Development of a Ranking in Albania
Final Report

July 2011

Contract No. MoES/CS/CQ/008/2010

CHE Centre for Higher Education gGmbH
Verler Straße 6
D-33332 Gütersloh

Phone: ++49 (0) 5241 97 61 0
Fax: ++49 (0) 5241 9761 40
E-Mail: info@che.de
Internet: www.che.de

Development of a Ranking in Albania
Final Report

July 2011

Contract No. MoES/CS/CQ/008/2010

Summary

In early 2010 the Ministry of Education and Science of the Republic of Albania commissioned CHE – Centre for Higher Education Development to develop a concept for a ranking of Albanian higher education institutions and to test it in a first pilot study in selected fields. The ranking is aiming at transparency about the Albanian higher education system; its major purpose is to give information to (prospective) students and help them to make an informed choice. In addition the ranking shall inform policy makers and the broader public about the performance of Albanian higher education.

Part of the project was an analysis of existing international rankings and their indicators with regard to their usability in the Albanian context. The analysis shows that international rankings are mainly looking at world-leading research excellence in internationally oriented research universities. They cannot provide information and orientation to prospective students; their indicators are not appropriate for teaching oriented institutions. An alternative approach is offered by CHE ranking which has the purpose to inform prospective students and which includes a number of indicators on teaching and learning, facilities beside some indicators on research activities. The basic methodology of the concept for the Albanian ranking is based on the CHE ranking methodology which differs in major characteristics from most rankings yet at the same time has a high reputation internationally.

1. The ranking will be field-based and will not compare whole universities
2. The ranking will be multi-dimensional and look on teaching, research and other dimensions without aggregating the indicators into a composite overall score.
3. The ranking will apply a grouping approach to ranking; it will not calculate a league table.

The project included two phases: first, the development of a concept of the new ranking, and, second, the test in a pilot study in four fields: business studies/economics, law, nursing/health and social sciences. After this project future ranking activities should be carried out by a national organisation, the Public Agency for Accreditation in Higher Education (APAAL). Hence the project included the transfer of knowhow and training of APAAL staff, too.

In the design phase the methodology had to be adapted to the structure and particularities of the Albanian higher education system - with regard to data sources, instruments of data collection and the set of relevant indicators. A first list of indicators based on CHE ranking underwent an intensive stakeholder consultation. Based on several stakeholder workshops and an online survey a revised list of indicators was developed which took into account stakeholders views on the relevance of indicators as well as the expert views of APAAL and the Ministry on the availability of data.

In the testing phase several lines of data collection took place. First, general data on the universities/institutions had been collected. Second, field-related data on faculties/departments (e.g. on students, staff, facilities) and individual degree programmes were delivered by the universities. In addition surveys among professors and students were carried out. All data collection procedures were adapted to the circumstances and structures in Albania.

After verification and analysis of data delivered by the various data collections and surveys the feasibility of data sources and indicators were assessed. In general the procedures of data collection regarding the self-reported institutional data, both on the level of university

and on faculty, worked, although some data were not available in many institutions or a lack consistency of data does not allow to use them in the ranking. In addition several cross-checks were used to ensure the validation of the data. Most problematic was the student survey. More than 6,000 students participated in the survey, but in the end the results could not be used to include indicators on student satisfaction into the ranking. The analysis of student data showed that Albanian students wanted to see their own institution as good as possible in the ranking and did not give frank and honest assessments of their university. The loss of student satisfaction indicators made the survey among professors particularly important. This survey produced a picture on the reputation of Albanian higher education institutions with regard to education, research and facilities. In addition we could calculate an innovative, tailor made indicator to measure research activities of Albanian professors and institutions.

The participation of institutions differed between fields. In the fields of business studies/economics, law and nursing the number of institutions was sufficient to calculate a full ranking with a sufficient scope of indicators. In social sciences at the end only ten institutions provided data. Hence only the top performing institutions are highlighted but no full ranking is calculated.

A future implementation of a sustainable ranking of higher education institutions in Albania can be based on the concept – the concept and set of indicators as well as instruments and processes of data collection – of this pilot project. The report includes a number of recommendations for future ranking activities taking into account the experiences and outcomes from this pilot project.

Table of Contents

List of Tables

List of Figures

1 Introduction

In early 2010 the Ministry of Education and Science of the Republic of Albania decided to implement a ranking of Higher Education Institutes in Albania.

The background of this initiative is “The Action Plan for Implementation of the Bologna Process: Preparation of the higher education standards per teaching cycles according to the demands of the Bologna Process” carried out by DAAD & FCG – International (Finnish Consulting Group) within the year 2010.

The Ministry wanted to use ranking as a tool to improve the quality in higher education. The main purpose of the planned ranking is to give information to (prospective) students helping them to make an informed choice about their university. At the same time the ranking will create a broader transparency about the Albanian public and private higher education system and it will help higher education institutions and politics to compare institutions within Albania. As one of the main approaches the Albanian Ministry wanted to implement a multi-dimensional ranking based on generally accepted methodology and principles. As example the guidelines of the International Expert Group (Berlin Principles on Ranking of Higher Education Institutions[1]) have to be mentioned. The Ministry commissioned CHE to develop the concept of an Albanian national ranking and prepare a pilot ranking in a selected number of fields. The ranking adapts the basic methodology of CHE rankings which are used nationally and internationally – in the U-Multirank project to develop a concept for a global university ranking. With this link there is a perspective for the Albanian ranking to connect to international ranking activities.

While the Albanian ranking is adapting the basic approach of CHE ranking – field based, multi-dimensional, group approach (instead of league tables) – the details of the ranking, in particular the particular set of indicators and the selection of adequate data sources have to be adapted to the tradition and structure of Albanian higher education.

The basic idea is that in the process of this project the Public Agency for Accreditation of Higher Education (APAAL) will develop the know how to run a future Albanian ranking; CHE is operating as a consultant bringing in its ranking expertise; CHE is responsible for the development of the ranking concept, the definition of indicators and their transformation into instruments for data collection. Data collection was carried out by APAAL. Data analysis was done done jointly by CHE and APAAL.

[1] International Ranking Expert Group (2006) “Berlin Principles on Ranking of Higher Education Institutions.” http://www.che.de/downloads/Berlin_Principles_IREG_534.pdf (Date of retrieval: 02.07.2011)

2 The CHE Centre for Higher Education

To implement a ranking in Albania the CHEg GmbH was chosen as project partner by the Ministry, due to its competencies in the area of higher education and rankings: The CHEg GmbH is a private non profit organisation which was founded in 1994 jointly by the Bertelsmann Foundation and the German Rectors conference. The purpose of CHE is to promote of reforms in German higher education. A ranking of German universities was among the founding tasks of CHE. Since its start in 1998 CHE ranking has been extended to more than 30 fields covering more than 2,000 departments of about 270 institutions.

In 2004 CHE has started to internationalise the ranking by including universities in Switzerland, Austria, the Netherlands as well as individual universities in other countries (Italy, Hungary and Romania) offering programmes in German language. In 2007 CHEg GmbH published the first ExcellenceRanking for Europe. This ranking wants to highlight the research strengths and internationalisation of European universities. European students can find a doctoral or master programme as well as information on more than 2,000 research teams.

CHE is a founding member of IREG Observatory on Academic Ranking and Excellence and a leading partner in the U-Multirank project founded by the European Union.

The CHE University Ranking approach has three main characterisctis which are different from most other rankings:

1) The CHE University Ranking is **field-based**. Evidence from the CHE ranking shows that universities can be very heterogeneous with regard to the performance of their individual daculties and departments. A university might perform well and hence be ranked high in physics and at the same time perform poorly and be ranked low in history. Prospective students who are the major target group of CHE ranking are interested in information about the field they want to study; averages on a whole university do not help them to make an informed choice. The finding, for example, that a particular university as a whole is ranked in the middle of the distribution is of no use for such prospective students interested in physics if this very field is ranked low.
2) The CHE University Ranking is **multi-dimensional**. The indicators differ between existing rankings, but most rankings calculate a composite overall score by assigning particular weights to the indicators. By selecting a particular set of indicators and assigning specific weights to each indicator, the rankings impose a specific definition of quality. According to the U.S. National Opinion Research Center, there is neither a theoretical nor an empirical basis to develop such weighting procedures. With regard to the users /target groups of the ranking we have to take into account the heterogeneity of their decision preferences. Some students are looking for a university with high research activities (as measured e.g. by research grants, publications etc.) while other students may look for a university with close contacts between students and teachers, good mentoring and short study duration. Calculating a composite overall score means to to patronise the

users of the ranking. Furthermore composite indicators level out differences between particular aspects of performance. This is most evident in rankings including indicators both on teaching and on research. A university with good research performance does not necessarily provide good teaching and learning experiences to their students and vice versa. Multi-dimensional rankings can provide better insights into the strengths and weaknesses of a university. This is the only way to take into account the multi-perspectivity nature of quality. This view leads Usher & Savino (2007: 23) to conclude from their analysis of ranking systems that “one of the main reasons of institutional unease [with rankings] is the tendency of institutional ranking schemes to use weighted aggregates of indicators to arrive at a single, all-encompassing quality score”.

3) The CHE University Ranking is using **rank groups** instead of calculating league tables. In the tradition of the U.S. News & World Report rankings most rankings order universities in league tables with individual rank positions. This approach suggests that each difference in the numeric value of an indicator marks a difference in quality/performance between the entities ranked. League table comparison inevitably involves the danger of misinterpreting small differences in the numeric value of an indicator in terms of differences in performance or quality. In many cases, data are insufficiently precise to establish clear cut and unambiguous table positions in a reliable way. Or, to put it in statistical terms, such a procedure ignores the existence of standard errors in data. Hence the CHE ranking orders universities only into three groups for each indicator: A top, a middle and a bottom group. There is no additional distinction made within groups; *within* groups universities are ordered alphabetically in all publications – so there is no league table.

3 Rankings in higher education

3.1 General aspects of rankings

Since the early years of the 20th century, rankings and league tables of higher education have existed, starting in the U.S.A. (Dill 2006). An overview on existing ranking systems by the Institute for Higher Education Policy (IHEP) lists more than 30 countries in all continents with a some countries (like the UK) producing a number of competing rankings. It is generally known that ranking is a delicate task with a range of possible methods and tools. There is much debate about how rankings affect the public perception of institutions, potentially having an influence on higher education policies and institutional decision making (cf. Hazelkorn 2011) as well on the employment prospects of graduates.

3.1.1 Purposes and target groups of rankings

Most national rankings started with the aim of informing (prospective) students and their parents about universities and programmes within their country. The 2001 edition of 'America's Best colleges' edited by U.S. News & World Report (USN&WR) announced to those target groups that it will "provide a detailed map to improve your odds of ending up in the right place". It is a challenge in particular for those rankings to find a balance between the need to reduce the complexity of information for the core target group, prospective students, who are the among the groups least informed about higher education, on the one hand, and, on the other hand, the need to deliver sophisticated and elaborate information for the higher education sector itself, which is important for the acceptance of rankings within higher education (Federkeil 2006).

It should be recognised that not all students are alike: the USN&WR ranking or the student information websites such as Studychoice123.nl (SK123) or CHE ranking are in the first instance aimed at students entering higher education for the first time in their lives, typically adolescents in their last years of secondary education. The Financial Times (FT) ranking is looking at more mature persons with some years of professional experience wanting to upgrade or extend their knowledge through gaining specific skills. And the Aspen Institute's 'Beyond Grey Pinstripes' ranking of MBA programmes (www.beyondgreypinstripes.org) is aimed at students interested in curricula emphasising green values and ethical business models. These are groups of completely different students with different cost/benefit calculations of studying in their minds, with different knowledge about higher education institutions and with different needs of information. Consumption motives (living on campus for 3 to 5 years, broad academic learning to form one's personality, etc.) will be more important to first-time students, while investment motives may more readily characterise the returning students (e.g. which competences and how much additional income will I get from two years part-time study with this particular school or professor?). Hence rankings have to be designed with due regard to their (main) target group.

In contrast, global league tables of higher education institutions as a rule do not refer explicitly to a defined target group. They address a broader public inside and outside

higher education and around the world. The most prominent global league table, The Academic Ranking of World Universities (ARWU) made by Shanghai Jiaotong University originally was intended as an instrument to compare the research performance of Chinese universities in science and technology fields, and of the Chinese national higher education system in general with the rest of the world, particularly with U.S. universities. Hence it was intended mainly as an instrument of national steering of research policy and planning; the implicit target group of such league tables then is the set of policymakers in the public authorities (ministries of education and science & technology).

More detailed research rankings like the Leiden Ranking seem to target more specific management decision-support, to find out which universities are comparable to one's own, or which ones might be interesting partners for a benchmarking exercise in the research dimension because they are performing better in specific research areas than one's own. Such questions and decisions indicate that institutional leaders and their support staff would be the prime target group of this ranking. Similarly, the Webometrics league table informs institutional leaders about the relative web presence of their higher education or research institution, which might lead to decisions regarding e.g. open access publishing. These and comparable rankings are designed to answer specific information needs of staff members (different ones, depending on the individual ranking being focused) in higher education and research institutions closely associated with the strategic decision-making level.

3.1.2 Institutional and field based rankings

In broad terms, interests of users can focus at institutional or at field levels of higher education and research. By fields, we mean smaller organisational units like faculties, schools or departments focusing at a single area of knowledge (e.g. academic disciplines like economics or physics, or interdisciplinary areas like business studies or nano-technology) or single programmes of study or programmes of research in such an area.

Most global league tables (ARWU, THE, Leiden, HEEACT, Webometrics) rank higher education as a whole, and it is this focus which most easily connects them with the reputation race.

The more national oriented rankings like the CHE Ranking and Dutch SK123 are geared to helping prospective students to make an informed choice of study programmes matching their individual needs and wants, rather than about organisational units of higher education and research institutions. The logic for being interested in the field level is easiest to argue for students or for individual researchers looking for a place to study or to do research: programmes across institutions may deliver quite different qualities. Showing the average value of indicators for whole higher education and research institutions hides the strengths and weaknesses of their fields, while it is argued that for all but the very best and richest institutions it is neither possible nor desired to be equally prominent in all fields present at the institution.

3.2 Overview on international rankings

Global rankings and league tables share broad principles and approaches, although they are driven by different purposes and differ in relation to their methodologies, criteria, reliability, and validity (Dill and Soo 2005). The latter suggests that there is no commonly accepted definition of quality of higher education—as research on quality assurance has also found since almost two decades (Brennan, Goedegebuure et al. 1992)—and hence a single, objective league table cannot exist (Van Dyke 2005; Brown 2006; Usher and Savino 2006).

Rankings have different purposes and different foci; hence they use different indicators on the same dimensions. With regard to global rankings the selection of the sample of university is guided by different methodologies and indicators, too. Nevertheless the existing global rankings suggest that there is in fact only one model that can have global standing: the large comprehensive research university' (van der Wende and Westerheijden 2009). The high regard for research institutions cannot be blamed on the league tables as such, but arises from the academy's own stance towards the importance of research. Although it can be argued that a league of world-class universities needs to exist as role models (on the concept of the world-class university cf. Salmi 2009), the evidence that strong institutions inspire better performance is so far mainly found in the area of research rather than that of teaching (Sadlak and Liu 2007). This means that in the existing rankings data are available only for one type of higher education institution, the large, comprehensive international research university, which represents only a minority of the higher education and research institutions of the world.

Table 1: Indicators and weights in global university rankings

	HEEACT 2008	SJTU 2010	QS 2010	Leiden Rankings 2008
Research output	• Articles past 10 years (10%) and last year (10%)	• Articles published in Nature and Science (20%) • [Not calculated for institutions specialized in humanities and social sciences]		• Number of publications (P)
Research impact	• Citations last 10 years (10%) and last 2 years (10%) • Average annual number of citations last 10 years (10%) • Hirsch-index last 2 years (20%) • Highly-cited papers (15%) • Articles last year in high-impact journals (15%)	• Articles in Science Citation Index-expanded and Social Science Citation Index (20%)	• Citations over the last 5 years per staff (20%)	• Size-independent, field-normalized average impact ('crown indicator' CPP/FCSm) • Size-dependent 'brute force' impact indicator (multiplication of P with the university's field-normalized average impact): P * CPP/FCSm • Citations-per-publication indicator (CPP)
Quality of education		• Alumni of an institution winning Nobel Prizes and Fields Medals (10%)	• Staff/student ratio (20%)	
Quality of staff		• Staff winning Nobel Prizes and Fields Medals (20%) • Highly cited researchers in 21 broad subject categories (20%)		
Reputation			• Peer review survey (40%) • Employer review survey (10%) • International staff score (5%) • International students score (5%)	
General		• Sum of all indicators, divided by staff number (10%)		
Website	http://ranking.heeact.edu.tw/en-us/2008/Page/Methodology	www.arwu.org	www.topuniversities.com	www.cwts.nl/ranking/LeidenRankingWebSite.html
Notes				There are four rankings, each focusing on one indicator.

Shanghai Jiao Tong University's ARWU

The Shanghai Jiao Tong University's (SJTU) Academic Ranking of World Universities (ARWU) focuses on research. The publication concerns the top 500 of about 1,000 universities in the SJTU database. It is based on indicators about publications, citations and highly cited authors as registered in worldwide databases, and on the list of Nobel prize and Fields Medal winners (in mathematics). As all those indicators are size-dependent an additional indicator was introduced to control for size. 60 % of the composite score rely on indicators on bibliometric indicators, 30 % on Nobel Prize/Field medal winners and the remaining 10% on the size-independent indicator. The indicators on research mainly refer to research *activity* measured by the number of publications rather than on research *impact* (citations). Publications in journals *Science* and *Nature* are counted twice (they are part of SCI publications, too). This implies an even stronger bias towards the natural sciences.

Nobel prizes are awarded for a limited number of academic fields only (physiology/medicine, chemistry, physics, economics; literature and peace do not refer to academic achievements). This means that 40% of the overall score refer to six fields of research only (incl. the Fields Medal for mathematics). Nobel Prize winners are taken into account since 1910, but with higher weights for more recent laureates. They are used for two indicators. First, as prize winners they are counted for the university to which they were affiliated at the time of winning the prize. Nobel prizes are usually awarded many years after the original research was undertaken and many prize winners changed university in the meantime. It can be questioned, therefore, if this indicator measures an institution's research excellence or rather its ability to attract researchers with high reputation. Second, Nobel Prizes are counted for a university's graduates, which also has a tenuous, long time-lag relationship with the excellence of an institution at this moment: to what extent has becoming a Nobel Prize winner been 'caused' by teaching in the university where they studied for their first or second degree?

