

**KLEMENČIČ, M., ZGAGA, P. (2015). Slovenia: The Slow Decline of Academic Inbreeding. In Maria Yudkevich, Philip G. Altbach, and Laura E. Rumbley (eds.) Academic Inbreeding and Mobility in Higher Education. Palgrave Macmillan, Chapter 7, pp. 156-181 Available at: <http://www.palgraveconnect.com/pc/doi/10.1057/9781137461254.0001>**

## **Slovenia: The Slow Decline of Academic Inbreeding**

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In a country with only one major university for a long time, academic inbreeding was necessary and inevitable. As part of socialist Yugoslavia, Slovenia was its most developed region and professors of Slovenian universities were rarely graduates of the Yugoslav universities. Further, due to the “non-aligned” character of Yugoslav foreign politics, borders with Western Europe were open and study at foreign universities was not impossible, especially in science, technology and medicine. Nevertheless, the possibilities for study abroad were fairly limited due to economic conditions. Moreover, study abroad has often led to brain drain. Despite rising enrollments since the 1990s, Slovenia is still a small higher education system (with only four universities) and academic inbreeding is a recognizable feature.

There are no aggregate statistical data on this phenomenon, nor do the higher education institutions specifically trace academic inbreeding. However, we have some evidence of the extent of this phenomenon from the EUROAC<sup>1</sup> survey on the academic profession in Slovenia that was conducted in 2013 (Klemenčič et al. 2014). In this survey, 50.6 percent of respondents confirmed that they are employed at the same institution

where they obtained their PhD (Klemenčič et al. 2014). The highest share of inbred academics (67.6 percent) was reported at the university in the capital, the University of Ljubljana (established in 1919); and somewhat lower (47.5 percent) at the University of Maribor (established in 1975), which are the two oldest universities in the country.

The two newer universities, one public and one which is formally considered to be “private” (i.e., established by a municipality and not by the state but largely financed from the state budget), were founded after 2000, and established PhD programs only within the last few years. Hence, by definition, they have very few inbred academics. The EUROAC survey does not include data for the “private” university, but does for the new public institution, the University of Primorska (established in 2003). The University of Primorska shows only 16.4 percent of in-bred academics among EUROAC respondents (Klemenčič et al. 2014). The fact that there are inbred academics at all in such a new institution suggests that new institutions are also hiring some of their very own recent PhDs.<sup>2</sup> We do not have data from the private university and a number of colleges (self-standing faculties or “higher schools,” in Slovenian legal terminology), but our expectation is that, given their more recent emergence, we will find less academic inbreeding in these institutions.

Data from EUROAC also show that academic inbreeding is the highest in the fields of engineering, manufacturing and construction (62.5 percent), then agriculture, forestry, fishery and veterinary sciences (58.1 percent), followed by natural sciences, mathematics and computer science (57.0 percent), and medicine and social services (56.3 percent). The lowest share is in education and teacher education (36.8 percent), and

social sciences, business, and law (43.9 percent). Arts and humanities with 47.7 percent lie somewhere in-between (Klemenčič et al. 2014). In terms of academic rank, we found the highest numbers of inbred academics among associate professors (64.5 percent), then assistant professors (62.6 percent), while inbreeding among full professors appears to be the lowest among the senior staff (52.6 percent). The evidence of a gradual phasing out of academic inbreeding perhaps lies in a lower share of inbred academics among assistants and young researchers: 41.2 percent of our respondents in this category report having obtained PhD at the same institution where now employed (Klemenčič et al. 2014).

This chapter analyses the causes of academic inbreeding in Slovenia and its consequences. There are a number of structural conditions, which continue to impair a more radical extraction of academic inbreeding. These are discussed in the following section, which also introduces the general characteristics of the Slovenian higher education system. The next section discusses hiring and appointment practices, which indeed have become more open, transparent, and more meritocratic, yet have not brought about major change in academic inbreeding practices. The final section introduces the consequences of inbreeding.

The data for this chapter have been obtained from national legislative documents and institutional statutory documents. We have also drawn on the data obtained through the EUROAC survey of conditions of academic work in Slovenia conducted in 2013, which involved sending an online survey to 5,791 academic staff employed at Slovenian higher education institutions. This survey was fully completed by 728

respondents; thus, with a 13 percent response rate. Partial responses to the survey were excluded from the sample. Given the highly complex and long questionnaire, the low response rate is not unexpected; indeed, it is similar to the response rates obtained by the same survey conducted in other European countries (Teichler and Höhle 2013; Kehm and Teichler 2013, Teichler et al. 2013). We draw here on the observation by Horta (2013) (citing Krosnik 1999) suggesting that ‘while a low response rate could be problematic, studies demonstrate that datasets resulting from low response rates can yield more accurate measurements and quality than those with greater response rate levels’ (Horta 2013, 493). Furthermore, the survey resulted in a nicely representative sample – including all main categories of academic staff, across disciplines, departments where employed, gender, academic rank, etc. (for details, see Klemenčič et al. 2014) – thus, meeting the criteria that representativeness is more relevant than response rate for generalizability of survey research (Horta 2013). Finally, the EUROAC survey and the present study present the first in-depth analysis of the academic profession in Slovenia and, as such, represent a great deal of “ground work” in this area. As such, we are unable to draw from other studies in the Slovenian context.

### **Structural Conditions for Academic Inbreeding: Higher Education in Slovenia**

With a population of 2 million in south/central Europe, Slovenian higher education institutions enroll in total 84,300 students, of whom 81 percent are full-time students (SURS 2013). In 2012-2013, there were 5,596 ranked academic staff, assisted by 3,050 assistants, language preceptors and other non-ranked staff academic staff (SURS 2013).

The student-staff ratio is, on average, 1 ranked academic staff member to 19.3 students; or, if we include all academic staff, 1 ranked or non-ranked faculty member to 11.6 students. Among academics at higher education institutions, 37.8 percent are women; 20.8 percent of all academics are over age 60 (SURS 2013).

