 1990 and 2008, the population grew at a rate of 0.7% per year, whereas employment grew by 0.6%. This differential continued: between 2008 and 2012, job creation rose by 0.4% per year and the economically active population by 0.6%.

In all the major regions of France, GDP growth has been stronger than employment growth. This gap, which widened in the years 2000, has been greater in the Paris Region than in the rest of France[26]. Although the overall trends in job creation have been similar in the Paris Region and the rest of France, GDP growth has been higher in the Paris Region. Internationalisation of the factors of production and heightened price competition have led the Paris Region to specialise in high value added and not very labour-intensive activities.

Comparative trends in GDP and employment in the Paris Region and the rest of France 2000-2013



[26] *Leroi Pascale. « Emploi et crise en Ile-de-France et sept autres régions françaises », IAU IdF, January 2014.*

The gap between GDP per job in the Paris Region and the average for the other French regions has continued to widen, rising from EUR14,300 (on average over three years : 1999-2001) to EUR24,700 (2009-2011).

GDP called into question

GDP has been widely used as the main indicator of economic growth, and yet it does not take the social and environmental dimensions into account. The social situation in a given area is a complex reality that encompasses numerous aspects including housing, healthcare, education and living conditions. Focusing on social inequality in different regions raises the issue of development rather than that of growth. Development relates to a multifaceted reality that cannot be accounted for by a simple econometric and productivist metric such as GDP.

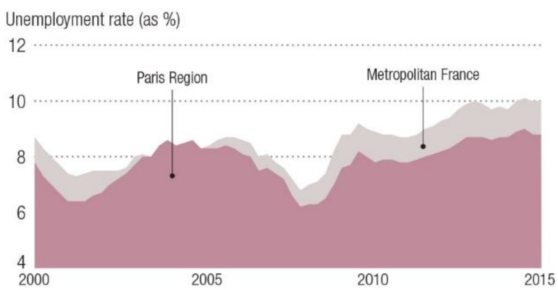
In 2009, the Stiglitz report drew the conclusion that new indicators were needed to measure economic performance and social progress in territorial entities. As a result, little by little, summary indicators were devised to measure a territory's human development and its social and environmental inequalities. It is against this background that the IAU îdF has developed indicators that complement the GDP indicator, namely the Regional Social Health indicator (ISSR), the Economic Vitality indicator (IVE) and the environmental time indicator (ITE)[27].

2.3 Rising unemployment and inequality

As in other metropolitan areas, unemployment and social inequality have increased in the Paris Region. The crisis has made an already bad situation even worse. Between early 2008 (minimum unemployment rate) and the third quarter of 2015, regional unemployment rose by 2.9 points (3.4 points in France as a whole) to reach 9.1% in the Paris Region (10.2% in France).

For 20 years, the unemployment rate has remained high in the Paris Region and in France as a whole. Long-term unemployment (i.e. one year and over) affects 42% of job seekers. True, in the Paris Region, the job structure has resulted in a lower unemployment rate. The share of insecure jobs is also smaller than the average for France. The young, workers and unskilled people are the most exposed to unemployment and inequalities increased during the crisis.

Changes in unemployment rate



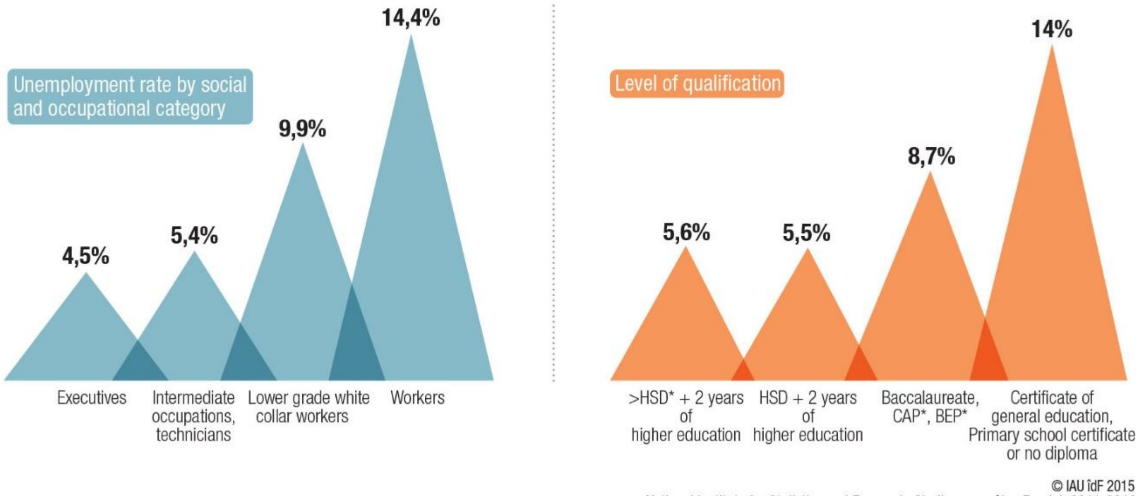
© IAU îdF 2015
source : National Institute for Statistics and Economic Studies, Unemployment rate (by International Labour Office)

Between 1997 and 2011, the social health index recorded an unfavourable trend in the Paris Region. Housing posted the worst deterioration.

Regional inequalities increased significantly, while poverty and over-indebtedness worsened as well. The social situation being very sensitive to changes in the economic climate, the 2008 crisis had a particularly negative impact on the most vulnerable sections of the population: a sharp rise in long-term unemployment and an increase in over-indebted. The income poverty rate also rose, as did the proportion of the population on income support. However, the sharp and continuous deteriorating trend in the social situation from 2008 onwards seems to have slowed somewhat in 2012.

[27] Sagot Mariette, « La santé sociale en Ile-de-France », Note rapide n° 627, IAU IdF, July 2013 ; Nascimento Iuli, Seguin Louise, « Un nouvel indicateur de l'environnement pour appréhender le développement durable », Note rapide, n° 597, IAU IdF, July 2012.

Unemployment inequality between economically active people



source : National Institute for Statistics and Economic Studies, enquêtes Emploi, 2011-2012
**Vocational training certificates*

According to the Strategic Analysis Centre[28], the proportion of salaried employees on unstable incomes and occupying insecure jobs could grow by 2030. The development of low-quality jobs (temporary contracts, involuntary part-time work, and low incomes) has had major consequences: poverty, indebtedness, violence, health and ecological hazards, high wealth concentration and growing income disparities. These inequalities could exhaust society's collective energy and reduce the chances of exiting the crisis. As emphasised by Richard Wilkinson[29], "Egalitarian societies are the most dynamic, creative and capable of changing."

In 2013, during the *Victimhood and sense of insecurity* survey[30], over half of the inhabitants of the Paris Region said they were concerned about the possibility of losing their jobs, i.e. twice as many as in 2001. Twenty-six per cent said they were worried about poverty. Thus today, all in all, over eight Paris Region residents out of 10 fear that they will end up jobless and insecure. It is the first time since the first survey that the sense of insecurity has spread to such a large proportion of the population.

The Paris Region: selective but also inclusive

According to a study by France Stratégie, the Paris Region appears to be the champion of upward social mobility: 40% of economically active young people, the children of working class and clerical workers, occupy middle or senior job positions; and nearly 20% of the Paris Region's upwardly mobile residents were born there. Natives of the Paris Region who reside in another region are less successful in terms of upward social mobility than those who still live there[31]?

Furthermore, a study by Direccte[32] Île-de-France shows that unemployment gaps between men and women, French people and foreigners and between young people and older workers are much narrower in the Paris Region.

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[28] *Centre d'analyse stratégique, Les secteurs de la nouvelle croissance : une projection à l'horizon 2030, 2012.*
[29] *Wilkinson Richard, « Lutte contre l'inégalité et transition écologique vont de pair », dans Alternatives économiques, n°331, January 2014.*
[30] *Carrère Marie, « Victimation et sentiment d'insécurité en Île-de-France : le point en 2013 », Note rapide, n°625, IAU îdF, juillet 2013.*
[31] *Dherbécourt Clément, « La géographie de l'ascension sociale », La Note d'analyse, n° 36, November 2015.*
[32] *Daniel Catherine, « Le chômage en Île-de-France. Son importance, ses caractéristiques par rapport aux autres régions », Bref Île-de-France, n°53, Direccte Île-de-France, January 2015.*

Wealth and poverty have both gained ground in the Paris Region, but the 2008 crisis had a particularly adverse impact on the least qualified residents, giving rise to greater inequalities. Poverty has been increasing since the end of the 1990s. In 2012, the poverty rate stood at 15% in the Paris Region compared with 14.3% in the rest of mainland France. Formerly, poverty was concentrated among elderly people. Today, poverty most often affects young people and children, as well as more and more urban dwellers. Thus, in 2011[33], 24% of single-parent families and 19% of large families were living under the poverty line.

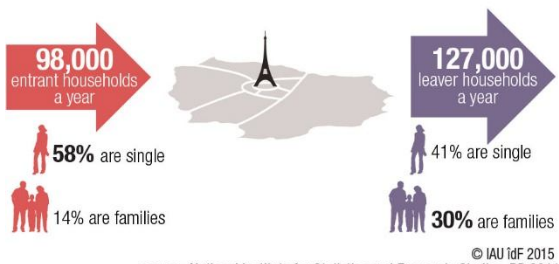
The Paris Region has the highest levels of inequality in France. It features the two richest counties, namely les Hauts-de-Seine and Paris, and the poorest one, namely la Seine-Saint-Denis. Ten per cent of households in the Paris Region earn less than EUR547 a month, which is among the lowest levels of income in the regions of mainland France[34]. Income inequalities have increased in most OECD member-states. According to the OECD (2015 report), the increase in the proportion of people in part-time work, on fixed-term contracts or in self-employment, has been a major factor of increased inequality. Low-skilled workers on fixed-term contracts, in particular, have levels of active income that are much lower and more unstable than those of workers on permanent contracts.

2.4 Loss of appeal for certain households

Poverty and inequality levels reveal the limitations of the current system for integrating all sections of the population. The Paris Region is not the only one facing such difficulties, but the deterioration in the living conditions of certain categories of the population raises questions specific to the Paris metropolitan area. Although employment is a driver of the region's attractiveness, notably in the eyes of executives and young people, other variables contribute to the Paris Region's comparative advantages and play a part in exchanges with other regions.

Like other large metropolitan areas, the Paris Region features very specific demographic trends. For some people, a stay in the Paris Region is just a stage, albeit sometimes a very long one, in their life paths.

Paris Region's exchanges with the rest of France



source : National Institute for Statistics and Economic Studies, RP 2011

Since 1968, the Paris Region's population exchanges with the French provinces have shown a deficit. This deficit increased in the 2000s. In the 35-59 age group, in particular, more people have been leaving the Paris Region than settling in it. They move to neighbouring regions to become homeowners or to start a family, or they move to more distant regions to pursue their careers there or to change environment or to return to their region of origin. More families have been leaving the Paris Region (30% of leavers in 2011) than settling there (14% of entrants). In 2011, 58% of households that moved to the Paris Region were single persons.

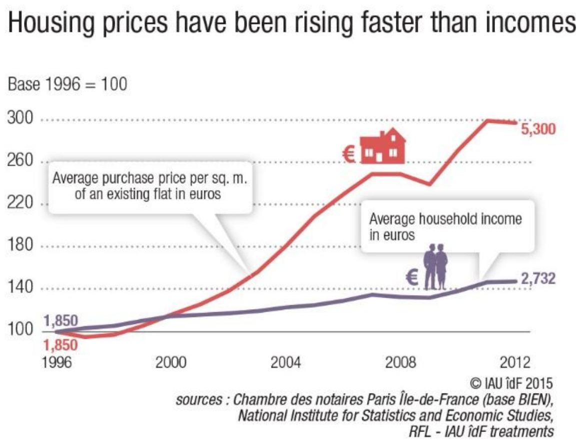
The newcomers are often executives. According to a survey on executives conducted by APEC[35], two French metropolitan areas, Lyon and Toulouse, are the best at combining economic dynamism with good quality of life. The Paris Region is the leader in France in terms of economic dynamism, but slips down to fourth place in terms of quality of life (notably regarding proximity to nature and protected areas).

[33] Diagnostic préalable à l'élaboration du SRHH, IAU IdF, 2015.
[34] Labrador Jessica, « Une forte hétérogénéité des revenus en Île-de-France », Île-de-France à la page, n°414, Insee, décembre 2013.
[35] L'Association pour l'Emploi des Cadres (Executives Employment Association)

Housing crisis

For nearly 20 years, housing construction in the Paris Region has been short of what is needed. Housing prices have been rising faster than incomes, which is symptomatic of a market under pressure: in the absence of a locally adapted supply, prices have been rising and households have been changing dwellings less often. Housing is households' largest item of expenditure. The housing vacancy rate stands at 6%, the lowest since the 1980s[36].

As a result of the situation on the housing market, the living conditions of numerous inhabitants of the Paris Region have deteriorated. The housing crisis no longer affects only the poorest: it has spread to the middle classes as well.



The housing difficulties of the poorest have led to an increase in the distance between homes and employment centres. Over the last 30 years, only executives have not moved away from the centre of Paris.

According to certain studies, the tensions on the housing market could have repercussions on the labour market. Thus, according to a study by the CREDOC, "more and more businesses have reported finding it difficult to fill certain posts in geographical areas where housing costs are too high." Seventy per cent of economically active people in France reportedly refuse job opportunities that lead to increased expenditure on housing. Thus, it is thought that the combined impact of the housing and employment crises limits the potential for residential and professional mobility.

To resolve the housing crisis, the Paris Region's regional master plan (SDRIF 2030) sets a target of 70,000 dwellings a year to be built between 2010 and 2030. The stakes are social and economic: the production of these dwellings would not only enhance the Paris Region's territorial attractiveness, but would also stimulate job creation.

