

ARTICLE

Diagnosis of Gender Parity in Universities: An Indicator-based Analysis¹

María Jesús Morales Caparrós

mjmorales@uma.es

Tenured University Lecturer, Department of Accountancy and Management, University of Malaga

María José Luna Jiménez

mjluna@uma.es

Tenured University Lecturer, Department of Accountancy and Management, University of Malaga

Ana Isabel Esteban Pagola

aiesteban@uma.es

Tenured University Lecturer, Department of Accountancy and Management, University of Malaga

Submitted in: November 2009

Accepted in: January 2010

Published in: July 2010

Abstract

The aim of this study is to assess, using a series of gender indicators, the impact that gender policies contained in Spanish university regulations and strategic plans have had on the current situation of female members of university teaching and research staff.

To that end, the evolution of the teaching and research staff (PDI) at a particular university over the last five years has been analysed. We shall take this university as a point of reference in order to extrapolate the results and conclusions to all other Spanish public universities.

The results show that there are still more men than women on the university's main representation and governing bodies, who are directly responsible for decision-making at the university. Likewise, it is found that such inequality manifests itself significantly when differentiating between elected positions and freely appointed positions, thus corroborating our hypothesis that gender parity as demanded by the current Spanish university regulations is more apparent than real.

This supports the idea of a need to establish equality policies and strategic equality plans at all Spanish public universities, aimed at rectifying the inequality that still exists.

Keywords

iequality, university, gender indicators

1. Research article by the SEJ 168 group of the Autonomous Government of Andalusia.

Diagnóstico de paridad en la universidad: análisis a través de indicadores

Resumen

El objetivo de este estudio es evaluar, a través de una serie de indicadores de género, la repercusión que las políticas de género, contenidas en la normativa universitaria y los planes estratégicos, han tenido en la situación actual de las mujeres pertenecientes al colectivo del personal docente e investigador de la universidad.

Para ello se analiza la evolución de la plantilla del personal docente e investigador (PDI), a lo largo de los últimos cinco años, en una universidad que se toma como referente, para posteriormente extrapolar los resultados y las conclusiones obtenidos al resto de universidades públicas.

Los resultados indican que aún hay una presencia mayoritaria de hombres en los principales órganos de gobierno y representación de la universidad, responsables directos de la toma de decisiones en la misma. Se observa, así mismo, que dicha desigualdad se manifiesta significativamente cuando se diferencia entre cargos electos y cargos de libre designación, lo que nos corrobora la hipótesis de que la paridad exigida por la actual normativa universitaria es más aparente que real.

Esto apoya la idea de la necesidad de establecer políticas de igualdad y planes estratégicos de igualdad en todas las universidades públicas españolas, dirigidos a corregir las desigualdades que aún se producen.

Palabras clave

igualdad, universidad, indicadores de género

1. Introduction

We need to situate women in the university setting as students in the second half of the 19th century, who almost anecdotally had to struggle and fight for the right to an education. Today, with the mass incorporation of women into university classrooms, the situation has undeniably changed. However, once they get their qualifications and join the labour market, differences continue to manifest themselves – to a lesser or greater extent – in various occupational areas.

Several studies (Touchon et al., 1993; Chamberlain, 1988; Sandler, 1986) show that even though there is no obvious gender inequality in terms of university admission or during university courses, the same cannot be said of university careers. In other words, the disadvantage becomes more obvious in the post-university period.

Regarding promotion, Jacobs (1996, pp. 13-185) shows that women have been at a disadvantage at every stage of a university career in every country across the globe, and that clear gender inequality has existed at the highest levels of university administration (Sagaria, 1988; Sturnick

et al., 1991). In the United States, for example, Graham (1978) suggests that the radical exclusion of women from Ivy League² institutions – a point of reference for higher education worldwide – actually damaged the position of women in universities in general.

The attainment of effective equality between men and women in our society is brought about by contemplating public policies that have a direct impact on gender inequality. For the purposes of policy development, it is essential to have necessary and sufficient information available to demonstrate the existence of such inequality. If inequality is not seen and not quantified, it is not perceived to be a problem and, therefore, the need to take action to remedy it cannot be appreciated.

Thus, for some years now, equality policies have had a transversal or gender mainstreaming focus (Lombardo, 2004). Consequently, they impact on the development of all policies and processes – at every level and at every stage – by the stakeholders usually involved in the adoption of remedial measures (this has been institutionalised in Europe since 1996³). Marked by Beijing, the development of gender mainstreaming strategy requires the incorporation

2. A group of eight of the oldest and most prestigious private universities in the north-east of the United States.

3. Communication from the Commission of 21 February 1996 “Incorporating equal opportunities for women and men into all Community policies and activities”, COM (96) 67 final - Not published in the Official Journal.

http://europa.eu/legislation_summaries/employment_and_social_policy/equality_between_men_and_women/c10921_en.htm

of the gender perspective at every stage and at every level of policy development in order to induce the generation of social changes to achieve greater equality between men and women (López et al., 2001, p. 17).

Information designed and produced from a gender perspective has shown itself to be a basic, essential instrument for revealing the reality of relationships that men and women establish. It also constitutes a criterion of analysis of the economic, political, cultural, social and historic reality that permeates all areas of daily life, allowing us to see and reveal the inequality of representation, presence and recognition between men and women in any of these areas (Guil Boza et al., 2005, p. 15).

Over the last decade, gender has been conceptualised as a social phenomenon in that it constitutes an institutionalised system of practices capable of dividing society into two large, distinctive categories that organises relationships in an unequal way on the basis of that difference (Ridgeway et al., 2004).

There are some studies on participation in management and decision-making in the university setting (Tomás et al., 2009; Johnsrud et al.; 1994; Denton et al., 1993), which subsequently progress towards gender relationships or budgetary analysis from this perspective (Arango, 2006; Martínez, 2007).

For some time now, there has been no obvious gender inequality as far as the workforce of Spanish universities is concerned. However, all studies referring to participation in management and decision-making in the university setting (Tomás et al., 2009; Johnsrud et al., 1994; Denton et al., 1993), and those based on budgetary analysis from this perspective (Arango, 2006; Martínez, 2007; Martínez, 2008) show that posts with greater responsibility and social prestige continue to be occupied mainly by men.

The term coined in the 1980s to describe this phenomenon was *glass ceiling*, which very clearly defines the subtle and invisible nature of the process. According to Guil Boza, its existence is discernible when looking at the figures and the complaints made by some women who aspire to go one step up on the promotion ladder yet, despite their suitability and the absence of any other rational explanation, do not manage to do so (Guil Boza et al., 2005, p. 16).

In universities, this glass ceiling is highlighted by the proportion – or disproportion – of women and men who reach chair level, as described in the report *Académicas en cifras 2007*, which shows that there is indeed an obstacle for women that cannot be explained on grounds of merit

or academic excellence, but rather by a gender bias still existing in the Spanish university system.

