Education economics

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M2 EPOG+
1 Major trends

2 France
Major trends

- International
- Chile and Sweden
International

Huge international differences: OECD countries are achieving higher education massification, whereas poor countries are still developing primary education.
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Huge funding differences:

- GDP per capita ratio is about 80 times higher in OECD countries than in poor countries.
- Education share of GDP is twice as big.
- Young people are 3 times less numerous (demographic transition).

⇒ 480 more funding per capita in education.
# Out of sync massification

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>97</td>
<td>99</td>
<td>98</td>
<td>78</td>
<td>92</td>
<td>99</td>
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<tr>
<td>United Kingdom</td>
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<td>99</td>
<td>99</td>
<td>70</td>
<td>94</td>
<td>98</td>
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<td>Iran</td>
<td>59</td>
<td>84</td>
<td>99</td>
<td></td>
<td></td>
<td>72</td>
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<tr>
<td>Cameroun</td>
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<td>72</td>
<td>95</td>
<td>7</td>
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<td>Marocco</td>
<td>36</td>
<td>76</td>
<td>94</td>
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<td>56</td>
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<tr>
<td>Bangladesh</td>
<td>51</td>
<td>72</td>
<td>90</td>
<td>14</td>
<td>45</td>
<td>63</td>
</tr>
<tr>
<td>India</td>
<td>61,36</td>
<td>79,80</td>
<td>92,25</td>
<td></td>
<td></td>
<td>62</td>
</tr>
</tbody>
</table>

Source: UIS Data Center, UNESCO.
### A gendered massification
Primary school completion rate, girls(% of age group)

<table>
<thead>
<tr>
<th>Region</th>
<th>1980</th>
<th>2000</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>European union</td>
<td>98</td>
<td>98</td>
<td>97</td>
</tr>
<tr>
<td>Latin America</td>
<td>88</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>India</td>
<td>45</td>
<td>64</td>
<td>93</td>
</tr>
<tr>
<td>China</td>
<td>107</td>
<td>100</td>
<td>109</td>
</tr>
</tbody>
</table>
OECD analyses education systems of member countries and associates, as a determinant of growth: annual reports *Education at a Glance*.

Policy change in the 1980’s (Vinokur, 2007):

**before**: France and USSR as models, with a free, public and centralized education.

**After**: with the WB, argues for liberalization of higher education, high tuition fees and loans. Private returns on higher education would be high enough.
GDP and spendings

Dépenses par élève/étudiant
(en équivalents USD convertis sur la base des PPA)

Tertiaire

OECD (2013)
Public vs private spending


Dépenses publiques et privées, selon le niveau d’enseignement et la provenance des financements

- Dépenses privées au titre des établissements d’enseignement
- Dépenses publiques au titre des établissements d’enseignement

<table>
<thead>
<tr>
<th>% du PIB</th>
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<tbody>
<tr>
<td>5.5</td>
</tr>
<tr>
<td>5.0</td>
</tr>
<tr>
<td>4.5</td>
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<td>4.0</td>
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<td>2.5</td>
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<td>2.0</td>
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<tr>
<td>1.5</td>
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<td>1.0</td>
</tr>
<tr>
<td>0.5</td>
</tr>
<tr>
<td>0.0</td>
</tr>
</tbody>
</table>

Moyenne OCDE (dépenses totales)

. OCDE (2013)
Funding in the UK

Fees and subsidies

OECD (2013)
### Market vs socialized models

<table>
<thead>
<tr>
<th>Market model</th>
<th>Socialized model</th>
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</thead>
<tbody>
<tr>
<td>Private merchant good</td>
<td>Public good</td>
</tr>
<tr>
<td>For profit/philanthropic</td>
<td>Not for profit</td>
</tr>
<tr>
<td>Fees</td>
<td>Free or almost</td>
</tr>
<tr>
<td>Mixed selection</td>
<td>Academic</td>
</tr>
<tr>
<td>Private funding</td>
<td>Public</td>
</tr>
<tr>
<td>Familly or loan</td>
<td>wage/scholarship</td>
</tr>
</tbody>
</table>