Transport: efficiency and congestion

The Paris Region's public transport and road networks are among the most efficient in all major metropolitan areas. Of course, owing to the concentration of the population in certain areas, commuting time between home and work is longer in the Paris Region than the average in France, i.e. 82 minutes instead of 64 minutes[37]. Commuting time, the modes of transport used, the quality of transport services are important factors: they may be barriers for access to employment and adversely affect the quality of life.

Between 1976 and 2010, home-to-work commuting time in the Paris Region was stable, but the number of home-to-work trips declined (due to the adoption of the non-stop work day, teleworking, etc.). Although less numerous, such trips have actually become longer: distances have tended to increase due to periurbanisation. According to a comprehensive transport survey, 42% of economically active inhabitants of the Paris Region spend between 15 and 45 minutes getting to work (one-way). However, 18% of them spend over one hour doing so.

According to a national survey[38], only 15% of economically active people in employment say that work-to-home commuting causes fatigue (less often mentioned than the intensity or rate of work). The authors of the survey stipulate that transport-related fatigue is due first and foremost to the

[36] Preliminary diagnosis for the Regional Housing Plan (SRHH), Fors, IAU îdF, 2015.
[37] Source: EGT (Comprehensive Transport Survey) 2010.
[38] Zilloniz Sandra, « Les temps de déplacement entre domicile et travail. Disparités selon l'organisation des horaires de travail », Dares Analyses n°081, November 2015.

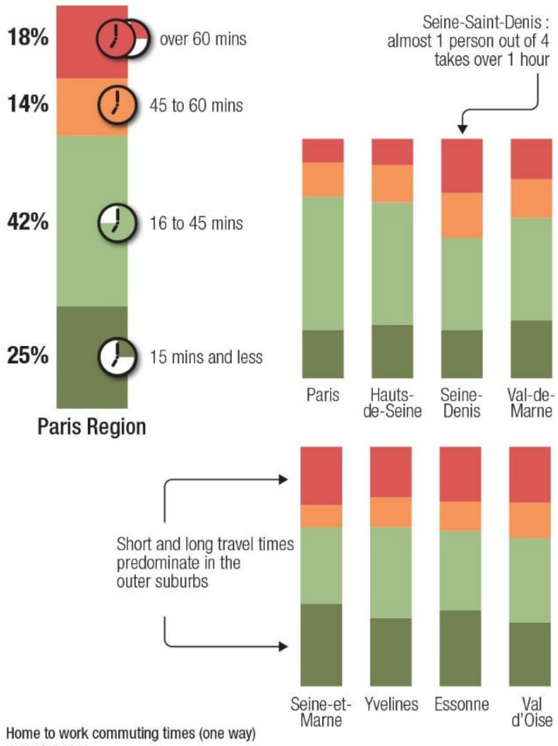
duration of the trips, and that it is in the Paris Region that transport users more often declare that they are tired because of their commuting. Congestion, the number of train changes and the sense of insecurity at certain times contribute to the fatigue caused by commuting. Delays on certain public transport lines may be harmful to salaried employees who have mandatory starting-times or who need to organise their family life.

After increasing for decades due to the growth in the rate of car ownership by senior citizens and the rise in the female rate of participation in economic life, motor vehicle mobility is now declining. Thus, more and more Paris Region inhabitants are opting for alternative means of transport instead of the car[39].

In spite of the overall decline in car traffic in Paris and its inner suburbs, in 2010 extremely heavy traffic moving at relatively slow speeds during the rush hours remained concentrated in the main road network (made up of the major radial roads and the A86 circular motorway).

The Paris Region has record levels of road traffic by European standards, with over 240,000 vehicles per day on average in 2010 on five of these road sections: three sections of the "boulevard périphérique" ring-road and one section of the A1 and A4 motorways, on which traffic levels exceed by far the busiest sections of motorway in London, Berlin or Milan.

How long do the inhabitants of the Paris Region take to go from home to work?



Home to work commuting times (one way)
© IAU îdF 2014
sources : EGT 2010-Stif-Omnil-DRIEA

2.5 Reliance on imported energy and natural resources

Most of the natural resources extracted locally in the Paris Region are limited to construction minerals and biomass. Seventy per cent of the natural resources needed by the Paris Region's economy are imported. These imports come from other French regions (52%) and from abroad (48%), and have tended to increase. However, reliance on imports is very variable depending on the categories of goods.

The Paris Region is totally reliant on imports of metallurgical materials and partially reliant on imports of construction materials. Power and gas are supplied by the national grid and managed by major operators. Only 7% of the energy consumed in the region is produced there. Considerable quantities of waste are produced at the end of the chain (40 million tonnes in 2013).

The Paris Region is also reliant on imports of food supplies. French agriculture with its 5,000 farms cannot meet the food needs of the Paris Region's 12 million inhabitants in terms of quantity and diversity, to a greater or lesser extent depending on the supply chain. Thus, food products come from neighbouring regions and countries and from all over the world. But areas for improvement have been identified, such as supplying food produce from the Paris Region by favouring short distribution circuits[40] and by developing the production and processing of food products in the Paris Region.

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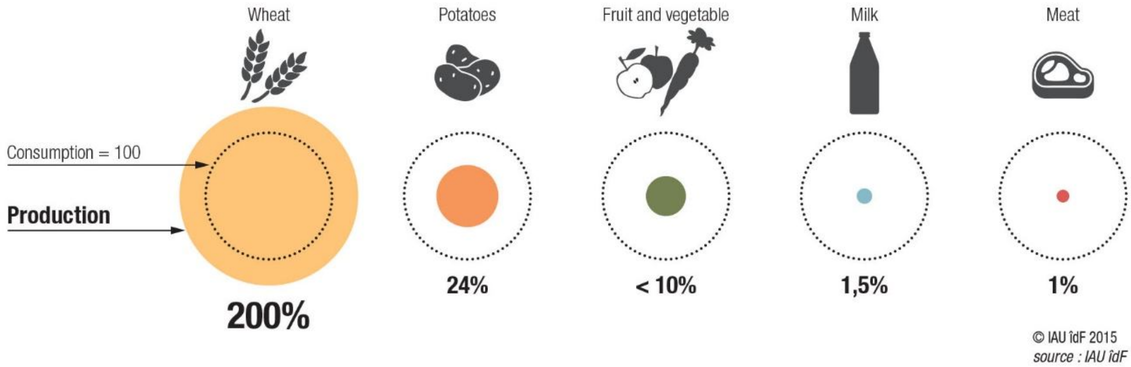
[39] *Bouleau Mireille, Courel Jérémy, « "Peak-car" : la baisse de la mobilité automobile est-elle durable ? », Note rapide, n°620, IAU îdF, avril 2013.*

[40] *De Biasi Laure, Delaporte Carole, Ropital Corinne, Les filières courtes de proximité, IAU îdF, to be published.*

Consumption and production in the Paris Region: only wheat is in surplus



3. The renewal of economic activities

Economic conditions over the last few years have borne the mark of the 2008-2009 crisis, which has had an adverse long-term impact and has led to job reductions. However, beyond the impact of the crisis, the economic landscape has been mainly modified by a number of underlying trends, namely: a decrease in production activities; the development of service activities; and the growth of the knowledge economy. These trends have been amplified or renewed by the boom in the digital economy and by the imperative need to cut greenhouse gas emissions. At the same time, changes in the productive system have been influenced by certain demographic and societal trends.

In the Paris Region, new lines of business and opportunities have emerged in response to the challenges of mobility, different uses, energy constraints, healthcare and new technologies, but also of traditional sectors such as construction and retailing.

The social and solidarity-based economy has become part of the economic environment[41]. New value chains have organised themselves: the creative industries have based their reorganisation and strengthening on digital technologies; economic and industrial activities have focused on renewable energies; and the economy as a whole has shifted towards high quality services that mutualise and optimise the use of goods and services.

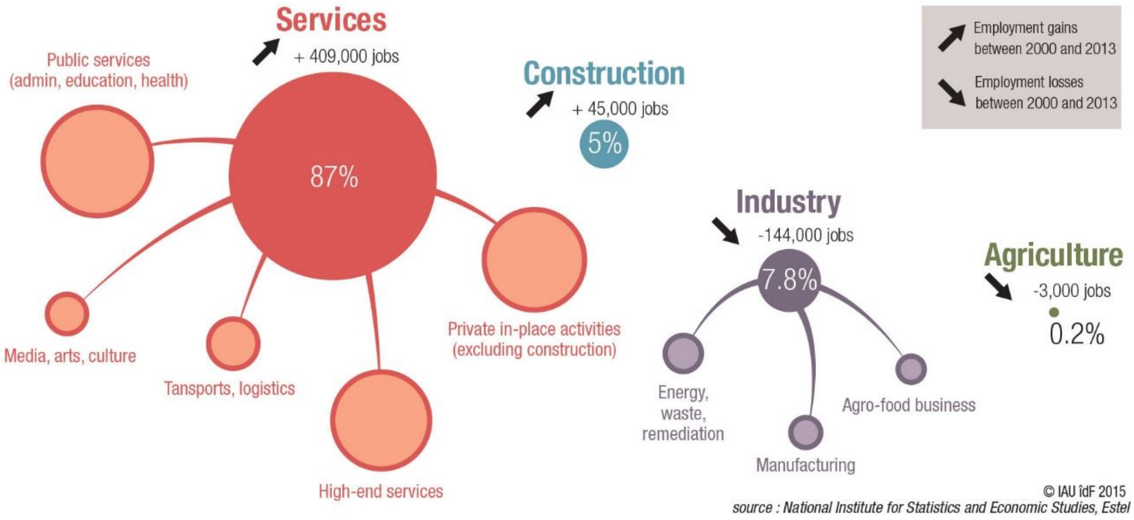
3.1 A service economy

The shift of the economy to services has been under way for a long time in the Paris Region. Service activities accounted for 87% of all jobs in 2013 and 90% of the region's value added comes from the market services sector. Between 2000 and 2013, 409,000 jobs were created in the tertiary sector (i.e. +8%), mainly in business services, but also in the accommodation and catering subsector and in services to individuals.

The decline in industrial employment, which began over 30 years ago, has continued. Following 144,000 job losses between 2000 and 2013, industrial employment currently accounts for less than 8% of jobs. The manufacturing sectors, in particular, have been diminishing regularly. Over this period as a whole, the IT assets subsector was the only manufacturing sector to record an increase in job creation, in spite of a shock during the crisis. In the construction sector, 45,000 jobs were created between 2000 and 2013 (+17%) and the sector weathered the crisis well[42].

[41] *Leroi Pascale, Soulard Odile, « L'économie en mode actif », in Les Cahiers, n° 156, IAU IdF, November 2010.*
[42] *Source : Insee, Estel.*

Breakdown of total employment in the Paris Region by major sector in 2013 and changes between 2000 and 2013



The economic fabric of the Paris Region is more diversified than that of other European or American metropolitan areas[43]. This diversity includes economic activities whose contributions to employment in the Paris Region are significantly greater than their contributions to employment in France as a whole. This is the case in business services (IT, scientific research, consultancy work and technical support), the information and communication sector, finance and insurance, but also in the accommodation and catering sector, partly due to the link with tourism.

Consultancy, legal, accounting, management and architectural services have continued to develop. Over the last 20 years (1990-2010), the rise in the numbers of people employed in IT, finance & insurance and scientific research has been faster in the Paris Region than in all the other major regions. More recently, between 2007 and 2012, there have been employment gains in business services (accounting and management activities, IT, consultancy work and technical support), as well as in scientific research and development.

A unique feature of the Paris Region economy is financial activity: in 2013, finance and insurance employed 317,000 people, accounting for 41% of employment in this sector in France. However, the Paris financial centre has been declining in importance for several years, which has led the stakeholders concerned to work on enhancing its attractiveness. The top two major financial centres are London and New York (trading in equities and currencies).

Activities specific to the economy of the Paris Region

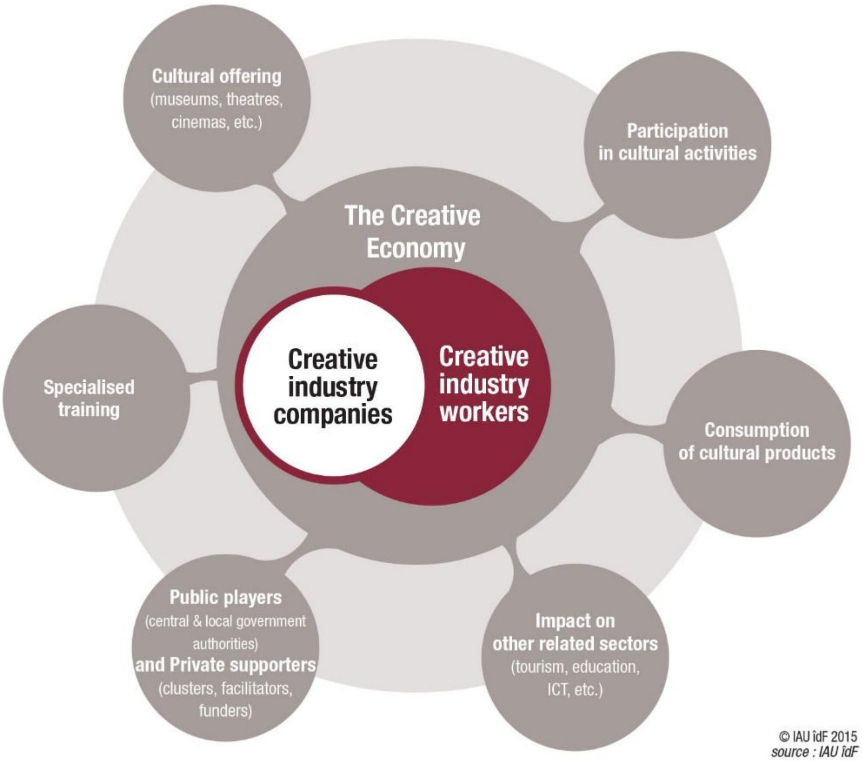
The sector specificity index is calculated by comparing the share of jobs provided by an economic activity to total regional employment with the same ratio for France as a whole. The index is significant for values greater than 120. A value of 100 means that the weight of the activity in question in terms of employment is the same in France as a whole as in the Paris Region.

