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The future of young women's economic role in a globalized economy: new opportunities – persisting constraints

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In most advanced industrial countries young women are outperforming young men in educational attainment. However, young women's labor market outcomes still lag behind those of young men. This discrepancy continues despite the fact that economic change in these countries has rapidly increased the educational requirements of jobs to be filled. This contribution discusses why women, despite their educational headways, encounter difficulties in seizing the opportunities offered by global economic change and examines the constraints women are still facing. Switzerland will be taken as the empirical reference.

*Young women's uneven inroads into and returns on the labor market*

Educational attainment has dramatically increased over the last decades, particularly for women in advanced industrial countries. In these countries, young women have even been outperforming young men in educational attainment, holding a significant enrollment advantage in tertiary-level education.<sup>1</sup> Not

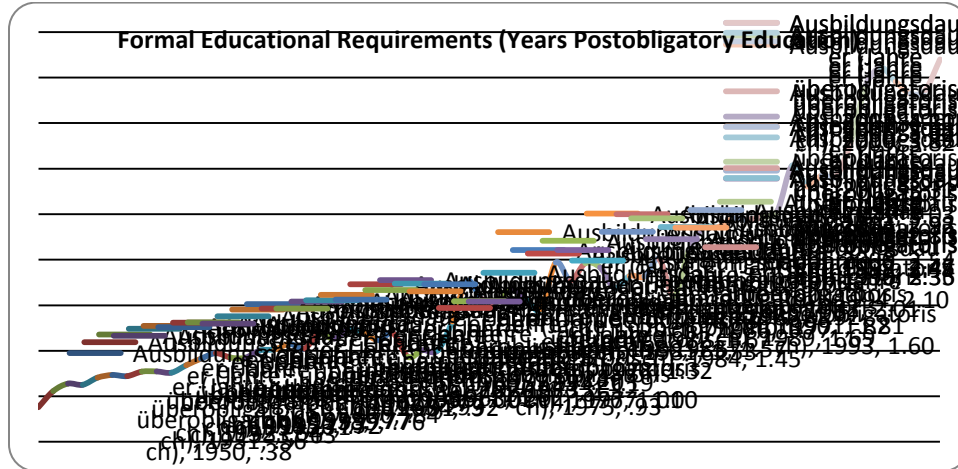
only the steep increase in women's educational attainment is characteristic of their changing social status over the last decades, improved access to the labor market is a distinctive feature as well. Women's employment rates have risen markedly in advanced industrial countries, although the increase in recent rates has slowed down and current rates still differ substantially across countries.<sup>2</sup> These achievements notwithstanding, other indicators of young women's labor market outcomes are still lagging behind those of young men. This is particularly notable with regard to the gender wage gap. Although this gap has been narrowing somewhat, women's wages are still lower than men's.<sup>3</sup> According to newest figures for Switzerland, women still earn 18.4 per cent less than men do. Moreover, women's career advancement regarding promotion and upward mobility is still often much slower than men's and does not lead as far. Women are still underrepresented in the top levels of organizations.<sup>4</sup>

The discrepancy between women's better performance in educational attainment compared to men's and their lower returns in the labor market are all the more significant as educational requirements of jobs have markedly increased over the last decades. Although data depicting trends in employers' demand for skills and qualifications are scarce, the available evidence, predominantly based on job advertisements, confirms a rather steep increase in the formal educational requirements of advertised jobs, particularly since the 1990s.<sup>5</sup>

Figure 1, based on representative samples of job ads published in the press and on-line in Switzerland from 1950 until to date, shows the trend in the average educational requirements of advertised vacancies. The increase starts to pick up in the mid-1990s and greatly accelerates from the early 2000s onward.<sup>6</sup> The educational requirements of the advertised jobs are measured in number of years of post-obligatory education required for the advertised vacancies. As post-obligatory education in Switzerland is highly

diversified, including certified vocational training, tertiary-level vocational training, and university studies, the trend clearly implies that, over the last 10 to 15 years, demand for tertiary-educated workers has markedly increased in the Swiss labor market.

