

European Commission
Directorate-General for Economic and Financial Affairs
Economic Policy Committee

**Efficiency and effectiveness of public
expenditure
on tertiary education in the EU**

**ANNEX : COUNTRY FICHE
ITALY**

**Joint Report by the Economic Policy Committee
(Quality of Public Finances)
and the Directorate-General for Economic and Financial Affairs**

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Brief characterization of the tertiary education system

1. Main features

| 1/ TEACHING | Italy | | | | | | | | | | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|------|------|------|------|------|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Academic staff per 1000 inhabitants relative to the average | 1.01 | 1.16 | 1.19 | 1.27 | 1.27 | 1.39 | 1.45 | 1.48 | : | : | : |
| Number of students per 1000 inhabitants | 28.6 | 27.7 | 29.1 | 29.6 | 30.3 | 31.1 | 32 | 32.2 | : | : | : |
| Number of students (graduate and post-graduate) per 1000 inhabitants | : | : | : | : | : | : | : | : | : | : | : |
| <i>From public institutions</i> | : | : | : | : | : | : | : | : | : | : | : |
| <i>From private government-dependent institutions</i> | : | : | : | : | : | : | : | : | : | : | : |
| <i>From private independent institutions</i> | : | : | : | : | : | : | : | : | : | : | : |
| Ratio of students per academic staff | 28.3 | 23.9 | 24.5 | 23.3 | 23.9 | 22.4 | 22.1 | 21.8 | : | : | : |
| Number of graduates per 1000 inhabitants | 2.64 | 2.82 | 3.19 | 3.37 | 3.63 | 4.11 | 5.32 | 6.2 | : | : | : |
| Ratio of graduates per 1000 academic staff | 2.6 | 2.4 | 2.7 | 2.7 | 2.9 | 3.0 | 3.7 | 4.2 | : | : | : |
| Standardized recruiter view indicator (graduates' employability as perceived by recruiters) | : | : | : | : | : | : | : | 1.2 | : | : | : |
| Standardized peer view country indicator (quality perceptions among peers) | : | : | : | : | : | : | : | 1.38 | : | : | : |
| PISA scores | : | : | 473 | : | : | : | : | : | : | : | : |
| Average total time spent by students in order to obtain a BA degree | : | : | : | : | : | : | : | : | : | : | : |
| Average total time spent by students in order to obtain a MA degree | : | : | : | : | : | : | : | : | : | : | : |
| Remuneration of a tenured university professor with 10 year seniority | : | : | : | : | : | : | : | : | : | : | : |
| 2/ RESEARCH | | | | | | | | | | | |
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Publications per 1000 inhabitants | 0.36 | 0.38 | 0.39 | 0.41 | 0.43 | 0.46 | 0.48 | 0.49 | : | : | : |
| | 1998-2002 | 1999-2003 | 2000-2004 | 2001-2005 | 2002-2006 | 2003-2007 | | | | | |
| Quality of research (position in the ISI citation index) | 3.87 | 3.99 | 3.96 | 4.12 | : | : | | | | | |
| % of research done in cooperation with industry | : | : | : | : | : | : | | | | | |
| 3/ EXPLANATORY FACTORS FOUND RELEVANT FOR EFFICIENCY | | | | | | | | | | | |
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Main categories of composite | | | | | | | | | | | |

| | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|-----|---|
| indicator | | | | | | | | | | | | |
| Funding Rules Indicator | : | : | : | : | : | : | : | : | : | : | 5.2 | : |
| Evaluation Indicator | : | : | : | : | : | : | : | : | : | : | 6.8 | : |
| Staff Policy Indicator | : | : | : | : | : | : | : | : | : | : | 7.9 | : |

4/ EXPENDITURE

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|------|------|------|---------|---------|---------|---------|---------|---------|--------|------|
| Total expenditure on tertiary education institutions as a percentage of GDP (1) | 0.78 | 0.85 | 0.86 | 0.94 | 0.96 | 1.00 | 0.89 | 0.93 | 0.94 | : | : |
| Total expenditure per student (€)(2) | : | : | : | 7,277.7 | 6,980.7 | 7,087.1 | 6,417.0 | 6,783.5 | 7,268.4 | : | : |
| Private expenditure on tertiary education institutions as a percentage of GDP (3) | 0.16 | 0.11 | 0.14 | 0.17 | 0.16 | 0.22 | 0.28 | 0.28 | 0.20 | : | : |
| Total expenditure on education as a percentage of GDP (1) | 4.65 | 4.70 | 4.50 | 4.86 | 4.62 | 4.74 | 4.58 | 4.71 | 4.93 | : | : |
| Private expenditure on education as a percentage of GDP (4) | : | 0.46 | 0.44 | 0.31 | 0.35 | 0.40 | 0.46 | 0.44 | 0.38 | : | : |
| Funds from non-public sources as % of total income (fees, earned income, investment, other) | : | : | : | : | : | : | : | : | : | : | : |
| Tuition fees as average of the cost of tuition (5) | : | : | : | : | : | 676.00 | 702.00 | 731.00 | 783.00 | 842.00 | : |
| Percentage of funds received by private government-dependent institutions from public sources | | | | | | | | | | | |
| Total public expenditure on grants, loans, and other programmes to cover education and/or maintenance of students (universal programmes / by categories such as merit or socio-economic status) (6) | | 16.9 | 18.3 | 12.4 | 15.8 | 17.0 | 16.7 | 16.8 | 16.6 | | |

Notes:

OECD and EUROSTAT data refers to the University and non-University sector. The latter is made of high school in arts, music and other specific fields, in Italian acronym these tertiary institutions constitute the AFAN (Alta Formazione Artistica e Musicale) sector. The country fiche, however, only focuses on the University sector.

(1) OECD indicator B2.1 EAG2009

(2) Eurostat: Annual expenditure on public and private educational institutions per pupil/student in EUR PPS, at tertiary level of education (ISCED 5-6), based on full-time equivalents

(3) OECD - EAG - Table B2.1b (1998- 2003) B2.4 (2004-2006) Expenditure on educational institutions as a percentage of GDP, by source of fund and level of education

(4) Eurostat: Expenditure on educational institutions from private sources as % of GDP, for all levels of education combined (%)

(5) MIUR: L'Università in cifre 2008 - Tabl.1.8 – State Universities. 2007 data has not yet been issued by OECD.

(6) Eurostat: Financial aid to students as % of total public expenditure on education, at tertiary level of education (ISCED 56)

The Italian tertiary education system is characterized by the great role of public institutions, the relevance of central planning of funding and policies, high degree of didactics, budgetary and financial autonomy of Universities, low tuition fees and a very high level of accessibility of students to the system.

There exist State and non-State institutions, which are both regulated by public law and constitute local government unities according to the national accounting (SEC95). Academic staff is mainly recruited on a competitive base, and regulated by public labour contracts. State Universities mainly refer to State financing, while non-State institutions mostly rely on higher tuition fees as well as local public and private funding. For the first time, in 2005 the allocation of a part of the Fund for the Ordinary Financing was based on quality indicators. The evaluation process started with the evaluation of teaching activities, afterwards the evaluation of research projects was introduced, and very recently there is some intent to complete the process by introducing the evaluation of Universities administration. Evaluation of research projects and teaching activities are currently carried out on a regular base by two consultant bodies of the Ministry of Education, University and Research¹. The recent reform of the evaluation system is going to be enacted by establishing a new independent institution.

The system as a whole is characterised for having one of the highest level of accessibility in the world: according to the 2008 QS SAFE - National System Strength Rankings- published by the THES (Times Higher Education Supplement)², the Italian system is ranked as the third country in the world for the number of Universities (and the attending students), and as first country in EU. The overall evaluation, however, places the Italian system at the 12th place in the world ranking (6th in the EU), as a result of other factors which bring down the Italian position, such as the presence of relatively lower quality of top Universities and relatively lower economic conditions, mainly related to funding. These results point out quite well the main University system's objective consisting in assuring a very good average quality of education, rather than supporting few excellence centres. In line with this perspective, the 2009 THES ranking of 600 top Universities in the world shows that Italian Universities do not reach the very first places. Nevertheless, 20 Italian Universities are within the 600 top institutions. These Universities represent more than the 54 per cent of the national University system in term of students, and more than the 62 per cent in term of academic staff³. Almost all of them are State Universities.

Also, Italian Universities stand out for a sound quality of education and scientific research according to the standardized peer review country indicator, the ISI scientific citation index and for productivity of academic staff. According to academic peers, the quality of the Italian system is perceived to be above the European average, while the ISI citation index suggests a steady growing pattern of research's quality since 1998. The production per capita of Italian researchers is above the EU average and equal to about the seventy per cent of Sweden, which is the country having the highest production of article per academic staff.

¹ For more details about these issues see section II on Explanatory factors for efficiency of this country fiche.

² <http://www.topUniversities.com/university-rankings/world-university-rankings/2008/safe-system-strength>

³ The first twenty Universities from the 174th place onwards are: University of BOLOGNA, SAPIENZA University of Rome, Polytechnic University of Milan, University of PADUA, University of PISA, University of FLORENCE, Polytechnic University of Turin, University of TRENTO, University of PAVIA, University of TRIESTE, University of Rome TOR VERGATA, University of NAPLES - Federico II, University of SIENA, University of MODENA, University of GENOA, CATANIA University, Catholic University of The SACRED HEART, University of MILANO, University of MODENA, University of TURIN.

