#### CHEPS Center for Higher Education Policy Studies Seminar Higher Education Ranking in European Perspective

#### **Amersfoort**

#### **2. December 2005**

### [Folie 1]

Ladies and Gentlemen,

At first let me thank for Invitation me and CHE-Staff to present CHE-UniversityRanking to the Dutch Community.

Today, throughout Europe and the world, we find a number of different kinds of university rankings with different methodologies, scopes and target groups and – I am sorry to say so – of different quality!

In order to satisfy the variety of needs and expectations, rankings imperatively must be based on a scientifically founded methodology. Validity and reliability of data are indispensable for serious and honest rankings that merit to be published and consulted. That's why I am particularly happy to have been invited to this workshop to present you, what we did.

I will first briefly present the institution I come from, because this is part of the – as I mean – success-story. I will then proceed to describing our ranking of –meanwhile- Austrian, German and Swiss universities in its uniqueness by pointing out 1<sup>st</sup> the *basic methodological principles*, 2<sup>nd</sup> some *facts* and how it works in the internet (that will be done by Gero Federkeil), and 3<sup>th</sup> the *effects* we have been able to observe up to now.

# [Folie 2]

Let me start with the CHE: The Center for Higher Education Development was founded in May 1994 by the German Rectors'

Conference and the Bertelsmann Foundation. The Center's purpose is to initiate and to assist reform in Germany's institutions of Higher Education. The CHE defines itself as a "think tank" and consulting group for Higher Education. As a non-profit institution, the CHE formulates nonpartisan political objectives, develops integrated concepts, and explores through pilot projects existing options for future development in close cooperation with academic and government institutions. Important is, that the Center is part of the university system and highly connected with the German Rectors Conference, but it has on the other hand a highly independent status.

Creating transparency about German universities by means of a ranking was one of the major founding tasks of the CHE. The first ranking was published in 1998, since 1999 we published it in cooperation with the big German magazine "stern" and since this year with the wellknown weekly newspaper DIE ZEIT. The CHE-HochschulRanking seems to be unique worldwide in terms of scope, approach and methodology – *[Folie 3]* and as Francois Tavernas stated in a report for the EUA may be probably the best model in the world.

This is the case for the following reasons, which I will call CHEmethodological principles that distinguish CHE-Ranking from many other ranking approaches:

# [Folie 4]

# 1. Comparison of disciplines, not Universities

The main target group of rankings are school leavers respectively university entrants. They decide for a specific subject or program at a university, not so much for a university as such. Therefore the ranking does not rank whole universities, but strictly refers to single subjects. This approach is supported by the theoretical argument that universities comprising many disciplines and programs are far too complex to be ranked as a unit. In addition empirical evidence

suggests that there are great differences in performance between different subjects within a university. A university may be ranked high in physics and at the same time ranked very low in literature. The information, that this university is ranked in the middle, which inevitably will be the result of ranking the whole university, would not have any relevance to a freshman in physics. [klick] For this reason, we only rank single subjects or subject areas, as you can see on the screenshot from the English version of the internet. This means that we only compare physics at University A to physics at university B, but we do not compare university A as a whole to university B as a whole. We believe that this principle takes into account the variety we encounter at our universities and which in most cases do not form a coherent picture. So - the 'subject' is the unity we rank. [Folie 5] We started in 1998 with Economics, Business Management and Chemistry. Every year after other disciplines followed. [klick] Since 2002 we organized a three-yearcycle, [klick] so economics and business management has been ranked meanwhile threetimes in this year. Just now we are analysing sciences and medicine for the third time. [klick] In total we are all three years actualizing 35 disziplines for more than 75 % of all students in [klick] 260 universities, more than 4.000 study programs and nearly 200.000 single datas.

# [Folie 6]

#### 2. Time series

That means, following the same methodology every year there are institutions going up and others coming down, as can be seen at the screenshot for physics.

# [Folie 7]

### 3. No league table but rank groups

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 the entities ranked. This inevitably involves the danger to misinterpret small differences in the numeric value of an indicator in terms of differences in performance or in quality. For example in the 2001

edition of the U.S. News & World Report ranking of national universities the difference between the rank 13 and rank 22 is only 6 on a 100 point scale. In many cases, data are not precise enough 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. Instead the CHE-ranking orders universities in three groups: [klick] The best universities are ranked into the top group with the color green, the worst into the bottom group with red color and the rest is considered to be intermediate yellow colored, [klick] which can be seen in the screenshot for five selected indicators. Grey points mean: no data. In all our publications, within one group universities are ordered alphabetically.

## [Folie 8]

#### 4. No overall score but multidimensional ranking

Moreover even within a single subject, the CHE-ranking does not calculate an overall value out of single (weighted) indicators. According to many research work, there is neither a theoretical nor an empirical basis for such weighting procedures. With regard to the orientation towards the students as our main target group as well with regard of the labor market we have to consider the heterogeneity of decision preferences within the target group. Some students are looking for a university with high research activities (as measures 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 an overall score is to patronise the target group.

