Research Article

Influence of International Rankings on Public Universities: Exploratory Research

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This paper explores the influence of international university rankings on public universities. A multiple case study of three French universities examines the nature of this influence at national, organisational, and individual levels. A thematic analysis of interviews using NVivo software showed that the changes, either imposed by new policies or initiated by the university managers, have profoundly altered the traditional values of academia. The novel findings unfold the perception of academics regarding the experienced changes. After describing the current situation in the French higher education system, the paper predicts that universities will engage more actively in the quest for a better position in the future and will consequently accept the rules and norms of rankings. It contributes to the discussion on the effects of quantifying higher education processes and outcomes, by analysing the perception of academics on the experienced evolutions. This paper addresses policymakers, university managers and researchers interested in understanding how evaluation instruments, such as international rankings affect organizations and individuals in the higher education sector.

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Introduction

Given the increasing demand for external accountability and public transparency, rankings have been widely adopted in higher education^{[1][2][3]}. The need for accountability and responsible behaviour is stressed through greater emphasis on output controls^{[4][5]}. To meet these demands, numerous national and international actors have been involved in developing different types of rankings.

Evaluating the performance of higher education institutions (HEIs) includes assessing the quality of teaching and research activities, and as "quality" is a highly subjective and debatable concept^[6], university rankings have become a major topic of discussion. On the one hand, the rankings are presented as a relatively objective means of judging the quality of universities. They are also acclaimed to improve transparency and allow students to make informed choices. However, critics have questioned their objectivity since their evaluation methods depend strongly on the choice of indicators used [11][7][8][9] [10][11]. They also argue that rankings do not address some of the key functions of higher education and that the indicators applied measure distant proxies rather than quality itself [3][5][12][13][14][15].

Despite serious criticism and even opposition from academia, rankings are nonetheless widely accepted by higher education players and the wider public due to their simplicity and consumer-oriented information^{[1][5][8][16]}. Consequently, university rankings have been subject to increased academic scrutiny and critical debate in recent years.

Previous studies have explored rankings' effects on different levels: on policymaking $\frac{[5][17]}{}$; on HEIs strategy and objectives $\frac{[2][4][11][14][18]}{}$ on students' choices (Clarke, 2007); on departments and other subunits $\frac{[16][19]}{}$, on academics' behaviour $\frac{[12][20]}{}$; and on university identity $\frac{[2][13][16]}{}$.

The aim of this paper is to contribute to the discussion on the effects of international university rankings on universities by exploring their influence on three levels: national, organisational, and individual. While much has been written about the methodologies employed, together with their inherent basis and problematic impact on higher education policies, detailed case studies on the perception of the influence remain an important desideratum in the literature. Rare prior empirical studies have identified tensions and value conflict generated within French universities at different levels [16].

Despite their global character, the influence of international rankings needs to be studied within a national context, as national systems, regularities and frameworks alter the institutional responses to this global trend. Indeed, as explained by Collins and Park^[14], international rankings must be examined in terms of their interaction with "domestic historically generated notions of reputation, and in particular the rigidity of national hierarchies and the importance of domestic rank for students, alumni and both public and private funding" (p.128). Earlier, Whitchurch and Grodon^[21] emphasised that even if academic and professional identities were turning more dynamic and multi-faceted around the world, the changes occurred at different rates in different contexts.

The article thus addresses an empirical gap with a study of three French universities. Since the appearance of the best-known rankings in the 2000s, the French government has introduced several measures to meet ranking evaluation criteria^[22]. On the other hand, like their foreign counterparts, French universities have engaged in important actions aiming at improving their position in global rankings^{[23][24]}.

The findings of this article contribute to the scientific literature on understanding how evaluation instruments, such as international rankings affect organizations and individuals in the higher education sector. It offers insights into the academics' perception of the experienced changes and contributes to the current debate of evolution of academic profession.

Literature Review

International university rankings reflect judgmental assessments^[3] as they seek to evaluate universities in a quantitative way by comparing them with each other. One of the first international university rankings, the Shanghai ranking, was published in 2003 and was quickly followed by other, large-scale, indicator-based assessments of universities that were published either as a ranking (individual institutions ranked according to certain criteria) or as a rating (individual institutions assessed according to certain criteria). Although the rankings have been modified since they first appeared in a bid to improve their subjective methodology^{[8][25]}, they are still criticized for lacking sufficient theoretical clarity and methodological precision^{[11][13][14]}. Academics appear to agree that most international rankings "have fallen short of their larger goal of measuring quality"^[15] and that there is a "mismatch between the quality, reputation and ranking"^[14].

Despite criticism, studies show institutional and systemic answers aiming at respecting the evaluation criteria promoted by the rankings. The literature review will first categorise the main criticism in previous studies and then will present the main reforms in France, claimed to be influenced by the ranking methodologies.

Main Criticisms of International Rankings

One of the main criticisms concerns the attempt to quantify the quality of university performance. Scholars argue that higher education missions are so complex that it is impossible to measure them by simple quantitative indicators [4][8][9][14][26]. Some examples of quantitative indicators are the number of

publications in ranked journals, number of students, internationalization degree and number of Nobel prizes. Scholars regret that this search for objectivity gives the impression that the value of education can simply be counted, hierarchically ordered, and uncontrovertibly judged^[3].

