A Universidade do Porto no QS Graduate Employability Rankings 2016 (Pilot)

Reitoria da Universidade do Porto

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http://www.iu.qs.com/qs-graduate-employability-rankings-year-2016-pilot/

1. Metodologia do QS GER e participação da U.Porto

"The QS Graduate Employability Rankings is the result of an extensive research project which has been running since October 2014 and is a pilot initiative, with a methodology subject to changes for the next editions.

This project's aim is to design a new approach to, and a new methodology for, employability in university rankings.

The methodology for the QS Graduate Employability Rankings differs from that found in the global rankings, using different indicators and changing the weighting of the existing indicators which it retains.

QS has undertaken extensive research with the help of university leaders worldwide, reading academic papers and talking to employers & student representatives to identify a suitable methodology – over 50 universities have had the opportunity to provide feedback and insights since October 2014.

This first edition is based on five criteria. In future, additional factors are planned – based on employer reputation in different sectors and alumni network characteristics – as sub-categories of the ranking. At present, QS is still working with its partners so as to be able to verify the reliability of this measure, from the available sources. This ranking remains a pilot exercise, and universities have only been ranked if they elected to actively participate in QS's data collection processes, or if enough publicly available data was available to permit their inclusion.

Indicators

Employer Reputation 30%
Partnerships with Employers 25%
Alumni Outcomes 20%
Employers' Presence on Campus 15%
Graduate Employment Rate 10%"

1

Para esta edição piloto do QS GER, a Universidade do Porto disponibilizou a informação solicitada (Employer On-campus Promotion; Employer's Contribution; Research Partnerships; Amount invested in research partnerships by external companies/organisations; Non-research Partnerships, Interships / Work Placements provided by external companies / organisations available for current students; Scholarship Funding; Graduate Employment Rate). O pedido foi feito em 20 de julho de 2015 e a resposta foi dada no dia 29 de setembro de 2015.

Desde 2009, a Universidade do Porto disponibiliza ao QS a lista de empregadores e os dados relativos a estudantes, docentes / investigadores e propinas. Desde 2011, disponibiliza as listas de académicos e variantes de nome da Universidade no Scopus. Para a edição deste ano, os dados de estudantes (2013/2014) e académicos (2014) foram solicitados em fevereiro de 2015, reportados em abril e validados pelo QS em maio. As listas de académicos, empregadores e variantes de nome no Scopus foram pedidas em meados de dezembro de 2014 e enviadas no limite do prazo, 30 de janeiro de 2015.

¹ In http://www.iu.gs.com/university-rankings/ger/ acedido 26 de novembro de 2015.

2. Posições da U.Porto no QS Graduate Employability Rankings

Posições da U.Porto

| | 20 | 2015 | | |
|--------------------------|---------|-----------|--|--|
| | U.Porto | Nº de IES | | |
| Ranking do Mundo | 101-150 | 201 | | |
| Ranking da Europa | 36-56 | 77 | | |
| Ranking da Ibero-américa | 8-16 | 20 | | |
| Ranking de Portugal | 2 | 2 | | |

Scores² da U.Porto

| Indicator | Score | # QS GER Ranking |
|-----------------------------|-------|---------------------|
| Employer Reputation | 20.7 | 285 |
| Alumni Outcomes | 17.0 | 237 |
| Partnerships with Employers | 91.3 | 32 |
| Employers' Presence | 8.5 | 195 |
| Graduate Employability Rate | 64.5 | 196 |
| Overall Score | 40.9 | 101-150 |

² Informação enviada por email pela agência QS.

3. Universidades portuguesas no QS Graduate Employability Rankings

Posições das universidades portuguesas no QS GER

| | Mundo | Europa | Ibero- américa | Portugal |
|-----------------------|---------|--------|-------------------|----------|
| University of Coimbra | 101-150 | 36-56 | 8-16 | 1 |
| University of Porto | 101-150 | 36-56 | 8-16 | 2 |
| #IES | 201 | 77 | 20 | 2 |

Scores das universidades portuguesas no QS GER

| | Employer Reputation | Alumni Outcomes | Partnerships with Employers | Employers' Presence | Graduate Employability Rate | Overall Score |
|---------------|------------------------|--------------------|-----------------------------------|------------------------|-----------------------------------|------------------|
| University of | | | | | | |
| Coimbra | n/d | n/d | 94,6 | n/d | 84,1 | 43,0 |
| University of | | | | | | |
| Porto | 20,7* | 17,0* | 91,3 | 8,5* | 64,5* | 40,9 |

n/d não disponível online.