Table A. Articles per academic staff in 2005

| | Articles per 1000 inhabitants | rank | of which | | | |
|----------------------|-------------------------------------|-----------|-----------------------------------|-----------|--|-----------|
| | | | Articles per academic staff | rank | Academic staff per 1000 inhabitants | rank |
| Sweden (max) | 1.52 | 1 | 0.42 | 7 | 3.66 | 1 |
| Italy | 0.49 | 14 | 0.33 | 10 | 1.48 | 23 |
| Romania (min) | 0.06 | 27 | 0.06 | 26 | 1.1 | 26 |
| Mean EU27 | 0.52 | | 0.27 | | 2.08 | |
| Sweden over Italy | 3.10 | | 1.27 | | 2.47 | |
| Mean EU27 over Italy | 1.06 | | 0.82 | | 1.41 | |

Source: elaboration of author on data from Table 3 pg 25 in St. Aubyn, M., Pina, A., Garcia,F., and Paispp, J. (2008)

Despite the good results in term of productivity, Table A points out the average number of academic staff per 1000 inhabitants in the EU27 area is about 1.4 times the Italian level. The difference widens a lot when considering Sweden, which is the country having also the highest number of academic personnel. Academic personnel in Sweden, however, includes Phd students, which are considered as students in the Italian system. The relatively low number of academic staff per 1000 inhabitants, which is the lowest in Europe, reflects into a corresponding high number of students in ISCED levels 5 and 6 per member of the academic staff.⁴

The comparison based on the funding of the tertiary system places Italy, in structural terms, as one of the countries having the least expenditure on tertiary education institutions: total resources were equal to 0.93 percent of GDP against an EU average of 1.23 in 2005. According to EUROSTAT data⁵, total public spending in tertiary education was about 0.76 per of GDP in 2005 (1.15 in EU27). More recently, public resources reached a share of 0.80 per cent of GDP in 2006 (1.13 in EU27).

The gap of funding amounted to about 1,300 EUR PPS per student in 2006 with respect to EU27 according to EUROSTAT data. When comparing per capita figures, however, one should consider that the estimates refer to full-time equivalent students, which are very difficult to estimate due to underestimation of irregular and part-time students. For, the number of students in full-time equivalent is likely to be overestimated as it mainly reflects only full-time students.

OECD indicators suggest the existence of a catching-up process of public spending in tertiary education since the second half of nineties, while a containment of funding growth is recorded

⁴ See St. Aubyn, M., Pina, A., Garcia,F., and Paispp, J. (2008), pp. 21 and 22.

⁵ http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database.

in more recent years. The 2006 change in real total expenditure on educational institutions per student (including educational core services, ancillary services and R&D) over the year 2000 was lower than the average in other OECD and EU countries.

Table B. Expenditure on educational institutions
Index of change with respect to 2000. (GDP deflator 2000=100, constant prices)

| Tertiary education | | | | | | | |
|------------------------|----------|----------------------------------|------------|---|------------|--|------------|
| | Notes | Change in expenditure (2000=100) | | Change in the number of students (2000=100) | | Change in expenditure per student (2000=100) | |
| | | 1995 | 2006 | 1995 | 2006 | 1995 | 2006 |
| Austria (max) | | 97 | 139 | 91 | 100 | 107 | 139 |
| Italy | 3 | 79 | 116 | 99 | 112 | 80 | 104 |
| Hungary (min among EU) | 3 | 74 | 133 | 58 | 152 | 128 | 88 |
| OECD average | | 83 | 130 | 84 | 118 | 99 | 111 |
| EU19 average | | 82 | 131 | 83 | 117 | 101 | 113 |

Note 3. Public institutions only (For Italy, except in tertiary education).

Source: OECD (www.oecd.org/edu/eag2009).

Table B also shows that the 2006 change in the number of students over 2000 was higher than the 2000 change over 1995. In the period 2000-06 enrolments were supported by the didactics reform which reorganised study programmes into three cycles as required by the Bologna process. At the same time, the number of graduates per academic staff has been constantly growing in the period 2001-05, reaching the level of 4.19 in 2005, which is above the level recorded in USA and the average in EU27 and EA areas. The latter are equal respectively to 3.73 and 3.24. If input data might suggest worsen condition for students than in other European countries, these kind of output data underlines good performance of students and efficiency of academic staff in some extent.

After this immediate and positive enrolments and graduates answer to the reform, however, the more recent data suggests a slight containment of output figures. In the academic year (henceforth a.y.) 2007-08, about 67 per cent of registered students (iscritti) to a first-level degree programme were regular, having obtained the number of credits (CFU) required by first-level degree programmes; the number of students leaving University after the first year declined to 18 per cent of enrolled students (immatricolati); about 57 per cent of enrolled students obtained a first level degree. However, only 26,8 per cent of enrolled students obtained a first-level Laurea degree by the regular years, while about 57 per cent of enrolments obtain a first level degree by one year after the regular length of the degree programme. As a consequence of delays, the effective length of first-level course was about 4.7 years, rather than 3⁶.

⁶ 2009 CNVSU (Comitato Nazionale di Valutazione del Sistema Universitario Italiano) Report on the Italian University System.

2. Structure of institutions and funding arrangements

The Italian tertiary education system is structured as a binary system, consisting of:

- i) the University sector, which is made up by 95 institutions, including State and non-State Universities, Higher Schools for doctoral programmes. Non-State Universities include the very specific sector of e-learning Universities;
- ii) the non-University sector which is organised into two autonomous sectors, referring to high education in the fields of music and arts, and high vocational education⁷.

In this fiche we exclusively focus on the University sector and refer to data issued in the 2009 Report on the Italian University system, elaborated by the National Committee for the Evaluation of Universities (CNVSU), which excludes the non-University sector.

According to the Ministry of Education, University and Research (henceforth MIUR), in 2008 there existed 61 State Universities, 28 Non-State Universities, of which 11 e-learning Universities, and 6 Higher Schools.

The institutional tasks of University institutions are both higher education and scientific research. Both State and Non-State Universities offer a variety of programmes and carry out research projects in social, scientific and engineering fields, having full didactics autonomy. According to Art. 33 of the Italian Constitution, the principle of University autonomy consists in the right for Universities to set their autonomous organisation within the respect of State law. In line with this basic orientation, both organisational and financial aspects are regulated by University statutes and regulations. In concrete, the organizational autonomy principle was put into effects only after the reforms of the late 60s. Since 1989, several reforms put into effects the basic principle of autonomy with particular reference to didactics autonomy. The first law putting into effects didactics autonomy was the so called *Legge Ruberti* No. 168/89.

Universities reach their institutional goals in teaching and research through specific structures: Faculties (coordinating subject courses and arranging them within the different degree programmes), Departments (organising those research sectors that are homogeneous by objectives or methods, and grouping all related subjects courses) and Institutes (dealing each with a homogeneous scientific sector).

The management of Universities is inspired on the autonomy and responsibility principles. The management bodies of Universities are the Dean, the Academic Senate and the Board of Directors. The latter is the body who is responsible for the economic and financial administration of University.

⁷ The non-University sector is composed of 4 education typologies of institutions: i) higher schools of design, including polytechnics for the arts, academies of fine arts, higher institutes for applied arts, music conservatories and recognised music institutes, higher institutes for musical and choreographic studies, national academies; ii) higher education in language mediation: including higher schools for language mediators; iii) higher integrated education (FIS), consisting of programmes of higher technical education & training (IFTTS); iv) a few specific fields (e.g. archiving, diplomatics, restoration, military

Professors are organised in two different categories sharing the same guarantees of teaching and research freedom: full-professors (first category) and associate professors (second category). The teaching staff also includes researchers and assistants, a category which is going to disappear. Both researchers and assistants have the title of associated professors after the confirmation given by the University (two years after their hiring). Beside the before mentioned staff units, Universities may call the so-called contract teachers to cooperate to teaching activities, which are regulated according to private labour contracts. Research is also carried out by research fellows, and post-doctoral fellows.

Both State and non-State Universities are independent public legal persons, they are statistically included into the non-economic public entities within the general government sector (ESA95). Non-State Universities are established by Ministry decree like State Universities, and are regulated according to public law, independently by the nature of the founder (local public bodies or private foundations). For this reason, they should not be called private Universities.

Non-State Universities do not rely very much on State financing, being tuition fees the fundamental part of their revenues. As a general rule, they are more tied to businesses and local authorities, therefore private and local government funding are also more relevant in these institutions. Most of them offer highly-qualified post-graduate courses as well post-experience education, such as specialization courses, Master in Business Administration, Executive courses which are very valuable in the labour market.

E-learning Universities are a particular kind of non-State Universities and were introduced in 2003 in order to enact the E-learning Action Plan of the European Commission. They are involved in e-learning course programmes enlarging the participation of disadvantaged students to University education and promoting long-life-learning. The integration of these Universities into the tertiary system is not strong, as enrolled students in the a.y. 2007-08 amounted only to 1 per cent of the total.