[43] *Storper Mickael, « Emploi et territoires », colloque du Conseil d'orientation de l'emploi tenu le 12 octobre 2015 à la Maison de la chimie, Paris 2015.*

The creative economy

In 2012, the creative economy employed 500,000 people in the Paris Region, of whom 350,000 in the cultural and creative industries (CCIs), i.e. films, performing arts, audio-visual, music, video games and gaming software, books, architecture and advertising. In addition, 150,000 creative people work in industries other than the CCIs. Today, the creative economy provides more jobs than the financial, construction, hotel and catering sectors put together.

As in most large metropolitan areas, employment in the CCIs has grown strongly since the 1990s. This growth has been driven by gaming videos and software, films and audio-visual products. However, the number of jobs has diminished in the publishing, press and music industries. The current economic circumstances have adversely affected all sectors of the CCIs. Their development has slowed and creative activities are now continuing to develop outside these industries: talented creative people are increasingly working across all sectors of the Paris region's economy.



In the early 2000s, the main drivers of employment growth in large urban areas were metropolitan functions (design-research, culture and leisure, inter-company trade, intellectual services) and this trend is continuing[44]. These functions are characteristic of the Paris Region's economy. Between 2007 and 2012[45], metropolitan functions' share of the regional economy rose from 38% to 39%, representing 2,196,800 jobs in 2012. Three quarters of employment gains generated by these functions involved intellectual services, while the rest mainly concerned the culture and leisure sectors.

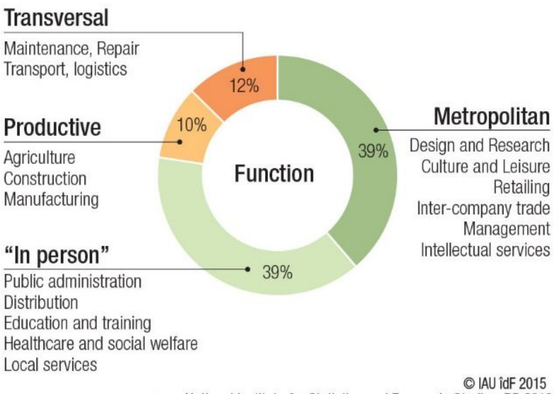
"In person" or face-to-face functions (retailing and local services, health and social services, education & training, public administration) represent 2,198,200 jobs, a slightly larger share of employment in the Paris Region than that of metropolitan functions, but they increased much less

[44] Catin Maurice, Van Huffel Christophe, « La croissance de l'agglomération toulonnaise et des grandes aires urbaines françaises : le rôle majeur de l'emploi dans les fonctions métropolitaines », Popsu 2013.
[45] Source : Insee, RP.

between 2007 and 2012 (+2.4% compared with +4.3% respectively). Among the “in person” functions, the largest employment gains were recorded in health and social services, which were equivalent to the employment gains in “intellectual services”.

Transversal functions (transport, logistics, and maintenance-repair) represent around 717 thousand jobs and the productive functions 566 thousand. The number of jobs in these functions diminished between 2007 and 2012, notably manufacturing jobs.

Breakdown of jobs by function in 2012



source : National Institute for Statistics and Economic Studies, RP 2012

Looking as closely as possible at the functioning of the economy from an occupational viewpoint

The so-called functional approach, which was initially developed by Pierre Beckouche, aims to describe the economy by disregarding the partitioning of economic activities in order to focus on the functions performed, such as, for example, “intellectual services” or “manufacturing”. These functions are identified on the basis of groupings of occupations as presented in the latest INSEE grid, i.e. 15 functions grouped under four categories: metropolitan, “In person”, productive and transversal[46]*.*

3.2 Digital technology: a driving-force of the economy

Lifestyles, means of communication, professional practices and consumption patterns are all impacted by the digital revolution. Some businesses have been weakened by these transformations, which make certain products, services or jobs obsolete. However, the digital revolution also provides many opportunities. A wider and wider range of products and services are under development in numerous fields, including healthcare (telemedicine), education (e-learning), energy and the environment (smart grids), culture (content and digital media), retailing (e-commerce), the media and leisure (websites, blogs, tweets), etc.

In 2012, the digital sector represented 512,600 jobs in the Paris Region, i.e. nearly half of the total sector in France. Its weight in the regional economy (9% of jobs) is greater than in the rest of France (3%). Between 2007 and 2012, its growth rate stabilised at 1% (compared with 2% taking all sectors into account). This small change conceals a deep reconfiguration process: industrial activities, services, sales in information and communication technologies (ICT) have been decreasing, as have certain creative content activities (book publishing and the press), which have been impacted by digitalisation later than other sectors.

The digital sector is characterised by growing hybridisation between the ICT and content sectors, which means that manufacturing and telecommunication players are shifting towards cultural content, a high growth sector. Between 2007 and 2012, IT programming and advisory services accounted for 20% of total employment gains in the Paris Region’s digital sector. These are the sector’s core business and have now become the driving-force of the regional economy. Other high growth subsectors are advertising, communication and film & television production.

[46] Omont Laure (Insee), « Un emploi métropolitain sur deux est occupé par un cadre dans l’aire urbaine de Paris », in Atlas des Franciliens, IAU îdF, March 2013.

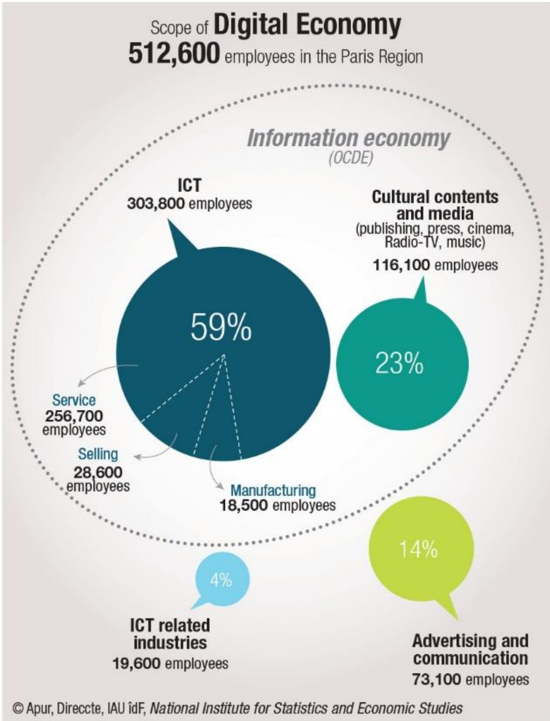
One of the characteristics of the digital sector is the large number of self-employed workers, who represent 12% of jobs compared with 9% taking all sectors into account. Thus, most employment gains in the digital sector concern self-employed workers[47].

Development of e-commerce continues

In France today, revenues generated by e-commerce amount to 57 billion euros, i.e. about 6% of total retail sales. Initially limited to sectors that can easily adapt to online digitised trading, e-commerce has spread to an increasing variety of sectors, such as clothing and food, thanks to drive-through outlets ("click & drive" shopping). Physical and virtual shops are more and more interdependent, while vendors have been adopting multi-channel strategies that enable them to multiply their contacts/relationships with customers.

The digital economy

Digital technology is at the crossroads of the ICT industry and creative content. Fifty-nine per cent of economically active inhabitants of the Paris Region work in the ICT sector (manufacturing, retailing, business services), mainly in IT programming and consultancy, which employs 154,000 people. This sector alone accounts for 30% of the digital economy. Twenty-three per cent work in digital content and media (films, audio-visual, book and press publishing, music). Fourteen per cent work in advertising and communication, and 4% in ICT-related industrial activities (manufacturing of navigational assistance equipment, optical instrumentation and equipment)[48].



3.3 Industry increasingly dedicated to intangible goods

The loss of industrial jobs has been a long-standing phenomenon in France. An analysis over a long period (1980-2012) reveals that productivity gains are reportedly the first cause of workforce reduction and account for 64% of employment losses[49]. The second cause is reportedly the outsourcing of service-related activities, which represents 23% of employment losses: services such as cleaning, security, logistics and accounting are provided by sub-contractors; IT services (engineering, technical assistance, IT integration) are provided by digital service companies; and part of R&D is entrusted to outside providers (engineering companies). In the Paris Region between the years 2000 and 2013, industrial employment continued to regress (23% of the workforce). Large iconic industrial sites have closed down, the most recent example being the PSA Peugeot-Citroen plant in Aulnay.

[47] Self-employed workers are not paid wages or salaries but receive other forms of compensation. They include business leaders, sole proprietors, craftsmen, retailers, etc.

[48] Renouvel Sophie , Roger Sandra (Apur), Dezenaire Florent (Direccte Île-de-France) Camors Carine, Soulard Odile (Iau îdf), Godonou Cyrille (Insee Île-de-France), Economie Numérique, 2 Note rapide to be published, IAU îdF, March 2016.

[49] Source : Roland Berger, 2015.

Industry in the Paris Region is becoming increasingly service-oriented by integrating more and more services and by combining products with offerings of assistance, maintenance, etc. Some businesses have repositioned themselves to undertake service activities. For example, ICT production chains have focused on cultural content: they implement applications, develop software programs, actively engage in audio-visual production, such as the TV series produced by Orange. Jobs have upscaled to such an extent that industrial companies in the Paris Region now have as many executives as service companies do. The number of production workers continues to decline: they now account for just a quarter of industry's workforce. The majority of jobs are in corporate headquarters, sales administration, logistics or R&D (which accounts for 40% of the automotive value chain in the Paris Region).

In 2013, in spite of reductions in its labour force, the Paris Region was the main centre of national industrial activity in France, with 456,000 jobs and 110 industrial sites each employing over 500 salaried workers. It was the top French region for consumer goods (27% of the French consumer goods workforce), with a particular emphasis on publishing-printing-reproduction (39%). It also leads all French regions in the automotive sector (13% of the automotive sector workforce) and in capital goods (nearly 19%). In terms of headcounts, the five main industrial sectors in the Paris Region are: the automotive sector; the manufacturing of IT, electronic and optical products; agro-food industries; chemicals; and energy. In the context of an overall reduction in industrial jobs, some sectors nevertheless seem to have sustained or even increased the number of salaried jobs, such as aircraft and spacecraft construction, electricity generation, remediation-decontamination activities, and waste or used water treatment.

3.4 The "greening" of the economy

The need to head gradually towards a less resource-intensive and polluting economy has helped to build employment momentum. Environmentally-friendly activities and the green economy's non-core activities are already involved and the economy as a whole will ultimately be impacted as well. Some job creation is linked to this ecological transition, which has also generated new economic models (the circular economy, ecological functionality[50]).

As the main purposes of environmentally-friendly activities are to protect the environment and the sustainable management of natural resources, they are directly concerned. Non-core activities (construction and transport, in particular) are also developing, supported by new standards and regulations and by territorial planning policies (green buildings, sustainable neighbourhoods, the Greater Paris project, etc.). In 2012, the Paris Region had 246,000 jobs at the heart of the green economy and no fewer than 771,000 professionals involved in green or "greening" businesses.

The Paris Region's players involved in ecologically-friendly activities are positioned in all market segments: water, waste, air emissions and exhaust gas, noise pollution, polluted soil, contaminated sites and renewable energy sources (biomass, photovoltaic solutions, district heating, and wind). These economic activities relating directly to protecting the environment are playing an increasingly important role in the Paris Region's economy, which largely exceeds their traditional functions as urban services. Non-core activities, notably construction and transport, have been evolving in order to take environmental challenges into account[51].

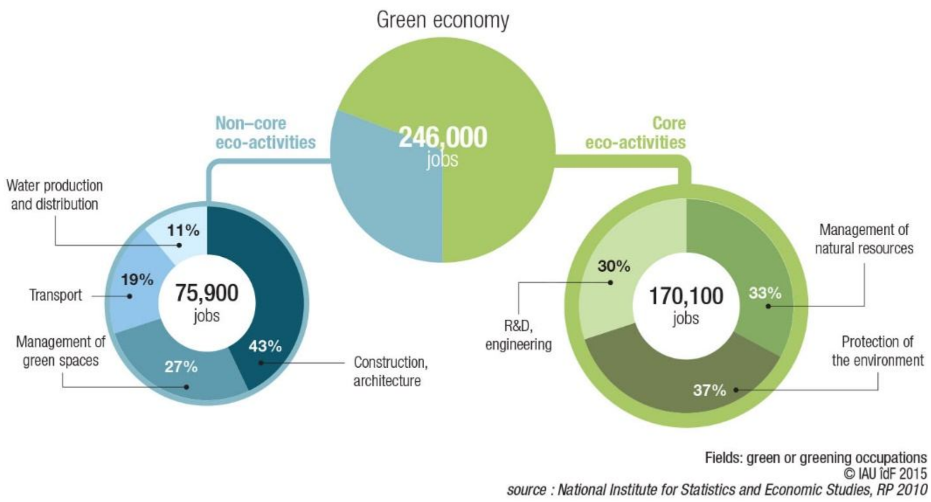
The Paris Region has acquired great research and development capabilities. According to the OECD, half of France's environmentally friendly technology value chain is concentrated in this region. Its research capabilities are particularly significant in water, waste and renewable energy sources: 40% of French "green" patent applications originate in the Paris Region. In addition to environmental specialisation, the region has a transversal knowledge base that fosters environmental innovation, notably in physics, mechanics and biology.

