

Doctors and postdocs in political science in Switzerland

A study conducted by the Swiss Political Science Association

Report by Quentin Borgeat, Jasmine Lorenzini and Pascal Sciarini

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Executive summary

This report shows the results of a survey conducted in spring 2019 among all people who received a PhD in political science from a Swiss university during the last eleven years (2008 to 2018) and among postdocs working in a Swiss university in June 2019. Thus, this survey sheds light on the experiences and career paths of both *postdocs* and *doctors in political science who left academia*. Moreover, it compares the results regarding postdocs with a similar study carried out in 2012.

Between 2008 and 2018, 496 persons have received a PhD in political science in Switzerland. Among the 574 persons included in the initial sample (the 496 doctors + 78 postdocs currently working in a Swiss university but who got their PhD abroad), we were able to contact 521 persons. Among them, 284 took the survey, which results in a 54.5% response rate, with some strong variation across universities.

According to our survey, more than a half of the doctors who graduated in political science in Switzerland between 2008 and 2018 still work in academia in 2019. However, our survey overestimates the share of persons still working in academia, due to the higher response rate among that population than among doctors who left academia. According to our estimation, the actual share of doctors still working in academia amounts to about 40%, which is still sizeable.

A fourth of doctors who graduated in Swiss universities between 2008 and 2018 and who still work in academia hold a *professorship* or similar, stable position. Among them, half work abroad, which suggests that Swiss doctors are competitive on the international job market. Professors overall tend to stress the difficulty of finding a stable position, but with variation across persons. They are more unanimous with respect to the importance of publications in top journals as a major requirement to get a professorship position. Interestingly, 43% of professors are women. This is not gender parity (yet), but comes close to it.

Doctors who specialized in public policy/administration and policy analysis are overrepresented among *doctors who left academia*, in comparison to their share in the initial sample. According to our survey, male doctors are proportionally more likely than female doctors to have left academia. Yet women who left academia did so earlier than men, i.e. after obtaining their PhD or after one postdoc position. Very few doctors remain unemployed after completing their PhD, and those who are currently employed outside academia report the transition was moderately difficult. However, the results to our survey suggest that the reasons for leaving academia relate more to a negative evaluation of the (prospect of an) academic career, than to a strong aspiration or calling for a non-academic career.

More than half of doctors who left academia say they did not receive any support during the transition. Men rate the transition as more difficult than women, although a larger share of women say they did not receive any support for the transition, especially from (people in) academia. Furthermore, a clear majority of doctors working outside academia say their job requires only a Master's degree, but women have a slightly more positive view on that than men. A gender pay gap appears with respect to the non-academic career, with women earning on average 20'000 CHF less a year than men.

Precarious working conditions still prevail for *post-doctoral researchers and teachers*. First, a majority of postdocs have short-term contracts of two years, at most. Second, less than 60 percent of the respondents have a full time or nearly full time employment (i.e. more than 80%). This is reflected in the mean income, which is 30'000 lower than among doctors working outside of academia. Third, almost half of respondents have had a fellowship as their first post-doctoral position or as their current post-doctoral position – a share that has substantially increased since 2012. This can be viewed as a sign that the SNSF is investing in young scholars, but this also contributes to precariousness.

On the more positive side, the gender gap among postdocs is shrinking in comparison to the 2012 survey. First, the share of men and women among postdocs is now more balanced. Second, women who work as post-doctoral researchers are now more likely than men to lead research projects, and less likely to be employees. Third, in comparison to the situation outside of academia, we observe more gender

equality when it comes to income and working time. By contrast, we observe some important differences when we compare the French-speaking and the German-speaking part of the country. There are comparatively more MA/OberassistentIn/Assistent professor positions in the German-speaking universities than in French-speaking universities. In addition, it is also more common that post-doctoral researchers obtain an MA/OberassistentIn position immediately after the PhD in German-speaking universities.

In light of these findings, the present study makes four recommendations:

- A) Open a debate about a sustainable approach for training in political science: How many PhD students can we train in political science? How many will find a job in academia? What are their career opportunities outside of academia? How can we support and facilitate the transition?
- B) Assess the skills associated with a PhD in political science in order to communicate about the competencies acquired during a training in political science.
- C) Develop PhD programs that enable to acquire qualifications valued on the non-academic labor market such as project management or team management; some existing measures used for gender equality could be used as models to develop such programs.
- D) Create more open-ended positions of different types – not only the classic professorship track (including assistant professor with tenure track), but also research and teaching open-ended positions, in line with the recommendations of the Swiss Academies (Hildebrand 2018).

Introduction¹

During the last decade, the number of PhDs delivered in Swiss universities and technical institutes increased by 34 percent. In 2005, 3100 persons received a PhD, in 2018 the number amounts to 4164 (source OFS²)³. These numbers highlight the vitality of Swiss universities and research institutions, but they also raise a number of challenges related to the working prospects of young doctors – in and outside of academia. In 2012, the Swiss Political Science Association (SPSA) set up a first survey to understand the experiences and career paths of postdocs working in political science departments (Lorenzini 2015). This study highlighted some of the difficulties faced by young scholars working in political science in Switzerland.

During the spring 2019, the Swiss Political Science Association conducted a new, broader survey extending the inquiry to all people who received a PhD in political science from a Swiss university during the last eleven years (2008 to 2018). This enables the SPSA to assess the situation of a variety of doctors: those who are now working outside academia, those still working in academia as postdocs (in Switzerland or abroad), and those who could get a stable professorship position (in Switzerland or abroad).

The goals of the present study are: a) to assess the situation of doctors in political science on the labor market, be they working in or outside academia; b) to understand what are the strengths and weaknesses of a PhD in political science; c) to develop ideas to improve the situation of young doctors in political science. Hence, the study asked the following questions: Which skills are valued on the labor market in and outside of academia? Or, in other words, what are the assets of a training in political science for a career in or outside of academia? What is a typical (if it exists) academic career in political science? And, importantly, what can be improved in the training and support offered to young doctors? While focusing on a specific scientific discipline, this report contributes to the broader discussion launched by the Swiss academies of sciences about the situation and future of doctors (see e.g. the report "Next generation", Hildbrand 2018).⁴

The current report is divided into four parts. In the first two parts, we present some information about the survey and survey respondents, and about the thesis experience. Part 3 focuses on political science doctors who left academia, and part 4 on postdocs still working in academia. Finally, part 5 provides insights into doctors holding a stable professorship. The conclusion summarizes the main results and formulates some recommendations.

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¹ We thank Adrien Petitpas, Steven Eichenberger and the members of the steering committee of the Swiss Political Science Association for their helpful comments on previous versions of this report. We also thank Alexandra Feddersen and Nadja Mosimann for their help at an early stage of the study, as well as the "Centre de Carrière" and the "Observatoire de la vie étudiante" of the University of Geneva for the information provided and the constructive feedback on the survey questionnaire.

² <https://www.bfs.admin.ch/bfs/en/home/statistics/education-science/diploma/tertiary-higher-institutions.html>

³ Furthermore, the federal administration notes that in "In 2017, there were 31,293 doctoral students at Switzerland's two federal technical universities, EPFL in Lausanne and ETHZ in Zurich. This record figure is 1,000 more than in 2016 and 10,000 more than 10 years ago." See <https://www.admin.ch/gov/fr/accueil/documentation/communiques.msg-id-70639.html>.

⁴ See also the "SNSF career tracker cohorts (CTC)" (<https://careertrackercohorts.ch/>) that aims at tracking the career paths of young researchers applying to a SNSF career funding scheme at the postdoctoral level, in order to monitor and evaluate those schemes.

Part I. The Survey

As a first step, we asked partners in Swiss universities to provide a list of all doctors who graduated in political science in Switzerland between 2008 and 2018. In a second step, based on the websites of the Swiss political science departments, we created a list of postdocs who obtained their PhD outside of Switzerland and who are currently working in a Swiss university. We then asked the departments and institutes of political science to validate and complement this list. Given that this second list does not include postdocs who obtained a PhD in Switzerland between 2008 and 2018, each doctor appears only once in our population (see Table 1).

Table 1. Population and response rate

University/Institute	Potential respondents (n)	Contacted persons (n)	Respondents (n)	Response rate (%)
Geneva	76	69	54	78.3
IDHEAP	19	19	14	73.7
Bern	55	52	37	71.2
Basel	18	13	8	61.5
Lausanne	70	64	38	59.4
St-Gallen	24	23	13	56.5
Luzern	18	18	10	55.6
Zurich	113	95	48	50.5
ETHZ	91	79	32	40.5
IHEID	90	89	30	33.7
Total	574	521	284	54.5

The first column of Table 1 shows for each university the number of potential respondents, i.e. of doctors who obtained a PhD from that university during the period of interest and/or who were working as postdoc there in Spring 2019 (N=574). The second column shows the number of persons for whom we could find a valid email address, and whom we contacted (N=521). We were thus able to contact nearly 90% of the identified population, with slight variations across universities and across gender (56% of the contacted persons are men, 44% women).

After completing the list of persons that form our population of potential respondents, we contacted all persons directly via email, except the doctors of the IHEID: The Institute could not share the list of doctors with us for reasons of data protection, but administered the survey on our behalf. To increase the response rate, we sent two reminders and we additionally sent several personal emails to people we knew to encourage them to participate. This enabled us to reach a response rate of 54.5%, with some strong variation across universities. For a first group of three universities (Geneva, IDHEAP, and Bern), the response rates exceed 70%. For five universities, the response rate varies between 50 and 62%. Lastly, there are two institutes with a lower response rate – the ETHZ (41%) and IHEID (34%). Not surprisingly, the lowest response rate concerns IHEID, where we did not have access to the names and email addresses and could only ask the institute to send out the invitation to take part – and the two reminders.

The response rate is slightly higher among women (56%) than among men (53%). As a result, there are 55% of men and 45% of women among survey respondents. Note further that the response rate is lower than in the 2012 survey (79%). However, that survey focused on the more homogeneous and arguably more motivated group of postdocs working in Switzerland. In the present study, the corresponding

response rate is 63%.⁵ According to our calculation, the response rate among Swiss doctors who left academia is far lower. It amounts to about 45%.

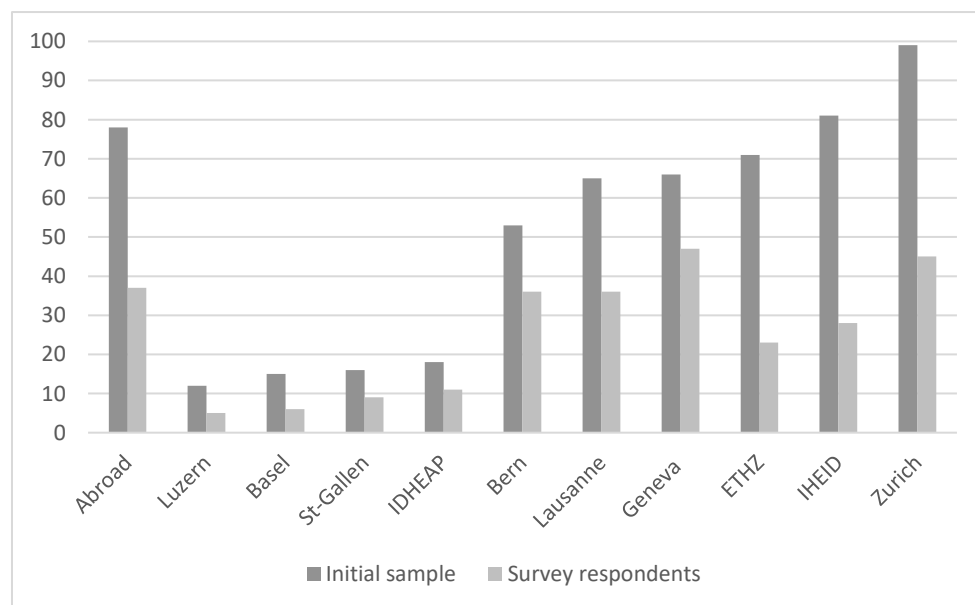
We shortened the questionnaire developed in 2012 to study the situation of postdocs and we further designed a questionnaire for doctors working outside of academia (see Appendix). This new questionnaire includes questions about the experience during the doctoral thesis, the transition to non-academic jobs, the reasons for leaving academia, and the evaluation of their current employment situation. Furthermore, we developed a very short questionnaire for doctors who have obtained a stable job in academia. The report presents the findings for these different groups of doctors in political science: doctors in political science who left academia (part III), postdocs (part IV), and doctors who hold a stable professorship (or similar) position (part V).

Figure 1 shows the number of persons who have received a PhD in political science in Swiss universities between 2008 and 2018 – in total (i.e. in the initial sample) and among respondents to the 2019 survey. During these eleven years, 496 persons have received a PhD in political science in Switzerland. Almost a hundred graduated from the University of Zurich and almost 80 did so at the ETHZ. The NCCR "Democracy" presumably contributed to this achievement. Further, 80 persons graduated at the IHEID, slightly more than 60 in both Geneva and Lausanne, and slightly more than 50 in Bern. Note further that 57% of doctors are men and 43% are women.

The distribution of doctors across universities is slightly different among survey respondents, as a result of differences in response rates. The University of Geneva shows the highest number of doctors who took the survey. The University of Zurich comes next, ahead of the universities of Bern and Lausanne.

Finally, Figure 1 also shows that our initial sample included 78 postdocs currently working in a Swiss university but who got their PhD abroad; a bit less than half of them (N=37) participated in the survey.

Figure 1: Number of doctors in political science across universities (2008-2018)



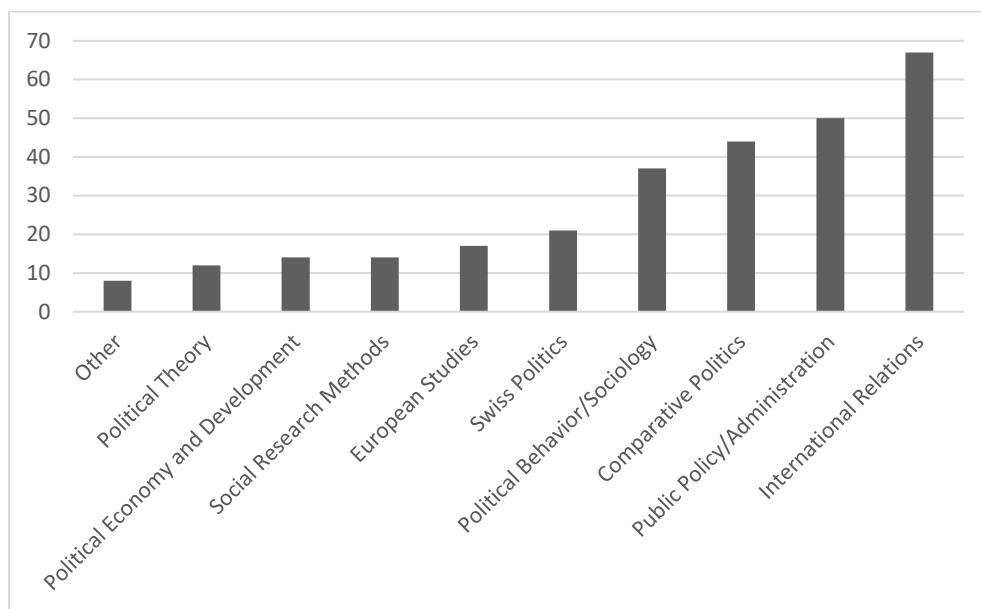
N=574 for the initial sample (dark grey bars); N=283⁶ among survey respondents (light grey bars)

⁵ The response rate is far higher among postdocs working in Switzerland and holding a PhD from a Swiss university (73%), than among postdocs working in Switzerland but holding a PhD from a non-Swiss university (47%).

