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# Dual career couples in academia, international mobility and dual career services in Europe 


#### Abstract

The number of dual career couples in academia is growing due to the increasing proportion of women with a doctoral degree and the greater propensity of women to choose another academic as their partner. At the same time, international mobility is required for career advancement in academia creating challenges for dual career couples where both partners pursue careers. This paper has two objectives: a) to raise the increasingly important issue of dual career couples in academia and the gendered effect that the pressure for mobility has on career advancement and work-life interference, and b) to present examples of recently established dual career services of higher education institutions in Germany, Denmark and Switzerland, responding to the needs of the growing population of dual career couples. Due to long established practices of dual career services in the US, the European examples will be compared with US practices. This paper raises the significance of considering dual career couples in institutional policies that aim for an internationally excellent and diversified academic workforce. It will appraise dual career services according to whether they reinforce or address gender inequalities and provide recommendations to HEls interested in developing services and programmes for dual career couples.


## Introduction

This paper emphasises the importance of dual career couples in academia in the context of an increasing population of women PhD graduates and presents institutional examples in European and US higher education institutions (HEls) responding to the dual career couple phenomenon. Furthermore, it highlights the gendered effects that international mobility can have for a dual career couple in academia and attempts to review recently established dual career services in European HEls according to whether they reinforce or address gender inequalities in the academic workplace.

More women PhD graduates than men are in dual career relationships in academia. This situation is partly created by the growing proportion of women with doctoral degrees (SHE, 2015; Stephan and Kassis, 1997; Ginther and Kahn, 2009) and the greater tendency of women academics - compared to men - being partnered with other academics (Schiebinger et al., 2008; Ackers, 2004). At the same time, researchers are required to be mobile to advance their careers, especially in the sciences (Mahroum, 2000; Ackers, 2001; Morano-Foadi, 2006). Finding two quite niche academic jobs in close proximity becomes even more challenging for two researchers in a relationship.

At a systemic level, mobility is a key concept of the European Research Area (ERA), with the following potential benefits: enhancing excellence in scientific performance; knowledge and technology transfer; and improving economic and social welfare (EC, 2014). The promotion of mobility of academic staff in Europe is reflected in the plethora of European support programmes available to academic staff and researchers since the 1960s (Teichler, 2015). While the significance of mobility for individuals' career advancement and wider scientific, economic and social benefits is highlighted, there is less emphasis on how the requirement for mobility in academia can have differential outcomes for men and women in terms of career progression and work-life balance, especially in the context of being in a dual career couple.

Dual career couples in academia in the US and Europe have been increasingly considered for talent management and gender equality institutional policies (especially in relation to work-life balance, diversity at the workplace) (Schiebinger et al, 2008; Ackers, 2004, EC, 2005; 2010).

In the US, dual career initiatives date back to the 1980s and there are currently well-established dual career policies and programmes across a great number of US institutions. These practices have been mainly framed around the rationale of academic talent management as highlighted in a recent US study:

> 'Meeting the needs and expectations of dual-career academic couples while still ensuring the high quality of university faculty is the next great challenge facing universities' (Schiebinger et al., 2008, p.1)

In Europe, recruitment and retention of excellent academic staff is also recognised as the most challenging issue for higher education (Huisman et al., 2002; Van den Brink et al., 2013). However, scholars have focused on the significance of pay and academic freedom (Huisman et al., 2002; Verhaegen, 2005) to explain academic recruitment and retention. The effect of partner opportunities on dual career couples in European academia is either not mentioned or seems to be of limited importance. Only a handful of studies raise this issue in the European context (see Vickenburg et al., 2014; Ackers, 2004; Rusconi and Solga, 2007) with even less research focusing on how European institutions respond to this issue (Zingg, 2013). Interestingly, research on dual career couples in Europe has been discussed with a greater gender dimension compared to the US, potentially reflecting the recent preoccupation of scholars and policy makers with gender inequality. For example, dual careers are mentioned in a European report on gender mainstreaming in research recommended employers to
"ensure that researcher mobility measures incorporate the gender dimension (e.g. taking into account dual careers, work-life balance issues)" (European Commission, 2012, p.43).