Figure 1: Formal education (years of postobligatory education) demanded in job ads in the Swiss job market, 1950-2010



The increase in formal educational requirements results from the changing demand for occupation-specific credentials, indicating the changing occupational structure in the wake of economic globalization. *Consultants, IT and Media Specialists* show a strong increase together with *Hospital Staff and Health Service Workers; Office and Administrative Staff; Teacher and Scientists; Engineers and Technicians*. These are occupations predominantly allocated in the service sector, showing the pronounced shift towards a postindustrial economy over the last decades. From the 1990s onward, technological development exerts strong effects on the demand for occupational skills.<sup>7</sup>

Juxtaposing the trends in educational requirements of jobs with the inroads women have made into higher education, the question arises why women encounter difficulties in turning their educational assets into advantages in the labor market. Although not undisputed, some literature even comes to the

conclusion that women's advancement in the paid workplace has recently slowed down or even stalled.<sup>8</sup> Below, we advance some thoughts about the persistent gender inequality in labor market returns to educational investments, focusing on Switzerland. We argue that sex segregation in vocational training, fields of study and the concomitant occupational sex segregation in the Swiss labor market account decisively for the prevailing inequalities.

*Sex segregation in apprenticeships, fields of study, and occupations*

Switzerland is characterized by an occupational labor market where access to most occupations is regulated through formal educational qualifications. Still to date, the majority of new labor market entrants have earned a formal educational certificate by serving an apprenticeship, that is, occupation-specific vocational training. The minority holds certificates of tertiary-level vocational training and university degrees of a particular field of study. The strong link between educational credential and occupational labor market allocation forcefully contributes to translating gender differences in fields of vocational training and fields of study into occupational sex segregation. By international comparison, Switzerland figures among those advanced industrial countries showing the strongest occupational sex segregation.<sup>9</sup> Research has provided ample evidence that wages in female-typed occupations are lower than in male-typed or integrated occupations and opportunities for upward mobility are comparatively limited, thus impeding gender equality in labor market returns.<sup>10</sup> To underscore our argument, we provide below three pieces of evidence.

The first one discusses why young women in Switzerland are overwhelmingly channelled into female-typed vocational training. The second one focuses on the implications of female-typed fields of study for labor market returns. The third piece of evidence shows that women's occupational allocation in the Swiss labor market over the last thirty years has been

concentrated in a relatively small number of occupations that have become female-typed because of the great influx of women.

*Sex segregation in vocational training*

The RIASEC-Model developed by John Holland consists of six basic types of vocational personality, each including a specific configuration of vocational interests, personality traits, and competences.<sup>11</sup> Research based on this typology shows that young women and young men differ in the types of vocational interests.<sup>12</sup> Women are more interested in the *artistic*, *social*, and, to a lesser extent, *enterprising* types; men prefer the *realistic* or *investigative* types. There is no gender difference with regard to the *conventional* vocational interest type. For the Swiss vocational training market, Hirschi classified the total stock of training contracts in 2006 according to Holland's typology and gathered the gender distribution in each vocational interest type. The results show that the overwhelming majority of young men train in a vocation that matches their vocational interests of the *realistic* type. Vocational trainings assigned to the *realistic* type of vocational interests did not only encompass by far the largest number of vocations, but they also hold the greatest share of contracts. Young women, by contrast, train to a much lesser extent in a vocation that matches their vocational interests. The reason is that training opportunities offered in vocations classified as the *artistic* and *social* vocational interest types are rather scarce. Women are thus channelled into vocational trainings of the *conventional* vocational interest type that make up a substantial share of vocational training opportunities. Women's deflection into vocational training of the *conventional* interest type and men's concentration in trainings of the *realistic* interest type exacerbate sex segregation in the vocational training market in Switzerland.