Vinokur (2007).
1. Les données concernent tous les étudiants (ressortissants nationaux scolarisés à temps plein et étudiants non ressortissants nationaux/étrangers scolarisés à temps plein).
2. Les frais de scolarité moyens varient de 200 à 1 402 USD pour les programmes universitaires dépendant du ministère de l’Éducation.
3. Les frais de scolarité portent sur les établissements publics, bien que plus de deux tiers des étudiants fréquentent un établissement privé.
4. Si seuls les établissements publics sont pris en compte, le pourcentage d’étudiants bénéficiaires de prêts d’études publics et/ou de bourses ou allocations devrait s’établir à 68 %.
Moulin (2014) 3 systems

Typology à la Esping-Andersen (1990)

Socio-democratic countries
- Large share of GDP
- Public funding, no fees
- Scholarship or wage, loan for cost of living
- Social investment
- Autonomy and individual fulfillment

Liberal US, UK, Chile, Japan
- Large share of GDP
- Large private funding, fees and loans
- Merit-based grants
- Economic finality: human capital

Conservative Continental Europe
- Low fees, scholarships and loans
- Family-based funding
- Limited access and graduation rates
## Access and graduation rates

<table>
<thead>
<tr>
<th>System</th>
<th>Country</th>
<th>Access rate</th>
<th>Graduation rate</th>
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</thead>
<tbody>
<tr>
<td>Social-democrats</td>
<td>Norway</td>
<td>76</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Sweden</td>
<td>72</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Finland</td>
<td>68</td>
<td>49</td>
</tr>
<tr>
<td>Liberal</td>
<td>Australia</td>
<td>96</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>US</td>
<td>72</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>64</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Chile</td>
<td>45</td>
<td>20</td>
</tr>
<tr>
<td>Conservative</td>
<td>Spain</td>
<td>53</td>
<td>38</td>
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<tr>
<td></td>
<td>Germany</td>
<td>46</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>39</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>OECD</td>
<td>60</td>
<td>39</td>
</tr>
</tbody>
</table>

Bachelor or better (OECD, 2013).

Denominator is population of **nationals** (Australia has a lot of foreign students).

Globalization of HE $\Rightarrow$ misfitted stats.
Doubling of internationally mobile students in the last 15 years

14 billion € for Australia in 2016.
Foreign student share in France is stable since 2006.

Chile

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>1981</td>
<td>Higher education reform: opening up to the private sector, fees increase, public loans</td>
</tr>
<tr>
<td>1990</td>
<td>Extension to primary and secondary education of the competition, <em>vouchers</em>.</td>
</tr>
</tbody>
</table>

**Vouchers**

Schools autonomy and public funding per exempt pupil.  
⇒ rise of the private sector (from 20% to 40%) but not of achievements:  
Private sector’s better performance is completely explained by social properties of the pupils. *Creaming effet* (Hsieh & Urquiola, 2003)
Chile

Higher education massification:
1 million students for 17 millions residents in Chile
2,3 millions students for 65 millions residents in France.
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2,3 millions students for 65 millions residents in France.
But variable quality and very expensive:
2,5% of GDB for HE, very low public share (lowest of OECD : 25%,
vs 40% for the US and 82% for France).
Higher education massification:
1 million students for 17 millions residents in Chile
2,3 millions students for 65 millions residents in France.
But variable quality and very expensive:
2,5% of GDB for HE, very low public share (lowest of OECD: 25%, vs 40% for the US and 82% for France).
Universidad del Mar lost its accreditation in 2011 + scandals
⇒ Massive student protest
Free higher education announced by candidate Bachelet in 2014
Once elected, she increased social grants (vouchers) to 50% of students.
Sweden

Strong egalitarian culture; unified higher education. « The State considers students as citizens, entitled to financial independence ».

