Letting the students decide what is important

- A ranking of 24 Swedish business programs on bachelor level

Abstract

Since the publishing of the first university ranking by USNWR in 1983, there has been a rapid growth in the number of university rankings and today, these rankings are a common phenomenon in the world of higher education. However, many of the existing rankings fail to inform the target group made up by students to the extent they possibly could. Moreover, the increase of university rankings has yet to reach Sweden to the same extent as in the Anglo-Saxon part of the world and there have been very few rankings made with a student perspective on Swedish business educations. A need for rankings that are more relevant for this target group has therefore been identified. To contribute to addressing this gap, three studies were carried out with a total of 1451 bachelor students studying business and economics in Sweden, with the purpose of creating a ranking of Swedish business and economics educations. In total, 24 programs were ranked based on parameters judged as important by the target group. The results show that the two categories perceived as most central by Swedish business and economics students when evaluating educational quality are (i) course related activities and (ii) career outlooks and activities preparing the students for that career. Moreover, it was found that a ranking based on parameters that the students find important can provide new information and results that are not in line with results from previous rankings. The ranking also reveals that there are big variations among different educations with regards to amount of teaching hours given and exposure to potential employers.

Keywords: Business educations, Student perspective, Survey-based, University rankings

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1. Introduction

The aim with this initial chapter is to provide the reader with a better understanding of the phenomenon of university rankings. The purpose of the thesis and the expected research contribution as well as the delimitations of the thesis will be described.

1.1 Problem area

The first university ranking was published by the American news magazine U.S. News and World Report (USNWR) in 1983 (Roberts & Thompson, 2007). The purpose behind the publishing was to provide the main recipients made up by prospective students, universities, and graduate recruiters with a transparent and comparative set of data to use when evaluating different educational institutions (Usher & Savino, 2007). Since then, university rankings have grown rapidly and today university rankings are a well-known phenomenon in many parts of the world (Dill & Soo, 2005; Merisotis, 2002; Yorke, 1997). Students make up one of main target groups for rankings (Sarrico et al., 1997) and it has been shown that rankings reach the students, however it is unclear to which extent the rankings actually affect them (Hossler & Foley, 1995). Several scholars (Bowden, 2000; Dill, 2001; Jobbins, 2005; Van Dyke, 2005) argue that the reason for the limited usefulness of existing rankings is related to the design of the rankings and the lack of a student perspective in the rankings. This reasoning goes hand-in-hand with research (Dill, 2001) that shows that many rankings have an over-emphasis on objective sources from universities and third parties, and that rankings with a bigger focus on student surveys are demanded. Most scholars (Bowden, 2000; Usher & Savino, 2007; Yorke, 1997) agree that university rankings are something that is here to stay, but that there is much to be done in order to make the rankings more relevant for the students.

University rankings have not been present in Sweden for long, and there are today only a few recurring rankings¹. Thereto, there is today no ranking in Sweden that actively takes the perspective of the students and there is also a lack of rankings that compare educations on discipline level, instead most rankings compare whole universities against each other². Because university rankings are a fairly young occurrence there is also a shortage of research

¹ Among the more well-known rankings are *Urank* (started 2007), *Sydsvenska industri- och handelskammaren* (started 2006) and *Högskolekvalitet.se* (started 2006).

² Discipline level means that the ranking ranks educational programs or within a specific discipline while university rankings compare whole universities against each other.

done in the sector. Much of the academia written so far has been made up by criticism towards the design of the rankings and the lack of reliability and validity in many of the major rankings (Boulton, 2010; Brown, 2006; Rocki, 2005). What is concluded by the academia is that no ranking gives a perfect picture of an education but there are some best practices one how to avoid the biggest methodological flaws when composing a ranking (Locke, 2007).

The difficulties that existing rankings have had in affecting the students and the lack of rankings on discipline level in Sweden indicate that there is a need for more and better university rankings in Sweden. In order to contribute to addressing this need this thesis aims to create a survey-based ranking on discipline level in Sweden that takes on the perspective of business and economics students on bachelor level³.

1.1.1 Purpose

Based on the problems described above, the purpose of this thesis has been formulated as: *to create a ranking with a student perspective on Swedish business and economics educations on bachelor level*⁴.

1.2 Background

There has been a tremendous rise of university rankings and the interest for university rankings around the world in recent years. The rise has several explanations; the world in general is heading towards a society where there is an increased demand for measurement and comparison (Power, 1999) and this has also started to reach the academic world (Harvey & Knight, 1996). Thereto, Roberts and Thompson (2007) state that an increased availability of information and data to the public regarding research quality and educational options have lead to an increased "marketisation" of the higher education system. University studies is costly both monetary wise and time wise (Almgren, 2008) and today's prospective students can do more research about their options and therefore also demand more information, such as in the form of university rankings, to evaluate their opportunities (Hazelkorn, 2007). This development has also caught the interest from commercial actors, such as newspapers and magazines, which have discovered the potential income streams that the publishing of rankings can create (Von Bergen, 2011-02-04).

³ Business and economics students on bachelor level are from here on referred to only as "business students".

⁴⁴ Business and economics educations are here on also referred to as "business schools" or "business educations".

Guarino et al. (2005) state that university rankings fill an important purpose by supplying the public with information and that this creates a larger accountability for the higher education sector. However, many scholars have leveled criticism against rankings and the methods used when designing them (Almgren, 2008; Boulton, 2010; Brown, 2006; Rocki, 2005). Most rankings have their own unique combination and weighting of the different parameters and the subjectivity of the composition is one commonly used argument in the criticism against rankings (Clarke, 2002; Guarino et al., 2005; Marginson & Van der Wende, 2007). Other discussions are often related to the purpose of the rankings as well as the lack of transparency about the methodology and raw data used in the ranking (Florian, 2006; IREG, 2006). This criticism indicates that there is room for improvements to be done.

1.2.1 University rankings from a Swedish perspective

Arriving to Sweden about a decade ago, university rankings were by then seen as very controversial in Sweden, however the debate has since then changed and the government has now given its open support for more quality measurement in higher education (Sydsvenska industri- och handelskammaren, 2009). This development can be seen as an example of how the increased measurement within the society that Power (1999) discusses has reached the educational system. But despite this development, the phenomenon of university rankings is far from being as established in Sweden as in other parts of the world (Wedlin, 2011-02-01). Further, few of the Swedish rankings that exist today have actively taken the perspective of the students and there is also a lack of rankings made on discipline level. Rankings are in general accused for providing a rather narrow picture of the quality of a university, and it has been argued that a reader interested in a specific discipline such as business will not get much information about that specific discipline from a ranking made on university level (Almgren, 2008; Boulton, 2010; Bowden, 2000; Dill, 2001; HEFCE, 2008; Nyblom, 2008; Van Dyke, 2005). There has therefore been a demand for more rankings on discipline level. These rankings have traditionally been more common in countries where tuition fees are part of the academic system. Up until now, Sweden has not used a system of tuition fees in the educational system. However, from September 2011 all students from non-EU countries will be compelled to pay a tuition fee to study in Sweden (Studera.nu⁵, 2011-02-03). If the development follows other countries that already have tuition fees, this will result in an increased interest for the quality of the different higher education institutions in Sweden. Moreover, this development most certainly takes some of the attractiveness of

⁵ Studera.nu is the name of the collaboration between *The Swedish Agency for Higher Education Services* and *Swedish National Agency for Higher Education*

Swedish universities away for the students affected by the tuition fees. Such an effect have already been seen in that the *The Swedish Agency for Higher Education Services* (Verket för högskoleservice, 2011-02-16) have had a drop with 73 per cent in the number of applications to Master programs from non-EU citizens compared to 2010. Since an effect of this development should be that these students' incentives to evaluate potential educations increases, it is reasonable to believe that this development will lead to an increased importance of university ranking positions for Swedish universities that want to attract these students.

1.2.2 Rankings from a perspective of business students

There has been little research done on the interest for rankings from prospective business students in Sweden. However, what is known is that there are 25 bachelor programs with a business and economics focus and that this number has grown steadily since the late seventies. This has resulted in that nearly six times as many students (5785 students) graduated within the field in 2009 compared to 1978 (1038 students) (Högskoleverket, 2011-05-02)⁶. A reason to this growth that Veckans Affärer (2003) points out is the popularity of the subject combined with the fact that a business education is relatively cheap to "produce" for the schools. In 2003 when this article was written, the cost for educating a business student was on average 35 000 SEK per year while the same cost for an engineering student was more than the double (Veckans Affärer, 2003). However, after a finished education the business student should, in general, have as much student loans and have dedicated as many years for his/her studies as an engineering student. This illustrates that a prospective business student should have a strong motivation to have facts and information available regarding different parameters of an education, such as if there are schools that have more lectures or where the students quicker obtain a job, in order to take a wise and well-informed decision about where to study.

The reasoning above makes the authors believe that there is a special demand for more rankings on business schools in Sweden. In order to make it as precise as possible, given the time and the scope of this thesis, the authors have first chosen to investigate what parameters Swedish bachelor students within business find important to include in a ranking and thereafter also create a ranking. The target group for this thesis is thus prospective and

⁶ The number includes all graduates taken their bachelor, "magister" or master degree within the field of business and economics in 2009.

current bachelor students within the mentioned fields of studies and the focus in the thesis will be on the opinions and perceptions of these students.

1.3 Expected research contribution

This thesis aims to bring more knowledge to the subject of university rankings. The authors intend to give the reader a picture of why the rankings of today do not affect students to the same extent as to which the rankings actually seem to reach them. Further, the authors are going to provide the reader with information about what Swedish business students see as the most important parameters when evaluating their education. Lastly, a ranking that ranks 24 Swedish bachelor programs within business will be composed with a student perspective.

1.4 Delimitations

Within the scope of this thesis the authors aim to find which parameters Swedish business students on bachelor level find important when evaluating an education. Due to the scope of the thesis there is no focus on programs within other subjects of studies and neither on master programs within business and economics. The thesis will also have a focus on Sweden, in the way that that there will be no empirical study conducted on international schools or programs.

2. Theory

The aim with this theory chapter is to provide the reader with an understanding of the research area of university rankings. The theoretical background of the field as well as the main recipients and the criticism expressed against the rankings will be touched upon. The criticism is then exemplified, followed by best practices for creating rankings and a theory conclusion.

2.1 Background and overview of the ranking landscape

As mentioned above, the phenomenon of university rankings has only been around for less than 30 years and there has not been much academic research done in the field. There are today a rather limited number of researchers who have started to explore the sector and therefore, the topic lacks a broad academic foundation to lean on. Instead, the lion share of the material published has been in the form of "non-peer-reviewed" articles and reports, which have often been published by governmental stakeholders such as the *Swedish National Agency for Higher Education* or organizations such as *Organisation for Economic Co-operation and Development*. The strong interest for the evolvement of university rankings combined with the rather limited research done in the area indicates that there is a research gap to be filled.

More specifically, research has shown that existing rankings have been unable to inform students, who make up the target group of this thesis, well enough and that the rankings have not been able to reach out to broad groups of students. Therefore, there is a need for studies that identify the reasons behind these problems and rankings that, based on the reasons identified, succeed in better informing the students about the quality of the different educational options lying ahead of them (Jobbins, 2005). In relation to this, it has been found that surveys are the least frequently used source of information in previous rankings (Usher & Savino, 2007). Several scholars (Dill, 2001; Morrison et al., 1995; Usher & Savino, 2007; Van Dyke, 2005) therefore emphasize the need for more studies of what students find important when evaluating their educations and call for more rankings based on student surveys. A particular need for more studies in Sweden has been emphasized by Almgren (2008) who states that it has not at all been researched what Swedish students want from rankings and she argues that there is a need to investigate what students want to know about educations and educational institutions.

Based on this, there seems to be a research gap to be filled in the form of a lack of knowledge of why existing rankings fail to inform students well enough, as well as poor knowledge about what Swedish students find important when evaluating their educations. Increasing this knowledge could be the key to designing more useful university rankings.

In order to more specifically identify where the research gaps exist, the theory chapter is divided into three main sections which step by step try to identify the reasons to why rankings have not been able to inform students well enough and find a solution to how useful rankings can be designed. The authors start by going over the target groups of university rankings in order to provide a picture of the recipients and to understand the demands from these different groups. Thereafter, the main criticism towards university rankings is mapped out in order to identify the main flaws that exist in today's rankings according to theory. This criticism is also exemplified by discussing the critique that has been put forward against two of the most well-known university rankings. The third section of the theory chapter describes policy studies for how good rankings can be created. The theory chapter is rounded off by a theory discussion where the specific research gaps are identified in order to map out the way forward for the empirical studies carried out for this thesis.

2.2 Main recipients of university rankings

Research has identified three main recipient groups of university rankings (Merisotis, 2002; Sarrico et al., 1997; Taylor & Braddock, 2000; Yorke & Longden, 2005). The first group includes current and prospective students, the second group consists of the higher education institutions and the third group is made up by the wider society including governments and graduate recruiters.

The focus in this thesis will be on students since it has been showed that there is a need for more studies that identify the reasons to why existing rankings seem to have failed to affect students, as well as a need for more rankings based on the students' perspectives. However, the two other main recipients will also be touched upon below, in order to provide the reader with a more complete picture of the different demands for rankings.

2.2.1 The use of rankings by universities and graduate recruiters

The widespread use of university rankings by higher education institutions has been shown by Hazelkorn (2007) who found that 56 per cent of the institutions covered in her study had formal internal processes for reviewing their ranking positions. Further on, a majority of these institutions had taken strategic decisions based on these processes. Hazelkorn (2007) is supported by Roberts and Thompson (2007) who argue that the universities make up the stakeholder group that have been using rankings the most over time. Furthermore, the findings of both Kirp (2004) and Marginson & Van der Wende (2007) also point to that universities adjust to the most influential rankings such as the USNWR ranking. This can also be seen in that many schools, for example Stockholm School of Economics, also employ staff with the work assignment to improve the schools' positioning in rankings (Von Bergen, 2011-02-04). The impact of rankings on universities is also shown by the observation that rankings do not only affect the reputation and attractiveness of the university/institution in the eyes of prospective students but also in relation to companies and organizations to cooperate with (Gunnarsson, 2010). Robertson & Olds (2008) even found that university rankings affect the British universities' possibilities to lend money, since credit rating institutes such as Standard & Poor use rankings when evaluating the universities' creditworthiness.

When it comes to the demand for university rankings from graduate recruiters, Morley & Aynsley (2007) found that 25 per cent of graduate recruiters use university rankings as their main source of information about quality of higher education institutions. The use of rankings by graduate recruiters have also been demonstrated in a report by *Higher Education Funding Council for England* (HEFCE) published in 2008. In the report, it is stated that university rankings make up one of the main sources for the reputation of universities as seen by graduate recruiters and that 80 per cent of these recruiters said that the institutions' overall reputation was the base for their evaluation of quality of universities.

2.2.2 The use of rankings by students and the effect on decisions of where to study

The interest for university rankings among students has been shown by several researchers. McDonough (1998) found that around 40 per cent of the American students read the newsmagazine rankings. Monks & Ehrenberg (1999) also discovered a correlation between on the one hand a selective admission ratio and higher tuition fees and on the other hand the university's position in the USNWR ranking. In 1999, Cornell University improved their ranking position, from the 14th position to the 6th position and this resulted in a reduction in admission rate as well as an increase in the average SAT⁷ score among the admitted students in the following year. The reasoning put forward is that such an effect of the ranking would not exist if the students would not look at the rankings. The same authors also found that a lower ranking position was correlated with a greater proportion of applicants accepted and lowered SAT scores required in order to be accepted. McManus (2002) found similar results

⁷ SAT stands for *Scholastic Aptitude Test* and it is a standardized test in the US covering mathematics and language skills in English.

as Monks and Ehrenberg, showing that the majority of the American first year students saw rankings as either an important or somewhat important factor when selecting schools. Similar results were found by HEFCE (2008), who state that 29 per cent of the students surveyed in the UK mentioned rankings as an important source of information when choosing university.

Contradictory to this are the findings by Hossler & Foley (1995) who state that rankings have a very negligible bearing on the process of American undergraduate students deciding what school to attend. They argue that rankings serve more as confirmatory devices to make the students comfortable with the decision they have already taken. The results from Eccles´ (2002) study are also in line with Hossler & Foley (1995) and contradict Monks and Ehrenberg (1999) as no evidence was found suggesting that an improved ranking position would raise the number of applicants to that university in the coming year. The observation that university rankings do not seem to play a big part in students´ choice of where to study was also made by Foskett et al. (2006) in their study on universities in Australia and New Zeeland. Regarding Swedish students, it has been shown that that the majority of the prospective students do not take university rankings into consideration when deciding where to study (Almgren, 2008).

Based on the discussion above, there seems to be a consensus about the fact that students are interested in university rankings and that they read the rankings. What is more disputable is to which extent rankings affect their decisions of where to study. This paradox might be explained by the shortcomings of existing rankings in informing students about the quality of different schools, which is discussed in the section below.

2.2.2.1 Rankings often fail to inform students contrary to what the creators claim

Brown (2006) states that there is yet no consensus in research on what it is that affects the students' choices of where to study and this is, together with a problem that existing rankings are too broad, something that he highlights as a reason to why university rankings up until now do not appear to have a big impact on students' choices of where to study. Marginson (2007) states that another reason for this limited usefulness of existing rankings is the fact that few rankings focus on teaching and learning even though this kind of information could be of value for prospective students. The reason for this is according to Altbach (2006, p.2) that *there are, in fact, no widely accepted methods for measuring teaching quality.* Altbach is also supported by Marsh & Hattie (2002), Marginson & Van der Wende (2007) and Dill & Soo (2005) who state that there is no clear link between research quality

and teaching quality. Following these arguments, one can find an explanation to why the rankings which are often argued to provide students with information about the teaching quality do not fulfill such a purpose very well. This might also explain the ambiguous results from the body of research presented about the effect of university rankings on student choice.

2.2.2.2 Students from different social classes use rankings to different extents

Continuing the discussion about usage of rankings, Dill & Soo (2005) have found data from their research in the US and the UK, which suggest that the usage of university rankings is different within different social groups. They found that a disproportionately large group of the readers interested in rankings come from high-achieving and socially advantaged groups. This is also in line with the results from the study by McDonough et al., (1998) who found that the stakeholders most interested in rankings were students with a high-income background, high-achievers and second generation students. This is also in line with the findings made by Usher & Savino (2007). Another observation made by both Connor et al. (1999) and Reay et al. (2005) is that students from independent schools are more likely to use rankings than students from state schools.

The fact that existing rankings only address a narrow group of users is something that Van Dyke (2005, p. 117) states as one of the two most persistent criticisms of rankings and this shows that there is room for improvements of the rankings. Improved rankings should be able to address and bring value not only to some groups of students but to all type of students, and research has suggested that the solution to this problem and the limited usefulness of previous rankings can be found in the design of the rankings. Along with Van Dyke (2005), both Dill (2001) and Taylor & Braddock (2000) point to the different interests of different recipients of university rankings. Because of these differences in interest, it is widely recommended that an overall ranking should be complemented with listings on how schools perform in specific parameters (Dill, 2001; Marginson, 2007; Sarrico et al., 1997; Taylor & Braddock, 2000; Yorke, 1997). Moreover, by letting the students themselves point out which parameters they find as important for evaluating educational quality and by assigning weights to the parameters based on the students' opinions, it is possible to address the problem pointed out by Van Dyke (2005) and create a useful ranking. Such an approach can according to Sarrico et al. (1997) and Van Dyke (2005) result in a source of information that can be a valuable aid in helping students to take a decision of where to study and increase the usefulness of the ranking.

Having identified the need for rankings based on students' opinions and some indications of potential solutions, the thesis now turns to examining more of the criticism against existing rankings in order to find a more precise theoretical explanation of where the limited usefulness of existing rankings derives from.

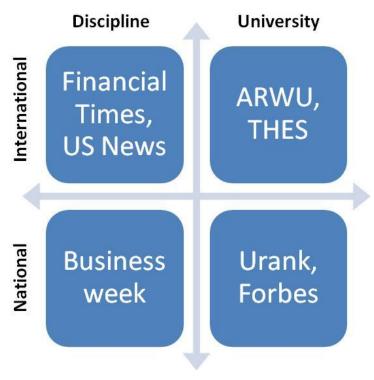
2.3 General criticism of existing university rankings

University rankings have been subject to a vast amount of criticism and some scholars argue that it is impossible to create good and objective rankings. Rocki (2005), for example, argues that there cannot exist an objective ranking since there are such a variety in both the methodologies and the choices of criteria included in any single ranking. He is also supported by Boulton (2010) who says that no ranking have parameters that are trustworthy enough or have the relevance or the spread in order to be accepted as quality measure for a university as a whole.

In summarizing the main criticism that university rankings have received and which might be the explanation to the inability of existing rankings to reach out to and influence broad masses of students, Bowden (2000) states that the main criticism against rankings have been related to a lack of statistical validity, unreliability as well as the fact that rankings have been said to not measure what they claim to measure. Unreliability and a lack of validity are also brought up by Brown (2006) when he summarizes the most important criticism towards rankings. More specifically, the critique has often focused on three areas of concern: *criticism of rankings on whole universities* (Almgren, 2008; Boulton, 2010; Bowden, 2000; Brown, 2006; Dill, 2001; HEFCE, 2008; Nyblom, 2008; Van Dyke, 2005) *criticism towards the use of certain specific parameters* (Altbach, 2006; Guarino et al., 2005; Johnes & Taylor, 1990; Morrison et al., 1995; Oswald, 2001; Yorke, 1997) and *criticism of the weighting of parameters* (Clarke, 2002; Guarino et al. 2005; Marginson & Van der Wende; 2007, Van Dyke, 2005; Usher & Savino, 2007). These three streams of criticism which have been widely brought up in research will make up the sections for the discussion of this criticism below.

2.3.1 Criticism of rankings on whole universities

Usher and Savino (2007) state that university rankings come in two different shapes; firstly they are composed on university level or on discipline level and secondly they have a national or international focus. The figure below shows the four most common types of distinctions within rankings exemplified with some of the more well-known rankings.





The question of rankings on university level versus rankings on discipline level has been debated frequently and many scholars argue that the value of rankings made on university level is limited and that rankings that rank specific disciplines are more useful (Almgren, 2008; Boulton, 2010; Bowden, 2000; Dill, 2001; HEFCE, 2008; Nyblom, 2008; Van Dyke, 2005). Van Dyke (2005) argues that the quality within the different departments can vary substantially and that rankings on discipline level therefore are to prefer. A potential reason to why there exist more university-based rankings that she brings up is that it requires much more work to gather and analyze data by discipline than on university level.

Following the reasoning by Van Dyke, the co-originator of the Swedish ranking Urank, Thorsten Nyblom (2008), have pointed out the weakness in his own ranking, saying that a ranking on university level never can serve as consumer information since it does not provide any information about a specific education. Nyblom states that even though it requires more work, rankings need to be made on faculty level or preferably discipline level in order to add value to the students. This is also in line with Almgren (2008), who have concluded that it is hard to compound a relevant ranking for a university as a whole because there are too many parameters that have to be boiled down to a specific number.

2.3.2 Criticism towards the use of certain specific parameters

Continuing the discussion of criticism inevitably brings the thesis to the choice of parameters used in rankings. A problem that has been discussed by numerous authors (Johnes & Taylor, 1990; Morrison et al., 1995; Oswald, 2001; Yorke, 1997) is the use of parameters which the universities can influence themselves, with the argument that the schools might make attempts to improve their score on those parameters in order to climb the ranking ladder. An example of such a parameter is "number of first class degrees⁸" which could easily be increased by the university. This is also a parameter that Oswald (2001) is opposing heavily.

Another common criticism is against the use of parameters that emphasize the past instead of the present. An example of such a parameter is according to Jobbins (2005) research awards. He state that these are often awarded for research that has been carried out long time before and therefore does not reflect the current quality of the school. Guarino et al. (2005) also argue that reputational surveys often reward past performance since such surveys often recycle reputation and Altbach (2006) adds to this that including reputational parameters often leads into "popularity contests" instead of rewarding the more objective quality of an education. Usher & Savino (2007) continue on the same topic by stating that reputational-related parameters can be subjective and are less transparent and comparable than other parameters. They therefore argue that it is hard to obtain a high validity when using reputational parameters.

In line with what has been mentioned previously in the thesis, that it is hard to measure the quality of the teaching, there have been a lot of critics stating that there is a lack of parameters related to measurement of teaching quality. Oswald (2001) says that the main functions of a university are the research and that the teaching is most often not shown enough in the rankings. Moreover, the weakness of the parameters used and the difficulties related to this measurement often results in a lower weighting in the end ranking. Both Oswald (2001) and Taylor & Braddock (2000, p.251) call for more focus on the teaching quality of a university and the latter authors suggest that a good measure for this is average class-size with the reasoning that *other things being equal, smaller classes generally allow for better class participation and improve communication between the lecturer and students*.

⁸ The highest grade achievable in the UK educational system.

2.3.3 Criticism of the weighting of parameters

Both Clarke (2002) and Guarino et al. (2005) state that most rankings use the *weight-and-sum approach*, where data is collected on a set of measures which are related to the educational quality. These measures are then weighted in correlation to their importance and the aggregated score of the weighted parameters are the components that create the final ranking. However, despite the widespread use of this method, there is an inherent problem with subjectivity when using it. It is widely argued in research that assigning weights to the different parameters is a ranking in itself since it is based on the subjective value of the researcher (Clarke, 2002; Guarino et al., 2005; Marginson & Van der Wende, 2007). Usher and Savino (2007, p. 3) put it well when concluding their critique against the somewhat arbitrary weighting method by stating; *The fact that there may be other legitimate indicators or combinations of indicators is usually passed over in silence. To the reader, the author's judgment is in effect final*.