In Europe, the number of women at doctoral level has been growing faster than the number of men since 2002 and women are relatively well represented at the lower grades of the academic career ladder (EC, 2015). However, their numbers are continuously dropping in more senior posts with quite a small proportion being found at top positions in higher education. On average, only $20 \%$ of top positions in European HEIs are held by women (EC, 2015). In terms of participation in decision-making bodies, the unbalanced representation of women persists, both in scientific and management boards of universities and acting as heads of HEls across Europe (EC, 2015).

Scholars argue that the persistence of gender inequality is explained by various factors: individual issues such as choices and preferences, or familywork conflict (Mason et al., 2002; Ginther and Kahn, 2009); and structural reasons like gender schemas and biases (Valian, 1999; Steinpreis et al., 1999; Moss-Racusin et al., 2012) and demographic inertia (Kullis et al., 2002).

This paper endorses the assumption that HEls are gendered organisations (Acker, 1990, 2008) with gendered norms, everyday practices and policies, which reinforce and reproduce gender inequality in the academic sector (Van den Brink, 2011; Deem, 2003; Bailyn, 2003; Knight and Richards, 2003).

This paper examines the potential effects of the increasing requirement for mobility in the context of a dual career couple and the emergence of dual career services in Europe (rationale, what services and for whom). It will do this through presenting the growing population of dual career couples and reviewing the recently established services that HEls in Denmark, Germany and Switzerland have developed - compared to the well-established US programmes - to meet the needs of this population. While it raises the significance of considering dual career couples in institutional policies that aim for an internationally excellent and diversified academic workforce, this study also explores to what extent dual career services address or reinforce gender inequalities. This is undertaken in the following sections.

## A growing population of dual career couples in academia

The term dual career couple was first coined in the context of 'dual career families' by Rapoport and Rapoport (1969, p.3), which reflected
"families in which both husband and wife pursue careers (i.e. jobs which are highly salient personally, have a developmental sequence and require a high degree of commitment) and at the same time establish a family life with at least one child".

Therefore, individuals in dual career couples seek careers that require commitment and are characterised by career advancement. This study focused on dual career couples where at least one is working in academia (referred to as dual career couples) and includes dual career couples where both are academics (which will be referred to as dual academic career couples).

Marriage among academics is a common phenomenon. Various recent studies in the US and Europe have shown that about a third of all faculty members have an academic partner (Schiebinger et al., 2008; Dubach and Stutz, 2013). European studies focused on recipients of prestigious funding schemes provided similar findings with a recent report on European Research Council grantees reporting a high incidence of dual career couples especially in science (Ackers, 2000; Vinkenburg et al., 2014).

In the academic world, the importance of dual academic career couples - or the 'two body' problem as it has been known in the scientific community (WolfWendel et al., 2003) - has been exacerbated by the increasing number of female PhD graduates and the tendency of women in academia to be partnered with another academic as reflected in studies in the EU and US (Ackers, 2004; Schiebinger et al., 2008; Dubach and Stutz, 2013). For example, in the US, $40 \%$ of women - compared to $34 \%$ of men - were
partnered with academics. In Switzerland, the study of Swiss academic staff ${ }^{i}$ showed that $45 \%$ of all female respondents and $32 \%$ of male respondents live in a dual academic career coupleii. This gender difference was reflected at all levels and increased at senior academic levels, with $57 \%$ of female professors reporting that they lived in dual academic career relationships.

At the same time, 'disciplinary endogamy ${ }^{\text {iii }}$ seems to take place especially in natural sciences with high proportions of women being married to scientists (Gibbons, 1992; Schiebinger et al., 2008). For example, $83 \%$ of women scientists in academic couples were married to another scientist compared to $54 \%$ of male scientists (Schiebinger et al., 2008). According to the American Institute of Physics, $44 \%$ and $69 \%$ of married female physicists were married to physicists and other scientists respectively ${ }^{\text {iv }}$ (Gibbons, 1992). In other fields, $80 \%$ of female mathematicians and $33 \%$ of female chemists were married to scientists or engineers (ibid). In Germany, a study by the German Physics Association showed that $86 \%$ of female physicists were in a dual academic career couple with another physicist and 'the number is expected to be as high in other disciplines' (Ruschikowski, 2003). While these studies might not represent the full population of academic staff in Europe and the US they are still indicative of the fact that a substantial proportion of academics are partnered with other academics globally.