*Sex segregation in fields of study*

In 2009, female enrolment in Swiss universities surpassed 50 per cent, having continuously risen from 32.4 per cent in 1980, to 41.5 per cent in 1995, and reaching 50.2 per cent in 2009.<sup>13</sup> Despite the substantial increase in female enrolment, gender distributions across fields of study have not budged much – a phenomenon observed for other advanced industrial countries as well.<sup>14</sup> In Switzerland as elsewhere, the fields of business, law, and medicine have integrated somewhat. Nevertheless almost every other female student in Swiss universities in 2009 is still enrolled in the humanities and social sciences compared to one out of four male students.<sup>15</sup> Almost identical figures were observed in 1995. Research shows that field of study affects labor market outcomes. Klein, for example, argues that employers, when screening university graduates for jobs, evaluate fields of study according to the expected average training costs graduates would accrue.<sup>16</sup> The higher the expected costs are, the more these graduates are relegated to the back of the labor queue. Using occupational specificity of a field of study as a signal to evaluate training costs, employers estimate training costs to be lower the more specific the preparation or the more narrow the occupational profile of a field of study is. According to Klein's findings graduates of fields of studies including arts, humanities, and social sciences take longer to find their first significant job, run a higher risk of over-education and skill mismatch. Haak and Rasner report results that are in line with Klein's.<sup>17</sup> The disadvantageous non-pecuniary labor market returns of these graduates are likely to translate into lower wages compared to graduates from other fields of study. In Switzerland, with almost every other female student being enrolled in 2009 in the female-typed humanities and social sciences (65.7 per cent female students), women's headways into higher education are not likely to contribute to greater gender equality in labor market returns.

*Occupational distributions of women and men*

The tight link between occupation-specific credential and occupational allocation in the labor market has been identified as an important source of Switzerland's strong occupational sex segregation. It is therefore of interest to learn about the effects of increasing female educational attainment and labor force participation over the last decades on women's occupational distributions. Based on Swiss Census data, Buchmann and Kriesi calculated, for the year 2000, the percentage of female workers in male-dominated, integrated, and female-dominated occupations that recorded an influx of female incumbents of at least 15 percent between 1970 and 2000.<sup>18</sup> The 21 male-dominated occupations (out of a total of 209 occupations) meeting this threshold held 2 per cent of all female labor force participants only. The 47 integrated occupations (out of a total of 111 occupations) that showed an influx of at least 15 percent of female workers combined 10 percent of all female workers. Finally, the 16 female-dominated occupations (out of a total of 57 occupations) that increased their share of female workers by at least 15 per cent assembled 27 per cent of all female labor force participants. These figures document that the great influx of female workers in the period of 1970 to 2000 contributed to the strong feminization of parts of the Swiss labor market, creating what Maria Charles has labelled occupational ghettos.<sup>19</sup> The fact that a substantial part of female workers crowd in a small number of occupations does not help improve their market returns despite the significant increases in women's educational attainment.

*Conclusion*

Like in most advanced industrial countries, women in Switzerland have greatly expanded participation in educational systems and labor markets. Access to these institutions have substantially equalized between men and women. When focusing on gender distributions within these institutions, we observe a great

deal of gender-differentiated roles, however. Female-dominated vocational training and fields of study at universities as well as female-dominated occupations are associated with disadvantageous monetary and non-pecuniary labor market returns. Sex segregation in education and the labor market reinforces gender inequality. The globalized economy of advanced industrial countries, despite the increasing demand for highly-qualified workers, has not affected much the gendered distributions in education and the labor market. According to the Jena Model of Social Change and Human Development, the inherent demands of social change, such as economic globalization, are accompanied with uncertainty at the individual level, but also with adaptive developmental processes and individuals' attempts to deal with these changing demands.<sup>20,21</sup> Yet, sex segregation within the labor market remains remarkably stable.

To explain the resilience of sex segregation within education and the labor market scholars refer to the enduring cultural force of gender essentialist stereotypes and to employers' job assignment and recruitment practices.<sup>22</sup> The logic of gender essentialism basically is a supply-side argument as these stereotypes bias evaluations of self and others, thus influencing individuals' adaptive processes, efforts to overcome changing demands, and, ultimately, choices. Arguments about employers' job assignment, screening and hiring practices give preference to the demand-side, stating that these practices may result in gender inequalities in job opportunities. So far, these two types of research literature are mostly separated. Future research would profit from bringing the arguments of individual choice and structural opportunities more closely together. It is only when we know the relative significance of biased choices and structural barriers appropriate policy measures can be designed.



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<sup>1</sup> Charles, M. (2011). "A world of difference: International trends in women's economic status." *Annual Review of Sociology*. 37, 355-371; Shavit, Y., Arum, R., and Gamoran A. (2007). *Stratification in higher education: A comparative study*. Stanford, CA.: Stanford University Press.

