University of Helsinki and Aalto University welcome you to
EUNIS Rectors Conference 2014 April 3–5
Helsinki and Espoo, Finland

The New Digital Era in Higher Education

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

Aalto-yliopisto
Aalto-universitetet
Aalto University
University quality assurance and graduate placement

Andrea Cammelli
Professor at the University of Bologna
Founder and Director, AlmaLaurea, Italy
LUIGI EINAUDI

President of the Italian Republic

“Knowing to decide” in Prediche inutili (Useless Sermons), 1956
“There is nothing a government hates more than to be well-informed, for it makes the process of arriving at decisions much more complicated and difficult”

The Times, 1937
Galileo Galilei
Astronomer and Instrument Maker

He stood before the Cardinals of the Congregation for the Doctrine of the Faith, that were reluctant to approach the telescope
The AlmaLaurea System

64 member Universities
Over 80% of Italian Graduates
AlmaLaurea’s activities are based on three pillars

The graduates’ profile: an annual survey (based on the previous year data) and report on the internal efficiency of the higher education system

The graduates’ employment conditions: an annual survey and report on the external efficiency of the higher education system

The online databank of graduates’ curricula: a powerful tool that improves the match between supply and demand of graduates and their transnational mobility (CVs are made available online three/four months before graduation time)
The AlmaLaurea System

64 member
Universities

Over 80%
of Italian Graduates

AlmaLaurea’s activities
are based
on three pillars

1. The graduates’ profile: an annual
   survey (based on the previous year
   data) and report on the internal
   efficiency of the higher
   education system

2. The online databank of graduates’
curricula: a powerful tool that
   improves the match between supply
   and demand of graduates and their
   transnational mobility (CVs are made
   available online three/four months
   before graduation time)

3. The graduates’ employment
   conditions: an annual survey
   and report on the external efficiency
   of the higher education system

This complete, periodic, well-timed and updated
documentation is provided to the governing
bodies of the universities that are part
of the consortium, to Committees dealing with
teaching Activities and career guidance
and made available to all the stakeholders
involved in higher education issues - families,
students, companies and policy-makers -
as a solid basis for fostering all decision-making
processes and activity planning
Population with tertiary education by age groups

source: OECD, 2013
reference year: 2011

percentage values

Japan 31
UK 31
Norway 29
United States 41
Sweden 28
France 19
Finland 31
Denmark 28
OECD 24
Spain 19
EU21 21
Germany 26
Czech Rep. 12
Italy 11
Turkey 10
Population with tertiary education by age groups

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-64 years</td>
<td>59%</td>
</tr>
<tr>
<td>25-34 years</td>
<td>47%</td>
</tr>
</tbody>
</table>

Countries:
- Japan: 59%
- UK: 47%
- Norway: 47%
- United States: 43%
- Sweden: 43%
- France: 43%
- Finland: 39%
- Denmark: 39%
- OECD: 39%
- Spain: 39%
- EU21: 36%
- Germany: 28%
- Czech Rep.: 25%
- Italy: 21%
- Turkey: 19%

Source: OECD, 2013
Reference year: 2011

Percentage values
Public and private expenditure in higher education as a percentage of GDP

United States 2.8
Denmark 1.9
Finland 1.9
Sweden 1.8
Norway 1.7
Japan 1.5
France 1.5
UK 1.4
Spain 1.3
Germany* 1.3
ITALY 1.0
Slovak Republic 0.9

source: OECD, 2013
reference year: 2010
* reference year: 2009

percentage values
Cumulative expenditure per graduate over the average duration of tertiary studies

Source: OECD, 2012 reference year 2010

* Reference year: 2009

Index numbers

## Spending per Graduate

**ITALY:**

43,283 $ USA (ppp)

<table>
<thead>
<tr>
<th>Country</th>
<th>Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>100</td>
</tr>
<tr>
<td>France</td>
<td>175</td>
</tr>
<tr>
<td>Spain</td>
<td>180</td>
</tr>
<tr>
<td>Finland</td>
<td>183</td>
</tr>
<tr>
<td>Germany*</td>
<td>207</td>
</tr>
<tr>
<td>Sweden</td>
<td>225</td>
</tr>
<tr>
<td>Denmark</td>
<td>228</td>
</tr>
</tbody>
</table>

index numbers
Total and private expenditure on R&D as a percentage of GDP

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Expenditure</th>
<th>Private Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>2.72</td>
<td>3.90</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.33</td>
<td>3.39</td>
</tr>
<tr>
<td>Denmark</td>
<td>2.09</td>
<td>3.07</td>
</tr>
<tr>
<td>Germany</td>
<td>1.88</td>
<td>2.80</td>
</tr>
<tr>
<td>France</td>
<td>1.41</td>
<td>2.24</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.89</td>
<td>1.85</td>
</tr>
<tr>
<td>UK</td>
<td>1.10</td>
<td>1.80</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.17</td>
<td>1.71</td>
</tr>
<tr>
<td>Spain</td>
<td>0.72</td>
<td>1.39</td>
</tr>
<tr>
<td>ITALY</td>
<td>0.68</td>
<td>1.26</td>
</tr>
</tbody>
</table>