## International mobility for dual career couples: A gendered practice?

Pursuing an academic career increasingly requires international mobility (Mahroum, 2000; Morano-Foadi, 2006) undertaking a number of short-term and uncertain employment contracts at early career stage with relatively low salary and lack of support during mobility stages (Ackers, 2004).

For dual academic career couples, there are additional challenges: a highly competitive labour market and 'locationally constrained careers' (Green, 1997) due to the highly specialised nature of the work and the limited availability of vacancies. Therefore, the primary concern for dual academic career couples seems to be finding two highly skilled - and rather niche - jobs at the same place or in close proximity (McNeil and Sher, 1999; Wolf-Wendel et al., 2003). Individuals in dual career couples did not accept a position if their partner was not hired as well (Schiebinger et al, 2008*; Rusconi and Solga, 2007vi). While this could affect both partners equally, studies suggest that being in a dual career couple has greater consequences for women rather than men, in terms of career progression, mobility and work-life balance (Mason et al., 2013; Ackers, 2004; Rusconi, 2002; Monk-Turner and Turner, 1986; Deitch and Sanderson, 1987). This is also reflected in an academic staff survey in Swiss universities where women were more sceptical of the feasibility of dual career partnerships (Dubach and Stutz, 2013).

Individuals in a dual career couple are confronted with mobility decisions for career advancement, such as applying to an institution abroad and/or following their partner to another institution. In these decisions, women were less likely to relocate for their career, especially when their partner's career was compromised, while men were more likely to move even if their spouses had no job in the new location (Ezrati, 1983). Even when women decided to relocate for their careers, they were less likely to be accompanied by their partner: men stayed behind in their original job and women commuted or separated (Ackers, 2004). Thus, the requirement for mobility for work and career reasons could negatively affect the personal relationships of women in this position.

Women were more likely to follow their partner and 'scale back' their careers, taking a job that might not be in alignment with their qualifications and experience (Becker and Moen, 1999; Ferbert and Huber, 1979; Ackers, 2004). Therefore, it is more likely for a dual career household to move due to the husband's career rather than the wife's career, with negative effects on the latter's career progression. For example, a US study of prestigious postdoctoral fellows showed that women selected less prestigious postdoctoral posts - which led to less successful careers - because they were trying to combine this postdoctoral choice with the needs of a partner or family (Sonnert and Horton, 1995vii).

The intersection of factors such as gender and age has also been found to negatively affect women (Rusconi and Solga, 2007; Ackers, 2004) due to power relations between partners based on earnings and/or career. In many cases of dual career couples, women are younger and at an earlier career stage than their partners leading to the the progression of one partner (typically the male) taking place at the expense of the career profile of the other partner (typically the woman)' (Ackers, 2004, p.37).

This section demonstrates how mobility decisions in a dual career couple can contribute to the decreasing number of women academics after the doctoral/postdoctoral position and to the cumulative disadvantage process on women's careers (ibid, Reskin, 2003viii).

## Dual career services: a response to the needs of dual career couples?

The growing number of dual career couples and the intense competition among universities for the best and brightest staff seems to have increasingly shifted the responsibility for dual career couples' decisions from the individual towards institutions (Wolf-Wendel et al., 2003). As a consequence, institutions are under pressure to rethink their policies on recruitment and retention and decide whether they should accommodate these needs.

US institutions have addressed dual career couples' issues since the 1980s through informal pathways. Talent management (attracting, developing and retaining excellent staff) is a major concern for a plethora of US institutions under the growing number of dual career couples. In the 1990s, formal dual career services were introduced and soon integrated within many US university services.

An increasing number of studies on dual career policies at US institutions have been conducted since the 1990s (Wolf-Wendel et al., 2000; Rusconi, 2002; Fleig-Palmer et al., 2003). US institutions were more likely to establish dual career services if they were: research intensive universities or geographically isolated institutions. Research-intensive universities were more likely to provide such services due to the flexibility and the availability of resources, while geographically isolated institutions could enhance their attractiveness to potential applicants through offering dual career services in an area with limited job opportunities (Wolf-Wendel et al., 2000; Fleig-Palmer et al., 2003; Raabe, 1997). Dual career services vary greatly across the institutions in terms of type and duration of services offered, eligibility to the programme, allocated staff and funding devoted to the service and stakeholder involvement (ibid).