All three public universities are comprehensive research universities, albeit different in age, size, research impact and also reputation. Together, they form a small and highly stratified system, which is particularly conducive to academic inbreeding. The University of Ljubljana was established in 1919 and served for seventy years as *the* national university (Zgaga 1998). Upon its establishment, all professors came from foreign universities; therefore, at least initially, it was impossible to speak of inbred staff. Its role as *the* national university, closely connected to emphasizing the national language (which was, in modern history, a generally sensitive political issue), further strengthened after 1945 and more and more of its professors completed their PhD studies at home. There was little competition between, or division of work with, other Yugoslav universities due to the highly decentralized higher education system of socialist Yugoslavia and the traditional cultural differences (Zgaga 1998). In the 1990s, during the wars in the former Yugoslavia, some of academics from other universities in the region found shelter and employment in Slovenia.

Only in 1975 did the Slovenian higher education system change significantly with the establishment of the second university – the University of Maribor. The third public institution, the University of Primorska, was established only recently, in 2003, and the “private” University of Nova Gorica emerged from a previously freestanding faculty,

which acquired the status of a university in 2006. In addition, different types of non-university higher education institutions exist: one public freestanding faculty and 39 private freestanding faculties and higher professional schools (all of them very small). The freestanding institutions have been legally allowed to operate since 1993; the first one was established in 1996 but most of them have emerged only recently (Zgaga 1998). The majority of enrollments are still at the public institutions: about 86 percent of all students are enrolled in public institutions and about two-thirds of all students are enrolled at the University of Ljubljana (Zgaga et al. 2013).

The possibilities for a highly mobile academic labor market within Slovenia are somewhat curbed simply due to the small number of institutions and the fact that some third cycle (PhD) study programs in are conducted only at one of these institutions. Furthermore, the system is highly stratified: most (but not all) faculties or departments at the University of Ljubljana are perceived to be of higher academic quality and hold more academic prestige than other institutions in similar fields elsewhere in the country.

The stratified system, with the University of Ljubljana at the top of the pyramid, explains why the highest level of inbreeding is at this institution. PhD holders from Ljubljana have often found appointments at other universities in the country, as well as abroad). Movement in the opposite direction—i.e., those with PhDs from other Slovenian universities securing employment at the University of Ljubljana—is less common because most (although certainly not all) faculties and departments at other universities do not enjoy the same level of prestige.

Of course, for a small portion of domestic professors, it was always possible to gain a PhD abroad. Besides this fact, somewhat lesser rates of academic inbreeding among full professors in our data could be an indication that, at the time of their first academic appointment, the mobility between the two only universities—Ljubljana and Maribor—might have been more fluid than was the case a generation or more later. It can also mean that currently, with the establishment of new institutions, full professors are the ones more likely to change institutions. On the other hand, it could also be explained through the fact that those generations of academic, in particular, still think of their *faculty* as their true alma mater, and not the university. Until 1990s, individual faculties enjoyed full legal and financial independence and the university served more as a network of independent faculties (Zgaga 1998; Zgaga 2013). Hence, moving from obtaining a PhD from one faculty to employment at another faculty at the same university may well be considered as changing institutions in the minds of full professors. Those academics that currently hold the rank of full professor built their careers in a system where faculties held independent legal and financial identity. Before the 1990s, the deans of the faculties negotiated funding directly with the Ministry. The feeling of belonging and formal affiliation was to the faculty and not to the university. The university had neither much decision-making power over the faculties, nor much symbolic value. It is likely that academics internalized that value system and have not shifted their perception of belonging in the wake of the university governance reforms. Hence, for them, changing from one faculty to another within one university really means a change of “institution.”

The establishment of Slovenia's two newest universities diminishes somewhat the overall rate of academic inbreeding at the system level. Both new universities created new academic openings that were filled predominantly by academics coming from Ljubljana and Maribor. However, both new universities are of marginal size especially when compared to the University of Ljubljana. In the absence of historical data, it is difficult to establish when a decrease in academic inbreeding began and whether it occurred with the massification of student enrollments, which led to an increase in study programs, a rise in instructional needs and thus more academic hiring. Our impression, supported by data on the present state of academic inbreeding at both older universities, is that this was not the case.

Until the late 1970s, there was only one university, and later there were only two universities, producing potential future academics. Both institutions had at the time tendencies towards fairly closed academic recruitment practices, as opposed to open and solely meritocratic hiring. Until the 1990s, when higher education was still in the elite stage and academics were few and had high social status, academic favoritism certainly marked the hiring practices at universities. Nepotistic practices in hiring were common across independent faculties. The 1990s brought about significant changes: the formulation of the new higher education system in the newly independent state happened simultaneously with rising student enrollments and a transition from elite to mass higher education (Zgaga 1998; Zgaga 2013). However, in the two old universities there were no real professional incentives for academics to move to other universities in the country; at least, there were no incentives for the best academics to do so. To put it

differently: the job security, public recognition, good salary and other fairly satisfactory work conditions dis-incentivized academics from seeking positions elsewhere, once they had made it 'into the system.' The following section analyzes the contemporary labor market conditions and the impact of these on academic inbreeding.

### **Labor market conditions**

Slovenia has a higher education system where the academic job market has not taken on (so far) market characteristics. Academics in public universities are employed as civil servants. They have fairly similar salaries across institutions, tend still to be relatively generously paid, and thus have little financial incentive to change institutions. According to legal requirements, all academic vacancies must be publicized externally on relevant national online platforms, and there is a fairly open and transparent selection process stipulated in legislation.

There are several bodies of legislation regulating employment of academics. The Constitution of Republic of Slovenia ensures the right of all employees to social security and health insurance, participation of workers in the management of their organizations, and the right to form and participate in representative bodies. Academics and researchers in public higher education and research institutions in Slovenia are civil servants and their status and remuneration provisions are defined in the Civil Servants Act and in the Act on the Civil Servant Payment System. This means that their base salary and bonuses are set through a comprehensive collective bargaining framework for the whole of the central government and public services. Centralized negotiations

result in a mandatory agreement with syndicates (unions) regarding base salary, bonuses and the code of conduct. By law, syndicates must be consulted regarding working conditions, the employment framework, the right to strike (or minimize service), the introduction of new management tools and government restructuring.