The aim of this study is to assess, using a series of gender indicators, the impact that gender policies contained in Spanish university regulations and strategic plans have had on the current situation of female members of university teaching and research staff. To that end, the evolution of teaching and research staff (PDI) at a particular university over the last five years has been analysed. We shall take this university as a point of reference in order to extrapolate the results and conclusions to all other Spanish public universities.

2. Methodology

In order to carry out our study, an analysis was done of the various parameters included in the human resources subsystem, in turn included in the management system called *ERP Universitas XXI-Económico*.⁴ The system incorporates different subsystems for information management, one of which is “UXXI_RRHH”. It is used to automate human resources management and therefore contains information about the evolution and current situation of the workforce.

Using a quantitative methodology, the most relevant PDI data for our study were extracted from the system. As a consequence of that study, significant attributes for categorising the information that we required were identified:

- Name: this allowed us to categorise the various parameters analysed in our study by the “gender” attribute.
- Grade: this allowed us to get information about the different types of PDI forming part of the workforce of Spanish public universities (full university professors, tenured university lecturers, full university school professors, tenured university school lecturers and contracted lecturers).
- Hours: this allowed us to categorise each of the grades studied in accordance with the number of hours worked (full time and part time).
- Post: this allowed us to get information about the post occupied by each member of the PDI. The fact that a member of the PDI holds an academic or management post also implies the occurrence of a

4. Applied in more than 100 universities in Spain and Latin America.

pay item associated with it, which is essential for the elaboration of budgetary indicators.

The time intervals were limited to the academic years shown below, and information referring to them was obtained. The interval limit was defined as the 30th September for every year except the last one, which was defined as the date when the information was actually obtained. The number of registers we used in our study was:

- 1,996 for the 2004–2005 academic year
- 2,093 for the 2005–2006 academic year
- 2,108 for the 2006–2007 academic year
- 2,226 for the 2007–2008 academic year
- 2,337 for the 2008–2009 academic year

Regarding other data, such as those relating to the composition of management bodies or budgets, these were obtained from the university’s website.

The fundamental instruments for doing the diagnostic analysis of the evolution of the PDI workforce over the last five years were gender indicators. The elaboration of indicators involves translating a complex reality into a common numeric language, validated and accepted by everyone, that provides an image that can be interpreted and understood anywhere, anytime. It should allow comparisons to be made in order to detect factors that, in each context, intervene in the definition of the phenomenon being analysed (Sabaté et al., 2007, p. 20).

As the basis for the definition of gender indicators, those proposed in the Draft Catalogue of Indicators for the Spanish public university system were taken. However, since a breakdown by gender is not contemplated in that document, it makes it impossible to get a clear view of the situation of women in universities. Consequently, we made two proposals: first, to perform a breakdown of the human resources indicators by gender (Table I); second, to extend that proposal to a series of additional indicators in order to get a more complete view of the reality (Table II).

Regarding the analysis of the representation and governing bodies, the study was limited to the last two mandates of the university’s governing team so that a comparative analysis could be done between them.

In order to achieve a sufficient degree of homogeneity, we considered it expedient to establish uniform criteria by defining common indicators for this section, aware of the fact that election dates for certain bodies do not coincide. Despite that, the aim was to highlight two orders of ideas that we wanted to signify:

- The participation of women in different decision-making bodies.
- The evolution of that participation, that is to say, if the situation of women at the university analysed has significantly changed.

To that end, we defined two indicators as shown in Table III, one referring to the participation of women and

Table 1. PDI indicators by gender. Own elaboration.

DENOMINATION		CALCULATION	MEANING
1.1.	Female full-time PDI	Numerator: Total female full-time PDI Denominator: Total PDI	Indicates the degree of female lecturers working solely for the university.
1.2.	Male full-time PDI	Numerator: Total male full-time PDI Denominator: Total PDI	Indicates the degree of male lecturers working solely for the university.
2.1.	Sole employment of female PDI	Numerator: Total female full-time PDI Denominator: Total female PDI	Indicates to what degree female lecturers work solely for the university.
2.2.	Sole employment of male PDI	Numerator: Total male full-time PDI Denominator: Total male PDI	Indicates to what degree male lecturers work solely for the university.
3.1.	Female civil service PDI	Numerator: Total female civil service PDI Denominator: Total PDI	Indicates the degree of stability of female lecturers over the total workforce.
3.2.	Male civil service PDI	Numerator: Total male civil service PDI Denominator: Total PDI	Indicates the degree of stability of male lecturers over the total workforce.
4.1.	Stability of female PDI	Numerator: Total female civil service PDI Denominator: Total female PDI	Shows the stability that women reach.
4.2.	Stability of male PDI	Numerator: Total male civil service PDI Denominator: Total male PDI	Shows the stability that men reach.

Table II. Proposal for expanding PDI indicators by gender. Own elaboration.

DENOMINATION		CALCULATION	MEANING
5.1.	Female civil service PDI by grade	Numerator: Total female PDI by grade (FUP, TUL, FUSP, TUSL) Denominator: Total civil service PDI	Indicates the professional grade of female teaching staff over the total civil service workforce.
5.2.	Male civil service PDI by grade	Numerator: Total male PDI by grade (FUP, TUL, FUSP, TUSL) Denominator: Total civil service PDI	Indicates the professional grade of male teaching staff over the total civil service workforce.
6.1.	Distribution of female civil service PDI by grade	Numerator: Total female PDI by grade (FUP, TUL, FUSP, TUSL) Denominator: Total female civil service PDI	Indicates the workforce composition of female civil servants.
6.2.	Distribution of male civil service PDI by grade	Numerator: Total male PDI by grade (FUP, TUL, FUSP, TUSL) Denominator: Total male civil service PDI	Indicates the workforce composition of male civil servants.
7.1.	Female contracted PDI by contract type	Numerator: Total female contracted PDI by contract type (temporary part-time lecturer, temporary lecturer, trainee lecturer, contracted doctor lecturer, emeritus professor, tenure-track lecturer, supply lecturer, researcher, others) Denominator: Total contracted PDI	Indicates the type of contract of the female teaching staff over the total contracted workforce.
7.2.	Male contracted PDI by contract type	Numerator: Total male contracted PDI by contract type (temporary part-time lecturer, temporary lecturer, trainee lecturer, contracted doctor lecturer, emeritus professor, tenure-track lecturer, supply lecturer, researcher, others) Denominator: Total contracted PDI	Indicates the type of contract of the male teaching staff over the total contracted workforce.
8.1.	Distribution of female contracted PDI by contract type	Numerator: Total female contracted PDI by contract type (temporary part-time lecturer, trainee lecturer, contracted doctor lecturer, emeritus professor, tenure-track lecturer, supply lecturer, researcher, others) Denominator: Total female contracted PDI	Indicates the workforce composition of female contracted PDI.
8.2.	Distribution of male contracted PDI by contract type	Numerator: Total male contracted PDI by contract type (temporary part-time lecturer, trainee lecturer, contracted doctor lecturer, emeritus professor, tenure-track lecturer, supply lecturer, researcher, others) Denominator: Total male contracted PDI	Indicates the workforce composition of male contracted PDI.

one referring to the participation of men, with the idea of establishing whether there are any differences between the genders.