Another major criticism is that international university rankings reflect research performance far more accurately than teaching $\frac{[4][8][9][10][27]}{[4][8][9][10][27]}$. As rankings neglect missions other than research, they do not evaluate all universities under the same conditions $\frac{[3][5][13][15][28]}{[13][15][28]}$. For instance, the Shanghai ranking measures education quality by the number of Nobel prizewinners among university graduates, which may be considered as linked to the quality of education, but in a very specific and somewhat indirect way. At the other extreme, some rankings judge teaching quality using staff/student ratios alone, without examining the teaching/learning relationship itself $\frac{[8]}{[8]}$. Other studies also argue that putting research to the centre has impacted the public service mission of academics $\frac{[27]}{[8]}$.

One further argument against the rankings' methodology is that measuring the quality of research in all disciplines using similar bibliometric indicators is also questionable due to wide differences in research traditions between the social and natural sciences [16]. Adopting bibliometric indicators to measure research quality is more adapted to exact and medical sciences than to human and social sciences, as traditionally, there are more publications and more citations per publication in natural sciences in the form of article, while social sciences tend to have other forms of publications.

There is also an issue with language. It has been noted that international rankings tend to favour universities from English-language nations as non-English language work is both published and cited less frequently [5][14][25]. A study by the Leiden Ranking team showed that the citation impact of publications from French and German universities in French or German, respectively, was smaller than the citation impact of publications from the same universities published in English [29].

In addition to seminal work on the failings of rankings' methodology, international rankings have also been considered as harmful to the academic profession and to university identity <a href="[12][22][24][26][27][28][30]. For example, Elken et al. [2] argue that as rankings are not value free, they may have an impact on university identity as they emphasize some aspects of university activities at the expense of others.

In this regard, studies mainly deplore two aspects. First, the neoliberal ideology of rankings is viewed as a threat to the traditional philosophy of education. For example, rankings are claimed to go against the democratic vision of higher education as they impose a normative view of what is a "good university" [22] [30]. Others consider that rankings neglect the public service mission of universities [13][27]. And as

rankings overlook the diversity and complexity of HEIs' missions^[13], they alter HEIs' identity^[26]. Yet others regret that rankings artificially create markets for universities and introduce market-like forces which contribute to establishment and maintenance of academic capitalism^[31]. The second major concern is that international rankings will suppress national specificities^{[5][9][22][28][32]}. Some consider that it is not possible to compare all national systems with the same tools as they differ considerably^[7]. Additionally, considering Anglo-Saxon countries as a model of excellence is wrong and somewhat harmful^{[22][32]}.

French Response to International Rankings

Many agree that the "disappointing image" of French universities, pushed the French government to undertake certain reforms to improve the country's overall positioning in international rankings [16][28]. In one of her press interviews in 2008, the Minister of Higher Education and Research, Valérie Pécresse, declared that the "bad grades" in international rankings reveal the urgency to reform the French university system (Echos, 2008). In another interview, she stated that the aim of her major reform was to "see ten French universities in the top hundred universities in the Shanghai ranking" (Le Figaro¹).

One reform is the law LRU (university autonomy law), which was introduced as an answer to the poor positioning of universities by helping them to "define their scientific priorities". (speech by Nicolas Sarkozy, 2009). Other reforms directly aimed at improving the position of "some" French universities in certain world rankings, such as the creation of the National Agency of Research (ANR), the creation of the Research and Higher Education Evaluation Agency (AERES), the introduction of Research and Higher Education centres (PRES), and increasing universities' organisational autonomy by way of the LRU law. The main idea behind all these reforms was to introduce economies of scale by grouping major research and education institutions to give them more international visibility. [16]

Like their counterparts, French academics have strongly criticized the ranking methodologies, questioning their capacity to objectively judge university performance [23][24]. One concern that nearly every study in France has raised is the fear that implementation of these public policies, in addition to the more direct impact of global rankings on French universities, could alter their traditional way of functioning [22][32]. Studies of different national contexts (Australia, UK) have demonstrated that changes at public policy level provoke changes in organisational and professional settings in academia [17][33].

Indeed, French studies have also put forward certain criticisable actions initiated by French universities and academics which could have been influenced by international rankings [30][32][34][35].

The literature on changes in higher education institutions due to the introduction of international rankings paves the way to an examination of whether similar changes have occurred in the French context. In a context of very little empirical research investigating the real impact of this phenomenon on French universities, we adopt the model of Parker and Jary^[33] to illustrate the results of a detailed case study on the effects of world rankings on three French universities. A study carried out by Jary and Parker in 1995 suggested a three-layer model to investigate changes in the field of higher education. The model was influenced by earlier work of Clark^[36] and Becher and Kogan^[37] and further developed by the authors in order to examine major changes in the UK's higher education system in the 1990s. The authors argued that changes in the political and institutional context (change at national or structural level) lead to forms of corporate work organisation (organisational level changes) that increase the power of management and decrease the autonomy and motivation of academics (changes at the level of individual or action)^[33].

Research Methodology and Data Analysis

The choice of a qualitative approach was determined by the exploratory nature of our research as well as the complexity of the study context. Our research question – *how the international rankings influence French universities* – involves understanding the experiences of universities as organisations and the experience of the faculty as a profession. A multiple case study was used to analyse the changes perceived by academics from different universities.