[50] *Leroi Pascale, Lopez Cristina, Emploi et transition écologique. Optimiser le potentiel d'emplois de la transition écologique, tome 1, IAU îdF, May 2015.*

[51] *Leroi Pascale, Lopez Cristina, Emploi et transition écologique. Les emplois de la transition écologique, spécificités et potentiels en Île-de-France, tome 3, IAU îdF, to be published.*

246,000 jobs at the heart of the green economy

The green economy includes the environmentally-friendly sectors that act in favour of the environment (protection of the environment, resource management, R&D) as well as non-core activities that are impacted by environmental issues (construction, green spaces, water production, transports and distribution). The number of jobs at the heart of the green economy amounts to 246,000 and 771,000 professionals work in green or greening jobs across the entire economy[52]. The industrial and service sectors of the green economy are driven by a more positive employment dynamic than the rest of the economy in France[53].



3.5 Four jobs out of ten are in the "in-place" economy

A large part of the Paris Region's economy is underpinned by the needs of its inhabitants or of people passing through.

Thus retailing, which is aimed mainly at meeting households' current needs, is par excellence part of the "in-place" economy, even though certain iconic facilities (department stores, luxury goods shops), mostly located in Paris, help to enhance the attractiveness of the region. This explains the better distribution of such activities across the area compared with metropolitan amenities, which are more polarised. The boundaries of the retailing sector have been widened to encompass a few other local activities, such as small retailers (baker's shops, small caterers), services to individuals (hairdressers, shoe repair, etc.) or real estate and travel agencies.

The total number of jobs amounted to around 400,000[54] in 2012. Half of the people concerned work in specialised retailing (household, sports, cultural and personal goods) in businesses that increasingly form part of organised trading (multiple retailers or franchisees); a quarter of jobs belong to the food sector, with quite a well-balanced distribution between large general retailers (hypermarkets, supermarkets, etc.) and small food retailers; the rest of the jobs are in personal services, agencies and, to a lesser extent, markets and distance selling. Although listed in France's classification of economic activities (NAF rev. 2, for the 2nd revision in 2008), e-commerce does not appear in the statistics.

[52] *Camors Carine, Lopez Cristina, « Emplois et professions de l'économie verte : une réalité multiple en Île-de-France », Note rapide, n°691, IAU îdF, juillet 2015.*
[53] *Commissariat général au développement durable, « L'emploi dans les activités de l'économie verte », Études et documents, n°110, August 2014.*
[54] *Source : Insee, RP.*

As a result of stagnant income levels and flat consumption, retailing ceased to create jobs: between 2007 and 2012, it lost slightly more than 20,000 jobs, i.e. 5% of the total. However, competition between groups and brands, digitisation of a portion of purchases and rapidly-changing consumer tastes generated contrasting trends among different retail segments. Proportionally, the biggest losses occurred in the food sector (large and small retailers) and in clothing.

Buoyed by high levels of consumption by inhabitants of the Paris Region and by tourists, accommodation & catering was one of the sectors that generated the most new jobs in the 2000s. Between 2007 and 2012, 22,700 new jobs were created, almost entirely in catering, particularly by traditional restaurants rather than fast-food outlets.

> ***Jobs in tourism***
>
> *In 2012, companies whose core business was tourism-related employed 516,400 people, which represented 9% of the Paris Region's total salaried labour force. In France as a whole, this rate stood at 7%. Over a third (34%) of all tourism-related jobs in France were concentrated in the Paris Region, mainly in transport (35% of the total), catering (33%) cultural and leisure activities (13%) and accommodation (12 %)[55].*

Services to individuals (families, dependent persons, day-to-day services), which grew considerably in the 1990s[56], have continued to develop, but at a slower pace. The pattern of job creation by households has been very typical (increase from 2000 to 2011, followed by a decrease). Between 2007 and 2012, in the social welfare and residential nursing care sector, new jobs rose by 51,500. Detailed surveys of paid employment show that part of this rise was linked to the aging of the population. Thus, the number of jobs in residential nursing care for elderly people has been increasing. Care for young children has also made a large contribution to job creation (+8,000).

> ***The social and solidarity economy (SSE)***
>
> *The SSE brings together private or public sector organisations (companies, cooperatives, non-profit associations, mutual insurance companies or foundations) that seek to reconcile economic activity with socially useful activity. In 2013, this sector represented 33,400 sites and employed 393,000 salaried workers, i.e. 7% of the Paris Region's labour force. The SSE is a plural economy, which includes market services of general interest and other activities more integrated in the conventional competitive segment of the economy. Its diversity can also be seen by its significant presence in the market economy, notably in banking and insurance, where cooperative banks and mutual insurance companies play an important part. That said, in the Paris Region, over three quarters of jobs in the social and solidarity economy are provided by non-profit associations, notably in the following sectors: social welfare (36%), teaching (19%), healthcare (10%), sport and leisure (7%) and arts and entertainment (2%), etc. It also plays an increasing part in social inclusion and in the social rehabilitation of people made vulnerable by employment trends and inadequate access to the labour market[57].*

The construction sector alone (building and public works) accounts for nearly 10% of all businesses in the Paris Region, i.e. 5% of the region's total salaried workforce. In 2010, it

[55] *Source: Regional Tourism Committee, Paris Île-de-France Region.*
[56] *Camors Carine, « 600 000 ménages seraient utilisateurs des services à la personne en 2030 », Note rapide, n°574, IAU îdF, October 2011.*
[57] *Observatoire de l'ESS en Île-de-France, « L'économie sociale et solidaire tournée vers l'action sociale dans les communes peu denses en Île-de-France », Panorama de l'ESS, n°6, October 2015.*

generated 40 billion euros' worth of revenues, mainly in the building sector (80%), notably works on existing buildings (60%)[58]. After a sharp drop in the number of jobs in the 1990s, the construction sector again started creating jobs in the Paris Region from the middle of the 2000s. Between 2007 and 2012, nearly 15,000 extra jobs were created in the construction sector.

3.6 Agriculture and agro-food sectors: resilient but fragile

In spite of the decline in the number of farms and the marginal level of employment in agriculture (12,000 jobs including forestry), the Paris Region is a major agricultural region. Nearly half of its land surface area is dedicated to agriculture. Large-scale field crops predominate, but fruit and especially vegetable crops are still present. Wheat production is emblematic of the region, which accounts for 5% of France's total land surface area dedicated to wheat. Thanks to some of the best quality wheatland in the world, the Paris Region enjoys a very large wheat surplus, of which it is a major exporter. Second only to cereals, vegetable crops (salads, onions, radishes, watercress) are the main strengths of the Paris Region's agriculture. However, faced with the high volume of demand, it has an overall trade deficit in agricultural products.

With nearly 50,000 jobs in 2012[59], the agro-food industries still remain an important industrial sector in the Paris Region, featuring three major value-chains: industrial bread, pastry and pasta manufacturing; beverage production; and meat processing, preserving and preparing. Secondary and tertiary processing of processed products to produce higher value added food, such as ready-made dishes, predominates, whereas primary processing (the processing of raw vegetable and meat products) is little developed and often disconnected from production in the Paris Region (except for milling and sugar). In spite of the presence in the Paris Region of the corporate headquarters of large agro-food corporations and their high-performing R&D facilities, the agro-food industry is finding it difficult to hold its own: between 2000 and 2010[60], the agro-food sector lost 24% of its jobs and businesses. The dynamics tend to differ depending on the value chain concerned: thus, the confectionery and ready-made dishes chain is growing, whereas bread, pastry and pasta manufacturing, beverage production and meat-processing, which are good providers of jobs, are significantly falling[61].

3.7 Logistics: essential to the functioning of the metropolitan area

The logistics value chain[62] encompasses all activities relating to flows (land, air and sea transport) and to the logistical processing of goods (warehousing, packaging, handling, etc.). Some companies carry out these activities themselves, but there is a growing trend towards the outsourcing of such activities to specialist providers. The Paris Region is a major logistical hub: in 2011, logistics accounted for 375,000 jobs (7% of the region's total salaried workforce). Half of the jobs are provided by logistics companies, while the other half are provided by wholesale businesses, industrial companies and retail distribution companies. Because of the digital transformation, rising environmental concerns and increasing professionalisation, this value chain is undergoing deep change and is a major economic challenge for the Paris Region.

[58] Fifty-eight per cent of businesses have no salaried employees and 36% have between one and nine salaried employees. Source: « Les besoins en emplois et compétences liés aux enjeux de la transition énergétique dans le bâtiment en Île-de-France ». Prospective study contract.
[59] Source: Insee RP 2012.
[60] Source: Association régionale de l'industrie agro-alimentaire (ARIA ÎdF)
[61] De Biasi Laure, Thévenot Laure, Faguer Élisabeth, « Nourrir 12 millions de Franciliens : un défi au quotidien », Note rapide, n°535, IAU îdF, February 2011.
[62] Raimbault Nicolas, « Logistique : émergence d'un nouveau marché immobilier », Note rapide, n°666, IAU îdF, November 2014 ; Omont Laure (Insee), Graille François (DRIEA), « 375 000 emplois salariés dans la logistique en Île-de-France », Insee Analyses Île-de-France, n°13, Insee, February 2015.

4. Employment developments

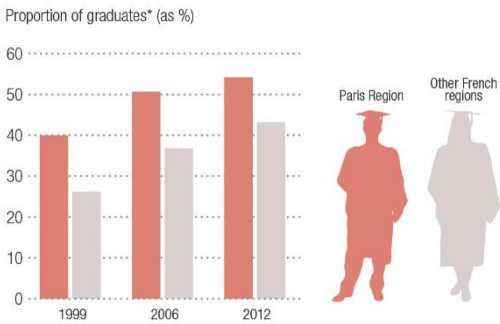
The trend in employment in the Paris Region is towards ever more executive positions and ever more highly qualified jobs. By contrast, jobs for employees and workers are more and more lowly qualified. In addition, there are growing trends towards more job flexibility, more self-employment and a weaker attachment to the company for which people work. These trends, which began in the 1990s, have been driven by globalisation and, to some extent, by digitalisation.

After the development of part-time and temporary employment, the trend is now towards the development of self-employment, multiple jobs (pluriactivity) and more diverse working hours. However, in spite of all the upheavals experienced and announced, the dominant form of employment remains a full-time office job under a permanent contract, even more so in the Paris Region than in the rest of France.

4.1 The qualitative upgrading of jobs

For several years, the Paris Region economy has undergone a qualitative upgrading process that draws jobs towards the most highly qualified professions, thereby raising the level of training of the labour force. The proportion of labour force participants aged over 15 who are higher education graduates, which was already large in the Paris Region, increased from 28% in 1999 to 38% in 2012. The young are even more highly qualified than their elders: over half (54%) of 25 to 34 year old participants who have left school are higher education graduates. In spite of this, 16% of labour force participants have no formal qualifications and 26% have qualifications below baccalaureate level.

Over half of 25-34 year old are higher education graduates



*25-34 year labour force participants not registered in an educational institution

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source : National Institute for Statistics and Economic Studies, RP

In the Paris Region, executives and people in higher intellectual occupations represent 29% of the labour force, by far the largest share among French regions, whose average is 17%. It is the only region[63] in which executives outnumber workers (14%), particularly in the industrial and market services sector. The increase in the number of executives slowed between 2007 and 2012 because of a general slowdown in employment growth, but in structural terms the underlying trend did not falter. Between 2007 and 2012, the share of executives rose by two points over five years in the Paris Region, a growth rate identical to the 1990-2010 period.

“Metropolitan function” executives, who are considered as occupying strategic job positions[64], are twice as numerous in the Paris Region (20% compared with 10% in France as a whole in 2010). The number of them continues to rise, albeit less than in other regions, but the specific nature of the Paris Region is such that this trend has not been called into question. Between 1999 and 2010, the Paris Region captured 39% of employment gains in this category on a national level. Nearly one “metropolitan function” executive out of two works in the Paris Region (44%).

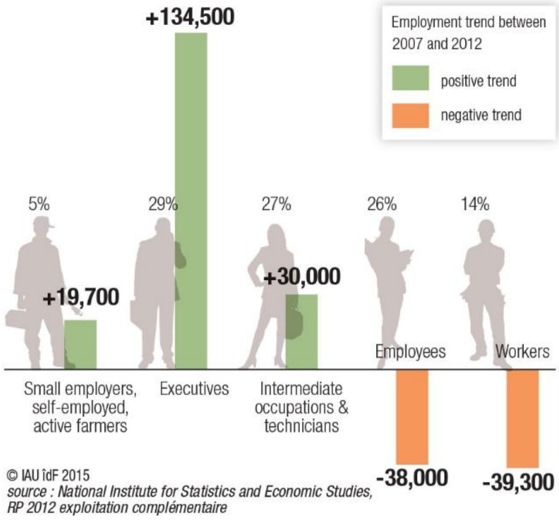
Intermediate occupations and technicians, less skilled than executive positions, increased by 30,000 jobs between 2007 and 2012. This was slower than during the preceding period (+0.4% a year instead of +1% between 2000 and 2006). Today, their growth rate is significantly weaker than that of executives. In other major regions, jobs in intermediate occupations are increasing at a faster pace. The intermediate professions represent 27% of regional employment.

After developing fast due to the economy’s shift towards services, the number of non-managerial salaried employees (who represent 26% of employment in the Paris Region) has been falling,

[63] *Leroi Pascale, Emploi et crise en Île-de-France et sept autres régions françaises, IAU îdF, January 2014.*

[64] *Source: Insee, RP 2010. Définition des fonctions on pp. 27-28.*

whereas it is increasing in the other major regions. This trend continued between 2007 and 2012, with 38,000 job losses, i.e. almost as many as among semi-skilled and unskilled workers (- 39,000).