Hence the institutional ARWU ranking has a strong bias in favour of the natural sciences due to the selection of indicators (e.g. the use of publications in science and nature). The use of the (mainly English language) bibliometric database in addition raises questions of language and cultural bias.

In addition to the institutional ranking, ARWU publishes rankings of broad academic fields for natural sciences/mathematics, engineering/technology and computer science, life and agricultural sciences, clinical medicine and pharmacy and social sciences as well as field based rankings from a limited number of fields. The indicators are slightly different from the institutional ranking: instead of articles in *Science* and *Nature* the broad field rankings are measuring the number of articles in top journals in the fields. As there are no Nobel Prizes in engineering, external research funds are substituting this indicator.

Table 2: Indicators and weights in ARWU

Indicator	Weight	Science	Engineering	Life Sciences	Clinical Medicine	Social Sciences
Alumni	10 %	X	-	X	X	X
Awards	15 %	X	-	X	X	X
Publications (SCI, SSCI)	25 %	X	X	X	X	X
Top Journal Publications	25 %	X	X	X	X	X
Highly Cited authors	25 %	X	X	X	X	X
Research Funds	25 %	-	X	-	-	-

The methodology of the rankings is described in detail on the ARWU website (www.arwu.org). The rankings exclusively rely on existing, publicly available databases. Due to the limitations and biases inherent in the indicators the ranking gives valid information on research in the natural sciences and medicine; but validity is limited for engineering and very problematic for the social sciences and humanities (which are not included in the field-based rankings). To be fair, we must keep in mind that the Shanghai ranking originally was developed to compare the research performance in science and technology of the Chinese universities with the rest of the world.

ARWU's presentation is on a website (www.arwu.org), but the ranking is fixed; there is no interactivity beyond choosing the global institutional ranking, the field ranking or the subject ranking. Registered users (registration is free) can also get a view of each university's profile, which gives the total ranking over the years since 2003 as well as the field and subject rankings in which the university figures since those started (2007 and 2009, respectively).

The QS World Rankings

Originally the QS ranking was a joint ranking by QS (Quaquarelli Symonds) and Times Higher Education (THE). In 2009 both partners split up. While THE developed a new ranking, QS is continuing the ranking as it was. The methodology of the QS Ranking includes at least 500 higher education institutions selected according to two main criteria:

> "Because we designed these rankings to measure universities in the round, the institutions they include have to teach undergraduates. This excludes many postgraduate colleges of undoubted merit, from London Business School to the University of California at San Francisco. Each university also has to work in at least two of the five principal areas of academic life: science, biomedicine, technology, social sciences and the arts and humanities. " [2]

[2] (http://www.topuniversities.com/articles/rankings/times-higher-education-%E2%80%93-qs-world-university-ranking-classification-system, accessed 2009-11-20)

Regarding its indicators, it depended strongly on academics' opinions of the 'quality' (rather: reputation) of higher education institutions around the world. Research impact in terms of citations and a proxy for the resources and facilities available to students in the form of the staff-to-student ratio together made up an equal share of the index. Smaller weights were accorded to employers' opinions on graduates' quality and internationalisation of staff and student s at the institution (see Table 1).

Whereas the data on citations are based on bibliometric databases (from Elsevier's database Scopus until 2009), the other data are either self-reported institutional data or based on national higher education statistics (student-staff ratio, international students and staff) or come from surveys (reputation). The survey method will be discussed methodologically below but briefly we can say that it is a method strong in eliciting respondents' opinions rather than facts. This may reflect the adage that 'quality is in the eye of the beholder', but that is only relevant to other users of rankings if the beholders have fact-based opinions, which is questionable on a world-wide scale—even at the smaller scale of the U.S.A. as a whole (where sometimes supposedly informed people blunder to talk about Princeton Law School [http://en.wikipedia.org/wiki/ Princeton_Law_School]) or the German-speaking part of Europe (Berghoff and Federkeil 2006) where opinions of academics on other higher education institutions proved to be besides facts.

In addition to the institutional ranking, QS publishes rankings for broad fields and, since 2011, for a number of fields. To be included in the field-based rankings institutions have to offer programmes in at least two out of the five broad fields. The league tables for Engineering and Information technology, Life Science and Biomedicine, Natural Sciences, Social Sciences and Humanities simply express the reputational scores. In addition the citations per publication are listed (except for the humanities).

Evidence shows (Federkeil 2009) that the reputation of universities as an attribution of quality among particular groups is strongly affected by the structure of the sample in terms of regional distribution, fields and the kind of persons being asked. This is particularly challenging for international surveys on reputation. Unfortunately the QS ranking does not give much information about the structure of the two reputational samples. A major problem of the survey among academics is the extremely low response rate of 2%. Academic reputation is known to be rather stable (Federkeil 2009); the fact that there are large changes in the results of some universities from one year to the next suggests that the survey faces problems of reliability. Those changes rather seem to be methodological artefacts than reflecting real changes.

The website where the QS ranking is published (www.topuniversities.com) gives the fixed-order list of the top-500 and allows the user to search for a particular higher education institution.

The Times Higher Education World Rankings

After splitting up with QS the Times Higher Education (THE) developed a new ranking in cooperation with Thomson Reuters. The new ranking downsized the weight of reputation in the composite overall indicator. The ranking uses 13 separate indicator designed to capture a broad range of activities, from teaching and research to knowledge transfer.

These elements are brought together into five categories:
• Teaching — the learning environment (worth 30 per cent of the final ranking score)
• Research — volume, income and reputation (worth 30 per cent)
• Citations — research influence (worth 32.5 per cent)
• Industry income — innovation (worth just 2.5 per cent)
• International mix — staff and students (worth 5 per cent)

The Higher Education Evaluation and Accreditation Council, Taiwan (HEEACT)

The Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT) publishes a ranking of the academic performance of higher education institutions in a five-year project, running until 2010.[3] The HEEACT pre-selects what it calls 'the top-500' higher education institution to calculate its ranking. The ranking is completely bibliometric; the dimensions involved are 'research productivity, research impact and research excellence' indicated by, respectively, published papers, citations, and highlighting highly-cited papers.

Different from most other rankings the time period taken into consideration is quite long (ten to eleven years). More than other rankings the HEECT ranking thus refers to past performance rather than current potential. Due to the structure of the underlying databases this ranking has a similar bias towards the natural sciences as the ARWU rankings. In its studies of the national universities, the HEEACT also looks at employers' satisfaction with graduates and at university-industry cooperation, using patents as an indicator, but those data are not included in its international ranking and more detailed information is not available in English.

The HEEACT website (http://ranking.heeact.edu.tw/en-us/2009/TOP/100) allows amongst other things for sorting the higher education institutions either according its rank in the top-500, alphabetically by name, or by their scores on one of the ten individual indicators.

Leiden Ranking

The Leiden ranking is a purely bibliometric ranking of research publications and citations. It refers to publications and citations from a major international publications and citations database (the Thomson Reuters data base formerly known as the ISI Web of Science), which undergoes intensive checking and cleaning by the CWTS group to ensure that publications are ascribed to the correct authors in the correct higher education and research institutions. The Leiden ranking does not aggregate its indictaors into a composite overall score.

3.3 Use and Effects of Rankings

Rankings do not only provide information on the performance of higher education and research institutions, but they also have major impacts on decision-making in higher education and research institutions and on the sector more broadly (cf. Hazelkorn 2011). According to many commentators, their effect on the sector is rather negative: encouraging

[3] http://ranking.heeact.edu.tw/en-us/2010/homepage/ , accessed on 2 July 2011.

wasteful use of resources, promoting a narrow concept of quality, and inspiring institutions to engage in 'gaming the rankings'. We think that a well-designed ranking can have a positive effect on the sector, encouraging higher education and research institutions to improve their performance. While specific effects depend on the details of each ranking exercise, some common tendencies of current rankings nevertheless can be highlighted in this section.

3.3.1 Use for students

Most rankings intend to affect student demand and there is clear evidence that they indeed have an impact on student choices. It has been shown in the U.S. that when an institution improves its position in the rankings, it receives more applicants the next year, sees a greater proportion of its accepted applicants enrol, and subsequently sees that the students in the incoming class have higher entrance scores and that the institution can reduce the amount of institutional grant aid that it spends to attract its class (Monks and Ehrenberg 1999). The experience of the CHE ranking in Germany confirms this result. In some fields, e.g. psychology and medicine, the number of applications at the recommended universities increased significantly after publication of the ranking: in psychology the number of applications rose on average 19% in universities that were recommended as excellent in research and 15% in universities that were recommended as efficient and supportive in teaching (Federkeil 2002). It is shown both in the U.S. and in Europe that rankings are not equally used by all student groups. They are particularly used by students of high achievement and from highly educated families (Cremonini and Westerheijden et al. 2008).

3.3.2 Use for universities

Rankings always have to find a balance between a reduction of complexity of information about universities for "lay" users (as e.g. perspective students, their parents, employers) and differentiated information for expert users (e.g. academic staff, university leaders"). While the first is a requisite to reach this target group at all, the latter is necessary in order to find acceptance within higher education. Ranking can offer benchmarking information and tools to higher education institutions.

3.3.3 Use for policy makers

There is some evidence that ranking are used in policy making. In a number of countries initiatives to promote the research performance and excellence of universities can be traced back to the results of global rankings. Some countries started to limit scholarships for national students who want to study abroad to students going to a university ranked among the top 200 of global rankings. In our view rankings should not be used as the bases for funding decisions.

3.4 Conclusion

Rankings are an instrument to create transparency about higher education systems or markets. During the last decade we have seen the emergence of a number of international rankings which draw high attention. *An analysis of global rankings shows that there major focus is the measurement of the research performance of comprehensive, internationally oriented research universities.* Their data bases and indicators are focused on that purpose. They do not provide information on teaching and learning relevant to (prospective) students

helping them to make an informed choice. Hence they cannot inform national rankings aiming at information to prospective students.

A ranking for a national higher education system like in Albania that is characterized by the existence of many new and small private institutions who have a focus on teaching should hence not be based on the indicators of the major global rankings. The CHE ranking offers an alternative approach which is focusing on information to students. On the other hand a ranking of the Albanian higher education system which does not have a long tradition of established quality assurance (evaluation, accreditation) should offer some quality information to the public in general.

4 Designing the Albanian ranking system

4.1 Project structure

According to the contract the ranking of Albanian higher education institutions should be carried out by an independent organisation – independent both from universities and from politics. CHE is offering consultancy for the development of the concept of the ranking and for the implementation of a pilot ranking but in the long run the ranking should be made by an Albanian organisation. A decision was made to implement a special section within the Public Agency for Accreditation of Higher Education (APAAL) to take over this task.

Due to this, the concept and the indicators have been developed in cooperation with APAAL. In addition also other stakeholders have been involved in the different steps of the project. So the quality of each step was ensured.

4.1.1 Ministry

The Albanian government implemented an independent Monitoring Board on Higher Education Ranking in Albania. The Ministry contacted the Albanian higher education institutions first to ask about their participation in the pilot ranking. The ministry acts as a facilitator in the implementation phase but the ranking system has to stay independent from political influence. Therefore designing and running the system has to be done in an independent way without influence of the Ministry.

4.1.2 CHE

CHE offered its ranking know-how and the basic concept of CHE ranking which was be adapted to the Albanian higher education system. CHE prepared criteria and indicators that are relevant for an Albanian Ranking. CHE also established procedures how to rank Albanian higher education institutions and trained APAAL staff in data collecting and analyses as a means of knowledge transfer to Albania. A first training was part of the design phase; a second training took place in Germany in May 2011 in the beginning of data cleaning and analysis. CHE's role is to ensure that the Albanian ranking system is in line with international ranking standards, to establish all necessary tools for a ranking and to enable APAAL to run the system in the future.

4.1.3 APAAL

The Albanian accreditation agency APAAL provides the necessary Albanian staff for the ranking project. CHE trained APAAL members in all relevant ranking aspects and data analyses APAAL is the main contact for the universities and stakeholders, due to the ranking. Furthermore APAAL organized visits of the Albanian universities at the beginning of the data collection and explained the questions to the administration and the deans. APAAL also was responsible for the data collection and entering the data into the database. Therefore APAAL organized visits of the Albanian universities at the beginning of the data collection and explained the questions to rectors, deans, students, academic staff and administration.

CHE strongly recommends to establish a special ranking unit within APAAL separate from the accreditation staff. This is important to avoid misunderstandings about the different roles and functions of ranking and accreditation.

4.1.4 Inclusion of stakeholders

The Rectors, Professors and students have been the most important stakeholder in this project. They helped defining the indicators that are usefull with regard to the Albanian system. Furthermore it is not possible to implement a ranking within a country without the support by these particular groups. For this reason three workshops took place. Within the first workshop the choosen indicators have been discussed with rectors of Albanian higher education institutions, both private and public.

In a second workshop, in November 2010, the indicators have been discussed with deans and professors out of the four selected fields.

The third workshop took place in December with the main focus on students.

Additionally CHE designed an online questionnaire with open access. All stakeholders that participated in one of the workshops and other experts were invited to participate in this survey. The respondents shared their views on the relevance of the indicators. The results of this survey have been discussed in detail in the first interim report of this project in December 2010.

4.2 Conceptual framework

The project was divided into two parts: first, in the design phase the basic concept for the project was developed closely referring to the basic CHE ranking approach. Data sources and the selection of indicators have been made in accordance to the particular structure and features of the Albanian higher education system. In particular the design phase comprised the development of basic design principles for the ranking, a clarification about the pilot fields, a decision about the (kind of) institutions and programmes to be included in the pilot ranking, the development of a set of indicators and a stocktaking of data sources. In the second phase the concept was implemented in a pilot study in four fields.

4.3 Berlin Principles

The design of the Albanian Ranking follows the Berlin Principles. In the second of a series of conferences of the International Ranking Expert Group (IREG), which is a group of individuals and organisations engaged in producing or researching rankings, convened in Berlin in 2006, a set of basic principles for good practice of rankings was agreed, the so-called *Berlin Principles on Ranking of Higher Education Institutions* (IREG 2006). The Berlin Principles refer to four aspects of rankings: the purposes and goals of rankings, the design and weight of indicators, the collection and processing of data and the presentation of ranking results. Accordingly, the 16 principles call for:

- being clear about purpose and target groups,
- recognising the diversity of institutions,
- being transparent regarding the methodology,
- measuring outcomes rather than inputs,
- providing consumers with a clear understanding of all of the factors used to develop a ranking and offering them a choice in how rankings are displayed, and,
- applying quality assurance principles to the ranking itself: enabling understanding and intersubjective control by enabling feedback, giving feedback possibilities to end-users, and acting on feedback to correct errors and faults.

In general, the Berlin Principles are accepted as a set of relevant and appropriate indications of what should be seen as ‘good’ rankings.

4.4 Design Principles

The design principles that are formulated here are in accordance with the Berlin Principles. The Berlin Principles emphasise the importance of being clear about the purposes of rankings and their target groups. The main purpose of the new Albanian ranking is to inform prospective and mobile students about the supply with higher education programmes. Of course every ranking produces transparency about its field to a broader public, including politics, too. *But the the concept and the selection of indicators for the Albanian ranking is based primarily on its major purpose to inform students*.

One-dimensional league tables prove to be neither informative nor a valid approach to measure differences between institutions; they do not correspond to the information needs of the different groups of external stakeholders and they do not correspond to the needs within universities for strategic decisionmaking. For this reason a multi-dimensional, robust ranking that gives various groups of end-users options to adapt it to their individual information needs, is needed, so that intended behavioural consequences may ensue without (many) unintended, perverse effects on behaviour of higher education and research institutions (‘gaming the rankings’), students (being guided towards high-reputation institutions but perhaps low-quality programmes within them) and decision-makers (adapting aims and decisions to available indicators).

4.4.1 Basic principles of designing a ranking

- Following the Berlin Principles, classifications and rankings should explicitly define and address target groups, as indicators and the way to present results have to be focused.

- Rankings and quality assurance mechanisms are complementary instruments: Rankings represent an external, quantitative view on institutions from a transparency perspective; traditional instruments of internal and external quality assurance are aiming at institutional accountability and enhancement. Rankings do not equal causal analysis but they may help to ask the right questions for processes of internal quality enhancement. *In particular rankings cannot replace accreditation. Both instruments have different purposes although they may use similar indicators in some instances*. Accreditation is designed to guarantee minimum standards of quality (of programmes or institutions) whereas rankings are trying to map the differences in performance among institutions. Accreditation is connected with a certain quality benchmark that has to be defined; rankings are always relative concepts.
- A major issue is the measures to ensure quality of the ranking process and instruments. They include statistical procedures as well as the inclusion of expertise of stakeholders, rankings and indicator experts and field experts (for the field-based rankings). A major condition for the acceptance of rankings is the transparency about their methodology. The basic methodology, the ranking procedures, the data used (including information about survey samples) and the definitions of indicators have to be public for all users. Transparency includes informing about limitations of the rankings. For this reason the stakeholders have been invited to participate in the design phase.

4.4.2 Indicator design principles

This leads to six design principles, which consists of two sets. The first set of design principles has to do with the aims and broad functions of the instrument as a whole:

1. The choice and definition of indicators must be based on a *conceptual model*. This conceptual model should explain the selection of indicators to be used in the ranking processes.

2. The perspectives of the different groups of users must be taken into account in the selection of dimensions and indicators; *relevance* of dimensions and indicators in their eyes should be one of the leading principles. The principle of user-relevance implies that the purpose of any specific ranking is an effect of the user's selection of dimensions and indicators. The relevance of indicators was discussed in four stakeholder workshops and together with the Ministry and APAAL as well as in an online survey in which respondents could share their view about the relevance of the indicators proposed.

3. Relevance to user groups implies that they can value different dimensions and indicators differently, and thus the ranking must follow a multi-dimensional approach.