The University sector also includes 6 Higher Schools specialised in postgraduate University studies for students who wish to enter into the 3rd cycle programmes of research doctorates. They are opened to students with a five years graduate or a Master degree (3+2 years). The enrolment is subject to a public selection, which ranks students in order to obtain a three or four-year grant. These schools are characterized by the highest degree of internationalization and the deep qualification of education programmes. The Higher Schools sector includes the following institutions: *Istituto universitario di studi superiori di Pavia; Scuola internazionale superiore di studi avanzati di Trieste; Scuola IMT (Istituzioni, Mercati, Tecnologia) e Alti Studi di Lucca; Istituto Italiano di Scienze Umane di Firenze; Scuola*

studies, etc.) which, along with their respective institutions, fall under the supervision of ministries other than that of Education.

normale superiore di Pisa; Scuola superiore di studi universitari e perfezionamento "S. Anna" di Pisa.

The organisation of these schools is based upon the Graduate College Anglo-Saxon model, offering accommodation and other facilities to doctoral students.

3. Governance and regulatory framework

The current regulatory framework of the tertiary education system in Italy is the result of different reforms introduced since the post-war period.

Up to the eighties, the reforms related to the regulatory framework were aimed at enlarging the access to University education: in 1969 the access to University was opened to every student having a diploma of upper secondary education, independently from the holding of a diploma of *maturità classica* (referring to humanities subjects) ; during the eighties, the liberalization process of the University access was concluded by eliminating the still existing link of enrolment to the type of secondary school which was attended. That brought to the achievement of a popular University.

At the end of eighties, the MURST was established, the Ministry of University and Scientific Research (Law No.168/89).

At the beginning of the nineties, a fundamental reform⁸ was introduced in order to streamline the public funding system by setting the Fund for the Ordinary Financing (in Italian *Fondo per il Finanziamento Ordinario*) and move from a very centralized funding system to a more decentralized one. Indeed, the reform put into effect the basic principle of financial autonomy of Universities. It also introduced the allocation of a part of public funding to State Universities on the basis of efficiency of the institutions, which was assessed according to the standard cost for student (balancing share).

Different laws were introduced for regulating didactics organization⁹, medium-term planning of Universities activities¹⁰, the right of study¹¹. Since the second half of the nineties, different reforms were introduced with the aim to strengthen didactics autonomy, redefine the University evaluation system, and reform the organization of study programs according to new education objectives.

In 1996, it was established the first national observatory for the evaluation of the University system.

⁸ Law No. 537/1993.

⁹ Law No. 341/90.

¹⁰ Law No. 245/90.

¹¹ Law. No. 390/91.

In 1997, it was introduced a new system of allocation of public funding for the Research Project of National Relevance (in Italian acronym PRIN). In 1999, it was established the committee for the evaluation of research (in Italian acronym CIVR). The first peer evaluation was carried out in the period 2001-2003 and results were issued in 2004.

In 1999, strong efforts were paid on supporting university autonomy. According to the introduced reforms, both State and not-State Universities can decide on the name and objectives of degree programmes, the introduction of restrictions to entry into high education programmes (such as the prevision of entry tests), the kind of education activities and the following education credits, the modalities of the final test in order to obtain the degree, as well as research priorities¹².

The 1999 reform also modified the University evaluation system by establishing internal University bodies, called *Nuclei di Valutazione*, which are responsible for planning, development and evaluation of management, didactics and research activities. The national observatory was transformed into the CNVSU, the National Committee for the Evaluation of University System, which is responsible for the evaluation of higher education institutions.

In 1999, the Ministry of University and Research enacted the so called 3+2 reform for the reorganisation of study programmes into three cycles¹³. The reform was coherent with the objectives of the so called Bologna process¹⁴. The new law was aimed at: i) raising the rate of graduates per year; ii) decreasing the number of students which leave University without getting a degree; iii) decreasing the time required for getting educational qualification; iv) fostering the mobility among students all over the world; v) fostering the internationalization of the University; vi) improving the quality, coherence and harmonization of all European University courses to create a European Education Space. The reform allows each University to build the most proper study programs according to the economic and social situation existing at local level. However, study programs must respect general guide lines given at national level for any scientific field by ministerial regulations. In line with this purpose, subsequently the MIUR established a closed set of degree programs, specifying for each one: educational targets, and graduate degrees¹⁵.

The interventions in 2005 were aimed at rationalize and qualify the offer of course programmes, by setting the so called minimum necessary requirements for the activation of new courses¹⁶.

¹² Law No. 370/1999.

¹³ Law No. 127/1997, enacted by Ministry Decree No. 509/1999.

¹⁴ Italy is one of the four countries that first engaged to create the so-called 'European Area of Higher Education' (Sorbonne Declaration, May 1998), thus starting that type of higher education reform which, known as "Bologna Process" (Bologna Declaration, June 1999) is being implemented all over Europe.

¹⁵ MD No. 386/2007.

¹⁶ MD No. 15/2005, modified by MD No. 544/2007.

As emerge by this brief survey of reforms, the organization of the system has been strongly affected by the active role of the Ministry of University and Research, which can be identified as the top governance institution of the tertiary education framework. In 2008, the Ministry of University and Research was merged with the Ministry of education (referring to first and secondary education) into the broader Ministry of Education, University and Research (in Italian acronym MIUR). The MIUR currently carries out activities related to: the planning of the University system; the financing of ordinary spending of University and building trade; the implementation of international rules; the definition of didactics organization and the status of academic personnel. It also carries out planning and coordinating activities related to scientific and technologic research at national, European and international level.

Beside the CNVSU and the CIVR evaluation bodies, there exist other national representative and consulting bodies: the CUN, which is the representative body of University autonomies, the CNSU, which is the representative body of enrolled students to University courses; and the CRUI, the association of Rectors of State and non-State Universities, having consultancy role in the field of autonomy, developments and internationalization.

The CNVSU and the CIVR are going to be joined into the National Agency for the Evaluation of the University System and Scientific and Technological Research (in Italian acronym ANVUR), whose main tasks will be related to the promotion of the quality of the Italian Universities and research activities, the supervision of the quality evaluation system and the efficiency of public funding allocation and financial incentives to research and innovation.

4. System's strengths and weaknesses

The main strengths of **State Universities** are:

- The provision of a comprehensive theoretical preparation;
- A very high level of accessibility to the system;
- Low tuitions fees which avoid discriminatory access to tertiary education;
- The existence of grants and financial supports supporting the equity at the entrance into the system, but taking into account merito as well.

Among the challenges, these are the most important issues to consider:

- The CNVSU called for the need of a containment of the Universities activities' delocalisation in different local branches;
- The provision of part-time study programmes is to be strengthened;
- Academic staff salaries are update according to seniority and this is risky for the financial sustainability of the tertiary education system, due to the old average age of full-professors. In 2009 about 20 per cent of professors was more than 60 years old (about 17 per cent in 1998). As a consequence, the ratio of personnel costs over the

Fund for the Ordinary Financing exceeded the threshold of 90 per cent in 2007. The problem has been recently addressed by the three-year consolidation plan introduced with the Finance Law for 2009-11, by the introduction of the turn-over to civil servant, including academic personnel;

- The existence of a low level of internationalization of institutions;
- There is no medium-term hiring planning for young researchers and Phd-students. These professional figures generally enter the system at an older age than in the past and have to face very unstable economic conditions at the beginning of their career. The researchers' entry-age has increased of more than 1.5 years since 1998 and more than 5 years since 1980. This kind of staff policy discourages younger graduates in continuing studying and undertaking the academic career;
- The organisation of public competitions, in general, favours internals to the detriment of meritocracy. The problem has been treated by the very recent reform introduced in 2009 which gave the preliminary selection of candidates to professors appointed at national level, and therefore limited the extent of local choices.
- Under-funding of the system together with the need of support public finance sustainability has actually limited research and teaching activities during the last few years. The 2009 three-year fiscal package addressed the problem by envisaging the possibility for Universities to transform into private foundations, while containing nominal ordinary financing.

The main strengths of **Non-State Universities** are:

- Higher autonomy in hiring staff personnel, because of a higher use of private labour contracts, allowed to all Universities by Law No. 210/1998;
- Better quality in the supply of students services: a more direct relationship with professors (lower ratio students/academic personnel), existence of tutors, possibility to split exams into several parts, and, more in general, the existence of a teaching organization closer to upper education schools than in State Universities.
- Closer link with the job market and better employability of graduates.
- Among the weaknesses, these are the most important issues to consider:
- High tuition fees actually do not allow low-income students to attend these Universities;
- E-learning Universities are still not integrated into the system, having very low enrolments;

The main strengths of **Higher Schools specialised in postgraduate University studies** are:

- The establishment of a network among University allowing the exchange of knowledge and the use of benchmark instruments in different field of research;
- The creation of synergies in research activities among different Faculties;
- A better offer of ancillary services to doctoral students;

- Top quality post-experience education programmes;
- A better possibility of mobility by visiting foreign Universities as a result of agreements among different countries.

One of the main weakness of the whole system refers to PISA scores. The 2000 ranking based on PISA score places Italy among the worst performing countries, suggesting the quality of secondary education should be improved also with the aim to assure better preparation of students in view of their enrolment into the higher education system. The results are questionable in some sense. Despite this, the need for a better secondary education system consists in an acknowledge problem in Italy, indeed, the Government recently introduced the so-called ‘Gelmini’ reform¹⁷ which, among the others, reorganised secondary education courses programmes and institutions. The reform is in force since the current 2010-11 school year¹⁸.