To complete the study, and as part of the qualitative methodology used, we also used the technique of gathering information through interviews with key informants, such as vice-rectors, deputy general managers for human resources, university teaching staff directors, quality unit directors, etc. In-depth interviews are, as stated by Mercadé (1986, p. 299), an optimum resource for obtaining

the desired information. Holding these interviews provided us with relevant information about the situation of women in universities, such as shortcomings, the needs of women forming part of the workforce, the perception of direct and indirect discrimination, equality gaps in universities, etc.

Finally, an interpretative approach was taken to the question studied through an analysis of various documents that ought to serve as a guide, thus establishing the guidelines to enable us to define the various critical indicators

Table III. Indicators of participation in governing bodies. Own elaboration.

DENOMINATION	CALCULATION	MEANING
Relative proportion of women in university officer posts	Numerator: Total female members of various governing bodies Denominator: Total team members	Indicates the percentage participation of women in various management teams – rector’s office, deans’ offices, faculty and department directors’ offices, etc. – of the university.
Relative proportion of men in university officer posts	Numerator: Total male members of various governing bodies Denominator: Total team members	Indicates the percentage participation of men in various management teams – rector’s office, deans’ offices, faculty and department directors’ offices, etc. – of the university.

– both qualitative and quantitative – to be considered in our research project.⁵

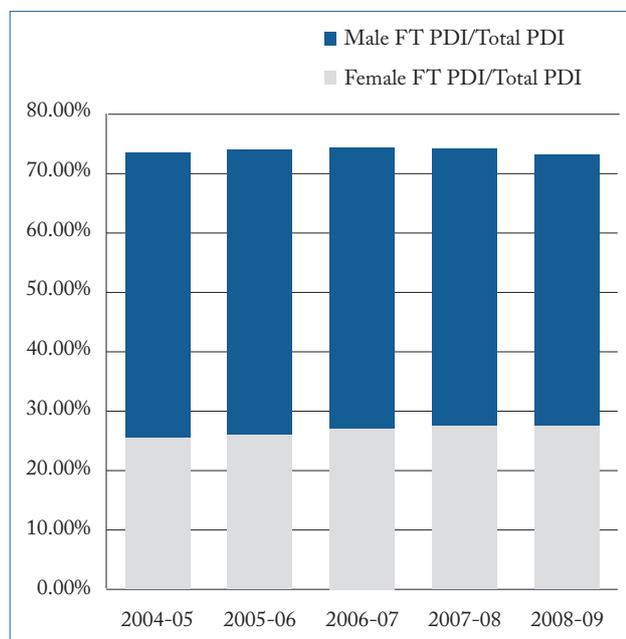
3. Results

3.1. Distribution of Teaching and Research Staff by Grade and Gender

The results of the analysis of the situation of teaching and research staff done using the indicators elaborated for the academic years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09 are shown as graphs.

Regarding the degree of sole employment of the workforce measured using indicators 1.1. Female full-time PDI and 1.2. Male full-time PDI, Graph 1 shows that most of the workforce works solely for this institution, something that is constant over the years. The relative proportion of men is significantly higher than the relative proportion of women. We assume that this is not due to the fact that a higher percentage of male lecturers works solely for the institution, but that there is a higher proportion of men than women on the PDI workforce.

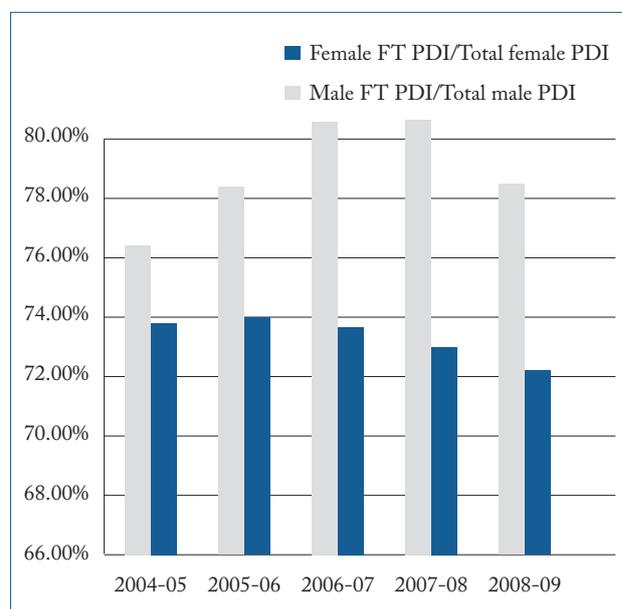
Graph 1. Indicators 1.1 and 1.2. Own elaboration.



To confirm that hypothesis, we then analysed indicators 2.1. Sole employment of female PDI and 2.2. Sole employment of male PDI.

Graph 2 shows that the percentage of women working solely for the university is higher than the percentage of men. Consequently, if we compare these indicators to the previous ones, we find that the higher number of men working full time is due only to the fact that, on the university's workforce, the percentage of men is higher than the percentage of women, thus confirming our hypothesis.

Graph 2. Indicators 2.1 and 2.2. Own elaboration.

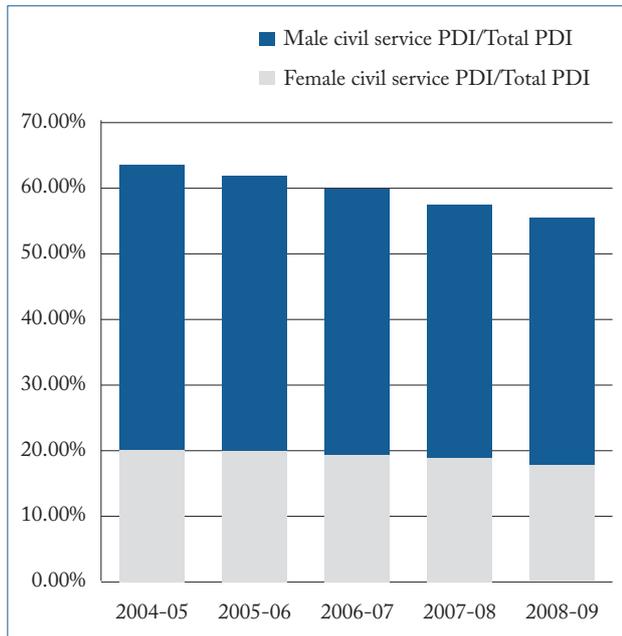


After analysing the majority composition of the workforce, it is then necessary to establish the degree of stability of the university teaching staff by gender, using indicators 3.1. Female civil service PDI and 3.2. Male civil service PDI, which, in turn, allows the university's stability policy to be checked.