The second set of design principles focuses on the methodological requirements of science-based, systematic ranking:

4. Indicators have to pay attention to issues of possible – in particular undesirable/perverse – incentives resulting from their use. Indicator definitions, data sources and data collection processes should be designed in such a way that they maximise *resistance against manipulations* ('gaming the results') through interested parties. This seems to be a particular problem in a higher education system with a high number of recently founded, small public institutions in a situation when an accreditation system is not yet fully developed.

5. Indicators have to meet the general requirements for empirical research and therefore must show high degrees of *validity*, *reliability* and *comparability*.

a. Ranking indicators must have high *construct validity*. In particular, many measures of performance are dependent on the size of institutions/units. Ranking indicators should therefore be defined in such a way that they measure 'relative' characteristics, controlling for size. In addition, calculating composite overall indicators, assigning fixed weights to each indicator, should be avoided

b. The measurement of institutional or programme characteristics, through ranking indicators has to be consistent. It should be independent of who applies the indicators and the place and time of measurement.

c. Ranking indicators have to produce information that is comparable across institutional and national settings and through time. Context characteristics that may comprise this comparability have to be identified.

6. *Availability* of comparable information for indicators is a serious condition. Although the selection of indicators should primarily be based on their relevance the availability of data ist the limiting condition in the end.

These principles guided our work on the selection and development of dimensions and indicators. Each indicator was tested for all the criteria mentioned.

5 Constructing the Albanian ranking system

The basic approach of the Albanian Ranking is drawn from CHE University ranking. In order to produce a methodologically valid and robust, multi-facetted, multi-dimensional ranking of higher education institutions four major methodological characteristics are taken from CHE ranking:

1. The Albanian ranking will be *field based* and will not compare whole institutions.
2. It will be *multi-dimensional*: the ranking will cover a number of indicators on different dimensions and aspects of performance of HEIs, but it will not calculate a composite overall indicator.
3. The ranking will be a *multi-perspective* ranking which combines different views and perspectives on the performance of HEIs. It combines facts from various data sources with subjective views of students and professors.
4. The ranking will apply a *group approach*: Instead of calculating league tables it orders institutions (separately for each indicator) into three groups.

5.1 Selection of fields and institutions

5.1.1 Selection of fields

Based on the project agreement the fields to be included into the pilot ranking are business studies/economics, law, social sciences and nursing. According to the Ministry of Education those disciplines cover the majority of students in Albania. For the pilot project the fields were defined more precisely. With regard to the small size of the Albanian higher education

system we decided to apply broader definitions of fields in order to have more institutions in each field.

a) Law: The definition of law is clearly in Albania, there are two mainly law related foci and additional one business foci:

- *Juridik* (Jurisprudence) and
- *Drejtesi (Law)*
- *Business Law*

b) Business studies/economics: In order to have a higher number of institutions and programmes included economics and business were taken together into one ranking. The definition of the field includes both general and specialised programmes. business studies: general programmes

- business studies: specialized programmes as Finance Manager, Finance and Banking, Business Management, Financial Accounting, Finance, Marketing, Agro-business Management, Economy and Agrarian Policy, Tourism economy
- economics

c) Social sciences: Similar to business studies/economics two sub-fields were taken together, sociology and political science. The included fields are

- Sociology,
- Communication sciences,
- Administrative and political sciences,
- International Relations

Not included are programmes on languages/culture which have a humanities profile.

d) Nursing: Like in business studies and the social sciences the field was defined in broader terms in order to increase the number of institutions and programmes which could be included:

- General Nursing
- Health related, non medical programmes: Mid-wifery and physiotherapy

5.1.2 Selection of Higher education institutes

The Albanian higher education system includes

- public universities,
- private higher education institutions
- professional colleges,
- high schools and
- academies.

Institutions of all types were asked by the Ministry to participate in the project irrespective of their legal status. In the end only public and private higher education institutions participated in the project, so that the heterogeneity of the sample was limited compared to the diversity of the whole higher education system. Due to the differences in the legal status between

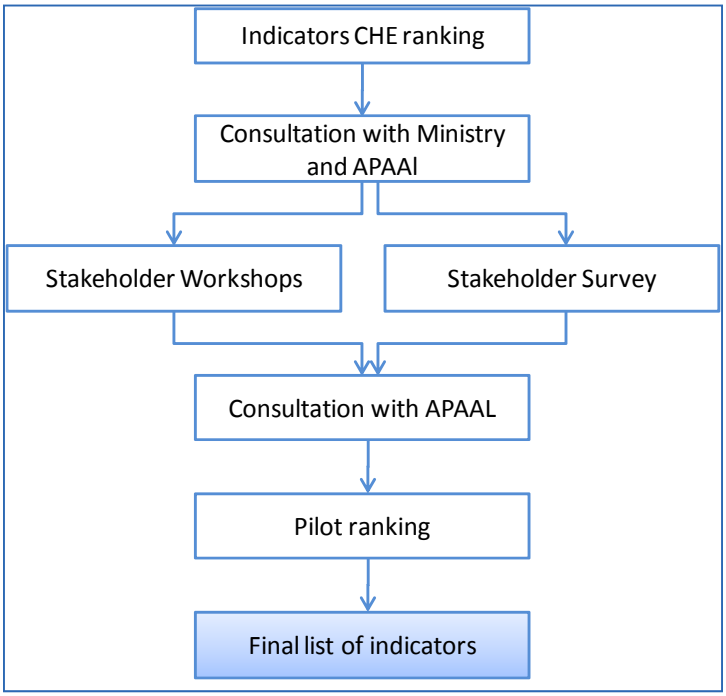
public universities and private higher education systems some indicators are only valid one type of institutions; e.g., only public universities are entitled to grant PhDs.

5.2 Selection of Dimensions and Indicators

The indicators used in CHE ranking were taken as a first input to develop a specific set of indicators for Albania. The process to identify relevant indicators for Albania included several steps of intense involvement of stakeholders:

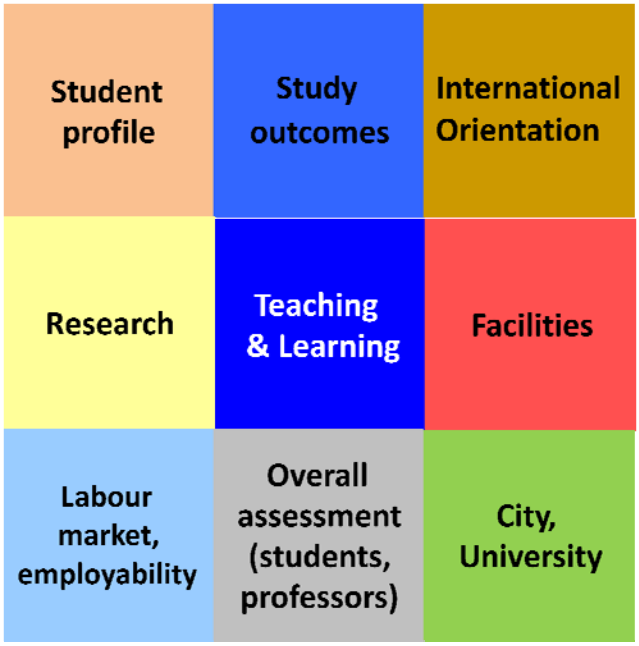
1. A consultation with the Ministry and APAAL
2. A workshop with general representatives of universities (held in October 2010) with about 30 participants
3. A workshop with field experts (held in November 2010) with about 20 participants
4. A workshop with students (held in December 2010) with about 40 participants
5. An online-survey among stakeholders on the relevance of indicators (in December 2010), in which respondents could rate the relevance of each indicator that was on the preliminary list of indicators. In addition they could suggest additional indicators. CHE ranking orders indicators into nine dimensions. Discussions with stakeholders showed that this model of dimensions can be used in Albania, too. As a result the same nine dimensions will be included in the ranking.
6. After additional consultation on indicators and data sources with APAAL a preliminary list of indicators was defined that was transformed into instruments of data collection and was applied in the pilot data collection.
7. The final list of indicators is based on the outcomes of the pilot study.

Figure 1: Process of Ranking procedure



CHE ranking orders indicators into nine dimensions. Discussions with stakeholders showed that this model of dimensions can be used in Albania, too. As a result the same nine dimensions will be included in the ranking.

Figure 2: Ranking Dimensions



One of the dimensions refers to the university and the city. Although the ranking is basically field-based this dimension gives some context information on those levels which are relevant to prospective students, e.g. on the percentage of students in the city population and information on student accommodation.

The ranking involves two kinds of information:

1. **Indicators** are giving information on performance by using three groups (top, middle, bottom group)
2. **Descriptors** are giving additional, descriptive information on to users – either qualitative (text) or quantitative (numbers)**.** If rankings have the purpose to help students in finding a university, additional descriptors are very useful. The descriptors are usually measurements where a ranking could not be made because it is not clear that a higher indicator value is necessarily better. But from the perspective of an individual user they might be relevant. Examples are the field-structure of the university or the ratio of male an dfemale students.

5.3 The set of indicators

The following list includes all indicators that were tested in the pilot study. It includes both indicators selected according to stakeholder consultation and some new indicators developed in the course of the project.

5.3.1 Student Profile

As the data on students' entry qualification (matura scores) were not available, we only have descriptive information for this dimension:

- Percentage of students by degree (level: institution and faculty)
- Percentage of student by broad groups of fields (level: institution)

5.3.2 Study Outcomes

	Proportion of graduates in norm period of study		
Explanation	Proportion (in %) of students who complete their programme in the standard/norm period of study.		
Dimension	Study outcomes		
Level	Programme		
Data Source	Self-reported data: Faculties		
Fields	All		
Time reference	Three year average		
Comments	There are three and four year BA-programmes; this indicator (in contrast to average time to degree) can be compared across all programmes (although systematic differences between 3 and 4 year programmes have to be checked)		
Relevance Albania	Intermediate; there are doubts if a (extremely) high percentage might reflect low standards rather than good organisation of a programme		
Calculation	N students graduated in norm period / N students graduated in total *100		

5.3.3 International Orientation

	International Orientation of programmes		
Explanation	Composite rating indicator including different facts. existence of double degree programmes, international students, student excange, international experience of academic staff, teaching in foreign language.		
Dimension	International orientation		
Level	Programme		
Data Source	Self-reported data: Faculties		
Fields	All		
Time reference	Last year		
Comments	This indicator does not create a relative ranking, but a *rating* against pre-defined standards! This means group size is not pre-determined. We think the individual components of this indicator (as e.g. percentage of international students) should not be ranked separately but should give an overall picture of internationalisation of teaching. The way the indicator is constructed implies that different ways and strategies of internationalization could lead to a position in the top group.		
Relevance Albania	High		
Calculation	For calculation of this indicator please see cp.5.4.1.		

	5.3.4 Support for stays abroad		
Explanation	Students assess the opportunities that their university offers to go abroad, including the attractiveness of exchange programmes and of partner institutions, the support and guidance in preparing the stay abroad, the integration of the stay abroad into studies.		
Dimension	International orientation		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	All		
Time reference	Last year		
Comments			
Relevance Albania	Intermediate		

5.3.5 Research

	Professors directing PhDs		
Explanation	Number of professors (head count) directing ongoing PhDs		
Dimension	Research		
Level	Faculty/Department		
Data Source	Self-reported data: Faculties		
Fields	All		
Time reference	Three year average		
Comments	Originally the indicator was referring to the number of PhDs completed per professor. As this would only be valid for public universities the indicator was changed; the questionnaire asked about the number of professor of the faculty, which directed PhDs, not on completed PhDs.		
Relevance Albania	Intermediate as it is relevant only for the samll number of public universities		
Calculation	Due to a change in the questionnaire made by APAAL the definition of the indicator has to be revised for the pilot ranking: Number of professors directing PhDs / number of professors in total.		

	Third party research funds per academic staff		
Explanation	Third party research funds from industry, foundations, German Research Council, public authorities etc. (in thousand euros) in relation to the number of academics. This measures the abilty of the univeristies to attract external research funds.		
Dimension	Research		
Level	Faculty/Department		
Data Source	Self-reported data: Faculties		
Fields	All fields		
Time reference	Three year average		
Relevance Albania	High		
Calculation	Sum (Research funds year 1 + Research funds year 2 + Research funds year 3) / Sum(total number of academic staff year 1 + total number of academic staff year 2 + total number of academic staff year 3)		

	Research actvities		
Explanation	Index indcator based on: • Publication of textbooks • Organisation of scientific conferences • Contributions (speaker) at international academic conferences • Membership in editorial board of academic journals • Presentation at international conferences • Participation in international research projects • Successful applications in TEMPUS programme		
Dimension	Research		
Level	Faculty/Department		
Data Source		Professor survey	
Fields	All		
Time reference	Most recent three years		
Comments	As traditional bibliometric indicators do not really work with regard to the situation of Albanian higher education system (not many publications in international peer reviewed journals) and with regard to the fields of the pilot study, a composite index indicator on basic research activities which are more relevant in Albania seems more meaningful.		
Relevance Albania	High		
Calculation	For calculation of this indicator please see cp.5.4.5.		

	Best reserach publications		
Explanation	Professors are asked to nominate the best publications from Albanian colleagues in their field within the last three years.		
Dimension	Research		
Level	Faculty/Department		
Data Source		Professor Survey	
Fields	All		
Time reference	Last three years		
Comments	In a situation where bibliometric is not seen to deliver meaningful indicators asking the professors of Albanian universities about the top publications could be an alternative.		
Relevance Albania	High		
Calculation	Calculation of top group only: Faculties where an author is employed who was nominated at least 3 times are highlighted		

5.3.6 Teaching and Learning

	Student-Staff-Ratio		
Explanation	Number of students in proportion to the number of professors .		
Dimension	Teaching and Learning		
Level	Faculty/Department		
Data Source	Self-reported data: Faculties		
Fields	Calculated only for fields with low linkages of teaching to other fields, as e.g. Human Medicine, Dentistry, Social Work		
Time reference	Last year		
Comments	Important aspect; valid only in fields with minor exchange in teaching with other fields		
Relevance Albania	Intermediate		
Calculation	Number of students (with a major in the field) at the whole faculty / number of staff (head count) at the faculty		

	Qualification of academic staff		
Explanation	Percentage of professors related to total academic staff .		
Dimension	Teaching and Learning		
Level	Faculty/Department		
Data Source	Self-reported data: Faculties		
Fields	Calculated only for fields with low linkages of teaching to other fields, as e.g. Human Medicine, Dentistry, Social Work		
Time reference	Three year average		
Comments	Important aspect; shows the structure and quality of staff at the faculty		
Relevance Albania	Intermediate		
Calculation	Three year average of professors / three year average of academic staff in total*100		

	Teaching hours per student (per month)		
Explanation	The indicator teaching hours per student and month replaces the indicators that originally were meant to be available by APAAL accreditation data but which are not: Teaching hours per student" and "Contact hours per student". The new indicator teaching hours per student and month is calculated as workload of staff / number of students with major in field.		
Dimension	Teaching and Learning		
Level	Programme		
Data Source		Student Survey	
Fields	All		
Time reference	Last academic year		
Comments			
Relevance Albania	High		
Calculation	Total workload of staff per year / number of students with major in field / 12		

	Special teaching issues		
Explanation	This is a rating indicator, where several aspects of teaching are taken into account: - Credits for other fields - Credits for key qualifications - Credits for internships		
Dimension	Teaching and Learning		
Level	Programme		
Data Source	Self reported data: Faculty		
Fields	All		
Time reference	Current year		
Comments			
Relevance Albania	High		
Calculation	For calculation of this indicator please see cp.5.4.2.		

	Quality indicator teaching		
Explanation	This is a rating indicator, taking into account several aspects related to basic quality: - Existence of quality assurance system at the institution - Status of accreditation - Stakeholder involvement: Existence of an advisory board - Square meters per student		
Dimension	Teaching and Learning		
Level	Faculty / University		
Data Source	Self reported data: Faculty and University		
Fields	All		
Time reference	Current year		
Comments			
Relevance Albania	High		
Calculation	For calculation of this indicator please see cp.5.4.3.		

	Course content		
Explanation	Students assess amongst other things the variety of courses/classes offered, the didactical quality of teaching, international orientation and the interdisciplinary relevance of the range of courses; Index made up of a number of items, on a scale of 1 (very good) to 6 (very poor).		
Dimension	Teaching and Learning		
Level	Program		
Data Source		Student Survey	
Fields	All		
Comments			
Relevance Albania	High		

	Study organisation		
Explanation	Students give their view on the co-ordination of the courses offered, the congruence of teaching and examinations, their access to compulsory classes; Index made up of a number of items, on a scale of 1 (very good) to 6 (very poor).		
Dimension	Teaching and Learning		
Level	Programme		
Data Source		Student Survey	
Fields	All		
Comments			
Relevance Albania	High		

	Support by teachers		
Explanation	Students give an assessment of, inter alia: accessibility of teachers, consulting hours, advice, feedback on homework etc.; Index made up of a number of items, on a scale of 1 (very good) to 6 (very poor).		
Dimension	Teaching and Learning		
Level	Programme		
Data Source		Student Survey	
Fields	All		
Comments			
Relevance Albania	High		

	Contact among students		
Explanation	Students assess co-operation with and contacts to other students; Index made up of a number of items, on a scale of 1 (very good) to 6 (very poor).		
Dimension	Teaching and Learning		
Level	Program		
Data Source		Student Survey	
Fields	All		
Comments			
Relevance Albania	Intermediate		

	Teaching evaluation		
Explanation	Students rated their involvemnet in teaching evaluation: the participation of students in this process and the implementation of results; on a scale of 1 (very good) to 6 (very poor).. The evaluation of courses and lectures is seen as a student-centered instrument for improving the quality of teaching.		
Dimension	Teaching and Learning		
Level	Programme		
Data Source		Student Survey	
Fields	All		
Comments	Evaluation of teaching is an indicator for the involvement of students in quality assurance within a university.		
Relevance Albania	High		

	E-Learning		
Explanation	Students assses some elements of e-learning: Materials for downloading, electronic interaction with teachers and e-learning calsses. Index made up of a number of items, on a scale of 1 (very good) to 6 (very poor).		
Dimension	Teaching and Learning		
Level	Programme		
Data Source		Student Survey	
Fields	All		
Time reference			
Comments			
Relevance Albania	Intermediate		

	Support in bedside teaching		
Explanation	Assessment of the support students receive in bedside teaching on a scale of 1 (very good) to 6 (very poor).		
Dimension	Teaching and Learning		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	Nursing		
Time reference			
Comments			
Relevance Albania	High		

	Training in empirical methods		
Explanation	Students rated method training on a scale of 1 (very good) to 6 (very poor). Method training plays an important role in career preparation in sociology studies.		
Dimension	Teaching and Learning		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	Sociology/Social Sciences		
Time reference			
Comments	Training in methods of empirical social research is an important issue of competencies in the social sciences.		
Relevance Albania	High		

5.3.7 Facilities

	Space: Square meters per student		
Explanation	Indicator of basic facilities		
Dimension	Facilities		
Level	Faculty/Department		
Data Source	Self reported: Faculty		
Fields	All		
Time reference	Current year		
Comments			
Relevance Albania	Intermediate		
Calculation	Calculation was done by the faculties itself.		