In order to produce a ranking which overcomes this problem, Van Dyke (2005) suggests that the target group should be surveyed about what weights to apply. One example of a ranking using such an approach is the MI Index⁹ which uses the opinions from the management at leading universities as a base for their different weightings of parameters. However, even though this reduces the subjectivity in that the ranking creators do not affect the weighting of the ranking, the subjectivity as such is not reduced but merely moved to the ones asked to consult, in this case the university management (Taylor & Braddock, 2000).

Another problem related to the weights assigned and the final score, which Guarino et al. (2005) bring up, is that there is a risk that rankings may "over-differentiate" universities, meaning that different ranks are assigned to universities which might be more or less indistinguishable. This is also something that Marginson (2007) points out as a big problem with existing rankings.

2.4 Practical examples of two rankings and a discussion of their methodology

Having discussed the evolvement and some general characteristics of rankings as well as the main critique put forward against rankings, the thesis now turns to some practical examples of how rankings can be designed in order to exemplify some of the critique brought up above.

⁹ The MI index is produced by *The Melboune Institute of the International Standing of Australian Universities.*

Two of the most influential (Hazelkorn, 2007; Marginson & Van der Wende, 2007) and most frequently discussed global university rankings are the *Academic Ranking of World universities* (ARWU) ranking¹⁰, and the ranking made by THES¹¹. Being the first global university ranking (ARWU) and the first international comparison made by a newspaper (THES) (Jobbins, 2005), these two rankings have been widely scrutinized and discussed (Florian, 2006; Jobbins, 2005; Liu & Cheng, 2005; Taylor & Braddock, 2000). The fact that these two rankings are among the most well-known together with the big difference between them makes them suitable as examples which together can provide an overview of some practical examples of the main critique of university rankings presented above.

2.4.1 The Times Higher Education Supplement System

The latest THES ranking is composed and weighted as in Figure 2 below, (THES, 2011-04-08):

Teaching – the learning environment	(30%)
 Reputational survey – teaching 	(15%)
 PhD awards per academic 	(6%)
 Undergraduates admitted per academic 	(4,5%)
- Income per academic	(2,25%)
 PhD awards/bachelor's awards 	(2,25%)
Research – volume, income and reputation	<mark>(30</mark> %)
- Reputational survey – research	(19,5%)
 Research income (scaled) 	(5,25%)
 Papers per academic and research staff 	(4,5%)
 Public research income/ total research income 	(0,75%)
Citations - research influence	(32,5%)
- Citation impact (normalized average citations per paper)	(32,5%)
Industry income – innovation	(2,5%)
- Research income from industry (per academic staff)	(2,5%)
International mix – staff and students	(5%)
- Ratio of international to domestic staff	(3%)
 Ratio of international to domestic students 	(2%)

Figure 2.

¹⁰ The ARWU ranking was former known as the Shanghai Jiao Tong University Ranking

¹¹ The ranking positions in these rankings for the schools included in this thesis is presented below: **THES:** 1. Lunds universitet, 2. Stockholms universitet, 3. Uppsala universitet

⁽www.timeshighereducation.co.uk/world-university-rankings/2010-2011/top-200.html)

ARWU: 1. Uppsala universitet, 2. Stockholms universitet, 3. Lunds universitet 4. Umeå universitet, 5. Göteborgs universitet, 10, Handelshögskolan i Stockkholm, 11. Linköpings universitet (www.arwu.org/Country2010Main.jsp?param=Sweden)

URANK: 1. Handelshögskolan i Stockholm, 2. Uppsala universitet, 3. Lunds universitet, 4. Göteborgs universitet, 5. Stockholms universitet, 6. Linköpings universitet, 7. Umeå universitet

2.4.2 The Academic Ranking of World Universities

The ARWU ranking had the following weightings in its latest ranking (2010) (ARWU, 2011-04-07).

- Alumni of an institution winning Nobel Prizes and Fields Medals	10%
Quality of Faculty	
 Staff of an institution winning Nobel Prizes and Fields Medals 	20%
 Highly cited researchers in 21 broad subject categories 	20%
Research Output	
 Papers published in Nature and Science 	20%
 Papers indexed in Science Citation Index-expanded and 	20%
Social Science Citation Index	
Per Capita Performance	
 Per capita academic performance of an institution 	10%

Figure 3.

2.4.3 The critique of ARWU and THES

With regards to definitions of quality of higher education, the validity of the ARWU ranking has been criticized for only defining higher education as scientific research with little or no notion of teaching (Marginson, 2007). On the other hand, the THES ranking has been criticized for putting too little focus of on research (Marginson & Van der Wende, 2007) and instead defining higher education only as reputation as an end in itself. As discussed above there are according to Guarino et al. (2005) and Altbach (2006) disadvantages with such an approach.

Comparing the two rankings, Jobbins (2005) states that the THES ranking has the advantage over the ARWU ranking in that it, through peer reviews reflects the universities' profile up to date while the ARWU ranking has a historical perspective due to the high weight assigned to Nobel prizes and Field Medals which, as discussed above, are often criticized for rewarding achievements made long time before. Therefore, Jobbins argues that the prizes say little about the current quality of the university and Marginson & Van der Wende (2007) add to this by stating that the ARWU ranking put too little emphasis on present research capacity. The strong focus on Nobel prizes and Field Medals have also been criticized by Taylor & Braddock (2000) who state that besides the lack of correspondence between research and teaching quality, the criterion falls short because many universities do not have

any winners of Nobel prizes or Field Medals and the ranking does not acknowledge the variety among these universities.

Taylor & Braddock (2000) have also criticized the THES ranking for putting too high weight on reputational surveys (34,5 per cent). In line with Guarino et al. (2005), Taylor & Braddock (2000) argue that letting the current opinions among academics influence the total score in the ranking to this extent leads to a replication of opinions and limits the possibilities to bring out new information.

Florian (2006) continues in the criticism towards the ARWU ranking and criticizes the ranking for being irreproducible. The ground for this is that according to Florian (2006), in the ARWU ranking from 2005 the creators of the ranking deviated from the methodology which was officially published. This criticism is an example of one of the criticism often brought up against rankings; that the rankings are not always transparent enough and this further emphasizes the importance of a high degree of transparency about the methodology when creating rankings.

2.5 A review of the most common components in rankings and two best practice examples

Having illustrated some of the critique against university rankings with two examples, this paragraph turns to some policies for how good rankings should be composed. Further, the section presents a categorization of parameters most commonly used in previous rankings which will be used as a theoretical tool for the analysis.

2.5.1 The CHE ranking - Best practice

A ranking that differs from many of the big rankings and which responds to some of the main critique presented above is the ranking produced by the Centre for Higher Education Development (CHE). This ranking have been brought forward as a good example by both Almgren (2008) and Marginson & Van der Wende (2006), and it is made on discipline level instead of institutional level. Moreover, CHE offer a free online version where the users can apply their own weights to parameters and create their own ranking. Instead of ranking the universities numerically, the CHE ranking lists the institutions in three groups depending on their scores. (HEFCE, 2008)

2.5.2 The Berlin Principles on Ranking of Higher Education Institutions - Best practice

In 2004, UNESCO European Centre for Higher Education and the American Institute for Higher Education Policy founded an expert group called the International Ranking Expert Group (IREG), consisting of 25 "experts" on ranking composition (Merisotis & Sadlak 2005). The purpose with the creation of this expert group was to develop principles and guidelines for university rankings. Two years later, in Berlin, IREG presented its recommendations for the creation of rankings, called *The Berlin Principles on Ranking of Higher Education Institutions* which since then has been an important kingpin and reference in the literature on university rankings. It is a collection of 16 guidelines and it advises on how to develop a ranking and how to avoid the factors that rankings most often get criticized for (Locke, 2007).

The Berlin principles are divided into four different sections which all have several subcategories. In the first section, *purposes and goals of rankings*, it is stated that university rankings should not be seen as the only truth regarding the quality of an education. It is also stated that a ranking should take the target group into consideration in its design and be clear regarding what sources of information the ranking is based on and that the creators should be aware of the context in which the institutions act and exist.

In the next section, *design and weighting of indicators*, it is stated that rankings should be transparent and unambiguous by being clear regarding the methodology used and provide raw data and calculations to improve the trustworthiness. It is also important to be clear about why parameters are chosen and what they should add. Further on, measuring outputs is said to be preferred over measuring inputs.

In the section called *collection and processing of data*, it is recommended to use data which is verifiable and collected with proper procedures for scientific data collection. Moreover, it is recommended to also apply external measures to enhance the credibility of the ranking.

In the last section, called *presentation of ranking results*, it is stated that the data should be presented in a way that minimizes errors and faults and that readers should be provided with the possibility to choose how rankings are displayed. All principles are presented more in detail in Appendix I. (IREG, 2006)

2.6 A classification of the parameters mostly used in existing rankings

According to Usher & Savino (2007), most rankings use different parameters and have different opinions of what "quality" is and consists of. They have therefore categorized the

most commonly used parameters in previous rankings into larger headings to make the sector more tangible and understandable. These authors have studied 19¹² of the most influential university rankings in the world and thereafter divided the most frequently used parameters concerning "educational quality" into seven categories, as showed in figure 4 below. The seven categories are described one-by-one in order to give the reader a better understanding of the most frequently used parameters in each category.

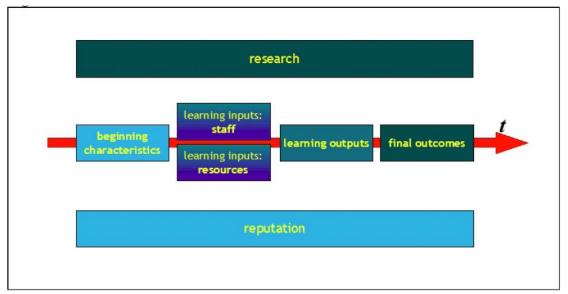


Figure 4. The seven categories into which Usher & Savino (2007) have divided the different parameters that are mostly used in university rankings.

2.6.1 Beginning characteristics

This category refers to all parameters and abilities that incoming students have when they apply to a university. The most common parameter is the results from national standardized tests such as *Högskoleprovet*¹³ and SAT. The benefit of this parameter is according to Usher & Savino that it is rather impartial. The second most used parameter is the grade point average (GPA) that the students possess from their high school. Another parameter which is often used is the international diversity of student body. Other parameters used are diversity in ethnical backgrounds of faculty and the number of students from non-academic backgrounds.

¹² Asiaweek, ARWU, TheCenter, CHE/Stern, Daily Telegrap, Education18, Excelencia, Financial Times, Good Guides, Guangdong, The Guardian, La Repubblica, Maclean's, Melbourne Institute, Netbig, Perspektywy, The Times, Times Higher Education Supplement, U.S. News, Washington Monthly and Wuhan.

¹³ Högskoleprovet is the standardized Swedish test covering general knowledge in math/logical reasoning, Swedish and English.

2.6.2 Indicators of Learning Inputs – Staff

As discussed above, it is rather challenging to find ways of measuring the quality of teaching. Because of this difficulty, many rankings use a rather simple method by measuring the number of faculties within a university. Other commonly used measures are the ratio of faculty personnel to students and the number of teaching hours given. An indicator which is important according to Usher & Savino is the average class-size, as it can show how much attention the students receive from their teachers. Staff qualifications are also an often used measure, for example in the form of teaching hours given by professors/tenured staff. Other parameters included in the category are age-structure of faculty and third-party evaluations of the teacher's knowledge and dedication.

2.6.3 Indicators of Learning Inputs – Resources

In this category there are parameters related to the spending on students, equipments and library resources. Other central parameters are the total institutional expenditures and the institutional expenditures on student services. The facilities of the university are also often included in the rankings.

2.6.4 Indicators of Learning Outputs

This category evaluates the level of educational attainment or the knowledge and skills that the students have obtained during their studies. However, there are rather limited sources to finding fair and comparable outputs to use as a parameter. The most common ways of measuring the learning outputs are linked to the retention rate and graduation rate of the education/school¹⁴.

2.6.5 Indicators of Final Outcomes

The most frequent parameter within this category is related to where the students end up after graduation. The employment outcome is often made up by the ratio of students that work within an area related to their studies after graduation. This parameter has traditionally been weighted quite heavily. Another measure which is commonly used is the average salary that the graduates obtain after graduation. Some rankings also include the factor "the percentage of students returning to additional education".

¹⁴ Retention rate means the number of students that proceed from the first to the second year of their studies while graduation rate covers the ratio of students starting the education to students graduating from the same education.

2.6.6 Indicators of Research

The diversity of the parameters within this category is rather big and the reason for that is according to Usher & Savino (2007) that it is a category where there are many ways of measuring inputs and outputs. Bibliometric citations and the number of articles published in scientific journals is a widely used, and in some rankings also heavily emphasized, parameter. Financial indicators of research such as research budgets are also very common. Another parameter which is assigned high weights in some rankings is research awards.

2.6.7 Indicators of Reputation

The last category out of the seven contains parameters related to reputation and peer appraisal. This could be seen as an indirect measurement of quality where the opinions from stakeholders as employers, academics and students are shown. These parameters can be rather subjective and are less transparent and comparable then other parameters but they can provide useful information for students since the students can get an understanding of the perceived value of the degree they will obtain. These parameters are very heavily weighted (up to 50 per cent of the total ranking) in some rankings, while they are excluded totally in other rankings.

To provide a summarizing picture, the categorization of parameters made by Usher & Savino (2007) is illustrated in Figure 5.

Beginning characteristics	• Entry requirements – GPA and Standardized test, International diversity of the student body
Learning Inputs — Staff	 Number of teaching hours, Number of teaching hours given by a professor, Number of faculties within the university, The ratio of faculty personnel to students, Class size
Learning Inputs — Resources	 Library resources, University spending/student, Institutional spending/student, Facilities of the school
Learning Outputs	Graduation rate, Retention rate
Final Outcomes	 Graduates with a job within six months after graduation, Average salary of graduates
Research	Bibliometric citations, Publications, Prizes and awards, Research budget
Reputation	 Reputation among employers, academics and students

Figure 5.

2.8 Summary of theory and implications for methodology and empirical research

The base of the theoretical chapter has been presented above, and the goal with this section is to bring the theory together and point out the research gaps that exist.

Research has shown that the big interest in university rankings mainly comes from students, universities and external actors such as governments and graduate recruiters. However, despite being requested by these groups, the rankings have up until now been unable to inform students, who make up the target group addressed in this thesis, well enough. Although the students read the rankings, it is disputable to what extent the rankings affect students' choices of where to study. Moreover, existing rankings fail to reach out to a broad mass of students. This limited usefulness of university rankings for students and the rankings' inability to reach out to many students shows that there should be room for improvements of rankings in order to make them more useful for students as well as making the rankings address a wider group of students. A first step towards creating useful rankings is to understand why previous rankings have not been useful.

Theory suggests that the reason for this limited usefulness of previous rankings mainly is related to:

- A too heavy focus on research quality and a failure in measuring teaching quality.
- Too much emphasis on reputational parameters, limiting the possibility to provide new information.
- That many rankings are made on university level and not on discipline level.
- A lack of transparency about the methodology used in the ranking.
- Subjectivity due to that the authors of the rankings have been assigning the weights of different parameters instead of surveying students about what weights to apply.
- Too much focus on the ranking activity as such instead of providing information about how different schools perform on the different parameters.
- An outdated picture in existing rankings due to inclusion of certain parameters.

Although these reasons have been brought up in theory, no empirical research has been done on why these rankings fail to inform Swedish students. A first research gap has therefore been identified as *there is low knowledge about why existing university rankings fail in informing Swedish students well enough*. In order to make an attempt to address this

research gap, **research question one** has consequently been defined as: **Why do existing university rankings fail to inform Swedish students well enough?**

What also stands out when looking at the theory is that despite a demand from both the public and the academia, there is a lack of survey-based rankings based on what students find important when evaluating their educations. The fact that few rankings have been made with a student perspective in Sweden together with the lack of research on what it is that Swedish students want from their educations shows another, **second research gap:** *there is low knowledge about what parameters Swedish students find important when evaluating their educations*. In order to create a ranking that overcomes the problems with existing rankings as suggested by theory it is key to first address this research gap and understand what parameters students find important when evaluating their education. Therefore, the authors have formulated **research question two** as: **What parameters do Swedish business students find important when evaluating educational quality?**

In order to address this research gap, the authors carried out a survey among Swedish students within business and economics with the purpose of identifying what this target group find as important when evaluating their education.

This was done by using the categorization of parameters made by Usher & Savino (2007) as a tool for testing if the theoretical explanations to the limited usefulness of previous rankings could be confirmed by Swedish students. The assumption was that if the parameters mostly used in the rankings summarized by Usher & Savino (2007) are grasping the quality of the schools in a good way, these parameters should also be valued as important by the students. If all these parameters would be seen as important for the target group of the thesis, it might be that rankings regardless of design have problems to affect students. However, if it would be found that some parameters are irrelevant for students, than it might also be possible to design a ranking that better reflects what students see as the building blocks of educational quality.

Beginning characteristics	 Entry requirements – GPA and Standardized test, International diversity of the student body 	
Learning Inputs — Staff	 Number of teaching hours, Number of teaching hours given by a professor, Number of faculties within the university, The ratio of faculty personnel to students, Class size 	
Learning Inputs — Resources	• Library resources, University spending/student, Institutional spending/student, Facilities of the school	
Learning Outputs	Graduation rate, Retention rate	
Final Outcomes	 Graduates with a job within six months after graduation, Average salary of graduates 	
Research	Bibliometric citations, Publications, Prizes and awards, Research budget	
Reputation	Reputation among employers, academics and students	

Figure 6.

Many researchers bring up the lack of rankings based on student-surveys and the lack of rankings made on discipline level as part of the explanation to research gap one. This lack of rankings becomes even more apparent when investigating the few rankings that exist in Sweden, where no ranking has been made on discipline level with an emphasis on survey-based data. Based on this fact and the call for more rankings on discipline level with a student perspective, a third research gap has therefore been defined as **research gap three**: *there exist few rankings of Swedish business schools with a student perspective.*

In order to address research gap three, the authors created a ranking of Swedish business schools based on the results from the first and the second study that was carried out, letting the students point out the importance of different parameters and assigned the weights based on this, thus providing a student perspective. This ranking makes up the base for answering research question three: What would the result be when creating a ranking of Swedish business schools with a student perspective?

2.8.1 Recommendations followed when creating the ranking and providing an answer to research question III

Related to the creation of the ranking and addressing research gap three there are many recommendations made in research about how a good ranking can be created. The main recommendations that have been made are:

- To mitigate the problem of irreproducibility, research has suggested that an increased transparency about the methodology would make existing rankings better.

- Related to the subjectivity in the allocation of weights, it has been recommended to survey students about what weights to apply.
- Related to the critique of too much focus on the ranking activity as such, it has been recommended to provide information about how different schools perform on the different parameters besides only presenting a final ranking made up by one score.

Since theory have brought up these recommendations as ways to create better ranking, the authors will follow them when creating the ranking in order to better be able to provide a good ranking for the Swedish students.

With this discussion the authors conclude the theory section and turn to the methodology which has been used in order to provide answers to the different research questions and create a ranking which tries to overcome the main problems with existing rankings as presented in this theory section.

3. Methodology

This chapter will describe the design and the choices made when writing the thesis. Three studies have been conducted and the chapter starts with a description of these three studies as well as the findings from the prior two studies. The chapter is concluded by a discussion regarding the reliability and validity of the thesis as well as a presentation of some critics towards the methodology used.

3.1 Introduction to the methodology

The intention with this thesis is to create a ranking of Swedish business schools that takes on the perspective of the students. In order to do this, three studies were carried out. The first and the second study were carried out to provide a picture of what parameters the target group finds as important when evaluating the quality of their education. This study resulted in a picture of the relative importance of different parameters when evaluating educational quality as seen by the students. These findings made up a foundation of 24 parameters which was then used as a base for the third study, which lead to the creation of the ranking. The figure below illustrates how the layout of the methodology for the thesis was constructed.

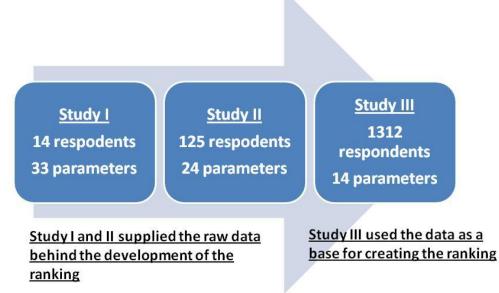


Figure 7. The picture summarizes the studies conducted within this thesis.

This methodology chapter has intentionally been made rather long and exhaustive of information. The reason behind this is to comply with the strong demand for increased transparency in university rankings and the methodology undertaken to come to the results presented, that has been put forward in research (IREG, 2006, Bowden, 2000, Brown, 2006). The authors have therefore been as precise as possible in this chapter in order to ease for a person interested in reproducing the ranking.

3.1.1 Choosing 24 schools to be included in the thesis

As mentioned above, the purpose of the thesis is to create a ranking with a student perspective on Swedish business and economics educations on bachelor level. In order to make the findings of the thesis as generalizable as possible, the authors aimed to include a sample as broad as possible in terms of the spread of the schools. When choosing what schools to include in the study, the authors encountered some problems. Sweden is at the moment in a transition phase moving from an old system where four-year "magister" programs have been combining bachelor and master programs to a new system where the master program is a two-year program that is separated from the three-year bachelor program. It was not possible to only include three years bachelor programs in this study and exclude all "magister" educations without missing several schools in Sweden, thus decreasing the value of the ranking for students. Therefore, a decision was taken to include also the schools¹⁵ that still use the old four-year format of their business programs and which do not offer any separate bachelor programs. The target group of the ranking created in this thesis is from here on therefore defined as students, or prospective students, on bachelor level or on a bachelor program, even though students from three of the schools are enrolled in a four year "magister program"¹⁶.

In order to be able to compare the educations in a fair way, one objective when deciding what schools to include was that the programs offered should not be specialized in any particular area but that they should be broad programs within business & economics. Based on this criterion, 24 schools qualified for the thesis. One relatively big Swedish institution which has a business related program was excluded from the study; Sveriges lantbruksuniversitet. The reason for this was that the school's current program within business and economics did not exist in 2006, a year from which some of the data used in this thesis is taken from. Thereto the existing bachelor program of today has a clear focus on environmental questions (SLU, 2011-02-15) distinguishing it from the programs which were included. Therefore, with a goal of creating a ranking as comparable as possible and thus increasing the validity of it, the authors chose to exclude the program. A list of the 24 schools included in the thesis is presented in table 1 below together with the abbreviations that from here on are used when referring to the different schools.

¹⁵ Göteborgs universitet, Linköpings universitet and Högskolan i Borås

¹⁶ The term bachelor program is from here on including these "magister" programs as well.

Full name:	Abbreviation used:
Blekinge tekniska högskola	Blekinge
Göteborgs universitet	Göteborg
Handelshögskolan i Stockholm	HHS-Stockholm
Högskolan i Borås	Borås
Högskolan i Dalarna	Dalarna
Högskolan i Gävle	Gävle
Högskolan i Halmstad	Halmstad
Högskolan i Jönköping	Jönköping
Högskolan i Kristianstad	Kristianstad
Högskolan i Skövde	Skövde
Högskolan på Gotland	Gotland
Högskolan Väst	Väst
Karlstads universitet	Karlstad
Linköpings universitet	Linköping
Linnéuniversitetet	Linné
Luleå tekniska universitet	Luleå
Lunds universitet	Lund
Mittuniversitetet	Mittuniversitetet
Mälardalens högskola	Mälardalen
Stockholms universitet	Stockholms uni
Södertörns högskola	Södertörn
Umeå universitet	Umeå
Uppsala universitet	Uppsala
Örebro universitet	Örebro

Table 1.

3.2 Methodology for the first study

On the way to fulfill the purpose of this thesis, and create a ranking with a student perspective on Swedish business and economics educations on bachelor level, a first prestudy was conducted. The aim with this study was to identify the relevant factors influencing the quality of a business education as perceived by the students. The study was conducted with 14 Swedish students that had recently finished their bachelor degree in business & economics. The students were to express their opinions regarding 33 parameters found as the most central in prior research (Clarke, 2002; Dill & Soo, 2005; Usher & Savino, 2007; Van Dyke, 2005).

3.2.1 Finding a diverse sample for the study

When choosing what students to include in the study, the goal was to grasp as many and broad perspectives as possible. Therefore, the main objective was to find students coming from different schools, hence having different experiences. Another goal was to include not only Swedish schools but also schools outside Sweden in order to broaden the base of experiences covered in the study. One requirement for choosing the students was also that they should not have finished their bachelor degree later than 18 months before the time of the first study, in order to get an up-to-date perspective in the study. Moreover, the authors wanted to find students with diversity in terms of different age and gender.

Based on these criteria, fourteen students in the ages of 22-29 years who had done their bachelor degree at ten different schools were interviewed. Out of the fourteen students, four were female and ten male. In addition to the ten schools, the students in the study had been on exchange semesters at a total of eight different schools. Taking this into account, the study was based on experiences gained from 18 different schools around the world.

3.2.2 33 parameters were used as the basis for the interviews which were semi-structured

After a review of the most commonly used parameters in the existing literature on university rankings, 33 parameters were identified as the ones mostly used in previous rankings. (Clarke, 2002; Dill & Soo, 2005; Usher & Savino, 2007; Van Dyke, 2005)

All interviews in the study lasted between 20 and 30 minutes and were carried out with both authors present. In the interviews, the respondents were first to think and talk freely about which parameters they found important when evaluating an education within business & economics. After that, the students discussed the importance of the 33 parameters found in prior research, which were presented by the authors, to see how important the students found these when evaluating educational quality. The methodology used for the interviews can therefore be seen as being of semi-structured character in the way that there was no interview form that was followed strictly. Instead, the parameters were used as more of a guide than an exact map (Corbetta, 2003). This approach was used because it gives the interviewer a larger freedom to tailor the interview after the respondent (Bryman & Bell, 2007) and this methodology was found appropriate since the authors wanted to have the possibility to follow up on interesting thoughts about parameters outside the 33. A negative aspect with the chosen interview methodology is that, most certainly, all interviews will not evolve in the same way which could affect the outcome of the respondent's answers.