Explanatory factors for efficiency

1. Staff Policy

1.1. Hiring/Firing

As in many European countries, academic staff in Universities is civil servants. Before 1998, the recruitment of full-professors was made at national level. Universities communicated their staff needs to the MIUR and a public competition was issued at national level. After a preliminary qualifying examination, preliminary winners could take further public competitions according to which they were ranked and finally able to be selected by each single University.

In line with Law No. 210 of 1998, Universities can set up public competitions for the recruitment of academic staff, independently from the MIUR. However, this has not completely translated into higher degree of freedom in selecting human resources. Public competitions are strictly regulated by law, which regulates the composition of the recruitment commission and recruitment criteria. Public competitions can only refer to one of the didactics areas envisaged by law, not to the specific characteristic of personnel the University needs.

In-charge academic staff is regulated by public-law-labour contracts in all Universities, both State and Non-State Universities, and have tenure contracts. In order to provide supplementary teaching and research activities, Universities can also offer temporary private-

¹⁷ Gelmini is the surname of the MIUR Ministry who introduced the reform. She is still in charge at present.

¹⁸ For more details please find related information at the following website (only available in Italian)

http://www.pubblica.istruzione.it/ministro/comunicati/2008_miur/181208.shtml

law-labour contracts, renewable up to a fixed period. The Law envisages requirements for staff recruitment also in this case.

The biggest increase of academic staff in State Universities was recorded in 1980. Law No. 382/1980 recognised several positions, such as associate professors and researchers which were working in non-tenured positions. In particular, the 1980 *ope legis* recruitment entailed the biggest entrance into the University system of associate professors over the last thirty years. The effects of this huge hiring procedure are currently evident in the ageing distribution of academic personnel: in 2008 the most frequent cohort was 61 years-old, while in 1998 it was 50 years old.

Differently by State Universities, the biggest increase of professors in non-State Universities is recorded after the 1998 reform, as a consequence of both the fulfilment of minimum requirements necessary to set new courses and the increase in the number of these institutions.

At present, State Universities staff policy is further constrained by financial limits including the prohibition to commit fixed labour costs for an amount exceeding the 90 per cent of the Fund for Ordinary Financing. The check on this limit is carried out by the MIUR on the base of multi-annual planning of financial resources for which Universities are obliged to send specific plans on a regular base.

In addition to that, according to the regulation of turn-over of personnel introduced by the 2009 Finance Law , over the 2009-12 period State Universities can hire academic staff for an amount of spending not exceeding the 50 per cent of retirements.¹⁹

Major information about the 2009 reform on recruiting procedures are provided in section 6.1 on recent reforms.

1.2. Wages

The level of autonomy to set wages is very low, especially in State Universities. The level of wages for professors, and as a consequence of researchers, is regulated by law. Biennial updates are set in specific ministerial decrees, in accordance to negotiation results achieved in other public sectors. In this sense, wage negotiation for academic staff is only on a derivative nature.

Non-State Universities have a higher degree of autonomy in setting wages, as they can add additional amounts to the basic level set by ministerial decree.

¹⁹ Art. 66 of Law No. 133/2008 converting D.L. No. 112/2008, as modified by Law No. 1/2009.

2. Output flexibility

2.1. Course content and exams

The MIUR gives general guidelines, determining the type of academic degrees Universities can issue and their legal force. According to law, Universities' regulations autonomously regulate the organisation of degree programmes, determining name and education objectives of each degree programme, as well as education activities to be included into curricula and the education credits. They also define the modalities of the final test to obtain the degree. Universities also decide research priorities.

2.2. Offer of short studies and other diversifies studies

Since 1999, Italian University studies have been fully reformed so as to meet the objectives of the Bologna process. At present two systems coexist, the old one envisaging five-years degree programmes and the new one introduced with the reform enacted by the MIUR decree No. 509 of 1999 and completed by MIUR decree No. 270 of 2004. According to the reform, the University system is now organised on 3 cycles.

The first cycle is constituted by a three-year full-time period with a workload of 180 ECTS²⁰ credit and is characterized by both theoretical and applied studies. Students achieve the first cycle *Laurea* degree, corresponding to the bachelor degree of the Bologna Declaration. The cycle is focused on professional and more applied contents than the old four-year degree programmes.

The second cycle consists of a further two-year full-time period characterised by a strong theoretical part and specialized studies in a given subject field, during which students must obtain 120 ECTS credits. The 2nd cycle University degree is the University Master degree (*Laurea magistrale*), corresponding to the master-level degree of the Bologna Declaration. This cycle of education is supposed to prepare students for higher, managerial and professional positions. Instead of attending the second degree course, students holding the *Laurea* degree can attend a one-year Master degree course of first level, obtaining 60 ECTS credits. These courses can be either academic in nature or professionally-oriented and let to achieve the first level University Master degree.

²⁰ Each credit is equivalent to 25 hours' work including lessons, hands-on practice, laboratories, internships and self-study.

Table C. Degree-courses envisaged by the Italian tertiary education system

| corsi di studio degree-courses | titoli accademici degrees | CFU credits earned | anni years |
|---|---|-----------------------|---------------|
| 1st cycle - undergraduate studies/students | | | |
| Corso di Laurea - CL Laurea degree course | Laurea-L 1st degree / Laurea degree | 180 | 3 |
| 2nd cycle - graduate studies/students | | | |
| Corso di Laurea Specialistica CLS / Laurea Magistrale CLM 2nd (Laurea) degree course | Laurea Specialistica-LS/Laurea Magistrale-LM 2nd degree (2nd Laurea) | 120 | 2 |
| Corso di Specializzazione di 1° livello-CS1 1st (level) Specialisation degree course | Diploma di Specializzazione di 1° livello -DS1 1st (level) Specialisation degree | 120-180 | 2 - 3 |
| Corso di Master Universitario di 1° livello-CMU1 1st (level) University Master degree course | Master Universitario di 1° livello MU1 1st (level) University Master degree | 60+ | 1+ |
| 3rd cycle - postgraduate studies/students | | | |
| Corso di Dottorato di Ricerca-CDR Research Doctorate programme | Dottorato di Ricerca-DR Research Doctorate degree | | 3+ |
| Corso di Specializzazione di 2° livello-CS2 2nd (level) Specialisation degree course | Diploma di Specializzazione di 2° livello-DS2 2nd (level) Specialisation degree | 60-300 | 1 - 5 |
| Corso di Master Universitario di 2° livello-CMU2 2nd (level) University Master degree course | Master Universitario di 2° livello -MU2 2nd (level) University Master degree | 60+ | 1+ |

The five-year programme leading to the University Master degree still exists in the following fields: engineering, medicine, pharmacy, dentistry and veterinary. The programme consists in 300 education credits, made by 180 education credits of the first cycle and 120 education credits referring to the second cycle (not included in Table C).

The second-level degree is required in order to enter into the third cycle of tertiary education, consisting of a three/four-year Research Doctoral programme, which is full academic in nature. The admission is subject to public competition within each University. The Research Doctorate degree (Dottorato di Ricerca) is achieved after the positive assessment of the doctoral student's research. Beyond doctoral programmes, students with a Specialisation degree can attend one-year second level master course, which give a more professionally-oriented education, obtaining 60 ECTS credits.

2.3. Student choice

The 3+2 reform entailed a progressive increase in the number of degree programmes and the following study courses. In the a.y. 2007-08 there existed a total number of 5,835 study courses, of which 3,436 for the first cycle and the five-years programme, and 2,399 for the second cycle. With regard to the 3,436 courses referring to the first cycle and five-years

programme, 3,134 referred to the first cycle, 269 to five-years courses and 33 referring to old system's courses which were still active especially in the medicine field.

A common set of courses is rigidly fixed for the undergraduate programmes in the first year, while the choice on the remaining course is left up to students which can choose among the courses envisaged within the selected degree programme.

Universities do not admit learners outside the general enrolment requirements to access into the Italian tertiary education system, which is the Italian upper secondary school diploma (*Diploma di Superamento dell'Esame di Stato conclusivo dei corsi di Istruzione Secondaria Superiore*), awarded after completing successfully the relevant State examination, after 12 years of schooling. Foreign comparable degrees obtained after at least a twelve-year education period are also accepted. In some fields, admission to degree courses may be subject to specific course requirements or entry test.

Part-time enrolment to study courses is envisaged only for the new system's courses (3+2). Education credits are generally lower the 60 credits (CFU - *credito formativo universitario*) per year referring to full-time students. According to the 2009 CNSVU Report on the Italian University system, in the a.y. 2007-08 about 39,000 students chose a part-time engagement, amounting to about 2,2 per cent of total enrolments. Most of part-time students are present in the Faculties of Architecture (8.4 per cent of total), Engineering (5.8 per cent) and Political Science (3.3 per cent).

Since the Amsterdam Treaty in 1997 to the new European measures in 2007, great progress has been made for the implementation of an European framework for lifelong learning. The Italian lifelong education system is characterised by public actions within the formal system (including Territorial Adult Centres and evening schools), many small different private initiatives and public actions in the informal system (different cultural bodies, libraries, museums, cultural associations).

Territorial Adult Centres were established in 1997 with the aim to give adults the possibility to both complete compulsory education, obtaining primary and secondary school degrees, and attend literacy classes, such as language courses and information technology courses. These centres also give students the possibility of enrolment at the second year of professional schools, conditional to the attendance of a set of courses (mixed programmes). Professionally-oriented courses designed for post-secondary school diploma and post-graduate degrees are also provided in order to ease the match of labor supply and demand.