	IT: Number of PC working places per student		
Explanation	Indicator of IT facilities for students		
Dimension	Facilities		
Level	University		
Data Source	Self reported: University		
Fields	All		
Time reference	Current year		
Comments			
Relevance Albania	High		
Calculation	Calculation was done by the institutions themselves.		

	Libraries		
Explanation	Sudents assess the quality of the library by a number of items: the availability of the required literature, the stock of books and specialist publications, user support, electronic servies, the possibility of literature research; Index made up of a number of items, on a scale from 1 (Very good) to 6 (very poor).		
Dimension	Facilities		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	All		
Time reference			
Comments	Libraries remain one of the major sources for learning.		
Relevance Albania	High		

	Rooms		
Explanation	Students give an assessment on the state/mainainance of the lecture theatres and seminar rooms, their technical equipment and the number of places available; Index made up of a number of items, on a scale of 1 (very good) to 6 (very poor).		
Dimension	Facilities		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	All		
Time reference			
Comments			
Relevance Albania	Intermediate		

	IT-infrastructure		
Explanation	Students give an assessment of hardware and software equipment for the PC-places, maintenance and care of the computers, user support, opening times, availability of workstations; Index made up of a number of items, on a scale of 1 (very good) to 6 (very poor)		
Dimension	Facilities		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	All		
Time reference			
Comments			
Relevance Albania	High		

	Laboratories		
Explanation	Students gave an assessment of the availability and the state of laboratory workplaces for students; Index made up of a number of items, on a scale of 1 (very good) to 6 (very poor).		
Dimension	Equipment		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	Nursing		
Time reference			
Comments			
Relevance Albania	Intermediate		

	Clinical treatment rooms		
Explanation	Students give an assessment of the state of the clinical treatment rooms as well as their technical equipment; Index made up of a number of items, on a scale of 1 (very good) to 6 (very poor).		
Dimension	Equipment		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	Nursing		
Time reference			
Comments			
Relevance Albania	Intermediate		

5.3.8 Labour Market, Employability

	Promotion of employability related skills		
Explanation	Index indicator including - Work experience of teachers outside higher education - Teaching hours related to special modules related to employability issues - Existence of internship service - Existence of career centre		
Dimension	Labour Market & Employability		
Level	Faculty/Department / Programme		
Data Source	Self-reported data: Faculties		
Fields	All		
Time reference	Last year		
Comments	The promotion of employability is a central element of education		
Relevance Albania	High		
Calculation	For calculation of this indicator please see cp.5.3.4.		

	Support during practical placement phase		
Explanation	Students rate how well the practical phase was embedded into the programme as well as the quality of project seminars and lectures held by practitioners. For teacher training programmes, the index represents the assessments of how subject related didactics.		
Dimension	Labour Market & Employability		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	All		
Time reference			
Comments			
Relevance Albania	High		

	Links between theory and practice		
Explanation	Judgement of the students in cooperative education courses on the preparation- and follow-up-courses for the vocational training phases, the organisation of these phases, and the quality of the supervision; Index made up of a number of items, on a scale of 1 (very good) to 6 (very little).		
Dimension	Labour Market & Employability		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	Business Administration (cooperative courses only)		
Time reference			
Comments			
Relevance Albania	High		

5.3.9 Overall Assessment

	Overall study situation		
Explanation	The overall teaching and study situation is assessed by students on a scale of 1 (very good) to 6 (very poor)		
Dimension	Overall Assessment		
Level	Faculty/Department		
Data Source		Student Survey	
Fields	All		
Time reference			
Comments	This is not a composite indicator calculated out of other indicators; it refers to one single question in the student questionnaire.		
Relevance Albania	High		

	Reputation in teaching		
Explanation	Percentage of professors that listed the faculty among the top three with regard to the quality of teaching/education		
Dimension	Overall Assessment		
Level	Faculty/Department		
Data Source		Professor Survey	
Time reference	Current status (year of survey)		
Comments	This indicator provides information on those institutions which did not actively participate in the ranking.		
Relevance Albania	High		
Calculation	According to the logic of the indicator (list of up to top 3),the top group is presented only: Faculties that have been nominated by more than 5 % of the professors within the field are highlighted		

	Research reputation		
Explanation	Percentage of professors that listed the faculty among the top three with regard to research		
Dimension	Overall Assessment		
Level	Faculty/Department		
Data Source		Professor Survey	
Fields	All		
Comments	This indicator provides information also on those institutions which did not actively participate in the ranking.		
Relevance Albania	High		
Calculation	According to the logic of the indicator (list of up to top 3),the top group is presented only: Faculties that have been nominated by more than 5 % of the professors within the field are highlighted		

	Reputation: Best Facilities		
Explanation	Percentage of professors that listed the faculty among the top three with regard to their facilities		
Dimension	Overall Assessment		
Level	Faculty/Department		
Data Source		Professor Survey	
Fields	All		
Comments	Most of the Albanian professors are working at more than one institutionand Albania is a small country with a limited number of universities. Due to this the professors know the facilities of different universities and could be asked to nominate the faculties in their field with the best facilities.		
Relevance Albania	High		
Calculation	According to the logic of the indicator (list of up to top 3),the top group is presented only: Faculties that have been nominated by more than 5 % of the professors within the field are highlighted		

5.4 Calculation of indicators and groups

CHE ranking applies a rank group approach that order universities into three groups with regard to each indicator. According the nature of the indicator there are different methods of calculating groups:

- Fact ranking indicators
- Rating indicators
- Student satisfaction indicators
- Reputation indicators

5.4.1 Fact ranking indicators

A number of indicators used in the Albanian ranking refer to facts as e.g. student-staff-ration, the percentage of students graduating with the norm period. Here the calculation of group is made with regard to the relative quartile distribution of faculties:

Top group: the first quartile, i.e. the best 25 % of universities,

Middle group: the second and third quartile, i.e. the middle 50 % of universities

Bottom group: the fourth quartile, i.e. the lowest 25 % of universities

This implies that the size of groups is pre-defined; the rank groups do not allow a conclusion on the performance of the whole higher education system.

5.4.2 Rating Indicators

In addition to traditional *ranking* indicators which put universities in a relative order according to their position compared to the best performing universities, we suggest to include some indicator that imply a *rating*. Using rating indicators universities are measured against some pre-defined standards. Rating indicators can best be used assessing issues where measures do not imply a linear increase in performance ("the more the better") ,where one single number cannot meaningfully measure more complex issues as e.g. international orientation of teaching or where there are different ways and strategies of reaching a certain objective (for instance with regard to internationalisation).. A certain share of international students is a relevant part of international orientation but we can neither assume that having 75% international students is better than having 65% nor does it sufficiently measure the international orientation of teaching. Each rating indicator includes a number of individual data points to which we assign a certain score. As a result there is a maximum score per indicator; the rank groups are defined by different threshold scores of the maximum score.

5.4.2.1 International Orientation

The indicator is based on data delivered by the faculties. The indicator will be calculated for each programme; in the presentation of results on the level of faculties/departments we suggest to select the best programme. The indicator takes into account the internationality of academic staff and students, student exchange with foreign universities and teaching in foreign languages.

International experience of staff (6 Points max.):

Indicator	Business	Law	Nursing	Social Sciences
Percentage of international guest/visiting professors (percentage related to the average per field):	> 10% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 4% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 4% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 8% = 2 Points > 1% = 1 Point < 1% = 0 Points
Percentage of Outgoing staff (percentage related to average per field):	> 5% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 5% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 1% = 2 Points < 1% = 0 Points	> 3% = 2 Points < 3% = 1 Point < 1% = 0 Points
Percentage of Albanian staff returning from abroad (percentage related to average per field):	> 11% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 13% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 4% = 2 Points > 1% = 1 Point < 1% = 0 Points	>16% = 2 Points > 1% = 1 Point < 1% = 0 Points

International orientation of students (4 Points max.):

Indicator	Business	Law	Nursing	Social Sciences
International students (degree students; percentage related to average per field):	> 2% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 1% = 2 Points > 0% = 1 Point = 0% = 0 Points	> 1% = 2 Points > 0% = 1 Point = 0% = 0 Points	> 1% = 2 Points > 0% = 1 Point = 0% = 0 Points
Student exchange: Outgoing students	> 1% = 1 Point	> 1% = 1 Point	> 1% = 1 Point	> 1% = 1 Point
Student exchange: Incoming students	> 1% = 1 Point	> 1% = 1 Point	> 1% = 1 Point	> 1% = 1 Point

International orientation of programmes (3 Points max.):

Indicator	Business	Law	Nursing	Social Sciences
Joint degrees: Existence of a joint degree with a foreign university Automatical transfer of credits?	 1 Point 1 Point	 1 Point 1 Point	 1 Point 1 Point	 1 Point 1 Point
Percentage of course in a foreign language	> 1% = 1 Point	> 1% = 1 Point	> 1% = 1 Point	> 1% = 1 Point

Rating: 13 - 8 Points: Top-group

7 - 2 Points: Middle-group

1 - 0 Points: Low group

5.4.2.2 Special Teaching issues

The indicator is based on data delivered by the faculties. The indicator, again, is calculated on the level of individual programmes; the best programme is selected as a score/group at the level of faculty/department.

Indicator	Business	Law	Nursing	Social Sciences
Cross-disciplinary teaching: Credits in another field (percentage related to average per field):	> 9% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 19% = 2 Points > 1% = 1 Point < 1% = 0 Points	>12% = 2 Points > 1% = 1 Point < 1% = 0 Points	>22% = 2 Points > 1% = 1 Point = 0% = 0 Points
Credits for key skills (percentage related to average per field):	>15% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 24% = 2 Points > 1% = 1 Point < 1% = 0 Points	>19% = 2 Points > 1% = 1 Point < 1% = 0 Points	>16% = 2 Points > 1% = 1 Point = 0% = 0 Points
Inclusion of work experience: Credits for internships/practice (percentage related to average per field):	> 5% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 9% = 2 Points > 1% = 1 Point < 1% = 0 Points	>25% = 2 Points > 1% = 1 Point < 1% = 0 Points	> 6% = 2 Points > 1% = 1 Point < 1% = 0 Points

Rating: 6 - 5 Points: Top-group

4 - 2 Points: Middle-group

1 - 0 Points: Low group

5.4.2.3 Quality Indicator Teaching

This indicator was developed with regard to the particular situation in Albanian higher education characterized by a high number of new, small private institutions which do not have a long track of performance and quality assessment.

Indicator	Business	Law	Nursing	Social Sciences
Status of accreditation	Full accreditation = 3 points Partial accreditation = 2 points Accredited with conditions = 1 point			
Space Qm2 per student	Top group within field = 2 points Middle-group within field = 1 point Bottom-group within field = 0 points			
Stakeholder involvement: Existence of Advisory Board	Yes, for the whole department = 2 points Yes, for some programmes = 1 point			
Existence of quality assurance system at the Institution	Yes = 1 point			

Rating: 8 - 7 Points: Top-group

6 - 3 Point: Middle-group

2 - 0 Points: Low group

5.4.2.4 Promotion of employability related skills

The indicator is based on data delivered by the faculties.

Indicator	Business	Law	Nursing	Social Sciences
Percentage of staff with work experience outside HEI (% related to average per field):	>52% = 2 Points >26% = 1 Point <26% = 0 Points	> 39% = 2 Points > 20% = 1 Point < 20% = 0 Points	>25% = 2 Points > 1% = 1 Point < 1% = 0 Points	>42% = 2 Points >21% = 1 Point <21% = 0 Points
Existence of a career Centre:	At the faculty level = 2 points At the university level = 2 point At a partner institution level = 1 point			
Existence of internship service	At the faculty level = 3 points At the university level = 2 point At a partner institution level = 1 point			
Teaching hours related to special modules related to employability issues	> 116 hours = 2 Points > 58 hours = 1 Point < 58 hours = 0 Points	> 136 hours = 2 Points > 68 hours = 1 Point < 68 hours = 0 Points	> 23 hours = 2 Points > 11 hours = 1 Point < 11 hours = 0 Points	> 58 hours = 2 Points > 29 hours = 1 Point < 29 hours = 0 Points

Rating: 9 - 8 Points: Top-group

7 - 3 Point: Middle-group

2 - 0 Points: Low group

5.4.2.5 Research activity

It has become clear already in the first consultations with the Ministry, APAAL and Albanian stakeholders that traditional research indicators as they are used by most rankings, in particular bibliometric indicators based on publications in international peer reviewed journals do not make much sense in Albania. In addition, bibliometric data bases do not cover most of the pilot fields well in general. Other indicators like PhD activities could be measured only for public universities as private institutions are not entitled to grant PhDs. Hence there is a need for alternative measures of research activities that are not focusing on measures of international research excellence only and which are representing the needs to develop a research base in Albanian higher education.

We developed an indicator which is looking on different aspects of activities of academic staff related to research. The indicator is based on the answers given by the professors about their own research activities

- publication of textbooks,
- publication of articles in international academic journals,
- contributions (as speaker) to international academic conferences,
- membership in editorial boards of academic journals,
- participation in international research projects,
- successful applications in TEMPUS programme,
- organisation of national academic conferences,
- organisation of international academic conferences.

The indicator was calculated in five steps:

1. Only those faculties have been included where at least five professors responded to the survey. To decide to which faculty a professor is assigned the faculty with full-time contract and, if more than one full-time contract was indicated, with the highest workload was chosen.
2. The professors indicated which kind of the activities listed above they have been involved in. The leading faculties in each activity (the top 25 percent) got a score of one on this activity.
3. The activities were priorised, each research activity was categorized: Category A indicating low level research activities (textbooks, membership in editorial boards, organisation of national conferences), Category B covering mid-level research activities (articles in international academic journals, participation in international research projects) and Category C marking high level research activities (speaker at international conferences, successful in TEMPUS, organisation of international conferences).
4. A weighted score out of the scores on the eight types of research activities was calculated. Weights are one for category A activities, two for category B and three for category C activities.
5. Grouping: The top 25 percent faculties are highlighted as top performer with regard to research activities.

5.4.3 Student satisfaction indicators

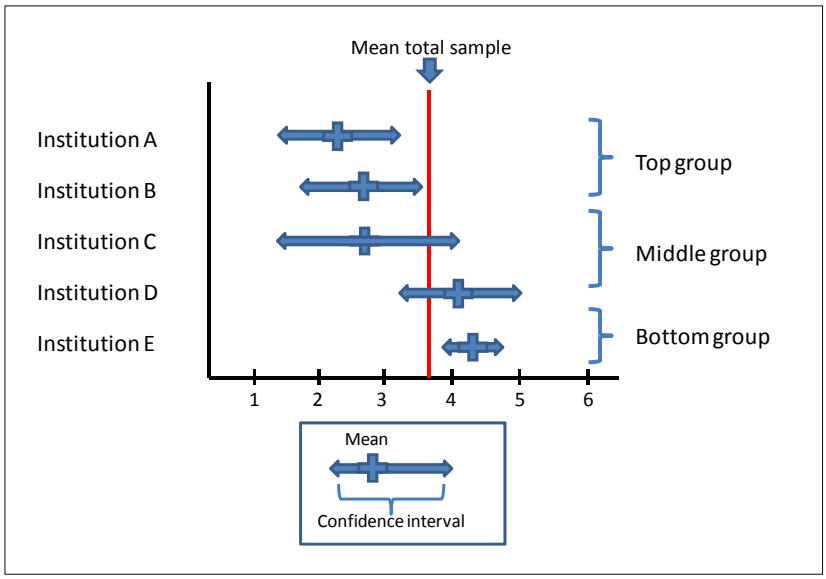
Student satisfaction indicators are reflecting the subjective views of the students who are rating various aspects of their teaching and learning experience on a six-point Likert scale[4]. The relevant scores for the ranking are the means.

In order to have a more robust methodology than just comparing the means, the calculation of groups for the student satisfaction takes into account the size of the subsample per university (number of cases) and the diversity of ratings within a university – both expressed in the standard error of and the confidence interval around the mean. This is a well established method in CHE ranking.

In statistical terms a university is assigned to the top group (for a particular indicator) if the confidence interval around the mean at that university is completely better than the mean of the total sample. On the other hand a university is assigned to the bottom group if the confidence interval around the mean at that university is completely worse than the mean of the total sample. All institutions for which the mean of the total score is within the confidence interval are assigned to the middle group. This procedure guarantees that the top group is significantly better than the bottom group. In the middle group either the mean is very close to the mean of the total sample or the statistical uncertainty (the size of confidence interval) is rather high so that it cannot be assigned to one of the extreme groups. This approach implies that both institutions with low participation and institutions where the ratings are very diverse tend to be assigned to middle group (as in both cases their confidence interval becomes bigger).

[4] With 1 marking „very good“ and 6 marking „very bad“

Figure 3: Grouping procedure student satisfaction indicators



5.4.4 Reputation indicators

Another group of indicators is based on the subjective views of the professors of the fields. They are asked to give their personal view on the reputation of Albanian universities, i.e. which ones they think to be the best in the country – with regard to teaching/education, research and facilities. They could list up to three institutions per indicator. In addition they were asked to list the five best publications in their field. Those indicators are measuring the top performing universities only; hence the grouping approach should refer to the top group only. Universities are sorted into the top group in reputation if they are nominated by more than 5 % of the respondents.