Three French universities served as case studies for our research. The choice of institutions was based on two criteria. First, we selected universities specialising in various disciplinary fields (i.e., science, social science, and a multidisciplinary university) to compare the impact of rankings on different disciplines. Second, we chose universities with different positions in the international rankings. To retain the interviewees' anonymity, we renamed the three universities as University A (UA), University B (UB) and University C (UC).

UA is one of the biggest science universities in France. It describes itself as the research university that embodies "French scientific excellence", and it is well positioned in international rankings (top 50). UB is a French multidisciplinary university that is famous for innovation and internalization. It has a relatively good position in nearly all the international rankings (50–100). UC is a very big French university, famous for human and social sciences and for its large campus. It either has a very poor position, or does not appear at all in international rankings.

The main source of the empirical data comes from semi-structured individual interviews with the faculty. As our unit of observation is limited to representatives from three universities, we maximized the variety of respondents: different experience, disciplinary field, and function at the university. Most respondents occupy senior management positions (president, vice president) and middle management positions (deans, head of administrative departments). Only four of the interviewees were academic staff with no administrative or hierarchical responsibilities². The seven heads of major administrative departments interviewed in the study do not hold academic degree but have management education and experience. All 25 semi-structured interviews were recorded and fully transcribed.

Position	UA	UB	UC	Total
University president	1	1	1	3
Vice president	1	2	1	4
Dean	3	4	1	8
Chief administrator	2	3	1	6
Academic	1	2	1	4
Total	8	12	5	25

Table 1. Interview respondents

In addition to the interviews, our empirical data includes 30 internal and external documents, namely,

the universities' annual reports, budgets, internal regulations, online publications, and university brochures. We also attended some meetings at the three universities where we took notes. We used these documents as a secondary data source that gave us insights into the context. Last, we analysed major legislative texts pertaining to higher education and enacted in France since the 2000s to help us identify links between public policies and international rankings.

The empirical data was analysed by thematic analysis. We translated the data into grounded theory by applying naturalistic inquiry processes^[39], including constant comparison and theoretical sampling^[40]. Our initial approach was a first-order analysis involving full coding of the interview transcription and documents. Reading of the first material enabled us to develop initial thematic codes which were completed during *in vivo* coding^[41] using the NVivo software. This first-order coding identified the following key topics related to ranking: *evaluation*, *pressure*, *publication*, *competition*, *public reforms*, *discipline specificities*, *communication*, *university missions*, *academic profession*, *university strategy and objectives*, and *Human resource management*.

These empirical concepts were grouped according to their significance [42]. Our themes were predominantly descriptive, i.e., they described patterns in the data relevant to the role of international rankings in university functioning. At this stage of the analysis, we identified the 'essence' of each theme and a causal relationship between them [42]. Five main dimensions emerged: Ranking as a reason of academic profession modification; Ranking as a university communication tool; Ranking as a strategy guideline for universities; Ranking as a public policy vector; and Ranking as a source of competition. Figure 1 illustrates these dimensions as well as the constituent themes and some examples from our empirical data which led to the formation of these themes.

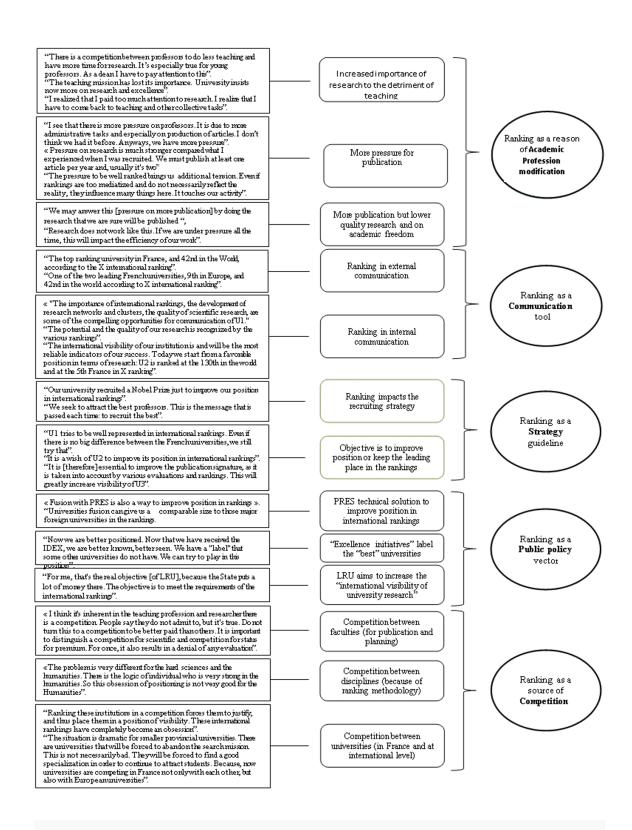


Figure 1. Main dimensions of the influence of ranking on the French university

Discussion of the Main Findings

To identify how international university rankings interfere with universities, we grouped the main findings of this research under three categories. At national level, various public policies have been influenced by international rankings with the aim to improve the position of France (French universities) in international rankings; At the organizational level a number of management decisions have been made to respect the rankings' requirements; At the individual level rankings have changed the way academics perceive and exercise their profession, namely because of the increased pressure for publication. Figure 2 summarizes these findings which are detailed in the following sections.