⁶ One person did not answer the question regarding the institution in which the dissertation was completed.

Figure 2 shows the field in which doctors in political science who participated in our survey specialized during the PhD. Doctors who specialized in international relations (IR) form the largest group: They account for 24% of the sample. Public policy/public administration comes next (18%), ahead of Comparative politics (15%), and Political behavior/sociology (13%).

Figure 2: Field of specialization in political science among doctors who participated in the survey



N=284

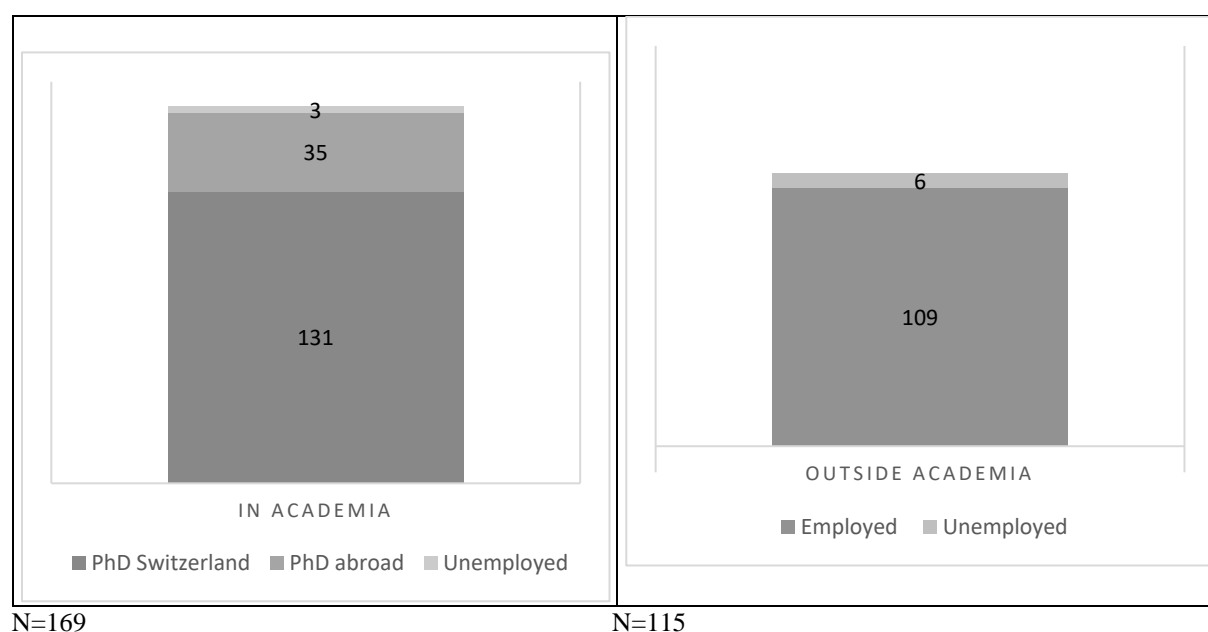
Finally, while the number of PhDs per year fluctuates, there is overall an upward trend. During the last three years, the number of PhDs per year has exceeded 25, against less than twenty during the initial years of the period under considerations.

Part II. Survey respondents and thesis experience

Figure 3 shows that among the 284 survey respondents, there are 166 doctors who still work in academia (+ 3 unemployed persons who want to work in academia) and 109 doctors who work outside of academia (+ 6 unemployed persons). Putting aside postdocs working in a Swiss university but holding a PhD from a non-Swiss university (n=35), responses to our survey suggest that more than half of doctors (54%, 134 out of 246) who graduated in political science in Switzerland between 2008 and 2018 are still in academia. This share slightly decreases with the academic age, i.e. with the time elapsed since the end of the PhD.⁷ It amounts to 59% among doctors who got their PhD in the last two years, to 51% among doctors who got it for three to five years, and to 48% among those who got it more than five years ago.

However, our survey overestimates the share of doctors who are still working in academia, owing to the higher response rate among them than among doctors who left academia. According to our estimation, the actual share of persons who got a PhD in political science in Switzerland and who are still working in academia amounts to about 40%, which is still sizeable.⁸

Figure 3: Area of activity – In academia or outside academia



Among the 166 respondents who currently work in academia, there are three different job profiles. As Figure 4 shows, the overwhelming majority (72%, n=120) holds a postdoc (in teaching and/or research) or lecturer position with a fixed-term contract. Postdocs were the focus of the 2012 survey and will be analyzed in part IV of the present report. A second, much smaller group (n=36) comprises academics

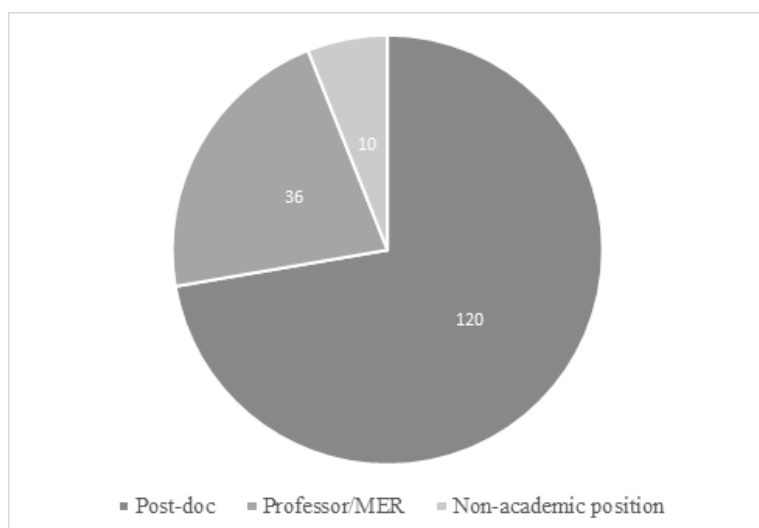
⁷ In our survey, 24% of respondents got their PhD less than two years ago, 34% got it 3 to 5 years ago, and 43% more than five years ago.

⁸ To estimate this share, we combine information from the response rate and from the various groups of survey respondents. According to our initial inventory, there are 113 persons who graduated in Switzerland and who are still working as postdocs in a Swiss university. To that group we must add Swiss doctors who, according to our survey, are working as postdocs abroad, Swiss doctors who got a stable professorship position in Switzerland or abroad, and Swiss doctors still working in academia but on a non-academic position (see figure 4). We are thus left with 182 doctors still working in academia, out of the 496 doctors who graduated between 2008 and 2018, which results in a 37% share. Yet the actual share is necessarily higher, since the number of Swiss doctors working abroad, the number of Swiss doctors who got a stable professorship position or similar, and the number of Swiss doctors who work in academia on a non-academic job are higher in reality than in our survey.

with a stable professorship (i.e., associate professor or assistant professor with tenure track) or similar (e.g. "maître d'enseignement et de recherche" (MER)). We will consider that group separately in part V. For both postdocs and professors, note that our survey also includes people who got their PhD in Switzerland but are now employed outside Switzerland.

Finally, the third, smallest group comprises doctors who work in the academic sphere in Switzerland but have another job than the standard teaching or research positions, e.g. they work as teaching councilors, research councilors or research coordinators. This third group comes close to the idea of alternative career paths for doctors in academia – as advocated by the Swiss Academies of Sciences (Hildbrand 2018). However, there are few such jobs among our survey respondents (n=10). These persons appear in Figure 4, since they work in the academic sphere, but they do not have an academic job. Therefore, while in this part of the report we include them in the group of doctors working in academia, we will include them in the group of doctors working "outside of academia" in part III.

Figure 4: Type of job in the academic sphere



N=166

Questions pertaining to the thesis and evaluation of the doctoral experience were asked to all respondents. Therefore, we can compare doctors who still work in academia to doctors who left academia. Table 2 helps to learn more about the sociodemographic profiles of both groups. In the last column, we also report the results from the 2012 survey focusing on postdocs, which can be compared to our "working in academia" category.⁹

First, in the 2019 survey the share of men is higher than the share of women (55% against 45%). Yet this is mainly due to the group of doctors working outside of academia (58% of men, 42% of women). Among doctors working in academia, the difference between the share of men and the share of women is smaller (52% against 48%), and it is also smaller than in the 2012 survey (59% against 41%). Focusing on doctors who got their PhD from a Swiss university, 58% of women are still in academia (64 women out of 111, results not shown in table 2). The corresponding share is lower (50%) among men (67 men out of 134).

⁹ Remember, however, that the "working in academia" category of the 2019 survey includes 36 professors or MERs, and 10 persons with a non-academic position.

Second, doctors working in academia are younger than those outside of academia. Yet doctors working in academia are slightly older in the 2019 than in the 2012 survey (see the 31-35 and 36-40 years categories). Lastly, doctors working in academia are less likely to have children (47%, against 57% in the other group), but they are more likely to have children than was the case in the 2012 survey (39%).

Table 2: Socio-demographic profiles of doctors working in academia and outside academia, in %

		Working outside academia	Working in academia	2012 survey
Sex	Male	58.3	52.4	59.4
	Female	41.7	47.6	40.6
	Total	100	100	100
	N	115	168	73
Age	26-30	2.6	7.7	7.6
	31-35	26.1	44.4	51.5
	36-40	38.3	34.3	28.8
	>40	33.0	13.6	12.1
	Total	100	100	100
	N	115	169	73
Family situation	Have children	57.0	47.0	39.0
	N	114	166	73

Note: When comparing the distribution across groups, adjusted residuals can be used to identify cells that have an unexpectedly high or low number of cases. This high or low number of cases points to a different distribution in one of the groups and, therefore, at statistically significant differences across the groups that are being compared. Adjusted residuals that are bigger or smaller than 1.96 indicate cells with fewer or more cases than expected. In table 2 there are no significant differences.

Table 3 presents the thesis format. The share of monography-based PhDs is far higher than the share of article-based PhDs, especially among doctors who left academia. Among doctors still working in academia, the share of article-based PhDs is slightly higher than in the 2012 survey.

Table 3. Thesis format of doctors working in academia and outside academia, in %

	Working outside academia	Working in academia	2012 survey
Monography	84.7	78.3	86.4
Article based	15.3	21.7	13.6
Total	100	100	100
N	113	161	59

Note : Bold to highlight adjusted residuals above +/- 1.96

While the share of article-based PhDs does not vary with doctors' academic age, i.e., with the number of years elapsed since the PhD (results not shown), article-based PhDs are far more frequent in German-speaking than in French-speaking universities (table 4). In the German-speaking ones, 24% of doctors working outside of academia and up to 41% of those working in academia have done a paper-based dissertation, whereas the corresponding figures are only 4% and 6% for doctors from French-speaking universities. Note that the category "abroad" comprises persons who received their PhD in a Swiss university, but then moved abroad for a postdoc.

Table 4. Thesis format of doctors working outside academia and in academia, per academic age and region, in %

	Working outside of academia		Working in academia		
	German speaking	French speaking	German speaking	French speaking	Abroad
Monography	75.9	96.3	58.7	93.6	85.7
Article based	24.1	3.7	41.3	6.4	14.3
Total	100	100	100	100	100
N	58	54	63	63	35

Note : Bold to highlight adjusted residuals above +/- 1.96

In Table 5, we look at the employment situation during the thesis. Among respondents to our 2019 survey, the most common situation during the PhD is to work on a research project related to the thesis. This was the case for 33% of those who work outside of academia and 28% of those who work in academia. The second most common situation is to be hired for teaching or to have multiple contracts – at the same time or following one another. However, the only statistically significant differences between the two groups appear in the less common employment situation, such as having a job outside of academia (more common among those who are now working outside of academia) or being enrolled full time in a PhD program (more common among those still working in academia). The latter result must be related to the fact that there are few full time PhD programs in Switzerland. Accordingly, 75% of postdocs who participated in such programs did their PhD abroad.

In 2012, the employment situation of postdocs was different. It was slightly less common to work only on a research project relating to the thesis (20% of postdocs did so). Back then, the most common situation was a hybrid one: 27% of the postdocs combined different jobs during their PhD.

The funding sources reflect the employment situation discussed above. We see a difference in the share of multiple sources of financing, which is higher among doctors now working outside of academia than among doctors still in academia. Furthermore, the same statistically significant differences noted above appear, related to earning money with a non-academic jobs and through a doctoral program or a fellowship.

Next, two questions relate to the time dedicated to different tasks, starting with the number of hours spent on teaching. On average, PhD candidates taught 3 to 4 hours per week. The mean is 3.2 for those who work outside of academia and 3.7 for doctors still in academia, but the difference is not statistically significant.

Regarding the overall time structure, we see that doctoral candidates spent about half of their working time on their thesis. The percentage is slightly higher among those still in academia, who dedicated 57% percent of their time to their thesis, on average (52% if we exclude those who were enrolled in a PhD program). For those who work outside of academia the corresponding figure is 49%. However, the difference is not statistically significant. We also notice that doctors still working in academia dedicated a slightly higher share of their time to their doctoral research than in the 2012 survey.