When conducting the interviews, both authors took notes that were compared after the interviews in order to ensure that no information was missed out on and that the authors had the same interpretations of the answers. For an interview guide, see Appendix II.

When observing the answers from the more qualitative part of the interviews where the students mentioned and discussed parameters that were outside the 33 parameters, a pattern

could be seen where less and less new parameters were brought up. During the last three interviews, no new parameters were brought up by the interviewees. This indicates that an exhaustive selection of parameters that students find important when evaluating the quality of a business education on bachelor level was identified and that a theoretical saturation seems to have been reached.

3.2.3 24 parameters were identified as the most important ones in the first study

When the results of the first study were analyzed, several of the original 33 parameters were found to be unimportant for the students in the study. The parameters that were judged as unimportant by the students, and thus excluded from the second study, were:

- *Number of applicants/Number of admitted students*
- Number of faculties within the university
- Faculty pay
- Bibliometric citations
- *The institutions' participation in international network (CEMS, EQUIS etc)*
- *Retention rate*
- The availability of scholarships
- The ratio of personnel to students
- Recognitions, awards and honors to the institution and its employees
- The share of the total number of students that goes on to pursue a PhD
- Reputation of the school
- Access to databases and articles through the school's library
- University and institutional spending
- Research budget

Beside from judging several parameters as unimportant, the first study also revealed that there are factors other than those commonly included in rankings that are relevant for Swedish students when they evaluate educational quality. The following parameters were brought up as important by several students in the first study and were therefore added to the more conventional parameters.

- The presence of an alumni-association
- The presence of a student association
- The number of people employed in supporting functions at the school
- The possibility to interact with graduate employers outside the scope of the education

• The accessibility of teachers outside lectures and seminars, i.e. office hours, quick response to e-mails, etc.

Together with the 19 out of the 33 original parameters that were judged as important by the respondents, these parameters made up a total of 24 parameters which made up the base for the second study.

- *Percentage of students employed six months after graduation*
- The availability of study areas and group rooms
- Selection of elective courses to choose from within the program
- Average salary of graduates
- Accessibility of teachers
- Mandatory parts of the teaching including contact with external actors
- Possibilities to meet graduate recruiters outside the teaching hours
- Amount of teaching hours
- Class size
- *High entry requirements*
- The presence of a student association
- Possibilities to do an exchange semester
- Possibilities to do an exchange semester at an <u>attractive</u> (as perceived by the students) university
- *Number of books in the library*
- Number of teaching hours lead by a professor/tenured staff
- Number of Master programs offered at the school
- Number of persons employed in supporting functions at the school
- The existence of a gender perspective within the institution
- Graduation rate
- Number of academic articles published by the institution
- Number of academic articles published by teachers involved in teaching
- International diversity of students
- The presence of an alumni association
- The existence of a gender perspective in the design of the program

3.3 Methodology for the second study

The first study was the initial step to get closer to answering research question one and two, and finding what parameters it is that students find important when evaluating educational quality and which therefore should be included in a ranking with a student perspective. The second study was carried out in order to find out the relative importance of these parameters as seen by the target group, thereby enabling the authors to provide answers to research question one and two. The findings from the second study can be seen as a foundation for what parameters it is that matters to business students when they are to evaluate their education.

3.3.1 Choosing three schools as sample schools

Due to limitations with regards to time and financial resources it was not possible to conduct the second data gathering physically present at all the 24 schools covered in the thesis. The possibility to receive economic funding for collecting the empirical data to the thesis was investigated; both through Stockholm School of Economics and through the student association of the same school but these attempts were unfortunately unsuccessful. Only being able to visit the schools in the geographically nearby area of Stockholm but still wanting to cover the view of the majority of the students, three schools were chosen as sample schools. In order to find representative schools, three categories of schools were identified based on the average GPA requirements for the second intake for the fall of 2008, 2009 and 2010 (Verket för högskoleservice, 2011-02-06). The decision to use the GPA average of the latest three years and not only the requirements for the last year was that only including one year as the base could lead to a misleading categorization if one school would have had a unusually high/low number of applicants that year. An average of three years reduces this risk and increases the likelihood that the categorization would reflect the schools well.

The first category of schools consists of schools that required a GPA ranging from 87,5-100,0 per cent of the maximum grade point, the second category consists of schools that required a GPA ranging from 75,0-87,5 per cent and the third group consists of schools requiring a GPA of less than 75,0 per cent. The decision to choose these different GPA ranges for identifying categories of schools was based on the fact that there is a cluster of schools that require a GPA between 75 and 100 per cent while the rest of the schools are more unevenly distributed in terms of GPA requirements. Looking at the three categories, there are five schools¹⁷ in the

¹⁷ HHS-Stockholm, Göteborg, Lund, Linköping and Uppsala.

first category, four schools¹⁸ in the second category and the third category consists of the remaining sixteen schools¹⁹. Using these three categories, the authors were able to get three sample schools that fairly well reflect all schools covered in the study based on their entry requirements. The schools picked out as sample schools from the different categories were Södertörn from the category with GPAs below 75 per cent, Stockholms uni from the category with GPAs in the range 75-87,5 per cent and HHS-Stockholm from the category with GPAs above 87,5 per cent²⁰. When these schools had been selected as sample schools the data gathering was conducted.

3.3.2 Choosing third year students as respondents and conducting the second study

The data gathering for the second study was carried out both physically at the three schools and it was also complemented by a web survey for one of the schools (HHS-Stockholm) where it was not possible to reach out to all students in person. The total number of responding students was 125. The respondents all filled out structured questions, in the form of a survey, where the 24 most important parameters, as identified by the first study, were to be ranked on a scale from one to seven. For more detailed information see Appendix III. Seven indicated a very high importance of that parameter as a measurement for educational quality, and one indicated a very low importance. The reason for having seven "closed" options was to allow for more nuanced answers than five options would have given, while at the same time not confusing the respondents with too many options, which is line with the recommendations by Malhotra (2004). All questions were also asked in the most neutral way that the authors could find, in order to not influence the respondents in some way due to the phrasing of the questions and this also goes in line with several scholars' (Lundahl & Skärvad, 1992; Rossiter, 2002) recommendations.

The schools were visited in week 10 and 11, 2011, and the classes visited were all part of the third year of studies in the schools' business and economics programs. The rationale behind the decision to interview third-year students was to be able to get a picture based on broader experiences from the students' studies, then if students that are more early on in their education would have been chosen as the ones to approach. For example, one question in the study was about the importance of having classes with less than 50 persons. Asking first year

¹⁸ Stockholms uni, Kristianstad, Jönköping and Umeå.

¹⁹ Södertörn, Blekinge, Borås, Dalarna, Gotland, Gävle, Halmstad, Skövde, Karlstad, Linné, Luleå, Mittuniversitetet, Mälardalen and Örebro.

²⁰ The average grade requierd to be admitted in fall 2008, 2009 and 2010 were for Södertörn 14,60, for Stockholms uni 16,96 and for HHS-Stockholm 20,00 on the scale ranging from 0-20,00.

students this question would probably not be optimal for the result since some schools might have smaller classes mainly in the second and third year of their programs.

The study was carried out, in person, at lectures of the different third year classes at the sample schools. The responding rate at Stockholm uni was 100 per cent and at Södertörn the responding rate was 98 per cent. At the last school, HHS-Stockholm, a responding rate of 100 per cent was reached for the classes that were visited in person. However, as stated above, the data gathering at this school was completed with a web survey. With this taken into account, the overall responding rate at the school was 79 per cent. After compiling the answers from this second study, the mean values were calculated for each of the parameters. These mean values then made up the base for the design of the ranking. The raw data behind the mean values can be found in Appendix IV.

3.3.3 Results of the second study and design of the ranking

The results of the second study are presented as the mean value that each parameter received, which indicates the importance of the parameter on a scale from one to seven.

In order to be able to reach a responding rate high enough, allowing for at least some level of generalizability, the number of questions included in the third study had to be limited. The third study was carried out through a web survey and the assumption was that including all 24 parameters would make the web survey too big so that enough respondents would not take their time to fill out the survey. Therefore, a decision was made to only include the ten parameters which in the second study received the highest average scores. This is in line with Dillman et al., (1993) who argue that a shorter survey increases the likelihood for a higher responding rate. It would have been preferable to be able to include all 24 parameters but the authors judged the importance of reaching a high responding rate as higher. Including all parameters would most likely have decreased the responding rate which would have decreased the possibilities to do draw any kind of more generalizing conclusions, which also would have undermined the value of the study.

However, just because the authors of this thesis decided to limit the questions and only include the ten most important parameters, this does not mean that the remaining parameters are to no use. Instead, these 24 parameters were all given a score between four and seven, corresponding to values between neutral importance and very high importance and should therefore be considered to be relevant, at least to some extent, for the mentioned target group. All 24 parameters should preferably be taken into consideration in a survey

that has the possibility to go into detail with a ranking from a student perspective. Unfortunately, this was not possible for the authors due to the scope of the thesis, but these 24 parameters could be seen as a foundation for composing a ranking with the target group's perspective. The bigger and the deeper the ranking aims to be, the more parameters should be included. The relative importance of the 24 parameters is presented in figure 8 and table 2 below.

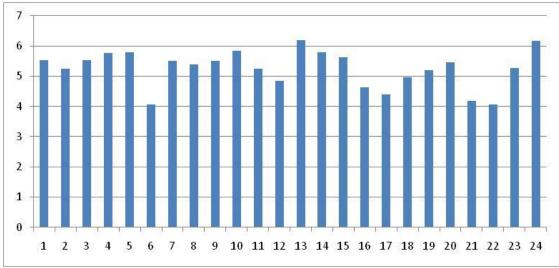


Figure 8. The figure shows the relative importance of the 24 parameters in study II.

Importance	Parameters			
5,54	1) Many teaching hours			
5,25	25 2) Many teaching hours lead by a professor			
5,52	,52 3) Small class size			
5,77	4) Frequent contact with external actors within the courses			
5,79 5) Good accessibility of teachers				
4,06	6) The existence of a gender perspective in the program design			
5,5	7) High entry requirements			
5,39	8) Good possibilities to do an exchange semester			
5,5	9) Good possibilities to do an exchange semester at an attractive university			
5,82	10) A broad selection of elective courses			
5,24	11) A high number of master programs offered			
4,83 12) A high graduation rate				
6,19 13) A high percentage of the students employed six months after gra				
5,79	5,79 14) High average salary			
5,62	15) Good possibilities to meet graduate recruiters outside the courses			
4,62	16) A high number of academic articles published by the institution			
4,4	17) A high number of academic articles published by teachers			
4,96	18) The existence of a gender perspective within the institution			
5,2	19) A high number of persons employed in supporting functions			
5,46	20) The presence of a student association			
4,18	21) A big international diversity of the students			
4,07	22) The presence of an alumni association			
5,26	23) A large number of books in the library			
6,16	24) The availability of study areas and group rooms for studying			



3.3.4 The ten most central out of the researchable parameters were included in the third study

As stated above, the intention was to include the ten most important parameters in the third study. These ten parameters were the following, presented in order of importance:

- 1. Percentage of students employed six months after graduation
- 2. Availability of study areas and group rooms
- 3. Selection of elective courses to choose from
- 4. Average salary of the graduates
- 5. Accessibility of teachers
- 6. Contact with external actors within the courses
- 7. Possibilities to meet graduate recruiters outside the teaching hours.
- 8. Number of teaching hours
- 9. Class size
- 10. Possibilities to do an exchange semester at an attractive university

For three of the parameters, it was not necessary to survey the students to get the data. These parameters were; *Percentage of students employed six months after graduation, Selection of elective courses to choose from* and *Average salary of the graduates*. However, when trying to gather data about the selection of elective courses available for the students at the different programs, the authors encountered problems. For some schools, students are allowed to include courses from other departments of the same university in their business degree while at other schools only courses within business and economics are available as elective courses. This problem could potentially have been mitigated by only including courses within business and economics in the parameter but in many cases it is difficult to classify courses since they can be a mix of business and another subject, such as "Politics and Economy of East Asia"²¹. In order not to risk that some schools would be disadvantaged or advantaged and with the aim of having comparable data for all schools to make the ranking more valid and useful, this parameter was excluded from the study.

The fact that the parameter related to selection of courses was excluded resulted in that the authors added the next-coming parameter in terms of importance; *High entry requirements*. For this parameter, data could also be found without surveying the students. With this parameter added, the parameters included in the third study were made up by the ten most important parameters that were researchable for the authors.

²¹ Given at Stockholms uni.

3.3.5 Adding four parameters covering overall impressions

Besides the ten parameters described above, another four overall parameters were included in the third study. The intention with these parameters was to grasp the overall student satisfaction at the different schools. The questions for these parameters were phrased in the following way:

- What is your overall impression of your education concerning the quality the teaching?
- What is your overall impression of your education regarding the opportunities to find an interesting employment after graduation?
- Are you satisfied/dissatisfied with your education overall?
- Would you choose the same education today if you were to re-make your choice?

These four parameters can be seen as an overall indication of what schools it is that provide the best education as seen by their students. If the ten parameters judged as the most important ones by the students are representative for what it is that makes up a good education, then there should also be a correspondence between the results on those parameters and these overall parameters. Besides the value of having a few parameters covering the overall quality of the schools as seen by the students, it could be interesting to see such correlations. Moreover, these parameters can grasp the difference in students' perceptions regarding for example the difference in teaching quality and what they believe actually results in a job after graduation. Differences between the schools with the most satisfied students and the schools with the most students stating that they would choose the same education today could also be of interest as it could give an indication of how much the actual student satisfaction affects the decision of where to study. Together with the ten previously mentioned parameters, these parameters make up a total of 14 parameters which were included in the third study. These parameters make up a total of 14 parameters which were included in the third study. These parameters make up the ranking created in this thesis. However, as discussed above, more parameters out of the 24 could be included in a ranking that is bigger and goes deeper than the one created in this thesis.

3.3.6 Assigning weights to the ranking

The purpose of the thesis is to create a ranking with a student perspective on Swedish business and economics educations on bachelor level. Therefore, the intention when designing the ranking and assigning weights to the different parameters was to fully base it on the results from the second study with no intervention from the authors. As described, all parameters received an average score between one and seven from the students. This average was used as the base for assigning the weights for the final ranking. However, the average between one and seven is slightly misleading as all parameters had already been judged as important by the respondents in the second study. Because of this, the likelihood that a parameter would receive a value below four, which indicates a neutral importance of that parameter, could therefore be seen as low. And this assumption was confirmed as all parameters received an average above 4,00. Considering that a value less than 4,00 can be said to indicate that the parameter is unimportant, the mean values between one and seven does not show the differences between the values proportionately. The authors argue that the relevant scale starts at 4,00 and goes up to 7,00. When calculating the weights, all mean values were therefore deducted by 4,00. Since the difference between 4,00 and 7,00 is 3,00, these new values were then divided by 3,00 in order to find their relative importance on the scale between four and seven. For example, the parameter percentage of the graduates employed six months after graduation received an average score of 6,192. This score was deducted by 4,00, resulting in a value of 2,192. The resulting 2,192 was then divided by the maximum 3,00 which a parameter could get on the new scale, giving it a value of 0,731. When these calculations had been done for all the ten parameters that derived from the second study, the sums of all the scores were added together and the individual scores were divided by that total sum to find their final relative weighting. To continue with the example of the parameter percentage of the graduates employed six months after graduation, the value 0,731 that this parameter got after the calculations was divided by the sum of all corresponding values, 5,799, giving it a final weight of 12,60 per cent in the overall ranking. These calculations are also presented in table 3 below in order to ease for the reader.

Step		
1)	6,192-4,00=2,192	The mean value of the parameter on the scale from 1 to 7
		was deducted by 4.
2)	2,192	This was the "new" mean value for the parameter on the new
		scale from 0 to 3.
3)	2,192/3,00=0,731 (73,1%)	The new mean value was divided by 3,00 (the new max value),
		which resulted in a percentage of the new max value.
4)	73.1%/5,799=12,60%	The percentage was divided by the sum of all "new" means value.
5)	12,60%	This gave the weighting of this parameter in relation to the total.
T 11 0		

Table 3.

The relative weights of the ten parameters deriving from the second study were assigned with the logic described above. However, since the authors added four parameters related to student satisfaction, these weights had to be adjusted in relation to the weights given to these four parameters. The four student satisfaction parameters were assigned a combined weight of 25 per cent in the final ranking with equal importance between these parameters. Every student satisfaction parameter was thus assigned a weight of 6,25 per cent. With the inclusion of these four parameters, the weights of the other ten parameters had to be adjusted proportionally. To do this the weights of those ten parameters were multiplied with 0,75. To continue with the calculation example from above, *percentage of the graduates employed six months after graduation*, the weight 12,60 per cent was multiplied with 0,75 resulting in a final weight of 9,45 per cent for this parameter.

All fourteen parameters included in study three are presented in table 4 together with their individual weights in the total ranking.

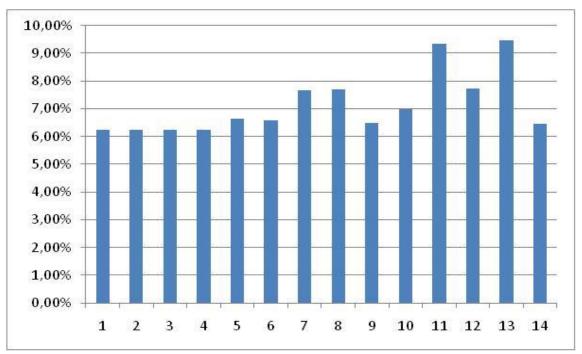


Figure 9. The picture shows the weighting of the 14 parameters in study III.

Weighting	Parameters				
6,25%	1) Overall impression of the education regarding the quality of the teaching				
6,25%	2) Overall impression of the education regarding the possibility to get an				
	interesting employment after graduation				
6,25%	3) Overall satisfaction/dissatisfaction with the education				
6,25%	4) Would you choose the same education today if you were to re-make your choice?				
6,63%	5) Number of teaching hours				
6,57%	6,57% 6) Class-size				
7 <i>,</i> 65%	7,65% 7) Mandatory contact with external actors within the courses				
7,71%	% 8) Accessibility of teachers				
6,48%	9) Possibilities to do an exchange semester at an attractive university				
6,97%	10) Possibilities to meet graduate recruiters outside the teaching hours				
9,33%	11) The availability of study areas and group rooms for studying				
7,73%	12) Average salary of graduates				
9,45%	13) Percentage of graduates employed six months after graduation				
6,47%	14) High entry requirements				

Table 4.

The assumptions and calculations related to the weighting could have been done in other ways and to enable this as well as to increase the transparency of the ranking, the data is presented in Table 4. The raw data behind these values is presented in Appendix IV.

3.4 Methodology for the third study

The third and final study was conducted with over 1300 students in order to get their opinions regarding their education and thereby coming closer to providing an answer to research question three. The 14 parameters described above were included in the study which was carried out in order to rank the 24 Swedish business programs on bachelor level. Information for eleven of these fourteen parameters was collected through a web-survey and the information for the remaining three was gathered from external statistics.

3.4.1 No centralized data base resulted in more 2500 manually entered e-mail addresses

As previously discussed, the initial intention was to visit the 24 different schools in person. However, due to the same reasons as for the second study, this idea was abandoned. Therefore, it was needed to find another way to reach the students from the different schools.

Sweden is known for its principle of public access to official records, and this principle includes the possibility to get lists of names and e-mail addresses of students enrolled in specific classes at Sweden's universities. Noticing this, the authors started a rather time consuming work to reach all 24 school's Ladok²² representatives and order lists with course participants and their e-mail addresses. There is no centralized system that has this

²² Ladok is the national system used for documentation of academic information at higher education institutions in Sweden.

information collected, and therefore the authors had to contact each school to find the right e-mail addresses. Due to university regulations the Ladok representatives were not allowed to send the material electronically but had to send it through the postal delivery. This resulted in that all material came on physical paper with the implication that all 2596 e-mail addresses that the authors received had to be typed into a computer by the authors. When the nearly 2600 addresses had been manually converted into an electronic format, it was possible to reach the target group of students from each school with e-mails.

3.4.2 Third year students were chosen as the target group for the third study

The ranking in this thesis is evaluating Swedish business programs on bachelor level. Given that those programs are three years long²³ the authors could have chosen to target first year students, second year students, third year students or a mix of the three. Third year students (studying on their fifth or sixth semester) were chosen as the primary target group for the third study. The main reason to this was, as discussed above, that third year students potentially have the broadest point of references of the student experience.

67,4 per cent of the students surveyed were in their third year of studies. The reasons to why not all respondents were studying on their third year are several. It could either be that the student is not following the ordinary program track, meaning that the student could have taken for example the courses "Business I", "Business II" and "Business III" in a row without studying any subsidiary subject. This would result in that the student would study a third year course such as "Business III" already in his/her third semester. Another reason is that, for some schools, the authors had to send the survey to students in classes that were not on third year level, which was done for schools where there were not enough students on third year level.

The appropriate courses were found by browsing *studera.nu* and each of the schools' own web pages with the relevant course descriptions. This was done in order to find information on what courses were offered at each school and at what level these courses were taught. For each course that was found suitable for the purpose of the thesis, the lists of registered students and their e-mail addresses were ordered.

3.4.3 A web-based survey was conducted through Qualtrics.com

When the target group was identified and a way of reaching them was found through e-mail, the next knot to solve was how to best get the students to answer the survey. An online

²³ Except the mentioned "magister" programs which are four years long

survey was the only realistic way to reach a sample as big as the one for this study (2596 students). The authors used Qualtrics.com for creating and carrying out the survey. The respondents were contacted with an e-mail from an e-mail address created by the authors²⁴. In the email, the respondents were kindly asked to fill out a survey regarding the quality of their education. It was communicated in the e-mail that the survey only consisted of twelve multiple choice questions and that the survey would not take more than three minutes to fill out. It was also mentioned in the e-mail that the respondent only was to consider parameters related to the education and not external factors such as the student's perception of the city in which the school was located or the quality of the social student-life. The students received a first e-mail from the authors in week thirteen, a reminder in week twelve and a second and last reminder in week fourteen.

3.4.4 Over 1300 students were surveyed about the perceived quality of their education

1312 recipients answered the third study and, as stated above, in total 2596 students were emailed. Deducting the e-mails that bounced back because of invalid e-mail addresses, a total number of 2544 students were e-mailed. This resulted in a responding rate of 51,6 per cent which, according to Baruch et al. (2008), is in line with common research standards. The responding rate could potentially be higher in reality since the authors have no information about the number of cases where the e-mail address that received the e-mail was not in use or not just checked upon.

HHS-Stockholm was the school with the highest number of individual answers, 101, followed by Uppsala with 90 answers while Halmstad had the highest responding rate, 83,3 per cent. However, this was also the school with the lowest number of individual answers, 20. The school with the lowest responding rate was Borås were 33,6 per cent of the e-mailed students filled out the survey. For more detailed information about number of responses and responding rates at different schools, see Appendix V. For more detailed information about the survey, see Appendix VI.

3.4.5 More women than men responded and the majority studied on their sixth semester

One objective with the third study was to reach a target group as comparable as possible in order to get a fair and equal picture of the student's experiences. Out of the 1312 respondents, 1308 chose to confide what semester they studied on. The chosen target group was business students studying their fifth and sixth semester and 67,4 per cent (884 students) of all respondents were within this target. The students not studying on their third year were

²⁴ Universitetsutvardering@gmail.com

rather equally distributed between semester three and semester nine or above, with no category of semester of study including more than eight per cent of the respondents. In total, 78,9 per cent of all the respondents had studied five semesters or more. Gotland, Borås, Luleå and Blekinge were the only schools that did not have the majority of their respondents studying their sixth semester. This fact could affect the answers from the recipients from those schools and this should therefore be taken into consideration when evaluating the ranking. The majority of the respondents from Gotland and Borås studied their third semester while the majority of the target group at the latter two schools studied their fourth semester.

All respondents declared their gender and 56,7 per cent (744 respondents) were females while the remaining 568 students (43,3 per cent) were men. Väst was the school with the highest representation of women (78,4 per cent), while Lund was the school with lowest percentage of women responding (29,0 percent). Close to fifty per cent (49,5 per cent) of the 1312 respondents were in the ages between 17 and 23 years while 38,5 per cent were between 24 and 28 years old. The remaining 12,0 per cent were 29 years or older.

3.4.6 The fourteen parameters were categorized into four categories

As described earlier, the first study and the second study resulted in a ranking consisting of 14 parameters. These parameters have been divided into four categories in order to make it easier for the reader to follow the upcoming part of the thesis. Figure 10 below shows the four main categories and the parameters within each category as well as the weighting of both the categories and the individual parameters. The next-coming part of the methodology chapter with the description of why the questions were formulated in the way they were can be seen as an operationalization of study III in order to get closer to answering research question III.