The last such comprehensive collective bargaining framework between the government and the Higher Education Syndicate [*Visokošolski sindikat Slovenije*] was established in January 2012. Based on their rank and length of service, academics are categorized into different pay-scale grades. There is some flexibility in terms of bonuses for performance [*dodatek za delovno uspešnost*] but not much, and the issue of merit pay is somewhat controversial. Employees are entitled to full social security support and have fairly robust guarantees with regard to job protection and dismissal. Consequently, the salaries for ranked academic staff in public universities are similar across institutions; i.e. fixed according to academic rank and number of years worked in the rank (Altbach 2000). As such, salaries do not necessarily factor in to academics' choices of employment. In addition to regular salary, academics can get additional payments (e.g. for additional workload, teaching part-time and PhD students, research and development projects, consultations, etc.).

The academic salaries at public higher education institutions in Slovenia are widely believed to guarantee a comfortable middle-class standard of living. In other words, the overall academic salary (base salary and bonuses) for full-time academics is still fairly comparable to salaries of higher-ranking professionals in other sectors. However, this trend might be changing with increasing salaries for top-tier managers,

lawyers and medical doctors. Still, academics in ranked positions are not financially pressured to seek additional employment, although they often do so—because there is opportunity for additional income. The professoriate in Slovenia enjoys a relatively high social status and tends to be respected by the public. Hence, academics are frequently invited to serve in ministerial and similar positions, on the boards of companies, and in other influential posts. In the EUROAC survey, 14.8 percent of respondents confirmed having additional employment at another public research or higher education institution, 4.7 percent reported working at another private higher education or research institution, 6.5 percent worked at other public education institutions, 4.4 percent also worked in business organisations, 4.3 percent were also self-employed, 3 percent worked for government, and 1.2 percent also worked in private non-profit organizations (Klemenčič et al. 2014). Public universities have adopted competition clauses, according to which academics who wish to teach at other Slovenian higher education institutions have to ask for permission from the rector or dean of the institution where they are employed.

In 2013, media brought to public light a discussion on academic salaries, which were depicted as rather high. In the data offered, an assistant (pay-scale grade 30 to 35) earns as base salary between EUR 1,373 (equivalent to PPP\$ 1,716)<sup>3</sup> to EUR 1,670 (PPP\$ 2,087), and up 20 percent more for additional weekly workload. An assistant professor [docent] (grade 48) earns, on average, a base salary of EUR 2,572 (or PPP\$ 3,215) and up to 15 percent more for additional teaching. Full professors' salaries are (grade 50 to 55) between EUR 3,009 (PPP\$ 3,761) to EUR 3,661 (PPP\$ 4,576) and up to 15 percent extra

for additional teaching. These figures correspond to our survey, where respondents reported their average *net income* (EUR 2,128 (equal to PPP\$ 2,671) for full professors and EUR 1,115 EUR (or PPP\$ 1,394) for assistant. These data position Slovenian salaries somewhere in the middle of the European countries (Altbach et al. 2012). Salaries tend to be highly taxed, but social welfare arrangements ensure that expenses such as health care, retirement funds, schooling for children and paid vacations are provided by the state. The above data show also a high disparity between non-ranked and ranked academic staff, where full professors' salaries are about three times higher than those of assistants and young researchers at the start of their academic career.

The salary conditions at public universities differ from those at private universities and colleges where remuneration scheme is less closely regulated, but there is also less job security, which makes such employment less attractive than having a position at a public institution. In addition, private institutions, to a large extent, offer part-time employment and contractual work. We do not have, however, any data on salaries from these institutions.

All in all, academic staff at public higher education institutions enjoys a high level of social security support and fairly satisfactory working conditions. This is shown also in the EUROAC survey: 55 percent of all full professors and 42.5 percent of associate professors report that they are very satisfied or satisfied with their employment. The share is lower among assistant professors (36.1 percent) and even lower among assistants and young researchers (27.1 percent) (Klemenčič et al. 2014). Furthermore, the majority of academics have not considered changing employment, but

those that have considered it have mostly considered transitioning to a non-academic position or to a higher education institution abroad (Klemenčič et al. 2014). However, in the recent period, there is also a growing number of those who teach part-time or on a contractual basis (about 20 percent) and do not enjoy the same job security and civil servant benefits as ranked academic staff (SURS 2013). These staff members statistically lower the proportion of inbred academics in Slovenian universities.

Also relevant to a discussion of inbreeding is the fact that the Slovenian academic job market is almost entirely closed to international academics. There are several reasons for this, revolving mostly around the fact that Slovenia is neither a notable study destination for foreign students nor does it practice much in the way of internationalizing the education on offer in the country (Klemenčič and Flander 2013). The Higher Education Act of the Republic of Slovenia, Article 8, specifies that the language of instruction at higher education institutions in Slovenia is Slovenian (a language spoken by a bit more than two million people worldwide). The law allows for a few exceptions to this rule. Instruction in foreign language is permitted in study programs of foreign languages. It is also allowed *in parts* of study programs, if these are conducted with the participation of a foreign lecturer (typically, a visiting lecturer through the Erasmus scheme or a bilateral agreement), or if a large number of foreign students (in practice, most often Erasmus exchange students) are enrolled. Institutions may offer study programs in foreign languages if the same study program is simultaneously offered also in Slovenian. Given budgetary constraints, such simultaneous offer of the same programs is very rare (Klemenčič and Flander 2013).

Consequently, among Slovenian institutions the demand for employing foreign lecturers is almost nonexistent.