In addition to that, Italian Universities provide advanced update courses lasting few months which are addressed to graduate people.

The recognition of informal training activities is regulated by Universities' regulations, on the base of general principle set into the MIUR decree 270/2004. According to the decree, education activities include each kind of organised activity having the aim of providing

cultural and professional education to students, with reference to post-secondary education courses, seminars, workshops, practical and laboratory classes, internships, individual research and study activities. In this perspective, Universities can recognise the participation to workshops, summer schools, professional competitions, the attainment of advanced-level computer skills certified by the Faculty or other public bodies, as well as the publishing of research articles.

The recognition is only given to those activities which are related with the selected degree programme.

2.4. Numerus clausus

For several years, many Faculties have used entry procedures limiting the number of enrolments in order to both avoid an overcrowding of infrastructures and assure a proper level of teaching quality. Only in 1994, Law No. 264 introduced the legal basis for the prevision of such a kind of students selection procedures by Universities.

In particular, numerus clausus are expressly envisaged in the fields of: medicine and surgery, dentistry, veterinary, architecture and primary education sciences.

The law also envisages planned access in some other fields, with particular reference to those degree programmes requiring the use of high-specialization laboratories, computer and technological systems. Planned accesses of students can be based on the secondary education diploma's grade and the results obtained in entry tests, which aim at assessing background knowledge of students. Entry tests are elaborated by the MIUR, together with the Ministry of Health with regard to medicine Faculties.

Non-State Universities can autonomously decide which kind of courses to be offered on a numerus clausus basis, while State Universities have to make a proposal to the MIUR who can confirm or otherwise the request.

2.5. 2.5. Regional/ European/ global mobility

According to the 2009 CNVSU Report on the Italian University system, in the a.y. 2007-08 about 80 per cent of students who enrol for the first time at University choose a degree programme in the Region of residence.

This figure is quite stable over several years, suggesting the average regional student mobility is low. However, significant differences across Regions emerge: the highest mobility is clearly evident in Basilicata (about 68 per cent), Molise (54 per cent) and Trentino-Alto-Adige (40 per cent). Differently, Lazio and Lombardia recorded the lowest exit of students (see Table D).

Table D. Regional mobility of registered students a.y. 2007-08¹

| Regions | A | B | C | D | E=C-D | F=C/B | G=D/A | H=F-G | |
|----------------------|--|--|---|--------------------------------|-----------------------|----------------------------------|-------------------------|-----------------------|-------|
| | Registered per Region of residence | Registered per Region of enrolment | Registered entering into the Region | Registered in other Regions | Net migration flow | Attractivity of regional HEIs | Exit from the Region | Net migration flow | |
| | number of students | | | | percentage values | | | | |
| North-west | PIEMONTE | 17,936 | 17,954 | 3,235 | 3,217 | 18 | 18.0 | 17.9 | 0.1 |
| | VALLE D'AOSTA | 515 | 193 | 41 | 363 | -322 | 21.2 | 70.5 | -49.2 |
| | LOMBARDIA | 37,833 | 44,221 | 10,313 | 3,925 | 6,388 | 23.3 | 10.4 | 12.9 |
| | LIGURIA | 6,033 | 6,013 | 1,336 | 1,356 | -20 | 22.2 | 22.5 | -0.3 |
| North-east | TRENTINO-ALTO-ADIGE | 3,644 | 3,349 | 1,086 | 1,381 | -295 | 32.4 | 37.9 | -5.5 |
| | VENETO | 19,369 | 18,682 | 3,977 | 4,664 | -687 | 21.3 | 24.1 | -2.8 |
| | FRIULI-VENEZIA-GIULIA | 4,986 | 6,078 | 2,114 | 1,022 | 1,092 | 34.8 | 20.5 | 14.3 |
| | EMILIA-ROMAGNA | 16,466 | 25,423 | 10,813 | 1,856 | 8,957 | 42.5 | 11.3 | 31.3 |
| Centre | TOSCANA | 14,025 | 20,801 | 8,340 | 1,564 | 6,776 | 40.1 | 11.2 | 28.9 |
| | UMBRIA | 4,242 | 5,828 | 2,569 | 983 | 1,586 | 44.1 | 23.2 | 20.9 |
| | MARCHE | 7,812 | 8,275 | 2,582 | 2,119 | 463 | 31.2 | 27.1 | 4.1 |
| | LAZIO | 32,145 | 41,966 | 12,816 | 2,995 | 9,821 | 30.5 | 9.3 | 21.2 |
| South and islands | ABRUZZO | 7,914 | 10,296 | 4,700 | 2,318 | 2,382 | 45.6 | 29.3 | 16.4 |
| | MOLISE | 2,280 | 1,757 | 704 | 1,227 | -523 | 40.1 | 53.8 | -13.7 |
| | CAMPANIA | 37,200 | 32,231 | 1,227 | 6,196 | -4,969 | 3.8 | 16.7 | -12.8 |
| | PUGLIA | 26,378 | 19,646 | 1,200 | 7,932 | -6,732 | 6.1 | 30.1 | -24.0 |
| | BASILICATA | 4,298 | 1,692 | 304 | 2,910 | -2,606 | 18.0 | 67.7 | -49.7 |
| | CALABRIA | 15,377 | 9,869 | 337 | 5,845 | -5,508 | 3.4 | 38.0 | -34.6 |
| | SICILIA | 29,608 | 26,903 | 1,991 | 4,696 | -2,705 | 7.4 | 15.9 | -8.5 |
| | SARDEGNA | 7,702 | 6,356 | 99 | 1,445 | -1,346 | 1.6 | 18.8 | -17.2 |
| Totale | 295,763 | 307,533 | 69,784 | 58,014 | 11,770 | 22.7 | 19.6 | 3.1 | |

Note: The word 'registered' refer to students who enrol to University for the first time. Figures do not include registered students coming from abroad.

Source: CNVSU, 10th Report of the Italian University system.

First, the reasons behind low regional mobility lie on the high degree of decentralisation of Universities activities, i.e. the presence of University head offices, or at least of a University study course, in about 272 municipalities. Also, economic reasons might matter for the choice. The insufficient number of student campus and University residences in several areas of the country actually limit students mobility, especially inflows of people, because of the bulk of expenditure required for renting a room.

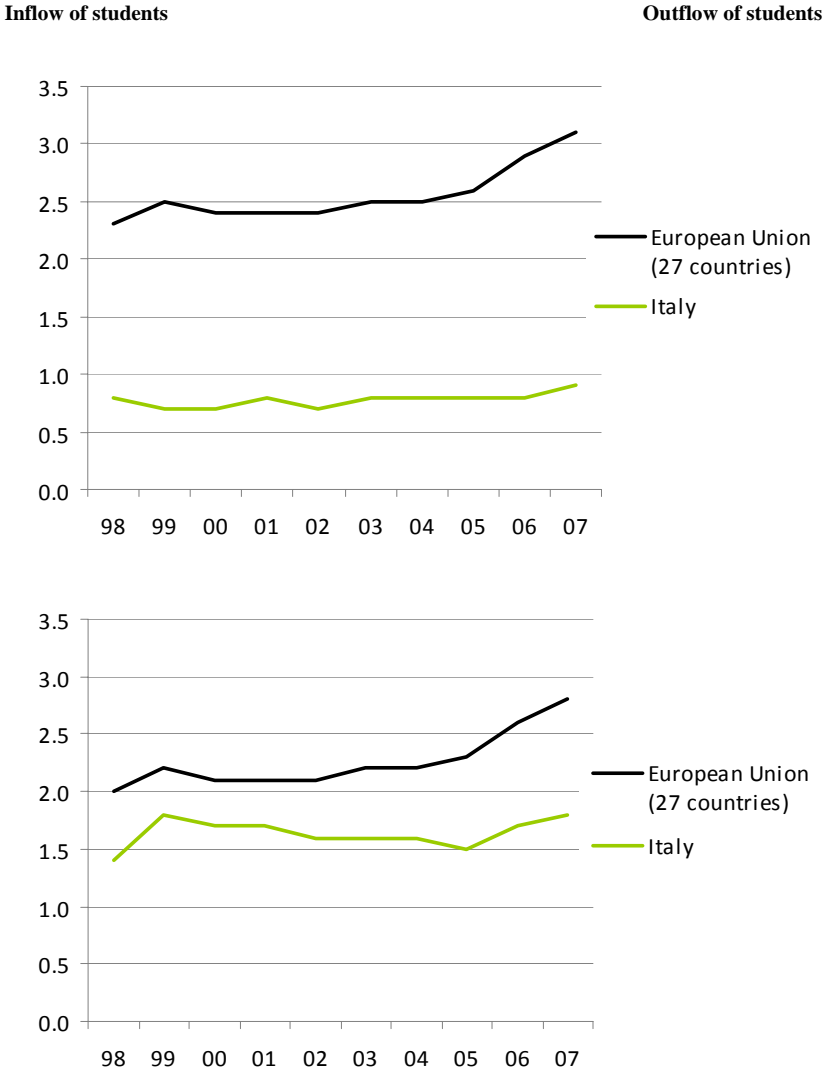
Regional mobility towards some Regions (Lombardia, Emilia-Romagna, Lazio and Toscana) is mainly due to the choice of a more qualified University, assuring better quality of teaching offer and higher employability possibilities after the degree. However, students prefer to stay within the geographic area of residence: about 93.3 per cent of students moving from one of the Central regions remains into the Central area, the same percentage is recorded for North-east and North-west areas. Differently, students from the Southern Italy and islands mostly decide to study in Central Regions.