In Europe, dual career couples and services have been under-explored until recently. This can be explained by the latest European efforts to address gender inequalities in academia and the limited consideration of dual career couples and/or partner opportunities in studies on recruitment and retention of academic staff in European HEls. Such considerations have only been documented in recent European studies and reports (Zingg, 2013; IDEA Consult, 2013).

According to a recent European collaboration project ${ }^{\text {ix }}$, TANDEM (Talent and Extended Mobility in the Innovation Union), dual career and integration services (DCIS) were one of the ways to facilitate mobility of researchers while accommodating family and partners' needs. In this case, dual career services were joined with integration services (childcare, housing, language assistance). Researchers ${ }^{\times}$with a partner and/or children ranked dual career and childcare/school as the most important aspects of relocating for a new job next to housing and living:
'the existence of dual career services would clearly make a difference on researchers' final decisions if they had more than one job offer' (Zingg, 2013, p.6).

Similarly, academic staff welcomed university policies that provided assistance with seeking employment of spouse especially when moving to another country according to studies in Switzerland and Denmark (Oxford

Research, 2010; Dubach and Stutz, 2013). However, many researchers do not seem to be aware of such services especially in countries with existing DCIS (Zingg, 2013). Investment in DCIS benefit not only HEls, but also the regional and national economy by increasing attractiveness, recruitment and retention of talented staff (Zingg, 2013).

## Methodology

The growing importance of dual career couples and the limited information about relevant services in European HEls led to a small research project, which aimed at filling this gap, raising awareness of and critically evaluating these programmes.

Due to the absence of information on dual career services in Europe, online research in European HEls was undertaken with a focus on Denmark, Germany and Switzerland. The latter two were forerunners in dual career services while the research team at the time had respective language skills to access information in their native languages. There is a concern among HEls about nepotism and positive discrimination in relation to dual career academic couples. However, anecdotal evidence from academics suggests that informal and ad hoc practices are undertaken at institutional level - to a limited extent though - to meet the needs of dual career couples (especially when it concerns top level professorial posts).

Representatives and coordinators of initiatives and services for dual career couples were contacted asking further information about these services. European respondents reported that many US HEIs are 'ahead of the game' in relation to dual careers, so it was decided to contact US HEls with long established dual career services to provide another comparative lens and enrich the data.

The data collected were comprised of online desktop research, email responses and eight semi-structured interviews with representatives from European and US institutions. The interviewees were selected based on their responsibilities and their experience of working with dual career couples. Interestingly, the interviewees were working in different structures within the universities: dedicated dual career units, Provost's office (for US universities), human resource departments and welcome services.

The semi-structured interview guide was comprised of the following themes: the rationale behind these initiatives, the services offered, the implementation process, the benefits of these services for different stakeholders, and the challenges that such programmes entailed. Most of the interviewees had been involved in national initiatives for dual career couples, so they also provided information on programmes available beyond their institutions, which is captured in the following section.

The interviews were recorded and transcribed. They were then complemented by additional documents and sources that respondents provided in relation to these programmes. Thematic analysis was undertaken with the following themes being identified: rationale of the emergence, offered services, eligibility, institutional and individual benefits and lastly (un) intended consequences of such programmes. Based on these themes, the data identified from the transcripts were moved onto an excel file which enabled conducting comparative analysis and identifying similarities and differences across institutions and countries.

It should be noted that dual career services presented below aim to meet the needs of dual career couples in academia irrespective if only one or both of them are pursuing academic careers.

## Dual career services in European HEls

A few initiatives have only recently been introduced by institutions in Europe addressing the needs for dual career couples in, for example, Germany, Switzerland and Denmark. These are presented next and are compared with US institutions that have been dealing with the needs of dual career couples since the 1980s providing a more established approach on dual career practices. Overall, dual career services emerged because HEls in the US and Europe wanted to enhance their ability in attracting and retaining talented academic staff in a globally competitive market. In Germany and especially in Switzerland, the introduction of dual career services was framed also in terms of equal opportunities between men and women and addressing gender inequality in HEls.