Short-term visiting lecturers are, at present, a much more feasible and also much likelier way of involving foreign academics in teaching, and such examples are more and more frequent. The Higher Education Act of the Republic of Slovenia, Article 62, stipulates that higher education institutions may, for a limited period of time, invite a visiting lecturer to conduct part of a study program, regardless of the conditions stipulated regarding promotions, which make appointment to an academic rank a necessary condition for teaching at a Slovenian higher education institution – provided that the course leader holds an academic appointment at that institution. Only the “private” University of Nova Gorica has in its statutes a provision for hiring adjunct academic staff who can also be from abroad but “for conducting parts of a course,” only (Statutes of University of Nova Gorica, Article 76).

The Employment Relationships Acts (for the public sector and for the area of education) are the second body of legislation influencing academic employment. One of the key conditions is that details about all job vacancies at higher education institutions are by law required to be made available externally, more specifically in the database of the Employment Service of Slovenia,<sup>4</sup> on the hiring institutions’ webpages, and in daily local or national newspapers. Advertising internationally, however, occurs only extremely rarely. For example, data from The Researchers Report on Slovenia by Deloitte (2012, 3) shows that in 2011, there were only 5 researcher posts advertised through the EURAXESS Jobs portal<sup>5</sup> – a notably small number when compared to the

EU average of 24. It is also not a widespread practice to advertise academic job openings through international academic job-search webpages, academic or professional journals or academic association mailing lists. The key reason for this is that academics in Slovenia are expected to be able to teach using the Slovenian language, which significantly restricts the pool of potential candidates for academic vacancies. Hence, the number of foreign citizens employed at higher education institutions is still highly limited (in 2008, 2.7 percent of all higher education staff were foreign citizens; the majority employed as lecturers in language departments) (Kolar and Komljenovič 2011, 3).

### **Academic Career Path: Hiring and Promotion**

There is no one single path of recruitment into an academic career in Slovenia. The most expected and desired path is that professors identify capable students during their undergraduate studies. Professors then encourage these students to continue on to graduate study. It depends a great deal on the position of the mentor within the institutional hierarchy and his/her informal influence and power whether the student will eventually make it into academic career at the home institution. Powerful mentors have more leverage to claim instructional needs and know how to negotiate new position openings. They also know how to prepare their students for academic careers in terms of “promotion points,” which they will eventually need to secure an academic appointment. Such conditions (i.e., the importance of mentors for initial talent identification and early career development) are naturally conducive to inbreeding.

However, in the hiring and appointment processes for ranked academic positions [*visokošolski učitelji*], i.e. assistant professor or higher, the influence of mentors diminishes. Here, the practice is that deans appoint the search and appointment committee following a fairly open and transparent process. However, informally, the expectations and the pressures from colleagues and others to hire internal candidates is inevitably strong and cannot always be resisted. Again, those that have been trained at the hiring institution under the mentorship of a well-informed and supportive mentor will be at an advantage, since the mentor will, in the course of the years of academic training and during the time spent in junior positions, prepare his or her protégés for appointment to rank. The impact of having sufficient information and preparation to face a fairly complex set of appointment requirements should not be underestimated. Also not to be underestimated is the importance of close social ties in Slovenia's fairly small, tightly knit academic communities.

The EUROAC data show more inbreeding in the STEM disciplines (Klemenčič et al. 2014). Given the particular work arrangements in laboratories and clinical settings, we can assume that these contexts are more conducive to the formation of mentor-protégé relationships, which lead to preferential treatment in hiring of those from the home research team or lab group. The STEM disciplines traditionally receive the most money for research and enjoy the highest proportion of young researchers' positions; therefore, these conditions contribute to the creation of personal networks and hiring "by acquaintance."

The development of mentor-supervisee ties depends on the particular path taken by each individual into the academic career. There are four distinct paths. After graduation, the mentor helps the student explore employment opportunities to stay at the same faculty, while pursuing postgraduate studies as a graduate student. From this arrangement stem the first two paths to the academic career. One comes through employment as a “young researcher” while pursuing a PhD and the second is through employment as an “assistant,” which is a non-ladder appointment.

First, positions for young researchers have existed since the 1980s as a particular scheme of government financing of postgraduate study and research training. At present, this scheme is administered through the Slovenian Research Agency (ARRS). It is potential mentors who, together with their home institutions, apply to the Agency for funding of a “young researcher” position. Those that are successful are then allocated funds to hire young researchers for a fixed term, up to a maximum of three and a half years for a PhD program.<sup>6</sup> The mentors select postgraduate students who wish to become young researchers, and these can be from any institution. The Slovenian Research Agency imposes only two eligibility conditions on student candidates: that their average grade for all examinations and course work at the graduate level is at least 8 (out of 10), and that they fulfill the conditions for enrollment in postgraduate studies for a PhD. The selection of young researchers at the institution must be conducted by the host institution following an open call and in accordance with the Agency’s Guidelines on funding, evaluating and monitoring research activity.<sup>7</sup> Hence, the rules

(at least formally) obstruct academic inbreeding, even though they do not necessarily prevent it.

A young researcher is not required to do assistant work (i.e., teaching), but rather research work: s/he is paid to work on the PhD thesis, participate in the mentor's research group, and sometimes does a bit of teaching (maximum 3 hours weekly, whereas for a professor the norm is 6 to 8 hours and for assistants 10 hours and more). Mentors might engage young researchers in other work—for example, lab work or sometimes research administration—but this is still the most comfortable path to enter an academic career. This path was strengthened in the last decades, but the current austerity measures have brought severe restrictions; in some disciplines (e.g., humanities) this option may even have become even marginal.

The second path to an academic career is through employment as an assistant. Assistants belong to the category of non-ranked higher education staff (together with language preceptors, librarians, sports and special skills teachers, etc.). The conditions to be elected to the role of assistant are to have a university degree with high accomplishment (a master's, PhD and/or or specialization), and show capacity for teaching, research and/or artwork (as relevant). Unlike young researchers who can devote substantial amounts of time to working on their thesis project, assistants have to work 10 to 14 hours or more (up to 18 hours teaching, working in labs, examining students, etc. In other words, assistants are hired on a fixed-term contract. It is especially common to see assistants hired into faculties that have high student enrollments, and thus high teaching needs, and insufficient funds for employing ranked academic staff.