Three external parameters			
•	Average salary of graduates	7,73%	
•	Percentage of graduates employed six months after graduation	9,45%	
•	Entry requirements	6,47%	
<u>Three</u>	Three course related parameters		
•	Number of teaching hours	6,63%	
•	Class size	6,58%	
•	Mandatory contact with external actors within the courses	7,65%	
Four non-course related parameters			
•	Accessibility of teachers	7,71%	
•	Possibilities to do an exchange semester at an attractive university	6,48%	
•	Possibilities to meet graduate recruiters outside the teaching hours	6,97%	
•	The availability of study areas and group rooms	9,33%	
<u>Four S</u>	tudent Satisfaction parameters	<u>25,00%</u>	
•	Overall impression of the education regarding the quality the teaching	6,25%	
•	Overall impression of the education regarding the possibility to get an	6,25%	
	interesting employment after graduation		
•	Overall satisfaction/dissatisfaction with the education?	6,25%	
•	Would you choose the same education today if you were to remake your choice?	6,25%	

Figure 10. The figure shows the 4 categories of the 14 parameters.

3.4.6.1 *Information for three out of the fourteen parameters was found in external data* As stated in the methodology chapter data for three out of the fourteen parameters was found in external data.

- The first parameter is related to the *entry requirement* needed to be admitted to the specific educational program. The data for this parameter was found through the official statistics from *The Swedish Agency for Higher Education Services* online portal, www.vhs.se (2011-02-06). The authors calculated the average of the GPAs needed to be admitted in the second intake in the fall of 2010, 2009 and 2008.
- The second parameter is made up by *the percentage of graduates employed within six months after graduation*. The data for this parameter was found in the report *Civilekonomerna tre år efter examen,* published by the labor union Civilekonomerna (2010).
- The third and last external parameter is made up by the average salary that graduates have after three years. The data for this parameter was found by using the raw data from the same report as above; *Civilekonomerna tre år efter examen*. In order to get the raw data, the authors contacted the head of research at "Civilekonomerna", Alexander Beck. With this data, the average salary could be calculated for the different schools.

3.4.6.2 Ten parameters derived from the online survey

The web survey contains twelve questions that cover ten parameters and three categories; 1) *course related topics, 2) non-course related topics, 3) student satisfaction.* All questions in the survey were of multiple choices character and two of the questions were followed by a voluntary box for comments. It was also possible for the respondents to leave comments at the end of the survey. The inclusion of boxes for comments was made in order to give the authors a more gradated picture of the respondents' opinions.

Course related topics - four questions

- 1) Approximately how many teaching hours per week have you had within your education?
- 2) Approximately how many hours per week, have you had lectures/seminars with less than 50 students in the class during the *first half of your education*?
- 3) Approximately how many hours per week have you had lectures/seminars with less than 50 students in the class during the **second half of your education**?
- 4) At approximately how many times during your education have you had a mandatory teaching activity where you had to interact with an external actor? (i.e. a company, an organization, municipality etc. **Not** guest lectures.)

The rationale behind choosing these specific questions – Course related topics

The three first questions are interrelated and aim to discover how much lecture time the students have at the different schools and how much attention the students get from their students. The decision to divide the parameter covering class size into two questions in the web-survey was made with the goal to capture the potential differences in the sizes of the classes between the beginning and the end of their educations. The reason was that the ranking aims to rank a whole bachelor education and not only a specific year of studies. However, the questions are though presented as one value in the final ranking. The goal with the last question is to catch the frequencies that the students were exposed to external actors within their courses.

Non-course related factors and facilities - four questions

- How do you perceive the accessibility of your teachers outside the scheduled lectures? (For example: office hours or quick responses to e-mails.)
- How attractive do you find the exchange universities that the school offers?
- How do you perceive the possibilities to meet graduate recruiters outside the scope of the courses? (For example: career fairs, recruitment events, company presentations.)
- Is your perception that there are many study areas and group rooms at your school?

The rationale behind these specific questions - Non-course related topics

The education is not only connected to the time when the students meet the teachers, there are also many other things that contribute to the university experience and learning. This thesis has actively chosen to neglect parameters which are not related to the educational quality. The parameters above could also be seen as parameters which to some extent are detached from the education. However, these parameters were all considered to be central for the students in the second study.

Student Satisfaction - Four questions

- Are you satisfied/dissatisfied with your education overall?
- What is your overall impression of your education concerning the quality of the teaching?
- What is your overall impression of your education regarding the opportunities to find an interesting employment after graduation?
- *Would you choose the same education today if you were to re-make your choice?*

The rationale behind these specific questions - Student satisfaction

As mentioned above, the student satisfaction parameters were not part of the second study. The reasoning for this has been explained in section 3.3.5 and it will therefore not be touch upon further here.

3.4.7 14 parameters boiled down to one ranking

In order to fulfill the purpose of this thesis, three studies were carried out. 33 parameters from the first study was reduced to 24 in the next study and then those 24 were refined to 14 parameters that are part of the ranking. Below is a clarification of how the scores from the different parameters in study three were calculated and how they together compound the ranking created.

The authors used two different methods for calculating the score for each school in the ranking. The first way of calculating the scores was used for the parameters that were evaluated on a scale from one to seven. All four questions related to student satisfaction were for example calculated with this method. If Göteborg, for example, got a mean value of 3,50 for one of these parameters, the score was calculated as a fraction of the maximum value (7,00) so that the school got 50 per cent (3,50/7,00=0,5) of the highest value obtainable. This 50 per cent was then multiplied with the weight of the specific parameter in order to get the value for Göteborg on this parameter. The following parameters has, in conformity with the four student satisfaction parameters, been calculated in the same way; *accessibility of the*

teachers, attractiveness of the exchange universities, possibilities to meet graduate recruiters outside the courses and the access to facilities such as group rooms and study areas.

The other way that the authors calculated the scores for the remaining parameters was by comparing each school's score with the score from the school that got the highest score in that specific parameter. This method was for example used when calculating the scores on the three external parameters. For example, for the parameter related to the percentage of students employed within six months after graduation, HHS-Stockholm had the highest number of graduates with a job (100 per cent). The remaining schools' scores were then calculated as fractions of the highest score. For example, if 78 per cent of the graduates from Skövde would be employed within six months, this would result in that Skövde would get 78 per cent of the total score on this parameter. This 78 per cent was then multiplied with the weight of the parameter in order to get the value for Skövde from this parameter. In addition to for the three external parameters, this way of calculating the scores was also used for the following parameters; *mandatory teaching activity with an external actor, lecture/seminars with less than 50 students* and *the number of teaching hours*.

After the calculations of all individual scores for the fourteen different parameters had been made for a school, those scores were multiplied with the weights of the individual parameters and then added together to give the school a total score. These scores were then compared against the other schools' scores and placed in the ranking.

The methodology chapter is now continuing with a section regarding the reliability and validity of the thesis and is then ended with the methodology critique.

3.5 Reliability

The reliability looks on whether the result from a study would be the same if the study was re-produced (Lundahl & Skärvad, 1992; Malhotra, 2004; Söderlund, 2005). It is therefore crucial to document and in a structured way describe how the process and approach of the research project has gone through (Bryman & Bell, 2007).

If someone would re-produce a study like the ones made for this thesis, it could not be taken for granted that it would result in the same results. The biggest reason for this is that the respondents in the study would not be that same since the respondents in this study will, most likely, have graduated by then. There is a possibility that students from another year have other opinions about their educations. The longer from now the re-creation takes place the larger is the risk that there can be a different outcome of the study. Both the educations and the expectations among the students can change over time and this can affect the level of reliability of a study like this one. This is a fact that cannot be eliminated but in order to increase the reliability the authors have aimed for a sample as big as possible with the goal of finding a somewhat representative selection of the Swedish business students.

The authors have also actively chosen to be as specific as possible in the methodology chapter as well as to provide the raw data used in order to ease the process for someone interesting in re-producing the study.

3.6 Validity

Validity can be seen as a measurement on how well something that a researcher wants to measure actually is measured (Flick, 2009). A study is considered to have a high validity when the parameters within the study actually measure the things they were intended to measure (Söderlund, 2005; Bryman & Bell, 2007). Lundahl and Skärvad (1992) separate internal and external validity. Internal validity relates to how well the study measure what is intended to measure as described above, while external validity relates to if the results from the study are generalizable. It could be that respondents lie, withhold information or manipulate their answers which can result in that the study does not mirror the objective "reality".

This thesis does not claim to give a perfect description of either the educational institutions' capabilities or the perception of all Swedish business students because it is not possible to do that within the scope of this thesis. However, the authors aim to give an indication of where the students seem to be most satisfied with their education. Important to remember when reading this thesis is that there is a risk that the respondents actively have chosen to give a more extreme score (either positive or negative) in order to affect the outcome of the ranking and this should be taken into consideration when looking at the results. However, the authors believe that the size of the sample mitigates the effects of such potential extreme scores. The fact that all students regardless of home school were e-mailed with the same letter and that the design of the survey was the same in order to make everything as equal as possible hopefully minimized the risk for unserious answers.

3.7 Methodology critique

When writing a thesis of this length and magnitude it is inevitable to make choices and selections that can be questioned. This section will try to bring light to certain choices and describe why they were made and discuss the potential shortcomings of them. The section

will first discuss the criticism concerning the methodology for the first study, then for the second study and round off the section with a discussion of the methodology for the third study.

3.7.1 Criticism towards the first study

Criticism towards the selection of the respondents in the first study could be raised. The selection was not a random sample of all business students in the country but was instead made up by people in the authors' surroundings, such as student peers, friends and acquaintances. The reason for this is related to the scope of the thesis and the rather qualitative character of the interviews. The study had to be done early on in the process as it was the key to proceeding with the second study. Given the time constraints, it would have been hard to get students from other geographic regions than Stockholm to take their time if the authors would not have known them in advance or physically gone to the locations. This could be seen as a weakness and it could be argued that the picture presented of the Swedish business students' perceptions is not fully accountable and generalized. As mentioned above, an attempt to minimize this risk was made by actively looking for diversity of the respondents in terms of age, gender, and schools. The authors found a good diversity both in terms of schools and ages, but it should be pointed out that the majority of the respondents were male (10/14). And even though a relative broad diversity was reached given the size of the sample, the risk of answers that can be geographically biased should still be acknowledged.

3.7.2 Criticism towards the second study

One limitation with the methodology for the second study is that all respondents come from schools in Stockholm and that the answers therefore might be biased from a geographical point of view. However, as described earlier, the three sample schools reflect the 24 schools covered fairly well with regards to entry requirements. Despite this, it would have been preferable to have a sample which would be representative in terms of geography as well.

The representativeness of the respondents is also related to the choice of courses that were approached. For two of the schools, only one course was used as the base for finding respondents while in the third school, two courses were used. Therefore, it is not certain that the students interviewed are representative for all third year students at the schools. However, as 4 per cent of the respondents were from courses within economics and 96 per cent from courses within business, this risk should be reduced because this quite well reflects the subject of major studies of all business & economics students in Sweden where the

students choosing these two subjects as major area of studies make up 91 per cent of all students (Civilekonomerna, 2010).

Further, another problem with the chosen methodology is that, because of the limited scope of this thesis, 14 parameters were excluded although they were found to be at least somewhat important for the students surveyed. In order to enable the creation of a ranking with a different design the authors have provided all raw data needed to design another ranking with as many of the 24 parameters as the person interested in doing this wants. Moving on, the thesis could also be criticized for the inclusion of the four student satisfaction parameters. These four were added by the authors without being evaluated by the students in the second study. The reasoning for this has been explained above; that the authors saw those parameters as the definite perception of the educational experienced by the students and that they would therefore bring value to the ranking. This methodology can of course be questioned, and therefore the authors will present one ranking including all 14 parameters as well as one ranking containing only the 10 parameters related to student satisfaction. By doing this the authors give the reader the opportunity of choosing the ranking that s/he finds the most suitable.

Continuing, another criticism that could be raised is concerning the dilemma with a survey where the respondents are to evaluate the importance of different parameters. The risk could be that the result is flawed by the order in which the questions are presented to the respondents. The respondent might not have the full picture of the relative importance of all the parameters until s/he has seen all the questions and might reconsider an earlier answer when faced with the whole picture. In order to mitigate the effects of this problem, the order in which the questions in the survey were presented was switched around so that all respondents did not answer a survey with the exact same order of questions.

Another limitation, related to the choice of using a scale from one to seven, is the potential risk that people tend to choose the alternative in the middle, a four, because that is a way of escaping making a statement. This could potentially result in survey responses that tend to be more neutral (closer to a value of four) than the "real" perceptions actually are. Further, there are advantages and disadvantages with all scales and, as stated above, the scale ranging from one to seven is a commonly used scale but the fact that there are drawbacks with it should still be acknowledged.

3.7.3 Criticism towards the third study

As described, one question was excluded from the third study even though it was judged among the ten most central parameters by the students in the second study. The reason behind this decision was that it was that it was hard to find a feasible way of measuring this parameter without risking the comparability of the different schools, due to the varying rules of what courses a student can include in his/her degree. A reduced comparability would undermine the value of the ranking and the decision was, based on this rationale, made to exclude the parameter. This reduces the influence of the student's opinions in the ranking to some extent but the authors believe that the ranking's validity benefit from the decision.

Continuing, the usage of external statistics from both Civilekonomerna and The Swedish Agency for Higher Education Services could also be criticized. However, they are both well established and acknowledged organizations, the latter is governmental and their statistics regarding entry requirements to universities is a linchpin in the Swedish educational system which should make the data rather trustworthy. Regarding the statistics used from the report "Civilekonomerna tre år efter examen" (Civilekonomerna, 2010), this is a well-known and continuously published report and the 2439 respondents in the report made up 44,6 per cent of that year's (2006) total number of graduating business students and the report should therefore be rather representative of all graduates.

The selection of the respondents could be questioned; the authors have reached 1312 students out of which the majority, 67,4 per cent, studies on their third year and almost 80 per cent of the students had studied five semesters or more. The choice of courses at each school was rather randomized; all courses which indicated to be third year courses within business and economics were chosen to be part of the sample. This led to that the schools with more students and courses often had more individual respondents than schools with fewer students. The authors argue that this is a defendable way of choosing the sizes of the samples since it reflects the size of the actual business and economics departments at the different schools. It is also important to point out that all schools were weighted in the same way, regardless of the amount of individual respondents from the first and second year of their studies. They were included since the number of third year students reached was not representative enough for some schools. This occurrence of these non-third-year students in the study will be taken into consideration in the analysis section of the thesis.

The choice of a multiple-choice web survey could be criticized for being a rather one-sided way of collecting the respondent's opinions regarding their education. Although this might be true, a web survey might also be the only way to reach this amount of students, studying in locations geographically spread out over the country, in this short amount of time. In order to mitigate the risk of this one-sidedness, room was left at three places in the survey for the respondents to leave comments.

As touched upon above, another risk is that respondents might actively have chosen to give an extreme score, either positive or negative. A reason for giving a too positive score could be that the student believes that a high ranking position for his/her school would benefit her/him in the longer perspective. This is definitely a risk and it should be kept in mind when analyzing the outcomes of this thesis. However, the risk should at the same time be mitigated by the fact that it applies for all schools.

Lastly, a problem with the subjectivity comes when basing the ranking on students' opinions. All twelve questions in the web-survey were answered by the respondents based on their own subjective mind and thoughts. There are few things in the questions that are set values or "right" answers. The answers can therefore not be taken as a definite truth. Students will most certainly have different goals and expectations of their education and it will probably also differ from school to school what the students want. Giving an example, a student at School A might have a wish of working as a bank clerk after graduation and believes that s/he have good chances of getting such a job and therefore gives a high score to the school on the question; What is your overall impression of your education regarding the opportunities to find an interesting employment after graduation? However, a student at School B might wish to work for an investment bank in New York and believes that her/his chances are rather limited due to the hard competition for such a job. Therefore this student gives the school a much lower score than s/he would have done if s/he would have wanted to work as a bank clerk. It is therefore very central for the authors to emphasize that the ranking presented is not an objective ranking that shows which schools are the "best" in Sweden, but that this is a ranking from the students' perspectives and their perceptions of the best schools. The goal with this example is to try to illustrate that the differences in visions and objectives can influence the rating that the respondents give to their school in a specific question. Therefore, the fact that the students in the second study valued some parameters which are more fact- and statistical driven can be seen as a positive thing as it reduces the influence of subjectivity in the ranking.

4. Empirics

Three studies have been conducted in order to develop a ranking on Swedish business schools with a student perspective. The findings from the third study are in this chapter going to presented, first parameter by parameter and then the main ranking is presented, complemented with five sub-rankings.

4.1 Results from the third study

As described in the previous chapter, three studies have been carried out. The findings from the first two studies were described in the previous chapter. Below, the results from the third study are presented, thus concluding the presentation of empirical results which was started in the methodology section. For more information about the raw data behind each of the 14 parameter, please see Appendix V.

The third study was the biggest of the three studies, including 1312 students. It consisted of 14 parameters that together add up to the final ranking. 1312 students answered the survey resulting in a responding rate of 51,6 per cent. The parameters are divided into the same categories as in the methodology section, and the results are presented in the following order; 1) *External parameters 2) Course related parameters, 3) Non-course related parameters* and 4) *Student satisfaction parameters*.

4.1.1 Three parameters from external sources - three questions

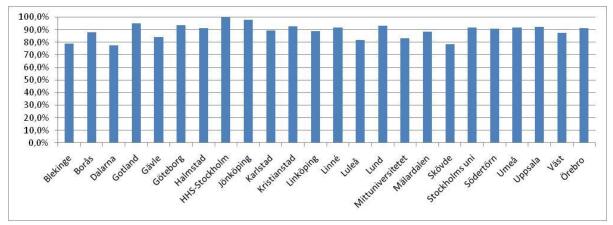
The data for these three parameters was gathered, and for some parameters processed, from external data. These parameters give the ranking a little bit less subjectivity and could be seen as some form of counterbalance to the more subjective answers from the survey.

4.1.1.1 The percentage of students employed within six months after graduation

This was the parameter that was considered to be the single most important factor to be included in a ranking from the perspective of Swedish business students. The data for the parameter was collected from the report *Civilekonomerna – Tre år efter examen* (2010) in which the raw data comes from the students that in 2006 graduated from a Swedish business education.

The parameter was given a weight of 9,45 per cent of the total ranking, and the score on the parameter was for every school calculated as a fraction of the score for the school with the highest result.

HHS-Stockholm was the school with the highest number (100 per cent) of graduates employed within six months of graduation. Jönköping and Högskolan i Kalmar²⁵ were the two runner-up schools with 97,7 per cent and 95,6 per cent of the graduates employed within six months after graduation. Dalarna was the school with the lowest number (77,3 per cent) of students employed, followed by Skövde (78,6 per cent) and Blekinge (79,1 per cent).





4.1.1.2 The average salary three years after gradation

The second of the three external parameters refers to the average salary that the graduates had three years after graduation²⁶. This means that the numbers do not need to have any correlation with the initial salary that the respondent got or the salary that graduates from these schools can expect today.

This parameter was seen as the fourth most important parameter in the second study and was given a weight of 7,73 per cent in the total ranking. The weighting of the parameter was for every school calculated as a percental ratio from the school with highest salary.

HHS-Stockholm was also here the school with the highest score. The students from this school had an average salary of 48 973 SEK three years after graduation. The drop to the next schools was noteworthy, students from HHS-Stockholm earned on average 13 258 SEK more per month than students from Stockholms uni who earned 35 715 SEK, and had the second highest income. The salary span was thereafter much tighter and the students from the third

²⁵ Högskolan i Kalmar is today part of Linneuniversitet and these numbers were taken from 2006 when Högskolan i Kalmar and Växjö universitet, that today are called Linneuniversitetet, were two separate schools. The authors have therefore added the two schools score and taken the average score from the two. The same procedure was done for all three external parameters for Linneuniversitetet. This made Linneuniversitetet's score for this parameter in this ranking; 91,55 per cent (=(95,6+87,5)/2)).

²⁶ Students graduating 2006 were the sample used in this parameter.

and fourth schools on this parameter, Lund and Linköping, earned 35 440 SEK and 34 191 SEK respectively. In the other end of the table the following three schools ended up; Luleå (26 543 SEK), Skövde (26 364 SEK) and Kristianstad (27 016 SEK). The average salary for business students who graduated in 2006 was three years later 31 077 SEK.

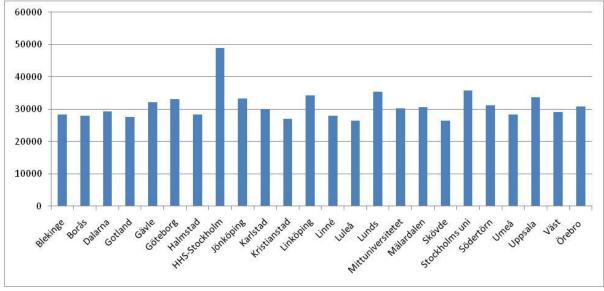


Figure 12.

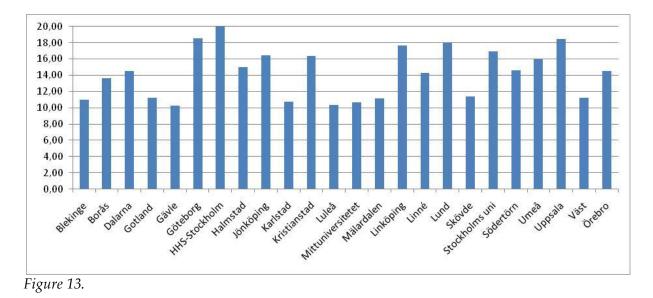
4.1.1.3 The grade point average needed to be admitted

The required GPA to be admitted at the different business programs was given a weight of 6,47 per cent in the final ranking. The scores in this parameter were calculated from the average GPA needed to be admitted in Higher Education in Sweden's second intake for the fall of 2008, 2009 and 2010. The national admission system changed between 2009 and 2010, and from 2010 there exist two admission groups from which students with high school grades can be admitted; either grades that has been complemented or grades that has not been complemented (Högskoleverket, 2011-03-28). Before 2010, there was only one admission group for high school grades, which included the two previously mentioned groups. In order to make the results as comparable as possible, the authors chose to include the GPA needed in 2010 from the group with grades that has been complemented since these are the most comparable to the grades needed to be admitted in 2008 and 2009. Another change between 2009 and 2010 was also the introduction of *credit increments*²⁷, which made the maximum grade point 22,5 instead of 20,0. This change was introduced by all schools except HHS-Stockholm (Högskoleverket, 2011-04-04), and all schools' GPA from 2010, except

²⁷ Named *meritpoäng* in Swedish, and it is an extra 2,5 points that high school students can get by studying special courses, for example advance courses in math or a foreign languages. For more information see https://www.studera.nu/studera/4075.html

for the previous mentioned school, have therefore been divided by 22,5 and then multiplied by 20,0 in order to get comparable numbers on the same scale.

The score for this parameter was calculated as a fraction from each school's GPA intake to the highest score obtainable; 20,0. HHS-Stockholm had the highest intake with 20,0 and Göteborg, Lund and Uppsala were the closest runner-ups with scores between 18,5 and 18,0. The schools with the lowest required GPA in order to be admitted were Luleå, Gävle and Mittuniversitetet who all had a score between 10,3 and 10,6.



4.1.2 Eleven parameters derived from the web survey

The results for the majority of the parameters in the final ranking derive from the web based survey. The eleven parameters within the three remaining categories will be described one by one as done above with the external parameters. For more information please see Appendix IV

4.1.3 Course related topics - Three questions

4.1.3.1 Approximately, how many teaching hours per week have you had in your business/economic courses during your education?

This parameter got a weight from the second study that corresponds to 6,63 per cent in the final ranking. The score in this parameter was calculated as a fraction from the school with the highest score. The school with the most perceived teaching hours per week was Göteborg who had 11,2 hours. The next-coming schools were Umeå and Linné who had 10,34 hours 9,75 hours respectively. The schools with the least perceived teaching hours were Blekinge with 3,45 hours, Mittuniversitetet with 5,36 hours and Luleå with 6,34. When studying these

results it should be remembered that both Blekinge and Luleå were two out of the four schools with a majority of the respondents studying on their first or second year.

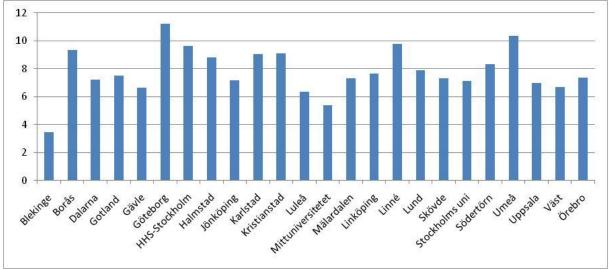
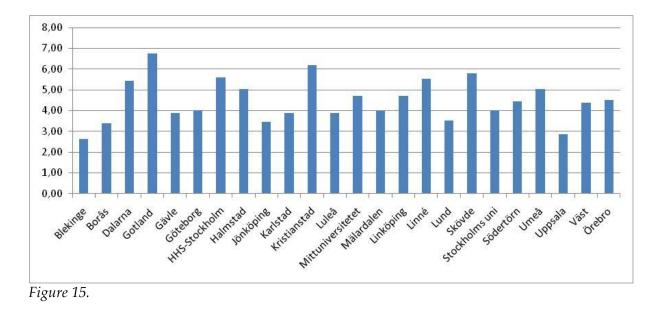


Figure 14.

4.1.3.2 Approximately how many hours per week, have you had lectures/seminars with less than 50 students in the class during your education?

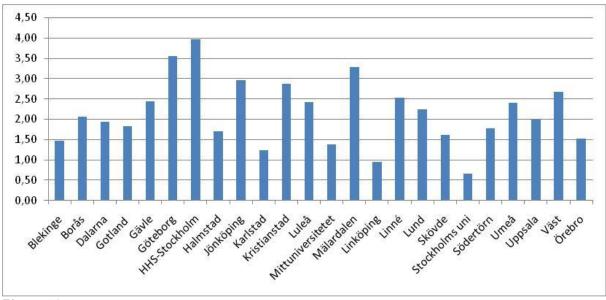
This parameter got a weight (6,57 per cent) rather close to the median of the 10 parameters included in the web survey. As mentioned in the methodology chapter this parameter was asked as two separate questions in the web survey to see any differences between the number of hours of lectures/seminars with less than 50 participants during the first and second half of the education. But it is the averages of the two answers that are presented here. The school with the most hours with lectures with less than 50 students was Gotland with an average of 6,74 hours per week. Smaller classes also seems to be common in Kristianstad (6,21 hours per week) and Skövde (5,81 hours per week).