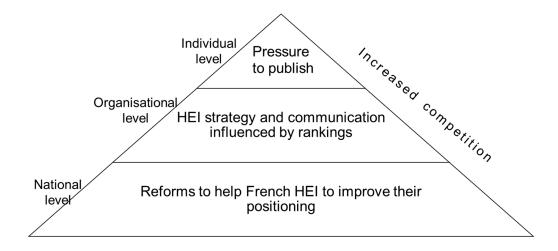


Figure 2. The influence of international rankings on the French higher education

Ranking as a Public Policy Vector

Consistent with the literature [4][7][17], the influence of rankings at national level in the French higher education system is observed in several pieces of legislation passed in France since the beginning of the 2000s designed to promote French higher education at international level. Two main goals emerged from our analysis of this legislation, 'influenced' by the international ranking methodologies, that are common to most of the reforms: "increase international visibility", "promote French research" and "make French university a world-class centre of research."

One of the most important reforms in this sense is a law on university autonomy, also called the law of Liberties and Responsibilities of Universities - *LRU*. This law mainly reorganizes university governance

by giving the institutions local management in terms of budget, human resources and real estate. One of the three directives of the law is to "make university research visible at international level" (mission letter from Valérie Pécresse to Nicolas Sarkozy, 5 July, 2007).

Another important policy is the *PRES* (Research and Higher Education Centres) reform which restructured the university map in France by grouping institutions into research and higher education centres. The PRES are federated structures that aim to achieve greater "readability and quality of research according to the highest international standards" through the cooperation of different HEIs. Cooperation often occurs through mergers (e.g., merging universities in Strasbourg and Aix-Marseille) that significantly increase the size of universities. Many respondents noted the influence of rankings on this reform. "We can say that one way to achieve the goal [of better positioning] for France is to merge several universities to reach a larger size so as to become a strong player in a region, as well as at national and international level" (UC1VP).

Ranking as a Strategy Guideline

The influence of international rankings at the organizational level of French universities is twofold: rankings are used as a communication tool and as a strategy guideline. For Hetzel^[35], even if ranking is not a strategy, it can be used as a tool to help improve universities' strategic positioning. The strategic documents analysed in this study demonstrate the influence of global ranking methodology on strategic decisions made at organisational level. For instance, one important strategic decision at UA was to merge with another "big" institution in order to "give the university new international visibility" and increase its international appeal (UA *Projet d'établissement 2009-2012: 29*). Size is a key variable in some international rankings, like the Shanghai ranking, which compares the number of students, student-teacher ratios, and other numerical criteria^[8]. A university contract from UB explains that "visibility is essential" for its attractiveness, which can be achieved "by more rigorous signature and citation of our publications" (Contrat d'établissement 2009-2012: 8). Even though UC does not feature in most of the world rankings, the university is also concerned by the visibility issue. A UC report on international rankings advises the institution's management team that, despite the inadequacy of the ranking methodology and UC scientific policies, "certain actions should be undertaken in order to improve the institution's visibility" (UC report on international rankings, p. 18).

Over 40% of the interviewees (none from UC) confirmed our observation from the document analysis that the main objective of UA and UB is to do better in international rankings. To our question "what do

you think is your university's strategy?", several replied that it is "to have a better position in the international rankings." The presidents of both UA and UB also gave similar messages. For the president of UA, the real objective is to be more effective in research and teaching and, "if ranking helps to show the performance, then it's good to be part of it." Likewise, for the vice president of UB, it is important to be "visible at international level and, as research is done within a network and bibliometrics are important in rankings, it's good to have a good position" (UB_5_VP).

Similarly, previous studies have shown that international rankings now play an important role in university strategies. This can be observed in annual reports and strategic plans [43][18] and in diverse actions undertaken aiming at improving HEIs' position in rankings [11]. For example, Elken et al., showed that while rankings were not commonly mentioned in Nordic universities' strategic plans, there were few exceptions, where universities clearly acknowledged that their goal was to figure among the top universities.

Ranking as a Communication Tool for 'Successful' Universities

Rankings and, more especially, a good position in international rankings, appear to influence universities' external and internal messages addressed to different stakeholders. UA, which is very well positioned in world rankings, always highlights this fact in internal and external communications. In internal communication, its ranking is used to remind faculty that "the quality of their research is acknowledged by international rankings" and that "UA can boast a very strong presence in the ranking of French higher education" (Projet d'établissement, 2009-2012). In external communication, UA notes its ranking position on the very first page of each communication, stating that UA is "the top-ranked university in France" (Program brochure). On fewer occasions UB also stresses that the "potential and the quality" of its research is recognized by the various rankings: "The international visibility of our institution is and will be the most reliable indicator of our success. Today we start from a favourable position in terms of research: UB is ranked as the 5th French institution" (Projet d'établissement, 2009-2012). As expected, given its poor positioning, we found not a single UC communication mentioning rankings.

Opposite results can be found in literature. For example, a study of Elken et al. [2] examining the place of rankings in the internal and external communication of Nordic universities, showed only very limited use of rankings on university websites (good position of certain universities only in the major rankings).