The hourly teaching rate of assistants is significantly lower than that of ranked staff, which allows institutions to do more teaching with fewer staff. Whether assistants will eventually be hired as ranked academic staff depends on two factors: if they succeed in gaining appointment to the rank of assistant professor [docent] and if a position opens up for them. It is possible that assistants are promoted to rank, but remain employed as assistants if no positions open. Given that the professors typically choose the assistants amongst their own students, this arrangement is conducive to academic inbreeding.

The third path into an academic career is taken by PhD holders that have self-funded their PhD studies, most frequently while working full-time or part-time in another job outside academia (and perhaps even outside Slovenia). It can occasionally happen that when particular competences are needed for teaching and there are no immediate candidates apparent from within the faculty (or other faculties), such candidates might be recruited into a ranked position. Again, the standard procedure would be to publically advertise a position, but certain individuals may be encouraged to apply. Indeed the practice is that a particular academic 'finds' the most suitable candidate and this often implies encouraging one's own former students to apply.

The fourth and last path into an academic career concerns professionals not working in higher education institutions and not necessarily holding a doctorate. Individuals (with a PhD or without, if the teaching to be undertaken is related to specific professional competences) working in companies or government institutions are initially invited to help teach in particular course, on a contractual basis. From this arrangement a part-time, fixed-term employment can emerge to teach one course (which

often corresponds to 25 - 33 percent employment). It is possible that such an individual eventually progresses into full-time employment.

These four career paths have not changed much over the years, but the circumstances within institutions have changed significantly. There were periods (in the 1990s and the first half of 2000s) when there were many new open positions for young researchers and assistants. Nowadays, however—due to austerity measures—there is much less opportunity. Furthermore, criteria for first election to an academic title have become more stringent.

Processes of appointment to academic rank are managed at the faculty level, both for new elections to rank and for those internal candidates that are applying for appointment to a higher rank [*izvolitev v naziv*]. Faculties tend to observe the appointment criteria strictly and discourage candidates to apply for promotion if there are doubts that the application will be successful. These discussions tend to cause some tension between academics and deans and dean's offices [*dekanat*]. Candidates apply directly to the faculty. Faculty leadership appoints three members to the appointment committee, from which one is not employed at the same faculty and often also not at the same university. The problem is that, due to the small size of the country, in some cases it is impossible to find peers at other universities. Some disciplines and fields exist at one university only. Increasingly, foreign academics are invited to serve on the appointment committees. Having foreign academics as members of appointment committee reflects changes in the academic culture, also poses a significant challenge in

terms of translating the entire opus of candidates' work into a foreign language, unless reviewers are sufficiently fluent in Slovenian.

The members of the academic committee then prepare a report to the faculty leadership following the guidelines on appointments to academic title approved by the university senate. The faculty senate obtains the three reports, and also checks all bibliographic and biographic data on the candidate. It appoints a chair of the faculty human resources committee to ensure that all criteria in the guidelines are observed. The entire appointment file then proceeds to the standing university appointments' commission [*habilitacijska komisija*]. This commission has thirteen members, who cover all disciplines, and one student representative; however among its members not all faculties are always represented. The commission discusses each candidate and votes on appointment. If the candidate obtains a majority of votes in favor, than the file goes back to the faculty senate, which has the final say, by which it is (in theory) also possible to reject the appointment, even if university commission approved it. The exception to this procedure is in appointments for full professors where the university senate, and not the faculty senate, has the final vote. This procedure is strict and also serves as a filter against any academic abuse. Especially over the last decade, commissions—which are respected bodies within universities—have emphasized international academic engagement of candidates among its criteria, and academic success at home is no longer a sufficient reason for promotion.

Before the 1990s, due to a particular funding scheme, the funding earmarked for employment of academic staff was specified at the Ministry for each faculty. That is,

since faculties were independent legal entities, Slovenian universities did not make these decisions on this budget item for their faculties. Deans could discuss budget items with the Ministry, but the ministry decided on the distribution on funds. Changes occurred after 1993 until an amended law in 1999 introduced lump sum funding, which was gradually implemented at the beginning of 2000s. At present, funding within the university is distributed by the rector and the management board according to mutually agreed criteria. So, in practical terms, this means that once the dean gets her/his share of the university cake, s/he then determines how much money s/he has available for teaching. From this sum s/he needs to cover the academic staff already employed and to ensure that all instructional needs are covered. This information determines whether and how much funding is available for opening new positions (or not). For any new position, approval from the rector is also needed: the competences of the rector have been strengthened in this regard in recent years. This change has reduced the power of the individual senior academic staff in terms of employing young academics.

Due to the recent austerity measures in the public sector, the funding for universities has decreased in the past year significantly, effectively placing a freeze on any new appointments except if funded through external (e.g., research project or market income) funding. Given the massive curricular reform in Slovenian universities following the Bologna recommendations, there was a certain reconsideration of instructional needs and some new positions (part-time or full-time) have emerged due to this reform. However, with the Bologna reforms changes also followed with respect to the criteria for hiring and promotion.

Specifically, the shift has been towards a more unambiguously meritocratic approach to hiring. While the criteria for academic appointments have always been transparent, they were in the past more ambiguous and open to interpretation. In the last decade, the criteria for measuring research productivity in particular (but also teaching) have become strictly defined and quantifiable through bibliometric indicators. Our observation is that the present academic culture reflects the firm intention of the deans to find the best—academically strongest—candidates. These intentions are motivated by the rise of the evaluative academic culture conducted under the emerging political rationality of New Public Management, as applied to higher education. New instruments of quality and evaluation have been imposed on institutions through the European Standards and Guidelines for Quality Assurance, adopted in the framework of the Bologna process (ENQA 2005).<sup>8</sup> These practices transcend approaches to hiring and promotion and, consequently, academics' research choices and career pathways.