Uppsala (2,88 hours per week), Blekinge (2,63 hours per week) and Borås (3,40 hours per week) are the schools with the least perceived hours in classes smaller than 50 students. However it is worth to, once again, point out that both Blekinge and Borås were two out of the four schools where the majority of the respondents were not studying their fifth or sixth semester. If it would be that it is common to have bigger classes during the first two years of studies, this could affect the results for these two schools. Lund (3,54 hours per week) and Jönköping (3,47 hours per week) were the next-coming two schools that had the least hours per week, and they were also schools where a majority of the respondents are studying on their third year.



4.1.3.3 Approximately how many times during your education have you had a mandatory course activity where you needed to interact with an external actor?

This parameter was assigned a weight of 7,65 per cent in the total ranking. The parameter was one of the parameters where the results from the different schools shifted the most. HHS-Stockholm was the school where the students perceived that they have had the most course activities with external actors such as companies, governments and organizations. They have, on average, had these kind of course activities 3,98 times while the students at the runner-up schools, Göteborg and Mälardalen, have had external course activities 3,55 times 3,29 times respectively. Karlstad (1,24 times), Linköping (0,94 times) and Stockholms uni (0,66 times) were the schools where the students perceive that they have had the least mandatory course activities with external actors.

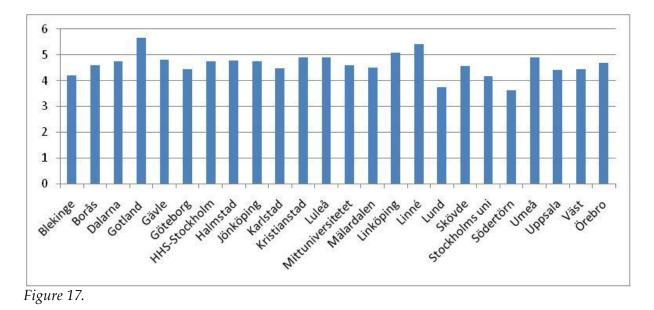




4.1.4 Non-course related parameters- Four questions

4.1.4.1 How do you perceive the accessibility of your teachers outside teaching hours?

The average score on this question varied between the highest score 5,67 for Gotland, and the lowest score, 3,62 for Södertörn. The students which were most pleased with the accessibility of their teachers, after the students from Gotland, can be found at Linné which received 5,41 as their average score. The third best school in this category was Linköping, which had an average score of 5,09. The students at Södertörn were the ones least happy with their teachers' accessibility, followed by Lund with an average score of 3,74 and Stockholms uni with 4,17 as their average score. Except for the top three schools and the four schools from the bottom, all other 17 schools were within the range of 4,40 and 4,90. What stands out is that there is a considerable gap in scores between Lund and Södertörn. The parameter was given a weight of 7,71 per cent in the final ranking.



4.1.4.2 How attractive do you find the universities that your school has exchange partnerships with to be?

On this parameter Jönköping outperformed all other schools by receiving an average score of 6,06. They were from the top followed by Lund with an average score of 5,15 and Göteborg with a score of 4,89. On the other end of the table, the reader can see that the students at Gävle were the ones that appeared to be the least happy with their exchange universities, giving their school a score of 3,78. They were followed by the students at Mittuniversitetet, who gave their school a score of 4,04, and the students at Södertörn who gave their school a score of 4,06. An interesting observation is that except for Jönköping which is a school with a clear international profile (Högskolan i Jönköping, 2011-04-23), the remaining top six in this

category were among the more established universities²⁸. On the other hand, three out of four schools from the bottom were young and all founded after 1989.

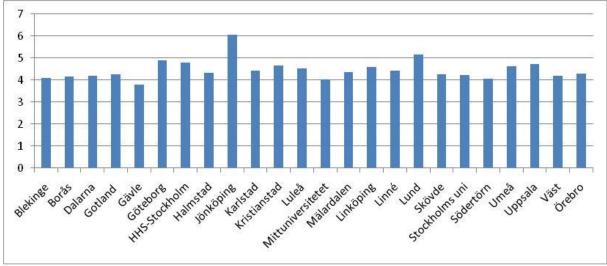


Figure 18.

4.1.4.3 How do you perceive the possibilities to meet a potential employer outside the scope of the courses?

This is a parameter with one of the lowest variations in answers between the schools. Except for the two schools with the highest scores, HHS-Stockholm (6,28) and Göteborg (5,39), all schools are in the range from 3,59 (Blekinge) to 4,96 (Umeå). The parameter was given a weight of 6,97 per cent.

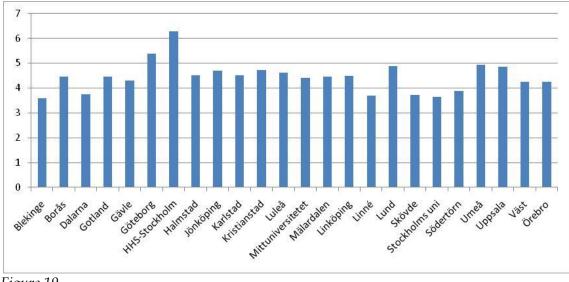


Figure 19.

²⁸ The 24 schools that are part of the study, presented in cronological order of establishment; Uppsala, 1477; Lund, 1666; Stockholms uni, 1878; HHS-Stockholm, 1909; Göteborg, 1954; Umeå, 1965; Linné (Växjö universitet), 1967; Luleå, 1971; Linköping, 1975; Örebro, 1977; Jönköping, 1977; Kristianstad, 1977; Skövde, 1977; Mälardalens, 1977; Dalarna, 1977; Gävle, 1977; Borås, 1977; Linné (Högskolan i Kalmar), 1977; Halmstad, 1983; Blekinge, 1989; Väst, 1990; Mittuniversitetet, 1993; Södertörns, 1996; Gotland, 1998 and Karlstad, 1999.

4.1.4.4 Is your perception that there are many study areas and group rooms?

This parameter was considered to be the second most important by the respondents of the second study and was given a weighting of 9,33 per cent of the final ranking. This was the parameter with the lowest overall score, and only two schools, Gotland and Borås, received a score higher than four. A four corresponds to that the students are neither satisfied nor dissatisfied with the school's facilities. This means that the students at 22 out of 24 schools were dissatisfied with the access to study areas and group rooms. Students at HHS-Stockholm are the ones most disappointed (1,49) followed by Uppsala (2,02) and Dalarna (2,19).

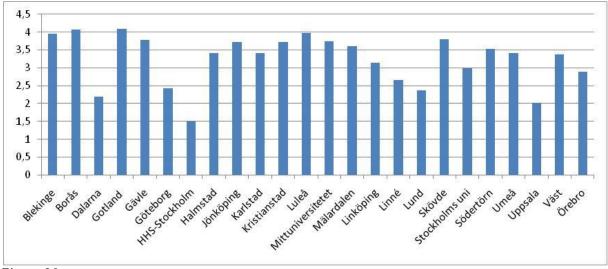
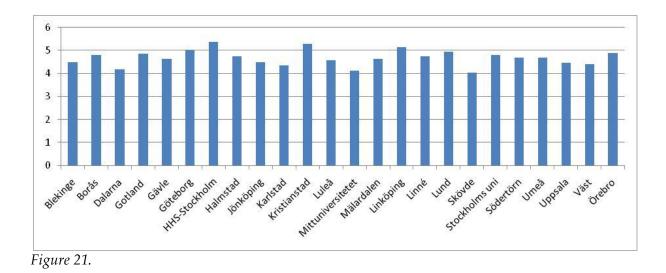


Figure 20.

4.1.5 Student satisfaction – Four questions

4.1.5.1 What is your overall impression of your education regarding the quality of the teaching?

The answers to this question were to be given on a scale from one to seven, where one represented "very unsatisfactory" and seven represented "very satisfactory". A similar 1-to-7 scale was used for the remaining three questions in this category as well. As can be seen in the figure below, the answers spread from 4,03 for the school with the lowest score (Skövde) to 5,36 for the highest performing school (HHS-Stockholm). HHS-Stockholm was followed by Kristianstad (5,27) and Linköping (5,13). These were also the only three schools with an average score above 5,00, indicating the overall low scores given in this parameter. Worth noticing is the concentration of the majority schools around similar scores; 15 out of the 24 schools are all within the range of 4,46 to 4,95, thus showing a very small variance. As argued in the methodology section, this, as well as the remaining three parameters about student satisfaction, were all assigned a weight of 6,25 per cent.



4.1.5.2 What is your overall impression of your education regarding the possibility to get an interesting employment after graduation?

The results from this parameter are varying more than the results from the previous parameter, with the lowest value being 4,61 (Stockholms uni) and the highest value being 6,50 (HHS-Stockholm). From the top, HHS-Stockholm is followed by Göteborg with a score of 5,68 and Borås with a score of 5,48. The schools with the lowest values were, after Stockholms uni, Mittuniversitetet with a score of 4,63, Gävle and Dalarna. The latter two both had a score of 4,65. The majority of the schools (17 out of the 24) can be found very close to each other and all are between 4,66 and 5,16, illustrating the low variance of the scores. It is worth mentioning that despite the generally narrow spread of the scores, there is a clear difference between the school with the highest value, HHS-Stockholm with 6,50 and the school with the second highest value, Göteborg which had the value 5,68.

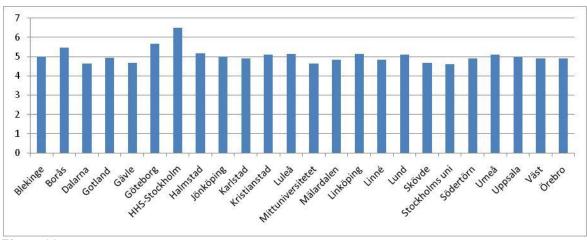
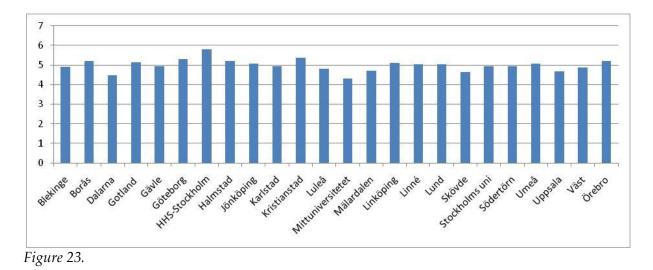


Figure 22.

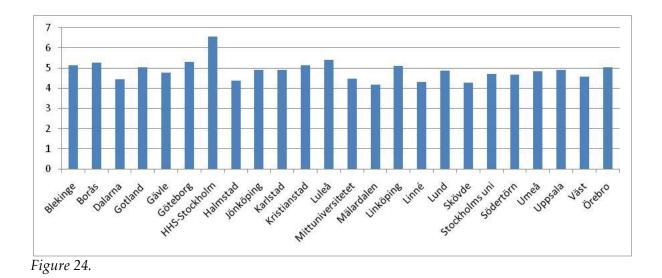
4.1.5.3 Overall, are you satisfied/dissatisfied with your education?

The school with the most satisfied students was HHS-Stockholm with an average score of 5,81, followed by Kristianstad with 5,38 and Göteborg with 5,30. Mittuniversitetet was the school receiving the lowest score from their students with an average of 4,31, followed by Dalarna (4,47) and Skövde (4,65). 16 out of 24 schools received a score between 4,65 and 5,15 showing that except for a few extreme values the schools are quite homogeneous with regards to the allocation of scores.



4.1.5.4 Would you choose the same education today if you were to re-make your choice?

The students which were most positive to making the same choice of education today can be found at HHS-Stockholm which received an average score of 6,57. This school is from the top followed by Luleå which received an average score of 5,39 and Göteborg with a score of 5,30. The students who are least likely to make the same choice today can be found at Mälardalen who gave their school an average score of 4,17. They are followed by the students at Skövde (4,26) and Linné (4,31). The variance in scores is bigger for this parameter compared to the other parameters regarding student satisfaction but a rather big part (11 out of 24) of the schools can be found in the range of 4,55 and 5,05.



4.2 The 14 parameters resulted in one main ranking and five sub-rankings

The results from the fourteen parameters have been presented above and the sum of those is here going to be added together to compose the ranking. The authors have created a main ranking containing all of the 14 parameters, as well as five sub-rankings; one for each of the four categories of parameters that has been presented earlier and one ranking with all parameters except the ones related to student satisfaction. The reason to present this last subranking is that those parameters were not among the ones that were seen as the most important ones in study two. Presenting this ranking as a complement to the overall ranking provides the reader with a ranking only based on the importance of parameters as seen by the students surveyed in this thesis.

4.2.1 HHS-Stockholm ended up in the top in the ranking with all 14 parameters

Taken all parameters together the maximum value that a school could get was 100. In order to get this maximum score the schools would have to get full score on each of the 14 parameters. The institution that received the highest score in the main ranking was HHS-Stockholm that got 82,0 out of the total score. That was 7,5 points higher than the runner-up Göteborg, which got a total score of 74,5. The gap between Göteborg and Kristianstad (73,3), who ended up on third place, was much smaller. Jönköping ended up on the fourth place with 71,0 while Umeå have the fifth highest score with 70,7.

In the other end of the table Blekinge was the institution with the lowest score. They received 57,7 while the second school from the bottom, Mittuniversitetet, got 60,3 out of the total hundred. The next coming schools were Dalarna (61,5) and Skövde (61,8).

Noteworthy is that many of the schools got scores very close to each other. There are five schools with around 67 points and there are another five schools with around 64 points,

which makes it very hard to differentiate these schools from each other. A diagram over the main ranking is presented in figure 25 below followed by a list where the schools' positions and total scores also are presented.

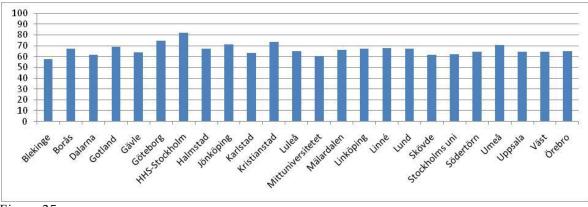


Figure 25.

1 Handelshögskolan i Stockholm	82,01	13 Örebro universitet	64,89
2 Göteborgs universitet	74,47	14 Luleå tekniska universitet	64,73
3 Högskolan i Kristianstad	73,31	15 Uppsala universitet	64,51
4 Högskolan i Jönköping	70,95	16 Södertörns högskola	64,37
5 Umeå universitet	70,66	17 Högskolan Väst	64,16
6 Högskolan på Gotland	69,16	18 Högskolan i Gävle	63,83
7 Linneuniversitetet	67,91	19 Karlstads universitet	63,28
8 Lunds universitet	67,39	20 Stockholms universitet	62,35
9 Högskolan i Borås	67,28	21 Högskolan i Skövde	61,86
10 Linköpings universitet	67,24	22 Högskolan i Dalarna	61,54
11 Högskolan i Halmstad	67,05	23 Mittuniversitetet	60,33
12 Mälardalens högskola	65,98	24 Blekinge tekniska högskola	57,65
T 11 F			

Table 5.

4.2.2 Five sub-rankings give the reader a taste of the differences within the different categories

The methodology and the empirical chapter have so far been dividing the 14 parameters into four different categories; external parameters, course related parameters, non-course related parameters and student satisfaction parameters. A ranking of each of these four categories are here presented and an extra ranking of the three categories not including the student satisfaction is also compiled.

4.2.2.1 A ranking based on external parameters

When putting together the parameters from the three external parameters the outcome changes quite substantially from the main ranking. This is especially obvious for more established schools such as Stockholms uni, Uppsala and in some aspects even Lund, whose positions all increased. These three external parameters counted for 23,7 per cent of the main ranking and 23,7 is therefore the maximum score that a school could obtain in this composition. HHS-Stockholm ended up in top, followed by Göteborg, while Skövde and Luleå got the lowest scores.

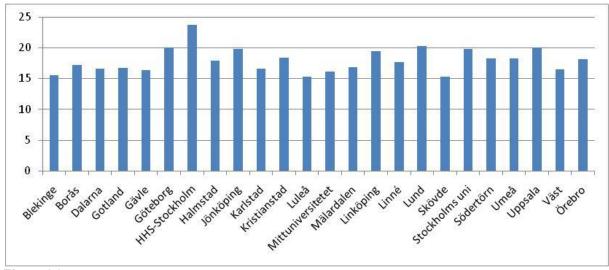
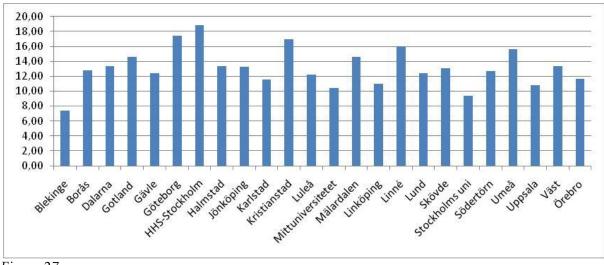


Figure 26.

4.2.2.2 A ranking based on course related parameters

This category is containing three parameters which together counted for 20,8 per cent of the main ranking. Also in this sum-up, HHS-Stockholm and Göteborg are the two schools in the top. Several schools that had prominent positions in the main ranking also scored well in this category, for example Kristianstad, Umeå and Linné. Stockholms uni and Blekinge can be found in the bottom of the ranking.





4.2.2.3 A ranking based on non-course related parameters

This was the category where the range between the highest and lowest score was the smallest. This category contained four parameters and got a total weighting of 30,4 per cent in the main ranking. No school received a higher score than Jönköping that got 20,4. Dalarna got 15,8 which was the lowest score obtained.

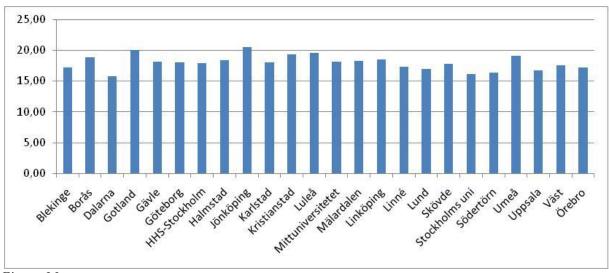
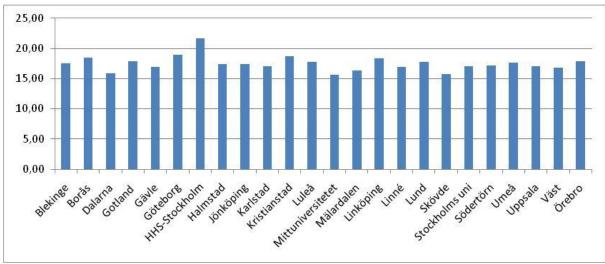


Figure 28.

4.2.2.4 A ranking based on student satisfaction parameters

This category, containing four parameters, counted for 25,0 per cent of the total weight in the main ranking. Like for the prior category, the category has a rather small range between the results. The variation between Göteborg that ended up as second and Skövde and Mittuniversitetet that got the lowest score is only 3,3 points out of the 25 point possible for the category. HHS-Stockholm got the highest result in the category.





Above, the main ranking and the four sub-rankings covering the four categories of parameters have been presented. This empirics chapter is now going to be ended by the presentation of the last ranking which only takes the three first categories into consideration.

4.2.2.5 A ranking based on the ten parameters identified by the students in study II

These three categories were worth 75,0 per cent of the main ranking. HHS-Stockholm and Göteborg is the top two schools, in similarity with the results from the main ranking, while Blekinge and Mittuniversietet can be found in the other end of the table.

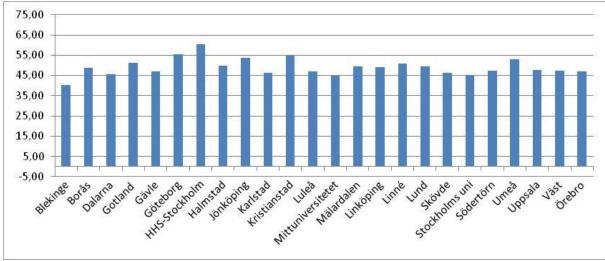


Figure 30.

5. Analysis

In this chapter, the findings from the empirical chapter are going to be analyzed and discussed. The purpose of the thesis will be the starting point for the analysis and the empirical findings will be linked and compared with the theoretical findings presented in chapter two.

5.1 Introduction to analysis

With the categorization made by Usher & Savino's (2007) as a tool (see figure 31), the first part of the analysis is contrasting the explanations brought up in theory to why existing university rankings do not affect students significantly with the empirical findings in this thesis, in order to provide an answer to **research question 1: Why do existing rankings fail to inform Swedish business students well enough?** All parameters in figure 31 are analyzed in order to find where the parameters used in previous research are not in line with what Swedish business students find important when evaluating their education. The relative importance of the parameters included in the second study is then analyzed in order to provide an answer to **research question 2: what parameters do students find important when evaluating educational quality?**

Beginning characteristics	• Entry requirements – GPA and Standardized test, Geographical diversity of the student body
Learning Inputs — Staff	• Number of teaching hours, Number of teaching hours given by a professor, Number of faculties within the university, The ratio of faculty personnel to students, Class size
Learning Inputs — Resources	• Library resources, University spending/student, Institutional spending/student, Facilities of the school
Learning Outputs	Graduation rate, Retention rate
Final Outcomes	• Graduates with a job within six months after graduation, Average salary of graduates
Research	• <u>Bibliometric</u> citations, Publications, Prizes and awards, Research budget
Reputation	Reputation among employers, academics and students

Figure 31. The figure illustrates Usher & Savino's seven categories with the most frequently used parameters.

In order to provide an answer to **research question 3**: What would the result be when creating a ranking on Swedish business schools with a student perspective?, the second part of the analysis is focusing on the correlations and findings that can be drawn from the third study. This discussion is more detached from theory as it also brings up empirical findings for which the research has yet to formulate theories.

5.2 Analysis - why existing rankings fail to reach out to and inform students

5.2.1 Beginning characteristics

5.2.1.1 Entry requirements & International diversity of student body

During the second study, *high entry requirements* was shown to be an important factor when evaluating the quality of a business education, as it received a score of 5,50 on the scale from one to seven, making it the 12th most important parameter. This shows that the parameter has a relatively high importance for students and this justifies the parameter's relatively widespread occurrence in previous rankings as found by Usher & Savino (2007).

On the other hand, *international diversity of the student body* was judged as less important by the respondents who gave it an average score of 4,18 which made it the 22st most important parameter. However, the circumstances of this study might explain this observation since this parameter mostly is used in international rankings. Since the respondents for this thesis were asked to evaluate their Swedish educations, out of which the majority was given in Swedish, this limits the likelihood that international students would be enrolled in the programs. Therefore, we can assume that the students did not reflect that much over the advantages of an internationally diverse student body but maybe thought more in terms of number of students from different parts of Sweden. Assuming that the increased value of an international student body comes from a multitude of cultures and nationalities, the parameter partly loses its relevance for this study and we should be careful when rejecting the parameter does not seem to be very important to use for rankings on bachelor programs on national level in Sweden.

Taken together, the findings from the Usher and Savino's category "beginning characteristics" provide support for the scholars arguing for objective parameters to be included in rankings (IREG, 2006). With regards to research question one, the observation also shows that the inclusion of entry requirements does not seem to be a main reason for the limited usefulness of existing rankings.

5.2.2 Indicators of Learning Inputs – Staff

5.2.2.1 Number of teaching hours

This parameter received an average score of 5,54 in the second study, giving it the 9th highest position on the list of parameters important for the students. In line with previous research, (Oswald, 2001, Taylor & Braddock, 2000), this shows that teaching hours seems to be a rather central and quite appropriate way of measuring learning inputs.

5.2.2.2 Number of teaching hours given by a professor

This parameter was given a score of 5,25 making it the 15th most important parameter. Notably, while stating that the parameter is relevant, several students in the first study brought up the fact that professors are not always better than other teachers. This is also supported by the fact that the parameter "number of teaching hours" received a higher score, indicating that the important fact for the student is whether they have many hours, and not the title of the person teaching. This finding is also in line with the claims by researchs that there is no link between research quality and teaching quality (Dill & Soo, 2005, Marginson & Van der Wende, 2007; Marsh & Hattie, 2002). However, the findings still give some credit to rankings that make a distinction between teaching hours given by professors and the ones given by other staff as such information can highlight nuances of the educational quality.

5.2.2.3 Number of faculties within the university

Interestingly, this parameter was not perceived as important by the respondents in the first study. This shows an indication of a parameter where previous rankings have failed in reflecting the interests of students. However, the circumstances of this ranking have to be taken into account when analyzing this parameter. Since the ranking in this thesis is made on discipline level, the students were asked to identify what they find as important when evaluating their business school. It is therefore likely that these students, who had already decided to study business, did not reflect over the value that a big number of faculties can bring to a whole university. Therefore, we cannot fully state that the parameter is irrelevant for rankings of whole universities. However, the result strengthens the argument put forward by many researchers that rankings on university level have limited possibilities to provide students with relevant information (Almgren, 2008; Boulton, 2010; Bowden, 2000; Dill, 2001; HEFCE, 2008; Nyblom, 2008; Van Dyke, 2005).

5.2.2.4 The ratio of faculty personnel to students

This parameter was perceived as somewhat important by the students in the first study. However, in the discussion about this parameter it was often mentioned together with the class-size parameter because the students saw this measurement as the important one for them since it indicates the tangible result of having a high ratio of faculty to personnel. This shows that although this parameter has an importance, it is the class-size that covers the essence of what the parameter aims to measure and rankings should therefore preferably focus on class-size. This result is supporting the argument by Taylor & Braddock (2000) that class-size is a better measure to use. It also shows that rankings including faculty to personnel but not class-size will have a limited value for the target group of this thesis.