Within these two groups, the share of low-skilled jobs has been growing: over a 10-year period (1999-2009), the percentage of low-skilled workers[65] rose from 39% to 43%, and that of low-skilled employees[66] rose from 38% to 41%.

Low-skilled personnel perform functions of critical importance to the metropolitan area[67]. However, they are less numerous in the Paris Region than in the rest of France. There are 940,000 low-skilled jobs in the Paris Region, two thirds of which are "employee" positions In the 2000s, low-skilled employment (i.e. of low-skilled workers and employees) did not increase much (+6,400 jobs a year on average between 1999 and 2009) compared with the employment gains for executives. More than a polarising move towards a dual employment market, this reflects an upward trend in the number of executives and a downward trend in the level of skills of employees and workers.

Finally, small employers (craftsmen and small traders), self-employed occupations and active farmers represent 5% of employment. In conjunction with the increase in self-employment, their number rose between 2007 and 2012 by +19,700 jobs, i.e. +8% over five years.

> ***The eight professions that developed the most between 2007 and 2012***
>
> *Administrative and commercial executives, professional services, public service executives, intermediate occupations in healthcare and social welfare, services to individuals (child care, domestic help, cleaning services, etc.), craftsmen and small traders.*[68]

4.2 Diversification of working hours

In 2012, 85% of jobs in the Paris Region were full-time jobs. The increase in part-time employment continues, but at a slower pace than in the 1990s. The percentage of Paris Region inhabitants who work part-time has remained steady at between 14% and 15% since 1999. In 1990, it was 9.3%. Over 20% of the labour force work part-time. Currently, 5% of the labour force is under-employed, i.e. they would like to work more hours.

Although part-time work has remained relatively stable, working hours are becoming more varied and the time actually worked is increasing. In the Paris Region, three economically active persons out of four have experienced longer working hours in one form or another: the length of the working day has exceeded 10 hours or weekly working hours have exceeded 40 hours or overtime work has not been compensated[69].

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[65] *Lower grade bluecollar workers.*
[66] *Lower grade white collar workers.*
[67] *Leroi Pascale, Thévenot Laure, « Près d'un emploi sur cinq est peu qualifié en Île-de-France », Note rapide, n°554, IAU îdF, June 2011.*
[68] *According to a breakdown of professions into 30 categories.*
[69] *Daniel Catherine, « La durée du travail en Île-de-France dans l'enquête Sumer 2010 », Bref Thématique, n°44, Direccte, April 2014.*

The forms of diversification of working hours[70] vary from one profession to another. People who provide services directly to private individuals in their homes and shop assistants often have working days split in two by a 3-hour or more break (14% and 6% respectively, with an average of 3%). Executives have greater exposure to overtime work: 16% of executives and higher intellectual professions work for over 45 hours a week. Finally, over 60% of salaried employees in sectors such as finance & insurance, construction, information & communication say that the length of their working day exceeds 10 hours. Fifty-eight per cent of those who work in specialised scientific and technical fields say the same thing. The percentage of people who work on Sundays increased from 11.9% in 2005 to 13% in 2013.

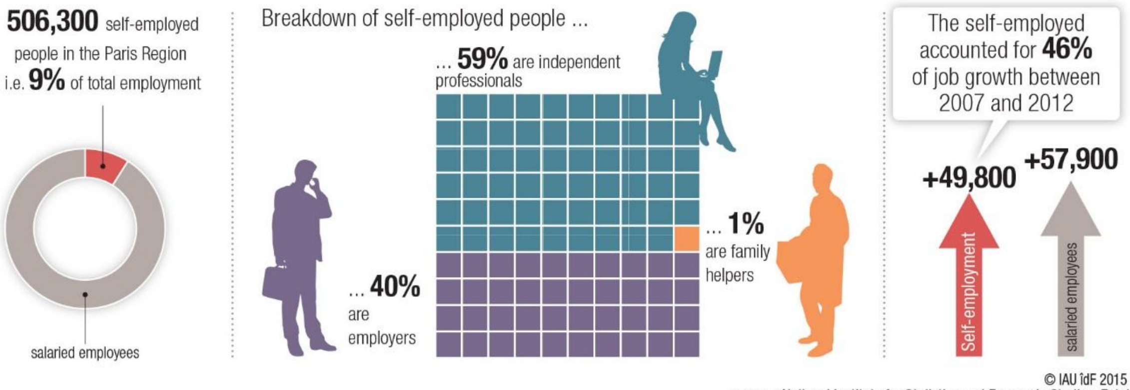
4.3 Stabilisation of temporary work

The permanent work contract (CDI) remains the norm (87% of jobs), but between 1990 and 1999 it declined in favour of temporary forms of employment, such as fixed-term contracts (CDDs) and temporary agency work. In the 2000s, the percentage of salaried employees under CDDs or working as temps changed little, stabilising at 10% of the Paris Region labour force in 2012. According to Eurostat, France is now one of the countries in Europe with the greatest use of temporary work contracts. The Paris Region, however, is below the national average in this regard because the more exposed low-skilled jobs are under-represented in this region.
Jobs of short duration and jobs with reduced working hours are more frequent among young new entrants to the labour market, low-skilled people, immigrants or women. According to the OECD, 40% of young people occupy non-standard jobs and around half of all temporary workers are aged under 30.

The percentage of workers living under the poverty line in the Paris Region rose from 3.7% to 4.2% between 2002 and 2011[71]. More and more people in work, as salaried employees or self-employed, have earned income levels below the poverty line, i.e. 814 euros a month in 2011. Since 1997, there has been a growing wage gap between the 10% of highest paid people in work and the 10% of the lowest paid people in work[72].

4.4 The development of self-employment

In 2012, the number of self-employed people in the Paris Region stood at 506,300, i.e. 9% of jobs, which was below the average for France (11%). Forty-nine per cent were independent professionals, a well-represented category in the region, 40% were business owners and 1% were family helpers. Self-employment developed significantly between 2007 and 2012 by +49,800 jobs, representing close to half (46%) of total employment gains in the Paris Region over the 5-year period.



© IAU îdF 2015
source : National Institute for Statistics and Economic Studies, Estel

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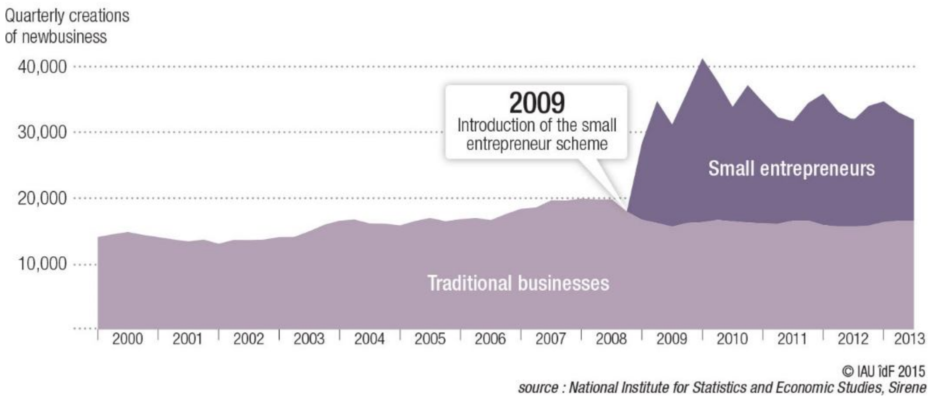
[70] Algava Élisabeth, Lydie Vinck, « L'organisation du temps de travail. Enquêtes conditions de travail », Synthèse stat', n°12, Dares, June 2015.
[71] Source: Insee, according to the narrowest definition of the poverty line, i.e. half the median standard of living.
[72] Fontagné Lionel, Mitaritonna Cristina, Tritah Ahmed, « Les inégalités salariales ont diminué en France », Lettre du CEPII, n°343, April 2014.

One out of four extra self-employed workers has come from the digital sector. Development of self-employment has been particularly apparent in the advertising/communication sector (+56% over five years). New skills and professions have emerged, such as referencing manager, motion designer (web animation developer), web interface designer, online community manager (in charge of developing a body's presence on the internet, etc.). Self-employment has also developed in IT programming and consultancy work (+35%) and in data-processing (+41%). All of this reflects a trend towards the outsourcing of certain functions and the growing use of freelance developers of mobile and web applications, database administrators (linked with the rise in cloud computing and big data), computer specialists, robotics consultants, etc.

Small entrepreneurs ("autoentrepreneurs")

The establishment of the status of small entrepreneur in 2009 doubled the creation of new businesses. Creating a new business of this kind is often seen as appropriate for a complementary business activity, because of the wage and earnings gaps between entrepreneurs according to their status. In the Paris Region, the average income of small entrepreneurs is only EUR530 a month, whereas conventional entrepreneurs generate EUR3,900[73]. In 2013[74], only 41% of small entrepreneurs in the Paris Region reported generating some revenue.

Quarterly business start-ups between 2000 and 2013



4.5 Work organisation transformed by digital technology

Economic models have been evolving to meet the challenges of digital technology and new forms of work have supported these changes, namely the outsourcing of corporate activities and jobs to self-employed providers and the development of a structured project-based organisation of work that makes it easier to disseminate innovation.

Entrepreneurs and, in particular, self-employed persons, who are intrinsically linked to the creation of start-ups, are often the first links in their respective sectoral value chains. They innovate, take risks and are the most vulnerable players (in terms of access to capital, job insecurity, etc.). They promote new more collaborative work methods, favour open work spaces and foster exchanges and cooperation.

These new work practices go hand-in-hand with specific office building requirements, i.e. modular co-working spaces and a massive increase in nomadic and remote working. In Paris, over the last 10 years, over 100,000 sq. m. of business incubators have been built or are being delivered to meet these challenges, as evidenced by two flagship projects: "Le Cargo" in the 19th arrondissement (district) of Paris and "La Halle Freyssinet" in the 13th arrondissement of Paris, both of which are driven by the dynamics of supporting the "Arc de l'Innovation" initiative. This

[73] *Source: Insee, self-employed database, fiches thématiques 2015.*

[74] *Source: Les autoentrepreneurs en Île-de-France. Bilan 2013, Urssaf, August 2014.*

Greater Paris metropolitan project aims to establish a network of innovative locations that have an overall impact and make a difference.

Although regularly considered as a good way of reducing home-to-work trips, teleworking has not really established itself. However, in the future, its development could be favoured by the rise in self-employment and the increasingly widespread use of information and communication technologies.

Because teleworking can be conducted in different ways (informal, institutionalised, nomadic), assessing the number of people who telework is a complex matter. However, all surveys point to a clear growth in teleworking since the start of the 2000s. The *Tour de France du télétravail 2013* survey provides a few orders of magnitude. In 2013, estimates suggested that nearly 17% of French workers teleworked, meaning that they worked “outside the office” at least once a week. In 67% of cases, the teleworking was informal and, in 56% of cases, it occurred only one or two days a month. In nearly eight cases out of ten, the teleworking was done from home[75].

A study conducted via LinkedIn shows that managers all over the world expect teleworking to develop strongly both in large metropolitan areas, where land prices are high and transport is difficult, and in emerging countries, where road infrastructures are sub-standard[76]. Based on a cautious baseline scenario, la Caisse des Dépôts[77] forecasts that the percentage of teleworkers in France will reach 21% in 2025 (compared with between 12% and 17% today): 11% of them are likely to work in telecentres, which represents 1.5% of the labour force in France, and 2.3% are likely to work in the Paris Region (excluding manual workers and farmers).

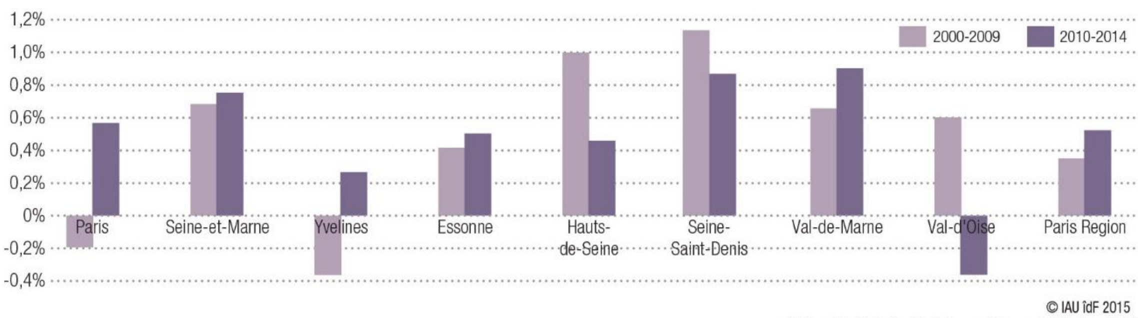
5. Spatial organisation of the Paris Region economy

The Paris Region is one of the most densely populated agglomerations in the world, and yet only 27% of its surface area is urbanised, with agricultural land representing 48% and natural areas 24%.

In this context, jobs are mainly located in the urbanised parts of the central agglomeration. The regional employment area is structured around some 50 economic hubs, on which a large number of home-to-work trips converge. About 10 of these hubs, the largest ones, are located in the centre of the agglomeration.

Finally, in a region whose employment concentration index[78] stood at 105.1in 2012, two counties had more jobs than the number of employed members of the labour force, namely Paris and the Hauts-de-Seine (with 164.5 and 127.4 respectively). This concentration index improved significantly between 2007 and 2012 in the counties of Hauts-de-Seine and Seine-St-Denis, but only slightly in the counties of Val-de-Marne and Essonne. It diminished slightly in Paris and Seine-et-Marne counties, and more markedly in the counties of Yvelines and especially Val d’Oise.