The new quality assurance system imposes on institutions more stringent criteria for measuring academic research productivity and thus prompts institutions to be more mindful of these criteria in their academic human resources strategies, including academic appointments. Furthermore, the competition for public research funding has become fiercer and one crucial aspect of the selection criteria is candidates' research productivity. Benchmarking institutions on scientific publications, citations and international collaboration has become the norm. The bibliometric criteria are adopted by independent government bodies—most importantly the National Quality Assurance and Accreditation Agency (NAKVIS) and the Slovenian Research Agency (ARRS)—and

implemented through external quality assurance and reaccreditation procedures, but also through external research funding schemes.

The same criteria are promoted by the University of Ljubljana, especially, and the also Rectors' Conference, and directed towards the newly established universities and other higher education institutions. The intention of various institutional and policy actors appears to be to push scientific activity to a more developed stage. Consequently, the institutions are imposing the same criteria on their subunits and on individual academics; this has significantly changed the expectations and choices in academic hiring and appointments by the deans and their academic appointments committees. Usage of bibliometric indicators is not uncontroversial and certainly should be debated in light of the possible effects it has on academic research choices and the academic profession, in general.

All faculties must prepare annual business reports in the framework of these quality assurance systems. These reports include several items on scientific productivity and international cooperation in research: the number of scientific publications (from Web of Science data), the number of scientific publications with foreign partners (again, from Web of Science data), and the number of pure citations in the last five years. Slovenia's faculties and universities are benchmarked against each other on these indicators. In addition, Slovenian universities, as others around the globe, compete on the international ranking lists. These developments are translated into the criteria for new appointments and, especially, into criteria for promotions to a higher rank, where 'promotion points' are directly calculated from various bibliometric indicators. Such

specific and quantifiable criteria diminish the influence of personal ties on hiring and promotion; however, they do not completely eradicate such influence, nor can they eradicate academic inbreeding in Slovenia due to the structural conditions discussed earlier.

### **International Cooperation as a Buffer to Academic Inbreeding**

We have discussed above that Slovenia is a small, stratified higher education system with a rigid academic labor market, which is also fairly closed to hiring foreign academics from abroad. In such a system, one way to combat academic inbreeding is to send Slovenian students to conduct PhD studies abroad. This has always been a reality, but in the past there were insufficient support mechanisms for candidates. The Slovenian government established in 2002 a general scholarship scheme, within the framework of the Slovene Human Resources Development and Scholarship Fund,<sup>9</sup> to support the best students in the country to study at the best foreign universities. The requirement is that these students must return to the country and be employed in Slovenia for at least as many years they have received scholarship support. If they do not comply with this requirement they are legally obliged to pay back the money. In 2012, EUR 8.5 million was granted for funding different forms of student mobility; most of this was earmarked for scholarships for Slovenian students to study in undergraduate and graduate programs abroad, although some of it was also to be used to attract postdoctoral researchers from the Western Balkan region (Slovene Fund 2013).

While some of these students indeed returned and became employed at Slovenian universities, this certainly has not been a major trend. There are several explanations for this. In the recent years, there have been no new faculty openings in Slovenian universities due to the financial crisis. Perhaps a more important explanation lies in the social networks and the mentor-supervisee relationships discussed earlier, which still tend to favor internal candidates. Those trained abroad might not have sufficient information about all of the requirements of the appointment procedure and thus are less prepared to meet them. Appointment criteria include both research and teaching. Students studying abroad might not be aware of the specificities of the requirements or be unable to fulfill them in PhD programs that operate differently than the typical arrangements in Slovenia. The public perception of hiring at Slovenian public institutions still is that they seek to appoint the “very best internal candidates,” who of course fulfill all the specificities of the appointment criteria.

This brings us to the final question of what can be done to mitigate the most frequently observed consequences of academic inbreeding: lower scientific productivity and academic stagnation due to limited connectedness and information exchange with colleagues from outside own institutions. For Slovenia, the answer lies in short-term international mobility as part of internationalization strategies.

Internationalization in general has been emphasized as a key policy objective in the nation’s higher education strategies (Kolar and Komljenovič 2011); to make progress toward this objective, academic mobility is highlighted as an important instrument. Academic mobility also features in institutional strategies: both in terms of teaching

mobility schemes and through international research cooperation (Klemenčič and Flander 2013). There are several schemes to support outward mobility, however, typically these are not sufficient for longer-term mobility. Mobility grants, such as ERASMUS, administered by the Centre of the Republic of Slovenia for Mobility and European Educational and Training programs (CMEPIUS), are typically sufficient only for short-term mobility for teaching (on average, one week for university teachers). Longer-term mobility is possible through research grants; however, these are portable to other EU countries only if a short-term stay in another EU country is part of a research project.

Short-term mobility has also been incorporated into promotion criteria. Already in the 1990s, the University of Ljubljana implemented a rule that promotion to the title of professor title is not possible if the candidate has not worked for at least three months at a foreign university. This principle was also adopted by other universities. Recently, this rule has been extended to consideration of promotions to the title of associate professor (University of Ljubljana 2011). Both conditions have been inserted into the national guidelines on minimal criteria for academic appointments issued by the National Quality Assurance and Accreditation Agency (NAKVIS 2010). This condition does not tackle academic inbreeding directly, but it tackles it in a specific way in which it is perceived in Slovenia. Essentially, it tries to buffer the assumed negative effects of academic immobility, such as “more inward oriented information exchange and lower scientific productivity” (Horta 2013, 487), by incentivizing academics to participate in shorter or longer term mobility while employed at their institution.