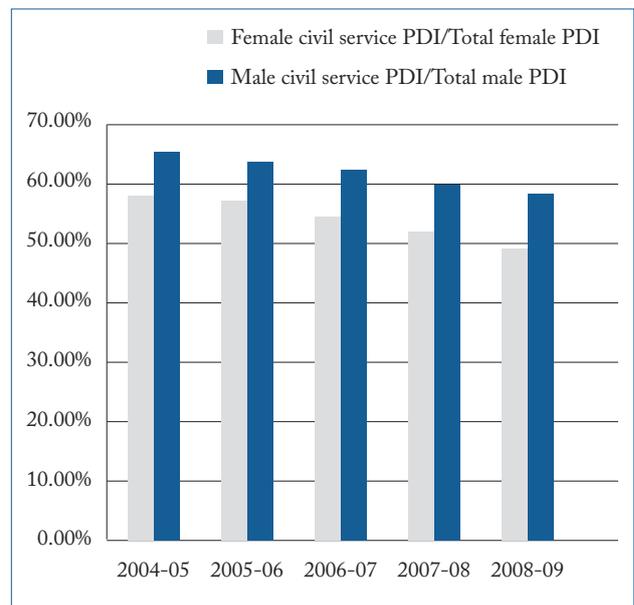
Graph 3 shows that, in the most recent academic years, the proportion of civil service staff has fallen in relation to other kinds of contractual positions that also foster a situation of stability. However, even though in general terms it may appear that there has been less of a fall in the proportion of women, this is not exactly true.

5. An analysis was done of the funding model that Andalusian universities and the Autonomous Government of Andalusia signed up to for the 2007-2011 period, the programme contract that the Andalusian Ministry of Innovation, Science and Enterprise and the various universities signed up to for 2008.

Graph 3. Indicators 3.1 and 3.2. Own elaboration.



Graph 4. Indicators 4.1 and 4.2. Own elaboration.



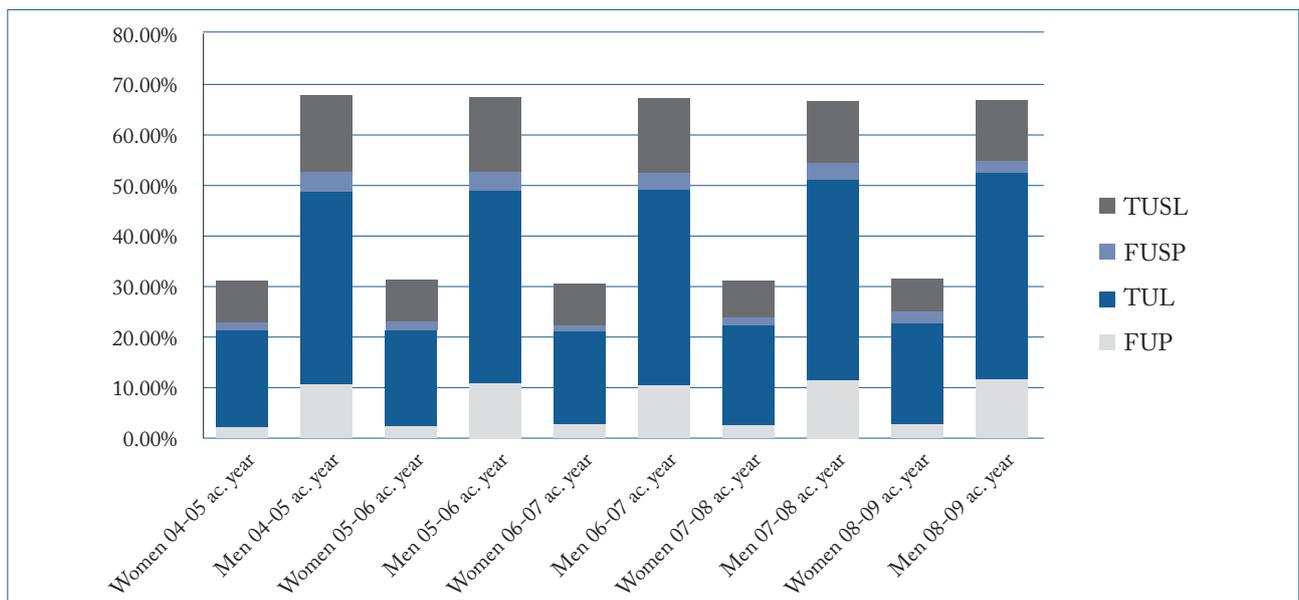
If we establish the relationship for each gender rather than for civil servants as a whole, indicators 4.1. Stability of female PDI and 4.2. Stability of male PDI show that there is a downward trend for both genders, though the downward trend for women is more pronounced (Graph 4). This would lead us to wonder what the reason for this might be. Perhaps it is due to the greater difficulty of achieving stability in the new university teaching staff

positions established by the LOU (Spanish University Regulation Act).

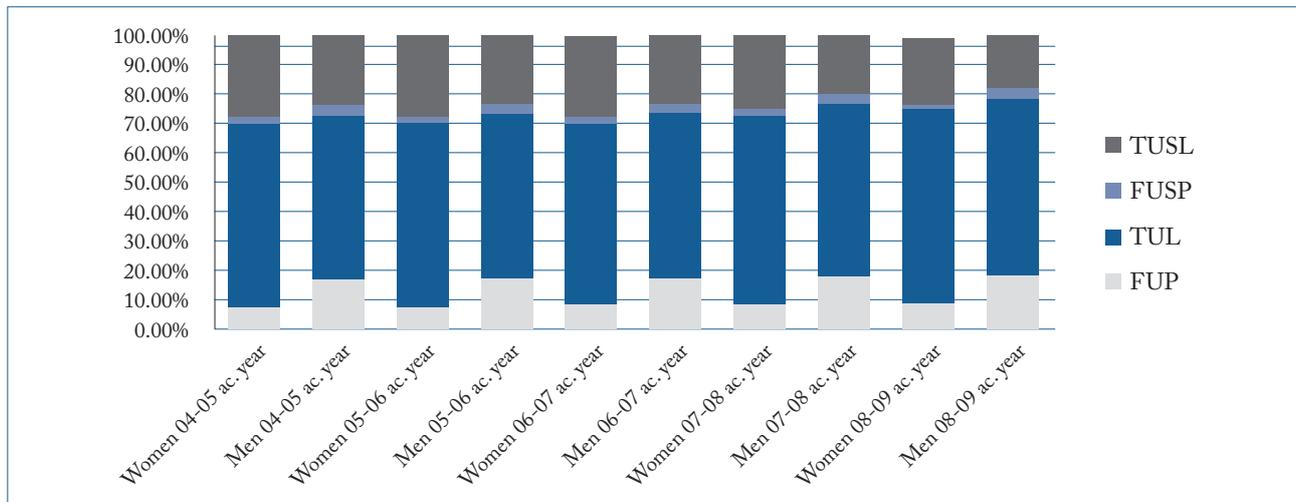
After reviewing the civil service PDI dimension, it is considered expedient to distinguish between the different job grades by gender, using indicators 5.1. Female civil service PDI by grade and 5.2. Male civil service PDI by grade.

