Immigration policies in France to cancel inequalities between the Paris region and the rest of the country

What region has the most chance of attracting high-skilled migrants?

Introduction, business problem

- France is a country which tries to attract an increasing number of highly skilled migrants.
- Paris-the capital city-has the status of a world-city, comparatively to New York, London or Tokyo.
- Paris has concentrated many multinational companies, so much so that many of the high-skilled jobs in France are solely present in Paris and nowhere else in the country (trader, financial structurer, big data engineer...).
- As many studies have shown that skilled migrants have a higher propensity to create new, innovative businesses (even compared to the native population, let alone the low-skilled migrants), it could be a great investment for France to attract skilled migrants in regions outside of Paris in particular.
- The latter could help decrease regional disparities in the country, hoping for better public infrastructure to develop outside of the capital city.

Data description

Average net incomes:

https://www.journaldunet.com/business/salaire/classement/departements/salaires
 https://www.journaldunet.com/business/salaire/classement/departements/salaires?page=2
 This page presents the average net income per working person in all French "départements".

Real estate prices:

https://www.consortium-immobilier.fr/prix/

This page presents the average price of one meter square of real estate property in all French "départements", whether that be a house or an apartment.

Statistics on middle and high schools:

https://www.insee.fr/fr/statistiques/2012787#tableau-TCRD_061_tab1_departements
This page presents the number of middle schools, general and professional high schools in all French "départements", whether these schools be public or private.

Geocoder:

We use the geocoder addon in python to get the longitudes and the latitudes of all French "départements".

Methodology

- All the data from the web pages is extracted thanks to webscraping.
- The longitudes and latitudes are extracted through geocoder.
- All data is cleaned, sorted and ordered into panda dataframes.
- All overseas French "départements" are excluded through data cleaning.
- All data is presented in the alphabetical order of French "départements".

```
#webscraping the income data
income=[]
url = 'https://www.journaldunet.com/business/salaire/classement/departements/salaires'
page = requests.get(url).text
soup = BeautifulSoup(page, 'html.parser')
for table in soup.find_all("table"):
    for row in table.find("tbody").find_all("tr"):
        col = row.find_all("td")
        income.append(col[0].text)
        income.append(col[1].text)
        income.append(col[2].text)
```

Results

| | Dpt with highest incomes | Dpt with most public middle schools | Dpt with most public professional high schools | Dpt with most public general high schools | Dpt with most private middle schools | Dpt with most private professional high schools | Dpt with most private general high schools | Dpt with most expensive houses | Dpt with most expensive apartments |
|---|--------------------------------|---|---|--|--|--|---|---|---|
| ď | Paris | Nord | Nord | Paris | Nord | Rhône | Paris | Savoie | Rhône |
| 1 | Hauts- de-Seine | Bouches- du-Rhône | Paris | Nord | Paris | Bouches-du- Rhône | Bouches-du- Rhône | Loire- Atlantique | Bas-Rhin |
| 2 | Yvelines | Seine-Saint- Denis | Pas-de-Calais | Seine-Saint- Denis | Rhône | Loire | Nord | Haute- Garonne | Aveyron |
| 3 | Val-de- Marne | Seine-et- Marne | Bouches-du- Rhône | Seine-et- Marne | Loire- Atlantique | Gironde | Rhône | Charente | Haute- Marne |
| 4 | Essonne | Pas-de- Calais | Rhône | Yvelines | Bouches-du- Rhône | Haute-Garonne | Loire- Atlantique | Val-d'Oise | Landes |

- Real estate valuation is not a determining factor for high-skilled migrants, are they usually are not immediately
 available to own property. They rent a place until become eligible.
- The presence of private schools is crucial. Private schools guarantee access to better universities, they also
 provide children of immigrants with extra classes in French, so students can better integrate.
- Income is a crucial parameter. There, Paris and the Paris region (Hauts-de-Seine, Yvelines, Val-de-marne, Essone) are extremely competitive, representing the main burden to bringing skilled migrants to other parts of the country.