Transfer between programmes is conditional to the recognition procedure by Academic senate on the base of the relevance of passed exams for the new degree programme where the student is going to register.

According to EUROSTAT data, available up to year 2007, the Italian tertiary education system is characterized by a higher share of students going abroad than inflows. The opposite feature is observable for the average of EU27 countries.

Inflow of foreign students coming in Italy shows a stable path over the period considered, slightly rising to a share of 0.9 of total Italian students in 2007. (see left panel Figure A).

Figure A. International mobility (percentage of all students)



Source: Eurostat online database http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database; DS-071260-Tertiary education participation; left panel: Inflow of students (ISCED 5-6) from EU27, EEA and Candidate countries - as % of all students in the country; right panel: Students (ISCED 5-6) studying in another EU27, EEA or Candidate countries - as % of all students. EEA= Norway, Iceland and Liechtenstein; Candidate countries: Croatia, Macedonia and Turkey.

The gap becomes thinner when considering outflow of students studying in another European country or candidate country. In 2007, the share of students studying abroad (in EU27, EEA or Candidate countries) was about 1.8, against the EU average of 2.8²¹.

The focus on Research doctoral programmes shows far better results. According to the 2009 CNVSU Report on the Italian University system, inflow of students who obtained the second

²¹ It's worth noting that data exclusively take into account student flows from and to European countries.

level degree in foreign countries has been progressively increasing since the a.y. 2003-04, from a share of 3.2 per cent over total Research doctoral programmes enrolments to the 6.4 per cent in a.y. 2007-08, and 7.3 per cent in a.y. 2008-09.

The enrolment to Italian Universities is opened to all citizens, independently from their citizenship. EU citizens, and non-European citizens who are resident in Italy, can access to tertiary education without any limitations, provided that they hold a comparable upper secondary education diploma (obtained after at least a twelve-year education period). Furthermore, they should pass entry tests whenever they are envisaged by the Faculty.

Differences exist for non-EU citizens who are not resident in Italy. For these students there might exist a maximum number of registrations which cannot be exceeded. Application forms with the required documentation must be sent to the Italian diplomatic representation that will send them in turn to the Italian University.

In both cases, the competent Italian diplomatic authority performs two main operations, consisting in the issuing of a declaration attesting the validity of study certifications in Italy (*dichiarazione di valore in loco*) and the confirmation of non-official translations (only for those performed by non-professional translators. In case of diplomas different from the one obtained after a twelve years education period (primary and secondary cycle) the diplomatic authority also provides for the recognition of diploma determining the equivalence (*equipollenza*) with the corresponding Italian education qualification.

In particular, the *dichiarazione in loco* can be required at the Italian diplomatic authority in the foreign country and its release is for free in case of study reasons, so the only costs are due for the diploma translation and the possible legalization procedure. The length of the procedure depends on the Italian diplomatic authority in the foreign country.

Teachers and researchers who have obtained their qualification in other Member States, or in other countries all over the world, can freely apply for academic staff public competitions without any limitation on their qualification and citizenship.

Many European students studying at Italian Universities on exchange agreements are doing so under the European Community Socrates Erasmus programme. In all Universities there is a European Office or European Officer dedicated to the management of this programme. Other exchange students from outside Europe are able to attend through bilateral agreements between their University and the host institution in Italy and are generally handled in the same way as European exchange students.

The studies carried out in a foreign country are fully recognised and transformed into the corresponding Italy ones according to the European Credits Transfer System (ECTS).

This MIUR website provides a comprehensive information tool for students coming from abroad giving the following information: admission procedures, study programmes, University degrees, non-University qualifications, tuition language and welfare services.²²

3. Evaluation

3.1. Institutional evaluation

The evaluation of the Italian tertiary education system relies on two consultant bodies of the MIUR:

- the CNVSU which is the National Committee for the Evaluation of Universities;
- the CIVR, which is the Committee for the evaluation of scientific research (*Comitato di indirizzo per la valutazione della ricerca*).

The CNVSU, established in 1999, is responsible for the yearly evaluation of quality of the whole tertiary education system and with reference to single Universities. Other tasks of the committee include the accreditation procedure of new tertiary institutions and the definition of accreditation criteria of education programmes.

In particular, in the Italian system there exists a twofold evaluation of course programmes. First, the CNVSU assesses the existence of minimum requirements in term of infrastructure and academic staff inputs necessary for starting a new course. These minimum requirements, measured as ratio to the number of students, are for a quantitative assessment of the sustainability of new courses. In addition to that, the CRUI (the association of Rectors of State and non-State Universities) assesses the quality of study courses. The overall assessment of the programme quality has to check whether: i) programme educational objectives are consistent with the mission of the university and the needs of all stakeholder and programme learning outcomes are consistent with the programme educational objectives; ii) academic and support staff, facilities, financial resources and cooperation agreements with businesses, research institutions and other Higher Education Institutions are adequate to accomplish programme outcomes; iii) curriculum and related processes ensure achievement of programme outcomes; iv) appropriate forms of assessment attest the achievement of programme outcomes; v) the management system is able to assure the systematic achievement of programme outcomes and the continual improvement of the programme.

Such a kind of quality assessment was implemented on an experimental basis for 750 study courses of the first cycle, and after that the CRUI System for assessment and certification of programme quality has been compared with the requirements of the document Standards and Guidelines for Quality Assurance in the European Higher Education Area, proposed by

²² <http://www.study-in-italy.it/>.

ENQA²³. The comparison has shown that the CRUI System fulfils all the requirements of the ENQA document.²⁴

With regard to research, the first evaluation phase on research activities was made on a three-year period by the CIVR, covering the period from 2000 to 2003. At present, the ongoing research assessment phase covers a five years-period, from the 2004 to the 2008. The ex-post evaluation covers the scientific performance, the social-financial impact of the research project, the adequacy and competence of human resources (in term of educational level), international mobility, adequacy of instruments and services aimed at the research (with specific notes on high-tech), and the capacity to attract and manage resources. The methodology used relies on both a quantitative judgment based on input and output measures and a qualitative opinion made by experts (peer review).

In order to overcome accountability problems stemming from the presence of two different evaluation bodies as well as the lack of evaluation for degree programmes, last summer the Government approved the establishment of an independent Authority for the Evaluation of the Tertiary Education System and the Research (in Italian acronym ANVUR) which is going to replace the two committees. The tasks of the Authority are the following:

- Evaluation of efficiency and effectiveness of didactics activities on the base of international quality standards as well as considering learning levels of students and their employability.
- Evaluation of Universities, Faculties and Research institutions, University courses, Research doctoral programmes and Master programmes;
- Evaluation of research projects' quality and results;
- Monitoring on external funding, activation of partnerships among private and public institutions;
- Accreditation of new tertiary educations institutions and University courses.

Student evaluations are generally carried out at the end of each academic course on the base of an anonymous questionnaire on the quality of teaching activities, practical classes, courses books, suitability of class rooms and timetable.

The yearly reports containing the evaluation of the Italian evaluation system's quality, from the 2000 edition to the 2009 edition, are available on the CNVSU website. Also, results from the CIVR evaluation are issued on the MIUR website.

²³ The European Association for Quality Assurance in Higher Education.

²⁴ For more information "Confronto del sistema CRUI per la valutazione e certificazione dei corsi di studio universitari con gli Standard e le Linee Guida ENQA"
<http://www.fondazionecrui.it/certificazione/HomePage.aspx?ref=751#>. See also Indagine stella sugli sbocchi occupazionali http://stella.cilea.it/opencms/opencms/stella/Progetto_STELLA/.

4. Funding rules

4.1. Public funding

As a general consideration, the Italian funding model of tertiary education system is characterized by a prevailing public framework with a relevant central planning, low enrolment fee and high freedom to access. Central government funding is provided to State Universities and Non-State Universities.

Before the reorganization of State funding introduced in 1993²⁵, the allocation of State resources was highly centralised. The Ministry of University allocated public resources to specific budgetary spending items to each University, and the latter could not modified the initial allocation according to actual payments. The 1993 reorganization lead to a drastic reduction of the number of financing items into two main funds: the Fund for the Ordinary Financing (Fondo per il Finanziamento Ordinario), which finances ordinary spending mainly related to labour costs, and a Fund for other medium-term financing composed of the Fund for University Real Estates, Machinery and Technological Equipment and the Fund for the Planning of University Development. Beside the streamline of the public funding system, the reform allowed for a higher degree of budgetary autonomy by giving Universities the possibility to reallocate initial spending commitments to other budgetary spending items, as well as moving resources from a fund to another.

During the period 1998-07 the Fund for the Ordinary Financing constantly increased in nominal terms, even if its relative role declined. Also the relative role of other finalised financing from the MIUR (medium-term funding) declined during last few years. As a consequence, the role of State funding has been progressively declining: in 2001 it was about the 75 per cent of total tertiary education system's revenues, while in 2007 it was about the 64 per cent, in line with the majority of European countries according to the 2009 CNVSU Report.

The Fund for the Ordinary Financing represents the main source of State Universities revenues, while just a residual part of total financing of Non-State Universities which finances education activities mainly with their own revenues, also relying on some local government contributions. In 2007 State resourced allocated to Non-State Universities amounted to about euro 88 million, which is a very small figure compared to the total (about euro 7 billion in 2007).