5.2.2.5 Class-size

This parameter received an average score of 5,78 in the second study, making it the 9th most important parameter. This importance justifies the occurrence of the parameter in many rankings as presented by Usher & Savino (2007) and as stated above, it strengthens the reasoning put forward by Taylor & Braddock (2000) who bring up this parameter as a good measure of teaching quality.

5.2.2.6 Overall Analysis of "Indicators of Learning Inputs – Staff"

As can be seen above, the category "Indicators of Learning Inputs – Staff" has ambiguous importance for Swedish business students when evaluating their education. Although the number of teaching hours was shown to be important, the number of faculties within the university was shown to be unimportant. While acknowledging that this thesis is focusing on the discipline level and that this makes the base for the answers a bit different than for a ranking on university level, we can still conclude that this measure is not relevant for the target group of this thesis. More interestingly, the result emphasizes the shortcomings of rankings on whole universities, as the students by judging the parameter as unimportant show that the overall quality of a university is not necessarily related to the quality of a specific department. This result is in favor of a vast amount of research made (Almgren, 2008; Boulton, 2010; Bowden, 2000; Dill, 2001; HEFCE, 2008; Nyblom, 2008; Van Dyke, 2005) and can provide part of the explanation to why existing ranking are not influencing students as much as they could potentially do.

Further on, although the ratio of faculty personnel to students, used in for example the THES ranking, seems to be fairly relevant, it does not seem to be the best measure of teaching quality. Instead, class-size is perceived as a better measure according to the students, which is in line with the reasoning put forward by Oswald (2001) and Taylor & Braddock (2000).

Taken together, these findings suggest that rankings on discipline level have better chances to inform students about educational quality and that an adjustment of the measure faculty personnel to students would increase the usefulness of existing rankings.

5.2.3 Indicators of Learning Inputs – Resources

5.2.3.1 Analysis – Library resources

The importance of this parameter was shown to be rather dubious. While library resources in the form of access to databases and articles was seen as unimportant by the students, number of books in the library was shown to be important as the parameter was given an average score of 5,61 in the second study, making it the 14th most important parameter. This medium importance indicates that it can be right to include it in rankings but that a high weight is not motivated. Taken together, library resources as a whole cannot be considered to have a strong positive effect on the overall quality of a program and their importance in rankings should therefore be limited.

5.2.3.2 University spending per student & Institutional spending per student

None of these parameters received any opinions judging them as important by the students. This lack of importance shows that rankings including this parameter are not reflecting the definition of educational quality as perceived by Swedish business students. The lack of importance to Swedish students could potentially be explained by the absence of tuition fees in Sweden, which could make this thesis' target group less interested in this parameter.

5.2.3.3 Physical facilities of the school

Contrary to the two previously mentioned parameters, this parameter was judged as highly important by the students and it received an average score of 6,17 in the second study, making it the second most important parameter of all investigated. This shows a strong motivation for not only including the parameter but also assigning a high weight to it.

5.2.3.4 Overall Analysis of "Indicators of Learning Inputs – Resources"

The parameters making up this category received different opinions from the students. While parameters such as physical facilities received very high support, university spending was seen as unimportant by the same students. It is therefore hard to say that the category as such is important or unimportant. What stands out instead is that the use of some parameters within this category, such as university spending, by existing rankings can be said to part of the answer to research question one. The double-faced results within the category also show that there are limitations with the classifications made by Usher & Savino (2007) and that there is a need for a more nuanced classification of the parameters.

5.2.4 Indicators of Learning Outputs

5.2.4.1 Graduation rate

This parameter received shared opinions in the first study. Almost all respondents highlighted the fact that it is hard to judge whether a high graduation rate is a sign of high or low educational quality. The reasoning which was put forward by the students was that a high graduation rate might indicate that it is easy to graduate from the program while on the other hand, a low graduation rate could indicate that the program could either be of a low quality making students actively quitting it, or too hard for students to pass. Thus, different conclusions about the quality could be drawn from the same information. Since the parameter received some support, it was nevertheless included in the second study where it received a value of 4,83 making it the fifth least important parameter as judged by the students.

5.2.4.2 Retention rate

This parameter was not said to be important by any student in the first study and was therefore excluded from the second study.

5.2.4.3 Overall analysis of "Indicators of Learning Outputs"

The fact that none of the parameters above was seen as very important by the students is interesting as it shows that there are doubts about including learning outputs in this form in rankings targeted at students. Usher & Savino (2007) also acknowledge that there is a problem that there are limited ways of measuring learning outputs and this might explain the low importance they seem to have among Swedish business students and the results thus confirm the presence of this problem.

Even though the learning outputs as defined in previous rankings do not seem to be very important for the target group, it is reasonable to believe that learning outputs as such are relevant for the target group and that, if there would exist good way of measuring learning outputs, they would be stated as more important by the students. Unfortunately, the inability by previous rankings in identifying such measures hinders this and this finding can provide part of the answer to research question I.

5.2.4 Indicators of Final outcomes

5.2.4.1 Percentage of students employed within six months after graduation

In the first study, there was a very clear consensus of the importance of this parameter and this importance was further strengthened in the second study where the parameter received an average score of 6,192, making it the single most important parameter for Swedish business students when evaluating their educations.

5.2.4.2 Average salary of graduates

This parameter had an average score of 5,793 which placed it on the 4th place over the most important parameters, emphasizing the importance of including the parameter in rankings of business schools. Considering that this is a parameter very commonly used in previous rankings it increases the relevance of those rankings.

5.2.4.3 Overall analysis - "Indicators of Final Outcomes"

Interestingly, out of the categories defined by Usher & Savino (2007), this is both the category with the clearest consensus of the importance of the different parameters included in it as well as the category with the highest positions in the list of most important parameters. Not only does this provide support for Usher & Savino's categorization and the rankings including and putting a high weight on these parameters but it also supports the research (Altbach, 2006; IREG, 2006) pointing out the advantages with including objective parameters in university rankings. We can therefore see conformity between our empirical findings and existing theory. Related to research question one, these findings also suggest that the answer do not derive from the inclusion of these parameters in existing rankings.

5.2.5 Indicators of Research

5.2.5.1 Prizes and awards

This parameter was judged as unimportant in the first study and this finding is in line with Taylor & Braddock (2000) and Jobbins (2005) who criticize the use of this parameter with the argument that it only benefits schools for research which has often been done many years before, instead of providing an up-to-date picture of the quality of the school.

5.2.5.2 Publications

In the first study, a distinction between articles published by researchers involved in teaching and articles published overall by the institution was made by some students. The reason for this was that according to these students, there is no obvious upside with good research as such if it does not benefit the students via a direct link between research and teaching as the students said that good researchers are not necessarily good teachers and that this link might be weak. This finding strengthens the many claims put forward in research saying that there is no clear link between research quality and teaching quality (Altbach, 2006; Dill & Soo, 2005; Marsh & Hattie, 2002). Included as two separate parameters in the second study, the two parameters *articles published by the institution* and *articles published by*

teachers involved in teaching were judged as the fourth and fifth least important parameters by the students. The first parameter received an average score of 4,40 and the latter 4,62. The slightly higher score for the parameter distinguishing articles published by teaching researchers confirms what was brought up in the first study; that this is a measure slightly better in determining the quality of a business school. However, the low score that both of the parameters received indicate that, overall, good research is not something that seems to have a strong influence on the quality of a business school as perceived by the students. This is in line with Marginson (2007) who has criticized rankings such as the ARWU for merely defining higher education as scientific research, with little notion of teaching.

5.2.5.3 Bibliometric citations & Research budget

The inclusion of the parameter *bibliometric citations* in university rankings did not receive any support in the first study. The support for the parameter *research budget* was as low and neither of the parameters were therefore included in the second study.

5.2.5.4 Overall analysis - Indicators of Research

Summarizing the parameters making up this category, we find strong indications that too much focus on research is a contributing reason to why existing rankings do not seem to offer students the value they could potentially do. None of the parameters included in this category received strong support from the students. Although articles published by teachers involved in teaching might be a small indicator of educational quality, the importance of it is rather low. Adding to this that the other three parameters were not seen as important at all, we can state that the rather large amount of critique (Dill & Soo, 2005; Marginson, 2007; Marginson & Van der Wende, 2007) against the research focus of many rankings is legitimate, seen from a student perspective. This also shows that the methodology used in for example the ARWU ranking, where there is a heavy emphasis on research-related parameters, is not appropriate if the goal with the ranking is to reach and bring value to the business students in Sweden. We can therefore conclude that part of the answer to research question one seems to lie in a too big emphasis on research in previous rankings.

5.2.5.5 Overall analysis - "Indicators of Reputation"

Notably, no reputational parameter was shown to be important by the students in the first study. Even though some students mentioned that a good reputation could be positive in itself as it might improve chances to get coveted jobs, it was not seen as an important parameter when evaluating educational quality. Our results therefore suggest that rankings aiming to inform students about the quality of an education should not include reputational

parameters. This result is also in line with the reasoning often put forward in theory that reputational parameters should be excluded because of their subjectivity (Altbach, 2006; Guarino et al., 2005; Usher & Savino, 2007; Taylor & Braddock, 2000). These findings also bring us a bit further in finding an answer to research question one as the inclusion of reputational parameters seems to be part of the answer.

5.2.6 Existing rankings fail to inform students due to a design that does not grasp what is important for students

Looking at the analysis above, we can find the answer to research question one. According to Sarrico et al. (1997) and Merisotis (2002) there are three main recipients of university rankings; students, universities and the wider society. Therefore, not all rankings are targeted towards the students. As a reaction to this Jobbins (2005) have called for more rankings targeted at students, which better inform students about the quality of the different educational options. To create such rankings, Dill (2001) argues that it is critical to include information collected from the students and Van Dyke (2005) states that the target group of the ranking should decide what weights to apply for each parameter. Adding to this, several scholars (Almgren, 2008; Boulton, 2010; Bowden, 2000; Dill, 2001; Nyblom, 2008; Van Dyke, 2005) find it better to have rankings on discipline level rather than university level since they provide the audience with more precise information.

Because most of the producers of existing rankings have gone against these recommendations and neglected the student perspective while at the same time created rankings on university- instead of discipline-level and ignoring the demand for survey-based rankings, the result has been a limited usefulness for the students. The results in this thesis suggest that the limited usefulness derives from a too big focus on indicators related to research and reputation even though such indicators are not relevant for students. Moreover, existing rankings have failed to identify good measures for learning outputs and instead included measures partly irrelevant for students. Additionally, parameters such as library resources, university spending and ratio of faculty personnel to students have been allowed to take much space in existing rankings, despite their low relevance as indicators of quality as seen by the students surveyed in this thesis.

Summarized, the answer to *research question one, why do existing rankings fail to inform Swedish students well enough*, is that the rankings focus too much on research and reputation while failing to identify what is important for students, for example in the form of learning outputs, and finding good measures for those indicators. To illustrate where the main shortcomings of existing rankings mainly can be found, the figure from Usher & Savino (2007) presented in section 2.6 is presented below in an adapted version. The two red crosses illustrate that these categories should not be included in rankings aiming for relevance among Swedish business students. The hollow red cross, on the other hand, illustrates that this category is not necessarily irrelevant as such but that there is a need for identifying other and more relevant parameters to measure the category.

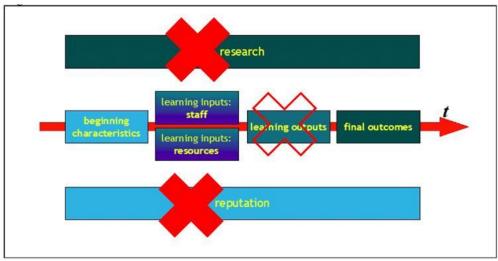


Figure 32. Adapted by Usher & Savino (2007).

5.2.7 Students find parameters related to career outlooks and course activities most important when evaluating educational quality

When establishing that certain parameters are unimportant for the target group of this thesis, we also come closer to finding out what parameters students find important when evaluating their education and the answer to research question two: What parameters do Swedish business students find important when evaluating educational quality?

Looking at table 6 below, a trend can be seen in that the respondents seem to put a lot of focus on the possibilities for their future careers and the educational activities preparing them for that career when evaluating the quality of their education, since four of the ten most important parameters in some way were related to career outlooks and possibilities to interact with potential employers: *percentage of students employed after six months* (1st on the list over most important parameters), *average salary of graduates* (4th), *mandatory parts of teaching including contact with external actors* (7th) and *possibilities to meet graduate recruiters outside the teaching hours* (8th). Moreover, factors closely related to the teaching activity were also shown to be very important as the above mentioned *mandatory parts of teaching including contact with external actors* (the 5th most important parameter), *amount of teaching hours* (the 6th most important parameter) and *classes smaller than 50 persons* (9th) all were

among the top ten parameters. A slight indication to that students value a high degree of flexibility and freedom in their choices of what to study can also be seen as the parameter *a wide selection of elective courses to choose from within the program* (the 3rd most important parameter) and *a big number of Master programs offered at the school* (16th) were judged as rather important by the students.

Drawing on the analysis above we can find an answer to **research question two**; What **parameters do Swedish business students find important when evaluating educational quality?** In addition to providing the hard facts presented in table 6 as an answer, we can conclude that students find parameters related to teaching activities and career outlooks to be the most important ones when evaluating educational quality.

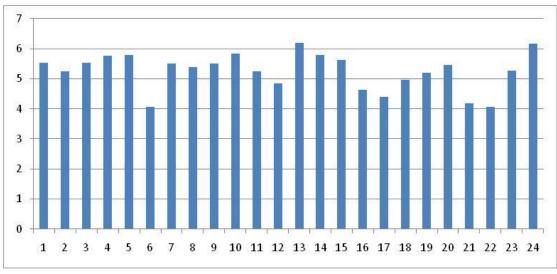


Figure 33

Importance	Parameters
5,54	1) Many teaching hours
5,25	2) Many teaching hours lead by a professor
5 <i>,</i> 52	3) Small class size
5,77	4) Frequent contact with external actors within the courses
5,79	5) Good accessibility of teachers
4,06	6) The existence of a gender perspective in the program design
5,5	7) High entry requirements
5 <i>,</i> 39	8) Good possibilities to do an exchange semester
5,5	9) Good possibilities to do an exchange semester at an attractive university
5,82	10) A broad selection of elective courses
5,24	11) A high number of master programs offered
4,83	12) A high graduation rate
6,19	13) A high percentage of the students employed six months after graduation
5,79	14) High average salary
5,62	15) Good possibilities to meet graduate recruiters outside the courses
4,62	16) A high number of academic articles published by the institution
4,4	17) A high number of academic articles published by teachers
4,96	18) The existence of a gender perspective within the institution
5,2	19) A high number of persons employed in supporting functions
5,46	20) The presence of a student association
4,18	21) A big international diversity of the students
4,07	22) The presence of an alumni association
5,26	23) A large number of books in the library
6,16	24) The availability of study areas and group rooms for studying
Falala C Th	a relatize importance of the 21 parameters evaluated in study II

Table 6. The relative importance of the 24 parameters evaluated in study II.

5.2.7.1 Previous rankings have failed to identify several important parameters

A further observation worth to mention here is that, as stated previously, some parameters that are not among the most commonly used parameters in previous rankings were brought up as important in the first study. Examples include possibilities to meet graduate recruiters outside the teaching hours, number of staff employed in supporting functions and accessibility of teachers. The last one of these was judged as the fifth most important parameter of all. The fact that a parameter which has not been included in many previous rankings ended up as the fifth most important parameter is notable as it indicates that many previous rankings have failed to identify an important constituent of educational quality as perceived by the students. This finding further confirms the claims that existing university rankings do not succeed in providing useful information to students.

5.3 Analysis – Beyond the theoretical framework

The short answer to **research question three**; what would the result be when creating a **ranking of Swedish business schools with a student perspective**, is the presentation of the final ranking below (Table 7). However, besides looking at the ranking as such, it is interesting to see the correlations between the different segments of ranking parameters and the final ranking. By illustrating such correlations and relationships between different

parameters, we aim to provide an understanding of the underlying reasons to why the ranking looks like it does. The purpose with this is to give a more nuanced answer to research question three than what the ranking just in itself can provide.

Regarding the final ranking (table 7), we have chosen to present the schools with their final scores while at the same time grouping the schools into groups with a score range of three points out of the maximum 100. This is done in order to not "over-differentiate" the schools from each other, which is something that several scholars (Guarino et al., 2005; Marginson, 2007; IREG, 2006) have recommended as a way to create better rankings. As can be seen in the table, five schools got a score between 67,05 and 67,91 points in this ranking and eight schools got a score between 63,28 and 65,98. With such small differences it is difficult to state that one school is better than another. Therefore, the ranking is presented in this format, leaving the definition of what a significant difference is to the reader.

75,00+	1 Handelshögskolan i Stockholm	82,01
75,00-72,01	2 Göteborgs universitet	74,47
	3 Högskolan i Kristianstad	73,31
72,00-69,01	4 Högskolan i Jönköping	70,95
	5 Umeå universitet	70,66
	6 Högskolan på Gotland	69,16
69,00-66,01	7 Linneuniversitetet	67,91
	8 Lunds universitet	67,39
	9 Högskolan i Borås	67,28
	10 Linköpings universitet	67,24
	11 Högskolan i Halmstad	67,05
66,00-63,01	12 Mälardalens högskola	65,98
	13 Örebro universitet	64,89
	14 Luleå tekniska universitet	64,73
	15 Uppsala universitet	64,51
	16 Södertörns högskola	64,37
	17 Högskolan Väst	64,16
	18 Högskolan i Gävle	63,83
	19 Karlstads universitet	63,28
63,00-60,01	20 Stockholms universitet	62,35
	21 Högskolan i Skövde	61,86
	22 Högskolan i Dalarna	61,54
	23 Mittuniversitetet	60,33
60,00-	24 Blekinge tekniska högskola	57,65

Table 7. The outcome of the main ranking including all 14 parameters.

In the second part of the analysis, we now leave the tool made up by the categorization by Usher & Savino (2007) and instead use the classification of parameters as defined in the methodology section 3.4.6; *external parameters, non-course related parameters, course related parameter, and student satisfaction parameters.*

5.3.1 External parameters

The correlation between the ranking positions in the ranking based on external parameters and the main ranking was shown to be quite low. What is interesting is that the main ranking put several of the more established schools²⁹, as defined by their year of foundation, in less prominent positions (Lund have the 8th place, Uppsala 15th place and Stockholms uni 20th place). However, when looking only at the three objective parameters which by some (IREG, 2006) have been argued to be good to include because they are comparable and transparent in a way that subjective parameters are not, one can see that the more established schools occupy the top positions. HHS–Stockholm and Göteborgs finished top two both in the main rankings and the rankings including only the three external parameters, but Lund (3rd place), Uppsala (4th place) and Stockholms uni (6th place) improved their position substantially when only considering these three parameters.

It has been shown that graduate recruiters read university rankings and the reason for these results can be related to this. Previous rankings such as ARWU, THES and Urank which have focused a lot on objective parameters such as these three have ranked the same schools high³⁰. These ranking positions together with high entry requirements might have added up to a reputation among graduate recruiters that students from established school have a high standard.

At the same time, the discrepancy in the ranking positions between the overall ranking and this sub-ranking also highlights the short-comings of only using external parameters. Even though these objective parameters have been asked for in some research (IREG, 2006) there is also a big demand for more survey-based parameters (Dill, 2001; Jobbins, 2005; Van Dyke, 2005) which can give a more updated picture of students' perceptions of their education. In line with those scholars, our results suggest that only basing a ranking on these external parameters limits the possibility to provide the recipients of the rankings with new information. In relation to this, we can state that one answer to **research question three** is

²⁹ See section 4.1.4.3 for a list of the schools with the year they were founded

³⁰ The ranking positions on these rankings are presented in section 2.4.

that such a ranking can provide new information compared to other rankings and put less established schools in high positions.

5.3.2 Course related parameters

The findings from the three course related parameters suggest a strong correlation between the outcome in the main ranking and the outcome of the ranking which is only based on course related parameters. Out of the seven schools that ended up in the top in the main ranking, six are also among the top seven of the ranking only including course related parameters. Taylor & Braddock (2000) state that class-size is a good measure of teaching quality and that the number of teaching hours is another indicator of teaching quality. The fact that all the top seven schools from the main ranking except one also ended up top seven in this ranking indicates that students who are satisfied with course related parameters are also satisfied with the university experience overall and this indicates that the students in the second study were able to identify the most relevant course related parameters which affect the overall perceived quality of the education. To conclude this reasoning, class-size, number of teaching hours and contact with external actors could therefore be seen as parameters that could give a snapshot of the overall quality of an education as perceived by the students.

5.3.3 Non-course related parameters

This was the category of parameters that resulted in the smallest range of answers. The only suggested correlation between these four parameters and the main ranking is that the less established schools among the top six schools in the main ranking; Jönköping, Kristianstad, Umeå and Gotland are all among the top five group in this category. The limited correlations found here can perhaps explain why theory to some extent have neglected non-course related parameters, as scholars might have found no clear effect on output from these parameters which could be brought up as a defense of existing rankings. The observation that these factors are important for the students but despite this do not seem to have an effect on the overall quality of the education can also show that they have more of a "delighting" effect in that they provide extra value for the student but that they do not make up the building blocks of educational quality.

5.3.4 Student Satisfaction

As described in the empirical section, a clear correlation was found where a high position in the ranking without the student satisfaction parameters also resulted in a high position in the overall ranking which included these parameters. For example, the top seven schools in the ranking without student satisfaction were the same as the top seven in the ranking where these parameters were included. The same result was found in the bottom of both rankings where the seven schools with the lowest scores were the same in both rankings. These findings show that the results which the schools received on the student satisfaction parameters were reflected well in the results of the other ten parameters.

More importantly, as the student satisfaction parameters were the only parameters included which were not identified or defined by the students in study II, a lack of correspondence between these and the outcome of the other parameters could be seen as an argument against the relevance of the overall ranking presented in this thesis. With these findings, the decision to include the parameters as well as the relevance of the ranking is strengthened and it also shows that the parameters were defined in a relevant way. Furthermore, the correlations that were found suggest that a researcher interested in creating a similar ranking without conducting a deep study could use these parameters to get a picture which quite well reflects the overall quality of different educations as seen by the students. The correlations are illustrated in figure 34 below where one can see that the red line which represents the results in the ranking without the student satisfaction parameters follows the blue line which represents the results in the ranking including these parameters.

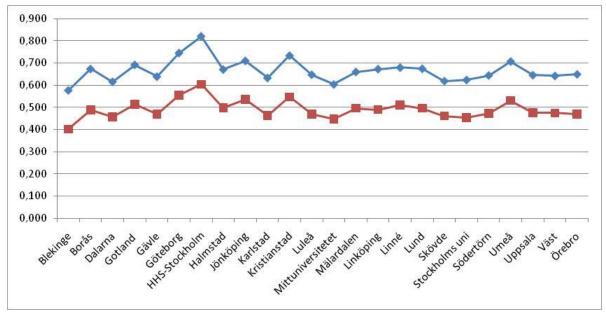


Figure 34. The blue line represents each school's score from the main ranking (14 parameters), while the red line represents each school's score for the ten parameters deriving from the students' opinions.

As mentioned before, a problem encountered in the third study was that for some schools, the main group of responding students was not made up by third year students. The school with the lowest number of respondents made up by third year students was Blekinge. Interestingly, this was also the school which had the biggest difference between its overall score without the student satisfaction parameters and its total score with these parameters included. With the student satisfaction parameters included, this school received higher score relative to the other schools than without the student satisfaction parameters. This could indicate that the fact that the students responding from this school were younger affected their perceived quality on specific indicators such as class-size, lowering the schools score on the ranking without student satisfaction. The authors want to acknowledge this to provide some explanation to the poor position for Blekinge in the overall ranking.

5.3.5 Further observations

Continuing on providing a more informative answer to research question three than just the ranking in itself, an interesting observation is that for the number of teaching hours, there was a big variation in the number of hours given at different schools. While the students at Göteborg perceive that they have had an average of 11.2 hours lead by a teacher throughout their studies, the same number for Blekinge was 3.45 hours. As discussed above, the responding students from Blekinge were earlier on in their education and it might be that the number of teaching hours increased later on in the education and in that this thesis would give Blekinge a disadvantage. But the result is striking even without this school. At Mittuniversitetet which was the school with the second lowest number of teaching hours, the students perceive that they have had an average of 5.36 hours per week. This is still only 47.9 per cent of the teaching hours at Göteborg.

This finding shows that for one of the few good measures of teaching quality according to previous research (Usher & Savino, 2007) and confirmed in the empirical part of this thesis, there are substantial differences among different Swedish schools. This is information that should be made available to students in order to let them know what they will get from the education they choose.

Another parameter where big variations between schools were found was the parameter *mandatory course moment with contact with external actors*. The best performing school on this parameter, HHS-Stockholm, had an average of 3,98 times while the same number for Stockholms uni was 0,66, only making up 16,6 per cent of the number of HHS-Stockholm. As this parameter was shown to be important to the students, such information could also be of value for students choosing where to study.