5.5 Data collection instruments

The questionnaires for the Albanian Institutions, the professors and the students are based on the questionnaires CHE constructed for CHE Ranking and for U-Multirank. After the consultation with stakeholders on the relevance of indicators they had to be adapted to the set of indicators for the Albanian ranking. Each of the questionnaires was discussed in detail with APAAL (in the November training) and was adapted to the culture and structures of the Albanian higher education system. The professor survey was discussed and constructed in May during the training workshop in Germany; this questionnaire is completely new, as it has to include the information needed for the new indicators on research activities and reputation.

In the end four different questionnaires have been designed. The complete questionnaires can be found in the Annex, in the following only a short introduction to the questionnaires is given.

General Data: This questionnaire was distributed directly to the rectors and administration of the universities. It includes general information about the university like address, total number of students, opening hours of the library, tuition fees and PC places per student.

Faculty Data: This questionnaire which was distributed to the deans of the faculties is the most detailed questionnaire asking about information about the faculty, e.g. number of staff

and qualification of staff, guest professors, external research funds, existence of advisory boards or number of students in total at the faculty. A second part collects information on individual programmes in the pilot fields, e.g. on the number of students and graduates, special teaching issues like credits for internships or for key skills, outgoing and incoming students, lectures in foreign languages.

Student survey: In CHE ranking, the student survey is a major source of information for the ranking. The students were asked to judge their teaching and learning experience in a detailed way. Questions are referring to course offerings, libraries, IT facilities, contacts to their teachers and the overall assessment of their study situation in general. In addition question on their study choice (why they decided to visit this particular university) and the social context (how much they have to pay for a room or how they finance their study) are included.

Professor survey: This questionnaire was sent out to all professors working at the faculties that participated in the project. The professors were asked about their workload at each faculty (to have means to cross-check the data delivered by universities), they had to indicate the leading Albanian universities in their field regarding research, education and facilities according to their personal view; and they were asked to list the best publications by Albania authors in their field in the last years. In addition the professors were also asked about their own research activities and if they attract funding within the last three years.

As an addition to the Professor survey also a selection of APAAL experts was asked to indicate the leading Albanian universities, but the response rate was too low to be used for further analyses.

5.6 Construction of a data base

In order to collect, manage and share the ranking data a comprehensive multi-level database is essential. This database should support the processes of data collection and include the master data on institutions (address of higher education institution, address of department, subjects etc.). In a second step, a database, which supports the analysis of ranking data and which helps the publication of the data should be created for the results.

5.6.1 Constructing the database for the Albanian ranking

a) Master Database (Data collection process): For the collecting process, a database was created which includes a hierarchical set of tables with the basic information on that level:

- City
- University/Institution
- University/institution – campuses
- Faculty/department
- Programme (in each of the four pilot fields)

A draft access database with these tables was provided for APAAL by CHE. Additionally, it can be useful to add extra tables, columns for internal information for the collecting process (e.g. special information about contact persons), forms (for data entering), enquiries (e.g. for questionnaire distribution) and/or statistic reports. All tables in the draft Master Database have a primary key to clearly indentify each data record and to relate a data set with the

respective unit one level higher (e.g. connect the departments' data record to the higher education institution data record).

The primary key was also included in the questionnaires to match the data later and secure a clearly mapping of the survey data and the master data. b) Analysis and publication database: In the course of data collection the Master database is transformed into a database for analysis. The structures of the Analyses Database and the Master Database are consistent. The data base includes the basic tables described above. In addition it contains the data from the different sources of data collection (one table for each data source) which are related to the respective level of analysis.

As illustrated by the passage above, it is essential that the questionnaires contain data fields with the corresponding primary keys to match the questionnaire and analysis data with the master data. The calculation of indicators and rank groups of indicators based on self-reported institutional data has been made within the data base. Additionally, the result data (indicator scores and rank groups) from surveys (e.g. students, professors) which have been analysed with different software (SPSS) should be included. Combining the results from the various data sources it is possible to produce the ranking tables (by field) directly from the data base.

6 Testing the Albanian ranking system

6.1 Data collection and data cleaning

6.1.1 Participation: Sample of institutions

In total 62 higher education institutions (including their different campuses) exist in Albania, eight of them are public universities, the others are private institutions.

The following criteria were proposed to participate in the ranking process:

1. The institution should be licensed
2. The study programs of the first circle of study should be licensed by the Decision of the Council of Ministers or by the Minister of Education and Science
3. The program should be functional and have 3 year students. In cases of small institutions the 2 year students should also be considered.
4. The number of students in a study field should be more than 15
5. Existence of full time study programmes

For this project 34 (55 %) of them confirmed their participation, including seven public universities. It has to keep in mind that not all Institutions offer all of the pilot fields. Regarding the first overview about possible institutions that was given to CHE in November by APAAL, 47 institutions are offering programmes in those fields. Hence 72 % of all target institutions declared their participation. Because some of these 47 institutions were licensed within the last two years and therefore had not enough or no second year students the number of possible participants was again limited.

A consistent overview which fields are offered at which faculty was not delivered to CHE, due to this it is not possible to calculate exact response rates.

The scope of the pilot ranking is limited in particular by the decision of the University of Tirana, the biggest public university in the country and the university with the highest reputation, not to participate. This has to be kept in mind in interpreting the results of the ranking.

Table 3: Overview Higher education institutes in Albania and participation

Name of the University	Declared participation	Delivery of data				
		General Data	Business	Law	Nursing	Social Sciences
Shkolla e larte UNVERSITETI AMERIKAN I TIRANËS	Yes	x	x	x	x	
Shkolla e larte NDËRKOMBËTARE E TIRANËS	Yes	x	x	x		
Shkolla e larte private NEW YORK UNIVERSITY - TIRANË	Yes	x	x	x		x
Shkolla e larte private ILLYRIA	Yes	x		x		x
Shkolla e larte private LOGOS	Yes	x	x			
Shkolla e larte private NËNA MBRETËRESHË GERALDINË	Yes	x			x	
Shkolla e larte private universitare JUSTICIA	Yes	x		x		
Shkolla e larte private Universiteti MARIN BARLETI	Yes	x	x	x		x
Shkolla e larte private Universiteti PLANETAR I TIRANËS	Yes	x			x	x
Shkolla e larte private VITRINA	Yes	x	x	x		x
Shkolla e larte universitare private EPOKA UNIVERSITY	Yes	x	x			
Shkolla e larte universitare private JUSTINIANI I	Yes	x		x		
Shkolla e larte universitare private LUARASI	Yes	x		x		
Shkolla e larte universitare private MEDIKADENT	Yes	x			x	
Shkolla e larte universitare private SEVASTI E PARASHQEVI QIRIAZI	Yes	x	x	x		
Shkolla e larte universitare private Universiteti EUROPIAN I TIRANËS	Yes	x	x	x		x
Shkolla e larte universitare private Universiteti KRISTAL	Yes	x	x	x	x	x
Shkolla e larte universitare private WISDOM UNIVERSITY	Yes	x		x		
Shkolla e larte universitare private ZOJA E KËSHLLIT TË MIRË	Yes	x	x		x	
Shkolla e larte Universiteti EVROPIAN PËR TURIZMIN	Yes	x				
SHKOLLA private E ARSIMIT TË LARTË PAVARËSIA	Yes	x	x			
ALBANIAN UNIVERSITY	Yes	x	x			x
ALBANIAN UNIVERSITY (Filiali Berat)	Yes	x	x			x
Universiteti ALEKSANDËR MOISIU, DURRES **(PUBLIC UNIVERSITY)**	Yes	x	x		x	

Name of the University	Declared participation	Delivery of data				
		General Data	Business	Law	Nursing	Social Sciences
Universiteti ALEKSANDËR XHUVANI **(PUBLIC UNIVERSITY)**	Yes	x	x		x	x
Universiteti BUJQËSOR I TIRANËS **(PUBLIC UNIVERSITY)**	Yes	x	x			
Universiteti BUJQËSOR I TIRANËS (Filiali Lushnjë)	Yes		x			
Universiteti EQEREM CABEJ **(PUBLIC UNIVERSITY)**	Yes	x	x		x	
Universiteti FAN S. NOLI **(PUBLIC UNIVERSITY)**	Yes	x	x		x	x
Universiteti FAN S. NOLI (Filiali Pogradec)	Yes	x				
Universiteti I SHKODRËS LUIGJ GURAKUQI **(PUBLIC UNIVERSITY)**	Yes	x	x	x	x	
Universiteti ISMAIL QEMALI VLORË **(PUBLIC UNIVERSITY)**	Yes	x	x	x	x	
Universiteti KRISTAL (Filiali Fier)	Yes	x		x	x	
Universiteti KRISTAL (Filiali Korçë)	Yes	x			x	
AKADEMIA E ARTEVE TE BUKURA	No					
AKADEMIA USHTARAKE SPIRO MOISIU	No					
INSTITUCIONI I ARSIMIT TË LARTË ISSAT	No					
KOLEGJ PROFESIONAL PRIVAT MEDICOM	No					
KOLEGJI PROFESIONAL PRIVAT DENTARIUM-AL	No					
KOLEGJI PROFESIONAL PRIVAT IVOCLAR VIVADENT & PARTNERS	No					
KOLEGJI PROFESIONAL PRIVAT LUIGJ BENUSSI	No					
KOLEGJI PROFESIONAL PRIVAT NEW GENERATION	No					
QËNDRA E STUDIMEVE ALBANOLOGJIKE	No					
Shkolla e larte private ALDENT	No					
Shkolla e larte private E EDUKIMIT	No					
Shkolla e larte private GJON BUZUKU	No					
Shkolla e larte private MARUBI	No					
Shkolla e larte private MESDHETARE E SHQIPËRISË	No					
Shkolla e larte private NEHEMIA	No					
Shkolla e larte private TIRANA BUSINESS UNIVERSITY	No					
Shkolla e larte private Universiteti ELITE	No					
Shkolla e larte private Universiteti METROPOLITAN TIRANA	No					
Shkolla e larte universitare private Universiteti POLIS	No					

Name of the University	Declared participation	Delivery of data				
		General Data	Business	Law	Nursing	Social Sciences
Universiteti ALEKSANDËR MOISIU (Filiali Peshkopi)	No					
Universiteti I SPORTEVE TË TIRANËS	No					
Universiteti I TIRANËS **(PUBLIC UNIVERSITY)**	No					
Universiteti I TIRANËS (Filiali Kukës)	No					
Universiteti I TIRANËS (Filiali Sarandë)	No					
Universiteti KRISTAL (Filiali Shkoder)	No					
Universiteti KRISTAL (Kukes)	No					
Universiteti POLITEKNIK I TIRANËS **(PUBLIC UNIVERSITY)**	No					

6.1.2 Data collection

6.1.2.1 General aspects

One result of the early stakeholder consultation was the recommendation to use paper-and-pencil questionnaires only. During the process the view on this has changed. To reduce the time needed for entering data and to avoid errors entering the data into the database we decided to make the questionnaire for the general data, the students available both paper-pencil-based and online. The questionnaire for professors was made available only as an online questionnaire. This procedure had a number of advantages. With regard to the limited resources in the project the department questionnaire which is much longer and complex was not transformed into an online version.

The use of online data entry in the end helped to keep deadlines. Due to ownership and license regulations the software used for these online questionnaires cannot be distributed by CHE to any Albanian partner (APAAL or Ministry) For this reason CHE gave an explanation to APAAL during their visit in May 2011 how the data can be entered into the access database directly.

All online surveys were protected by individual password so that we could guarantee that the questionnaires were answered only by authorised persons (general data) resp. respondents correctly included in the sample (students, professors) and that respondents could answer the questionnaire only once (as the password was blocked after completing the questionnaire).The access information to the online questionnaires (URL and an individual password) were printed on the paper questionnaires; hence the students and rectors (administration) could decide if they will answer the questionnaire paper-pencil based or online. Questionnaire filled out in the paper version had to be back to APAAL. Data entry was made by APAAL staff in those cases.

To start the data collection each university and faculty was visited by staff from APAAL and/or the Ministry. They explained the questionnaires to the university staff and could answer questions directly. They also handed the questionnaires over to the students to avoid that they receive additional non-neutral instructions by university staff. The following time schedule gives an overview about the different questionnaires and tasks related to the distribution.

Table 4: Time schedule interviews

	CW 13	CW14	CW15	CW16	CW17	CW18	CW19
	28.03-01.04	04.04-08.04	11.04-15.04	18.04-22.04	25.04-29.04	02.05-06.05	09.05-13.05
Delivery of questionnaires by CHE							
Preparation of distribution to universities		Inform APAAL until 04.04. Division until 6th					
Confirmation of meetings with universities							
Visits to universities and distribution of questionnaires							
Participants answer questionnaires							
Support during data collection							
Reminder to administration and deans (one week before individual deadline)							
Data entry paper questionnaires							

CHE
APAAL
Interviewer
Data technicians
Participants answer questionnaires

6.1.2.2 General Data

The questionnaire for the administration of the university was distributed by APAAL and/or Ministry staff to the rectors of each university and branch. They could answer the questionnaire directly online or paper-pencil based and sent the questionnaire back to APAAL. In total 33 out of the 34 institutions which had confirmed participation answered the questionnaire. Most of them used the online option, only one Institution decided to answer the paper-pencil based questionnaire.

6.1.2.3 Faculty Data

The questionnaire on faculty data was handed out to the deans by APAAL and/or Ministry staff. They could answer the questionnaire directly online or paper-pencil based and send the questionnaire back to APAAL. Again the response rate for the faculty data is calculated on the base of the first overview about possible faculties. 63 out of 102 (62 %) faculties delivered data.

- 22 out of 39 delivered data for business studies/economics (56 %),
- 16 out of 22 (73 percent) for law,
- 14 faculties out of 20 (70 %) participated in nursing and
- 11 out of 21 (52 %) in social sciences.

The low level of participation both in absolute and relative terms in social sciences does not allow for a full ranking.

6.1.2.4 Student Survey

In CHE ranking the student satisfaction indicators are an important part. Experience both from CHE ranking and from U-Multirank show that student satisfaction indicators can be a valid and reliable indicator in ranking.

Hence we included a student survey in the Albanian pilot ranking, too. The organisation of the student survey in Albania differed from the normal way it is organised in CHE ranking. In order to prevent direct influence on students by their teachers and their institution the invitations are sent impersonally to the students either by mail or by e-mail. According to consultation with APAAL and the Ministry this approach was supposed not to work in Albanian. Instead the visiting teams of APAAL and Ministry staff handed out the invitation letters/access information to the online questionnaire to the universities which forwarded them to their students.

Based on the responses by students the distribution of questionnaires did not follow a uniform way (see table 5). In some universities more than 70% of the students told that they received the questionnaire in classes, in other universities a substantial number reported that they were informed by e-mail.

Table 5: Distribution of access code – student' answers

Distribution	Percent
In classes	24.5 %
On campus	29.5 %
By e-mail	12.9 %
By APAAL staff	1.4 %
By Ministry staff	3.0 %
Info on website	2.5 %
By mail	0.1%
Other	19.9%
No answer	6.3 %
Total	100.0 %

In total 6.477 students responded to the questionnaire. A response rate cannot be calculated as we do not have information on the number of students who were invited to take part. As table 6 shows the number of respondents per university differs extremely – probably as a combined effect of different size and different response rates.

A number of indicators of the original list of indicators are based on the assessment of their own institution by their students, e.g. on the quality of courses, the organisation of the programme, the contacts to teachers and on facilities like rooms, libraries and IT. The quality of the student satisfaction indicators depend on the willingness of the students to give honest and frank assessments of their own university.

The result of the feasibility analysis of the student survey is that results unfortunately cannot be used for the ranking. The reasons are:

a) the extreme differences in the number of participants (see table 6),
b) the small number of institutions with a sufficient number of cases in some fields,
c) the extremely small degree of standard deviations indicating a high degree of homogeneity, and (see illustration 4),
d) the very positive level of assessments in most institutions (see illustration 5).

a) Number of respondents

The number of respondents differs very much between institutions, partly due to differences in size of institutions, partly due to different response rate. The procedure of calculating groups takes into account the confidence intervals of the mean which is affected by the number of cases. Big differences in the sample size reduce the robustness of the ranking method. In the social sciences e.g. the two faculties with the highest number of respondents (Alexander Xhuvani and Kristal) together make up for half of the total sample. Hence they largely determine the overall means in that field against which the grouping method is measuring them.