When it comes to appointments to academic rank, all of the universities follow the basic requirements for appointment developed by the National Quality Assurance and Accreditation Agency (NAKVIS 2010). These basic requirements include knowledge of at least one widely spoken foreign language. For appointment to full and associate professor it is also required that the candidate have conducted research, teaching, or artistic work at a foreign university or research institute for a minimum of 3 months (at least 30 days without interruption) after being awarded a PhD. At the level of assistant professor, a less specific requirement of active participation at the international level is stipulated (usually proved by attending conferences abroad or by activities within EU projects, etc.). These criteria have been adopted and extended by the institutions and, in recent years, the proportion of staff that complies with this criterion is markedly increasing.

At the University of Ljubljana (2011), candidates for promotion need to demonstrate various aspects of “international impact.” One aspect includes course leadership in international study programs, or teaching experience at a foreign university. Furthermore, in terms of demonstrating teaching capacity, this can also be done through thesis supervision (mentorship) of exchange students. No other specific aspects of working with incoming students are mentioned. In the scoring system for evaluation of candidates for appointment, the following international activities in teaching count towards appointment to an academic rank: participation in international projects for curriculum development, development of study methods, etc.; confirmed pedagogic work at a foreign university; organization of summer schools, seminars,

competitions with mostly international participants; and participation in organized pedagogic training (at the level of the university or internationally).

The University of Maribor (2012) does not add any specific criteria regarding international teaching. As mentioned earlier, university statutes stipulate that working with international students is considered one of the regular work obligations of academics. However, in the scoring system for the evaluation of candidates for appointment, it is stated that lectures at a foreign university are valued differently, depending on the number of hours taught. Also, lectures for incoming students at the University of Maribor are also counted.

The University of Primorska (2013) has the same provisions as the University of Ljubljana when it comes to demonstrating teaching competences or international impact. For promotion to the rank of associate professor, but not for full professor, the candidate also needs to demonstrate international engagement (e.g., completed international or bilateral projects, research or teaching at foreign institution, etc.). The guidelines specify that shorter stays at foreign institutions score proportionally less, but can be added up to a maximum score for this category.

The University of Nova Gorica (2013) added to the basic requirements several criteria on international engagement, such as: for assistant professors, it requires postdoctoral training abroad or study abroad, and for associate and full professors it requires cooperation with foreign institutions and groups. It also enables appointment of adjunct professors, for which teaching at a foreign university can serve as an example of pedagogic work.

In short, the expectation is that short-term mobility will help academics to remain connected with the international academic community and thus continue to progress academically. In other words, short-term mobility is a buffer for the potential consequences of academic inbreeding, even if it is not spelled out like this in national policies and regulations. The question of whether this approach works remains open. We will discuss the consequences of inbreeding in the next section.

### **Consequences of Inbreeding**

Despite a fairly high degree of academic inbreeding, especially at the two largest and oldest Slovenian universities, this does not appear to have the detrimental implications for academics' research productivity as expected in the literature (Horta 2013). In the regression analysis of EUROAC data on the inbreeding qualifier, we have found no statistically significant differences between inbred and non-inbred academic staff when it came to feelings of belonging to the faculty or university, or favoring teaching over research (Klemenčič et al. 2014), which are some of the key distinctions reported in other studies on academic inbreeding (Horta 2013; Horta et al. 2010).

When asked to describe their research work in the past or current academic year, slightly fewer inbred academic staff (35.6 percent) report working alone on a research project than non-inbred academic staff (37.2 percent) (Klemenčič et al. 2014). But when asked whether they collaborate with colleagues at other higher education institutions in Slovenia, surprisingly more—but not many more—inbreds responded affirmatively (78.5 percent, as opposed to 74 percent of non-inbreds). Similarly, more inbred than non-inbred academics report collaborating with colleagues abroad. One of the measures of

internationalization was whether academics have lectured at home in a foreign language or lectured abroad, and on both questions inbred academic staff reported more of such activity than non-inbred academics. For example, 48.5 percent of inbred academics report having lectured abroad in the last three years as opposed to 41.5 percent of non-inbred academics.

Similar findings are seen in success rates for acquiring international research project funding. More inbred than non-inbred academics report participating in projects at home and abroad. The only slight exception here relates to serving as principal investigators in research projects funded from national sources—16.4 percent of non-inbred academics indicate they have been principal investigators in these contexts, as opposed to 15.0 percent of inbred academics). Inbred academics also appear to be more productive in terms of research, judging from self-reported data on publishing books and articles, editing or preparing scientific reports, with the only exception being editing international scientific books (which as indicated by 10.4 percent of non-inbreds, as opposed to 8.1 percent of inbred academics). This finding stays the same even if we filter the data according to academic rank.

What we deduce from these data is that international engagement and also research productivity are higher among inbred academics. This can be explained by the fact that the most prestigious faculties and departments still tend to train and later employ the best PhD students. In the EUROAC data, the highest percentage of inbred academics are at the University of Ljubljana, which at the same time qualifies as the top Slovenian university; and the most competitive one when it comes to acquiring research

funding. For example, in 2012, the University of Ljubljana was granted 65 percent of all grants (44 in total) from the Slovenian Research Agency for the purpose of establishing research programs (Slovenian Research Agency 2014). The case of Slovenia as a small and stratified higher education system clearly shows that not only are the structural conditions for academic inbreeding unique, but also that the consequences of inbreeding do not always confirm the propositions highlighted in the literature.

The most inbred university is also the most prestigious and overall produces the most and best research in Slovenia. Because it is the best university, it tends not to hire PhDs from other Slovenian universities; rather, it still hires the best PhDs who are typically trained precisely at this university. We do not wish to claim that the University of Ljubljana could not benefit from attracting excellent foreign researchers if this was more practical—it certainly would. It is overall the best Slovenian university, but in global terms, it is a relatively minor player.<sup>10</sup> But the fact of the matter is that academic inbreeding does not show detrimental consequences for this institution, when it comes to research productivity, despite what the literature suggests. There certainly are biases in hiring procedures and, as elsewhere, the influence of tight social networks and mentor-protégé relationships is present. But these practices are of equal (if not even lesser) significance to academic inbreeding as the structural conditions explained earlier.