Effects of International Rankings on the Academic Profession

Analysis of twenty-five individual interviews shows that the rankings have interfered with the academic profession in several ways. First, the importance given to research in ranking methodologies has altered the balance between traditional teaching and research. French faculty pay considerable attention to this mission at the expense of teaching and other activities. Most of the respondents are conscious of the growing emphasis on journal ranking and focus more on what journal editors and reviewers are likely to accept for publication, rather than "what matters for the well-being of the profession and society" (UA_18_AC). The increased importance of research has put additional pressure on the faculty to publish more, especially in "Impact Factor" journals, which has also increased tension between colleagues. Our analysis also confirms the importance of research by the budget distribution of the studied universities. In the context of overall decrease in university budgets, the budget for research was either constant or increased.

This tendency is not specific to France. The study by Ter Bogt and Scapens^[3], for example, demonstrated that activities which are not included in the quantitative performance measurement system are largely neglected. Academics have adapted to the new system and concentrate on "satisfying" the underlying requirements. A recent study showed that universities act strategically in how they seek to both influence and respond to annual ranking releases, especially when it comes to their research activity. Changes are made to contribute to a significant rise in their ranking^[43]. White et al.^[44] point out that academics who achieve extremely high research output are those who, alongside personal interest in research activity, have more time to conduct research thanks to a reduced teaching workload and administrative support from their institutions. A study by Tagliaventi et al.^[27] showed similarly that some academics tend to adopt more research orientation compared to other missions.

Second, the emphasis on research to the detriment of teaching inevitably impacts teaching quality. "Nobody cares about what you teach now. There is no control. All they check is how many articles you publish a year"(UB_37AC). Our findings are in line with a study by Drucker–Godard et al. [34] that also demonstrated a "devaluation of teaching duties" due to the new evaluation practices observed in academia. Similarly, Ter Bogt and Scapens [3] found that academics focused mainly on research and only ensured that their teaching performance was at least satisfactory.

Third, there seems to be a danger that the quality of research would deteriorate due to the abovementioned changes. Some interviewees said that they prefer to undertake research which is certain to be published rather than research they are personally interested in or has a higher value for the field. This point also arose in a study by Ter Bogt and Scapens^[3] who observed that it was possible to manipulate measured research performance to falsely claim, for example, that papers were co-written in order to "take advantage of the weights attached to joint publications"^[3]. Recent research argued that significant part of academics, especially those why try to maintain all their missions, are not "achieving satisfying performance in any domain according to international standards"^[27].

Ranking as a Source of Increased Competition

Ranking and competition is a two-way relationship. While some respondents directly blamed competition in the French higher education system on rankings, especially the Shanghai ranking, others considered that existing competition made it "necessary" to have rankings to help students easily see differences between institutions (UB_5_VP). This view is in line with the findings of Ter Bogt and Scapens^[3], according to which "the importance of rankings has increased largely because of the competition between universities, both nationally and internationally, as well as the more general internationalization of the university sector"^[3].

Competition is also observed at different levels in our study: between academics, departments, universities and nations. A shift from local to global competition between universities $^{[25]}$ reinforced existing rivalry between the French HEIs for financial resources and for attracting students and leading researchers. Rankings intensified a vertical competition between HEIs. However, our study does not confirm the differentiation between university types as it is the case in most Anglo-Saxon literature which mention a vertical differentiation between research-intensive HEIs and others and among the different grades of research-intensive HEIs $^{[5]}$.

In addition to competition between universities for a better position in the international rankings, respondents also talk about competition "inside institutions across different disciplines" (UA_17_Dir). As noted above, previous studies have argued that the ranking system favours some disciplines more than others^{[3][15][35]}. Accordingly, one dean explained that "the problem is very different for natural and human sciences. There is a logic of individualism which is very strong in the humanities. So, this positioning obsession may not be very positive for them." (UB_22_Dir). A recent study of Marques and Powell^[19] showed that units within HEIs compete not only for material resources, but especially for symbolic resources, such as reputation and legitimacy. Our study also highlights a similar trend, where some research directors regret losing prestige because of not performing well according to international indicators.

Competition appears to be amplified between faculty as well. As some interviewees remarked, even if people do not admit it, competition has increased to be "better than others." However, it is worth mentioning that this competition concerns research and not teaching. "Some young professors try to do a minimum of teaching and a maximum of research. This is due to increased pressure to publish. It's very clearly stated in our objectives" (UA_16_Dir). This point was also noted in many previous studies mentioned in this paper. For example, a study on factors influencing extremely high or low research output from American business faculty members showed that research "stars" report being given more time to do research as they enjoy greater institutional support in the form of graduate assistants and summer research support. They also seem to have less course preparation [44]. Our findings are in line with the observation of Marginson and van der Wende [5] that intensified competition based on research performance will exacerbate demand for high-quality scientific labour.

Most of the interviewees regret the changes perceived because of the international university rankings. Most importantly, interviewees regret the rise of competition observed at various levels. "I feel that the purpose of rankings is to install competition at national level in France. This means ignoring the weaker universities and seeing if they can survive. Competition is presented as a form of natural selection (UC7PR). This point is particularly sensitive for the French academics as the hierarchisation goes against the traditional value of equality strongly embedded in the French education.

However, in contrast to the results of previous studies, around 35% of the interviewees did not criticize the impact of rankings, instead describing it in a neutral and positive way. Being part of a well-ranked university gives the UA faculty a feeling of pride. Some declared, that "it's still prestigious to belong to the first French university in international rankings" (UA13_Dir).