Germany and Switzerland seemed to be the forerunners in introducing dual career services in Europe. In both cases, these initiatives were mainly funded by federal bodies to enable HEls to pilot and explore the effects of providing such services. It should be noted that only a fraction of the HEls integrated such services within their own structures after the expiry of the respective funding.

In Germany, dual career services started as a pilot programme in approximately forty German HEls. After an evaluation process, about a quarter of HEls incorporated dual career services within the university, as a permanent service. A small number of HEls have discontinued the programme, whereas some universities have included it as part of the international office or welcome centre, meeting only the needs of international staff. There were various reasons for introducing these initiatives as a dual career coordinator in a German university reported:
> "Universities had to show that they have strategies for competing globally for attracting and retaining staff and some institutions competed in terms of equal opportunity/gender equality actions and then the topic became a trend with other universities starting similar projects even though they were not chosen as excellence universities"

Similar rationales were invoked in Switzerland, where dual career couples were the focus of the third phase (2008-2012) of the Federal Programme, 'Equal Opportunity at Swiss Universities'xi. This programme was linked to a survey of academic staff at Swiss Universities. It showed that female academics were under greater pressure to balance career, family and partnership compared to their male colleagues to the detriment of their careers (Dubach et al. 2013). The programme, thus, targeted to enhance the representation of women in top academic posts in Swiss HEls so that the number of women will reach $25 \%$ of full and associate professors and $40 \%$ of assistant professors in Swiss institutions by 2013. While the programme did not meet its targets, one of the researchers involved in the evaluation of the Swiss programme highlighted that it was still beneficial in raising awareness and helping the institutions to familiarise with the issue of dual career couples:
'Through the financial incentives and the "agenda setting" of the programme - the universities gained practical experience in hiring dual career couples. For most universities, this wasn't a standard procedure before.'

In Denmark, dual career services emerged because HEls wanted to retain international researchers in Denmark. Nevertheless, there were concerns that international staff would decide to leave the country if their spouses were unhappy and could not continue their careers (Oxford Research, 2010). In addition, these services seemed to be of benefit to dual career couples, institutional structures and the national economy as illustrated below:
"For example, spouses who get these services, feel valued because they get tailored information and advice. Their hired partners are happy that their spouses were benefited by the services. Departments found helpful not to use their own resources but having a central unit that deals with these issues. In addition, private companies are benefited through a pool of highly profile candidates that are coming along with academics. For example, there is an expert fair organized annually where spouses are invited to network with companies in Denmark." [Danish university representative]

## What services and for whom?

Dual career services vary across institutions and countries. The most common services offered for dual career couples (where one at least is an academic) are advice on CVs, applications and interviews, guidance on job search, information on the local and national labour market, career workshops, networking events and access to employers and institutions in the region. Complementary to these services, but also significant, are the socalled integration services that offer guidance and support in relation to childcare, housing, language courses and advice on mortgage and tax issues.

In Denmark, at the University of Copenhagen, spouses of international staff are supported in their effort to find employment with tailored advice on CVs and career workshops. While everybody is eligible for these services, there is a VIP staff category, which includes newly appointed professorial staff. These applicants are offered additional services, such as tailored information and integration services for childcare, housing and professional advice with taxes and mortgage. This is similar to the US where partners of faculty hires were top priority (Fleig-Palmer et al., 2003; Wolf-Wendel et al., 2000).

There are specific services and practices for dual academic career couples, such as dual career hiring and split/sharing positions, which seemed to be more established and formalised in the US. In Europe, these approaches happen more informally and on ad hoc basis for top professorial positions. A few German HEls refer to dual academic career couples on their websites offering support for partners pursuing academic careers and providing access to available vacancies within the university or local academic institutions that they collaborate with.

In Switzerland, the federal programme allocated funding for both individual (targeted at dual academic career couples) and structural measures. Career development support for individual partners' (of first hires) careers was cofunded by Swiss universities ( $50 \%$ programme funding and $50 \%$ from hiring universities). The fund operated on a first come first served basis and benefited 27 dual career couples (support on individual basis). Most of the funded cases (over 65\%) concerned professorial appointments while the rest was about junior research posts. In terms of gender, eight women received a professorial post and the majority of women were the second hires in the funded cases (21 of the 27 couples). At the time of the report, eight women were in follow-up jobs initially funded by the programme. However, more time is required to track the career development of this group and evaluate the long-term impact of this initiative.