²⁵ Art. 5 of the 1994 Finance Law No. 537/1993.

Table E. Composition of Universities total revenues

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | euro bln | | | | | | |
| Fund for the Ordinary Financing from MIUR | 6.0 | 6.2 | 6.3 | 6.5 | 6.9 | 7.0 | 7.1 |
| Other medium-term financing from MIUR | 1.1 | 1.0 | 1.0 | 1.0 | 1.1 | 0.9 | 1.1 |
| <i>memo: Total State resources</i> | 7.1 | 7.2 | 7.3 | 7.5 | 8.0 | 7.9 | 8.2 |
| Other finalised resources | 1.2 | 1.3 | 1.4 | 1.5 | 1.4 | 1.9 | 2.2 |
| Tuition fees | 1.0 | 1.1 | 1.3 | 1.4 | 1.4 | 1.5 | 1.6 |
| Real-estate divestments and loans | 0.2 | 0.4 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 |
| Other | 0.0 | 0.3 | 0.3 | 0.3 | 0.6 | 0.5 | 0.4 |
| TOTAL | 9.6 | 10.4 | 10.5 | 11.0 | 11.8 | 12.2 | 12.8 |
| | % of composition | | | | | | |
| Fund for the Ordinary Financing from MIUR | 63 | 60 | 60 | 59 | 58 | 57 | 56 |
| Other medium-term financing from MIUR | 12 | 10 | 10 | 10 | 9 | 8 | 9 |
| <i>memo: Total State resources</i> | 75 | 70 | 70 | 68 | 67 | 65 | 64 |
| Other finalised resources | 12 | 13 | 13 | 13 | 12 | 16 | 17 |
| Tuition fees | 11 | 11 | 12 | 13 | 12 | 12 | 13 |
| Real-estate divestments and loans | 2 | 4 | 2 | 3 | 4 | 3 | 3 |
| Other | 0 | 3 | 3 | 3 | 5 | 4 | 3 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: CNVSU, 10th Report on the Italian University system.

In 2007, medium-term funds were about 15 per cent of the Fund for the Ordinary Financing and about 9 per cent of total revenues. They include resources assigned to research projects with relevant National interest (PRIN), beyond resources related to the three-year planning and building construction.

The allocation of resources of the Fund for the Ordinary Financing by MIUR is based on different criteria for State Universities and Non-State Universities.

According to the 1993 reform, each State University receives resources according to a baseline share and an additional balancing share. The baseline share is allocated by the MIUR proportionally to the amount of payments made by Universities in the previous year (historical principle). The balancing share is the tool according to which the MIUR can differentiate public funding to Universities, allocating resources according to standard costs per students and, since 2004, also on the base of quality of research activities.

In 2004 a new allocation procedure was introduced for the three-year financial planning²⁶, envisaging that a part of the balancing share of the Fund for the Ordinary Financing was to be allocated to Universities according to their level of performance.

Two thirds of the balancing share are allocated to State Universities on the basis of the adjusted number of regular students for each study programme. The above mentioned quantity is given by the number of regular students exceeding the number of registered students weighted for the following factors: the length of the programme, the level of difficulty and the results from the CNVSU's teaching activities assessment on minimum requirements and quality. The formula used is as in the following:

$(n_{\text{Regular_Stud}} - n_{\text{Registered_Stud}}) * (L/L-1) * SF_{\text{factor}} * MR_{\text{factor}} * Q_{\text{factor}}$
where: L=length; SF= scientific field; MR=minimum requirements; Q=quality.

One third of resources is allocated on the basis of the potential research staff. Defined. In particular, the number of potential research staff is found by considering academic personnel in charge as 1 potential unit; researchers with research grants as 0.6 potential unit, doctoral students and in charge scientific-technical personnel as 0.8 potential unit.

The resulting quantity is then adjusted for two multiplicative factors: the PRIN factor which measures the participation to research projects of Relevant National Interest, and the CIVR factor which is based on results from the quality assessment. An additive factor is also considered which is based on the ability of Universities to attract external financing.

In addition to the balancing mechanism, which mainly refers to structural factors, a rewarding share was envisaged in 2009. The latter takes into account the evolution of the system towards strategic objectives. In particular, in 2009 about 7 per cent of the Fund of the Ordinary Financing was allocated to universities recording the best improvement in terms of yearly percentage changes in a set of performance indexes.

Differently from the balancing share, the weights considered within the rewarding share are the following: two thirds of the share is based on improvements in research, while one third on improvements in teaching.

Improvements in teaching activities are measured through the following five quality indexes, having the same weight (0.20 per cent):

- the ratio of academic staff in charge over the number of courses in the a.y. 2008-09, which is aimed at verifying whether the minimum resources requirements are fulfilled;
- the ratio of registered students at the second year who obtained at least two thirds of credits (CFU) required by the degree programme over the total. The above mentioned

²⁶ Law No. 43/2005.

measure is aimed at measuring student performance at the beginning of tertiary studies;

- the ratio of credits (CFU) obtained by the students enrolled in the a.y. 2008-09 and the credits required by the degree programme. The above mentioned measure is aimed at providing an average performance measure;
- the ratio of the number of courses envisaging the final student's evaluation over the total, which aims at rewarding institutions taking into consideration for stakeholders opinion;
- the percentage in 2007 of employed students who graduated in 2004, which provides a measure of employability of graduates after three year since the attainment of the degree.
- Improvements in research are measured, among the others, through the following factors:
 - Percentage of academic staff and researchers who took part of PRIN research projects which were positively evaluated.
 - Percentage of funding obtained in the European competitions, within VI PQ-European Union CORDIS projects.

The State financing to non-State Universities, which is far less than the one in favour of State Universities greatly refers to the historical principle, still ignoring any reference to quality evaluation.

Research funding

Scientific research is financed by State resources assigned to research projects of Relevant National Interest (in Italian acronym PRIN projects). The funding is on a competitive base at national level. The selection of best research project takes into account the co-financing of project and the presence of group research work. Further specific funds are envisaged for investment in basic research, for specific industrial and information technology research projects.

The other main funding source comes from the European Union with reference to the participation to the so-called *Programmi Quadro di Ricerca e Sviluppo Tecnologico*, as well as Structural Funds.

Additional funding for both State and non-State Universities comes from local governments, mainly Regions, but also from the private sector, including foundations, firms, and households. In particular non-State Universities rely a lot on funding granted by private foundations.

Both firms and households are motivated to directly finance research activities by the existence of tax allowances for financial contributions given to scientific research. In addition to that, the 5 per 1000 of IRE personal taxation can be devolved to research institutes and Universities.

4.2. Impact of quality assessments on funding

The results of quality assessments have an impact on funding decisions (see the previous text).

4.3. Private funding

4.3.1. Tuition fees and/or households

According to the 2009 CNSVU Report on the Italian University system, in 2007 student fees amounted to a share of 13 per cent over total revenues of Universities (see Table E). The average fee per student was equal to about euro 947, but the distribution of tuition fees across geographic areas shows that student fees paid in Northern Regions were about two times those paid in Southern Regions and about 40 per cent higher than fees paid in Central areas. As a general rule, higher student fees are required for attending first and second-level Master courses as well as specialization courses offered to graduates.

4.3.2. Business, other

According to the 2009 CNSVU Report on the Italian University system, in 2007 finalised revenues from other sources than the MIUR were about 17 per cent of total University revenues (see Table E). The significant increase recorded during the last years suggests the improvement in the ability of the tertiary education system to obtain resources from firms and other institutions.

In order to strengthen these recent developments, the three-year budget manoeuvre for 2009-12 gave Universities the possibility to transform into Private University Foundations.²⁷ Private University Foundations are non-commercial institutions with no profit objectives, which operate on the base of the economic principle of business management. The law envisaged the entrance of new subjects, both public and private, into private University foundations, therefore a growing importance of funding from the business sector might be expected in the future.

²⁷ D.L. No. 112/2008 converted into Law No. 133/2008.

4.3.3. Grants/loans

Law No. 390/1991 on the right of study defined the main features of the Italian system of financial support for tertiary education study. The law, and the following enacting Ministry regulations, put into effect the basic principle of the Italian Constitution envisaging the provision of financial support for the best performing students. The enacting of the principle brought to the establishment of a National Agency for Right to Study (in Italian acronym ADISU), which is organised into local offices responsible for the management of arrangements at Regional level.

Different tools are provided by the Italian system, among which scholarships constitute the main kind of direct financial support: in the a.y. 2007-08 about 10 per cent of enrolled students were entitled to a scholarship. However, only 82 per cent of them benefited of financial aid, due to public funding constraints.

Students entitled to a scholarship, as well as benefiting students, do not have to pay tuition fees and the Regional tax for the right of University study. In addition to them, students who passed the upper secondary education exams with maximum grades, regular graduates, disabled students and students benefiting of specific loans (*prestito d'onore*) are exonerated by paying tuition fees.

Scholarships are given on a competitive base which takes into account students performance and the economic and wealth situation of their family. The economic situation depends on the number of family's components (ISEE indicator). The amount of the scholarship is different depending on the residence of students; higher amount are granted to people coming from a city different from the one where the student is enrolled. The amount is also increased in case of disabled persons and students in particular disadvantaged economic situations. Beyond equality targets, efficiency is also rewarded, providing higher scholarships to regular graduated students.