Table 5. Situation of doctors during the PhD, in %

	Working outside academia	Working in academia	2012 survey
Employment situation during the PhD thesis			
Research project related to thesis	33.0	27.5	20.3
Teaching assistant	21.4	25.4	18.6
Multiple contracts (teaching, research, etc.)	21.4	14.1	27.1
Job outside of academia	9.7	1.4	1.7
Research project not related to thesis	7.8	8.4	8.5
Full time PhD program / graduate school	3.9	19.7	23.7
Other	2.9	3.5	.
Total	100	100	100
N	103	142	57
Financing of PhD thesis			
Multiple sources of finance	39.8	32.6	-
Research assistantship (thesis-related project)	18.5	18.4	-
Teaching assistantship	16.5	17	-
Employment outside academia	9.7	2.8	-
Research assistantship (project unrelated to thesis)	4.8	2.8	-
Fellowship	3.9	14.9	-
Other employment within academia	1.9	5.7	-
Other	4.8	5.7	-
Total	100	100	-
N	103	141	
Teaching hours per week			
1 hour	16.7	21.2	-
2 hours	29.2	36.4	-
3 hours	16.7	3	-
4 hours	20.8	27.3	-
6 hours	12.5	6.1	-
More than 6 hours	4.2	6.1	-
Total	100	100	-
Mean	3.2 hours	3.7 hours	-
N	24	33	
Time devoted			
Mean percentage of time dedicated to...			
Doctoral work	48.9	57.1	50.8
Research (not related to the dissertation)*	16.2	16.3	19.5
Teaching*	15.2	16.2	18.8
Nonacademic job	11.4	3.8	3
Service to the department and administrative tasks*	6.6	5.2	6.6
Other*	1.7	1.5	1.4
Total	100	100	100
N	114	160	59

Note : Bold to highlight adjusted residuals above +/- 1.96

In Table 6, we consider the training received during the doctoral research, in particular, taking part in a doctoral school or attending summer schools. We see that more than half of all 2019 respondents participated in a doctoral school, which is far higher than in the 2012 survey (39%). In 2019, the share of participants in a doctoral school is slightly higher among doctors still in academia than among those who work outside of academia, but the difference is not statistically significant. Most respondents of the 2019 survey retrospectively rate the doctoral school as useful or very useful.

The difference between doctors in and outside academia is even larger (and statistically significant) with respect to attendance to a Summer school (73% against 60%). Yet both groups evaluate their participation in these summer schools equally positively (90% and 97% say it was useful or very useful). Finally, we see that among doctors still in academia the degree of attendance to a Summer school is again higher than in the 2012 survey.

Table 6. Training during the PhD thesis, in %

		Working outside of academia	Working in academia	2012 survey
Doctoral school	Attendance	51.8	61.2	39.0
	N	112	160	59
Evaluation¹	Usefulness	74.1	84.7	-
	N	58	98	-
Summer school	Attendance	60.4	73.3	62.5
	N	111	161	56
Evaluation¹	Usefulness	89.5	96.6	-
	N	67	117	-

Note: Bold to highlight adjusted residuals above +/- 1.96

¹ This question was not asked in the 2012 survey.

In Table 7, we add more detailed information regarding differences across regions. First, among both doctors working in and outside of academia taking part in a doctoral school is far more common in the French-speaking (65 and 84%) than in the German-speaking region (40 and 59%). In the French-speaking region, a considerable effort was made to develop a doctoral school for PhD candidates (the so-called CUSO program), which accounts for those differences. Among doctors who are currently working in academia, there are also respondents who did their PhD abroad. For them, it was also far less common to attend a doctoral school (26%).

Second, the results regarding attendance to Summer schools show a different pattern: Among doctors working outside of academia, the share of respondents who attended a Summer school is significantly higher in the German-speaking (79%) than in the French-speaking region (40%). The corresponding difference is also large – but not statistically significant – for doctors working in academia.

Table 7: Training during the PhD, by region, in %

	Working outside of academia			Working in academia		
	German speaking	French speaking	Abroad	German speaking	French speaking	Abroad
Doctoral school						
Attendance	40.3	64.8	-	58.7	83.9	25.7
N	57	54	-	63	62	35
Usefulness	87.0	65.7	-	89.2	80.8	88.9
N	23	35	-	37	52	9
Summer school						
Attendance	78.9	39.6	-	88.9	71.0	50.0
N	57	53	-	63	62	36
Usefulness	91.1	85.7	-	96.4	97.7	94.4
N	45	21	-	55	44	18

Note : Bold to highlight adjusted residuals above +/- 1.96

In Table 8, we consider mobility during the PhD thesis. We first note an important difference between doctors who work outside of academia and those who have an academic job. While among the latter 58% spent one or more semesters abroad, only 50% of the former did so. Unfortunately, we cannot tell whether this is a cause or a consequence – that is whether people who did not pursue an academic job chose not to spend time abroad during the PhD thesis or whether their lack of mobility hindered their chances to find a postdoc position.

Half of academic stays were funded by national fellowship (56% for those working outside of academia and 46% for postdocs) and about half of these stays were conducted in European universities. However, a third or more also went to the U.S. or Canada. The duration of the stay varied between six months and a year. Interestingly, doctors who work outside of academia were less likely to stay abroad but when they did they stayed longer: 67% stayed for 7 to 12 months, against 44% for doctors still in academia; conversely, 52% of doctors in academia had a stay of six months or less, against 28% among those who left academia.

Table 8. Academic mobility during the PhD thesis, in %

	Working outside academia	Working in academia	2012 survey
Stay abroad during the PhD thesis	39.8	58.4	62.7
N	113	161	59
Funding scheme			
National fellowship (home country)	56.1	46.3	-
Multiple sources of finance	12.2	20.0	-
Home institution fellowship	9.8	16.2	-
Other fellowship	7.3	5.0	-
Own funding	2.4	6.3	-
Other	12.2	6.2	-
N	41	80	-
Stay country¹			
Europe	50.0	56.5	47.2
USA/Canada	38.6	34.8	44.4
Switzerland	2.3	6.5	5.6
Other	9.1	2.2	2.8
N	44	92	36
Stay length¹			
1-6 months	27.9	51.6	48.7
7-12 months	67.4	44.0	43.2
13-24 months	4.7	4.4	8.1
N	43	91	37

Note : Bold to highlight adjusted residuals above +/- 1.96

¹ Respondents could mention more than one stay abroad, here we present the findings for the first mentioned stay

Writing a PhD in political science: highlights

According to our survey, more than a half (55%) of the doctors who graduated in political science in Switzerland during the period 2008-2018 still work in academia in 2019. However, our survey overestimates this share, due to the higher response rate among doctors still working in academia, than among doctors who left academia. According to our estimation, the actual share of doctors still working in academia is lower than 55%. It amounts to about 40%. Furthermore, among survey respondents the share of doctors still working in academia decreases with the academic age, i.e. with the time elapsed since the end of the PhD (from 59% among doctors who have received their PhD during the last two years, to 48% among those who have received it more than five years ago).

In terms of gender representation, while the share of men is overall higher in our sample, this holds more so for doctors who left academia (58% of men against 42% of women), than for doctors still working in academia (52% of men against 48% of women). In line with this, among doctors who got their PhD in a Swiss university, men are proportionally more likely than women to have left academia (50% against 42%).

Furthermore, the representation of men and women among doctors still in academia is far more balanced in the 2019 survey than in the 2012 survey. Back then, 59% of postdocs answering to the survey were men. The difference between both surveys is especially noteworthy, since in the 2019 survey the group of doctors working in academia includes not only postdocs, but also professors (we will come back to this in parts IV and V below).

Only a minority of doctors (N=36) still working in academia hold stable, open-ended, jobs, i.e. hold a professorship or similar position. Adding the doctors who hold a stable, non-academic position in the academic sphere to the group of professors does not modify the picture, since the size of this additional group is very small (N=10).

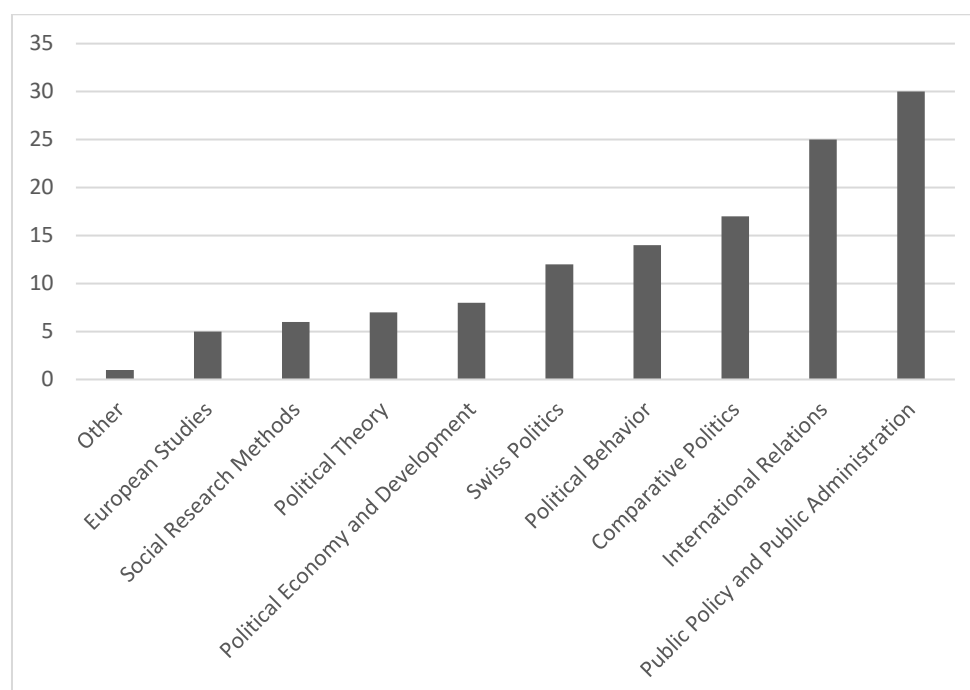
A large majority of dissertations are monographies, less than 20 percent are article-based theses. This share slightly increases over time and the article-based theses are more common in the German-speaking universities.

During the PhD, doctors have worked on research projects, contributed to teaching, participated in doctoral schools and summer schools, and about half worked abroad for a period of time. Doctors in political science are highly qualified, in the next section we will see what this leads to in terms of non-academic careers.

Part III. Political Science Doctors working outside of academia

In section III, we focus on doctors who are working outside of academia. This part of the study is new. It was not included in the 2012 survey, so we cannot offer any comparison over time. For starters, Figure 5 presents the field in which doctors who left academia specialized in their PhD. In contrast to Figure 2 above including all respondents, the largest category is that of doctors who specialized in the field of public policy/administration and policy analysis. This suggests that it is easier for doctors in this field to find a job outside of academia (e.g. in public administration). It is even possible that these persons already knew when they wrote their PhD that they would not remain in academia and hence specialized in a field where they knew their chances at finding a job would be high.

Figure 5: Field of specialization in political science among doctors who left academia



N=125¹⁰

Table 9 presents the early stages of the non-academic career, as well as the number of post-doctoral positions (if any) that the doctor had previously held. We see that an overwhelming majority of respondents who left academia did so right after having obtained their PhD. This holds especially true for women: 74% of women who left academia did so immediately after the PhD; the corresponding share is 63% among men.

¹⁰ The group of doctors working outside academia henceforth includes the 10 persons who actually work in academia, but on a non-academic position (e.g. as teaching councilor or research coordinator).

Table 9. Career start and number of post-doctoral positions, if any, in %

	Total	Male	Female	French-speaking	German-speaking
When did they leave academia					
Right after obtaining the PhD degree	67.7	63.0	74.4	72.3	64.4
After one or more post-doctoral positions	32.3	37.0	25.6	27.7	35.6
Total	100	100	100	100	100
N	93	54	39	47	45
Number of doc post-doc positions					
1	51.7	45.0	66.7	58.3	43.7
2	31.0	35.0	22.2	33.3	31.3
3	6.9	5.0	11.1	.	12.5
4 or more	10.3	15.0	.	8.3	12.5
Total	100	100	100	100	100
N	29	20	9	12	16

Note: Bold to highlight adjusted residuals above +/- 1.96

Table 10 further shows that the most important reason for leaving academia differs between men and women. For men, the lack of career perspectives is critical: 39% of male doctors declare having left for this reason, while only 13% of the women say so. Interestingly, for women the most frequently mentioned factor is "personal reasons" (20%). The precarious working conditions are roughly as frequently mentioned as a reason for leaving by men and women (about 20%), and in both groups this reason ranks second. Note also that this reason is more important for persons from German-speaking than from French-speaking universities.

Another significant difference between men and women relates to the insufficient support received to pursue an academic career. Only 2% of men say this is the most important reason for leaving academia, while up to 15% of women say so. This suggests that in spite of mentoring programs, women are less likely to be included in networks and encouraged to pursue an academic career.¹¹ Overall, we notice that the reasons for leaving academia relate more to a negative evaluation of the academic career than to a strong aspiration or calling for a non-academic career.

Table 10. Reasons to leave academia, in %

	Total	Male	Female	French-speaking	German-speaking
Most important reason to leave academia					
Lack of career perspectives in academia	27.7	38.9	12.5	27.7	28.3
Precarious working conditions in academia	19.2	20.4	17.5	12.8	23.9
Dream job in another sector	13.8	18.5	7.5	12.8	15.2
Personal reasons	12.8	7.4	20.0	14.9	10.9
Opportunity to work in another sector	8.5	7.4	10.0	14.9	2.2
Insufficient support to pursue an academic career	7.5	1.8	15.0	6.4	8.7
Difficulties related to international careers	1.1	.	2.5	2.1	.
Other	9.6	5.6	15.0	8.5	10.9
Total	100	100	100	100	100
N	94	54	40	47	46

Note: Bold to highlight adjusted residuals above +/- 1.96

¹¹ Two women explicitly mentioned sexism as one the most important reasons to leave academia.

As a complement of Table 10, Table 11 shows how respondents retrospectively evaluate their working environment during the thesis.

Table 11. Evaluation of working environment during the thesis, in %

	2012 survey	2019 survey	Male	Female	German speaking	French speaking
Friendly	92.7	88.2	86.1	91.5	88.3	87.9
Supportive	73.6	72.5	74.0	70.2	78.3	66.6
Competitive	46.0	63.3	60.3	68.1	70.0	55.9
Motivating	.	70.6	73.6	66.0	72.8	67.8
Depressing	.	23.5	18.1	31.9	18.6	28.8
Oppressive	.	16.8	15.3	19.1	11.9	22.0
N		119	72	47	59	59

Note : Bold to highlight adjusted residuals above +/- 1.96

Respondents were asked to assess the atmosphere in their department. The figures show the share of respondents who "agree" or "strongly agree".

The overall assessment of the atmosphere in doctors' former departments is positive. Almost 90% say it was friendly and 73% say it was supportive. For these positive elements, we observe no difference between men and women. However, as we turn to the less positive qualifying terms, we start to notice differences: 68% of women say the working environment was competitive, whereas only 60% of the men say so. Differences also appear for the "depressing" and – to a lesser extent – for the "oppressive" feelings, which are more frequently mentioned by women than by men. Yet none of these differences is statistically significant.