^{*} enviado pela agência QS, mas não disponível online.

4. Anexo - QS FAQS e indicadores

4.1 FAQS

"What are the indicators used for this ranking and how did you calculate the scores?

To find out more about the methodology, thresholds and indicators used for the 2016 QS Graduate Employability Rankings, please click http://www.iu.qs.com/university-rankings/ger/.

When will the ranking results be published?

The results will be published on the QS Intelligence Unit website soon after the presentation on the 26th of November at QS Asia Pacific Professional Leaders in Education (QS APPLE).

What are the differences between the regular QS ranking and this pilot initiative?

In practical terms, this new ranking will not affect your participation or score in any other QS Rankings. We have offered universities the opportunity to be excluded from the analysis. The rankings are published on our QS Intelligence Unit website instead of our *TopUniversities*platform whilst it is in developmental phase. As the ranking and its discussion reach a new level, it is a QS objective to make this ranking a regular yearly initiative in the foreseeable future.

What are the consequences to the universities that opted out in this first version? Can they participate in future rankings?

The universities that declined the invitation to take part in this pilot exercise were excluded from QS's final analysis this first year and will not be published. A list of official opt-out institutions will be published on our IU website along with the pilot's results. All universities that opted out will be offered the opportunity to participate in future QS Graduate Employability Rankings and their decision to not participate in this first version will not affect the results in any form.

Why is this ranking a pilot initiative?

Employability has always been an important metric used in QS's rankings. Over the last 20 years, we foregrounded the opinion of employers in our rankings. Now, we're planning to expand our reach to include more data on employability to support our university rankings. In order to implement this idea, QS decided to proceed with due caution, as most of the data we requested and some of the indicators we've used have never been part of our rankings before. However, most of it has already been extensively analysed and collected via other QS products. This ranking intends to take the discussions on employability rankings to a new level, and through its experimental methodology attempt to create new opportunities for future development in our approach to such an important theme. Therefore, by publishing this first set of results, QS is confident that important discussions surrounding this issue will ensue. Naturally, we are open to feedback and welcome discussions with any universities interested in collaborating with us as we improve our new initiative.

What are the next steps following the QS Graduate Employability Rankings launch?

QS will schedule webinars to explain the rankings' methodology and calculations. Institutions that filled in our data request accordingly by the proposed deadline will also receive a more detailed analysis of their results globally and regionally in December.

How many universities will be published this first year?

Although QS analysed over 600 universities, in this first year only the top 200 ranked universities.

What data sources did you use to calculate the scores?

- Employer Reputation
- Alumni Outcomes
- Partnerships with Employers
- Employers' presence on campus
- Graduate Employment Rate

QS sources data not only directly from institutions themselves but also from government ministries, agencies such as the Higher Education Statistics Agency (HESA) in the UK, web sources and other third-parties. Where possible data are checked against multiple sources to verify their authenticity."³

³ In http://www.iu.gs.com/university-rankings/gs-ger-fag acedido 26 de novembro de 2015.

4.2 Employer Reputation

"Methodology

The Employer Reputation component is unique amongst current international evaluations in taking into consideration the important component of employability. The majority of undergraduate students leave university in search of employment after their first degree, making the reputation of their university amongst employers a crucial consideration.

Background

A common approach to the evaluation of employability in domestic rankings is graduate employment rate, there are two reasons why this indicator does not work at an international level – the first is that this evaluation looks at the top universities in the world – all of whom have very high employment rates – so it doesn't provide very much discernment. The second is that, since we are looking at different countries, the results would react to local economic conditions and not necessarily just the quality of the institution. So, instead, we survey employers to ask their opinion on the quality of graduates.

Source of Respondents

The results are based on the responses to a survey distributed worldwide to employers from a number of different sources:

Previous Respondents

QS has been conducting this work since 2004 – all previous respondents to our survey are invited to respond again to provide us with an updated viewpoint on the quality of universities in their broad field.

OS Databases

In twenty years of operation QS has developed an extensive database of employers in key markets worldwide.

QS Partners

QS has an extensive network of partners including international media organisations and job portals, number of whom support our employer research by distributing survey invitations

Institution Supplied Lists

Since 2007, institutions have been invited to submit lists of employers for us to invite to participate in the Employer Survey.

In 2010, this invitation was extended to academics for them to take part in the Academic Survey which feeds into the Academic Reputation indicator.

Since employers are encouraged to list a number of institutions, the risk of bias towards the submitting institution is minimal, nonetheless submissions are screened and sampling applied where any institution submits more than 400 records.