Graph 5 shows that, in all professional grades, the relative proportion of men is higher than the relative propor-

Graph 5. Indicators 5.1 and 5.2. Own elaboration.



Graph 6. Indicators 6.1 and 6.2. Own elaboration.



tion of women, though these differences are perhaps more pronounced at the higher level, that is to say, the full university professor grade.

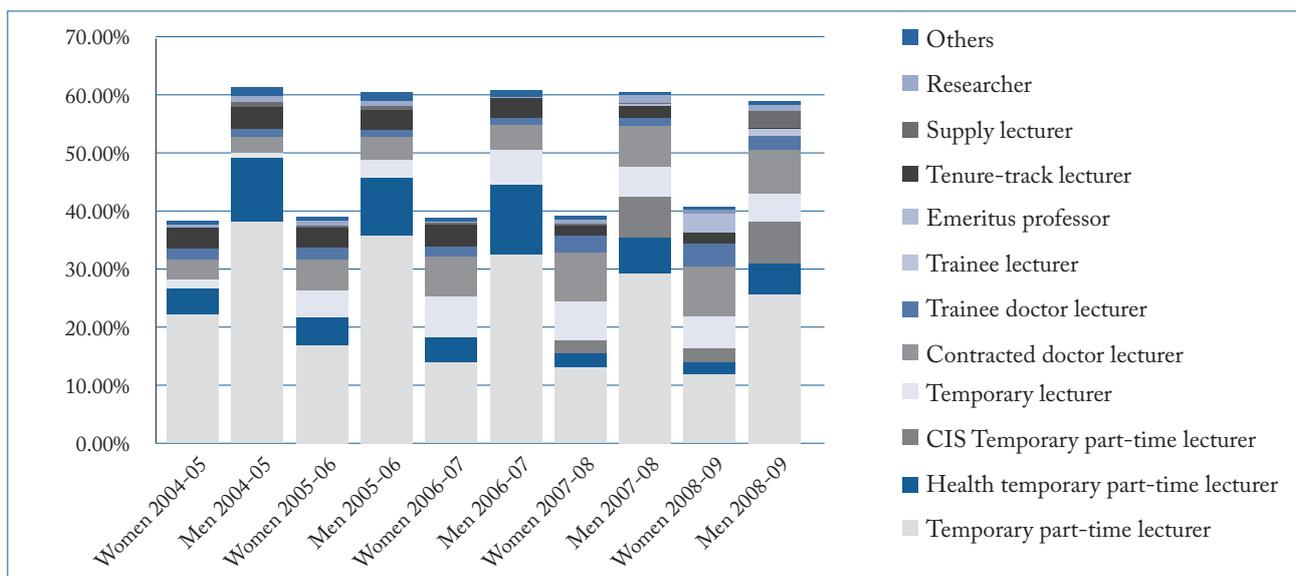
As in previous cases, in order to get a clear view by gender and so as not to dilute the percentages over totals, indicators 6.1. Distribution of female civil service PDI by grade and 6.2. Distribution of male civil service PDI by grade show the workforce composition of male and female civil servants.

Graph 6 shows that the bulk of the female civil service workforce includes the following grades: tenured university lecturers and tenured university school lecturers. The most significant feature is, undeniably, the big difference between full university professors and full university school

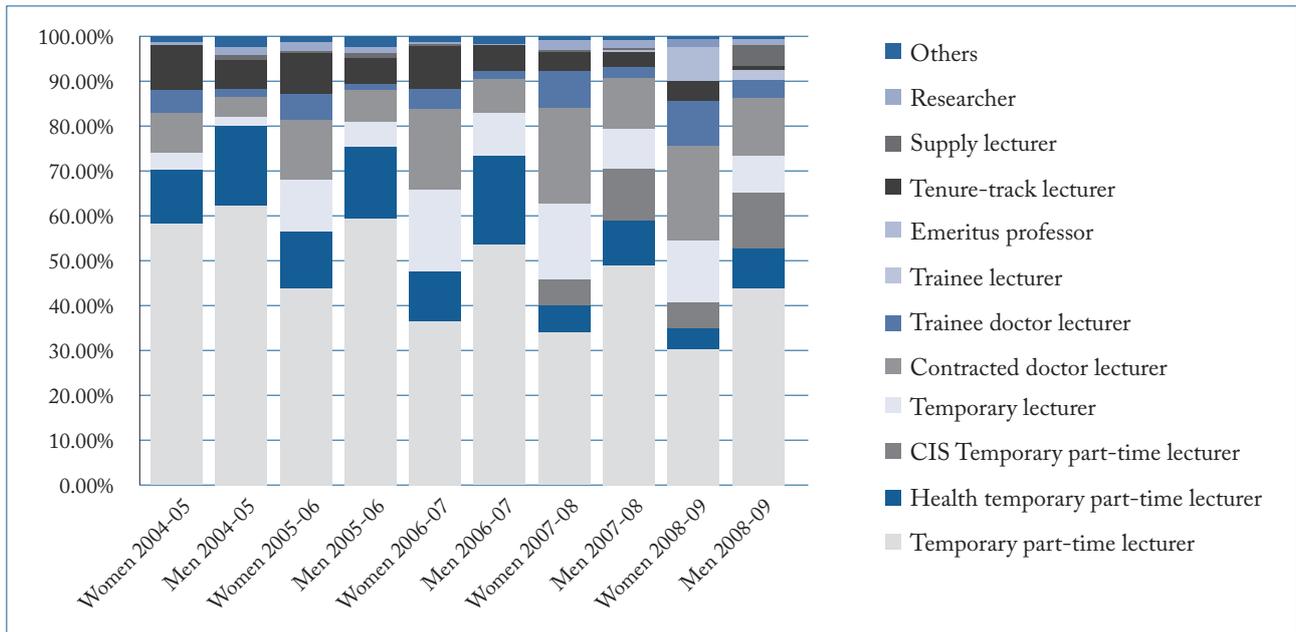
professors, despite the fact that the latter have the same grade as tenured university lecturers.

There is a tendency to attribute the difference in the number of female and male professors to the historic process. According to *Académicas en cifras 2007*, there are few female professors because the incorporation of women into universities is recent. But this does not seem to be the case because, since the 1960s, women have accounted for more than 30% of graduates. For example, in 1968, the percentage of female graduates was 33.8%. It is a significant number that should have generated a considerably higher percentage of professors than the current one (*Académicas en cifras 2007*, p. 20).