Being part of a prestigious organisation also helps in development of organisational identity and corporate belonging as opposed to disciplinary identity. Traditionally in France faculty identify themselves vis-à-vis their discipline rather than the institution in which they work^[20]. Several factors can explain this. First, the faculty is recruited centrally by the Ministry of Higher Education and Research and until 2008 (LRU law), human resource management was also centralised at Ministry level. Second, and probably most important, until 1968, French university was divided vertically at the level of different disciplines without much coordination between them^[45]. This separation between the faculties (disciplines) was reinforced by the creation of hierarchical and centralized streams that managed their academic staff. Each faculty had its own internal regulations. This traditional dual disciplinary division

"was the main reason that made it impossible to create a university organisation in France" even after the 1968 reform which on paper ended this structure by creating independent interdisciplinary entities [45].

Conclusion

Evaluation, quality assurance, accreditation, ranking... this vocabulary is relatively new in French higher education, even if assessing research, institutions and faculty are longstanding procedures. What is new is the introduction of more overall assessment of university activities and faculty performance and, more broadly, their establishment within higher education policies.

The academic literature is rich with criticism of rankings, according to which the latter give viable results for only 5% of the world's universities. Most French universities are left out of the equation. The reason for this can be traced to the ranking methodology that privileges large, scientific-based research universities, English-speaking countries, etc. [1][7][8][16][25]. French universities are either flattered or disconcerted, depending on their position in the rankings. In the attempt to upgrade their positioning, they are strongly tempted to improve their performance specifically in the areas measured by ranking indicators.

The findings of this research contribute to the ongoing discussion of the evolution of the higher education across the globe by exploring some intended and unintended effects of university rankings. The findings of an in-depth case study of three French universities show that at national level, rankings influence public policies which create a favourable environment for universities to improve their positions [4][17]. At organizational level, rankings influence university strategies and communication [11] [14][16][18][43]. Complementing previous research, we offer the additional insight that the degree of influence largely depends on a university's position in the rankings or its existing prestige. Universities that already have a well-established reputation nationally and/or those that are well-ranked will be less influenced by the rankings, while less "successful" universities will make more efforts.

Another contribution of this research builds on the literature on the evolution of academic profession. Our findings show that the international rankings installed the "publish or perish" mindset. As research is more valued in international rankings and local evaluations, Faculty tends to privilege research over other activities [12][20][27][34]. As a result, there is more pressure for academic output, negligence of teaching mission and overall increased competition [3][19][25]. However, the novel findings of this study enrich the existing literature as they demonstrate certain advantages of the rankings' influence. While it

is hard to find positive outcomes of rankings in Anglo-Saxon research (see namely $\frac{[46]}{}$), one interesting result we observed in our paper is the positive attitude of some faculty towards the changes experienced. Interviewed academics from the well ranked university acknowledge the benefits of being well represented in international rankings. The specificity of the French higher education system may explain this finding: on the one hand, a good position in the rankings gives universities an advantage in the context of competition with the *Grandes Écoles* and, on the other hand, it enhances the faculty's sense of corporate belonging with respect to their institutions in contrast to the traditional identification with their profession.

The authors acknowledge several limitations that should be considered when interpreting the findings of this pilot study. A qualitative research approach allowed us to detect the perceptions and experience of the French academics from public universities. However, the findings are unlikely to be generalised as the institutional context and national particularities can be influencing them. A quantitative study can assess the main variables identified in this research. Second, it is still too early to predict what the outcome of these changes will be. Our paper describes the present situation in the French higher education system. However, we may assume from the experience of some foreign countries that French universities will also strive more actively for a better position and thus, will accept the rules and norms of rankings [4][14]. This will alter even further the academic profession. This observation on diversification of academic profession echoes Whitchurch and Grodon [21] on the diversification of professional identities in higher education. A comparative study across different institutional and systemic contexts can overcome this limitation.

Future studies could assess the situation according to the five main dimensions identified in this study. It will be interesting to see which of the trends toward change identified will be confirmed over the longer term. Another possibility for future research is to test the five dimensions with a quantitative study.

Statements and Declarations

Funding

No specific funding was received for this work.

Conflicts of Interest

No potential competing interests to declare.

Ethics

This study was conducted in accordance with the Declaration of Helsinki. As per institutional and national guidelines at Paris Nanterre University, France at the time the research was conducted, formal ethics approval was not required for interview-based social science research deemed to be of minimal risk. All participants were fully informed of the study's objectives and methodology, and all provided voluntary oral informed consent to participate. Participant anonymity and the confidentiality of their responses have been maintained throughout the research process.

Author Contributions

All authors participated in the conception of the study and the development of the methodology, and wrote the original draft. All authors participated in the review and editing of the manuscript and approved its final version.

Footnotes

- ¹ "Pécresse veut dix universités dans l'élite Mondiale", 6 August 2008. Interview with Valérie Pécresse, Minister of Higher Education and Research.
- ² In the French higher education system, a university president, vice president and dean are necessarily academics.