Structural measures led to the development of structures that enabled universities to implement processes for dual career couples (bodies/offices, websites). Swiss HEls adopted different approaches on how to use this
funding. HEls in the German speaking region developed institutional proposals based on their priorities (studies on current situation, what needs exist, creating welcome/dual career services) while those from non-German speaking regions submitted a joint project leading to an internet platform called carriere2; a needs analysis report and raising awareness of dual career couples (Dubach et al., 2013). While most universities have developed websites in relation to dual career couples, the engagement of Swiss universities with dual career couples has been limited either in financial terms of developing specific guidelines or dedicated structures regarding appointment of dual career couples.

What seemed to be common in most institutions was that the partners of newly appointed staff for 'professorial positions' or top scientists were eligible for these services, in line with previous research in Germany and Switzerland (Rusconi and Solga, 2007; Dubach and Stutz, 2013). In Germany, Goethe University Frankfurt and Dresden University offer dual career services to partners of postdocs who work on excellent research clusters and are international junior scientists respectively. While an exception to the rule of professorial posts, the rationale of the best and the brightest is very clear in these practices.

## But are dual career services reinforcing gender inequalities?

Examining the dual career services with a gender lens, there are two issues that need to be discussed especially when it comes to dual academic career couples (where both partners aspire to an academic career): eligibility; and workplace culture and assumptions

As discussed earlier, most dual career programmes are available to newly appointed professors. Since women are under-represented in professorial positions, such initiatives become problematic and gender-constructed and reproduce gender inequalities. Gender power relations become pertinent since by restricting eligibility to professors, there is a differential distribution of power translated into access to these beneficial resources. On the contrary, more emphasis should be given at the entry level of academic careers such as the postdoctoral level where men and women are more equally represented. Therefore, eligibility to these programmes should be open to all career levels especially at the early career stage where there is more precarity and low pay and benefits. In addition, issues of childcare, housing and financial assistance are more critical than for comparably better-paid professors. One of the interviewees, raised the difficulty of convincing the institution to integrate such a programme and a recurring question was emerging:
"Why should a university invest in partners of junior researchers as they are to leave the institution after a few years at the latest". (Swiss HEI employee)

But meeting the dual career needs of this group entails benefits for both the couples and the institution. Dual career couples enhance their international mobility with a favorable effect on career progression, work-life balance and overall quality of life. Dual career opportunities for researchers at all career stages are not only tools to increase attractiveness, but also retain an excellent and diversified body of researchers. It could also contribute to gender equality strategies of HEIs.

The second issue is linked to eligibility, but is more pertinent to the notion of gendered organisations, workplace culture and gendered assumptions especially when a dual career couple is comprised of two academics. For example, anti-nepotism policies and assumptions at HEls about traditional gender roles can limit the career prospects of women in dual career academic couples reflecting gendered assumptions about individual attitudes and ambitions. Support for partners was more likely to be offered by institutions when men (rather than women) asked about support towards their partners. Appointment committees did not view women favourably when they referred to the need for dual career support (Rusconi and Solga, 2007). Furthermore, as Henderson reported (2007, p.46)
"In many cases, accompanying partners are subject to the personalities and informal practices of various departments. When the accompanying partner is female, potential employers may assume that her ambitions are limited enough to accept a position that is beneath her qualifications (or no position at all)."

Similar concerns have been echoed in US studies that recommend dual career hiring, as a practice that HEls should consider meeting the needs of dual academic career couples (Schiebinger et al., 2008; McNeil and Sher, 1999). While this practice has existed since the 1970s in US institutions, it grew from $3 \%$ to $13 \%$ in 2000 (Schiebinger et al., 2008). In a study of academic faculty in 13 top US research institutions, it was found unsurprisingly that women were often the second hires in a couple, demonstrating the higher leverage that male scientists have as a first hire at an institution.