Continuing, a noteworthy observation was found regarding the relationship between the perceived possibility to get an interesting job after graduation and the actual employment

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outcomes. While the students at Stockholms uni are the ones that find their chances to get an interesting job to be the worst, the same students receive the second highest salary three years after graduation. The school is also on the seventh place on the parameter *percentage of* graduates employed within six months after graduation. Although a high salary and the fact that students get a job quickly cannot be said to perfectly mirror the extent to which students obtain interesting jobs, it is at least an indication. And the fact that this relationship is so conspicuous for Stockholms uni makes us want to highlight that these students, due to some reason, have a perception of their career outlooks that is quite different from the reality. A reason for this can be found in that Stockholms uni have the lowest position in the ranking only including the possibility to meet graduate recruiters within the education and at the same time have the second lowest perceived possibility to meet recruiters outside teaching hours. The students with the best perceived possibility to obtain an interesting job were the ones at HHS-Stockholm and this correlated with the top position for this school on both of the parameters related to meeting graduate recruiters. Although this correlation is not significant enough to make any generalizations, it is nonetheless interesting to see the correlations for both these schools and it gives a small indication that students who are exposed to graduate recruiters frequently seem to have a better perception about their career outlooks.

5.3.6 Summarizing the analysis of the third study and providing an answer to research question three

Besides providing the ranking in table 7 as an answer to research question three, some interesting observations can be drawn from the ranking. In line with theory, our results show that rankings focusing heavily on objective and external parameters have a limited possibility to provide the ranking recipients with new information as we can see that schools traditionally obtaining high ranking positions are favored by such parameters.

Moreover, course related parameters as well as the student satisfaction parameters as defined in this thesis can give a fairly good picture of the overall quality of a school as perceived by the students. This indicates that researchers interested in judging the quality of different educations without carrying out a study as extensive as the one for this thesis could get a hint of the quality by only looking at factors such as class-size and number of teaching hours as well as student satisfaction parameters.

Opposite to this, non-course related activities seem to have a more limited possibility to provide such information. Although these parameters were shown to be beneficial for less

established schools, the positive effect of a high score in such parameters seems to be more in the form of a delighting value for the student.

We can also conclude that there are interestingly big variations in the number of teaching hours given at Swedish schools as well as the extent to which students are exposed to external actors within their education.

6. Synthesis

The aim with this chapter is to take a more holistic perspective of the results and provide a more speculative analysis which is a bit more detached from theory compared to the analysis in the previous chapter.

In 2011, the options available for prospective Swedish business students are more numerous than ever before. The possibility to choose among 24 schools that provide educations which by the names are similar can be seen as a positive thing. However, at the same time this plethora of options makes the choice harder than if the possibilities would be more limited and it increases the need for relevant information about the quality of different schools.

While university rankings around the world have increased with a similar speed as the educational options for these students, this development has yet to reach Sweden to the same extent. More importantly, the number of rankings of Swedish business schools has been small, not benefiting the students to the extent it could. Furthermore, the majority of existing university rankings have been shown to have limited relevance for prospective student. This combination of a more complex choice to be made and a lack of information to base the choice upon have lead to an increase in demand for university rankings that can better inform students. Many researchers arguing for this need suggest a student-perspective and a survey-based methodology as the appropriate approach for rankings with such ambitions.

With this background, the purpose with this thesis was to create a ranking with a student perspective on Swedish business and economics educations on bachelor level, in order to provide relevant information for both prospective and current students. Although it should be stressed that the ranking is not judging the best schools as such since it to a big extent is made up by the perception of students and thus shows the best schools as perceived by the students, several interesting observations have been made.

6.1 A ranking with a student perspective can provide new information

An interesting observation is that the main ranking brought up several less established schools in the top. Kristianstad, Gotland and Borås were all among the top ten schools in the ranking. While none of these schools are included in neither the ARWU nor the THES rankings, Uppsala which is ranked as the 3rd best Swedish university by THES and as the best university of all included in this thesis by ARWU, only ended up as number 15 in our ranking. Similar results were found for Stockholms uni. Judging by their ranks on the THES and ARWU rankings where they had the third and second place respectively, one could

assume a high position in our ranking. However, our ranking contradicts this as the school only ended up on the 20th position. Looking at *Lund* which in the THES ranking is the best Swedish school of the ones included in this thesis and the third best school according to ARWU, this school ended up on the 8th position in our ranking, further illustrating a discrepancy between two of the most influential international university rankings and the ranking created in this thesis. While no clear generalizations can be drawn from this, this observation strengthens the argument that survey-based rankings on discipline level are able to provide new insights to the reader.

6.2 A need for a shift of focus of both the universities and existing rankings

Looking at the constituents of educational quality as seen by the students and the implications for universities, what seem to matter the most for students evaluating the quality of their education is the career outlooks as well as the activities preparing them for that career. On the other hand, the quality of the research is overall seen as unimportant. This indicates that university rankings aiming to provide an education which is relevant for the students should perhaps shift their focus accordingly. What might be even more interesting is that it gives a hint to in what direction universities could evolve if they want to increase their attractiveness among prospective students. Based on the importance of career outlooks and career preparing activities, it could be argued that universities could benefit from expanding their view from universities as producers of knowledge to a view of universities being as much producers of labor. If they are to attract students as well as provide them with the education the students' value, universities have to listen to what graduate recruiters and employers want from the graduates. The risk could otherwise be that research intensive schools with too little focus on what the students and recruiters value become less popular.

This is quite speculative and there are many parameters to take into account, but what is at least clear is a need of a change of focus in existing rankings if they are to inform students better. Even though research without doubt is one of the key activities of a university, the heavy focus on research in existing rankings does not reflect the reality in which students make their choices of where to study. Therefore, a change of the focus of existing rankings from research and reputation to factors relevant for students would be to the benefit of the students that need more relevant information to be able to make informed choices of where to study.

Continuing with what has been shown to have a high importance for the perceived quality of an education and the implications for schools, another factor is the course related activities. Schools aiming to please their students could therefore focus more on increasing the number of teaching hours and interaction with external partners within the courses as well as shrinking class-sizes. Some indications can also be seen that schools which are able to provide the students with freedom within their educations might be able to better attract students. Our study also shows that universities that offer the students good non-course related activities such as the possibility to meet graduate recruiters and factors enabling the students to focus on their studies such as good facilities and accessibility to teachers have the possibility to bring additional and delighting value on top of the core constituents of educational quality.

6.3 There are big variations between different schools that students should be aware of

Turning to some implications for prospective students, our findings show that there are big variations in both the content and outcomes of different educational programs. The variation in the level of attention given to the students in the form of teaching hours is big. The same applies for the possibility to get exposure to graduate recruiters within the education. There are also big variations in terms of salary depending on which school the student decides to attend. These variations are important to highlight so that prospective students better get to know what they can expect from their educations.

Continuing on the value for prospective students, the relative weightings of the importance of different parameters made by current students might in itself be of value for prospective students. Since it might be hard for students who have never studied on universities to know what it is that makes up high educational quality as they will perceive it, these results might make it easier for them to understand what it is that they probably will value in an education once they have started it.

6.4 It is important to reflect on the value of more university rankings

Moving on to a discussion about the implications of a university system filled with rankings and evaluations, Power (1999) discusses the development of a society which is increasingly obsessed with measuring. Skeptical voices to the shape that this has taken for university rankings have been raised in research. Several scholars (Guarino et al., 2005; Marginson, 2007; IREG, 2006) stress the importance of not having the ranking activity as an end in itself and it is recommended to not rank for the sake of ranking in itself. Along with the arguments from these scholars, we have decided to present our findings in a ranking putting all schools into groups as a complement to the ranking showing the final scores for all schools. Even though there is a consensus about the need for more and above all, more useful rankings, it is important to keep in mind what value a ranking can bring to the stakeholders. When three schools are within a very close range when summing up their total score, highlighting this importance might not provide any value. A student choosing between two schools that are very close to each other in a ranking will probably anyway look into more specific information about schools, such as which of the schools it is that performs well on some parameters extra relevant for him/her. In order to increase the transparency of this thesis and the studies undertaken, a ranking with final scores is nevertheless presented. However, when looking at this ranking as well as other rankings, it is important to reflect over the value of a higher education system where more and more rankings are produced that separate schools based on different criteria.

6.5 A ranking to guide prospective students

The ranking in this thesis provide several important insights about the differences between Swedish business schools. As stated in theory, there will probably never exist one, perfect, overall ranking of universities since the parameters to be included are too many while the preferences of different stakeholders and their different perceptions of academic quality are widely different. But taking on the perspective of the target group made up by students, this thesis has provided these students with information which has been judged as relevant by the same students. Therefore, the ranking can hopefully provide some value to prospective students drowning in choices of where to pursue the education which to a big extent will shape the future of their lives.

7. Conclusion

This final chapter of the thesis is going to present the main conclusions from the thesis. The chapter will also describe the limitations with the findings as well as practical implications and implications for future research.

The purpose of this thesis was to create a ranking with a student perspective on Swedish business and economics educations on bachelor level.

The thesis has shown that the reason to why many of the existing university rankings do not affect the students to the same extent as they potentially could do is that many of the existing university rankings have had an emphasis on parameters related to *reputation* and *research*. Our findings show that these parameters are not seen as important for business and economics students in Sweden. Further on, existing rankings have also had difficulties in finding measures for parameters related to *learning outputs*, which are relevant for Swedish business and economics students.

In contrast to the focus of the majority of existing rankings, the findings in this thesis suggest that a ranking aiming for relevance among the given target group should emphasize parameters related to *career outlooks* & *career preparing activities* as well as *course related activities*. These factors were perceived as most central by the students when evaluating educational quality and a ranking focusing on such factors should be more relevant for the target group.

The ranking created in this thesis does not name the "best" schools as such but is instead providing a picture of the best schools as perceived by the students. This is different compared to many other rankings, and the outcome of the ranking also mirrors those dissimilarities. For example, several of the more established schools ended up in lower positions then they have done in other rankings. This indicates that a prominent position in a more research heavy ranking does not need to correspond with a top position in a ranking focusing on student perceptions and it also shows that a survey-based ranking with a student perspective made on discipline level can provide new information.

Moreover, the ranking suggests that the results for a school on course related parameters and parameters related to overall student satisfaction as defined in this thesis can provide a picture which rather well reflects the overall quality of the school as perceived by the students. The ranking has also showed that there exist big variations between the different educations in terms of number of teaching hours and exposure to external actors within the education. Below, the authors present the results in the main ranking of the 24 schools included in this thesis, which can be seen as the first ranking of Swedish business programs which takes on the perspectives of Swedish business and economics students on bachelor level.

75,00+	1 Handelshögskolan i Stockholm	82,01
75,00-72,01	2 Göteborgs universitet	74,47
	3 Högskolan i Kristianstad	73,31
72,00-69,01	4 Högskolan i Jönköping	70,95
	5 Umeå universitet	70,66
	6 Högskolan på Gotland	69,16
69,00-66,01	7 Linneuniversitetet	67,91
	8 Lunds universitet	67,39
	9 Högskolan i Borås	67,28
	10 Linköpings universitet	67,24
	11 Högskolan i Halmstad	67,05
66,00-63,01	12 Mälardalens högskola	65,98
	13 Örebro universitet	64,89
	14 Luleå tekniska universitet	64,73
	15 Uppsala universitet	64,51
	16 Södertörns högskola	64,37
	17 Högskolan Väst	64,16
	18 Högskolan i Gävle	63,83
	19 Karlstads universitet	63,28
63,00-60,01	20 Stockholms universitet	62,35
	21 Högskolan i Skövde	61,86
	22 Högskolan i Dalarna	61,54
	23 Mittuniversitetet	60,33
60,00-	24 Blekinge tekniska högskola	57,65

Table 9.

7.1 Limitations

This thesis has had Swedish business and economics students on bachelor level as the target group. All studies have been conducted on that sample and it is therefore hard to make generalizations outside this target group. The perceptions among the students could be different when doing similar studies on master students within the same field of studies or on students studying other disciplines. Moreover, since the findings from this thesis are related to Swedish students within the given target group there is nothing that guarantees that the outcomes would be the same if a similar study would be conducted on international bachelor students within the same area of studies.

7.2 Implications for future research

As described in this thesis, this is a research area which is fairly young and rather unexplored. The authors therefore believe that there are numerous topics to investigate and study further as the lack of studies made in Sweden makes the need for future research big. The authors chose to target bachelor students within the fields of business and economics and it would be interesting to choose another sample to see if they would have the same perceptions as the sample in this thesis. A similar study on business and economics students on master level as well as studies on students from other subjects of studies would be interesting to see. Another interesting research topic would be to expand this study and use more than 10 of the 24 parameters that were seen as the most central for the target group of this study.

7.3 Practical implications

A conclusion that has been made is that students seem to appreciate parameters that are course related, such as the class-size and the number of teaching hours, as well as parameters related to career outlooks and the activities preparing the students for that career. It could therefore be wise for schools aiming to attract more students to emphasize what they can offer students with regards to these parameters when communicating with prospective students. As this thesis has presented data on how all business schools perform on the different parameters relevant for their students, there are also implications for universities that want to increase their student satisfaction levels. The schools can use the information to see where their students perceive that they are performing poorly and use this as a base for taking measures for improvements.

For future creators of university rankings, the findings in this thesis suggest that a key to creating a useful ranking for the reader is to have knowledge about the audience targeted and what they find important to include in a ranking. If the ranking aims to measure the research quality of a school, then the ARWU design of a ranking might be suitable as a template. However, if the target group is made up by students, parameters such as reputation and research should perhaps be ignored or at least less heavily weighted in the ranking.

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Appendices

Appendix I

The 16 Berlin Principles on Ranking of Higher Education Institutions

Purposes and goals of rankings:

- Be one out of several factors with the purpose of evaluating and judging the quality outputs of a higher education institution. A ranking should not been seen or treated as the only truth regarding the quality of the education.
- Clearly meditate the purpose of the ranking and the target group/s, and a ranking should also be designed with consideration to its purpose and the target group.
- Know the diversity of the institutions that are being ranked, and be aware of the different goals and missions of the different institutions.
- Be clear regarding the source of information used in the ranking and the different messages that each output communicates. It is good to combine different types of sources such as databases, university statistics students, etc in order to get a broader view of the higher education.
- Identify the cultural, economic and historical context of the educational system that is ranked. This is more central in an international ranking since there can be different objectives and various opinions of what a term such as "quality" refers to.

Design and weighting of indicators

- Be transparent and unambiguous, it is therefore crucial to be clear in the methodology part of the ranking. Providing the calculations and raw data enhances the trustworthiness of the ranking.
- If possible measure output in preference to input. Output provides a more accurate assessment of the quality and position of a university or a program.
- The parameters should be chosen according to their relevance and validity, it is central to be clear of why a specific parameter is included and what it should represent and add to the ranking, not just that the data was available.
- There should be as few changes as possible between different issues of the ranking regarding the weights assigned to the parameters.

Collection and processing of data

- *Respect and pay attention to ethical standards and best practice recommendations.*
- When possible, use data that is audited and verifiable. That eases when comparing institutions and will also improve the trustworthiness of the ranking.
- When possible, include data that is collected with proper procedures for scientific data collection. A skewed set of data or information collected from an unrepresentative target group may show an erroneous or biased picture of the target group's thoughts and opinions.
- *Apply external organizational measures that enhance the credibility of ranking.*
- The founders of different rankings should continuously try to improve the quality of their ranking by utilizing the development of the ranking methods.

Presentation of ranking result

- Provide the readers with a good transparence and an understanding of the factors used in the ranking, and preferably offer them a choice in how rankings are displayed.
- Collect the data in a way so that it eliminates or reduces the errors in the original data, and be organized and published in a way so that errors and faults can be corrected

Appendix II

<u>Study I</u>

Below are the 33 parameters that were found in previous research and that were used as a guide when conducting the interviews in study I.

- Number of applicants/Number of admitted students
- Number of faculties within the university
- Bibliometric citations
- Faculty pay
- *The institutions' participation in international network (CEMS, EQUIS etc)*
- *Retention rate*
- The availability of scholarships
- The ratio of personnel to students
- Recognitions, awards and honors to the institution and its employees
- Reputation of the school
- Access to databases and articles through the school's library
- University and institutional spending
- Research budget
- Percentage of students employed six months after graduation
- The availability of study areas and group rooms
- Selection of elective courses to choose from
- Average salary of graduates
- Mandatory teaching activities including contact with external actors
- Number of teaching hours
- Class size
- High entry requirements
- Possibilities to do an exchange semester
- Possibilities to do an exchange semester at an <u>attractive</u> university
- Number of books in the library
- Number of teaching hours lead by a professor/tenured staff
- Number of Master programs offered at the school
- The existence of a gender perspective within the institution
- Graduation rate
- Number of academic articles published by the institution

- Number of academic articles published by teachers involved in teaching
- International diversity of students
- The existence of a gender perspective in the design of the program
- The share of the total number of students that goes on to pursue a PhD

Appendix III

Study II

The questions from study II is below presented in both Swedish and English. The reason for this is to increase the transparency for the reader. The Swedish version, is presented first, and is an exact copy of the survey given to the students while the English version only is a translation of the question asked. All questions where to be answered on a scale from one to seven.

Study II in Swedish:

<u>Kön:</u>	🗆 Kvinna	□Man	\Box Vil	l inte ange
<u>Ålder:</u>	□17-23	□24-27	□28+	\Box Vill inte ange
<u>Vilken te</u>	ermin på utbi	ldningen läs	ser du?	

1. Är det positivt/negativt att din utbildning har många (mer än 10h) lärarledda timmar per vecka?

Väldigt negat	tivt		Neutralt		Väldigt	positivt
1	2	3	4	5	6	7
2. Är det po	sitivt/negativ	t att en stor del	av dina unde	rvisningstimn	nar leds av en	
professor?						
17.11.1.	· · ·				T7"1 1° (• • • •

Väldigt nega	tivt		Neutralt		Väldig	gt positivt
1	2	3	4	5	6	7
3. Är det po	sitivt/negativt	t att undervisni	ngsgruppen ä	r mindre än 50) personer?	
Väldigt nega	tivt		Neutralt		Väldig	t positivt

Väldigt nega	tivt		Neutralt		Väldig	gt positivt
1	2	3	4	5	6	7

4. Är det viktigt/oviktigt att vissa utbildningsmoment har anknytning till externa aktörer såsom näringslivet, kommun, organisationer (t.ex. obligatoriskt konsultprojekt mot organisation)?

Väldigt ovikt	tigt		Neutralt		Väldig	gt viktigt
1	2	3	4	5	6	7

5. Är det viktigt/oviktigt att läraren är tillgänglig utanför undervisningstiden (t.ex. att du kan gå och knacka på dörren och ställa en fråga)?

Väldigt ovikt	igt		Neutralt		Väldig	gt viktigt
1	2	3	4	5	6	7

Väldigt ovikt	iot		Neutralt		Väldie	gt viktigt
				Π		
1	2	3	4	5	6	7
7. Är det pos	sitivt/negativt	att det ställs h	ıöga krav (bety	zgssnitt, högsl	koleprovet etc.) för att
=	å utbildningen		8	0 / 0	1	/
Väldigt negat	0		Neutralt		Väldig	gt positivt
1	2	3	4	5	6	7
8. Är det vik	tigt/oviktigt a	tt det finns sto	ra möjligheter	att komma iv	äg på ett interi	nationellt
utbyte?						
Väldigt ovikt	igt		Neutralt		Väldig	gt viktigt
1	2	3	4	5	6	7
9. Är det vik	tigt/oviktigt a	ıtt du har möjli	ghet att åka på	a utbyte till ett	, enligt dig, at	traktivt
universitet?		-		-		
Väldigt ovikt	igt		Neutralt		Väldig	gt viktigt
1	2	3	4	5	6	7
Väldigt ovikt	0.0	att det finns et	Neutralt		, I	gt viktigt
	_	_				, 0
						, 0
□ 1	2	\square	\Box	\Box 5	□ 6	, 3 □ 7
	2	3			6	7
11. Är det vi	2 ktigt/oviktigt				6	7
11. Är det vi din institutio	2 ktigt/oviktigt on?	3			6 gram att välja	□ 7 på vid
11. Är det vi	2 ktigt/oviktigt on?	3	ånga (minst tr		6 gram att välja	7
11. Är det vi din institutio <i>Väldigt ovikt</i> i	2 ktigt/oviktigt on?	3	ånga (minst tr		6 gram att välja	□ 7 på vid
11. Är det vi din institutio Väldigt ovikta □ 1	2 ktigt/oviktigt on? igt □ 2	3 att det finns m □ 3	ånga (minst tro <i>Neutralt</i> 4	e) Master-pro □ 5	6 gram att välja <i>Väldig</i> 6	□ □ 7 på vid gt viktigt 7
11. Är det vi din institutio <i>Väldigt ovikti</i> □ 1 12. Är det vi	2 ktigt/oviktigt on? igt □ 2 ktigt/oviktigt	3 att det finns m	ånga (minst tro <i>Neutralt</i> 4	e) Master-pro □ 5	6 gram att välja <i>Väldig</i> 6	□ □ 7 på vid gt viktigt 7
11. Är det vi din institutio <i>Väldigt ovikti</i> □ 1 12. Är det vi inom utbildi	2 ktigt/oviktigt on? igt □ 2 ktigt/oviktigt	3 att det finns m □ 3	ånga (minst tro <i>Neutralt</i> 4	e) Master-pro □ 5	6 gram att välja <i>Väldig</i> 6 ⊡ bildning tar en	□ 7 på vid gt viktigt 7 n examen
11. Är det vi din institutio <i>Väldigt ovikti</i> □ 1 12. Är det vi	2 ktigt/oviktigt on? igt □ 2 ktigt/oviktigt	3 att det finns m □ 3	ånga (minst tro <i>Neutralt</i> 4 el av de som p	e) Master-pro □ 5	6 gram att välja <i>Väldig</i> 6 ⊡ bildning tar en	□ 7 på vid gt viktigt 7 n examen gt viktigt
11. Är det vi din institutio <i>Väldigt ovikti</i> □ 1 12. Är det vi inom utbildi	2 ktigt/oviktigt on? igt 2 ktigt/oviktigt ningen? igt	3 att det finns m □ 3 att en stor and	ånga (minst tro <i>Neutralt</i> 4 el av de som p	e) Master-pro □ 5	6 gram att välja <i>Väldig</i> 6 ⊡ bildning tar en	□ 7 på vid gt viktigt 7 n examen gt viktigt
 11. Är det vi din institutio Väldigt ovikti 1 12. Är det vi inom utbildi Väldigt ovikti 1 	2 ktigt/oviktigt on? igt 2 ktigt/oviktigt ningen? igt 2	3 att det finns m 3 att en stor and 3	ånga (minst tro <i>Neutralt</i> 4 el av de som p <i>Neutralt</i> 4 4	e) Master-pro 5 åbörjar din ut 5	6 gram att välja <i>Väldig</i> 6 bildning tar en <i>Väldig</i> 6	□ 7 på vid gt viktigt 7 n examen gt viktigt 7
 11. Är det vi din institutio Väldigt ovikti 1 12. Är det vi inom utbildi Väldigt ovikti 1 1 13. Är det vi 	2 ktigt/oviktigt on? igt 2 ktigt/oviktigt ningen? igt 2 ktigt/oviktigt	3 att det finns m 3 att en stor and	ånga (minst tro <i>Neutralt</i> 4 el av de som p <i>Neutralt</i> 4 4	e) Master-pro 5 åbörjar din ut 5	6 gram att välja <i>Väldig</i> 6 bildning tar en <i>Väldig</i> 6	□ 7 på vid gt viktigt 7 n examen gt viktigt 7
 11. Är det vi din institutio Väldigt ovikti 1 12. Är det vi inom utbildi Väldigt ovikti 1 	2 ktigt/oviktigt on? igt 2 ktigt/oviktigt ningen? igt 2 ktigt/oviktigt	3 att det finns m 3 att en stor and 3	ånga (minst tro <i>Neutralt</i> 4 el av de som p <i>Neutralt</i> 4 4	e) Master-pro 5 åbörjar din ut 5	6 gram att välja <i>Väldig</i> 6 ⊡ 6 ⊡ 6 Jobb inom sex	□ 7 på vid gt viktigt 7 n examen gt viktigt 7
 11. Är det vi din institutio Väldigt ovikti 1 12. Är det vi inom utbildi Väldigt ovikti 1 1 13. Är det vi efter examer 	2 ktigt/oviktigt on? igt 2 ktigt/oviktigt ningen? igt 2 ktigt/oviktigt	3 att det finns m 3 att en stor and 3	ånga (minst tro <i>Neutralt</i> 4 el av de som p <i>Neutralt</i> 4 el av de som et	e) Master-pro 5 åbörjar din ut 5	6 gram att välja <i>Väldig</i> 6 ⊡ 6 ⊡ 6 Jobb inom sex	7 på vid gt viktigt 7 n examen gt viktigt 7 x månade

14. Är det viktigt <i>Väldigt oviktigt</i>	t/oviktigt att d	-	g ger en hög lö	n?	Väldigt vi	ktiot
1	2	3	4	5	6	7
		-				-
15. Är det viktigt ramar?	t/ oviktigt med	naringslivsk	ontakt i unive	rsitetets regi u	tanfor Kursern	as
Väldigt oviktigt		Ν	leutralt		Väldigt vi	ktigt
1	2	3	4	5	6	7
16. Är det viktigt <i>Väldigt oviktigt</i>	t/oviktigt att ir		publicerar mån <i>Jeutralt</i>	iga akademisk	a artiklar? <i>Väldigt vi</i>	ktigt
1	2	3	4	5	6	7
17. Är det viktigt <i>Väldigt oviktigt</i>	t/oviktigt att <i>u</i>		irare publicera <i>leutralt</i>	r akademiska	artiklar? <i>Väldigt vi</i>	ktigt
1	2	3	4	5	6	7
18. Är det viktigt <i>Väldigt oviktigt</i> □	t∕oviktigt med		vad gäller kön leutralt □	n och etnicitet	inom institutic <i>Väldigt vi</i> □	
1	2	3	4	5	6	7
19. Är det viktigt stödfunktioner (t <i>Väldigt oviktigt</i>	-	edning, karri	-	-		ktigt
1	2	3	4	5	6	7
20. Är det viktigt studenternas intr Väldigt oviktigt	e	tbildningskv Λ	0	, ,	,	ktigt
1	□ 2	∐ 3		5	6	7
1 21. Är det viktigt Väldigt oviktigt		geografisk s	4 pridning på st leutralt		6 n utbildning? <i>Väldigt vi</i>	/ ktigt
1	2	3	4	5	6	7
22. Är det viktigt studenter)?	t/oviktigt att d	et finns en A	lumniförening	e (en förening f	ör före detta	
Väldigt oviktigt		N	leutralt		Väldigt vi	ktigt
1	2	3	4	5	6	7

23. Är det vi	iktigt/oviktigt	att institutione	ns bibliotek ir	inehar många	böcker?	
Väldigt ovikt	igt		Neutralt		Väldig	t viktigt
1	2	3	4	5	6	7
	0.0	att det finns m	ånga studiepla	atser och grup	prum i skolan	?
Väldigt ovikt	igt		Neutralt		Väldig	t viktigt
1	2	3	4	5	6	7

Study II in English:

<u>Gender</u>	<u>:</u> □ W	oman	□Man	□Prefer to not disclosure
<u>Age:</u>	□1 7-2 3	□24-2	27 □28	+ □ Prefer to not disclosure
What s	emester are	e you stu	dying on?	