Furthermore, students benefiting of scholarships are offered several services, such as housing assistance, refectory meal tickets and fee waivers. Despite the number of housing places is increased over the last years, only one over five entitled students obtains a housing place offered by a Regional ADISU office (about 20 per cent of total entitled). Differences emerge across Regions, being the best situation in the Regions of Marche (about 63 per cent of entitled obtains housing) and Trentino-Alto-Adige (about 50 per cent).

Easy terms loans for the best performing students (*prestiti d'onore*) were recently introduced by the Government who acts as guarantor to banks. These loans are offered to students who are resident in Italy, ageing between 18 and 35 years, with certain education attainments. They can be used for paying tuition fees and housing rents, attending the Erasmus programme, enrolling at a second-level Master course as well as buying a laptop. These loans are still not well developed and no specific statistics about them is available.

5. Impact on Employability

Official data issued in the special focus on graduates by the ISTAT (the National Statistic Institute) suggests the existence of an advantage for graduate students with respect to students with a secondary-school diploma. The unemployment rate of 25-29 years-old students with a University degree is 12.9 percent, comparing with the 18.8 percent of 20-24 years-old students with an upper secondary diploma. The advantage for graduated people keeps on existing in the five-year period following the educational attainment: the unemployment rate of students becomes in line with the unemployment rate of total population estimated equal to 6.7 percent in Italy in 2008 despite the relatively low work experience.

Table F. Unemployment rate by different educational attainment in 2008

| | Secondary school diploma | | University degree | |
|--------------|--------------------------|------------|-------------------|------------|
| | 20-24 | 25-29 | 25-29 | 30-34 |
| | age | age | age | age |
| BY SEX | | | | |
| Males | 17.8 | 8.2 | 11.8 | 5.9 |
| Females | 20.0 | 10.6 | 13.7 | 7.6 |
| Total | 18.8 | 9.3 | 12.9 | 6.9 |

Source: <http://www.istat.it/lavoro/unilav/focus.pdf>

Universities have been improving arrangements to ease the link with labour market, by creating specific offices devoted to job counselling and internships. In the a.y. 2007-08 about 96 per cent of University declared to offer internships to students, while about 39 per cent of University declared to offer students specific arrangements to ease the transition from the tertiary education system to firms. Most of these arrangements are organised by bigger Universities having more than 40, 000 enrolled students.

In many Universities, specific ‘career days’ are organised by giving businesses the opportunity to both illustrate their core activity to students and collect curricula vitae. Moreover, firms and other private and public institutions often organize specific meetings at Universities, carrying on job selection among graduates.

Also, in many Universities there exist databases where graduates can publish their curriculum vitae. Curricula are publicly consultable by businesses and institutions searching for new employees. In particular, in 1994 the *Almalaurea* consortium was established by several Italian Universities with the financial support of the MIUR, having the aim to keep closer the world of University and labour market. The *Almalaurea* website publishes the curricula of graduated students from 55 Italian Universities, collecting information on their careers. More recently, there have been established several new Universities consortiums, especially among excellent education centres, as in the case of the *UJ Career and placement Service* established by the *Scuola Normale* and the *Sant’Anna* University in Pisa, and the IMT (Institute of Advanced

Studies) in Lucca. Similarly to the *Almalaurea*, the consortium publishes on line the database of graduated students of the three Universities.

In addition to the *Almalaurea* consortium, there is the STELLA consortium which was established by several Universities in the Region of Lombardia.

6. Recent and planned reforms of the tertiary education system

6.1. Description of recent reforms

The recent reform of the tertiary education system was introduced with Law No. 1/2009 of conversion of D.L. No. 180/2008 (the so called *Legge Gelmini*), containing measures for the right to study, the increase in quality of the University system and research.

First, the reform introduced new procedure for the recruitment of professors and researchers in order to simplify recruitment procedures and achieve a more transparent and fair selection system. In particular, the recruiting commission for full and associate professor is made of four components, chosen among full-professors. Only one is appointed by the Faculty which called the competition, while the remaining full-professors are drawn from a list of ordinary professors of the scientific field at national level. Up to now, the selection of commission members was based on the election by all academic staff at national level. The recruiting commission for researchers is made by three components, of which one is the associate professor setting the competition and the remaining two are drawn from a list of ordinary professors of the scientific field at national level. The reform also envisaged that researchers' selection is to be based on requirements recognized at international level.

Before the reforms, the members of recruiting commissions were elected by in charge personnel.

The law also envisaged the exceptional recruiting procedure based on direct call by Universities (*chiamata diretta*), without any public competition, for both researchers and professors who come back to Italy within the brain drain programme and carried out research and teaching activities for at least three years in Italian universities (Law 1/2009). The provision is also aimed at selecting the most brilliant academic staff.

Secondly, the reform allowed for the distribution of public funding to Universities according to merit. The 7 per cent of the Fund for the Ordinary Financing (and of euro 550 million of resources envisaged by the University Agreement for the period 2008-2010) was allocated to the Universities with a better educational supply, quality of research and teaching. The evaluation is being developed by the CIVR and the CNVSU.

Finally, the reform gave room to the entrance of young people into the academic institutions. The turn-over in the 2009-12 period introduced by the 2009 Finance Law, aiming at freezing hiring in the general government sector, was raised to 50 per cent of retirements (the cap is 20 per cent for the remaining institutions belonging to the general government). Also, the law specified that at least the 60 per cent of new hiring must be reserved to new researchers. At the same time, however, the reform called for more responsibility of Universities by prohibiting those Universities whose labour costs exceeded the threshold percentage over the State Fund for the Ordinary Financing to hire new academic personnel.

As explained in section 3, in 2009 the Government approved the establishment of a new independent Authority for the Evaluation of the Tertiary Education System. The MIUR did not provide specific details about the date from which the ANVUR is going to take up work. At present, the CIVR is making the selection of the members of panels, among academics and experts, to which commit the second evaluation phase of scientific published articles over the five-year period 2004-2008. As a consequence, it is likely the Agency will start to work not before the end of 2010. The starting of work is also linked to the enacting act about quality and efficiency of the tertiary education system the Government is called to issue according to the new draft bill on the re-organization of the tertiary system. The draft bill is, however, still under discussion at Parliament at present. According to the bill the rewarding mechanisms for the allocation of public resources will be related to results (ranking) of Universities deriving from the external evaluation carried out by the ANVUR. In 2009, 7 per cent of the Fund for the Ordinary Financing was allocated according to the evaluation of teaching and research quality. The target to be achieved by the end of the legislature (3 years) consists in 30 per cent.

As explained in the country fiche, the three-year fiscal package for 2009-12 (D.L. No. 112/08) gave Universities the possibility to transform into Private University Foundations, which are non-commercial institutions with no profit objectives operating on the base of the economic principle of business management. The law envisaged the entrance of new subjects, both public and private, into private University foundations. As a consequence a growing importance of funding from the business sector might be expected in the future.

Finally, further measures were introduced in 2009 with the aim to limit the problem of brain drain, such as tax allowances envisaged by Law No. 2/2009 of conversion of D.L. No. 185/2008. The law introduced both tax incentives to Italian scientific researchers and professors working abroad to return to Italy and the extension of tax credit to research carried out in Italy even when commissioned by a foreign counterparty. Specifically, a flat income tax rate (10 per cent) has been introduced for the income earned by researchers from full-time employment or self-employment in the next five years of their return in Italy, as well as the exclusion of their income from IRAP tax, the Regional tax on productive activities paid by businesses, in the year of return and in the next two years.

6.2. Planned reforms (or reference to ongoing policy debate)

At present, the new draft bill on the re-organization of Universities is being discussed at Parliament. Among others, the draft bill envisages the following:

- a relevant reform for the governance of Universities: the role of the Rector, the Board of Directors and the Academic Senate are revised. In particular, the bill envisages the presence of external members (at least the 40 percent of members) in the BoD with the aim to increase the independence of financial planning;
- a re-organized of Faculties on the basis of the school model in USA, and a broad rationalization process by reducing the number of Universities, throughout mergers, and study courses;
- the establishment of a special fund to promote excellences and merito (scholarships and easy-term loans);
- the introduction of a unique external quality assessment system carried out on a regular base by the ANVUR, aimed at assessing university performance on didactics and research and linking results to rewarding mechanisms within the State ordinary financing. Another fundamental action refers to wages update of academic staff. The biennial update of academic staff wage due to career growth is going to be obtained only after the approval of a scientific report on academic activities carried out, to be elaborated by professors and researchers every two years;
- the introduction of an ex post assessment of University recruitment policy. In particular, the biennial updating mechanism of academic staff wage due to career growth is going to be obtained only after the approval of a scientific report on academic activities carried out, to be elaborated by professors and researchers every two years. (The assessment of scientific results will matter also for the allocation of a part of the Fund for the Ordinary Financing to Universities, not only for individual career);
- a reform of the system of financial support for tertiary education study, in line with the Constitutional reform of 2001 on local autonomies, by entrusting the Government to define LEA at national level for the delivery at local level of public services;
- new procedures for academic staff recruitments based on the two stage selection procedure already envisaged by the 2005 reform which was not enacted (so called *riforma Mussi*). According to that a first qualification (*abilitazione*) at national level will be instrumental to go on local competitions.