Graph 7. Indicators 7.1 and 7.2. Own elaboration.



Graph 8. Indicators 8.1 and 8.2. Own elaboration.



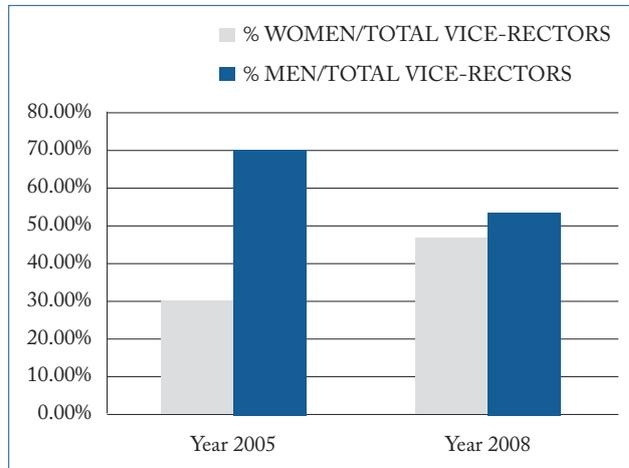
To finish with the composition of the PDI workforce, we present, using indicators 7.1. Female contracted PDI by contract type and 7.2. Male contracted PDI by contract type, the distribution of contracted staff. Graph 7 shows that the temporary part-time lecturer position was the most common one over the years, though it is tending to fall. We understand that this is due to new university legislation, with the consequent change to contractual positions. This is also shown by the rise in temporary lecturer and contracted doctor lecturer positions.

Regarding the composition of the contracted men and women workforces (indicators 8.1. Distribution of female contracted PDI by contract type and 8.2. Distribution of male contracted PDI by contract type), the percentage of men in temporary part-time lecturer positions was found to be higher, whereas the trend was the opposite for emerging contracts, such as temporary lecturer and contracted doctor lecturer positions (Graph 8).

3.2. The University’s Representation and Governing Bodies

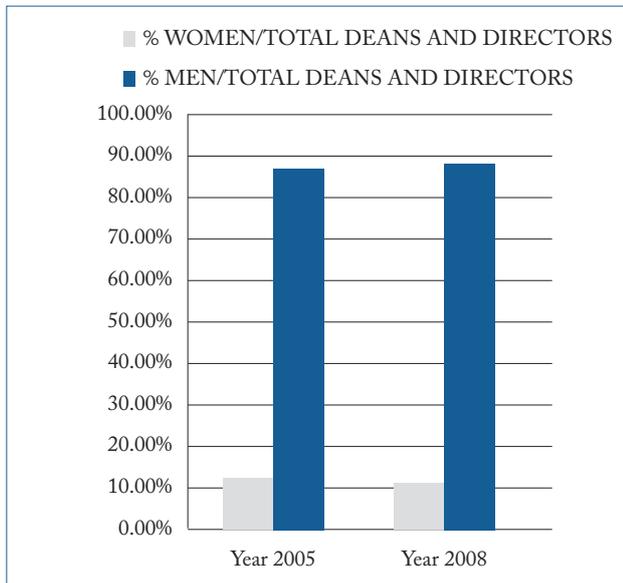
The results for freely appointed positions (Graph 9) show a considerable increase in the percentage of women forming part of the university’s decision-making bodies, with a clear intention of moving towards the principle of parity as set out in Spanish legislation.

Graph 9. Percentage of female/male vice-rectors. Own elaboration.



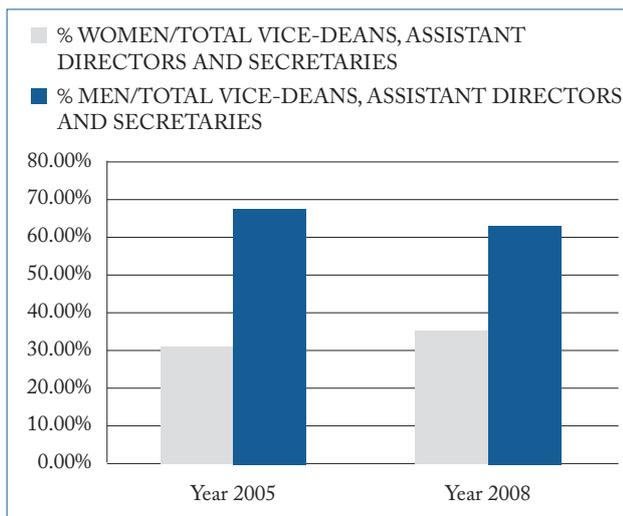
However, in the rest of the decision-making and governing bodies, the imbalance is considerable, as shown in Graph 10. Regarding the faculty university officers, faculty deans and faculty directors, bearing in mind that they are university officer posts to which people are elected and not appointed, we think that this imbalance may be partly due to the fact that women still do not put themselves forward as candidates for these posts in the respective elections. Consequently, it would be expedient to analyse the reasons behind the lack of motivation for doing so and, to that end, we propose that a survey should be done in subsequent projects to detect the potential reasons.

Graph 10. Percentage of female/male deans and directors. Own elaboration.



Regarding the rest of the faculty university officer posts, their composition and evolution is shown in Graph 11. Despite being posts to which people are appointed that should comply with parity criteria, we find that although there has been a slight increase, there is still obvious inequality, which is very pronounced in certain faculties.

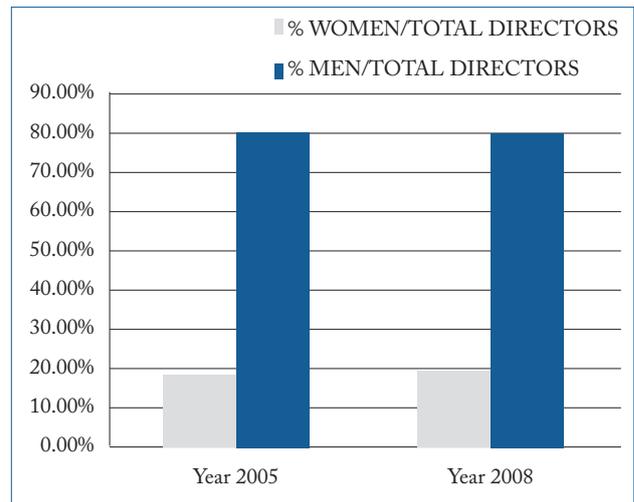
Graph 11. Percentage of female/male vice-deans and assistant directors. Own elaboration.