The Survey

The QS Employer Survey has been running since 1990 and contributes to a number of key research initiatives operated by the QS Intelligence Unit including the QS TopMBA Salary & Recruitment Trends Report and the TopMBA Global 200 Business Schools. Like the academic survey the questionnaire is adaptive responding to the early questions to take respondents through the MBA, Masters or First Degree tracks as appropriate.

The key sections for the Rankings work as follows:

Personal Details

Knowledge Specification

Top Domestic Instituitons

Top International Institutions

Additional Information

Personal Details

Name, Company, Job Title, Industry, Department, Extent of recruitment responsibilities.

Knowledge Specification

Country – respondents are requested to indicate which country they have most familiarity with rather than the country where they are based. This enables new international faculty members to comment on their sphere of knowledge rather than speculate on an area they may yet know little about.

Region – regional knowledge responses are grouped into three supersets that define the list of institutions from which the respondent can select, these are Americas; Asia, Australia & New Zealand; and Europe, Middle East & Africa

Faculty Area – respondents are asked to select one or more faculty areas in which they consider their expertise to lie. These are Arts & Humanities; Engineering & Technology; Life Sciences & Medicine;

Natural Sciences; and Social Sciences. Sections 3 and 4 below are repeated for each faculty area selected.

Field – respondents are asked to select up to two specific fields that best define their academic expertise Top Domestic Instituitons

Respondents are asked to identify up to ten domestic institutions they consider best for recruiting graduates.

Top International Institutions

Respondents are asked to identify up to thirty international institutions they consider best for recruiting graduates. The list consists solely of institutions from the region(s) with which they express familiarity in section 2.

Additional Information

We use this section to gather additional information from respondents, such as feedback on previous publications and the importance of various measures in evaluating universities.

Response Processing

The work is not done once the survey is designed and delivered. Once the responses are received a number of steps are taken to ensure the validity of the sample.

Five Year Aggregation

To boost the size and stability of the sample, QS combines responses from the last five years, where any respondent has responded more than once in the three year period, previous responses are discarded in favour of the latest numbers.

Junk Filtering

Any online survey will receive a volume of test or speculative responses. QS runs an extensive filtering process to identify and discard responses of this nature.

Anomaly Testing

It is well documented on the basis of other high-profile surveys in higher education that universities are not above attempting to get respondents to answer in a certain fashion. QS run a number of processes to screen for any manipulation of survey responses. If evidence is found to suggest any institution has attempted to overtly influence their performance, any responses acquired through sources 4 and 5 (above) are discarded.

Results Analysis

Once the responses have all been processed, the fun really begins and it works as follows for each of our five subject areas:

- Devise weightings based on the regions with which respondents consider themselves familiar –
 weightings are (now) based only on completed responses for the given question. This is slightly
 complicated by the fact that respondents are able to relate to more than one region.
- Derive a weighted count of international respondents in favour of each institution ensuring any selfreferences are excluded.
- Derive a count of domestic respondents in favour of each institution adjusted against the number of
 institutions available for selection in that country and the total response from that country ensuring any
 self-references are excluded.
- 4. Apply a straight scaling to each of these to achieve a score out of 100.
- 5. Combine the two scores with a weighting 70% international, 30% domestic these numbers were based on analysis of responses received before we separated the domestic and international responses three years ago, but a low weighting for domestic also reflects the fact that this is a **world** university ranking. We use 85:15 for the academic review.
- 6. Square root the result we do this to draw in the outliers but to a lesser degree than other methods might achieve our intention is that excellence in one of our five areas should have an influence, but not too much of influence.
- 7. Scale the rooted score to present a score out of 100 for the given faculty area." 4

⁴ http://www.iu.qs.com/university-rankings/indicator-employer/#toggle-id-7 26 de novembro de 2015

4.3 Alumni Outcomes

"Methodology

QS has been recording the educational background of over 20,000 highly influential employers, sector leaders, and award-winning professionals, as well as individual professionals both senior and junior. The aim is to rank which universities are proving themselves as sources of successful employees and employers, and can claim to have positively influenced their alumni's development. The criterion is based on the fact that universities with strong track records in this field will have the kind of high-quality alumni networks that provide students with connections, career advice, and internship/work placement opportunities – all of which boost employability. This is a new indicator within our rankings, and we will feature this metric as one of the key Employability indicators.