In Table 12, we consider the transition period – how difficult it was to enter a non-academic career and whether the doctors received support during this period. Political science doctors who are currently employed outside academia report the transition was moderately difficult (mean of 4 on the 0-10 scale). Women rate transition as less difficult than men (mean of 4.5, against 3.3). This might be linked to the timing of the career change: As we have seen above, women leave earlier – right after the PhD or after one post-doctoral position. The longer one stays in academia, the more difficult it presumably is to change career path – due to the high personal investment in the academic career – and to have one's skills recognized in another career track.

This interpretation is supported by the result (not shown in the table) that doctors who left academia right after the PhD say it was less difficult to find a job than doctors who left academia after one or more post-doctoral positions (mean of 3.7 and 4.6, respectively).

Finally, a bit more than half of respondents (51% for men and 60% for women) did not receive any support to find a job outside of academia. Among doctors who say they received support to find a job outside of academia, it is worth noting that only 8% of women but up to 24% of men say they received support from people in academia. This again suggests that women are more isolated than men in the academic world.

Table 12. Evaluation of the transition period

	Total	Male	Female	French-speaking	German-speaking
Difficulty to find a job outside of academia					
Mean	4.0	4.5	3.3	3.9	4.2
Std. Dev.	3.4	3.2	3.5	3.5	3.3
N	95	55	40	46	48
Support to find a job outside of academia (%)					
No	54.7	50.9	60.0	58.7	52.1
Yes, people in academia	16.8	23.6	7.5	17.4	16.7
Yes, personal networks	5.3	10.9	17.5	2.2	6.3
Yes, people who left academia	13.7	5.4	5.0	10.9	16.7
Yes, other	9.5	9.1	10.0	10.9	8.3
Total	100	100	100	100	100
N	95	55	40	46	48

Note : Bold to highlight adjusted residuals above +/- 1.96
Scale 0 (Not difficult at all) to 10 (Very difficult)

Asked about how the skills acquired during their training are recognized in the professional world on a scale from 0 (not recognized at all) to 10 (totally recognized), respondents emphasize a number of skills (table 13). The ability to analyze and synthesize information comes first, ahead of writing skills and the ability to lead and/or to work in a team. Additional skills also are also highly recognized. The only exception is the ability to apply for or to obtain funding, which receives an average score below the arithmetic mean.

Table 13. Degree of skills recognition

	Mean	(Stand. Deviation)
Analyze and synthesize information	8.9	(1.8)
Writing skills	8.2	(2.2)
Ability to lead and/or to work in a team	8.0	(2.1)
Knowledge transfer	7.7	(2.3)
Polyvalence	7.7	(2.3)
Ability to manage big projects	7.5	(2.6)
Methodological skills	7.3	(2.6)
Specialized knowledge	6.3	(2.9)
Ability to apply for / obtain funding	4.2	(3.2)
N	102 to 110	

Table 14 provides information about the current employment situation and thus helps to learn more about the added value of a PhD thesis for a non-academic career. An overwhelming majority of doctors remain in the Swiss labor market, but women are more likely than men to move to another country (29%, against 13% among men). Most doctors benefit from open-ended contracts (three quarters do so among both men and women), but far more so for doctors from German-speaking (86%) than from French-speaking universities (64%). About half of respondents work full time or more than 80 percent, but the corresponding figure is higher among men than among women (56% against 42%).

When we consider the sector of employment, we see important differences between men and women. More than half of male doctors work in the public sector (57%), whereas only a third of the women (35%) do so. Conversely, there is a higher share of women working in NGOs (20% compared to 8% among men), but the difference is not statistically significant. There is also a regional difference with

respect to jobs in the private sector, which are far more frequent in German-speaking (33%) than in French-speaking (14%) Switzerland.

Table 14. Doctors' current employment situation and characteristics, in %

	Total	Male	Female	French-speaking	German-speaking
Country of employment					
Switzerland	81.4	87.3	71.4	80.0	82.5
Europe	12.4	9.9	16.7	9.1	15.8
Other	6.2	2.8	11.9	10.9	1.7
Total	100	100	100	100	100
N	113	71	42	55	57
Employment contract					
Open-ended contract	75.4	75.0	76.2	63.6	86.2
Fixed-term contract	19.3	20.8	16.7	29.1	10.3
Other	5.3	4.2	7.1	7.3	3.5
Total	100	100	100	100	100
N	114	72	42	55	58
Employment rate					
0-50%	7.2	4.3	12.2	11.1	3.6
51-80%	42.3	40.0	46.3	33.3	50.0
81-100%	50.4	55.7	41.5	55.6	46.4
Total	100	100	100	100	100
N	111	70	41	54	56
Employment sector					
Public administration	48.6	56.9	35.0	57.1	40.0
NGO or civil society organizations	23.8	7.7	20.0	10.2	14.5
Private enterprises	12.4	21.5	27.5	14.3	32.7
Other	15.2	13.8	17.5	18.4	12.7
Total	100	100	100	100	100
N	105	65	40	49	55
Employment requirements					
Doctoral degree	22.0	18.8	27.5	23.1	19.6
Master degree	65.1	72.5	52.5	65.4	66.1
Bachelor degree	2.7	1.4	5.0	1.9	3.6
Other	10.1	7.2	15.0	9.6	10.7
Total	100	100	100	100	100
N	109	69	40	52	56
Supervision responsibilities					
Yes	52.7	53.5	51.22	38.9	66.7
N	112	71	41	54	57

Note : Bold to highlight adjusted residuals above +/- 1.96

As far as the requirements for the doctors' current working position are concerned, we see that a clear majority of these jobs require a master degree, but not a doctoral degree. Yet, here we again see an interesting difference between men and women: A larger share of men say they have a job requiring a master degree (73%, against 53% among women), whereas a larger share of women say they occupy a job requiring a doctoral degree (28%, against 19% among men, but the difference is not statistically significant). Of course, it is difficult based on our data to know whether female doctors get access to higher ranked jobs, or whether male doctors undervalue the requirements for their jobs.

Finally, about half of respondents have supervision responsibilities. Considering the high qualification of respondents, this percentage is rather low. A closer look at the data suggests that supervision responsibilities are more frequent in the private sector or in NGOs than in the public sector. Further, supervision responsibilities increase with academic age, from about 40% for people who received their

PhD during the last two years to about 60% for people who received it more than five years ago (results not shown).

In Table 15, we consider the (gross) income of doctors who work outside of academia. We first consider the mean income, which amounts to about 100'000 CHF a year. There is a difference between genders in that respect, with men earning about 20'000 CHF more per year than women. Looking at the difference in income between men and women across income classes, we see that only 31% of female doctors earn between 104'000 and 187'000 CHF, while 52% of male doctors do so.

Since we observed that women work at slightly lower rates (see table 11), we calculated the virtual income that would be associated with a full time job (second part of table 12). This reveals new disparities between men and women: A larger share of women (16%, against 2% among men) would earn very little (less than 62'000 CHF a year) and a larger share of men (63%, against 40% among women) who earn between 104'000 and 187'000 CHF.

Table 15. Current income

	Total	Male	Female	French-speaking	German-speaking
Average income					
Mean	98'060	105'130	85'920	92'120	103'450
Std. dev.	38'180	37'220	37'180	36'960	39'150
N	106	67	39	51	54
Current income range					
0-62'000	18.9	14.9	25.6	25.5	13.0
62'001-104'000	34.0	29.8	41.0	31.4	37.0
104'001-187'000	44.3	52.2	30.8	43.1	44.4
>187'000	2.8	3.0	2.6	.	5.6
Total	100	100	100	100	100
N	106	67	39	51	54
Full time equivalent average income					
Mean	114'450	119'300	106'170	108'580	119'660
Std. dev.	39'040	35'962	43'040	37'930	39'922
N	103	65	38	50	52
Full time equivalent income					
0-62'000	6.8	1.5	15.8	8.0	5.8
62'001-104'000	35.9	33.8	39.5	44.0	28.8
104'001-187'000	54.4	63.1	39.5	46.0	61.5
>187'000	2.9	1.5	5.3	2.0	3.9
Total	100	100	100	100	100
N	103	65	38	50	52

Note : Bold to highlight adjusted residuals above +/- 1.96 or significant differences across groups according to ANOVA test

When looking at the average level of satisfaction regarding both the income and the employment situation on a 0-10 scale (table 16), we see that doctors are satisfied. The average is above 7 for income and close to 8 for employment situation. In spite of the overall lower income between men and women (table 15), both groups are equally satisfied with their job and income. By contrast, but not surprisingly, satisfaction with income increases with the level of income (table 17).

Table 16. Job and income satisfaction

	Total	Male	Female	French-speaking	German-speaking
Income satisfaction					
Mean	7.2	7.2	7.3	7.1	7.4
Std. dev.	2.37	2.35	2.42	2.52	2.25
N	112	71	41	54	57
Employment satisfaction					
Mean	7.8	7.7	7.9	7.1	7.5
Std. dev.	2.08	1.99	2.22	1.10	2.37
N	112	71	41	54	57

Note : Bold to highlight adjusted residuals above +/- 1.96

Income and employment satisfaction is based on a scale from 0 to 10, where 0 means not satisfied at all and 10 completely satisfied.

Table 17. Income satisfaction, by current income

	Income			
	0-62'000	62'001-104'000	104'001-187'000	>187'000
Mean	4.7	7.4	8.1	9.7
Std. dev.	(2.65)	(2.02)	(1.74)	(0.58)
N	20	36	47	3

Note: Bold to highlight significant differences across groups according to ANOVA test

Finally, Table 18 shows that a large share of doctors (about 40%) no longer has any contact with the academic world. This holds for both men and women. Among those who still have contacts, however, there are important differences between men and women with regards to the nature of these contacts: A fourth of men are still hired to teach courses at universities, while this is the case for less than one woman out of ten. This might be related to the fact that women left academia earlier or to the weaker networks they had in the academic sphere (see above). Conversely, women are more frequently involved in mentoring than men. This might be due to the number of mentoring programs for women.

Table 18. Current contacts with universities, in %

	Total	Male	Female	French-speaking	German-speaking
No	40.0	41.1	38.5	39.1	41.7
Yes, I'm teaching a course	16.8	23.2	7.7	15.2	16.7
Yes, I participate in workshops and roundtables	13.7	16.1	10.3	13.0	14.6
Yes, I'm intervening in a course	4.2	5.4	2.6	6.5	2.1
Yes, I'm mentoring	4.2	.	10.3	2.2	6.2
Yes, other	21.1	14.3	30.8	23.9	18.8
Total	100	100	100	100	100
N	95	56	39	46	48

Note : Bold to highlight adjusted residuals above +/- 1.96

Doctors working outside of academia: highlights

Our study of doctors working outside of academia reveals four important findings. First, the 2019 survey reveals differences in the likelihood of leaving academia depending on one's field of specialization. Doctors who specialized in public policy/administration and policy analysis are overrepresented among doctors who left academia, in comparison to their share in the initial sample. Yet we do not see this as

a negative outcome. Quite to the contrary, we assume that those doctors specialized in a field that made it easier for them to find a job. Another positive result is that very few doctors remain unemployed after completing their PhD. Moreover, those who are currently employed outside academia consider that the transition was moderately difficult, with women being more likely to say it was not difficult than men.

On the more negative side, the results to our survey suggest that the reasons for leaving academia relate more to a negative evaluation of the (prospect of an) academic career, than to a strong aspiration or calling for a non-academic career. Furthermore, according to their self-assessment, the kind of jobs that doctors obtain often require only a Master degree, whereby women have a slightly more positive view on that than men, i.e. they more often consider that their job requires a doctoral degree.

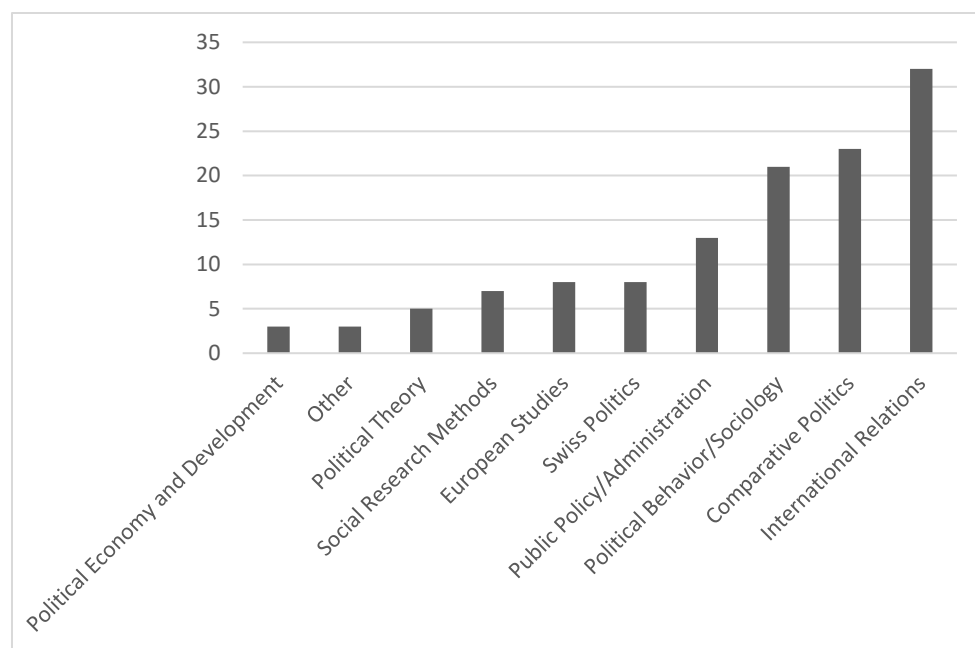
Another interesting finding relates to the lack of support received during this transition period. More than half of respondents say they have not received any support during the transition. Although women are more likely to say it was not difficult to find a job, a larger share of them did not receive any support, especially from (people in) academia: Only 7% of the women received support from people in academia, while 23% of men did so.

Finally, the last set of insights relate to gender equality. Although in the previous section we have noted that about half of the post-doctoral researchers are women, and that women leave academia proportionally less than men, when looking at transition we see a different picture. A higher share of women than men leave academia immediately after obtaining their PhD (74% against 63%). This difference is not large, but it is interesting to discuss it in relation to the more negative assessments that women give of their working environment during the PhD. A larger share of women said that their working environment was depressing, and that they did not receive support to stay in academia. Gender inequalities also appear when we consider the non-academic career. In particular, we found a gender pay gap – highly qualified women earn on average 20'000 CHF less in a year than men.

Part IV. Political science doctors working in academia ("postdocs")

In this fourth part of the report, we consider the situation of postdocs. Figure 6 again presents the field in which postdocs specialized. As a sort of inverted mirror of Figure 5, we see that the share of doctors who specialized in public policy/administration and policy analysis is far lower in Figure 6. Among postdocs, the second largest group (after those who specialized in IR) is Comparative politics, shortly ahead of political behavior/sociology.