| | Department | Net income (monthly, EUR) | Longitude | Latitude | |
|----|-----------------------|---------------------------|------------|-----------|--|
| 0 | Paris | 3683 | 2.341400 | 48.857170 | |
| 1 | Hauts-de-Seine | 3585 | 2.241225 | 48.806163 | |
| 2 | Yvelines | 3268 | 1.841223 | 48.815273 | |
| 3 | Val-de-Marne | 2666 | 2.469195 | 48.777422 | |
| 4 | Essonne | 2601 | 2.243431 | 48.522547 | |
| 5 | Rhône | 2487 | 4.640873 | 45.871030 | |
| 6 | Val-d'Oise | 2467 | 2.130822 | 49.082732 | |
| 7 | Haute-Garonne | 2466 | 1.174886 | 43.358858 | |
| 8 | Seine-et-Marne | 2430 | 2.934009 | 48.627462 | |
| 9 | Isère | 2373 | 5.574199 | 45.263864 | |
| 10 | Bouches-du-Rhône | 2335 | 5.085355 | 43.545473 | |
| 11 | Oise | 2322 | 2.424938 | 49.409954 | |
| 12 | Alpes-Maritimes | 2313 | 7.116190 | 43.938015 | |
| 13 | Guyane | 2310 | -53.233122 | 3.921724 | |
| 14 | Territoire de Belfort | 2284 | 6.928577 | 47.631736 | |
| 15 | Gironde | 2266 | -0.575848 | 44.823894 | |

Discussion 1/2

Paris area

- Besides the Paris region, the Rhône region is extremely attractive in terms of income.
- Val-d'Oise, Haute-Garonne and Seine-et-Marne are also attractive places.

Table - French departments ranked based on average net income levels

Discussion 2/2

| | Department | Public middle school | Public professional high school | Public general high school | Private middle school | Private professional high school | Private general high school | House price (EUR/m2) | Apartment price (EUR/m2) |
|----|-----------------------|----------------------------|---------------------------------------|----------------------------------|-----------------------------|--|-----------------------------------|----------------------------|--------------------------|
| 74 | Paris | 114 | 29 | 71 | 78 | 12 | 103 | 1767 | 2043 |
| 12 | Bouches- du-Rhône | 136 | 26 | 39 | 65 | 27 | 53 | 2425 | 2107 |
| 58 | Nord | 203 | 44 | 56 | 84 | 16 | 48 | 1743 | 2499 |
| 68 | Rhône | 113 | 24 | 37 | 72 | 31 | 43 | 1874 | 1500 |
| 43 | Loire- Atlantique | 83 | 15 | 25 | 68 | 14 | 29 | 1518 | 2129 |
| 77 | Yvelines | 116 | 7 | 42 | 37 | 9 | 27 | 1658 | 2489 |
| 91 | Hauts-de- Seine | 99 | 13 | 40 | 42 | 6 | 26 | 2192 | 1606 |
| 5 | Alpes- Maritimes | 73 | 13 | 22 | 21 | 9 | 24 | 1792 | 2224 |
| 93 | Val-de- Marne | 105 | 10 | 37 | 38 | 9 | 23 | 2206 | 2307 |
| 92 | Seine-Saint- Denis | 130 | 16 | 51 | 35 | 8 | 22 | 1677 | 1869 |
| 66 | Bas-Rhin | 90 | 9 | 31 | 25 | 9 | 21 | 1598 | 1503 |
| 32 | Gironde | 105 | 23 | 32 | 33 | 17 | 21 | 1856 | 1717 |
| 28 | Finistère | 61 | 7 | 20 | 50 | 12 | 21 | 2220 | 2335 |
| 94 | Val-d'Oise | 111 | 9 | 36 | 38 | 3 | 19 | 1530 | 1729 |

Table - French departments ranked based on the supply of private general high schools

- Selection at university is solely based on a high school transcript, and the type of high school a pupil attended.
- General high schools prepare for intellectual careers, which call for a minimum of three years of higher studies (Bachelor's degree),
 even though five years if the most common length people engage in a university course for (Master's degree).
- Private schools guarantee access to better colleges and universities, along with extra language classes and personalized follow-up
 from professors. This might prove crucial for second generation immigrants.
- Rhône, Nord and Loire-Atlantique have the highest supply of general private high schools, guaranteeing a higher chance of accessing
 one of those prestigious establishments for sons and daughters of immigrants.

CONCLUSION: RHÔNE WINS

- Rhône is the best region outside of Paris when it comes to the combination of both metrics. Schools in particular are of crucial importance, since good education promises for the best integration of second generation immigrants into the host society.
- Investigating further the possibility of Rhône to implement efficient pro-immigration programmes—such as language programmes, along with other type of assistance—could be incredibly rewarding for the region.
- High-skilled migrants prove high integration capacity, with incredible success on the part of second and third generations. Investing in their well-being is net benefit for rich countries. It could allow a country like France to rebalance the inequalities between the Paris region and the rest of the country effectively.