Table 6: Student Respondents by university and field

	Respondents	Business/ economics	Nursing	Law	Social science
ALEKSANDER MOISIU	215	195	20		
ALEKSANDER XHUVANI	1.083	421	370	1	291
BUJQESOR I TIRANES	77	76			1
BUJQESOR TIRANES I	15	15			
EPOKA	63	50		1	12
EQEREM CABEJ	156	127	28		1
EUROPIAN I TIRANËS	617	389		115	113
EVROPIAN PER TURIZMIN	7	6		1	
FAN S. NOLI	870	449	282		139
FAN S. NOLI (Filiali Pogradec)	39	37	1		1
I SHKODRËS LUIGJ GURAKUQI	132	76	35	7	14
ILLYRIA	6			3	3
ISMAIL QEMALI VLORE	222	5	161	56	
JUSTICIA	7			5	2
JUSTINIANI I	113			113	
KRISTAL	1.005	240	229	291	245
KRISTAL (Filiali Fier)	3		2		1
KRISTAL (Filiali Korçë)	29		29		
LOGOS	27	27			
LUARASI	7			6	1
MEDIKADENT	33		33		

NDËRKOMBËTARE E TIRANËS	24	9	3	12	
NËNA MBRETËRESHË GERALDINË	39		39		
NEW YORK UNIVERSITY - TIRANE	31	21		1	9
PLANETAR I TIRANËS	14		14		
SHKOLLA E ARSIMIT TË LARTË PAVARËSIA	59	18		23	18
SHKOLLE E LARTE MARIN BARLETI	102	47		30	25
ALBANIAN UNIVERSITY	477	132		230	115
ALBANIAN UNIVERSITY (Filiali Berat)	104	66			38
UNVERSITETI AMERIKAN I TIRANËS	148	30	56	62	
VITRINA	614	178	3	340	93
WISDOM UNIVERSITY	3	1		2	
ZOJA E KËSHLLIT TË MIRË	136	20	115		1
Total	**6.477**	**2.635**	**1.420**	**1.299**	**1.123**

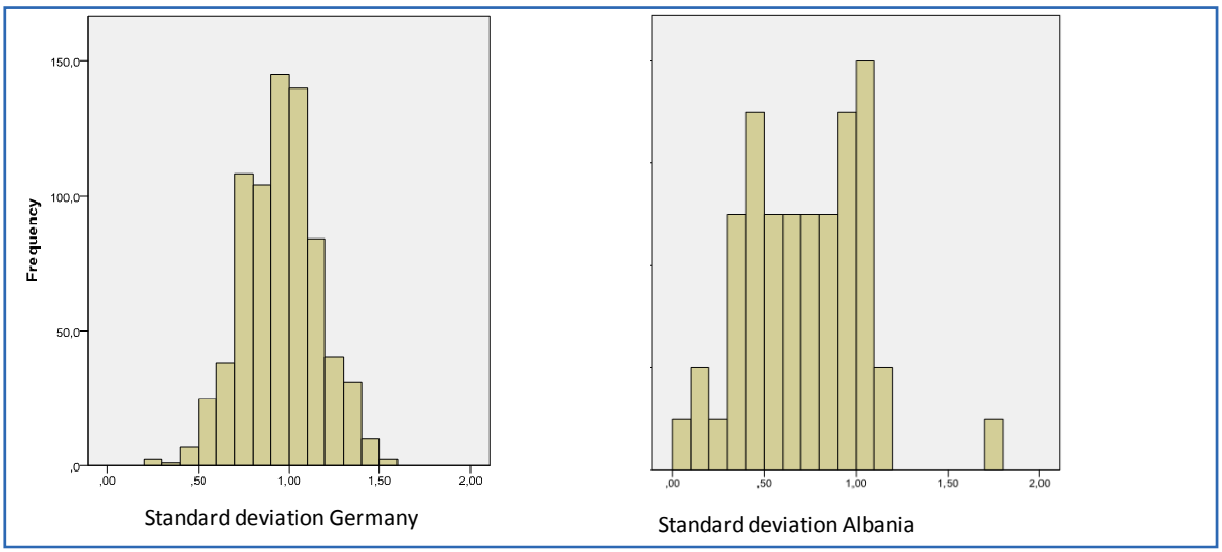
b) Small number of institutions with sufficient response numbers

As a consequence of the big differences in response numbers the number of institutions (by field) which pass the minimum response numbers set by CHE methodology is very low in all fields except business studies/economics. The table shows that in law and the social sciences only nine faculties exceed the minimum number of cases of 15 for a calculation of indicators (12 in nursing). Distinguishing between different programmes (e.g. nursing and other health related fields) would diminish the response number further.

c) Small degree of standard deviations

Normally in every subjective assessments of a reality there is a certain degree of heterogeneity between respondents, or, to put it in statistical terms some standard deviation. The data from the Albanian student survey show that the standard deviation per institution, field and indicator in many cases is extremely low. Illustration 4 compares the distribution of standard deviations for all indicators and fields between the German sample and the Albanian survey. While the German distribution almost perfectly follows a normal distribution with almost half the scores being higher than one (referring to a six point answering scale in both surveys), there are almost no assessments with a standard deviation of more than one in Albania; including some cases with a high number of cases and almost no standard deviation at all (at one institution in nursing the standard deviation in one indicator was only 0.48 and the mean was 1.07 with more than 350 respondents!).

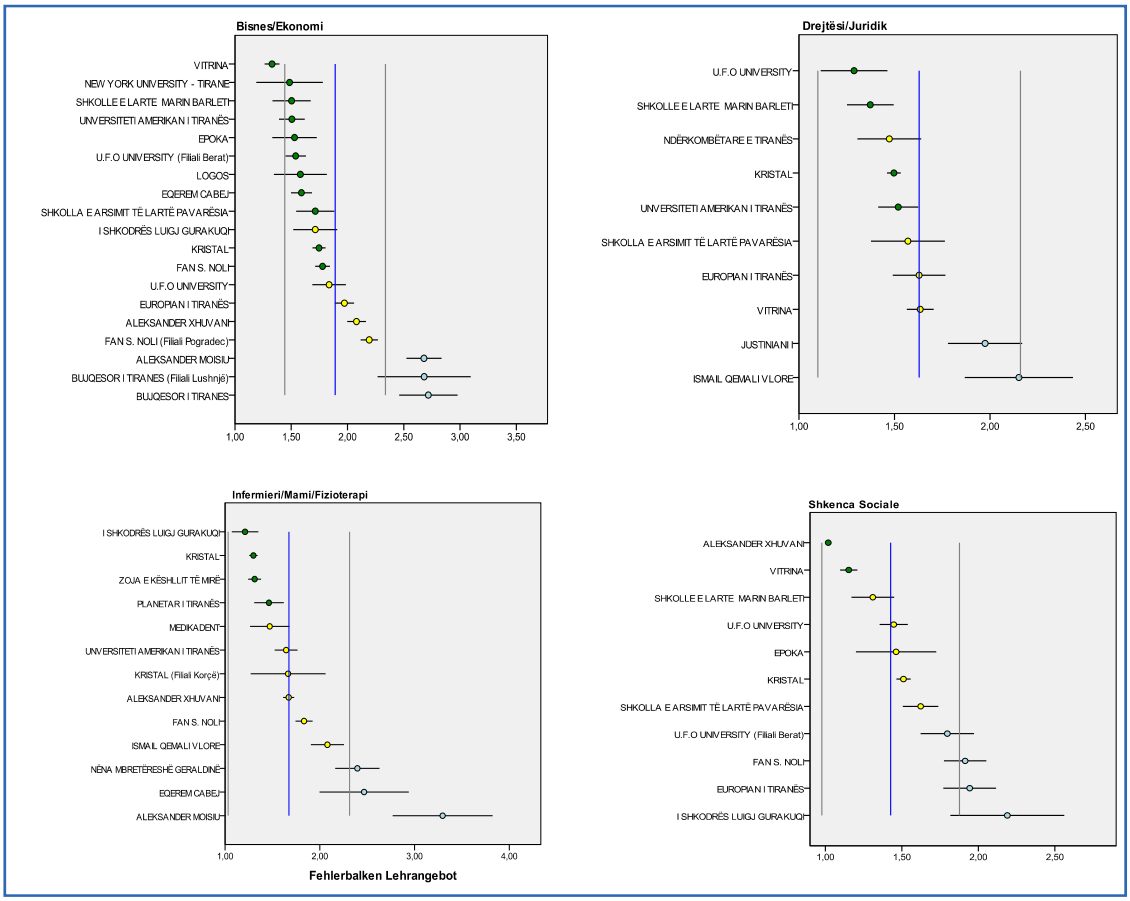
Figure 4: Comparison of distribution of standard deviations German – Albanian student survey



d) The very positive level of assessment by students

Figure 5 shows that except from social sciences where we have only a few institutions the distribution of means does not mark a continuum. Rather they are concentrated very much on the very positive side.

Figure 5: Means and confidence intervals by fields (Indicator quality of courses)



In sum the analysis of spread (standard deviations) level of assessment (means) – apart from problems with the number of institutions and very different sample sizes – indicate that they cannot be interpreted as honest views on their institutions, Rather the reflect the wish of Albanian students to let their own institution look as good as possible- with the exception of a very few institutions which would be sanctioned for giving more realistic assessments. Hence the student survey and the student satisfaction indicators cannot be in for the ranking. In addition the consistency and quality of data seems to be very poor even for most of the more descriptive questions that could have been used as descriptor. E.g., students were asked about the number of professors involved in teaching in their programmes. Within many single programmes the answers ranged from very few (less than 5) to more than 50!

For future ranking exercises we propose to test and use different kind of questionnaires and questions, e.g. questions focusing more on student engagement and student learning behaviour instead of a direct assessment of their own institutions. There are examples of such surveys as e.g. the National Survey on Student Engagement in the US.[5] Maybe it could be useful to test such instruments – adapted again to the Albanian system – in a small pre-test with a small number of students prior to next ranking exercises.

6.1.2.5 Professor Survey

The e-mail addresses of 1,569 Professors from the four pilot fields have been available. All of them were invited to participate in the online survey and 647 (42 %) answered the questionnaire. The biggest group, 35.4 %, belong to the field of business/economics, 20,7 % to social sciences, 12.8 % indicated to teach mainly in law, only 6.6 % selected nursing; 14.2 % selected “other field”. 10.2 % did not answer this question and hence could not be included in the analysis.

Table 7: Professor Survey: Responses

	Respondents	Percentage
Business/Economics	229	35,4%
Social and Political Sciences	134	20,7%
Law	83	12,8%
Nursing/Health	43	6,6%
Other	92	14,2%
Missing	87	10,2%
Total	647	100%

6.1.3 Data cleaning

6.1.3.1 Feedback loop

We used a number of instruments to verify and clean data. First, a feedback loop with the institutions and faculties was introduced in which we asked additional questions on the data provided (see above). Based on the experience of CHE ranking and of the pilot phase in

[5] See http://nsse.iub.edu/ .

Albania this is an important and proven instrument of quality assurance in the ranking process which should be kept in future Albanian ranking exercises.

Due to a lack of other verified data sets data collection on Albanian higher education institutions had to rely mainly on self-reported data - as in many other European countries. This created the need to develop instruments to verify and check the data provided by institutions.

The quality of self reported data delivered by institutions and faculties was checked by CHE already during the data collection. It was obvious from the beginning that the quality of the general data generally was good. The quality of the faculty data differed. It was necessary to verify and clean the data. Three major mistakes and problems within the data occurred and had to be solved:

Problems regarding format errors

- Text in boxes, where only numbers are allowed, e.g. Number FTE: Text had to be deleted
- Special characters: e.g. LEK or „-“ where only numbers should be used: Text had to be deleted
- Too detailed information: Additional text had to be deleted and shortened.
- Decimals: With regard to calculation it was necessary to change points into comma.

Problems regarding understanding of questions

- Looking at data some questions have obviously been misunderstood by institutions. . Remarks: Institutions/faculties could add remarks to each question. It was necessary, to check each remark, because additional or important information could be included. E.g. the number of outgoing students in total and not only for the programmes, information that the staff categories have been interpreted in a different way.

Problems regarding the consistency/plausibility

- There were some cases where percentages of different categories added up to more than 100 percent.
- Extremely high numbers (compared to other institutions) had to be checked.

The feedback loop started immediately after the training workshop in May. Until end of May all universities and faculties should have contacted again if some of their data was unclear. The institutions had the possibility to correct their data until 3rd June. Afterwards APAAL had additional time to check this data again. All corrected data was sent to CHE until 13th of June.

6.1.3.2 Cross-Checks

Cross-Checks have been used to check the consistency of the information given by the faculties and given by the professors.

Did the professor / staff member indicate the names of all HEI where they are employed and did the faculties only list professors really working at the faculty?

The faculties listed the names and e-mail-addresses of their professors. Also the professors / staff members have been asked at which university they are employed. Due to the fact that

only about 500 respondents indicated at least one university where they are employed, the check of consistency of the data is limited to those 500 persons.

First it was checked if the professor / staff member named the university that indicated his or her name in the staff list. In 83 cases (17 %) the professor / staff member did not mention the university that indicated him or her as staff member. This had no consequences for the faculty, because the professors did not evaluate their faculty, but gave their opinion about the leading faculties in their field. Because the professor could have been reached with the E-Mail address given by the faculty, this faculty seems to have contact to this professor.

Did the professor / staff member indicate the name of all HEI, which indicated him/her in their staff list?

Due to the Albanian higher education system it is possible to work at more than one institution. The first check showed that 265 persons out of 1498 (17, 7 %) have been listed as professor/staff member by more than one faculty. These names have been checked with the professor survey, where the staff was asked to indicate the universities where they are employed at. Only 13 professors have been indicated by an institution which they did not mention themselves.

Self-consistency of workload indicated by the faculty and indicated by the professor.

The professors have been asked to give their workload at each faculty they are employed. Also the faculties gave the workload of their staff. The information on 429 persons could be cross-checked. Only in 40 (!) cases (9 %) the amount of workload indicated by the faculty was the same amount indicated by the staff itself.

Cross-checks of institutional data and self-reported data by the professors showed that the data on institutional affiliation are quite valid but we cannot completely exclude the possibility that in particular persons who are listed by an institution and are not actually employed there did not respond to the professor survey so we could not verify their institutional affiliation.

The cross-check of data on workload/working hours revealed a high degree of inconsistencies which could not be solved by CHE.

University level

Also on the university level some cross-checks have been possible. So it was checked, if the number of all students was the same as the sum of the number of students per subject group or per degree.

In some cases the total number of students did not correspond to the sum of the student numbers by groups of fields. For calculation of the indicator “Percentage of students by field” the number given within the subject groups had to be used. The same problems occurred regarding the question about students by type of degrees.

6.1.3.3 Cross-check with accreditation data

Data cleaning started in May in Germany during the workshop with APAAL. In this workshop each aspect of data cleaning was explained in detail and the general data and the faculty data was checked together. Due to the reason, that not all questionnaires were filled in May, it was necessary that APAAL continued the data cleaning until End of May in Albania. In any case of precariousness CHE recommended a feedback-loop: the faculty should be called or the questions should be asked via E-Mail. So the data can be checked by the faculty again. The data has to be checked in an intensive dialogue together with the faculty or the administration.

Due to the limited time for this first round of ranking this procedure was changed by APAAL. Data given by the HEI during accreditation processes was used for checking and cleaning the data. For future rankings we strongly recommend to include additionally the institutional feedback loop.

6.1.3.4 Detailed explanation about Data cleaning given by APAAL

The following abstract explains in detail how the data cleaning was done by APAAL, regarding the accreditation data. The text was distributed to CHE by APAAL.

“During this process a lot of documents from different institutions have been considered, like internal and external evaluation reports, evaluation study programmes reports, that are available at APAAL through different processes of accreditation. Visits to universities were not applied to verify the reliability of the data but respective coordinators from universities were contacted.

APAAL went through the verification and correction of university, departments and study programs questionnaire. In the meantime, APAAL contacted the university faculties and their respective administrators to verify and add missing information. APAAL also verified the questionnaires with the data available on the agency.

The questionnaire on the general data of universities had several problems as the following:

The definition given by the decision of the council of ministers:

1. The total number of students
2. The number of bachelor students
3. The number of master and PHD students
4. The number of students in different majors (social sciences, law, scientific sciences, medicine, engineering and others)
5. The ratio of the number of computers per student
6. Tuition fees

The entire list above was verified with each university representatives to correct the exact total number of students in the bachelor, master and PHD programs. Information was requested to the HEIs in cases when it was missing or it was ambiguous. In addition, the data was verified and checked with all the records of the HEIs available at APAAL. The tuition fees were converted from Euro to Lek. The ratio of the number of computers per student was calculated based on the information given by universities and then verified when it missing or not correct. Furthermore, text was replaced with numbers and vice and versa when it was required .The name of the HEIs were also corrected according to their respective “Decision of the Council of Ministers”.

The Faculty Questionnaire had the following problems:

1. The number of academic staff (full and part time lectures)
2. The number of professors, associate professors, PHD, master and supportive staff
3. Number of hours given by part time staff
4. Number of academic staff with foreign experience
5. Number of guest professors from foreign universities
6. Number of professors who have lectured abroad
7. Sum of outside funds for research
8. Area (in meter square) available to students
9. Some information was missing

The same procedure was followed with the faculty questionnaire as with the General Data of University questionnaire. Universities were contacted mainly through email to verify and give missing information and ambiguous one. Not all of them replied. 17 faculties brought their questionnaires to APAAL which were then added and filled out in the excel sheet. Texts, numbers, percentages were added and removed as required by the format of excel sheet to make the indicators ready for calculations. The area available to students was checked through the records of the HEI available at APAAL.

The academic staff and research questionnaire had the following problems:

- Text was written down when number was required
- The tuition fees were either in Lek or in Euro
- Number of credits for the majors and courses
- Number of credits for internships was ambiguous
- Information about Scientifics activities and research,

  The name of the academic journals published, scientific conferences were not declared in a correct way. As a result, their verification was done through internet and CV of the academic staff attached in the application files of the study programmes
- The funding of the institutions for the academic staff and research was difficult to be verified by PAAHE given the short period of time and unclearness of the institutions about this issue in the first ranking process.

Other information was checked about the academic staff and their respective research. It is worth mentioning the fact that a high percentage of staff was found lecturing at different institutions, thus creating difficulties defining the part and full time academic staff. PAAHE made available to CHE the list of the academic staff from the University of Tirana to see the duplications of the names declared by different institutions.

We appreciate the participation and the engagement to complete the questionnaire of the higher education institutions. They have respected the deadlines of the questionnaires and data declaration. The information declared by the institutions is in general correct. Problematic areas are in general those related to academic staff, hours of teaching, credit for each course/program and data about the facilities of the universities. The faculty questionnaires are problematic as well, where it is not clear where the data declared belong

to the university or faculty, for example the academic staff or faculty facilities. In other cases, the declaration of data was either missing or were not calculated correctly. Probably, the institutions haven't understood the questions right or it was difficult to do a separation of hierarchy: university, faculty, and department. This is to be discussed in the following processes.

Another problem was related to the foreign academic staff in Albania. Their status is unclear, whether they are full or part time staff. If they are full time lectures, their relation with the institution should be made clear, and if they are part time lectures their annual working hours should be checked."

6.1.4 Conclusions: Feasibility of data sources and data collection processes

As in most national rankings the data collection in the Albanian pilot project had to rely largely on self-reported data which make verification and cleaning of data particularly important. Finally the process of collecting data at the institutions by the specific ways and processes introduced proved feasible although there are still some doubts on some data, in particular on work load of academic staff.

The mixture of online and paper-pencil-based questionnaires facilitated data collection and helped to reduce errors in data entry. We suggest keeping this approach as long as it does not seem to be feasible to change to online surveys completely. In the pilot study we used a software platform owned by CHE. In future ranking exercises APAAL will have to provide for this.