Source: ISTAT, 2013
Reference year: 2010

USA: total expenditure 2.90
Source: OECD
Year: 2009
## Managers by level of education

<table>
<thead>
<tr>
<th>Country/Area</th>
<th>Compulsory Schooling or lower qualification</th>
<th>Secondary School qualification</th>
<th>Degree or higher qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>4</td>
<td>17</td>
<td>78</td>
</tr>
<tr>
<td>France</td>
<td>9</td>
<td>27</td>
<td>64</td>
</tr>
<tr>
<td>Denmark</td>
<td>13</td>
<td>26</td>
<td>61</td>
</tr>
<tr>
<td>Spain</td>
<td>19</td>
<td>22</td>
<td>58</td>
</tr>
<tr>
<td>Norway</td>
<td>8</td>
<td>38</td>
<td>54</td>
</tr>
<tr>
<td>EU27</td>
<td>11</td>
<td>36</td>
<td>53</td>
</tr>
<tr>
<td>EU15</td>
<td>13</td>
<td>35</td>
<td>52</td>
</tr>
<tr>
<td>UK</td>
<td>13</td>
<td>35</td>
<td>52</td>
</tr>
<tr>
<td>Germany</td>
<td>5</td>
<td>44</td>
<td>51</td>
</tr>
<tr>
<td>Sweden</td>
<td>6</td>
<td>43</td>
<td>50</td>
</tr>
<tr>
<td>Italy</td>
<td>28</td>
<td>48</td>
<td>24</td>
</tr>
</tbody>
</table>

*source: AlmaLaurea elaboration on Eurostat data, 2012*

percentage values
Employed as Manager or Professional (high skilled occupation)

source: elaboration on Eurostat data, 2007-2012
Classific. Isco 88 1, 2

percentage values

2007 2008 2009 2010 2011 2012
Employment rate up to one year: a comparative study by kind of degree course

<table>
<thead>
<tr>
<th>Year</th>
<th>First level/ Bachelor</th>
<th>Second level/ Master</th>
<th>Single cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>66%</td>
<td>70%</td>
<td>57%</td>
</tr>
<tr>
<td>2011</td>
<td>70%</td>
<td>72%</td>
<td>60%</td>
</tr>
<tr>
<td>2010</td>
<td>73%</td>
<td>72%</td>
<td>62%</td>
</tr>
<tr>
<td>2009</td>
<td>76%</td>
<td>74%</td>
<td>65%</td>
</tr>
<tr>
<td>2008</td>
<td>77%</td>
<td>75%</td>
<td>69%</td>
</tr>
<tr>
<td>2007</td>
<td>82%</td>
<td>81%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Percentage values: GRADUATES 2012-2007

source: AlmaLaurea 2014

def. ISTAT Labour Forces

first cycle: only graduates not involved in another degree were considered

-16 points %
-11 points %
-23 points %
Educational level of graduates’ parents
both parents with qualification lower than degree

source:
AlmaLaurea 2013

percentage values
Employment and graduates: some factors that positively affect the probability to work up to one year

Under the same conditions...

+9% study experiences ABROAD

+14% INTERNSHIP/TRAINING during university

source: AlmaLaurea 2014

logistic regression model (correct classification rate: 64%)
# Employment status up to one, three and five years

<table>
<thead>
<tr>
<th></th>
<th>Employment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>75</td>
</tr>
<tr>
<td>3 years</td>
<td>86</td>
</tr>
<tr>
<td>5 years</td>
<td>87</td>
</tr>
</tbody>
</table>

*Source: AlmaLaurea 2014*
# Employment status up to one, three and five years

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment Rate</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>75</td>
<td>16</td>
</tr>
<tr>
<td>3 years</td>
<td>86</td>
<td>9</td>
</tr>
<tr>
<td>5 years</td>
<td>87</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: AlmaLaurea 2014

Percentage values
### Employment status up to one, three and five years

<table>
<thead>
<tr>
<th></th>
<th>Employment Rate</th>
<th>Unemployment Rate</th>
<th>Permanent workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>75</td>
<td>16</td>
<td>38</td>
</tr>
<tr>
<td>3 years</td>
<td>86</td>
<td>9</td>
<td>57</td>
</tr>
<tr>
<td>5 years</td>
<td>87</td>
<td>8</td>
<td>73</td>
</tr>
</tbody>
</table>