Last but not least, we should add here that at the University of Ljubljana efforts are right now being made to simplify the process of appointments to academic rank of the candidates who (may) come from abroad. On the other hand, the university recently

got a grant for the promotion of internationalization; one of the actions is the employment of foreign experts for a longer period of time (at least one semester).<sup>11</sup>

## **Conclusion**

We posit that the present causes of academic inbreeding in Slovenia do not lie as much in social factors as they do in structural and legal aspects of the Slovenian higher education system. As described in the introduction, personal ties up to nepotistic practices were undoubtedly common characteristics of all social institutions, including academia, before and after the political changes begun in 1990. We do not consider academic inbreeding to be a part of Slovenian academic culture in the sense that this culture would blindly favor personal ties over merit, or hold a conviction that home-bred academics possess certain (necessary or desirable) qualities which those coming from outside do not have. However, we observe that the leverage held by individuals to influence academic hiring and promotions has been significantly curbed starting from 1990s on. Over time both the criteria for hiring and academic appointments, as well as the associated processes have become more open and transparent and more meritocratic; however, structural conditions, such as the number of universities, the vertical differentiation of universities and the relatively closed nature of the labor market for foreign academics, have largely remained the same or at least not changed significantly.

On the system level, we see some phasing out of academic inbreeding. This has been provoked mostly by the emergence of new institutions and reinforced by the culture of measuring research excellence. The government measures specified in the Research and Innovation Strategy of Slovenia 2011-2020 (Kolar and Komljenovič 2011) specifically address scientific excellence as well as researchers' mobility, training and career development. The objective stated in the Strategy is also to strengthen the qualifications of the academic and research personnel, and ensure effective inter-institutional and interstate mobility for researchers. Given the stringent policy on language of instruction, employing foreign researchers might come ahead of employing foreign academics for teaching. Sending students abroad to do PhDs with the intention that they will return to academic positions in Slovenia is much discussed and the government has set up a significant scholarship fund for study abroad (Slovene Fund 2013). However, several conditions must be met to ensure their actual return. Availability of postdoctoral positions is one and these are not widespread. The popular perception regarding job openings for ranked positions is that these still tend to be reserved for internal candidates. The conditions of academic work, especially in terms of time and resources available for research, do not necessarily make Slovenian universities highly attractive. For all these reasons, candidates who have completed their PhD abroad are more susceptible to brain drain.

Given the small size of the Slovenian higher education system and the structural limitations to prevent academic inbreeding, and in view of short-term mobility as a factor in the academic promotions, it makes sense, then, to discuss several different

categories of academics in Slovenia – using Horta’s (2013) concepts: non-inbreds, pure inbreds, intra-university inbreds, and mobile (pure or intra-university). *Non-inbreds* are academics that are working in a faculty different from the one where they obtained their degree. *Pure inbreds* are those who have obtained degrees at all levels within same institution, i.e. faculty or school. They have also not been engaged abroad at other universities for notable periods of time. This category of academics is increasingly small in Slovenia and is phasing out with the retirement of older professors and the conditions of new appointments. *Intra-university inbreds* are a category of academics that makes sense in systems where universities tended to be highly decentralized. Until the mid-1990s, Slovenia’s two universities fit into this category. They acted as networks of legally and financially independent faculties. Moving between faculties within the same university meant changing professional context and social networks almost as if moving between two different universities. Most senior academics in Slovenia have spent their early academic career in this kind of fragmented university. Even at present, for a better understanding of academic inbreeding, it is relevant to discuss the extent to which, in practice, faculties may or may not be integrated within the same university in practice, and how interconnected the various academic communities are. Finally, *mobile (pure or intra-university) inbreds* are working at the same faculty (or within the same university) where granted the PhD degree, but have spent significant amounts of time working at foreign institutions. In Slovenia, mobile inbreds are becoming a dominant category: academics tend to spend some periods of time abroad, but usually not extensive amounts of time. Nevertheless, international cooperation through international research

projects and short-term mobility for teaching have presented a buffer for negative consequences of academic inbreeding, which in a small and stratified higher education system is structurally impossible to fully eradicate.

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<sup>1</sup> The more complete name for the EUROAC study is "The Academic Profession in Europe: Responses to Societal Challenges." This was a collaborative research project within the EuroHESC Program, conducted by INCHER Kassel and partner institutions from 2009 to 2012.

<sup>2</sup> Those holding only a master's degree cannot be employed as ranked professors, i.e. assistant professors and higher ranks [*visokošolski učitelji*], but only as assistants who have to obtain a PhD in due time otherwise they lose employment.

<sup>3</sup> PPP conversion factor to market exchange ratio for 2012 (0.8 for Slovenia)

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<sup>4</sup> Available at <http://english.ess.gov.si/>

<sup>5</sup> The EURAXESS - Researchers in Motion portal is a joint initiative of the European Commission and the countries participating in the European Union's Framework Program for Research. The portal provides access to a complete range of information and support services for European and non-European researchers wishing to pursue research careers in Europe. Available at <http://ec.europa.eu/euraxess/index.cfm/general/about>

<sup>6</sup> Available at <http://www.arrs.gov.si/en/mr/predstavitev.asp>

<sup>7</sup> Available at <http://www.arrs.gov.si/sl/akti/prav-sof-ocen-sprem-razisk-dej-jun-12.asp>

<sup>8</sup> Available at [http://www.enqa.eu/pubs\\_esg.lasso](http://www.enqa.eu/pubs_esg.lasso)

<sup>9</sup> Available at <http://www.sklad-kadri.si/en/>

<sup>10</sup> Webometrics performed by the Cybermetrics lab (Spanish National Research Council) ranks University of Ljubljana 192 in global ranks, University of Maribor 431, University of Primorska 2375 and University of Nova Gorica 3065. Available at <http://www.webometrics.info/en/Europe/Slovenia?sort=asc&order=World%20Rank>

<sup>11</sup> See <http://www.uni-lj.si/aktualno/novice/2014022813271069/>