References

- 1. <u>a</u>, <u>b</u>, <u>c</u>, <u>d</u>Luque-Martínez T, Faraoni N (2020). "Meta-Ranking to Position World Universities." Stud High Educ. **45**(4):819–833. doi:10.1080/03075079.2018.1564260.
- 2. a, b, c, d, e, felken M, Hovdhaugen E, Stensaker B (2016). "Global Rankings in the Nordic Region: Challenging the Identity of Research-Intensive Universities?" High Educ. 72(6):781–795. doi:10.1007/s10734-015-9975-6.
- 3. a, b, c, d, e, f, g, h, i, j, k, l, mTer Bogt HJ, Scapens RW (2012). "Performance Management in Universities: Effects of the Transition to More Quantitative Measurement Systems." Eur Account Rev. 21(3):451–497.
- 4. a. b. c. d. e. f. gHazelkorn E (2011). Rankings and the Reshaping of Higher Education. The Battle for World-Cla ss Excellence. New York: Palgrave Macmillan.
- 5. a, b, c, d, e, f, g, h, i-Marginson S, van der Wende M (2007). "To Rank or To Be Ranked: The Impact of Global Rankings in Higher Education." J Stud Int Educ. 11(3/4):306–329.

- 6. [△]Tandilashvili N, Balech S, Tabatadze M (2023). "The Role of Affective Ties in the Asymmetrical Relationshi p Between Student Satisfaction and Loyalty. Comparative Study of European Business Schools." J Mark Hig h Educ. [Online ahead of print]:1–25. doi:10.1080/08841241.2023.2204468.
- 7. a, b, c, dKosztyán ZT, Banász Z, Csányi VV, Telcs A (2019). "Rankings or Leagues or Rankings on Leagues? R anking in Fair Reference Groups." Tert Educ Manag. 25(4):289–310. doi:10.1007/s11233-019-09028-x.
- 8. a, b, c, d, e, f, g, h Tandilashvili N, Tabatadze M (2016). "International University Rankings: Review and Future Perspectives." World Sci. 12(2):67–72.
- 9. a, b, c, dMillot B (2015). "International Rankings: Universities vs. Higher Education Systems." Int J Educ Dev. **40**:156–165.
- 10. ^{a, b}Aquillo I, Ortega J, Fernandez M (2008). "Webometric Ranking of World Universities: Introduction, Meth odology, and Future Developments." Higher Educ Eur. **33**(2-3):233–244.
- 11. ^{a, b, c, d, e}Hendel DD, Stolz I (2008). "A Comparative Analysis of Higher Education Ranking Systems in Europ e." Tert Educ Manag. **14**(3):173–189.
- 12. ^{a, b, c, d}Bloch R, Hartl J, O'Connell C, O'Siochru C (2021). "English and German Academics' Perspectives on M etrics in Higher Education: Evaluating Dimensions of Fairness and Organisational Justice." High Educ. **83** (4):765–785. doi:10.1007/s10734-021-00703-w.
- 13. ^{a, b, c, d, e, f}Roessler I, Catacutan K (2020). "Diversification Around Europe Performance Measuring With R egard to Different Missions." Tert Educ Manag. **26**(3):265–279. doi:10.1007/s11233-020-09057-x.
- 14. ^{a, b, c, d, e, f, g, h, i}Collins FL, Park G-S (2016). "Ranking and the Multiplication of Reputation: Reflections From the Frontier of Globalizing Higher Education." High Educ. **72**(1):115–129. doi:10.1007/s10734-015-9941-3.
- 15. \underline{a} , \underline{b} , \underline{c} , \underline{d} Brooks R (2005). "Measuring University Quality." Rev High Educ. **29**(1):1–21.
- 16. a, b, c, d, e, f, g, h, iTandilashvili N (2022). "La Transformation de l'Université Française: La Perception des Uni versitaires" [The Transformation of the French University: The Perception of Academics]. Gestion Manag P ublic. 10(1):55–76. doi:10.3917/qmp.101.0055.
- 17. ^{a, b, c, d}Lim MA, Williams Øerberg J (2017). "Active Instruments: On the Use of University Rankings in Develo ping National Systems of Higher Education." Policy Rev High Educ. **1**(1):91–108.
- 18. ^{a, b, c}Marginson S, Sawir E (2006). "University Leaders' Strategies in the Global Environment: A Comparativ e Study of Universitas Indonesia and the Australian National University." High Educ. **52**(2):343–373. doi:<u>10.1</u> 007/s10734-004-5591-6.
- 19. ^{a, b, c}Marques M, Powell JJW (2020). "Ratings, Rankings, Research Evaluation: How Do Schools of Education

 Behave Strategically Within Stratified UK Higher Education?" High Educ. **79**(5):829–846. doi:10.1007/s10734

-019-00440-1.