Figure 6: Field of specialization in political science among postdocs



N=123

Tables 19 and 20 present the position doctors held right after the PhD and their current position, respectively. As the last row of tables 19 and 20 indicate, the number of postdocs participating in the survey has increased since the 2012 survey (91 persons in 2019 if one puts aside the 22 postdocs working abroad, against 59 in 2012).¹²

Further, the last row suggests that the gender gap has strongly decreased in comparison to 2012. Back then, 59% of postdocs answering the survey were men, and only 41% were women (Lorenzini 2015: 9). In 2019, the corresponding shares are 51% and 49% (or 54% and 46% if one corrects for the slightly higher response rate to the 2019 survey among women).

In the 2019 survey, the largest group is that of postdoctoral fellows, which accounted for 44% of total jobs right after the PhD, and for 51% of current jobs. These figures are far higher than in the 2012 survey, where postdoctoral fellowships represented only 15 to 17% of total jobs. Conversely, the category of OberassistentIn/Maître-assistant.e was the largest in the 2012 survey (31%), but now represents less than 20% of jobs, and offers even fewer jobs than the Research collaborators/assistants category. There is, however, a difference between German-speaking and French-speaking universities

¹² 73 persons participated in the 2012 survey, but the number of complete responses amounted to only 59. Focusing on postdocs working in Switzerland, the corresponding figures in the 2019 survey are 96 and 90. Note also that there are slightly more postdocs who work in a Swiss university but hold a PhD from a non-Swiss university (35), than postdocs with a PhD from a Swiss university working abroad (29).

in that respect: the share of OberassistentInnen is significantly larger than that of Maître-assistant.e.s. The share of lecturers/teaching assistants has also strongly decreased between 2012 and 2019.

In our view, those results are somehow ambivalent. On the positive side, they suggest that the number of postdoctoral fellowships sponsored by funding agencies (typically the SNSF) has strongly increased, both in relative and – even more so – in absolute terms (i.e., in relation to the overall increase in the number of postdocs between 2012 and 2019).¹³ On the negative side, the results also mean that the share of precarious and short-lived fellowship positions has increased between 2012 and 2019, whereas the share of longer-lived positions such as OberassistentIn/Maître-assistant.e financed by Swiss universities has decreased, and this especially in French-speaking universities. Yet the share of assistant professorships without tenure track has remained stable (about 9% of current jobs in both surveys) – and as even doubled in absolute terms (from 5 in 2012 to 10 in 2019).

Unsurprisingly, our data also shows that the share of assistant professor without tenure track strongly increases with the academic age (results not shown) – from 3% among doctors who graduated during the last two years, from 19% among persons who graduated more than five years ago. The share of postdoctoral fellows logically shows the opposite pattern, whereas the share of OberassistentIn/Maître-assistant.e does not vary with the academic age.

Table 19: Position after PhD, in %

	2012 survey	2019 survey	Male	Female	French- speaking	German- speaking	Abroad
Postdoctoral fellow	16.9	44.2	40.0	48.3	48.7	35.4	54.5
Research collaborator/ assistant	22.0	17.7	21.8	13.8	20.5	18.8	13.6
OberassistentIn/Maître- assistant.e	30.5	11.5	12.7	10.3	2.6	20.8	9.1
Lecturer/Teaching assistant	20.4	6.2	5.4	6.9	7.7	4.2	9.1
Assistant professor without tenure track	3.4	0.9	1.8	.	2.6	.	.
Hybrid	-	5.3	5.4	5.2	2.6	6.3	4.6
Other	6.8	14.2	12.7	15.5	15.4	14.6	9.1
Total	100	100	100	100	100	100	100
N	59	113	55	58	39	48	22

Note: Bold to highlight adjusted residuals above +/- 1.96

¹³ If one considers the position after PhD (table 15), the number of postdoctoral fellowships has increased from 10 to 50.

Table 20: Current position, in %

	2012 survey	2019 survey	Male	Female	French- speaking	German- speaking	Abroad
Postdoctoral fellow	15.3	50.9	55.4	46.7	53.8	49.0	54.5
OberassistentIn/Maître- assistant.e	35.6	17.2	12.5	21.7	12.8	27.4	4.5
Research collaborator/ assistant	15.3	12.9	17.9	8.3	12.8	13.7	13.6
Assistant professor without tenure track	8.5	8.6	8.9	8.3	10.3	5.9	9.1
Lecturer/teaching assistant	11.9	3.5	1.8	5.0	2.6	2.0	9.1
Other	10.2	6.9	3.6	10.0	7.7	2.0	9.1
Total	100	100	100	100	100	100	100
N	59	116	56	60	39	51	22

Note: Bold to highlight adjusted residuals above +/- 1.96

Table 21 aggregates the various postdoc positions in three main groups, and looks at the respective contract duration. In most cases (84%), the teaching and research positions subsumed in "other" category are based on short-term contracts of one or two years. This further reinforces the precarious character of postdoc positions. The same holds, although to a lesser extent, for the postdoctoral fellow position (61% of short-term contracts). By contrast, OberassistentIn/Maître-assistant.e/Assistant professor without tenure track positions are in a majority of cases (62%) associated with longer contracts of more than two years. Moreover, the share of long term contracts strongly increases with the academic age – from 25% among doctors who aggregated during the last two years to 63% among doctors who received their PhD for more than five years (results not shown).

Table 21: Duration of contract by positions (grouped), in %

	Total	Postdoctoral fellow	OberassistentIn/Maître- assistant.e/Assistant professor	Other
Short term contract (1-24 months)	61.2	60.7	37.9	84.0
Long term contract (more than 24 months)	38.8	39.3	62.1	16.0
Total	100	100	100	100
N	116	56	29	25

Note: Bold to highlight adjusted residuals above +/- 1.96

Turning to postdocs' employment rate, Table 22 shows that a majority of respondents have a full time or close to full time job. On closer inspection, however, the fairly high employment rate is mainly due to the group of postdocs working abroad, in which 99% of postdocs have a full time or nearly full time job. The employment rate is lower among postdocs working in Swiss universities. This holds especially for French-speaking universities, where 18% of doctors have a low (0 to 50%) employment rate and only 48% have a high (81 to 100%) employment rate. In German-speaking universities, too, less than half of postdocs have a 81 to 100% employment rate. In other words, in Swiss universities the majority of postdocs have a part-time job. In addition, note that the employment rate does not increase with the time elapsed since the PhD.

Table 22: Employment rate

	Total	Male	Female	French-speaking	German-speaking	Abroad
Mean	84.7	86.5	83.1	80.5	80.8	98.7
Std. dev.	20.74	18.3	22.8	22.73	21.13	6.26
N	120	58	62	40	53	23
0-50%	10.0	6.9	12.9	17.5	9.4	.
51-80%	32.5	36.2	29.0	35.0	45.3	4.3
81-100%	57.5	56.9	58.1	47.5	45.3	95.7
Total	100	100	100	100	100	100
N	120	58	62	40	53	23

Note: Note : Bold to highlight adjusted residuals above +/- 1.96 or significant differences across groups according to ANOVA test.

Table 23 further indicates that postdoctoral fellowships more often result in full-time or nearly full-time jobs than the two other groups of positions. According to our data, less than half of OberassistentInnen/Maître-assistant.e.s/Assistant professors have a full time or nearly full time position.

Table 23: Employment rate by positions (grouped), in %

	Postdoctoral fellow	OberassistentIn/Maître-assistant.e/Assistant professor without tenure track	Other
0-50%	10.3	6.7	14.8
51-80%	25.9	50.0	29.6
81-100%	63.8	43.3	55.6
Total	100	100	100
N	58	30	27

Note: Bold to highlight adjusted residuals above +/- 1.96

Figures show the percentages in each category

Among postdocs, the share of time devoted to research amounts to 70%, which is slightly higher than in the 2012 survey (table 24). However, this result is obviously influenced by the high number of postdocs with a postdoctoral fellowship in our sample. A closer look at the data confirms that time allocation greatly varies depending on the postdoc status. Thus, almost 60% of postdoctoral fellows dedicate 81 to 100% of their time to research, whereas 60% of OberassistentInnen/Maître-assistant.es/Assistant professors without tenure track devote less than 50% of their time to research.

Table 24: Work-time allocation, in %

	2012 survey	2019 survey	Male	Female	French- speaking	German- speaking	Abroad
Mean percentage of time dedicated to...							
Research	58.8	70.1	77.4	63.0	72.8	65.2	77.4
Teaching	24.6	13.7	11.8	15.5	15.3	13.6	11.0
Service to the department; administrative tasks	11.8	5.6	3.6	7.2	3.8	6.8	4.8
Supervising students	-	4.0	3.6	4.3	3.7	4.6	3.0
Grading exams	-	1.7	1.6	1.8	1.6	1.9	1.4
Other	4.5	5.1	1.9	8.2	2.8	7.9	2.4
Total	100	100	100	100	100	100	100
N	59	116	57	59	38	54	23

Note: Bold to highlight significant differences across groups according to ANOVA test.

Among postdocs, the average income amounts to 72'000 CHF (Table 25, upper part). Accordingly, about half of postdocs in our survey earns from 62'000 to 104'000 CHF. While there is hardly any difference between men and women in terms of income, we again witness regional differences, with postdocs in German-speaking universities earning 13'000 CHF more than their fellows in French-speaking universities, on average. 69% of the former belong to the 62'000 to 104'000 CHF category, but only 45% of the latter do so. Similarly, 47% of postdocs in French-speaking universities earn less than 62'001 CHF, against only 17% of postdocs in German-Speaking universities.

Regional differences do not vanish if we take into account variations in the employment rate, and calculate the virtual income for a full time job (Table 18, lower part): The average income is still CHF 9'590 higher in German-speaking universities, and postdocs in French-speaking universities are overrepresented in the lowest income class and underrepresented in the highest income class. At a first glance, the situation of postdocs working abroad is even worse: 76% of them belong to the lowest income class if we correct for the employment rate. However, the comparison between Swiss incomes and incomes abroad should take into account the differences in the costs of living, which are also much higher in Switzerland than abroad.

Finally, income increases with the academic age (results not shown). The mean income (calculated on a full time job basis) amounts to 77'000 CHF among doctors who graduated during the last two years, to 83'500 CHF among doctors who graduated three to five years ago, and up to 100'000 CHF among doctors who graduated more than five years ago.

Table 25: Income

	Total	Male	Female	French-speaking	German-speaking	Abroad
Average income						
Mean	71'916	73'410	70'420	68'930	82'110	52'500
Std. dev.	24'060	25'130	23'070	25'930	21'030	11'930
N	114	57	57	39	53	21
Income range						
0-62'000	39.5	38.6	40.3	47.4	16.7	80.9
62'001-104'000	50.9	47.4	54.4	44.7	68.5	19.1
104'001-187'000	9.6	14.0	5.3	7.9	14.8	.
Total	100	100	100	100	100	100
N	114	57	57	38	54	21
Full time equivalent average income						
Mean	85'760	85'570	85'950	88'300	97'890	53'630
Std. dev.	27'500	27'580	27'680	29'040	18'880	13'280
N	111	55	56	39	50	21
Equivalent full time (CHF)						
0-62'000	24.3	23.6	25.0	18.4	3.9	76.2
62'001-104'000	57.7	58.2	57.1	65.8	66.7	23.8
104'001-187'000	18.0	18.2	17.9	15.8	29.4	.
>187'000	.	.	.	.	.	.
Total	100	100	100	100	100	100
N	111	55	56	38	51	21

Note: Bold to highlight significant differences across groups according to ANOVA test for the mean.

In spite of income differences across regions, we do not see corresponding differences with respect to income satisfaction (table 26). All groups seem rather satisfied with their income, on average.

Table 26: Income satisfaction

	Total	Male	Female	French speaking	German speaking	Abroad
Mean	6.6	6.6	6.6	6.3	6.9	6.6
Std. Dev.	2.49	2.49	2.51	2.68	2.46	2.31
N	114	57	57	38	54	21

Note: Bold to highlight significant differences across groups according to ANOVA test for the mean.

Income satisfaction is based on a scale from 0 to 10, where 0 means not satisfied at all and 10 totally satisfied.

Table 27 provides information about postdocs' participation in academic networks. More than 90% of postdocs have been involved in research. The corresponding share was lower (72%) in the 2012 survey. Moreover, unlike in the previous study, there are no differences between men and women in terms of research involvement – nor with respect to the number of projects in question. Yet there is a difference in the role granted to male and female postdocs: women take more often than men the leading role in research projects, and less frequently work as employees. This is again an important change in comparison to the 2012 survey.

Table 27: Participation in research projects and related status, in %

	2012 survey	2019 survey	Male	Female	French speaking	German speaking	Abroad
Research involvement							
Yes	71.4	92.4	91.5	93.2	94.6	90.7	91.3
N	56	118	59	59	37	54	23
Nr of research projects							
0 project	28.6	0.9	.	1.8	-	2.0	-
1 project	16.1	37.6	40.7	34.5	40.0	32.6	52.4
2 projects	16.1	31.2	27.8	34.5	37.1	34.7	19.1
3 projects	19.6	12.8	11.1	14.6	8.6	12.2	14.3
4 projects or more	19.6	17.4	20.4	14.6	14.3	18.4	14.3
Total	100	100	100	100	100	100	100
N	56	109	54	55	35	49	21
Status							
Leader	35.0	53.2	46.3	60.0	47.2	50	66.7
Co-Leader	72.5	44.0	42.6	45.5	36.1	54.2	33.3
Employee	60.0	67.0	77.8	56.4	77.8	66.7	52.4
Other	20.0	5.0	7.4	1.8.	5.6	2.1	4.8.
N	40	109	54	55	36	48	21

Note: Bold to highlight adjusted residuals above +/- 1.96

In 2019, as in 2012, publications in peer-reviewed journals still appear as the most valued outputs in Swiss political science departments according to postdocs (table 28). Men and women tend to disagree on the importance granted to teaching in their respective Departments: Teaching is more valued according to female than to male postdocs. Women also tend to see more importance attributed to contributions in the media and supervision of students, than men. Finally, Departments in French-speaking universities are said to give more importance to teaching than in German-speaking universities. The same holds for service to the Department or research group.

Table 28: Perception of department's values, in %

	2012 survey	2019 survey	Male	Female	French speaking	German speaking	Abroad
Opinion about...							
Publications in peer-reviewed journals	96.2	96.2	94.3	98.1	93.6	96.1	100
Publications in general	-	92.4	88.7	96.1	93.6	92.3	90.5
Service to the department / research group	60.5	64.8	62.3	67.3	74.2	57.7	66.7
Teaching	58.9	59.1	49.1	69.2	67.7	51.9	61.9
Supervision of students	53.0	52.4	47.2	57.7	51.6	48.1	61.9
Contributions in the media	42.3	38.1	30.2	46.2	32.3	36.5	52.4
N	48-52	105	53	52	31	52	21

Note: Bold to highlight adjusted residuals above +/- 1.96.