Changes in employment trends in the counties of the Paris Region (annual average rate)



source : National Institute for Statistics and Economic Studies, Estel

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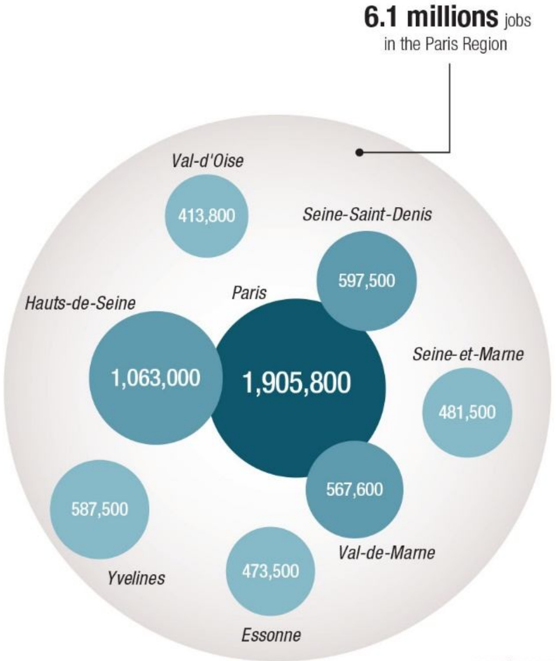
[75] *Source: Tour de France du télétravail, Enquête nationale 2013.*
[76] *Source : Orie, 2015, A. Aguiliéra, A. Rallet, 2014.*
[77] *ENS Cachan, EMP, Caisse des dépôts, Externalités des télécentres, March 2014.*
[78] *The employment concentration index shows the number of jobs in an area for every 100 economically active residents of the area. Source: Insee, RP2012.*



© IAU îdF 2015
source : National Institute for Statistics and Economic Studies, Estel 2013

Almost one out of two jobs are located in Paris and Hauts-de-Seine counties

With 1.9 million jobs, Paris accounts for 32% of regional employment, followed by Hauts-de-Seine county with 1.1 million jobs, i.e. 17%. The other counties account for between 400,000 and 600,000 jobs.

Between 2000 and 2013, the shares of regional employment of the counties of Paris and Yvelines declined (by -2 points and -1 point respectively), whereas those of Seine-Saint-Denis and Hauts-de-Seine counties increased (by +1 point each). The shares of the other counties were stable.

After major trends towards the spreading out of employment over the region between the 1980s and 1990s, the Paris Region's spatial organisation stabilised in the 2000s, at a time when employment was growing at a moderate pace. Between 2000 and 2013, the dynamism of the municipalities in the inner suburbs slightly shifted the centre of gravity towards the central area.

The regional economy being relatively diversified, most areas feature a broad range of economic activities. Nevertheless, certain activities have their preferred locations, resulting in local economic specialisation. In some cases, this specialisation has been due to the geographical clustering of similar activities, while in other cases it has been linked with the presence of a business or facility of great structural importance to the locality concerned.

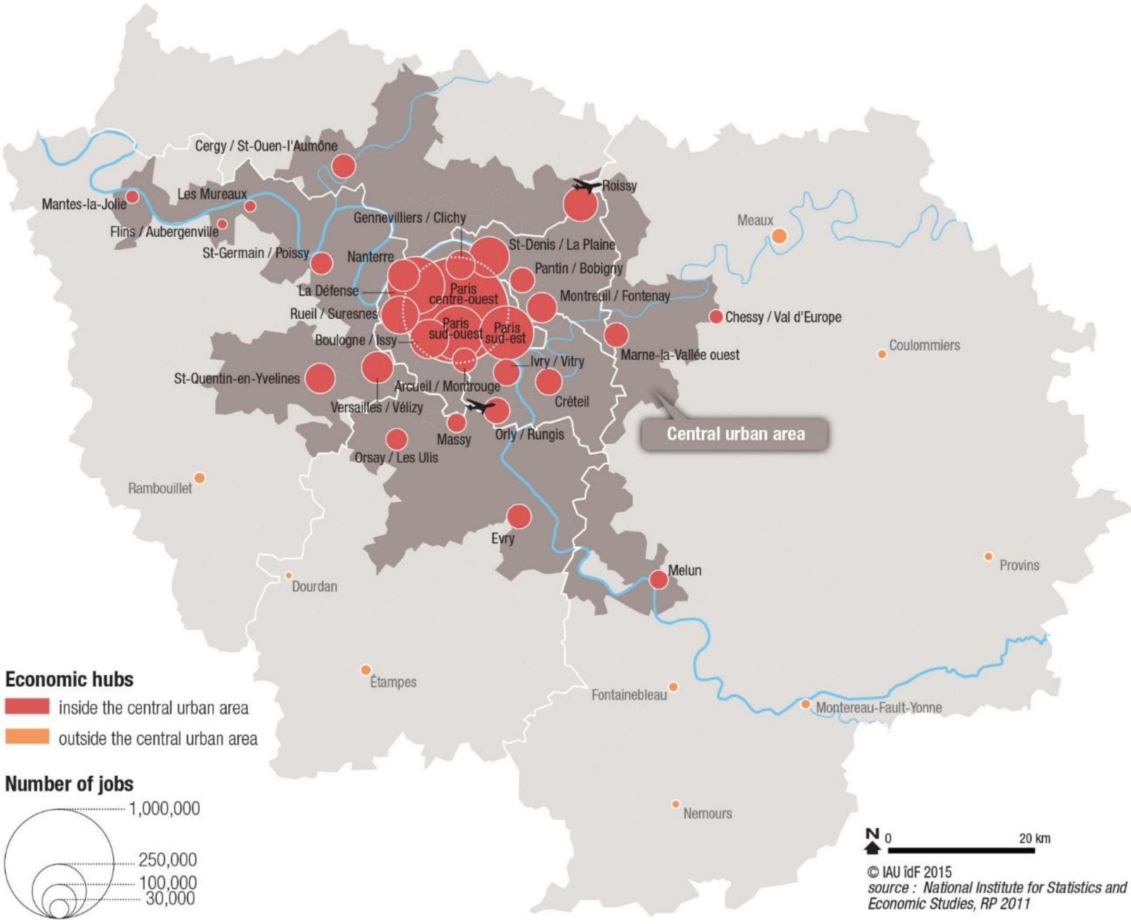
5.1 Half the jobs are in the economic heartland

In the Paris Region, the economic function is more focused and centralised than the residential function. Thus, 93% of jobs are located in the central agglomeration, which is home to 89% of the population, a discrepancy which is even greater in the "economic heartland".

This area has been considered[79] as remarkable for the continuity of its municipalities and districts in terms of particularly high rates of density, population and employment. It hosts 51% of jobs and is home to 34% of the population of the Paris Region. Among its most characteristic features are a high concentration of office space (60% of the region's office stock) and corporate headquarters.

[79] *Under a grouping of municipalities specially defined for this study, IAU IdF 2015.*

Economic hubs

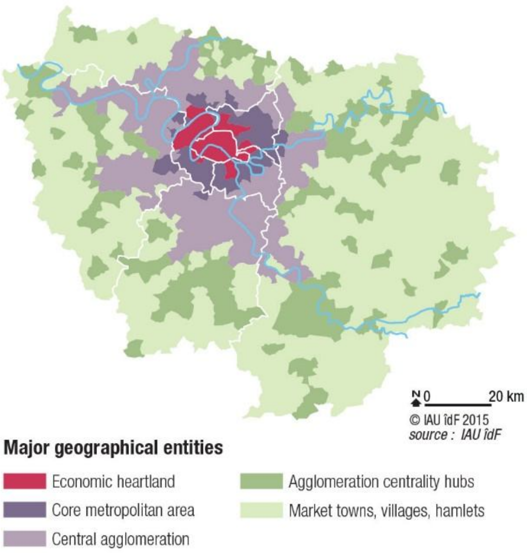


The economic heartland is centred on Paris and encompasses the municipalities in the inner suburbs, with a larger footprint in the north-west quadrant. It features some major employment areas, notably: West-Central Paris structured around the Central Business District (CBD); the 13th district of Paris and the developing neighbourhood around the French National Library (BNF); la Défense business district; Nanterre; Gennevilliers; Boulogne/Issy-les-Moulineaux; Saint-Denis-La Plaine; Montreuil and Ivry-sur-Seine. In 2012, all the districts and municipalities in the Paris Region with over 70,000 jobs each (representing 35% of the region's total labour force) were situated in this economic heartland, except for the Roissy-en-France airport hub, which is on the fringes of the central agglomeration (see below).

The "core metropolitan area" was defined in the Paris Region's 2030 Regional Master Plan (Sdrif Ile-de-France 2030). It surrounds the economic heartland and comprises some large employment areas, such as Créteil and Versailles, each of which has some 50,000 jobs, as well as Orly airport hub, Rungis (MIN, Silic, Sogaris), Aulnay-sous-Bois and the new towns of Noisy-le-Grand and Massy (with over 25,000 jobs each), located around the economic heartland in the "core metropolitan area".

Major geographical entities

This breakdown is the one used in the Paris Region's 2030 regional master plan (SDRIF), to which has been added the "economic heartland" defined for this study. This entity is a grouping of municipalities based on employment density, number of jobs and the ratio of jobs to economically active population. The economic heartland is included in the core metropolitan area, which itself is included in the central agglomeration.



© IAU îdF 2015
sources : National Institute for Statistics and Economic Studies RP 2012, ORIE

In the rest of the central agglomeration (excluding the core metropolitan area) employment density diminishes with increasing distance from the centre of Paris and the stock of office buildings becomes smaller overall. However, some municipalities are exceptions, namely: Roissy-en-France; Vélizy-Villacoublay, Guyancourt and Montigny-le-Bretonneux, where office space is plentiful; Cergy and Saint-Ouen-l'Aumône in the new towns; the prefecture towns of Évry and Melun. These municipalities provide over 20,000 jobs each. This area on the outskirts is home to nearly a quarter of all jobs in the Paris Region.

The regional area located outside the central agglomeration is mainly rural and represents 7% of regional employment, concentrated notably in the agglomeration centrality hubs. In this space, the proportion of public sector jobs is above the regional average.

5.2 Predominant economic sectors and spatial organisation

The Paris Region economy is diversified and its component activities choose to locate in areas that meet their needs and means. But as these choices result from numerous trade-offs, the municipalities end up having quite a variety of profiles. However, it is possible to identify a few key spatial organisation features, as shown by the results of a typology of municipalities that provide at least 1,000 jobs each (altogether accounting for 97% of regional employment). In some cases, the predominant economic sectors are linked with a degree of specialisation in logistics, art, culture, etc.

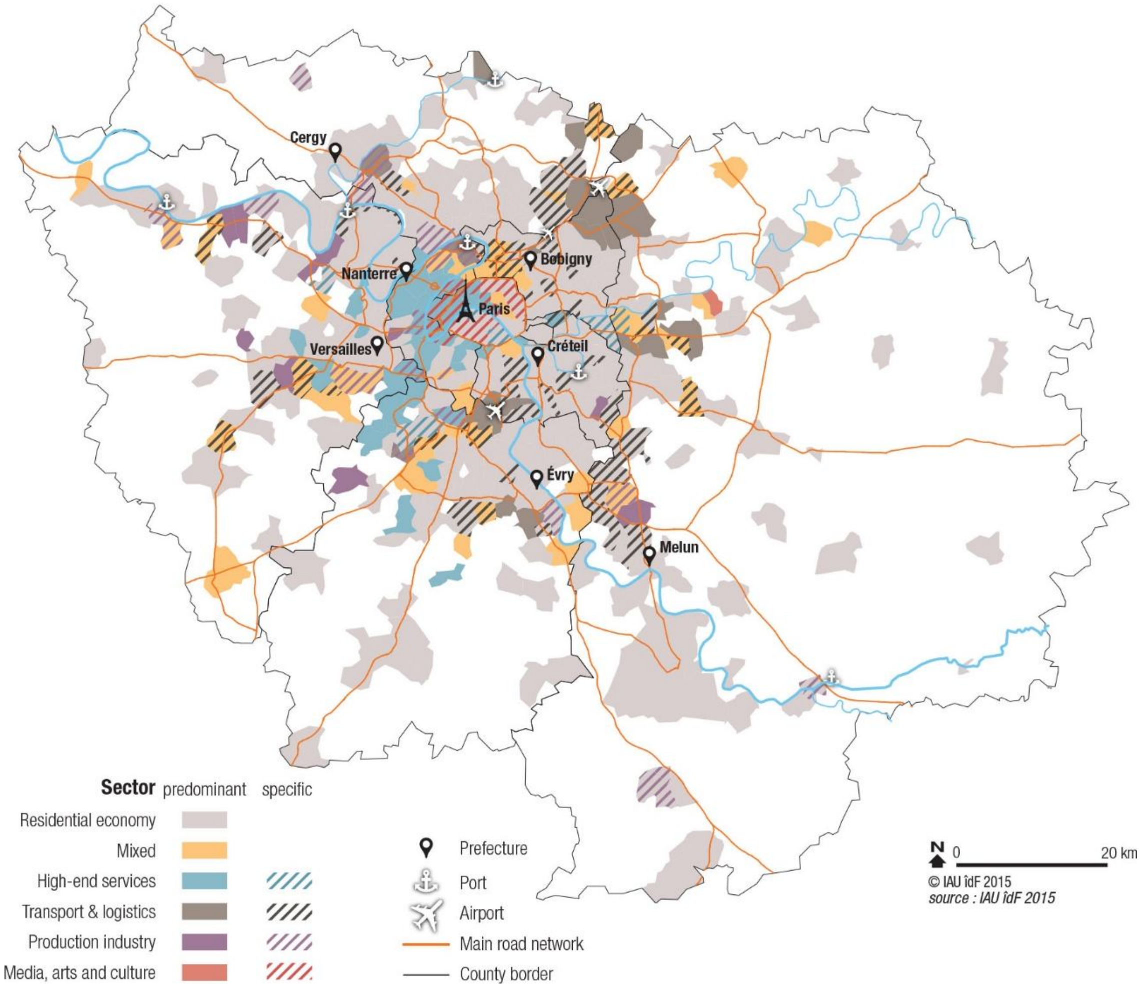
Predominance of the private residential economy[80]

The first striking element is the predominance of the residential economy, which characterises 318 municipalities out of the 444 studied. These are the municipalities where the residential

[80] *The 'residential economy' is defined by the national statistical office (INSEE) as "all activities mainly aimed at meeting the needs of permanent local populations and tourists".*

economy, be it private (retail trade, services to individuals, accommodation & catering, construction, etc.) or public (government, education, healthcare), represents at least 51% of total employment. These municipalities provide the backdrop against which the remaining 100 or so municipalities stand out as having more specifically distinctive profiles.