*Source: AlmaLaurea 2014*
## Employment status up to one, three and five years

<table>
<thead>
<tr>
<th></th>
<th>Employment Rate</th>
<th>Unemployment Rate</th>
<th>Permanent workers</th>
<th>Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>75</td>
<td>16</td>
<td>38</td>
<td>1.115</td>
</tr>
<tr>
<td>3 years</td>
<td>86</td>
<td>9</td>
<td>57</td>
<td>1.261</td>
</tr>
<tr>
<td>5 years</td>
<td>87</td>
<td>8</td>
<td>73</td>
<td>1.383</td>
</tr>
</tbody>
</table>

Trends confirmed also among first level and single cycle graduates

Source: AlmaLaurea 2014

Percentage values and average in euro
Degree = more employability?

Not to forget…

<table>
<thead>
<tr>
<th></th>
<th>Graduates</th>
<th>Diplomas secondary school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to age 64</td>
<td>76</td>
<td>63</td>
</tr>
</tbody>
</table>

The Italian labour market is characterized by a very late access and human capital enhancing.

Source: ISTAT 2013
Employment rate up to five years by gender and residence at graduation

Source: AlmaLaurea 2014
Def. ISTAT Labour Forces

Differences also by category of professional activity, earnings and generally confirmed by degree subject group
Quota who works up to five years by gender, marital status and children

**Marital status**

- **Unmarried Single men**
  - Women: 74%
  - Men: 81%

- **Married women**
  - Unmarried: 71%
  - Married: 91%

- **Married men**
  - Unmarried: 71%
  - Married: 91%

**Δ employment in point % (MEN-WOMEN)**
- Unmarried-single men: +7
- Married: +20

**Without children**

- Women: 76%
- Men: 83%

**With children**

- Women: 63%
- Men: 89%

Δ employment in point %
- Without children: +6
- With children: +26

Source: AlmaLaurea 2014

Only the ones who did not work at graduation were considered.

Percentage values.
Employed condition up to five years by degree subject grouping

- Medicine (health prof.): 97%
- Engineering: 92%
- Economics, statistics: 91%
- Architecture: 87%
- Politics, social sciences: 84%
- TOTAL: 82%
- Foreign languages: 80%
- Psychology: 79%
- Education: 79%
- Physical education: 79%
- Law: 77%
- Agriculture: 77%
- Mathematics, physics, natural sciences: 73%
- Chemistry, Pharmacy: 71%
- Humanities: 68%
- Geology, biology, geography: 60%

△ employed (health prof. Geo-biol.): +37 points %

Source: AlmaLaurea 2014

- Employed
- Not searching
- Searching

Defence, security and military studies group not reported.
Monthly income up to five years by degree subject grouping

<table>
<thead>
<tr>
<th>Subject Grouping</th>
<th>Average Income in €</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>1708</td>
</tr>
<tr>
<td>Medicine (health prof.)</td>
<td>1646</td>
</tr>
<tr>
<td>Economics, statistics</td>
<td>1520</td>
</tr>
<tr>
<td>Chemistry, pharmacy</td>
<td>1519</td>
</tr>
<tr>
<td>Mathematics, physics, natural sciences</td>
<td>1500</td>
</tr>
<tr>
<td>Politics, social sciences</td>
<td>1339</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1275</td>
</tr>
<tr>
<td>Geology, biology, geography</td>
<td>1265</td>
</tr>
<tr>
<td>Law</td>
<td>1237</td>
</tr>
<tr>
<td>Architecture</td>
<td>1196</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td>1147</td>
</tr>
<tr>
<td>Education</td>
<td>1079</td>
</tr>
<tr>
<td>Humanities</td>
<td>1031</td>
</tr>
<tr>
<td>Physical education</td>
<td>1015</td>
</tr>
<tr>
<td>Psychology</td>
<td>939</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1383</strong></td>
</tr>
</tbody>
</table>

Source: AlmaLaurea 2014

△ earnings (Engineering - Psychology) +82%
The European Commission approved 3 three-year collaboration projects with various universities from the Mediterranean area (Morocco, Tunisia, Armenia, Serbia, Bosnia, Croatia and Montenegro).

The AlmaLaurea model presented at the World Bank (June 2013).

AlmaLaurea is also developing new collaborations with Universities from South America and South-East Asia.
Plutarch (46-120 D.C.)

Greek historian, biographer, and essayist

“Young people are not vessels to be filled, but torches to be kindled”
Thank you!

www.almalaurea.it