Percentage of respondents who rate the element as "important" or "very important"

Postdocs' overall assessment of the atmosphere in their department is positive (table 29). More than 95% say it is friendly, which is thus even higher than in the 2012 survey. Moreover, the share of postdocs who find their environment supportive has substantially increased since 2012 (from 74% to 92%). This regards especially women: While in 2012 only 50% of women found their environment supportive, the share now amounts to 91% and is hence similar than among men. Yet women are more likely than men to find the environment competitive (57% against 44%), but the difference between women and men is lower than in the 2012 survey (the corresponding figures were 65% and 33%). Finally, only 10% of postdocs or less (men or women alike) find the environment depressing or oppressive.

Table 29: Perceptions of the general atmosphere in the department/research group, in %

	2012 survey	2019 survey	Male	Female	French speaking	German speaking	Abroad
Friendly	92.7	98.1	98.2	98.1	93.6	100.0	100.0
Supportive	73.6	91.7	92.7	90.6	87.1	92.5	95.6
Motivating	-	84.1	85.4	82.7	77.4	82.7	95.6
Competitive	46.0	50.0	43.6	56.6	41.9	50.9	56.5
Depressing	-	10.2	10.9	9.4	16.1	7.6	8.7
Oppressive	-	6.5	5.4	7.5	9.7	5.7	4.3
N	50/55	108	55	53	31	53	23

Note: Bold to highlight adjusted residuals above +/- 1.96

Respondents were asked to assess the atmosphere in their department. The figures show the share of respondents who "agree" or "strongly agree".

The level of satisfaction with employment inside academia is high (more than 7 on the 0 to 10 scale), and this for both male and female postdocs (table 30).

Table 30: Satisfaction with employment inside academia

	Total	Male	Female	French speaking	German speaking	Abroad
Mean	7.4	7.4	7.4	7.6	7.3	7.5
(Std. dev.)	(1.86)	(2.04)	(1.67)	(2.02)	(1.81)	(1.72)
N	114	57	57	38	54	21

Note: Bold to highlight adjusted residuals above +/- 1.96

Scale 0 (very unsatisfied) to 10 (very satisfied)

Assessments are more critical towards the issue of mobility (table 31). When asked how difficult it had been to move to a different country for reasons such as partner's job or children in school on a 0 (very easy) to 10 (very difficult) scale, postdocs provide split answers: The average response is close to the arithmetic mean, but the large standard deviation suggests that postdocs' hold highly heterogeneous views on this. Women and postdocs in French-speaking universities rate the issue of mobility as slightly more difficult than men and postdocs in German-speaking universities, but the differences are not significant.

Table 31: Difficulty to move

	Total	Male	Female	French speaking	German speaking	Abroad
Mean	4.5	4.4	4.7	4.6	4.4	5.1
(Std. dev.)	(2.99)	(3.03)	(2.98)	(2.93)	(3.15)	(2.86)
N	118	59	59	38	53	23

Note: Bold to highlight adjusted residuals above +/- 1.96

Scale 0 (Very easy) to 10 (Very difficult)

When asked about what they see as the most important incentives they receive from their department, postdocs first point to reimbursement of conference expenses (32%, table 32) – the share was even higher in 2012. Faculty research colloquiums come next (23%), ahead of organization of workshops and work/research groups.

Table 32: Most helpful incentive received from department/research group, in %

	2012 survey	2019 survey	Male	Female	French speaking	German speaking	Abroad
Reimbursement of conference expenses	48.8	32.4	32.8	31.9	36.4	33.0	26.8
Faculty research colloquium	20.9	23.3	23.8	22.7	12.1	31.1	21.9
Organization of workshops	4.7	13.2	13.9	12.4	15.1	11.3	14.6
Work / research groups	4.7	11.0	10.7	11.3	15.1	4.7	19.5
Possibility to invite researchers for a research stay	4.7	8.7	8.2	9.3	6.0	9.4	9.7
Funds for buying books	7.0	4.1	3.3	5.2	6.0	2.8	2.4
Possibility of taking a sabbatical leave	7.0	2.7	16.4	4.1	4.5	2.8	.
Support groups	2.3	2.7	3.3	2.1	1.5	2.8	4.9
Other	-	1.8	2.4	1.0	3.0	1.9	.
Total	100	100	100	100	100	100	100
N	43	219	122	97	66	106	41

Note: Bold to highlight adjusted residuals above +/- 1.96

Percentages. In the 2019 survey, the respondents were asked to give two incentives, hence we recalculated the shares on a 100% basis.

The kind of support to publish received from members of department/research group seen as most helpful is "read and comment on your work" (24%), and then "discuss your work" (23%) (table 33); this was already the case in 2012.

Table 33: Most helpful support to publish, in %

	2012 survey	2019 survey	Male	Female	French speaking	German speaking	Abroad
Read and comment on your work	23.7	23.6	25.9	21.2	18.8	26.9	23.9
Discuss your work	18.4	23.1	21.4	24.8	17.4	26.0	26.1
Suggestions for readings	13.2	15.6	13.4	15.9	23.2	10.6	15.2
Co-author a paper	15.8	14.7	16.1	13.3	13.0	15.4	15.2
Suggestions about conferences	10.5	14.7	15.2	15.9	20.3	10.6	15.2
Contribute to an edited volume	7.9	6.7	5.4	8.0	5.8	7.7	4.3
Other	-	1.8	2.7	0.9	1.4	2.9	.
Total	100	100	100	100	100	100	100
N	38	225	112	113	69	104	46

Note: Bold to highlight adjusted residuals above +/- 1.96

Percentages. In the 2019 survey, the respondents were asked to give two incentives, hence we recalculated the shares on a 100% basis.

Considering more specifically with whom postdocs discuss their work the most, Table 34 shows some differences across regions. Postdocs discuss more frequently with colleagues in the same Department or working group in German-speaking than in French-speaking universities (65% against 46%). Conversely, postdocs discuss more frequently with colleagues abroad in French-speaking than in German-speaking universities (40% against 13%).

Table 34: Discussion partner, in %

	2012 survey	2019 survey	Male	Female	French speaking	German speaking	Abroad
Research discussion partner							
Colleagues in my department / research group	42.1	57.8	57.6	57.9	45.7	64.8	56.5
Colleagues in Switzerland	8.8	13.8	13.6	14.0	14.3	13.0	17.4
Colleagues abroad	47.4	23.3	20.3	26.3	40.0	13.0	21.7
Graduate students	.	0.9	1.7	.	.	1.9	.
Family, friends	1.8	3.5	6.8	.	.	5.7	4.3
Undergraduate students	.	.	.	.	.	.	.
Other	.	0.9	.	1.8	.	1.9	.
Total	100	100	100	100	100	100	100
N	73	116	59	57	35	54	23

Note: Bold to highlight adjusted residuals above +/- 1.96

Turning to publications, the average number of postdocs' publications amounts to 6, which is similar to the 2012 survey (table 35). Also, and as in the 2012 survey, there are important differences between male and female postdocs: The average number of publications is two units higher among men than among women; women are both more frequently represented than men in the group with 0 to 4 articles, and less frequently represented in the group with 11 and more articles. Thus, women have not caught up with men in terms of the number of peer-reviewed articles since the 2012 survey. Of course, we do not know whether men and women have had the same working conditions, depending on their family situation. Differences between men and women are more modest with respect to the number of books or the number of special issues.

Further, we also see an important difference with respect to publication record across regions: the average number of peer-reviewed articles by postdocs working in German-speaking universities is higher than for postdocs from French-speaking universities. Differences were not as large in the 2012

survey and were actually in favor of postdocs from French-speaking universities (6 publications, on average, against 5.8 in Zurich and 5.4 in other German-speaking universities) (see Lorenzini 2015: 53). By contrast, postdocs working in a French-speaking university have edited more books or special issues than their fellows in a German-speaking university.

Not surprisingly, the average number of peer-reviewed articles is higher among doctors who got their PhD for more than five years (about 10) than among doctors who graduated for one to five years (about 5, results not shown).

Table 35: Number of publications

	2012 survey	2019 survey	Male	Female	French speaking	German speaking	Abroad
Mean number of publications							
Peer-reviewed articles (Std. dev.)	5.9 (4.42)	6.1 (4.98)	7.1 (5.73)	4.9 (3.78)	4.9 (3.91)	6.2 (5.69)	7.1 (3.73)
N	55	111	57	54	32	52	23
Books (Std. dev.)	0.9 (1.03)	0.7 (0.92)	0.6 (0.90)	0.7 (0.96)	0.7 (0.90)	0.8 (1.04)	0.5 (0.73)
N	57	111	57	54	32	52	23
Edited books / special issues (Std. dev.)	0.6 (0.99)	0.6 (0.97)	0.6 (1.08)	0.5 (0.84)	0.8 (1.07)	0.4 (0.77)	0.6 (1.08)
N	55	111	57	54	32	52	23

Note: Bold to highlight adjusted residuals above +/- 1.96 or significant differences across groups according to ANOVA test for the mean.

Countrywide, English is the main language of publications (that was already so in 2012), but the share of French-speaking postdocs publishing in French is higher than the share of German-speaking postdocs publishing in German (table 36).

Table 36: Language of publications, in %

	2012 survey	2019 survey	Male	Female	French speaking	German speaking	Abroad
English	91.2	92.7	94.7	90.6	84.4	96.1	95.6
French	5.3	5.5	5.3	5.7	15.6	.	4.4
German	3.5	1.8	.	3.8	.	3.9	.
Total	100	100	100	100	100	100	100
N	57	110	57	53	32	51	23

Note: Bold to highlight adjusted residuals above +/- 1.96

The share of postdocs who are satisfied or very satisfied with the number of publications amounts to about 60% (in comparison to 66% in 2012), but greatly differs between men and women (Table 37). In line with their lower number of peer-reviewed articles (see Table 27), women are far less satisfied than men with their number of publications (only 43% are satisfied, against 74% of men). A similar (but slightly smaller) difference in satisfaction between men and women already transpired from the 2012 survey (57% of women were satisfied, against 72% of men).

By contrast, men and women do not differ from each other with respect to the evaluation of the quality of their publications, which is high for both groups

Table 37: Satisfaction with publications, in %

	2012 survey	2019 survey	Male	Female	French speaking	German speaking	Abroad
Satisfaction of number of publications							
Satisfied	65.5	59.1	73.7	43.4	65.6	54.9	65.2
N	55	110	57	53	32	51	23
Satisfaction of quality of publications							
Satisfied	92.7	87.2	86.0	88.5	90.6	88.8	78.3
N	55	100	57	52	32	50	23

Note: Bold to highlight adjusted residuals above +/- 1.96

Figures show the percentages of respondents who are "satisfied" or "very satisfied"

Finally, nearly all postdocs who took our survey see their future in academia. Yet postdocs who see their future in academia rate the difficulty to find a job as very high (Table 38): 8.3 on the 0-10 scale. Still, they remain somehow confident about their chances to find an academic job. Women see it as slightly less difficult than men to find an academic job – but they are not more confident that they will find one. It is also worth mentioning that both the evaluation of difficulty and confidence do hardly vary according to academic age (results not shown). Yet doctors who got their PhD recently are even less confident than their more advanced fellows that they will find an academic job (their mean score is 5.7 on the confidence scale, against 5.0 among doctors who graduated for three to five years, and 4.9 among doctors who graduated more than five years ago).

Table 38: Prospects for the future

	Total	Male	Female	French speaking	German speaking	Abroad
Future in academia						
Yes (%)	91.7	94.6	88.7	96.9	86.0	95.5
N	109	56	53	32	50	22
Difficulty to find an academic job						
Mean	8.3	7.9	8.7	8.4	8.1	8.3
(Std. dev.)	1.7	(2.0)	(1.3)	(1.5)	(1.76)	(2.0)
N	98	52	46	31	44	20
Confident to find an academic job						
Mean	5.3	5.2	5.5	5.3	5.5	5.0
(Std. dev.)	2.5	(2.4)	(2.5)	(2.38)	(2.37)	(2.7)
N	97	51	46	30	44	20

Note: Bold highlight significant differences according to F-test

For difficulty and confidence: 0-10 scales where 0 means "very easy" and "very confident", and 10 means "very difficult and "not confident at all".

Postdocs: highlights

What have we learned about post-doctoral researchers? There are good and bad news when we bring together the findings of this second survey among postdocs. The good news is that the gender gap is shrinking. The bad news is that precarious working conditions still prevail in academia for post-doctoral researchers and teachers.

Regarding the good news, we observed positive changes in terms of gender gap when we compare the current survey to the 2012 survey. First, the share of men and women among postdocs is more balanced than it was seven years ago. Research on gender equality shows that the post-doctoral phase is as a turning point for women's career in academia. Our study seems to indicate that in political science women remain in academia at this stage. Second, women who work as post-doctoral researchers are now more likely than men to lead research projects and less likely to work as employees. In addition, the share of women who say their working environment is supportive has increased. Thus, we observe some improvement in comparison to 2012 with respect to gender equality. In addition, in comparison to the situation outside of academia, we also observe more gender equality when it comes to income and working time. In this case, we did not see statistically significant differences between men and women.

With this note on working time and income, we turn to the bad news. Postdoc positions are, by definition, precarious. Yet several results tend to emphasize further the precariousness of postdoc positions. First, a majority of postdocs have short-term contracts of two years, at most. The only exceptions regards the OberassistentIn/Maître-assistant.e/Assistant professor positions, but those are rare. Second, less than 60 percent of the respondents have a full time (or more than 80%) employment. This is reflected in the mean income, 85'000 compared to 114'000 for doctors working outside of academia. It is thus striking that post-doctoral researchers earn much less than doctors who left academia. For similar levels of qualification, the annual income gap amounts to 30'000 CHF.

Precariousness also comes in a different form: We observe that almost half of the respondents have had a fellowship as their first post-doctoral position or as their current post-doctoral position – a share that has substantially increased since 2012. While this can be viewed as a sign that the FNS is investing in young scholars, this also contributes to precariousness.

A last note on regional differences: We observe some important differences when we compare the French-speaking and the German-speaking part of the country. There are comparatively more MA/OberassistentIn/Assistent professor positions in the German-speaking universities than in French-speaking universities. In addition, it is also more common that post-doctoral researchers obtain an MA/OberassistentIn position immediately after the PhD in German-speaking universities. This calls for a discussion of the overall academic career path – what is required at the different levels and what are the opportunities after these jobs.