Typology of municipalities based on their predominant economic sectors

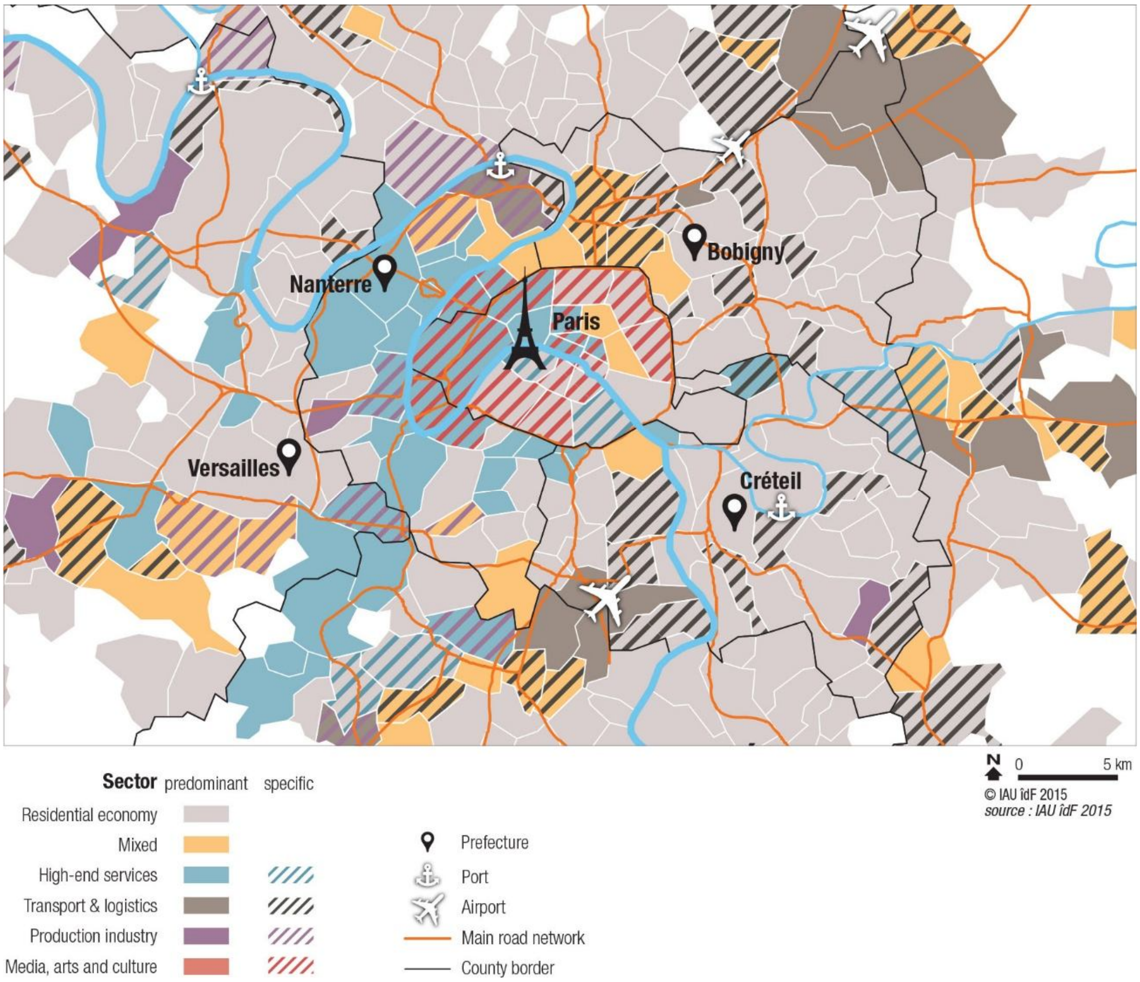


> ***A typology of predominant economic sectors***
>
> *To ensure statistical relevance, the analysis focuses only on the 444 municipalities that had over 1,000 jobs each in 2011 (total employment, INSEE RP2011). Altogether, the cumulative number of jobs in these municipalities represented almost the total employment in the Paris Region (97 %). INSEE's NAF nomenclature of 88 divisions of activity was grouped into eight "meta-activity" divisions. These were then used to define six predominant economic sectors: the residential economy (private and public), the mixed sector economy, high-end services, the transport & logistics sector, the manufacturing industry sector, and the media-arts-culture sector. Each of the 444 municipalities was assigned to the predominant sector that came top in terms of the number of jobs on its territory, shown on the above map by different corresponding swathes of colour. Furthermore, some municipalities where another sector was particularly well represented in terms of the number of jobs in relation to the regional average were assigned specific profiles represented on the map by corresponding coloured hachures.*

High-end services located in the Great Western part of the Paris Region

In 38 municipalities and seven city of Paris districts, the predominant economic sector is “high-end services”. Apart from a few isolated municipalities, these towns and districts form a remarkable north-to-south geographical continuum stretching from Bois-Colombes in the north of Hauts-de-Seine county to Gif-sur-Yvette in the north west of Essonne county, taking in Nanterre, la Défense, the Central Business District (CBD) in the 1st, 2nd, 8th, 16th and 17th districts of Paris, Boulogne-Issy-les-Moulineaux and Vélizy. In all these places, high-end service providers are more or less over-represented compared with the average for the Paris Region (from +5 points in the 3rd district of Paris to +44 points in Bruyères-le-Châtel in Essonne county), and the representation of the residential economy is below average. However, this continuum should not conceal the fact that these places have significantly different profiles: for example, some such as La Défense are more specialised in finance, insurance and corporate headquarters, whereas others are more specialised in scientific R&D such as Saclay plateau. Furthermore, some municipalities, in addition to featuring “high-end services” as their predominant economic sector, have another well represented sector: media, arts and culture in several Paris districts as well as in the municipalities of Levallois-Perret, Neuilly-sur-Seine and Issy-Boulogne; or manufacturing industry in Vélizy (aerospace, automotive, ICT, etc.) and Saint-Cloud (aviation, thanks to presence of the Dassault Aviation company’s main site in the Paris Region).

Typology of municipalities based on their predominant economic sector: focus on the central urban area



Logistics and manufacturing industry located mostly in the outer suburbs

The predominant economic sector in 21 municipalities is “transport and logistics”. Needless to say, these municipalities are located next to the hub airports of Roissy and Orly-Rungis along major logistical routes (Bondoufle and Lisses on the Francilienne ring road in Essonne county; Croissy-Beaubourg and Bussy-Saint-Georges where the A4 and Francilienne motorways intersect in Seine-et-Marne county, etc.), but also close to inland waterway ports (Gennevilliers, Bruyères-sur-Oise).

Fifty other municipalities where the “residential economy” generally predominates also feature major transport and logistics activities. They are often located on the edges of municipalities where the transport and logistics sector predominates, such as Gonesse, Goussainville and Louvres, which can be added to the Roissy airport hub that extends as a logistical route along the A1 motorway from Saint-Denis via Le Bourget. Similarly, Chilly-Mazarin, Morangis, Villeneuve-le-Roi and Thiais form part of the Orly-Rungis airport hub. Other localities with a strong emphasis on transport and logistics have been emerging, notably Sénart new town, which appears to be a logistical gateway to the south-east part of the Paris region stretching from Vert-Saint-Denis to Brie-Comte-Robert via Lieusaint.

Only nine municipalities still feature a strong predominantly industrial sector representing at least 30% of employment, whereas the weight of the residential economy is below average. These are mainly located in areas of the Paris Region traditionally associated with the mechanical, automotive and aeronautical industries, namely Seine Aval (Renault in Flins, Peugeot in Poissy), Saint-Quentin-en-Yvelines (Thales and EADS in Elancourt) and Melun-Sénart (Safran in Villaroche-Réau). Twenty municipalities where the mixed or residential economic sectors predominate can be added to these nine, because they still feature a strong manufacturing industry presence representing between 12% and 29% of total employment, namely: Les Mureaux, Mantes-la-Ville or Saint-Ouen-l’Aumone in the Seine Aval sub-region; municipalities south-west of Paris such as Guyancourt, Vélizy and Massy specialised in high value added high-tech industries (optronics, ICT) and the automotive business (the Renault Technocentre in Guyancourt); but also the towns of Colombes and Gennevilliers in the north of Hauts-de-Seine county.

Municipalities with sectorially diversified profiles

Some 50 municipalities can be classified as being mixed-sector: the weight of the residential economy is below average and no other sector predominates, so they have diversified sectorial profiles. This notably concerns the main municipalities that form part of the Plaine Commune agglomeration (such as Saint-Ouen, Saint-Denis, Aubervilliers), which, in spite of experiencing a rapid development of the service sector (“tertiarisation”) over the last 15 years, are still not (or not yet) dominated by the “high-end services” sector.

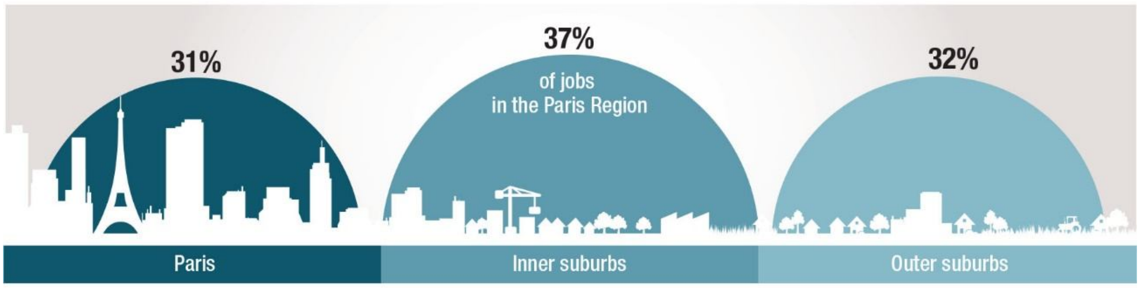
The economic diversity of a strategic territory: the Saclay plateau

The extended territory of the Saclay plateau stretching from Massy as far as Saint-Quentin-en-Yvelines stands out because of the great diversity of its economic fabric. It features, first, a mix of municipalities dominated by “high-end services” (Saclay, Jouy-en-Josas, Gif-sur-Yvette), including some, such as Massy and Vélizy, that also feature specific industrial activities; second, some sectorially mixed municipalities with industrial (Guyancourt, Buc) or logistical activities (Trappes, Villebon-sur-Yvette); and finally third, some industrial municipalities (Élancourt).

5.3 Recent developments in favour of the central urban area

Between 1980 and 1990, employment increased in the *outer suburbs* of the Paris Region, buoyed notably by the development of five new towns, which accommodated half of the population growth between 1975 and 1990. Conversely, in the 2000s, employment gains were greater in the *inner suburbs* than in the rest of the Paris Region. The inner suburbs were also attractive to households: between 1990 and 2009[81], they accommodated half of the Paris Region's population within a 20-kilometre radius of Notre Dame Cathedral. Furthermore, some of the employment gains were due to population growth and the related rise in demand for services and retail facilities.

Between 2000 and 2009, a large share of the growth in regional employment in the inner suburbs occurred in Seine-Saint-Denis county (+1.1% a year), Hauts-de-Seine county (+1% a year) and, to a lesser extent, in Val-de-Marne county (+0.7%). In the outer suburbs, employment trends were more varied: up +0.7% and +0.6% a year in Seine-et-Marne and Val d'Oise counties respectively; up more moderately by +0.4% in Essonne county; and down -0.4% in Yvelines county. In Paris, employment decreased moderately by -0.2%. In the Paris Region as a whole, employment trended upwards by +0.4% a year between 2000 and 2009. Over the same period, the number of jobs rose by 170.4 thousand in the inner suburbs and by 45.6 thousand in the outer suburbs, whereas in Paris the number it fell by 33.1 thousand.



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source : National Institute for Statistics and Economic Studies, Estel 2013

From 2010 onwards, following the financial crisis, employment grew at a moderate pace (+0.5% a year) in the Paris Region as a whole and continued to grow in the inner suburbs, but less variably. The highest employment growth rates were posted by Seine-Saint-Denis and Val-de-Marne counties (+0.9%), followed by Seine-et-Marne (+0.8%) and Paris (+0.6%). Thus, between 2010 and 2014, the number of jobs increased by 59.2 thousand in the inner suburbs, by 42.6 thousand in Paris and by 23.6 thousand in the outer suburbs. Employment increased in all counties, but at a slower pace than average in Yvelines county. Ultimately, between the years 2000 and 2014, the inner suburbs' share of total employment in the Paris Region increased, whereas that of the outer suburbs diminished slightly.