- 20. ^{a, b, c}Tandilashvili N, Tandilashvili A (2022). "Academics' Perception of Identity (Re)Construction: A Value C onflict Created by Performance Orientation." J Manaq Gov. **26**(2):389–416. doi:10.1007/s10997-022-09627-8.
- 21. ^{a, b}Whitchurch C, Gordon G (2010). "Diversifying Academic and Professional Identities in Higher Education: Some Management Challenges." Tert Educ Manag. 16(2):129–144. doi:10.1080/13583881003757029.
- 22. ^{a, b, c, d, e, f}Eloire F (2010). "Le Classement de Shanghai. Histoire, Analyse et Critique" [The Shanghai Rankin g. History, Analysis and Critique]. L'Homme Soc. **178**(4):17–38.
- 23. ^{a, b}Lussault M (2010). "Palmarès et Classements: La Formation et la Recherche Sous Tension" [Rankings an d Classifications: Training and Research Under Tension]. Rev Int Educ Sèvres. **54**:29–38.
- 24. ^{a, b, c}Naszályi P (2010). "'Lorsque le Sage Montre la Lune, l'Imbécile Regarde le Doigt… Ou le Classement de Shanghai' Proverbe Chinois" ['When the Wise Man Points to the Moon, the Fool Looks at the Finger… Or the Shanghai Ranking' Chinese Proverb]. Rev Sci Gest. **3-4**:243–244.
- 25. ^{a, b, c, d, e}Marginson S (2007). "Global University Rankings: Implications in General and for Australia." J Hig h Educ Policy Manag. **29**(2):131–142. doi:<u>10.1080/13600800701351660</u>.
- 26. ^{a, b, c}Vinokur A (2008). "Vous Avez Dit 'Autonomie'?" [You Said 'Autonomy'?]. Mouvements. **55-56**(3):72–81.
- 27. ^{a, b, c, d, e, f, g}Tagliaventi MR, Carli G, Cutolo D (2020). "Excellent Researcher or Good Public Servant? The Int erplay Between Research and Academic Citizenship." High Educ. **79**(6):1057–1078. doi:10.1007/s10734-019-0 0456-7.
- 28. ^{a, b, c, d}Harfi M, Mathieu C (2006). "Classement de Shanghai et Image Internationale des Universités: Quels Enjeux Pour la France?" [Shanghai Ranking and International Image of Universities: What are the Stakes fo r France?]. Horiz Stratégiques. **2**(2):100–115.
- 29. [△]Van Raan AFJ, van Leeuwen TN, Visser MS (2010). "Germany and France Are Wronged in Citation-Based R ankings." Scientometrics. **88**(2):495–498.
- 30. ^{a, b, c}Tandilashvili N (2016). Le Managérialisme et l'Identité Universitaire; Le Cas de l'Université Française [Managerialism and University Identity; The Case of the French University]. Doctoral dissertation, Paris Na nterre University. <u>www.theses.fr</u>.
- 31. Cantwell B (2015). "Laboratory Management, Academic Production, and the Building Blocks of Academic Capitalism." High Educ. **70**(3):487–502. doi:10.1007/s10734-014-9851-9.
- 32. ^{a, b, c, d}Chapuisat X, Laurent C (2008). "Classements Internationaux des Établissements d'Enseignement Su périeur et de Recherche. Quelques Perspectives Pour Améliorer l'Image des Universités Françaises" [Interna

- tional Rankings of Higher Education and Research Institutions. Some Perspectives to Improve the Image of French Universities]. Horiz Stratégiques. 2(2):116–120.
- 33. ^{a, b, c}Parker M, Jary D (1995). "The McUniversity: Organization, Management and Academic Subjectivity." O rganization. 2(2):319–338. doi:10.1177/135050849522013.
- 34. ^{a, b, c}Drucker-Godard C, Fouque T, Gollety M, Le Flanchec A (2013). "Le Ressenti des Enseignants-Chercheur s: Un Conflit de Valeurs" [The Feelings of Teacher-Researchers: A Conflict of Values]. Gestion Manag Public. 1(4):4–22. doi:10.3917/qmp.004.0004.
- 35. ^{a. b.} ^cHetzel P (2010). "Oublier Shanghai: Classements Internationaux des Établissements d'Enseignement S upérieur" [Forget Shanghai: International Rankings of Higher Education Institutions]. Sénat. https://www.senat.fr/rap/r09-577/r09-57715.html#toc45.
- 36. [△]Clark BR (1983). The Higher Education System: Academic Organization in Cross-National Perspective. Berk eley, CA: University of California Press.
- 37. [△]Becher T, Kogan M (1992). Process and Structure in Higher Education. Routledge.
- 38. \triangle Yin RK (2009). Case Study Research: Design and Methods. 4th ed. Los Angeles: Sage.
- 39. [△]Lincoln YS, Guba EG (1985). Naturalistic Inquiry. Beverly Hills: Sage Publications.
- 40. △Glaser B, Strauss A (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago:

 Aldine.
- 41. △Strauss A, Corbin J (1998). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. 2nd ed. Thousand Oaks, CA: Sage.
- 42. ^{a, b}Braun V, Clarke V (2006). "Using Thematic Analysis in Psychology." Qual Res Psychol. **3**(2):77–101. doi:<u>10.</u> 1191/1478088706qp0630a.
- 43. ^{a, b, c, d}Dowsett L (2020). "Global University Rankings and Strategic Planning: A Case Study of Australian In stitutional Performance." J High Educ Policy Manag. **42**(4):478–494.
- 44. ^{a, b}White CS, James K, Burke LA, Allen RA (2012). "What Makes a "Research Star"? Factors Influencing the R esearch Productivity of Business Faculty." Int J Prod Perform Manag. **61**(6):584–602.
- 45. ^{a. b}Musselin Ch (2001). La Longue Marche des Universités Françaises [The Long March of French Universiti es]. Paris: Presses Universitaires de France.
- 46. [△]O'Connell C (2015). "An Examination of Global University Rankings as a New Mechanism Influencing Miss ion Differentiation: The UK Context." Tert Educ Manag. **21**(2):111–126. doi:10.1080/13583883.2015.1017832.

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