Part V. Professors and MERs

The last part of our report deals with the group of persons who received their PhD between 2008 and 2018 and got a permanent position in academia – as associate professor, assistant professor with tenure track, or "Maître d'enseignement et de recherche" (MER). Among the 247 survey respondents who got their PhD in Switzerland between 2008 and 2018, 36 (15%) could get a stable professorship or similar position. Yet this figure is probably overestimated, as a result of the lower response rate among doctors who left academia.

Among doctors who got their PhD in a Swiss university and are still working in academia, the share of professors amounts to 27%. Not surprisingly, this share increases with the academic age: from 3% among persons who got their PhD for less than two years, to 22% among those who got their PhD three to five years ago, and 45% among those who got their PhD for more than five years.

Interestingly enough, half of professors are working abroad (18 out of 35), and 43% are women (15 out of 35). Associate professors and assistant professors with tenure tracks are more frequent in French-speaking universities and abroad, whereas senior researchers with open-ended contracts are (far) more numerous in German-speaking universities.

Asked about how difficult it was to get a stable position, respondents tend to emphasize difficulty (6 on the 0 to 10 scale, on average, Table 39), but hold diverging views on this (see the large standard deviations). There are no differences between men and women in evaluating difficulty, but there are difference across regions: Respondents working in French-speaking universities – and, to a lesser extent, respondents working abroad – deem it more difficult to get a stable position than respondents working in German-speaking university (yet that difference is not significant and must be taken with a grain of salt, given the very small number of observations).

Respondents agree on the utmost importance of publications as requirements to get a stable professorship: More than 90% rate them as important or very important, and about 80% see publications as *the* most important requirement. While other factors, such as research grants, teaching experience or networks, are also seen as important, they are very rarely mentioned as the most important requirement.

Men and women agree on the importance of publications, yet diverge with respect to the importance of teaching experience and supervision of young scholars, which are far more valued by women.

Table 39: Difficulty to get a position, and requirements

	Total	Male	Female	French speaking	German speaking	Abroad
Difficulty to get a position						
Mean	5.9	5.9	5.9	7.5	5.0	5.6
(Std. dev.)	(2.6)	(2.6)	(2.9)	(2.5)	(2.8)	(2.5)
N	33	19	14	8	9	16
Importance deemed to...						
Publications	93.9	94.7	92.9	100	88.9	93.7
Research grants	72.7	78.9	64.3	75.0	77.8	68.7
Teaching experience	87.9	78.9	100	100	77.8	87.5
Network	78.8	78.9	78.6	100	88.9	62.5
Mobility	69.7	73.7	64.3	75.0	66.7	68.7
Supervision of young scholars	39.4	26.3	57.1	50.0	44.4	31.3
N	33	19	14	8	9	16
Most important requirement						
Publications	82.4	85.0	78.6	87.5	77.8	82.3
Research grants	2.9	5.0	.	.	.	5.9
Teaching experience	2.9	.	7.1	.	.	5.9
Mobility	.	.	.	.	.	.
Network	2.9	5.0	.	.	11.1	.
Supervision of young scholars	.	.	.	.	.	.
Other	8.8	5.0	14.3	12.5	11.1	5.9
N	34	20	14	8	9	17

Note: Bold to highlight adjusted residuals above +/- 1.96

Difficulty: Scale from 0 (very easy) to 10 (very difficult)

Importance: Percentage of respondents who find the related element "important" or "very important"

The importance of publications also transpired from responses to an open-ended question asking professors which advices they can provide to young scholars: more than half of responses (8 of 14) point to publications, and some of them add "in top journals".

Looking more closely at the type of publications deemed important (Table 40), we again see some differences between men and women: Women see peer-reviewed articles in top journals as more important than a high number of peer-reviewed articles, whereas men see it the other way around. Yet the main difference between genders regards special issues, which are rated as important by an overwhelming majority of women (77%), but by only 22% of men.

Table 40: Importance of the kind of publications

	Total	Male	Female	French speaking	German speaking	Abroad
Publications						
Importance of...						
Peer-reviewed articles in top journals	90.9	84.2	100	100	88.9	87.5
Important number of peer-reviewed articles	84.4	88.9	78.6	87.5	75.0	87.5
Book chapters	45.5	36.8	57.1	50.0	55.6	37.5
Special issue	45.1	22.2	76.9	71.4	44.4	33.3
Edited volume	29.0	27.8	30.8	28.6	44.4	20.0
N	31	18	13	7	9	15
Most important kind of publications						
Peer-reviewed articles in top journals	76.5	85.0	64.3	75.0	100	64.7
Important number of peer-reviewed articles	23.5	15.0	35.7	25.0	.	35.3
Book chapters	.	.	.	.	.	.
Edited volume	.	.	.	.	.	.
Special issue	.	.	.	.	.	.
N	34	20	14	8	9	17

Note: Bold to highlight adjusted residuals above +/- 1.96

Importance: Percentage of respondents who find the related element "important" or "very important"

Employment satisfaction and income satisfaction are overall high, except with respect to income satisfaction among professors working abroad (table 41). Women are slightly less satisfied with their job than men, and professors in German-speaking universities are slightly more satisfied than their peers in French-speaking universities.

About half of respondents see themselves in the same university in 10 years, and half imagine themselves in another university. Professors working abroad show more readiness to move to another university – perhaps as a result of their lower income satisfaction.

Table 41: Employment satisfaction, income satisfaction, and future

	Total	Male	Female	French speaking	German speaking	Abroad
Employment satisfaction						
Mean	7.7	8.2	7.1	8.0	8.4	7.2
Std. dev.	(1.38)	(1.10)	(1.49)	(1.51)	(1.13)	(1.30)
N	34	20	14	8	9	17
Income satisfaction						
Mean	6.9	6.7	7.1	7.6	8.1	5.8
Std. dev.	(2.20)	(2.60)	(1.54)	(1.68)	(1.62)	(2.27)
N	34	20	14	8	9	17
In 10 years...						
In the same university	53.3	55.6	50.0	100	62.5	31.3
In another university	46.7	44.4	50.0	.	37.5	68.7
No longer in academia	.	.	.	.	.	.
N	30	18	12	6	8	16

Note: Bold to highlight significant differences across groups according to ANOVA test for the mean.

Satisfaction: scale from 0 to 10

Professors and MERs: highlights

A fourth of doctors (27%, N=36) from a Swiss university (2008-2018) still working in academia hold a professorship or similar, stable position (15% if one also takes into account doctors who left academia). Among them, half work abroad, which suggests that Swiss doctors are competitive on the international job market. Furthermore 42% of professors are women. This is not gender parity (yet), but this comes close to it.

Professors overall tend to stress the difficulty to find a stable position, but with variations across persons. They are more unanimous with respect to the importance of publications in top journals as a major requirement to get a professorship position.

Job and income satisfaction is overall high among professors, but women are less satisfied than men with their job, and professors working abroad are less satisfied with their income.

Conclusion

In concluding this report, we draw the implications of our analyses to improve the transition to non-academic careers and to mitigate the difficulties faced by young scholars during the (sometimes long) postdoctoral phase.

We started the report with key numbers about the increase in PhD titles obtained in Switzerland during the last decade. Most of the political science doctors who answered our survey are employed, very few of those working in or outside of academia are unemployed. The other good news is that many of the skills acquired during the PhD are useful and valued outside of academia, and that doctors outside of academia are overall satisfied with their job and their income. For those who stayed in academia, the final good news is that a number of them could obtain a professorship – and these persons are fairly satisfied with their job and their income.

In spite of these positive findings, the study allowed us to identify some problems both in terms of academic careers and transition to non-academic careers. We would like to briefly highlight these problems before we present ideas to facilitate the transition to non-academic careers and to improve the working conditions of postdocs.

Problems identified for non-academic careers

Part III of the report focused on doctors working outside of academia, who represent about 60% of the persons who got a PhD in political science according to our estimation (46% according to survey respondents). Our survey reveals three important findings. First, the main motives to leave academia are based on negative evaluations of the academic environment or career prospect. Doctors leave because the working conditions are precarious. Among men, an even more important reason is the lack of career perspectives in academia, whereas women also leave for personal reasons or because they were not encouraged to stay in academia. This means that those who decide to stay in academia are less risk-averse, that they are ready to cope with precarious working conditions, but does it also mean (as often implicitly assumed) that they are the most talented? Answering this question is beyond the scope of this report. Yet it is important to reflect on the kind of messages sent to young scholars.

The second important finding relates to the difficulty of transitioning from academia to a non-academic career. Among the difficulties that we highlighted appear a lack of support and limited help from colleagues in academia (especially so for women). Furthermore, we observe that the longer they stayed in academia after the PhD, the more difficult the transition. This pleads for the development of services that facilitate the transition from academia to non-academic careers.

This is all the more crucial in light of our third important finding: only 22 percent of respondents occupy a job that in their view requires a PhD and only 53 percent of the respondents have a job which includes supervision of others. Be it a fact or a misperception, this means that most doctors working outside of academia do not have access to jobs that require the level of qualifications that they have and that many do not have opportunities to lead a team. Hence, some work needs to be done for the recognition of skills acquired during the PhD.

Problems identified for academic careers

Part IV of the report followed more closely in the footsteps of the 2012 survey, hence we were able to assess changes in the situation of postdocs over time. We find that the post-doctoral phase remains a very uncertain phase. In fact, we were not able to identify a "typical" academic career. Although the requirements mentioned converge on publications and all agree that obtaining funding, teaching

experience, and other skills are also important, we do not observe any pattern in terms of academic and number of publication or timing of access to professorship.

The comparison between the 2012 and 2019 survey offers three interesting findings. Starting with the positive one, we observe an improvement related to gender. Women are less underrepresented among postdocs and they are better represented among project leaders, which was not the case in 2012. Hence, we notice some positive changes with regard to gender equality.

A more ambivalent difference relates to the growing importance of SNSF fellowships to finance postdoctoral positions. On the positive side, this means that there is (more) money for young scholars. Yet, on a less positive note, this also means that there is a growing dependence on the SNSF to support financial young scholars after their PhD. The number of institutional positions offered by universities has hardly increased and is far below the number of persons who remain in academia under various SNSF schemes.

Lastly, the most worrying and negative aspect of the comparison shows that precarious working conditions still prevail during the post-doctoral phase. Two thirds of the postdocs have a temporary contract of less than two years, the mean employment rate is 80 percent. This number hides even lower percentages, with a third of postdocs working between 50 and 80 percent and 10 percent working less than 50 percent. As a result, the average income is rather low for persons with this level of qualification, 72'000 CHF. Even if we consider full time equivalent, the average remains below the average income of doctors working outside of academia (85'700 compared to 114'450). In spite of being highly qualified, being satisfied with the quality of their publications, and leading or co-leading research projects, postdocs remain in precarious positions for a number of years. These findings correspond to one of the major problems identified in the Swiss Academies Report on "Next Generation" (Hildebrand 2018).

What is a sustainable policy for PhD in political science?

As we have seen, the number of PhD candidates and holders is growing – not only in political science but across many disciplines. This poses a challenge in terms of career outcomes and calls for a reflection within political science, as a discipline. We recommend to initiate a debate on the development of a sustainable career path for political scientists. Taking up important questions such as what is the ideal number of PhD trained in political science? What will they do when they graduate? How many will stay in academia? What skills can be valued outside of academia? How can we facilitate the transition – as a discipline but also within our departments and universities – to non-academic labor markets?

For non-academic careers, career centers exist in many universities. However, they are often ill-prepared to support PhD students, the bulk of their job being related to BA and MA students. One interesting idea would be to think in terms of the specific skills obtained during a PhD, in addition to those obtained in a bachelor or a master in political science. What kind of jobs can a doctor apply to? The default option, often implicitly assumed, during a PhD training in political science is an academic career. However, our study shows that only a minority will remain in academia for a postdoc and even fewer will obtain a permanent position. Hence, it is important to prepare doctors for the transition to non-academic jobs. Our study shows that about half of the doctors working outside of academia supervise others. This seems to be an important caveat to access higher level positions. We recommend that universities and political science departments develop strategies so that PhD candidates can acquire skills valued outside of academia that might not be central for an academic career. We think that the PhD training can mitigate this problem, facilitate the acquisition of such skills through workshops and trainings offered during the

thesis. The atelier *Regard* offered in the framework of gender equality programs, as well as several transversal programs offered by the CUSO,¹⁴ could be interesting models to follow.

In addition to thinking about the different training in terms of skills acquired and formalizing information about that, some work also needs to be done to give visibility to this information. Half of the doctors we interviewed work in the public sector, hence it is important to discuss with the State at various levels and to make sure that they understand what a PhD in political science entails in terms of skills and competencies. Similarly, it would be important to discuss with trade unions about the recognition and valorization of the skills acquired. Our study shows that 40 percent of the doctors who left academia have no contact anymore with the university, this appears as an important loss in terms of knowledge but also a missed opportunity to build bridges between the university and the broader labor market. Some of the work related to the identification and valorization of the skills of political scientists can be dealt with at the level of the SPSA, but others are best handled within the various departments or universities.

For the academic careers, the report of the Swiss Academies (Hildebrand 2018) recommends to clarify the different tracks that can lead to stable positions within the universities and proposes three different tracks for stabilization. The first track is professorship and here the report recommends to open more assistant professor positions with tenure track. The report highlights that only 10 percent of the university staff are professors, hence the bulk of the work is performed by PhD students and precarious workers at the postdoctoral level. This situation is not sustainable, therefore, they recommend the creation of a second track of open-ended teaching and research position that offer stability and visibility for university staff. However, these positions only existed in the French-speaking part of the country and they tend to disappear. So far from moving in the direction recommended by the report, the universities seem to move in the opposite direction. Lastly, the study suggested a third track with research management and support positions within the university. We only find few such positions in our survey.

We concord that universities need to tackle the issue of precarious working conditions for young scholars and we recommend that a debate be opened wherever possible within the Swiss Political Science Association, political science departments, faculties, and universities to find creative solutions for the new generation of young scholars.