As mentioned before, this is often justified by the differences in terms of age and career stage, where men are more likely than their female partners to be older and seeking a high status position (Schiebinger et al., 2008; McNeil and Sher, 1999). Only a small proportion of male academics ( $19 \%$ compared to $53 \%$ of women), who were first hires for professorial posts, had partners
seeking similar posts (Schiebinger et al., 2008). In addition, HEls are well aware of the two-body problem and might use it to exploit the needs of dual academic career couples to find a job at the same location. For example, HEIs are likely to offer jobs for both partners which would be paid less than when hiring two different academics, or offer jobs at a lower level than desired by both partners or in particular by the second hire (McNeil and Sher, 1999; Wolf-Wendel et al., 2003) Since second hires are often women, it is more likely that such situations work to the detriment of women's careers. Split or shared posts - which can be found in the US but not in Europe, at least not in a formalised way - have been suggested as a beneficial solution for both institutions and individual scientists in dual academic career couples in the same discipline and at a approximately similar career stage (McNeil and Sherxii, 1999). For example, in the field of physics, the low density of physicist jobs along with the low likelihood for a dual academic career couple to find professional employment can lead to physicists leaving physics, a loss for the profession. In addition,

> 'As these employment problems are more acute for women, lack of attention to dual-career issues can hamper efforts to increase the representation of qualified women in physics.' (McNeil and Sher, 1999, p.2)

Finally, when policies for dual academic career couples are not transparent and clear, 'second hires' might be perceived as an 'add-on' to the first hire and their professional expertise and competences of the second hire are likely to doubted and challenged (Wolf-Wendel et al., 2003). Therefore, such practices can be characterised as reinforcing gender inequalities due to the lack of clarity and transparency.

## Conclusions

Dual career couples in academia are a common phenomenon in both the US and Europe. Considering the increasing proportion of women completing doctoral degrees and participating in the academic labour market, along with the inclination of women to be the partner of another academic, it is expected that the number of dual academic career couples in academia will continue to grow. While being in a dual career couple entails benefits for both partners in terms of mutual understanding and common interests, dual career couples are confronted with many challenges, which affect their career advancement, personal relationships and work-life balance. In an era of intense competition in the academic labour market and increasing requirement for mobility, dual career couples find it difficult, not only to find two jobs at the same place, but more importantly to get posts that will enable them to fulfil their career aspirations.

However, there are caveats especially when this topic is examined with a gender lens. It is highlighted that the pressure for international mobility is a gendered practice in the academic labour market since it affects women more negatively - in terms of career advancement and work-life balance especially when they are in a dual career couple rather than men. Mobility is based on the assumption that academics, as ideal workers, would be free to move to different institutions, develop their expertise and foster international networks without consideration of implications or disruptions that this might have on personal life. Women's mobility seems to be constrained by various reasons: the ticking of the 'biological clock'; the prioritization of men's careers due to a combination of higher social and occupations status; and higher remuneration and age difference. These are also due to gender attitudes and assumptions about traditional gender roles.

Services for dual career couples are emerging in Europe following the example of well-established programmes in the US. They provide career support (job search, CV and application advice, interview training, networking with local employers) for the partners of the new recruits and often offer childcare, housing and relevant integration services to the dual career couple. Recipients of dual career services experience a smoother transition to a new working and living environment alleviating work-life balance pressures, and they are more committed to an institution that recognises and supports their personal needs. This again has positive effects on their motivation and performance. Dual career couples feel valued and welcome services that would enable them to integrate in a new community and help them in pursuing fulfilling careers for both partners. Finally, it is the national and wider research system as such that profits from HEls being known as attractive employers. Hence, dual career services can become an important competitive advantage in the labour market for research institutions and the local economy, if implemented properly and extensively. Overall, dual career and integration services are a positive step that higher education institutions should consider. These services provide a signal to employees that HEls acknowledge the pressures that dual career couples come across in a global academic marketplace and they are willing to help with work-life balance issues.

While these services are driven by the global competition of HEls to attract and retain international excellent staff, German and Swiss initiatives have drawn particular attention to the benefits that these programmes could entail for the promotion of female careers and the retention of women in academia. However, gendered issues are raised in relation to dual career services, in terms of eligibility and workplace culture/assumptions especially when it comes to dual academic career couples (where both partners aspire to an academic career).