5.4 Rapid employment growth in the municipalities adjoining Paris

During the 2000-2010[82] period, the highest rates of growth in private payroll employment were posted in the municipalities adjacent to Paris (Saint-Denis, Gennevilliers, Boulogne, Ivry-Vitry). Paris districts posted job losses, notably in the central business district, with the exception of eastern Paris (13th district), where jobs increased. Over the period in question, job creation spread out from the capital city to neighbouring hubs and the municipalities adjacent to these hubs. In some cases, this job growth was due to the opening of large establishments by corporations in sites located, for example, around the Gennevilliers hub, such as Atos Origin in Bezons, IBM in Bois-Colombes, Orange in Arcueil, LCL in Villejuif, Credit Agricole in Montrouge, etc.

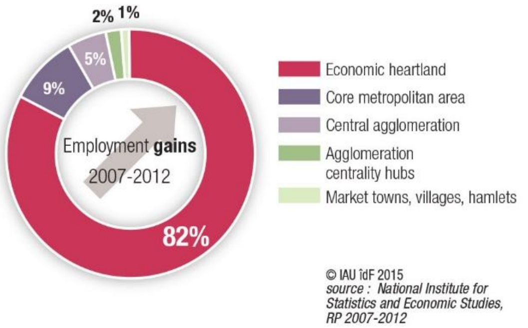
[81] *Beaufils Sandrine, Louchart Philippe, « Île-de-France 2009 : 1,1 million de Franciliens de plus qu'en 1990 », in Atlas des Franciliens, IAU îdF, March 2013.*
[82] *Aussillous Charlotte, Baudrand Vincent, Lesecq Guillaume, « Spécialisation des pôles d'emploi franciliens, situation et tendances 2000-2010 », DRIEA, March 2015 (Garp private salaried employment field); comments companies, IAU îdF.*

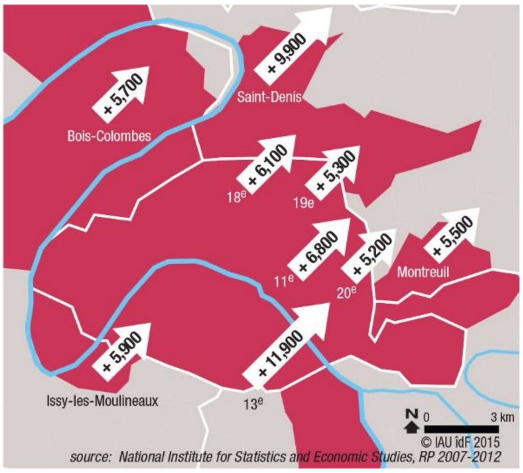
Over a more recent period (2007-2012), nine municipalities and Paris districts have each gained over 5,000 dependent and independent jobs, all located in the core metropolitan area.

The leader is the 13th district of Paris, thanks notably to the expansion of office space in the French National Library (BNF[83]) neighbourhood, whose development continues, featuring the complete restructuring of a former railway building (la halle Freyssinet) and the planned arrival of the headquarters of *Le Monde* newspaper. In second place is Saint-Denis, which continues to transform itself and posts the second largest employment gain. It has benefited from the relocation of businesses (such as Orange, Generali, SNCF, etc.) from la Défense, Paris and more distant municipalities and from employment gains in high value added services. Today, the Plaine district of Saint-Denis has become the third largest business district in the Paris Region after the Central Business District (QCQ) and la Défense. After losing a number of banking institutions, the QCA has welcomed iconic representatives of the digital world (BlaBlaCar, Leboncoin, and Criteo). This district is undergoing regeneration and boasts one of the lowest vacancy rates in the region.

After the 13th district, four other Paris districts posted high employment growth rates between 2007 and 2012: the 11th district (with the very recent arrival of the Publicis advertising and PR company) and the districts in north-eastern Paris (18th, 19th, 20th). The momentum has been driven by the relocation to these districts of organisations that produce cultural content (films, audiovisual products, books, the press, and music) as well as advertising and communication material. Municipalities adjacent to Paris such as Montreuil, Boulogne-Billancourt, Issy-les-Moulineaux and Bois-Colombes have also posted employment gains.

High employment growth rates (2007-2012) in the Paris Region's economic heartland





Nine municipalities and Paris districts each gained over 5,000 jobs between 2007 and 2012.

5.5 Certain functions have been moving away from the dense area

During the 2000-2010 period, some economic hubs in the outer suburbs, such as Trappes-Guyancourt, Roissy-en-France, Orly and Massy-les Ulis, posted increases in employment. However, almost all the economic hubs located outside the central agglomeration recorded decreases in employment.

During the more recent 2007-2012 period, some 15 municipalities in the outer suburbs recorded net employment gains of over 1,000 jobs each. This represented a net cumulative gain of 26,000 jobs, whereas the outer suburbs as a whole gained only 7,000 jobs because numerous municipalities suffered job losses. Almost all the municipalities that posted employment gains were located in the vicinity of former new towns or in the central agglomeration (excluding the core metropolitan area).

Certain functions have been moving away from the dense area. Large organisations tend to bring together all their staff in campus-like sites. Thus, some industrial companies have decentralised their manufacturing headquarters, as Peugeot have done in Poissy, for example, and as Thalès

[83] *Bibliothèque nationale de France*

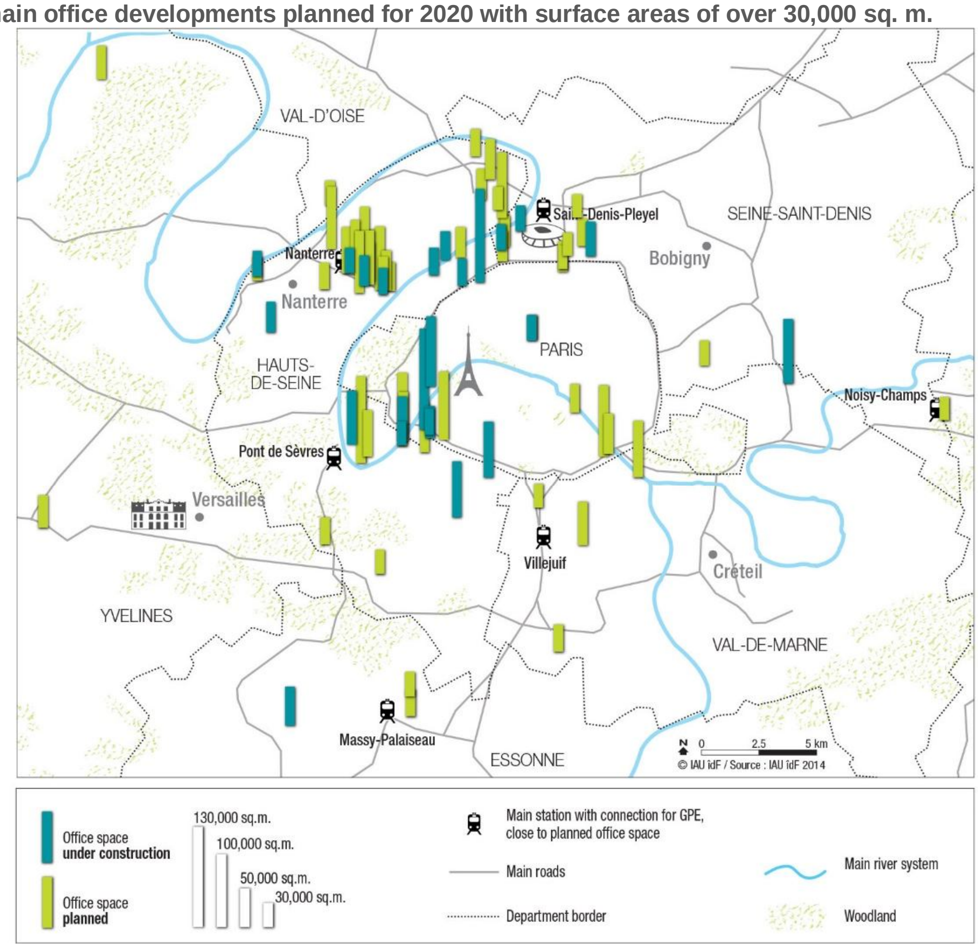
have done in Saint-Quentin-en-Yvelines south-west of Paris. The preferred sites for manufacturing facilities are located on the edge of the dense urban area where land is more readily available and more affordable.

Logistics facilities continue to move away from central areas: the most recent developments (1998-2009)[84] are the most distant from the centre of the metropolitan area. At the same time, new buildings are concentrated in a smaller number of municipalities specialised in such property developments, most of which are located in the outer suburbs and at the gates of the Paris Region.

The business parks (ZAEs[85]) with the greatest potential are located in the outer suburbs and account for 90% of the projects that have been identified. Seine-et-Marne county is the one that has the greatest available capacity for accommodating ZAEs. Val d'Oise county has the second largest amount of surface area of space available for ZAEs, followed by Yvelines and Essonne counties. The availability of space for ZAEs is limited in the inner suburbs (which accommodate 10% of identified projects) and is mainly to be found in Val-de-Marne and Seine-Saint-Denis counties. However, in the outer suburbs, the rates of concentration of jobs per hectare in the ZAEs are low, which may explain the low job growth rate in part of the outer suburban area.

Regarding new office development programmes, against the background of the sharp economic downturn since 2009, property developers have fallen back on established service sector hubs. Thus, the majority of new office developments under construction or planned featuring over 30,000 sq. m. of surface area are located in the Paris Region's economic heartland, and more particularly in its established business districts.

The main office developments planned for 2020 with surface areas of over 30,000 sq. m.



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[84] *Bahoken Françoise (Ifsttar), Nicolas Raimbault (Ifsttar), « Les nouveaux territoires logistiques franciliens : éloignement et spécialisation », Note rapide, n°665, November 2014.*
[85] *Zones d'activités économiques*

CONCLUSION

The Paris Region economy is that of a great urban region whose administrative frontiers are consistent with its living zone, the functional urban region. This region accounts for 19% of the population of France, 22% of its jobs and 31% of its GDP. The Paris Region's already very high performance infrastructure networks are going to be considerably enhanced by investments undertaken, notably in international airports and the Grand Paris Express automated metro system. Among the Paris Region's other acknowledged strengths are: the broad presence of internationalised and diversified businesses; a cosmopolitan and highly skilled labour force; an attractive property offering and market; and a wealth of cultural and creative industries and amenities.

In the mixed economic conditions of the last 15 years, the Paris Region has continued to enjoy job growth and has withstood the crisis better than other French regions. However, unemployment has been increasing as a direct consequence of the crisis, but also because the economically active population has grown at a faster pace than job growth (+0.6% a year compared with +0.4% a year respectively between 2007 and 2012). Furthermore, since the mid-2000s, self-employment jobs have accounted for half of total employment gains owing to the very sharp increase in independent professionals.

In spatial terms, Paris and its neighbouring municipalities have kept a major share of job location and especially of higher metropolitan functions. The heart of the Paris agglomeration, i.e. the capital city and around 100 neighbouring municipalities, account for 69% of jobs and 76% of office space in the capital city region. Hauts-de-Seine county and Paris accommodate two thirds of executives who occupy metropolitan functions. In seven Paris districts and 38 municipalities, high added value service jobs significantly predominate. This is due to the fact that the means of production are very highly concentrated in the areas best endowed with good accessibility, quality amenities, a skilled population, a commercial property offering, etc. In recent years, new forms of economic development, together with the effects of the crisis, which have lowered commercial property prices in the centre, have led to high job growth in Paris and the inner suburbs. Over the 2000-2014 period, the three counties adjacent to the capital city accounted for 57% of total job growth in the Paris Region, while Paris accounted for 18%.

The Paris Region is high-performing, powerful and has demonstrated a real potential for adapting to new developments in work organisation and for meeting the new demands of digital technology and the ecological transformation. Half a million people already work in digital companies and the Paris Region has successfully preserved and renewed several of its industrial skills. Although very focused on high value added services and metropolitan functions, it has a more diversified production system than have other metropolitan areas, such as London, for example.

In spite of these favourable trends, the Paris Region still needs to strengthen its positions in certain fields and to conquer new positions in others. The impacts of international competition and structural transformations are still being felt. Similarly, the social and regional inequalities due to current economic mechanisms and amplified by the major economic crisis of 2009 undermine the Paris Region and hamper its economic development. That said, the current dynamics of the capital-city region's economy open up numerous new possible courses of development.

It is true that many economic trends and policies are national, European and global issues. However, issues relating to the responsiveness of a productive system and its objectives really must be tackled at regional level and encompass the:

- employment and economic conditions of the Paris Region's inhabitants;
- development dynamics open to businesses in the Paris Region;

- quality of the living and hosting conditions afforded to employees, residents and visitors;
- positioning of the region, notably its role in the French and international economies.

In order to set its strategic priorities, the Paris Region's Regional Council has taken the initiative to launch its 2016-2021 Regional Economic Development, Innovation and Internationalisation Plan (SRDEII[86]). This plan, which includes a consultation procedure, provides an opportunity to mobilise and channel the energies of all the relevant stakeholders in the Paris Region – local authorities, voluntary organisations, enterprises - around a common objective. It is also an opportunity to link an economic development plan with other thematic strategies that have a great economic impact (master plan, vocational training, climate-air-energy plans, housing and accommodation, higher education).

By capitalising on what has already been achieved, the economic stakeholders who have rallied around the Regional Council have the means to address the issues and challenges facing the capital-city region in terms of international competitiveness and appropriate spatial development. The Paris Region must enhance its role as a world city region, ensure the continuance of its major regional assets and tackle various challenges and difficulties, starting with the social and territorial inequalities.

[86] *Schéma régional de développement économique, d'innovation et d'internationalisation.*

IAU île-de-France, Paris region agency

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