In our view the *general data* on universities, which are mostly descriptive, are not problematic. Data were largely available and the quality of data seems to be sufficient.

The most comprehensive questionnaire was collecting the field-based information at the *faculties*. Many indicators are based on those data. The verification process revealed some problems with regard to staff data, the number of academic staff reported but in particular the work load/working hours. This made it impossible to calculate reliable full-time equivalent staff numbers. As the staff structure of Albanian universities was hard to understand for outsiders we suggest that the Ministry and APAAL take some efforts to clear the data situation. This will also help to make Albanian data more comparable to international data sets.

The *survey among professors* brought feasible indicators on the reputation of institutions and on the research activities of faculties. In some fields the participation was not very high; given the importance of this survey for the ranking the Albanian partners should think about additional incentives in future rankings.

The *student survey* which is a central element of CHE ranking and which proved to be feasible in the U-Multirank project on a broad international scale, too, could not be used at all as a data source in Albania. It was obvious that the students used the survey mainly to make their institution look as good as possible. As a result the indicators did not discriminate between institutions. Hence the pilot ranking does not include any indicators on student satisfaction. We suggest using other forms of student questionnaires in the future that focus rather on student engagement than on the assessment of their own institution (e.g. leaned on the US National Survey on Student Engagement (NSSE; http://nsse.iub.edu/). It could be

helpful to test such a questionnaire with a small pre-test sample in a few fields and a few institutions before starting the next ranking exercise.

In addition the possibilities to conduct *surveys among graduates* might be explored. A small scale pilot study could test if graduates give more honest and reliable assessments of their former institution. It was not possible to integrate a graduate survey into the first pilot ranking, since it proved to be difficult to identify a sufficient number of alumni addresses. Also the *employers* could be asked about their experiences with employability of graduates from different institutions.

6.2 Feasibility of indicators

In the following tables the relevance, validity, reliability and the feasibility of each Indicator are shown in an overview per dimension. Indicators with only descriptive information are listed below the tables; they can be used as additional information when the data will be published. The lists include all indicators from the original list are discussed with regard to their feasibility. As some of the indicators turned out to be not feasible we tried to develop alternative indicators. They are included in the lists, too.

In the left part of the tables the methodological standards of relevance, validity and reliability are assessed. A green triangle (▲) means "high", a yellow square (■) indicates intermediate and a red triangle (▼) means low with regard to the respective standard.

In the right columns of the tables the result of the empirical assessment of the feasibility of the indicators is summarized by field as the situation differs between fields for a number of indicators. A green triangle (▲) indicates that feasibility is high; a yellow square (■) indicates that there are some problems regarding feasibility but in most cases data on the indicators can be collected and interpreted. Finally, a red triangle (▼) indicates that there are serious problems in collecting data on the indicator. The feasibility assessment is based on three aspects. The first aspect refers to the availability/non-availability of data. If the information on an indicator or the underlying data elements is missing for a large number of universities it is an indication that there are (serious) problems in providing data. The second driver of the feasibility assessment is the level of conceptual clarity. Based on an analysis of the comments to the respective questions made by the institutions in the questionnaires, an assessment is made to what extent the conceptual clarity limits the interpretation of the data: again. The third driver refers to the level of data consistency and is based on an analysis of individual questionnaires. In the process of verification, the individual questionnaires are reviewed. Inconsistencies in the answers provided may help in identifying problematic questions.

In the last comment the conclusion with regard to the publication of results is listed. Besides the publication of a ranking for a given indicator, there is an alternative option to mark the top group/top performers only. And, in some cases, a publication of the results is not possible either due to a lack of data or due to severe problems in the quality of data.

Legend:

▲ positive / feasibility: sufficient

■ intermediate / feasibility limited

▼ low / feasibility not given

6.2.1 Dimension: Student profile

With regard to the dimension "student profile" most information is descriptive only. In the discussions prior to the data collection the average mature score of first year students was proposed as an indicator of the entrance qualification of students.

Table 8: Overview Dimension Student profile

Indicator	Data source	Relevance	Validity	Reliability	Feasibility				Presentation of results
					Business	Social Sci.	Law	Nursing	
Student population									
Average Matura score of first year students	Ministry	■	■	n.a.	▼	▼	▼	▼	Not available

According to the Ministry the data are available only for public institutions which are the minority of institutions in the (pilot) ranking. Hence it will not be used in the ranking.

Descriptors:

- Percentage of students by broad fields (level: university, faculty)
- Percentage of students by degrees (BA; MA, PhD, other; level: university)
- Relation male to female students (level: faculty)

6.2.2 Dimension: Study outcomes

Table 9: Overview Dimension Study outcomes

Indicator	Data source	Relevance	Validity	Reliability	Feasibility				Presentation of results
					Business	Social Sci.	Law	Nursing	
Study Outcomes									
Proportion of graduates in norm period of study	Faculty Data	■	■	■	■	▼	▼	▼	Ranking

Validity is affected by the fact that a high rate of graduates who could graduate within the norm time of their programme could either by an indication of a good organisation of the programme or express the fact that the standards of the programme are low (“degree mills“).Still it is a relevant information for students and the quality issue could be assessed in combination with other indicators.

Many institutions could not provide the data in law, social sciences and nursing. Hence a ranking is possible only for business studies/economics.

6.2.3 Dimension: Study international orientation

As already indicated in chapter 5 there will be no indicators based on student satisfaction.

Table 10: Overview Dimension International Orientation

Indicator	Data source	Relevance	Validity	Reliability	Feasibility				Presentation of results
					Business	Social Sci.	Law	Nursing	
International orientation									
International orientation	Faculty Data (prog. level)	▲	▲	■	▲	▼	▲	■	Ranking
Support for stays abroad	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible

The indicator “International orientation” is a rating indicator compiling information about the exchange of students and academic staff and on teaching in foreign languages programmes (see cp 5.3.1 for detailed information). Calculation of the indicator is possible in business studies/economics and in law, with limitations in nursing; due to a lack of data it cannot be used in social sciences

Descriptors:

- International character of the institution: National Albanian institution or campus/branch of a foreign university resp. a cross-national institution.

6.2.4 Dimension: Teaching and learning

This is a core dimension in a ranking aiming at providing information to (prospective) students. Here the loss of indicator derived from the student survey is most relevant.

Table 11: Overview Dimension Teaching and learning

Indicator	Data source	Relevance	Validity	Reliability	Feasibility				Presentation of results
					Business	Social Sci.	Law	Nursing	
Teaching and learning									
Student staff ratio	Faculty Data	▲	■	■	▲	▼	▲	■	Ranking
Teaching hours per student per month	Faculty Data	▲	▲	■	▲	▼	▼	▼	Ranking
Percentage of professors in all full-time-staff	Faculty Data	▲	▲	■	▲	▼	▲	■	Ranking
Credits for special teaching issues per programme	Faculty Data (prog. level)	▲	▲	■	▲	▼	▲	■	Ranking
Quality indicator teaching	Faculty Data	▲	▲	▲	▲	▼	▲	■	Ranking
Course content	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible
Study organization	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible
Support by teachers	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible
Contact among students	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible
Teaching evaluation	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible
E-Learning	Student survey	▲	▲	▼	▼	▼	-	-	No ranking possible
Training in empirical methods	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible
Credits for laboratory courses	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible

The student-staff-ration refers to head count of staff and only regarding students with major in field.

The indicator “teaching hours per student and month” replaces the indicators that were meant to be available by APAAL accreditation data but which are not: “Teaching hours per student” and “Contact hours per student”. The indicator now is calculated as workload of staff

per student with major in the field. Data are available to a sufficient degree only for business studies/economics.

The “Quality indicator” combines some basic yet highly important aspect of teaching, as the accreditation status of the institution, the square meters per student as an indicator of the availability of basic resources, the existence of an internal system of quality assurance and the existence of an advisory board with external members (indicating some links to the labour market).

6.2.5 Dimension research

As already indicated above the traditional indicators of research excellence which are used in most international and many national rankings, in particular those based on bibliometric analysis, were not considered useful for this project. On the one hand we could not expect many publications from Albanian academic staff in international peer reviewed journals included in the international bibliometric data bases (and national bibliometric data bases do not exist) and, on the other hand, the pilot fields of the ranking are in general not well covered by the bibliometric data bases. Hence we developed specific indicators which take into account the particular situation in Albanian higher education.

Table 12: Overview Dimension Research

Indicator	Data source	Relevance	Validity	Reliability	Feasibility				Presentation of results
					Business	Social Sci.	Law	Nursing	
Research									
Professors directing PhDs	Faculty Data	■	▲	■	▼	▼	▼	▼	
External research funds per academic staff	Faculty Data	■	■	■	▼	▼	▼	▼	
Research activities	Professor Survey	▲	▲	■	▲	▲	■	▼	Ranking (top faculties only)
Best research publications	Professor Survey	▲	▲	▲	▲	▲	▲	▼	Ranking (top faculties only)

The indicator on PhDs was changed due to a change in question in the translation process; the initial questionnaire asked about the number of professor of the faculty, which directed PhD, not about the number of completed PhDs. Due to the small number of faculties that could deliver this data according to the new definition it is not possible to calculate results out of it. For the future we would recommend to go back to the initial concept. It has to be kept in mind that only state universities are allowed to allocate doctoral degrees.

Similarly only a few institutions could provide data on external research funds.

Important are two new indicators that were developed particularly for the Albanian context. The Indicator “research activities” is calculated as a rating indicator (see cp 5.3.5) taking into account individual research activities of professors. This indicator is based on the professor survey. With regard to a limited response rate in that survey, only the top performing institutions should be presented. In addition we asked professors about the best publications in their field – according to their subjective view. It is worth mentioning that this indicator can also show this particular aspect of research at the University of Tirana which did not provide data for the ranking. Both indicators are not feasible in the field of nursing, due to the small number of faculties and professors that delivered any data regarding these aspects.

Descriptors:

- Entitlement to award PhDs (which is identical to the status of being a public university)

6.2.6 Dimension Facilities

In the particular situation in Albania characterized by a number of small and new private institutions who had not been subject yet to a public system of quality assurance some indicators on basic availability of resources ad facilities may be informative to students.

Table 13: Overview Dimension Facilities

Indicator	Data source	Relevance	Validity	Reliability	Feasibility				Presentation of results
					Business	Social Sci.	Law	Nursing	
Facilities									
Space: square meters per student	Faculty data	▲	▲	■	▲	▼	■	■	Ranking
IT: Number of PC working places per student	General Data	▲	▲	■	▲*				Ranking
Libraries	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible
Rooms	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible
IT-Infrastructure	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible
Laboratories	Student survey				▼	▼	▼	▼	No ranking possible

* Calculated for the whole institution

The square meters per student as a basic indicator of facilities can be used in a ranking of business studies/economics and with some limitations in law and nursing. The number of IT

working places is calculated for the whole institutions as in many institutions they cannot be attributed to a particular field/faculty.

Descriptors:

- Opening hours of the library
- Opening hours of the IT facilities
- Opening hours of students consulting services

6.2.7 Dimension: Labour market and employability

Due to restrictions in resources and time in the project and due to a lack of infrastructure (address data; interview/field resources) both graduate and employer surveys could not be carried out in this project. Instead we are able to use a rating indicator summarizing particular elements of teaching and learning related to employability (see 5.3.4)

Table 14: Overview Dimension Labour market

Indicator	Data source	Relevance	Validity	Reliability	Feasibility				Presentation of results
					Business	Social Sci.	Law	Nursing	
Labour Market / Employability									
Promotion of employability related skills	Faculty Data	▲	▲	■	▲	▼	▲	■	Ranking
Support during practical placement phase	Student survey				▼	▼	▼	▼	No ranking possible
Links between theory and practice	Student survey				▼	▼	▼	▼	No ranking possible

Descriptors:

Special modules regarding the labour market:

- Share of compulsory, free choice, voluntary modules and modules offered by external partners.

6.2.8 Dimension: Overall Assessment

Originally the idea was to have an overall assessment of the teaching and learning experience by students and only one indicator on the reputation of Albanian higher education institutions based on the survey among professors. As the student satisfaction indicator turned out to be not feasible, we distinguished the view of the professors by three categories: reputation in research, reputation in teaching and learning and reputation with regard to the facilities of institutions.

Table 15: Overview Dimension Overall assessment

Indicator	Data source	Relevance	Validity	Reliability	Feasibility				Presentation of results
					Business	Social Sci.	Law	Nursing	
Overall Assessment									
Reputation in Education	Professor Survey	▲	▲	▲	▲	▲	▲	▼	Ranking (top faculties only)
Reputation in Research	Professor Survey	▲	▲	▲	▲	▲	▲	▼	Ranking (top faculties only)
Best facilities	Professor Survey	▲	▲	▲	▲	▲	▲	▼	Ranking (top faculties only)
Overall study situation	Student survey	▲	▲	▼	▼	▼	▼	▼	No ranking possible

Generally all three indicators are feasible; only in nursing the number of respondents in the professor survey was too low to calculate any indicators out of it.

Similar to the indicator on best research publications those three indicators can include the University of Tirana as professors were asked to list only institutions they are not employed at. We think this is important to contextualize the results of a ranking when the biggest university of the country did not participate.

6.3 Results of Ranking Albanian universities

Due to the reason that no information from the student survey can be used for creating a ranking, the results are based on the outcome of the institutional and faculty questionnaires and the Professors survey. The selection of indicators was made on the bases of the feasibility analysis per field.

It is necessary to point out again that the largest university of Albania, the University of Tirana, did not participate in the project. At the same time the University of Tirana was named by most of the professors regarding the best research university, teaching university and the university with best facilities in their field. The faculties from University of Tirana scored as top performers for these indicators.

We strongly suggest that any communication of the ranking results should reflect this by pointing out that the ranking is a relative ranking among those universities participating in the pilot exercise while the most important public university of the country, which is regarded as the best national university among the professors of other institutions, too, is missing. Additional effort should be taken to include the University of Tirana in future rankings.

In the following section the results are presented by field. As the pilot study included only four fields any publication should refrain from attempts to aggregate results to the institutional level (“the best universities”).

Legend:

▲ Top - group

■ Middle-group

▼ Low-group

6.3.1 Business studies/economics

In Business most of the data can be used to create a ranking. In this field a sufficient number of faculties participated in the survey and also a high number of professors answered the questionnaires. The groups are calculated with inclusion of the Branches, but these Branches were deleted within this publication.

Table 16: Ranking Business

Name of the University	Qualification of staff	Square Meters per student	Student-Staff-ratio	Employability Indicator *	International orientation *	Graduates in norm period	Special Teaching issues *	Teaching hours	Quality Indicator teaching*	Best research publications	Research activity *	Reputation in Research	Reputation in Education	Best Facilities
Universiteti "Aleksandër Moisiu" Durrës	▼	▲	▲	■	■	▼	▼	■	■	▲		▲	▲	
Universiteti "Aleksandër Xhuvani", Elbasan	▼	▼	▼	■	■		▼	■	▼					
SHLUP "Universiteti Amerikan i Tiranës	▲	■	▲	■	■	▲	▲	▲	■					
Universiteti Bujqësor i Tiranës	■	■	▼	■	■	■	■	■	■	▲		▲	▲	▲
SHLUP "Epoka"	▲	■	■	■	▲		▼	▲	▲		▲			
Universiteti "Eqerem Çabej" Gjirokastër	■	■	■	■	▼	▲	▼	■	■					
SHLUP "Universiteti Europian i Tiranës"	■	■		▲	■	▲	■	■	■			▲	▲	▲
Universiteti "Fan S. Noli", Korçë	■	▼		▼	■	■	▲	■	▼		▲			
Universiteti “Ismail Qemali“, Vlorë	▼		■	▼	■		▼	■	■					
SHLUP "Universiteti Kristal"	■	■		■	■	■	▲	▲	■					
SHLUP "Logos"	▲	■		▼	▼		■		▼					
Universiteti "Luigj Gurakuqi“, Shkodër	■	▼	■	■	▲	▼	▼	▼	■					
SHLUP "Universiteti Marin Barleti"	■	▲	■	■	▲	■	■		▲					
SHLUP "Shkolla e Lartë Ndërkombëtare e Tiranës"	▼	■	▲	■	■		■	▲	■					
SHLUP "University of New York-Tirana"	▲		▼	■	▲	■		▲	■		▲	▲	▲	▲
SHLUP "Pavarësia“ Vlorë	▼	▲	■	▲	■		■	▲	■	▲				
SHLUP "Sevasti dhe Parashqevi Qiriazi"	▼	▲	■	■	■	■	▼	■	▲					
SHLUP "Albanian University"	▼	▼		■	■	▼	▼	■	■	▲				
SHLUP "Zoja e Këshillit të Mirë"	▲	■	▲	■	■	■	■	■	■					

* = Rating Indicator

Those results show that universities score different on the various indicators. There is neither a university who scores top on all indicators nor is there a university ranked into the bottom group on all indicators. This is an empirical proof of the necessity of multi-dimensional rankings. The calculation of an overall composite indicator would have blurred those differences in profiles.

6.3.2 Law

In law 15 faculties delivered data, which means that participation is sufficient to produce a ranking. Compared to business studies/economics the scope of indicators is more limited. The branches (filiali) were included in data collection and the calculation of groups but are not included in the publication of results. In Law the indicators “Square meters per student” and “Graduates in norm period” could not be calculated, due to the small numbers of faculties that delivered data regarding these aspects.