Graph 12 shows the distribution by gender of these posts, and once again a considerable imbalance is found and, as in the case of faculty university officer posts, we

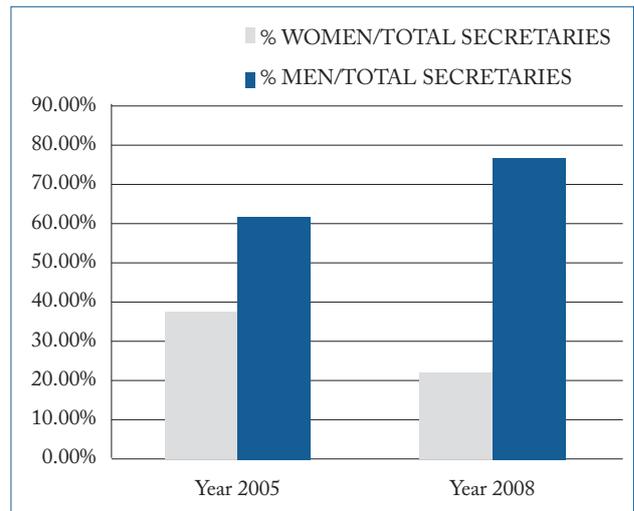
propose that research should be done into the potential reasons for this by carrying out an ad hoc survey to help us reflect on why it is that women do not put themselves forward as candidates.

Graph 12. Percentage of female/male directors. Own elaboration.



Regarding department secretaries, Graph 13 shows a change in the opposite direction. In previous years, the participation of women was greater, but now the proportion is lower.

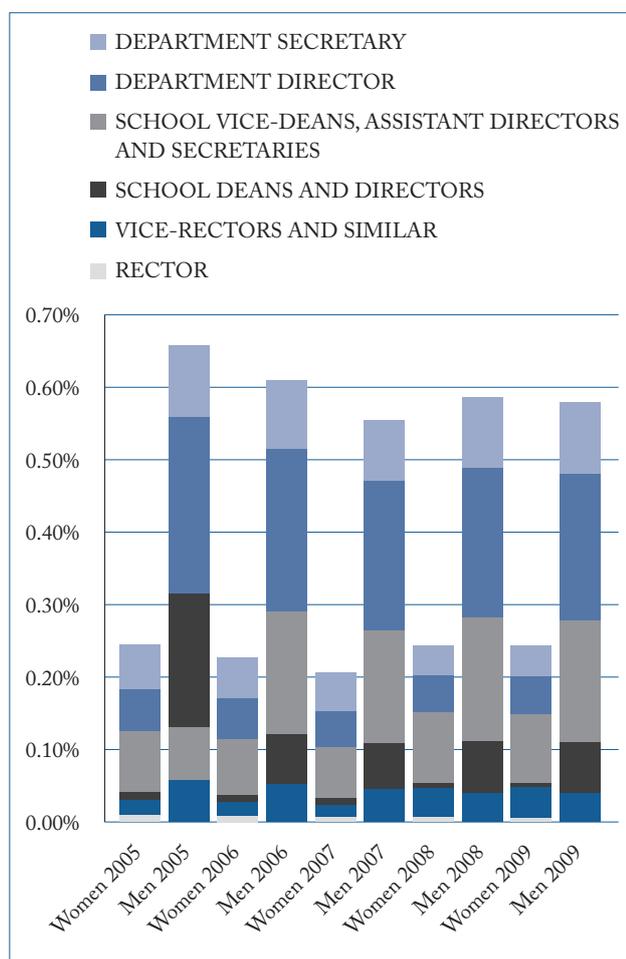
Graph 13. Percentage of female/male department secretaries. Own elaboration.



Holding an academic or management post implies the payment of an additional pay item associated with it. In order to complete the comparative analysis and to

underscore the financial impacts of the differences that we have just seen, the budget of the university studied is broken down by the specific weight of additional payments by post. The results are given in Graph 14, which show that although there are salary differences by gender, the percentage of pay earned by men holding the various posts is still higher. However, there appears to be a slight tendency, possibly due to the parity policies promoted by the rector's office, towards a narrowing of the global gender gap.

Graph 14. Breakdown by additional payments by post. Own elaboration.



In order to simplify the visualisation of the analysis, grouping was done by the additional payment amount by post, calculating the percentage represented by the total amount of the additional payment by post for women and men over item I (staff costs) of the university's budgets over the period studied.

4. Discussion and Conclusions

The workforce of the university studied is formed mostly of men, something that is in keeping with the studies carried out in the area of public universities in Spain (*Académicas en cifras, 2007; Datos y cifras del sistema universitario español en el curso 2008-2009*) and other countries (Jacob, 1996; Ridgeway, 1997; Ranson, 1990). There are several reasons that account for a greater presence of men at the university: the concentration of men in certain areas of knowledge characterised by a high degree of research (experimental and technological sciences) or, as has also happened in other countries, the academic incorporation of a large number of women at a time when there was a considerable decrease in registration (Slaughter, 1993).

But this shortage of women is not only quantitative but also qualitative, and the academic evolution of women and men is outlined by the so-called *scissor diagram*: at the start of an academic and research career, there are more women than men and, as they gradually move up through academic and research grades, there are more men and considerably fewer women.

Most members of the PDI at the university are civil servants, although there has been a slight decrease in recent years in relation to contractual positions that also lead to workforce stability. The difference between the number of female lecturers working solely for the university in comparison to men doing the same thing is worth underscoring.

An initial conclusion from the analysis could be that when women work at the university, they work completely and solely for it, whereas there is a higher percentage of men doing other work too.

On the civil service workforce, tenured university lecturers are in the majority, followed by tenured university school lecturers. The most significant feature was the big difference between professors. In the last year of the study, women accounted for only 20% of the total. Consequently, inequality clearly persists despite regulatory efforts to increase numbers.

Non-civil service teaching staff members, specifically contracted lecturers, are mostly men, particularly in the temporary part-time lecturer contractual position. An initial conclusion could be that temporary part-time lecturer positions, set aside for professionals of renowned prestige, are taken up by men for whom working at the university brings the personal prestige that being a university lecturer entails while complementing their professional status and their salaries.

The results show that there are still more men than women on the representation and governing bodies, who are directly responsible for decision-making at the university.

Regarding freely appointed positions, there is a clear tendency towards parity, which is much more obvious for university officers appointed directly by the rector, which must legally comply with parity.

However, in the faculty decision-making bodies – deans' offices and faculty and department directors' offices – an overwhelming difference is found in the percentage of men working as deans and faculty and department directors, all of which are elected posts. This corroborates our hypothesis that gender parity as demanded by current Spanish university regulations is more apparent than real and therefore needs to be the object of reflection and the basis for future actions to foster equality between men and women.

In that sense, we believe it expedient to analyse the reasons behind this fact. Hence it is our intention to complete the study using the qualitative methodology technique of gathering information through surveys, which will allow us to clarify why it is that women do not put themselves forward as candidates and to give appropriate answers to important questions.