The research

The project started by mapping the educational backgrounds of the senior leadership teams at the top 500 privately owned companies in the world according to annual revenue. Later on, the process evolved to incorporate several global lists of influence from the past 3 years compiled by some of the most respected global media outlets and business expert companies, such as Forbes, Fortune, LinkedIn and TIME. The research continued to gather information from regional and national lists of respected awards and rankings of all parts of the world until it covered over 16,000 tertiary degrees offered in over 1,200 universities around the world.

The research prioritised youth leadership lists, both to take the opportunity to feature new universities in the ranking and also to recognise degrees awarded more recently, particularly in the past 5 years.

Once all the responses have been processed, the analysis can begin in earnest. It works as follows for each of our five subject areas:

- 1. Exclude duplicate entries of individuals that were listed more than once in different awards.
- 2. Devise weightings based on the scope of the list: global, regional, or national.
- 3. Derive a weighted count of young prominent leaders and senior leaders, prioritising young leaders on a ratio of 2:1.
- 4. Apply a straight scaling to each of these to achieve a score out of 100.5

4.4 Partnerships with Employers

"Methodology

This criterion has been created with the pilot iniative of the <u>QS Graduate Employability Rankings</u>. It involves summating the number of official partnerships a university has with employers, and ranking all universities accordingly. It is based on the belief that universities which can successfully collaborate with influential employers, providing their students with work experience, funding and openings to demonstrate research initiative, will function as a boost the employability of their students. Examples of partnerships include fast-track job applications, internship offers, and work placements – all of which increase student proximity to employers and are proven to enhance employability.

QS also mapped on <u>Scopus</u> the academic yield that research partnerships produced, awarding extra points for partnerships with the top 500 companies in the world and top additional regional companies according to revenue, that produced at least 3 papers in the past 5 years.

We only considered distinct companies for this indicator, and excluded universities and governments (including ministries and other agencies controlled by governments) in this first edition. After a thorough validation by our analysts to ensure the existence of such partnerships in the first place, the numbers were converted into a ratio between the number of partnerships with employers and the number of <u>Full Time</u> <u>Equivalent (FTE) Faculty Staff</u>, using the same dataset as the latest <u>QS World University Rankings</u>." ⁶

⁵ In http://www.iu.qs.com/university-rankings/indicator-alumni-outcomes/ acedido 26 de novembro de 2015

⁶ In http://www.iu.gs.com/university-rankings/indicator-partnerships/ acedido 26 de novembro de 2015

4.5 Employers' Presence on Campus

"Methodology

This indicator has been created with the pilot initiative of the <u>QS Graduate Employability Rankings</u>. It involves identifying the number of employers who are actively present on a university's campus, providing motivated students with an opportunity to network and acquire information. This 'active presence' may take the form of participating in careers fairs, organising company presentations, or any other self-promoting activities on the part of employers.

We only consider distinct companies taking part in self-promoting activities on campus for this indicator. The total number was either supplied to us or collected on official university reports (if applicable) and audited by our diverse team of analysts. The numbers were converted to a ratio between the number of distinct employers on campus and the number of <u>Full Time Equivalent (FTE)</u> students, using the same dataset as the latest QS World University Rankings."

4.6 Graduate Employment Rate

"Methodology

This criterion, created with the pilot initiative of the <u>QS Graduate Employability Rankings</u>, examines whether the efforts made by a university to prepare their students to become employable ultimately proves successful, and does so by measuring the percentage of a university's graduates that are employed up to twelve months after graduation.

The graduate employment rate is the proportion between students employed full time within 12 months after graduation and students from the same class unemployed but seeking for employment in the same period. Students pursuing further studies, unavailable to work, working part-time or not seeking employment are excluded from this calculation.

The final graduate employment rate was thoroughly verified by our team of analysts. To be considered as part of the QS Graduate Employability Rankings, the graduate employment rate needed to be one of the three following options: be part of an official government report, official university report or be supplied to QS as part of a complete list of graduates from the past complete academic year with their respective employers and date of employment.

In several countries, the timeline of survey collection and methodology is slightly different than QS's. An additional concern is that the economic conditions of a country also have a great influence on the employability prospects of students post-graduation. Thereby, in order to normalise the effects of such factors, QS built the scores using a comparison between the universities' graduate employment rate and the national average of tertiary education employment rate, or sub-regional average of graduate employment when applicable."

⁷In http://www.iu.qs.com/university-rankings/indicator-employers-presence/ acedido 26 de novembro de 2015.

⁸ In http://www.iu.qs.com/university-rankings/indicator-graduate-employment/ acedido 26 de novembro de 2015.