Table 17: Ranking Law

Name of the University	Qualification of staff	Student-Staff-ratio	Employability Indicator *	International orientation *	Special Teaching issues *	Quality Indicator *	Best research publications	Research activity *	Reputation in Research	Reputation in Education	Best Facilities
SHLUP "Universiteti Amerikan i Tiranës	■	▲	■	■	■	■					
SHLUP "Universiteti Europian i Tiranës"	▲	■	■	■	■	▲	▲		▲	▲	▲
SHLUP "Illyria"	■	▲	■	▼	▼	▼					
Universiteti “Ismail Qemali“, Vlorë	▼	▼	▼	■	■	▼					
SHLUP “Justicia”	▲	■	■	■	■	▲					
SHLUP "Justiniani I"	▲	■	■	■	■	■		▲			
SHLUP "Universiteti Kristal"	▼	▼	■	■	■	■					
SHLUP "Universiteti Kristal", filiali Fier	■	▲	■	■	■	■					
SHLUP "Luarasi"	■	■	■	■	▼	■			▲	▲	
Universiteti "Luigj Gurakuqi“, Shkodër	▼	■	■	■	▼	▲		▲			
SHLUP "Universiteti Marin Barleti"	■	■	■	■	■	■			▲		▲
SHLUP "Shkolla e Lartë Ndërkombëtare e Tiranës"	▼	■	▲	■	■	■					
SHLUP "University of New York-Tirana"	▼	■	■	▲	■	■			▲	▲	▲
SHLUP "Sevasti dhe Parashqevi Qiriazi"	▼	▲	■	▼	■	■					
SHLUP "Wisdom University"	▲		■	■	■	■	▲				

* = Rating Indicator

6.3.3 Nursing

In Nursing 14 faculties participated in the project. This number is just sufficient to create a ranking. According to the data situation the number of indicators is limited. Response in the professor survey was not sufficient to apply in the respective indicators. The branches (filiali) were included in data collection and the calculation of groups but are not included in the publication of results. In Nursing it was not possible to calculate all Indicators, especially those belonging to the professor survey were not possible, but also the “Graduates in norm period”.

Table 18: Ranking Nursing

Name of the University	Qualification of staff	Square Meters per student	Student-Staff-ratio	Employability Indicator *	International orientation *	Special Teaching issues *	Quality Indicator *
Universiteti "Aleksandër Moisiu" Durrës	▼	▼	■	■	■	▼	■
Universiteti "Aleksandër Xhuvani", Elbasan	▼			■	▼		■
SHLUP "Universiteti Amerikan i Tiranës	■	▲	■	■	■	▲	▲
Universiteti "Eqerem Çabej" Gjirokastër	■	■	▼	■	▼	▼	▼
Universiteti "Fan S. Noli", Korçë	▼	■	▼	■	■	▲	■
Universiteti “Ismail Qemali“, Vlorë	▼	▼		■	■	■	■
SHLUP "Universiteti Kristal"	■	■	■	■	■	■	▲
Universiteti "Luigj Gurakuqi“, Shkodër	■	▼	■	■	■	■	▼
SHLUP "Medikadent"	▲	▲	▲	■	■	■	■
SHLUP "Nëna Mbretëreshë Geraldinë	▲	■	■	■	▼	■	■
SHLUP "Universiteti Planetar i Tiranës"	▲	■	▲	▲	■	■	■
SHLUP "Zoja e Këshillit të Mirë"	▼	▲		▼	▲	■	■

* = Rating Indicator

6.3.4 Social Sciences

Due to the small number of participating (only ten) institutions and programmes it is not possible to create a ranking. The information given by the professors could be used to highlight the best performing faculties with regard to education, research and facilities, also to highlight those faculties with best researchers/publications and highest level of research activities. To make sure that some more information can be offered to prospective students the top performing faculties regarding the rating-indicators: employability, international orientation of programmes and special teaching issues have been included in the following table. However we do not think that a further distinction of middle and bottom beyond the mentioning of the top performers is supported by the data situation. In order to keep high methodological standards and to provide only valid and reliable information we cannot support the publication of a full ranking of social sciences.

Table 19: Ranking Social Sciences

Name of the University	Employability Indicator *	International orientation *	Special Teaching issues *	Best research publications	Research activity *	Reputation in Research	Reputation in Education	Best Facilities
Universiteti "Aleksandër Xhuvani", Elbasan	▲				▲			
SHLUP "Universiteti Europian i Tiranës"		▲		▲		▲	▲	▲
Universiteti "Fan S. Noli", Korçë								
SHLUP "Illyria"								
SHLUP "Universiteti Kristal"								
SHLUP "Universiteti Marin Barleti"				▲				
SHLUP "University of New York-Tirana"		▲			▲	▲	▲	▲
SHLUP "Universiteti Planetar i Tiranës"			▲					
SHLUP "ALBANIAN University"	▲							▲

* = Rating Indicator

6.4 General outcomes and publication

The credibility and trustworthiness of any ranking depends on the relevance and methodological quality (validity, reliability, feasibility) of its indicators. This project was the first attempt to develop a system of indicators for Albanian higher education. Early consultations with the Ministry, APAAL and stakeholders showed that the system could not rely on existing verified data sets. The set of indicators, decisions about data sources and instruments to collect data had to be developed from scratch. The reference to CHE ranking allowed referring to a proven and established system. Yet the concept had to be specific for the Albanian higher education system.

The pilot study has shown that not all data sources turned out to be feasible. In particular the student survey cannot be used for a ranking as the students' responses were not open and frank assessments of their university but rather stimulated by the wish to present their institution as positive as possible. The other data sources, general data on institutions, field based data on faculties/departments and the survey among professors, in general produced valid and reliable data. Yet a number of indicators were not feasible: For a number of indicators only a minority of institutions could provide the necessary data; in some cases data were not consistent enough to calculate a really comparable indicator. Based on this analysis of feasibility we defined – for each field - a set of indicators we believe to be of sufficient quality to be used in a ranking. Some of the indicators which turned out to be not feasible in this pilot study should not be considered in future rankings, but others could be integrated again in a later stage, putting more effort into data collection and cleaning and convincing more institutions to take part.

Very positive is that some indicators represent concepts that are very specific for the Albanian situation, especially taking into account the stage of development of research and the situation of a small country.

For some indicators it was possible to create a ranking with the grouping approach; for others we decided to make just "top performance" transparent without further differentiation in middle and bottom groups. This is still an informative concept. Furthermore we are able to show non-ranked information which is relevant for student decisions.

The majority of indicators reflect a *ranking* approach, comparing the performance of universities in relation to the top performing institutions. This is the normal procedure in ranking, no matter if they apply a league table or a rank group approach. Those indicators cannot tell much about the performance of the whole system as one quarter of the universities automatically are ranked bottom and top according to the grouping method. Following recent developments in CHE ranking we introduced a new kind of indicators that follow a *rating* approach. Here universities are compared against pre-defined standards (e.g. with regard to international orientation); the size of groups is not pre-defined then. If many institutions perform well in the indicator many will be ranked top.

In general the participation of institutions was far from being complete in all fields. This is not too surprising for a first ranking exercise in a country. In business studies/economics, law and – with some limitations – in nursing participation is sufficient to publish a ranking; in social sciences participation is below a meaningful threshold for a ranking. Here any publication should be limited to a listing of those institutions that performed particularly well – without a ranking in the lower tiers.

A major problem with regard to the coverage and hence informative value was the non-participation of the University of Tirana which is – in size and, as the results of the professors' survey indicate – the most important university in the country. Any publication should make this limitation of the ranking explicit! With regard to the non-complete participation the universities performing best in the pilot exercise are the best *among the sample of participating institutions*. The pilot ranking does not allow a generalisation that they are the best institutions in the country.

6.4.1 Print publishing

For the first Albanian ranking with a limited scope of institutions, fields and indicators it is not necessary to create a web tool. As a first step the publication of the results in tables seems to be sufficient. A print publication should include the ranking tables (see chapter 6.3.). CHE proposes to use an alphabetic order of institutions for printed tables in order not to introduce a hierarchy of indicators which is opposing the multi.-dimensional character of the ranking.

Depending on the planned volume of the print publication overview tables/sheets for individual institutions could be published, too (see as an example appendix 8.3). With this information a prospective student gets all available information o a particular institution at a glance.

One of the major purposes of the Albanian ranking is to inform prospective students and help them to make an informed choice. Prospective students are "lay" users of rankings. They do not have much knowledge and background information on higher education. *They need information about the use of the ranking and an explanation of indicators.*

6.4.2 Online publication

As already outlined, it is not necessary in our view to create a web tool for the publication of the pilot ranking as the effort and costs are high. For future ranking exercises it has to be kept in mind that publishing some information online reaches a broad target group.

There are a number of options for online publication:

Most common is the webpage. This kind of online publishing should also be the first choice in the Albanian Ranking project. Here statistic tables with selected indicators can be described. As example see: http://ranking.zeit.de/che2011/en/rankingkompakt?esb=24&ab=3&hstyp=1

It is easy to implement a website with an engaging look and feel, what would also be helpful for the future of the Ranking in Albania. As addition this static website should offer background information about the project, at least the first abstract of the report, to explain the project process to the stakeholder and other interested persons.

As variation of the static website, a dynamic website has to be mentioned. The most important difference between a static and a dynamic website is the high technical complexity that comes along with the dynamic sites. The CHE-Ranking bases on a dynamic site that allows the target groups to create an on-time personalized ranking. At the moment it is not necessary for the Albanian Ranking to create such a tool, due to the small number of participants.

With regard to web 2.0 two additional possibilities should be mentioned:

Wiki: It is very easy to show the profile of each participating Higher Education Institution and to give useful extra information (e.g. about accreditation)

Facebook: Also Facebook, as one of the biggest social networks worldwide gives the possibility to publish the results on an own site. The implementation is easy and not too complex, but the scope is limited.

7 Suggestions for a future ranking of Albanian universities

This project was about developing and testing the concept of a ranking of Albanian higher education institutions. From the beginning the ranking which was developed and tested in the project was thought to be the bases for an ongoing Albanian ranking system which would be extended to a broader range of fields.

7.1 Concept and indicators

- The field based and multi-dimensional approach proved to be fruitful for Albania, too, and should be continued.
- A league table approach is not a useful approach to rankings any way. With regard to the data situation in particular, the construction of ranking groups instead of a league table is highly recommended.
- The set of indicators which came out of the pilot project are a good base for future rankings. The set of indicators has to be adapted to new fields. Consultation with stakeholders from the fields is vital for the acceptance and quality of the ranking.
- In our view the majority of indicators (~ 90 %) are meaningful for all fields. In addition the ranking should include specific indicators relevant to particular fields (as e.g. indicators on bedside teaching in medicine, laboratories in engineering and experimental fields).
- CHE is willing to offer consulting on the further development of indicators in line with European developments.

7.2 Data collection

- The process of data collection was adapted to the realities of higher education in Albania. Important measures were personal visits at all institutions to present data collection and institutional questionnaires. We suggest keeping this process – which is feasible for a small country - at least for the next one or two rankings until institutions are more familiar with the system.
- The collection of general and field based data from institutions worked sufficiently well in the pilot study. Nevertheless experience from the pilot study shows that the process of checking and verifying the data is highly important. We strongly recommend including a feedback loop in the collection of self-reported data before calculating indicators. This feedback loop should include a careful first check of the

questionnaires returned by the institutions and a round of questions *to* the institutions to clarify and eventually correct their data. It has to be ensured, that the data given by the faculties is valid if doubts in the validity of data occur they should ironed out in co-operation with the faculty.

- The staff structure in Albanian higher education, which is not easily understandable to foreign observers, is a challenge for rankings that have to make an exact attribution of staff to a particular university. While the cross-checks of data on institutional affiliation did not reveal major problems; the data on work load/working hours – and hence any attempt to define full-time equivalents – were highly problematic. Exact numbers which could be used as a denominator to control indicators for size of institutions could not be calculated on this base.
- The pilot project showed that a student survey cannot be used in the Albanian context at the moment. We propose to make a small pilot survey using different instruments focusing more on aspects of student engagement (as e.g. in the US survey on student engagement) and actual study practices than on an assessment of their own institution. In addition a profile of faculties from a students' perspective could be developed with students ranking different aspects (as e.g. contact to teachers, employability issues, international orientation, and quality of classes) without assessing their own institution against any scale.
- In addition we suggest to attempt to conduct surveys among graduates. As we cannot foresee if they will produce better information than the student survey we propose to start with a pilot in one or two selected fields, depending on the availability of graduate addresses.CHE can provide a basic questionnaire which could be adapted to the Albanian context. In addition a survey among employers could be tested – in fields with a defined labour market and a clear idea about who the relevant employers in those fields are.
- The value of rankings depends on the degree of coverage of the system they want to measure. The Ministry as well as APAAL should take initiative to extend the participation of institutions. With regard to its standing in the Albanian higher education system the participation of the University of Tirana is highly relevant to ensure the relevance of the ranking.

7.3 Publication

- As outlined above ranking results should be published both in print or web-based. Each form of presentation has to deliver an explanation of the concept and the indicators in addition to the mere results.
- With regard to the sustainable implementation of the ranking cooperation with a media partner is possible and could contribute to the funding of the ranking and to the awareness regarding the results. Such a cooperation should be based on a clear agreement about competencies of both partners and on the way the results can/have to be published (e.g. no league tables, no aggregation of results into a composite overall score, not aggregation across fields – media partners are usually interested in very simple information).
- Web based publication has the advantage that it can provide interactive features to look onto the results. Interactive, web based publication is the logical way to publish multi-dimensional rankings. They do not only allow for a sorting of fixed tables by

different indicators but offer the possibility to integrate a personalized ranking in which the users can select the indicators according to their own preferences and priorities. This becomes more important with increasing numbers of indicators. With regard to prospective students as the main target group of the ranking the complexity of the ways to present the results has to be adapted to their level of understanding. Guidance for users how to use the ranking are important.

Creating (and testing!) a really interactive web based ranking needs time and resources. This should not be underestimated.

- Students are not the only users of rankings. Rankings can provide benchmarking information for the higher education institution involved. The provision of overview and detailed analysis of data to participating institutions in addition to the published results can be an incentive to participate and can help to ensure the acceptance of the ranking among universities.
- Universities should be informed about their results (one or two days) before publication. Media will contact universities and ask question as soon as the results are public. Universities should have an opportunity to prepare for media questions as well as to prepare their own public relation activities regarding their ranking results.

7.4 Sustainable implementation of an Albanian ranking

- Experience from the pilot study shows that the ranking should be run independently from the Ministry or any individual higher education institutions included in the ranking. The creation of a unit within APAAL clearly separated from the accreditation part of APAAL and free from government intervention is an adequate solution.
- The implementation of a sustainable national ranking system in Albania needs a special organisation resp. a special unit in an existing organisation with sufficient manpower and knowhow to run the ranking and to develop it further continuously. If the ranking will be conducted by the accreditation agency the separation of ranking and accreditation is particular important; any impression of a mixture of both instruments by universities can damage either of the systems.
- With respect to the size of the Albanian higher education system CHE estimates that such a unit has to entail at least 2 ½ to 3 full time equivalent staff members (1 senior and 1 ½ to 2 junior) depending on the extent to which IT tasks (e.g. programming of questionnaires) are done internally or outsourced.
- We strongly recommend the establishment of an advisory board which should be composed by members representing different stakeholders:
    - representatives of public universities and private institutions,
    - representatives of national student organisations,
    - representatives of national employer/recruiter organisations,
    - representatives of the fields included (deans, field related academic and professional organisations): The field representatives could alternate annually according to the cycle of including and updating different fields in the ranking, and,
    - If available, experts in evaluating and indicator methodology.

  The board should bring in its expertise both in the phase of conceptualising the ranking (adapting the set of indicators to fields and new developments in higher

education) and shortly before publication to discuss results with regard to plausibility and publication.

It is important to emphasize that in the end the organisation which is doing the ranking has to make all decisions and has to be accountable for the ranking. This cannot be delegated to an advisory board.

- With regard to the demand for resources we suggest to extend the ranking to other fields gradually. Based on our experience from both national and international experience we suggest introducing a cycle of three to four years to repeat and update the ranking for individual fields. Accordingly one to two groups of fields (as e.g. humanities, engineering) should be included resp. in one year.
- The selection of fields should be based
    - first, on a sufficient number of institutions offering programmes in that field (we suggest a minimum number of 15, better 20 institutions/campuses),and,
    - second, a minimum number of students studying that field.

8 References

Brennan, J., L. C. J. Goedegebuure, et al. (1992). *Towards a methodology for comparative quality assessment in European higher education: A pilot study on economics in Germany, the Netherlands and the United Kingdom.* London/Enschede/Hannover, CNAA/CHEPS/HIS.

Brown, R. (2006). "League tables – do we have to live with them?" *Perspectives* **10**(2): 33-38.

Cremonini, L., D. F. Westerheijden, et al. (2008). "Disseminating the Right Information to the Right Audience: Cultural Determinants in the Use (and Misuse) of Rankings." *Higher Education* **55**: 373-385.

Dill, D. D. (2006). *Convergence and Diversity: The Role and Influence of University Rankings*. CHER 19th Annual Research Conference, Kassel.

Dill, D. D. and M. Soo (2005). "Academic Quality, League Tables, and Public Policy: A Cross-National Analysis of University Ranking Systems." *Higher Education* **49**: 495-533.

Federkeil, G. (2002). The CHE-/Stern- ranking. . *International roundtable on statistical indicators for the quality assessment of higher/tertiary education institutions.* Warsaw.

Federkeil, G. (2006). "Rankings and Quality Assurance in Higher Education." *Higher Education in Europe* **33**: 209-218.

Federkeil, G. (2009). Reputation indicators in rankings of higher education institutions. *University rankings, diversity and the new landscape of higher education*. B. M. Kehm and B. Stensaker. Rotterdam

Hazelkorn, E. (2011): Rankings and the Reshaping of Higher Education: The Battle for World-Class Excellence, London

Sadlak, J. and N. C. Liu, Eds. (2007). *The world-class university and ranking: Aiming beyond status.* Bucharest; Shanghai; Cluj-Napoca.

Salmi, J. (2009). *The Challenge of Establishing World-Class Universities*. Washington, D.C., World Bank.

Usher, A. and M. Savino (2006). A world of difference: A global survey of university league tables. Toronto, Educational Policy Institute**:** 64.

van der Wende, M. and D. Westerheijden (2009). Rankings and Classifications: The Need for a Multidimensional Approach. *Mapping the Higher Education Landscape: Towards a European Classification of Higher Education*. F. van Vught. Dordrecht etc., Springer**:** 71-86.

Van Dyke, N. (2005). "Twenty Years of University Report Cards." *Higher Education in Europe* **30**(2): 103-125.

van Raan, A. F. J. (2005). "Fatal attraction: Conceptual and methodological problems in the ranking of universities by bibliometric methods." *Scientometrics* **62**(1): 133-143.