Consequently, it is necessary to develop time and space comparative analysis instruments on the allocation of resources in the university system that allow the impact of gender policies being implemented at the university and gender equality obstacles to be identified, and inequality to be seen where it occurs.

Analysis using budgetary indicators constitutes a key tool for determining the gender impact on budgets in order to develop strategies that encourage and make it possible for women to access the higher levels of teaching activity and the nucleus of practice and of scientific and technological innovation in the university setting, all of which are based on the consideration that equality policies implemented by the university must form part of that budget.

Bibliography

- ARANGO GAVIRIA, L. G. (2006). *Jóvenes en la Universidad. Género, clase e identidad profesional*. Bogotá: Siglo del Hombre Editores.
- CHAMBERLAIN, M. K. (1988). *Women in Academe: Progress and Prospects*. Nueva York: Russell Sage Foundation.
- Communication from the Commission of 21 February 1996 "Incorporating equal opportunities for women and men into all Community policies and activities" (COM (96) 67 final - Not published in the Official Journal).
- <http://europa.eu/legislation_summaries/employment_and_social_policy/equality_between_men_and_women/c10921_en.htm>
- Agreement of 10 July 2007 of the Governing Council, approving the Funding Model for Andalusian Public Universities (2007-2011). Official Gazette of the Autonomous Government of Andalusia (25 July 2007, No 146).
- DENTON, M.; ZEYINOGLU, I. U. (1993). "Perceived Participation in Decision-Making in a University Setting: The Impact of Gender". *Industrial and Labor Relations Review*. Vol. 46, No 2, pages 320-331.
- GRAHAM, P. A. (1978). "Expansion and Exclusion: a History of Women in America Higher Education". *Signs*. Vol. 3, No 4, pages 759-773.
- GUIL BOZAL, A.; SOLANO PARÉS, A.; ÁLVAREZ GIRÓN, M. (2005). *La situación de las mujeres en las universidades públicas andaluzas*. Sevilla: Consejo Económico y Social de Andalucía.
- JACOBS, J. A. (1996). "Gender Inequalities and Higher Education". *Annual Review of Sociology*. Vol. 22, pages 153-185.
- JOHNSRUD, L. K.; HECK, R. H. (1994). "Administrative Promotion within a University: The Cumulative Impact of Gender". *Journal of Higher Education*. Vol. 65, No 1, pages 23-44.
- LOMBARDO, E. (2004). *La europeización de la política española de igualdad de género*. Barcelona: Editorial Tirant Lo Blanch.
- LÓPEZ, I.; SIERRA, B. (2001). *Integrando el análisis de género en el desarrollo. Manual para técnicos de cooperación*. Madrid: IUDC. UCM.
- MARTÍNEZ AGUAYO, C. (2007). "Aplicación del enfoque de género en los presupuestos públicos de Andalucía". *Nuevas Políticas Públicas: Anuario multidisciplinar para la modernización de las Administraciones Públicas*. Vol. 3, pages 19-36.
- MARTÍNEZ USERO, J. A. (2008). "La Ley 4/2007 de universidades y la integración de los estudiantes con diversidad funcional en la sociedad del conocimiento". *Revista de Universidad y Sociedad del Conocimiento (RUSC)*. Vol. 5, No 1, pages 1-8. UOC.
- MERCADÉ, F. (1986, July-September). "Metodología cualitativa e historias de vida". *Revista internacional de sociología*. Pages 295-319.
- MINISTERIO DE CIENCIA E INNOVACIÓN (2008). *Datos y cifras del sistema universitario español - curso 2008-2009*. Secretaria General Técnica MEPSYD.
- MINISTERIO DE EDUCACIÓN Y CIENCIA (2007). *Académicas en cifras 2007*.

- RANSON, M. R. (1990). "Sex Segregation by Field in Higher Education". *Journal of Higher Education*. Vol. 31, No 5, pages 447-494.
- RIDGEWAY, C. L. (1997). "Interaction and the Conservation of Gender Inequality: Considering Employment". *American Sociological Review*. Vol. 62, pages 218-235.
- RIDGEWAY, C. L.; CORRELL, S. J. (2004). "Unpacking the Gender System: A Theoretical Perspective on Gender Beliefs and Social Relations". *Gender and Society*. Vol. 18, No 4, pages 510-531.
- SABATÉ MARTÍNEZ, A. et al. (2007). *Hacia un sistema de indicadores de género en España: Un análisis territorial*. Madrid: Instituto de la Mujer.
- SAGARIA, M. A. (1988). "Administrative Mobility and Gender: Patterns and Processes in Higher Education". *Journal of Higher Education*. Vol. 59, pages 305-306.
- SANDLER, B. R. (1986). *Campus Climate Revisited: Chilly for Women Faculty, Administrators, and Graduate Students*. Washington, DC: Association of American Colleges.
- SLAUGHTER, S. (1993). "Retrenchment in the 1980s: The Politics of Prestige and Gender". *Journal of Higher Education*. Vol. 64, No 3, pages 250-282.
- STURNIC, J.; MILLEY, J. E.; TISINGER, C. A. (1991). *Women at the Helm: Pathfinding Presidents at State Colleges and Universities*. Washington, DC: AASCU Press.
- TOMÁS, M.; DURÁN, M. M. (2009). El género y la participación en algunos órganos de gobierno en la universidad. *Revista Complutense de Educación*. Vol. 20, No 1, pages 151-163.
- TOUCHON, J. G.; SHAVLIK, D.; DAVIS, L. (eds.) (1993). *Women in Presidencies*. Washington, DC: American Council Education.

Recommended citation

MORALES, María Jesús; ESTEBAN, Ana Isabel; LUNA, María José (2010). «Diagnosis of Gender Parity in Universities: An Indicator-based Analysis» [online article]. *Revista de Universidad y Sociedad del conocimiento (RUSC)*. Vol. 7, No 2. UOC. [Accessed: dd/mm/yy].
<<http://rusc.uoc.edu/ojs/index.php/rusc/article/view/v7n2-morales-luna-esteban/v7n2-morales-luna-esteban-eng>>
ISSN 1698-580X



The texts published in this journal are – unless indicated otherwise – covered by the Creative Commons Spain Attribution 3.0 licence. You may copy, distribute, transmit and adapt the work, provided you attribute it (authorship, journal name, publisher) in the manner specified by the author(s) or licensor(s). The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/3.0/es/deed.en>.

About the Authors

María Jesús Morales Caparrós

mjmorales@uma.es

Tenured University Lecturer, Department of Accountancy
and Management, University of Malaga

María José Luna Jiménez

mjluna@uma.es

Tenured University Lecturer, Department of Accountancy
and Management, University of Malaga

Ana Isabel Esteban Pagola

aiesteban@uma.es

Tenured University Lecturer, Department of Accountancy
and Management, University of Malaga

Universidad de Málaga

Avda. Cervantes, 2

29071 Málaga (Spain)