- 1) Is it positive/negative with a high amount (more than 10h) of teaching hours?
- 2) Is it positive/negative with a high amount of teaching hours lead by a professor?
- 3) Is it positive/negative with classes smaller than 50 students?
- 4) Is it positive/negative with a mandatory course moment that includes contact with external actors?
- 5) Is it important/unimportant with the accessibility of the teacher outside the course?
- 6) Is it important/unimportant with the existence of a gender perspective in the design of the program?
- 7) Is positive/negative with high entry requirements?
- 8) Is it important/unimportant with a possibility to do an exchange semester?
- 9) Is it important/unimportant with a possibility to do an exchange semester at an <u>attractive</u> (as perceived by the students) university?
- 10) Is it important/unimportant with a broad selection of elective courses to choose from?
- 11) Is it important/unimportant with a large number of Master programs offered?
- 12) Is it important/unimportant that the school has a high graduation rate?
- 13) Is it important/unimportant that a high percentage of students are employed within six months after graduation?
- 14) Is it important/unimportant with a high average salary of graduates?
- 15) Is it important/unimportant to have a good possibility to meet graduate recruiters outside the teaching hours?
- 16) Is it important/unimportant that the institution has published many academic articles?
- 17) Is it important/unimportant that the teaching teacher has published many academic articles?

- *18) Is it important/unimportant with an existence of a gender and ethnical perspective within the institution?*
- 19) Is it important/unimportant to have a high number of persons employed in supporting functions?
- 20) Is it important/unimportant that the school has a student association?
- 21) Is it important/unimportant with an international diversity of the students?
- 22) Is it important/unimportant with an existence of an alumni association?
- 23) Is it important/unimportant that the library has a large number of books?
- 24) Is it important/unimportant with a good availability of study areas and group rooms?

Appendix IV

<u>Study II - Raw data</u>

	HHS-Stockholm	Södertörn	Stockholms uni	Total
Acc. 17.22				
Age; 17-23	33	25	12	
Age: 24-28	15	17	16	48
Age: 28+	2	2	3	7
Total	50	44	31	125
Women	34	24	14	72
Men	16	20	17	53
Total	50	44	31	125
Students on their third semester	0	2	1	3
Students on their fourth semester	0	0	2	2
Students on their fifth semester	0	1	3	4
Students on their sixth semester	50	41	16	107
Students on their seventh semester	0	0	3	3
Students on their eigth semester	0	0	6	6
Total	50	44	31	125
The courses visited were:	Institutional Economic Development,	Finansiella Strategier	Corporate Finance	
	Management Accounting			

1) N	Many teaching hours
2) N	Many teaching hours lead by a professor
3) S	Small class size
4) F	requent contact with external actors within the courses
5) (Good accessibility of teachers
6) T	The existence of a gender perspective in the program design
7) H	Iigh entry requirements
8) (Good possibilities to do an exchange semester
9) (Good possibilities to do an exchange semester at an attractive university
10)	A broad selection of elective courses
11)	A high number of master programs offered
12)	A high graduation rate
13)	A high percentage of the students employed six months after graduation
14)	High average salary
15)	Good possibilities to meet graduate recruiters outside the courses
16)	A high number of academic articles published by the institution
17)	A high number of academic articles published by teachers
18)	The existence of a gender perspective within the institution
19)	A high number of persons employed in supporting functions
20)	The presence of a student association
21)	A big international diversity of the students
22)	The presence of an alumni association
	A large number of books in the library
24)	The availability of study areas and group rooms for studying

Parameters:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
HHS-Stockholm	5,35	4,90	5,72	5,78	5,59	4,30	6,26	5,94	5,81	5,64	5,18	5,00	6,37	5,46	5,86	4,68	4,28	5,04	5,04	6,18	4,56	4,58	4,74	6,14
Södertörn	5,22	5,49	5,46	5,80	5,95	4,05	5,02	5,00	5,00	5,88	5,20	4,59	6,12	5,83	5,51	4,37	4,15	4,88	5,39	4,98	3,90	3,80	5,39	6,16
Stockholms uni	6,04	5,35	5,39	5,74	5,83	3,83	5,22	5,22	5,70	5,96	5,35	4,91	6,09	6,09	5,48	4,83	4,78	4,96	5,17	5,22	4,09	3,83	5,65	6,20
Average:	5,54	5,25	5,52	5,77	5,79	4,06	5,50	5,39	5,50	5,82	5,24	4,83	6,19	5,79	5,62	4,62	4,40	4,96	5,20	5,46	4,18	4,07	5,26	6,16

Appendix V

10,976 13,656

14,48 11,198 10,296

18,496

20 14,962

16,444 10,772

Study III: Raw data

Gender	Ble	kinge Bor	ås Dala	arna Gotland	Gävle	Götebo	rg HHS-Stockhol	m Halmstad	Jönköping k	Carlstad	Kristianstad Lul	å Mittur	iversitetet Mälardale	n Linköping	inné Lun	Skövd	Stockholm	s uni Södert	örn Umeå	Uppsala	Väst Örel	ro Total f	or all schools	Percentag	e of total
Women		28	29		-			41 11	30	40	37	21	18 4	19 20	42	22 2		28	57 3		1 40	15	744		56,7%
Men		12	18	10 2	6 1	18 3	30	60 9	27	17	15	30	15 2	20 25	19	54 1	1	42	24 1	7 4	8 11	10	56	3	43,3%
Total students	5	40	47	32 4	9 3	38 8	84 1	01 20	57	57	52	51	33 6	i 9 45	61	76 3	4	70	81 5	0 8	9 51	25	1312	2	100,0%
					-		-			-		-				-			-	-		-			
Age	Ble	kinge Bor	ås Dal	arna Gotland	Gävle	Götebo	rg HHS-Stockhol	m Halmstad	Jönköping	Karlstad	Kristianstad Lule	å Mittur	iversitetet Mälardale	n Linköping	linné Lun	Skövd	Stockholm	s uni Södert	örn Umeå	Uppsala	Väst Örel	oro Total f	or all schools	Percentag	e of total
17-23		12	36	12 2	25 1	13 4	40	66 13	39	29	30	31	1 3	33 17	31	45 1	4	25	39 2	6 4	1 20	12	650	0	49,5%
24-28		13	9	9 1	.1	9 4	40	32 7	16	25	19	13	15 2	28 25	26	29 1	8	41	29 20	0 4	2 18	11	50	5	38,5%
28+		15	2	11 1	.3 1	16	4	2 0	2	3	3	7	17	8 3	4	2	1	5	14	4	6 13	2	15	7	12,0%
Total students	5	40	47	32 4	9 3	38 8	84 1	00 20	57	57	52	51	33 6	59 45	61	76 3	3	71	82 5	0 8	9 51	25	1312	2	
Semester of st	tudies Ble	kinge Bor	ås Dala	arna Gotland	Gävle	Götebo	rg HHS-Stockhol	m Halmstad	Jönköping H	Karlstad	Kristianstad Lule	<u>å</u> Mittur	iversitetet Mälardale	n Linköping	linné Lun	Skövd	Stockholm	s uni <mark>Södert</mark>	örn Umeå	Uppsala	Väst Örel	oro Total f	or all schools	Percentag	e of total
Semester: 1-3		12	27	1 2	:5	1	5	5 2	2	16	1	9	2	5 3	8	3	5	15	4	1	46	0	162	2	12,39%
Semester: 4		21	8	0 1	2	2	2	0 0	3	3	4	33	2	2 1	2	5	2	4	3	0	4 1	0	114	1	8,72%
Semester: 5		2	0	0	0	0	4	2 1	1	6	0	1	4	1 4	2	6	1	9	3	0 1	.0 0	3	60	D	4,59%
Semester: 6		0	12	28	9 2	29 (69	94 16	46	25	25	1	16 5	3 32	48	57 2	6	26	62 43	36	2 35	10	824	1	63,00%
Semester: 7		0	0	1	1	2	0	0 0	2	3	2	3	3	4 2	1	2	0	3	3	0	62	4	44	1	3,36%
Semester: 8		3	0	2	-	-	1	0 0	1	3	20	3	5	4 3	0	2	0	7	2	4	36	6	79	Ð	6,04%
Semester: 9+		2	0	0	•	-	-	0 0	2	1	0	1	1	0 0	0	1	0	4	4	2	0 1	2	2	5	1,91%
Total students	5	40	47	32 4	9 3	38 8	83 1	01 19	57	57	52	51	33 6	59 45	61	76 3	4	68	81 5	0 8	9 51	25	1308	8	
Three ext	ternal pa	irameter	rs																						
The perce	entage o	f studen	ts wi	th a job w	ithin s	six mon	ths after gra	duation																	
Blekinge B	Borås D	Dalarna	Gotla	nd Gävle	Göte	borg HH	IS-Stockholm	Halmstad	Jönköping	Karlsta	d Kristianstad	Luleå	Mittuniversitetet	Mälardale	n Linköpi	ng Linné	Lund	Skövde	Stockho	lms uni	Södertörn	Umeå	Uppsala	Väst	Örebro
79,10%	88.00%	77.30%	92.5	2% 84,00%	93	3,70%	100,00%	91,30%	97.70%	89,40	% 92.70%	81,90%	83,10%	88,609	6 88.8	91.60	% 93,10%	5 78,60%		91,60%	91.00%	91,50%	92.10%	87,70%	91,10%
	00,0070	,	0_,0				200,0070	0_,00/0	01)10/0						00,0		// 00,20/			0_,00/0	0_,00/0	0_,007		01)10/0	01)10/0
The avera	age salaı	ry (in SE	EK) th	ree years	after	gradatio	<u>on</u>								_	_									
Blekinge B	Borås D	Dalarna	Gotla	nd Gävle	Göte	borg HH	IS-Stockholm	Halmstad	Jönköping	Karlsta	d Kristianstad	Luleå	Mittuniversitetet	Mälardale	n Linköpi	ng Linné	Lund	Skövde	Stockho	lms uni	Södertörn	Umeå	Uppsala	Väst	Örebro
	27998	29335		98 32224		33169	48973	28282	33223			2635			-	93 279	33 35442			35716					
	1.000							-0-02	00120				50200	2300						20.10				0	
-	• •			· ·					2 0.0`																
The grad	e point a	verage :	neces	sarv in or	der to	be adm	itted (Maxir	num score	z = 20.0																
Blekinge B							IS-Stockholm						Mittuniversitetet		_			Skövde			Södertörn		Uppsala		Örebro

16,386 10,342

10,638

11,116 17,616 14,254 18,01

11,42

16,96

14,602 15,946 18,468 11,22 14,522

			meters																				
Approxima	ately, ł	now man	y teache	er-lead h	nours per v	week have you	had in bi	usiness/eco	onomic c	courses duri	ng you	r education?											
Blekinge Bo	orås	Dalarna	<u>Gotland</u>	<u>Gävle</u>	Göteborg	HHS-Stockholm	<u>Halmstad</u>	<u>Jönköping</u>	<u>Karlstad</u>	<u>Kristianstad</u>	<u>Luleå</u>	Mittuniversitetet	Mälardalen	Linköping	<u>Linné</u>	Lund	<u>Skövde</u>	Stockholms uni	Södertörn	<u>Umeå</u>	<u>Uppsala</u>	<u>Väst</u>	<u>Örebro</u>
3,45	9,35	7,23	7,51	6,62	11,20	9,64	8,79	7,15	9,04	9,08	6,34	5,36	7,30	7,66	9,75	7,88	7,33	8 7,14	8,33	10,34	6,99	6,71	7,38
	(· · ·							ss during your ec											
<u>Blekinge</u> Bo												<u>Mittuniversitetet</u>						Stockholms uni			<u>Uppsala</u>		<u>Örebro</u>
2,63	3,40	5,43	6,74	3,88	4,03	5,59	5,03	3,47	3,90	6,21	3,88	4,70	3,97	4,72	5,53	3,54	5,81	4,02	4,44	5,03	2,88	4,38	4,50
A	atalw h				مورية مرايدهما	tion have very h		datamı aa		wa a wata wala a wa		needed to intera	at aurithe auro		at an 2								
	(í de la companya de la										Lund	Sköudo	Stockholms uni	Sädartärn	Umoå	Unncolo	Väct	Örebro
<u>Blekinge</u> <u>Bo</u> 1,46	2,06	<u>Daiarna</u> 1,94								-		Mittuniversitetet 1,38						Stockholms uni			Uppsala 1,99		
1,40	2,00	1,54	1,85	2,44	3,33	3,50	1,71	2,50	1,24	2,07	2,43	1,30	3,23	0,54	2,33	2,23	1,01	0,00	1,77	2,40	1,55	2,07	
Four non-c	011750	rolatod n	aramoto	rc								i											
<u>tour non-c</u>	course	<u>relateu p</u>	aramete	.13																			
How do yo	ou perc	eive the	availabi	ilitv of v	our teache	ers outside teac	hing hou	rs? (On a s	scale fro	om 1 to 7)													
Blekinge Bo	orås	Dalarna	Gotland	Gävle	Göteborg	HHS-Stockholm	Halmstad	Jönköping	Karlstad	Kristianstad	<u>Luleå</u>	Mittuniversitetet	Mälardalen	Linköping	<u>Linné</u>	Lund	<u>Skövde</u>	Stockholms uni	<u>Södertörn</u>	Umeå	Uppsala	/äst c	Örebro
4,200	<u>4,610</u>	<u>4,750</u>	<u>5,670</u>	<u>4,820</u>	4,440	<u>4,740</u>	<u>4,790</u>	<u>4,740</u>	<u>4,460</u>	<u>4,900</u>	<u>4,900</u>	<u>4,600</u>	<u>4,510</u>	<u>5,090</u>	<u>5,410</u>	<u>3,740</u>	<u>4,560</u>	<u>4,170</u>	<u>3,620</u>	<u>4,900</u>	4,400	4,430	4,680
How attrac	ctive d	o you fin	d the ur	niversiti	es that you	ur school has e	xchange <u>p</u>	oartnershi	os with t	to be? (On a	scale f	<u>rom 1 to 7)</u>											
<u>Blekinge</u> Bo						HHS-Stockholm						Mittuniversitetet						Stockholms uni			Uppsala		<u>Örebro</u>
4,08	4,15	4,19	4,27	3,78	4,89	4,8	4,33	6,06	4,43	4,65	4,54	4,04	4,37	4,6	4,42	5,15	4,27	4,24	4,06	4,62	4,73	4,21	4,28
I								d	-611		1	(
			·			tential employe							Mälandalan	Linkänina	Linné	Lund .	Skövde		Cäalautäuva	l luce e å	Unneele A	läck i	Örebro
<u>Blekinge</u> Bo 3,59	4,47	<u>Dalarna</u> 3,75				HHS-Stockholm 6.28			4,51	4.72		Mittuniversitetet 4,41	4,46	<u>LINKOping</u> 4,48		<u>Lund</u> 4,88	<u>skovae</u> 3,73	Stockholms uni 3.64	3,89	<u>omea</u> 4,94	Uppsala 4,86	<u>/äst</u> (4,24	<u>Jrebro</u> 4.24
3,35	4,47	3,75	4,47	4,3	3,39	0,28	4,3	4,/	4,31	4,72	4,02	4,41	4,40	4,40	3,7	4,00	3,73	3,04	3,03	4,34	4,00	4,24	4,24
ls vour ne	ercenti	on that f	here are	many	studv area	as and group r	ooms at v	your schoo	ol? (On a	a scale from	1 to 7)												
Blekinge Bo						HHS-Stockholm						Mittuniversitetet	Mälardalen	Linköping	Linné	Lund	Skövde	Stockholms uni	Södertörn	Umeå	Uppsala	/äst Ö	Örebro
	4,075	2.19							3,41				3.6		2,655		3,795	2.985	3,525	3,41	2,02	3,38	2,895

Four Stu	ident sat	isfaction	paramet	ers																			
What is	vour ov	erall imp	ression	of vou	r educatio	n regarding th	ne qualit	v the teacl	ning? ((On a scale fi	rom 1 t	o 7)											
Blekinge			Gotland			HHS-Stockholm	÷ .		<u> </u>			Mittuniversitetet	Mälardalen	Linköping	<u>Linné</u>	Lund	<u>Skövde</u>	Stockholms uni	Södertörn	<u>Umeå</u>	<u>Uppsala</u>	<u>Väst</u>	<u>Örebro</u>
4,5	4,79	4,19	4,86	4,63	4,99	5,36	4,74	4,48	4,35	5,27	4,57	4,12	4,62	5,13	4,74	4,95	4,03	4,8	4,7	4,68	4,46	4,4	4,88
What is	your ov	erall imp	ression	of you	r educatio	<u>n regarding th</u>	<u>ie possib</u>	<u>ility to ge</u>	<u>t an int</u>	eresting em	ploym	ent after gradua	tion? <u>(On a</u>	scale fro	m 1 to	7 <u>)</u>							
Blekinge	<u>Borås</u>	<u>Dalarna</u>	Gotland	<u>Gävle</u>	<u>Göteborg</u>	HHS-Stockholm	<u>Halmstad</u>	Jönköping	<u>Karlstad</u>	<u>Kristianstad</u>	<u>Luleå</u>	<u>Mittuniversitetet</u>	<u>Mälardalen</u>	<u>Linköping</u>	<u>Linné</u>	<u>Lund</u>	<u>Skövde</u>	Stockholms uni	<u>Södertörn</u>	<u>Umeå</u>	<u>Uppsala</u>	<u>Väst</u>	<u>Örebro</u>
5,02	5,48	4,65	4,94	4,66	5,68	6,5	5,16	5	4,89	5,1	5,14	4,63	4,85	5,14	4,85	5,11	4,68	4,61	4,89	5,12	4,97	4,9	4,92
																							ļ!
Overall	, are you	satisfied	/dissati	sfied w	vith your e	ducation? (Or	i a scale i	from 1 to '	7)														
Blekinge	<u>Borås</u>	<u>Dalarna</u>	Gotland	<u>Gävle</u>	<u>Göteborg</u>	HHS-Stockholm	<u>Halmstad</u>	Jönköping	<u>Karlstad</u>	<u>Kristianstad</u>	<u>Luleå</u>	Mittuniversitetet	<u>Mälardalen</u>	Linköping	<u>Linné</u>	<u>Lund</u>	<u>Skövde</u>	Stockholms uni	<u>Södertörn</u>	<u>Umeå</u>	<u>Uppsala</u>	<u>Väst</u>	<u>Örebro</u>
4,92	5,19	4,47	5,13	4,95	5,3	5,81	5,21	5,08	4,95	5,38	4,8	4,31	4,71	5,11	5,05	5,03	4,65	4,94	4,93	5,08	4,69	4,88	5,2
Would	you cho	ose the sa	me edu	cation	today if y	ou were to re-	nake yo	ur choice?	(On a	scale from 1	l to 7)												
Blekinge	<u>Borås</u>	<u>Dalarna</u>	Gotland	<u>Gävle</u>	<u>Göteborg</u>	HHS-Stockholm	<u>Halmstad</u>	Jönköping	<u>Karlstad</u>	<u>Kristianstad</u>	<u>Luleå</u>	<u>Mittuniversitetet</u>	<u>Mälardalen</u>	Linköping	<u>Linné</u>	Lund	<u>Skövde</u>	Stockholms uni	<u>Södertörn</u>	<u>Umeå</u>	<u>Uppsala</u>	<u>Väst</u>	<u>Örebro</u>
5,15	5,26	4,44	5,04	4,76	5,3	6,57	4,37	4,89	4,89	5,14	5,39	4,48	4,17	5,11	4,31	4,86	4,26	4,72	4,69	4,84	4,91	4,59	5,05

Appendix VI

Study III

The questions from study III is presented below in both Swedish and English. The reason for this is to increase the transparency for the reader. The Swedish version, is presented first, and is an exact copy of the survey given to the students while the English version only is a translation of the question asked.

<u>Kön:</u>	🗆 Kvinna	□Man	□Vill i	nte ange						
<u>Ålder:</u>	□17-23	□24-27	□28+	□Vill inte ange						
Vilken termin på utbildningen läser du?										

1) Uppskattningsvis hur många lärarledda timmar har du i genomsnitt haft per vecka i dina ekonomirelaterade kurser?

1) = 1-3h, 2) = 4-6h, 3) = 7-9h, 4) = 10-12h, 5) = 13-15h, 6) = 16h+

2) Uppskattningsvis hur många timmar i veckan hade du föreläsningar/seminarier med <u>mindre</u> än 50 studenter i ekonomirelaterade kurser under den första halvan av din utbildning?

1) = 1-2h, 2) = 3-4h, 3) = 5-6h, 4) = 7-8h, 5) = 9-10h, 6) = 11-12, 7) = 13h+

3) Uppskattningsvis hur många timmar i veckan hade du föreläsningar/seminarier med <u>mindre</u> än 50 studenter i ekonomirelaterade kurser under den andra halvan av din utbildning?

1) = 1-2h, 2) = 3-4h, 3) = 5-6h, 4) = 7-8h, 5) = 9-10h, 6) = 11-12, 7) = 13h+

4) Vid hur många tillfällen under din ekonomiutbildning har du haft ett obligatoriskt kursmoment som haft anknytning till externa aktörer (näringsliv, kommun, organisationer)?

1) = 0ggr, 2) = 1-2ggr, 3) = 3-4ggr, 4) = 5-6ggr, 5) = 7ggr +

- 5) Hur upplever du dina lärares tillgänglighet utanför undervisningstiden? (Ex. att du kan gå till deras rum och fråga om hjälp, att de snabbt svarar på mail, etc.)
 1) = Väldigt otillfredsställande tillgänglighet, 4) = Neutralt, 7) = Väldigt tillfredsställande tillgänglighet
- 6) Hur attraktiva anser du att utbytesuniversiteten som institutionen/skolan erbjuder är?

1) = Väldigt oattraktiva, 4) = Neutralt, 7) = Väldigt attraktiva

7) Hur upplever du möjligheterna att möta potentiella arbetsgivare utanför undervisningens ramar? (Arbetsmarknadsdagar, företagspresentationer, rekryteringsevent, etc.) 1) = Väldigt små möjligheter, 4) = Neutralt, 7) = Väldigt stora möjligheter

8) Upplever du att det finns många studieplatser, såsom läsesalar och grupprum, att tillgå vid din skola?

1) = Det finns för få, 4) = Det finns lagom, 7) = Det finns ett överskott

9) Vad är ditt helhetsintryck av din ekonomiutbildning avseende kvaliteten på undervisningen?

1) = Mycket otillfredsställande, 4) = Neutralt, 7) = Mycket tillfredsställande

10) Vad är ditt helhetsintryck av din ekonomiutbildning avseende möjligheterna att få ett intressant arbete efter utbildningen?

1) = Mycket otillfredsställande, 4) = Neutralt, 7) = Mycket tillfredsställande

- 11) Är du nöjd/missnöjd med din ekonomiutbildning överlag?
 1) = Mycket missnöjd, 4) = Varken eller, 7) = Mycket nöjd
- 12) Skulle du välja samma ekonomiutbildning om du gjorde om ditt val idag?

1) = Definitivt inte samma, 4) = Osäker, 7) = Definitivt samma

Study III in English:

Gender:	□ Wom	an □Ma	n	\Box Prefer to not disclosure						
<u>Age:</u>	□17-23	□24-27	□28+	\Box Prefer to not disclosure						
What semester are you studying on?										

- 5) Approximately how many teaching hours per week have you had per week within your education?
- 6) Approximately how many hours per week, have you had lectures/seminars with less than 50 students in the class during the *first half* of your education?
- 7) Approximately how many hours per week have you had lectures/seminars with less than 50 students in the class during the **second half** of your education?
- 8) At approximately how many times during your education have you had a mandatory teaching activity where you had to interact with an external actor? (i.e. a company, an organization, municipality etc. **Not** guest lectures.)
- 9) How do you perceive the accessibility of your teachers outside the scheduled lectures? (For example: office hours or quick responses to e-mails.)
- 10) How attractive do you find the exchange universities that the school offers?
- 11) How do you perceive the possibilities to meet graduate recruiters outside the scope of the courses? (For example: career fairs, recruitment events, company presentations.)

- 12) Is your perception that there are many study areas and group rooms at your school?
- 13) Are you satisfied/dissatisfied with your education overall?
- 14) What is your overall impression of your education concerning the quality of the teaching?
- 15) What is your overall impression of your education regarding the opportunities to find an interesting employment after graduation?
- 16) Would you choose the same education today if you were to re-make your choice?