Calculating an overall score furthermore ignores the fact that also within a single subject universities have different profiles and have specific strengths and weaknesses as I showed you in the last screenshot that will be overlooked by an overall score. That is why we opted for a multidimensional ranking: We collect a great number of indicators which we rank separately one from an other in order to give a realistic and differentiated impression of programs and courses. So we leave the decision about the relevance of an

indicator to the user's individual preference. The internet with its interactive features offered us new opportunities for individual choices: **[klick]** In the CHE-ranking users can make their own personal ranking by choosing and weighting indicators by their own. We call it "My Ranking".

And by the way: The results of all our rankings and all the data that we have analysed are completely free accessible for everybody in the internet.

## [Folie 9]

#### 5. International

CHE-Ranking started national and is now internationalizing, in 2005 with **[klick]** Austria and Switzerland. The reasons are clear: In the context of the Bologna-process, student mobility within Europe is growing and will probably grow further within the next years. Accordingly information for students about programs in an international perspective will become more important.

## [Folie 10]

The internationalization strategy is determined by two goals: [klick]

First, the ranking should reach a high acceptance within the higher education system and within single universities of the respective countries.

**[klick]** Second, the comparative ranking must - in its methodology and the choice of indicators — take into account specific characteristics of the higher education systems and academic culture of the other countries. Otherwise the comparison will not be able to produce valid information on those countries. E.g. we have to check carefully the availability of adequate data bases for comparative bibliometric analysis in order to avoid biases disadvantaging a country.

To reach both goals, the CHE is co-operating with qualified

partners in Austria and Switzerland having profound knowledge of the HE system of their country and the CHE puts stress on a strong commitment to the ranking by the national universities associations.

### [Folie 11]

Furthermore we started slowly carrying out also unpublished pilotprojects to learn from the data.

## [Folie 12]

The aim is to establisch a European ranking of universities. As a next step to further internationalization would be the inclusion of universities in other European countries like the Netherlands, Denmark, Belgium or Luxemburg. But in any case we propose to follow the CHE-principles with

ranking disciplines not universities,

multi-dimensional

and presenting rank groups instead of league table positions.

## [Folie 13]

#### Communication

Let me add some remarks on the communication strategy, we have with our media-partner DIE ZEIT. In a contract is laid down, that CHE is responsible for methodology, selection of indicators, choosing the subjects and so on, that mean all content work is made by us and cannot be influenced by DIE ZEIT. DIE ZEIT is only distributor of the informations we are responsible for.

**[klick]** The results of our ranking are published in at least three different ways: **[klick]** A regular issue of the DIE ZEIT, usually in April/May, dedicates its title-story to the publication of the new ranking. Beside some general information on the programme and the ranked subjects,

the article presents selected results of the ranking in a more aggregate way. [klick] This regular edition of DIE ZEIT is accompanied by a special issue, called "Studienführer", which contains the so-called "Ranking kompakt", i.e. ranking results for five selected and telling indicators. [klick] Finally the ranking-website (www.che-ranking.de) provides the entire available data, which can be selected according to various means of access. And that's it, what Gero Federkeil will show you now in an interactive session at the internet.

### [Internet].

### **Effects and Impacts**

So far for the concept and the realisation of the ranking. But what effects and impact does it have?

[Folie 14] First of all I will show you the page impressions on the german internet sites during the last years, starting with an amount of less than 300.000 up to nearly 12 Mio in 2004. These are tremendous results as all our media partners told us. [Folie 15] The international dimension of the English version is as well impressive. The DAAD told us, that the ranking sites are more popular than the data bank for student's funding.

[Folie 16] The effects of our ranking on students are quite considerable: According to survey data, not made by us, but by HIS in 2004/5 more than 60 % used rankings for information, nearly 50 % said rankings are useful information and more than 50 % of students know the CHE-Ranking. Using rankings by 60 % is doubling the value since the year 2000, when only 30 % used rankings. So our ranking helped to make people become aware of the differences in the quality of teaching and research and demolish the myth of all universities are equal.

**[Folie 17]** A good example of effects can be shown for psychology and medicine: universities with good rankings results got significant more applicants – we can count that in psychology and medicine, because these students are administered by the ZVS, while the effect on the other side is not so strong

### [Folie 18]

On the institutional level **[klick]** we observe that universities and departments take the ranking as a starting-point for the analysis of their strengths and weaknesses. In this context we offer more detailed analysis of the student survey for single departments.

### [Folie 19]

The following slides shows the number of requests for detailed results. This year nearly 250 departments up to now asked us for detailed informations on the student survey, a strongly increased number. Furthermore the group of Bavarian universities asked for detailed results in chemistry for benchmarking-purposes, the University of Bielefeld started together with us a profile-comparison between itself and other universities. I will show you some example of diagrams, which have been developed.

## [Folie 20]

Bar sheet

## [Folie 21]

Spin net, with the different universities, having strength and weaknesses

## [Folie 22]

Last point to the institutional level. In 2005 the DAAD carried out a survey, asking university-leaders and representatives for the effects of the CHE-Ranking. That's what the answered.

## [Folie 23]

# [Folie 24]

Last but not least the reaction of the labor market. **[klick]** First of all: staff manager use the ranking for recruiting purposes. So Andreas Hilbich explicitly emphasizes that they use CHE-Ranking for recruiting.

That has been a short overview on CHE-Ranking, Principles, Methodology, Result and Effects.

Thank you for your attention.