¹⁴ See e.g. [https://competences.cuso.ch/index.php?id=1203&L=0&tx_displaycontroller\[showUid\]=5229](https://competences.cuso.ch/index.php?id=1203&L=0&tx_displaycontroller[showUid]=5229):
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Appendix: Questionnaires

Block I: All respondents

Block II: Doctors working outside of academia

Block III: Postdocs

Block IV: Prof./MER

Block I: All respondents

Initial filter questions

Filter 1: You obtained a PhD thesis in political science in Switzerland during the years 2008-2018 or you currently work in a Swiss university. In order to direct you to a specific set of questions, we would like to know what is your current employment situation. Are you currently:

- Working in a university (→ **Filter 2**)
- Employed in another work environment (→ **Block II**)
- Unemployed (→ **Filter 3**)

Filter 2: We would like to know what is the position that you hold in university:

- Associate, or full professor (→ **Block IV**)
- Senior lecturer or researcher with open-ended contract (MER or the like) (→ **Block IV**)
- Assistant professor with tenure-track (→ **Block IV**)
- Assistant professor without tenure-track (→ **Block III**)
- SNSF professor (Excellenza, Forderung professor, prof. boursier-e) (→ **Block III**)
- Teaching or research fellow (OberassistentIn, Maître-assistant-e) (→ **Block III**)
- Other post-doctoral position with fixed-term contract (e.g. SNSF Ambizione) (→ **Block III**)
- Non-academic position in the university (→ **Block II**)

Filter 2: Are you currently looking for:

- an academic position (→ **Block III**)
- a job outside academia (→ **Block II**)

General information (all respondents)

Please indicate your gender:

- Male
- Female

Have you ever had any children of your own, step-children, adopted children, foster children or a partner's children living in your household? (Yes/No)

What is your main field (s) of specialization?

- Comparative Politics
- European Studies
- International Relations
- Methods
- Policy Analysis
- Political Theory
- Political Behavior
- Political Economy and Development
- Public Policy and Public Administration
- Social Research Methods
- Swiss Politics
- Other: Please indicate

Doctoral studies (all respondents)

In which institution did you complete your doctorate?

In case of a joint supervision procedure, list the two institutions in which the dissertation was completed

- ETH, Zürich
- IDHEAP, Lausanne
- IHEID, Genève
- Universität Basel
- Universität Bern
- Universität Luzern
- Universität St Gallen
- Universität Zurich
- Université de Fribourg
- Université de Lausanne
- Université de Genève
- Other: please indicate

If you mentioned that you hold a joint PhD, in which of the two institutions did you spend most of your time during your PhD?

In which year did you complete your doctorate?

What was the form of your dissertation?

- Monograph
- Article-based

In which framework did you write your dissertation?

If your situation changed during your doctoral studies, please check all that apply

- I was involved in a research project and the dissertation was part of the research project
- I was involved in a research project but the dissertation was not part of the research project
- I was working as a teaching assistant and wrote the dissertation next to my teaching activities
- I was a student in a full time PhD program / graduate school
- I was working outside of academia and wrote the dissertation next to my professional activities

- Other: please indicate

From which sources of financing did you benefit while working on your dissertation?

Please check all that apply

- Fellowship
- Teaching assistantship
- Research assistantship on a project related to the dissertation
- Research assistantship on a project not related to the dissertation
- Other employment within academia
- Employment outside academia
- Other: please indicate

On average, how many hours per week did you teach every semester on your own?

If you mentioned more than one source of financing for your PhD, which one is the most important one in terms of total amount.

During your doctoral studies, what percentage of your working time did you on average devote to the following activities? Please estimate an average over the entire period of your doctoral studies (percentage for each activity; the total needs to amount to 100).

- Doctoral work
- Research (not related to the dissertation)
- Teaching
- Service to the department / the University; administrative tasks
- Non academic job
- Other: please indicate

While an academic career often requires to work and live in different countries, sometimes it is difficult to do so for personal reasons (i.e. partner's job, children in school, etc.). Considering these personal reasons, during your PhD thesis, how difficult would it have been for you to move to a different country? (0=very easy; 10=very difficult)

During your doctoral studies, did you spend a semester or more than a semester in an academic institution other than your home institution? (Yes/No)

If yes: How many semesters did you spend in an academic institution other your home institution?

Did you spend these semesters in different academic institutions? (Yes/No)

If yes: For each of your stay, please indicate the country in which the institution was located

If yes: For each of your stay, please indicate the length of your stay in months.

What sources of funding did you have to finance your stay? Please check all that apply

- Fellowship from my home institution
- Fellowship from the host institution
- National fellowship from my home country
- National fellowship from the host country
- Other type of fellowship
- Own funding
- Other: please indicate

During your doctoral studies, did you attend a "doctoral school" (such as, for instance, CUSO doctoral school, NCCR doctoral school, Gerzensee doctoral courses, etc.)? (Yes/No)

If yes: In retrospect, how useful do you consider your participation in a doctoral school?

- Very useful
- Rather useful
- Rather not useful
- Not useful at all

During your doctoral studies, did you attend a “summer school”? (Yes/No)

If yes: In retrospect, how useful do you consider your participation in a doctoral school?

- Very useful
- Rather useful
- Rather not useful
- Not useful at all

Block II: Doctors working outside of academia

To which extent do you agree with the following statements about the general atmosphere in the department/research group you worked in? (1 = strongly agree; 2 = agree; 3 = disagree; 4 = strongly disagree)

- The general atmosphere is friendly
- The general atmosphere is supportive
- The general atmosphere is competitive
- The general atmosphere is motivating
- The general atmosphere is depressing
- The general atmosphere is oppressive

Current position

What type of employment contract corresponds to your current contract?

- open-ended contract
- fixed-term contract
- on call employment /hourly wages
- self-employed
- other (specify)

In what country are you currently working?

What is the business sector of the company/organization you currently work in?

- Public administration
- NGO or civil society organizations
- Private enterprises
- Other (specify)

What is your current employment rate? (Please indicate the percentage stipulated in your employment contract. If the rate is variable, please indicate the average rate.)

Your employment rate is lower than 90 percent, what are the reasons?

What were the education requirements for the position you currently hold?

- Doctoral degree
- Master degree

- Bachelor degree
- Other (specify)

Do you directly supervise other staff members? (Yes/No)

What is your total annual income in swiss francs (CHF) at your rate of employment?

- Less than 33'000
- 33'000 – 49'000
- 49'000 – 62'000
- 62'000 – 75'000
- 75'000 – 88'000
- 88'000 – 104'000
- 104'000 – 122'000
- 122'000 – 146'000
- 146'000 – 187'000
- More than 187'000

On a scale from 0 (not satisfied at all) to 10 (totally satisfied), how satisfied are you with the income you receive for this employment?

On a scale from 0 (not satisfied at all) to 10 (totally satisfied), how satisfied are you with your current job?

On a scale from 0 (not recognized at all) to 10 (totally recognized), how recognized are the following skills acquired during your training are recognized in the professional world?

- Analyze and synthesize information
- Knowledge transfer
- Methodological skills
- Ability to lead and/or to work in a team
- Ability to manage big projects
- Ability to apply for / obtain funding
- Specialized knowledge
- Polyvalence
- Writing skills
- Other (please specify)

Transition toward a non-academic career

When did you leave the academic world?

- Right after obtaining the PhD degree
- After one or more post-doctoral positions

How many different post-doctoral jobs did you have ?

Why did you leave the academic world?

- Dream job in another sector
- Opportunity to work in another sector
- Lack of career perspectives in academia
- Difficulties related to international careers
- Precarious working conditions in academia
- Insufficient support to pursue an academic career

- Personal reasons
- Other (please specify)

Which of the above reason is the most important?

On a scale from 0 (not difficult at all) to 10 (very difficult), how difficult has it been to find a first job outside of academia?

Did you receive support in your job search?

- No
- Yes, from University employment services / career center
- Yes from PhD supervisors
- Yes, from other professors
- Yes, from other colleagues (PhD candidates, post-docs)
- Yes, from former colleagues and doctors who left academia
- Yes, from personal networks (friends, family, etc.)
- Yes, from other (please, specify)

Relationship to the academic world

Do you still have contacts with the academic world?

- No
- Yes, I'm teaching a course
- Yes, I'm intervening in a course
- Yes, I participate in workshops and roundtables
- Yes, I'm mentoring
- Yes, other (please specify)

Block III: Postdocs

For how many years have you been in a post-doctoral position (research assistant, teaching assistant, assistant professor, postdoctoral researcher, lecturer, etc.)?

To which institution (s) are you currently affiliated? Please check all that apply

- ETH, Zürich
- IDHEAP, Lausanne
- IHEID, Genève
- Universität Basel
- Universität Bern
- Universität Luzern
- Universität St-Gallen
- Universität Zurich
- Université de Fribourg
- Université de Lausanne
- Université de Genève
- Other: please indicate

If you have selected more than one affiliation, could you indicate the institution where you have the highest employment rate?

What position did you hold immediately after you completed your dissertation?

If you held more than one position at the time, please indicate every position you held.

- Teaching assistant
- Lecturer
- Maître-assistant-e
- Oberassistent-in
- Assistant professor without tenure track
- Research assistant
- Research collaborator
- Postdoctoral fellow (on a research fellowship)
- Other: please indicate

For this position, indicate your work percentage.

For this position, to which institution were you affiliated?

For this position, what was the duration of your contract? (in months)

What position do you currently hold?

- Teaching assistant
- Lecturer
- Maître-assistant-e
- Oberassistent-in
- Assistant professor without tenure track
- Research assistant
- Research collaborator
- Postdoctoral fellow (on a research fellowship)
- Other : please indicate

For this position, indicate your work percentage.

For this position, to which institution were you affiliated?

For this position, what was the duration of your contract? (in months)

In the position you currently hold, what percentage of your working time do you on average devote to the following activities?

Please indicate how your work percentage is split among the different activities. The total percentage needs to add to 100% (if your work percentage is less than 100%, please convert the percentages to a full time position).

- Research
- Teaching
- Supervising students
- Grading exams
- Service to the department / the University; administrative tasks
- Other: please indicate

What is your gross annual income in Swiss francs (CHF) corresponding to your occupancy rate?

- Less than 33'000
- 33'000 – 49'000
- 49'000 – 62'000
- 62'000 – 75'000
- 75'000 – 88'000
- 88'000 – 104'000
- 104'000 – 122'000

- 122'000 – 146'000
- 146'000 – 187'000
- More than 187'000

On a scale from 0 (not satisfied at all) to 10 (totally satisfied), how satisfied are you with the income you receive for this employment?

On a scale from 0 (not satisfied at all) to 10 (totally satisfied), how satisfied are you with your current job?

While an academic career often requires to work and live in different countries, sometimes it is difficult to do so for personal reasons (i.e. partner's job, children in school, etc.). Considering these personal reasons, during your PhD thesis, how difficult would it have been for you to move to a different country? (0=very easy; 10=very difficult)

Research projects and cooperation

Since you completed your dissertation, have you been involved in research projects (including a post-doc research fellowship)? (Yes/No)

If yes: In how many projects have you been involved (including a post-doc research fellowship)?

If yes: Indicate your status in the research project

- Leader
- Co-leader
- Employee
- Other: please indicate

If yes: For each of the projects, indicate your status in the research project

- Leader
- Co-leader
- Employee
- Other: please indicate

With whom do you discuss your work the most?

- With colleagues in my department / research group
- With colleagues in Switzerland
- With colleagues outside of Switzerland
- With graduate students
- With undergraduate students
- With family, friends
- Other: Please indicate

Work environment

To which extent do you agree with the following statements about the general atmosphere in your current department/research group? (1 = strongly agree; 2 = agree; 3 = disagree; 4 = strongly disagree)

- The general atmosphere is friendly
- The general atmosphere is supportive
- The general atmosphere is competitive
- The general atmosphere is motivating

- The general atmosphere is depressing
- The general atmosphere is oppressive

What incentives does your current department / research group give you in terms of publishing and further developing your research networks?

From the list below, check the two incentives that were especially helpful in your case.

If you have joined your current position less than a year ago, please answer the question with respect to the previous position you held.

- Faculty research colloquium
- Reimbursement of conference expenses
- Possibility of taking a sabbatical leave
- Funds for buying books
- Work / research groups
- Support groups
- Organization of workshops
- Possibility to invite researchers for a research stay
- Other: please indicate

What kind of support to publish do you receive from members of your department / research group?

From the list below, check the two incentives that were especially helpful in your case?

If you have joined your current position less than a year ago, please answer the question with respect to the previous position you held.

- Suggestions about conferences where you could present your work
- Suggestions of readings that could be useful for your research
- Offers to read and comment on your work
- Offers to discuss your work
- Offers to co-author a paper
- Offers to contribute to an edited volume
- Other: please indicate

In your opinion, how valued are the following elements in your department / research group?

Please rate their importance on a scale from 1 to 4 (1 = not important at all; 2 = unimportant; 3 = important; 4 = very important)

- Publications in general
- Publications in peer-reviewed journals
- Contributions in the media
- Teaching
- Supervision of students
- Service to the department / research group

Publications

As of today, how many peer-reviewed articles have you published (including articles accepted for publication)?

How many articles do you currently have under review for publication in a peer-reviewed journal?

How many books have you published?

How many books / special issues have you edited?

In which language (s) do you publish the most?

- German
- French
- Italian
- English
- Other: please indicate

How satisfied are you with the number of your publications?

- Very satisfied
- Satisfied
- Dissatisfied
- Very dissatisfied

How satisfied are you with the quality of your publications?

- Very satisfied
- Satisfied
- Dissatisfied
- Very dissatisfied

Future

Sometimes, it is difficult to plan an academic career, nevertheless would you like to stay in academia if possible? (Yes/No).

If yes: How difficult do you imagine it is to find a academic job?

Please answer a scale from 0 to 10, where 0 means very easy and 10 very difficult

How confident are you to obtain a job in academia?

Please answer a scale from 0 to 10, where 0 means very easy and 10 very difficult

Block IV: Professor/MER

In what country are you currently working?

In what institution are you currently working?

On a scale from 0 (very easy) to 10 (very difficult), how difficult has it been to obtain your current job?

There are different requirements to obtain a professorship or a stable position, how important have been the following assets to obtain your current job: (1 = not important at all; 2 = not important; 3 = important; 4 = very important)

- Publications
- Research grants
- Teaching experience
- Supervision of young scholars
- Mobility
- Network

According to your personal experience, which one is the most important asset to obtain a professorship or a stable position?

- Publications
- Research grants

- Teaching experience
- Supervision of young scholars
- Mobility
- Networks
- Other (specify)

How important would you say that different kinds of publications have been important to obtain your current job? (1 = not important at all; 2 = not important; 3 = important; 4 = very important)

- Peer-reviewed articles in top journals
- Important number of peer-reviewed articles
- Book chapters
- Single-authored book/ monograph
- Edited volume
- Special issue

According to your personal experience, which one is the most important kind of publications to obtain a professorship or a stable position?

- Peer-reviewed articles in top journals
- Important number of peer-reviewed articles
- Book chapters
- Single-authored book/ monograph
- Edited volume
- Special issue

On a scale from 0 (not satisfied at all) to 10 (totally satisfied), how satisfied are you with the income you receive for this employment?

On a scale from 0 (not satisfied at all) to 10 (totally satisfied), how satisfied are you with your current job?

Where do you imagine yourself in 10 years?

- In the same university
- In another university
- No longer in academia