Concerns about the fairness, legality and meritocracy of dual career practices have been raised in US institutions (Schiebinger et al., 2008), which need to be addressed by the development of clear and transparent guidelines and policies. Clarity and transparency of dual career policies are pivotal and they need to be combined with institutional efforts to review gendered practices and cultures. In this way, they can address the abovementioned caveats of eligibility and workplace culture and have the potential to contribute to the current efforts of HEls to addressing gender inequality in academia.

This paper raises the significance of considering dual career couples in institutional policies that aim for an internationally excellent and diversified academic workforce. However, dual career services are not a panacea for institutions that want to attain recruitment, retention and diversity goals. HEls need to conduct a thorough assessment of institutional needs in relation to dual careers, and then examine and plan accordingly which practices best fit their needs. There are challenges in running such programmes and they should be designed carefully in alignment with the profile and mission of the institution. These challenges concern a range of issues such as: sustaining institutional, financial and administrative support; availability of employment opportunities in the local context; dealing with visa-limited candidates; managing expectations; clear communication about dual career services; and ensuring the integrity of the programme especially in cooperation with business partners.

Dual career couples in Europe remain an under-researched area in the academic literature. Further research is required to explore a plethora of issues. Initially, it would be imperative to map out the population of dual career couples in Europe to get an overview of the 'two-body' problem and how prevalent this phenomenon is in European countries. In addition, it is important to investigate the decisions, needs and challenges of this population. Rusconi (2002) highlights the importance of undertaking longitudinal studies of dual career couples at different career stages, which will enable researchers to understand the difficulties and the dynamics of decision-making processes at different career stages. By getting a better insight into these issues, it will potentially enable the development and improvement of policies at different levels (international, European, national and institutional) for meeting the needs of dual career couples in science and academia, along with fulfilling the aims of academic excellence and gender equality.

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## Endnotes

i
This survey was sent to all academic staff in all Swiss universities and the Federal institutes of technology in 2011. The response rate was $36 \%$ ( 10,635 respondents), with $48 \%$ participation from women and $29 \%$ from men. In terms of disciplines, employees in humanities and social sciences were over-represented whereas those from medicine and technical sciences were under-represented.

## ii

It should be noted that $27 \%$ of respondents live with an employed partner but do not fulfil the dual career couple criteria: either because one partner works less than $80 \%$ FTE and/or one partner does not have a higher university degree (this is quite limited.)

## iii

According to Schiebinger et al.(2008) , the term "disciplinary endogamy" reflects the tendency of academics to couple in similar fields of study and are often found in the very same department
iv

The respective proportions of male married physicists were $6 \%$ and $17 \%$.
v

In this study, 88 per cent of dual career faculty from US institutions would have not accepted their position if their partner was not hired as well. vi

According to administrators and affirmative action officers in German universities, rejection of university posts in German institutions were often related to dual career considerations.
vii

In this study $62 \%$ of married women and $19 \%$ of married men had a spouse with a doctorate. This project was based on 699 questionnaire responses and 200 interviews with recipients of NSF and NRC postdoctoral fellowships.
viii

According to Reskin, the process of cumulative disadvantage is based on a combination of factors along with 'non-events' (for example, the decision not to take a more prestigious postdoc due to incompatibility with partner's career), which affect cumulatively a woman's career resulting in great inequality at senior career stages between men and women.
ix

The project partners were the Dual Career Advice and Integration Services (ETH Zurich and University of Copenhagen) and the Euraxess Service Centres (in Bratislava, Copenhagen, Tartu, Thessaloniki and Zurich).
x
The survey was sent to researchers in the countries of the project partners but also reached researchers in France, Spain, UK and US through the Euraxess network. Most of the respondents were doctoral and postdoctoral researchers. More than 3000 researchers and their partners responded to the survey (mainly from Europe).

## xi

The Federal Programme is still continuing (SUK Programme 4- 2013-2016) finishing soon. This programme aims at funding the implementation of institutional action plans rather than separate projects/individuals as it was the case in the previous phases..

## xii

In 1998, McNeil and Sher conducted a web-based survey for dual science career couples with over 630 responses, which includes narrative responses. In this study, eligible respondents were couples comprised by at least a physicist and another scientist (often physicist though). Therefore, $89 \%$ of the respondents had partners who were scientists while almost $50 \%$ of the respondents were dual career couples in physics. The report can be found at the following
link:http://www.physics.wm.edu/~sher/survey.pdf