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- No tuition fees
- 3 000 €/year grant for all
- 760 €/month subsidized loan in complement

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Students age is much higher than in France or UK: it’s not a compulsory step into employment.

Democratization of the scolar system extends to grown-ups.

2 France
- Massifications of education
- Academic labor
Strong development of education in France accross the XXth century: Mean length of study increased from 8 years for a child born in 1900 to 16 for a child born in 1975.

Massification of higher education in the last 30 years: Twice as much students than in 1980, 7 times more than in 1960.

<table>
<thead>
<tr>
<th>Year</th>
<th>1960</th>
<th>1975</th>
<th>2010</th>
</tr>
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<tbody>
<tr>
<td>Share</td>
<td>20</td>
<td>40</td>
<td>50</td>
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</table>
Share of education in the French GDP

Growth until 1970 and fluctuations despite the massification.

Major trends

France

Massifications of education

Academic labor

Share of each cycle


Education economics
Massification of student enrollment by 10% /year during the 1960’s. Growth holds in volume except during the early 2000’s

Source: French government (RERS).
Decomposition of French student enrollment

Source: French government (RERS, 2014).
Décomposition de la charge d'études en France

- *Apprentissage* (majorité d'élèves d'ouvriers ou d'employés) : 7 780 €
- *Université* (41% d'élèves d'ouvriers ou d'employés, 34% d'élèves de CSP+) : 8 790 €
- *BTS* (43% d'élèves d'ouvriers ou d'employés) : 13 360 €
- *Prépa* (16% d'élèves d'ouvriers ou d'employés, 50% d'élèves de CSP+) : 15 110 €
- *Sciences Po* (12% d'élèves d'ouvriers ou d'employés, majorité d'élèves de CSP+) : 17 000 €
- *ENS* (9% d'élèves d'ouvriers ou d'employés, 53% d'élèves de CSP+) : 42 700 €
- *Polytechnique* (75% d'élèves de CSP+) : 62 350 €
- *ENA* (majorité d'élèves de CSP+, 6% d'élèves d'ouvriers ou d'employés) : 89 000 €

*Sources : Insee, Observatoire des inégalités, ministère de l'Enseignement supérieur*
Major trends
France

Massifications of education
Academic labor

Tuition fees extension

- 70 000 students enrolled in for profit private universities
- 200 000 students enrolled in not for profit private universities
- mean fees exceeded 10 000 €/year in business schools
- fast fees increase in public Grandes Ecoles and Masters
Grandes Ecoles development

Source: French government (RERS, 2014).
Private sector growth

Évolution des enseignements supérieurs privé et public depuis 1998 (base 100)
(France métropolitaine + DOM y compris Mayotte à partir de 2011)
Assistant professor vacancies

- **Major trends**
  - France
  - Massifications of education
  - Academic labor

- **Education economics**

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**Bar chart**

- **Years:** 2005, 2010, 2015, 2020
- **Categories:**
  - ST
  - Pharma
  - LLASHS
  - DEG

- **Data**
  - 2005:
    - ST: 2417
    - Pharma: 100
    - LLASHS: 2158
    - DEG: 89
  - 2010:
    - ST: 2318
    - Pharma: 98
    - LLASHS: 2264
    - DEG: 94
  - 2015:
    - ST: 2194
    - Pharma: 91
    - LLASHS: 2101
    - DEG: 87
  - 2020:
    - ST: 1852
    - Pharma: 77
    - LLASHS: 1675
    - DEG: 69

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**Representative Text**

Assistant professor vacancies in France show a significant trend in the massifications of education, particularly in academic labor. The data indicates a rise in vacancies from 2005 to 2020, with a notable peak in 2015. The categories, including science and technology (ST), pharmacy (Pharma), law and social sciences (LLASHS), and economics (DEG), display varying degrees of increase over the years.
Major trends
France
Massifications of education
Academic labor

Student per professor ratio

Education economics