<sup>2</sup> England, P. 2010. "The gender revolution: Unven and stalled." *Gender & Society*. 24 (2), 149-166; Charles, see 1.

<sup>3</sup> Leuze, K., and Strauss, S. (2009). "Wage inequality between male and female graduates: The influence of occupational specialization, female-dominated subjects and occupational segregation." *Zeitschrift für Soziologie*. 38 (4), 262-281.

<sup>4</sup> Yap, M., and Konrad, A.M., 2009. "Gender and racial differences in Promotions: Is there a sticky floor, a mid-level bottleneck, or a glass-ceiling?" *Industrial Relations*. 64 (4), 593-619; Gorman, E.H., and Kmec, J.A. (2009). "Hierarchical rank and women's organizational mobility: Glass ceilings in corporate firms." *American Journal of Sociology*. 114, (5), 1428-1474.

<sup>5</sup> Dörfler, L., and Van de Werfhorst, H.G. (2009). "Employers' demand for qualifications and skills: Increased merit selection in Austria, 1985-2005." *European Societies*. 11, (5), 697-720; Salvisberg, A. (2010). *Soft Skills auf dem Arbeitsmarkt: Bedeutung und Wandel*. Zürich: Seismo.

<sup>6</sup> Swiss Job Market Monitor. Unpublished figures.  
([www.stellenmarktmonitor.uzh.ch](http://www.stellenmarktmonitor.uzh.ch))

<sup>7</sup> Sacchi, S., Salvisberg, A., and Buchmann, M. (2005). "Long-term dynamics in skill demand in Switzerland, 1950-2000." In H.Kriesi, Farago P., Kohli, M., and Zarin-Nejadan, M. (eds.), *Contemporary Switzerlan: Revisiting the special case*. Houndsmills, Basingstoke: Palgrave Macmillan.

<sup>8</sup> Reskin, B.F., and Maroto, M.L. 2011. "What trends? Whose choices?: Comment on England." *Gender & Society*. 25, (1), 81-87; England, See 2.

<sup>9</sup> Charles, M., and Grusky, D.B. (2005). *Occupational ghettos: The Worldwide segregation of women and men*. Stanford, CA.: Stanford University Press.

<sup>10</sup> Charles, see 1; England, see 2; Leuze & Strauss, see 3.

<sup>11</sup> Holland, J. (1997). *Making vocational choices: A theory of vocational personalities and work environments*. 3<sup>rd</sup> edition. Englewood Cliffs , N.J.: Prentice Hall.

<sup>12</sup> Hirschi, A. (2009). "Eine typologische Analyse des Lehrstellenmarktes: Strukturelle Benachteiligung von jungen Frauen." *Swiss Journal of Sociology*. 31, 1-18.

<sup>13</sup> Swiss Federal Statistical Office. (2010). *Bildungsstatistik 2010*. Neuchâtel: BFS.

<sup>14</sup> England, P., and Li, S. (2006). "Desegregation stalled: The changing gender composition of college majors, 1971-2002." *Gender & Society*. 20, (5), 657-677.

<sup>15</sup> Swiss Federal Statistical Office, see 12.

<sup>16</sup> Klein. M. (2011). "Higher education and non-pecuniary returns in Germany: Tracing the Mechanisms behind field of study effects at the start of the career." *Irish Educational Studies* 30(2), 253-270.

<sup>17</sup> Haak, C., and Rasner, A. (2009). "Search [f]or work: The College-to-Work transition. Graduates in the humanities in interdisciplinary perspective." *Kölner Zeitschrift für Soziologie und Sozialpsychologie*. 61, (2), 235-258.

<sup>18</sup> Buchmann, M., and Kriesi, I. (2008). "Feminisierung der Arbeitswelt." In S. Larcher Klee, and Grubenmann, B. (eds.), *Tagesstrukturen als sozial- und*

*bildungspolitische Herausforderung: Erfahrungen und Kontexte*. Bern: Haupt Verlag.

<sup>19</sup> Charles, M. (2005). "National skill regimes, postindustrialism, and sex segregation." *Social Politics*. 12, 289-316.

<sup>19</sup> Pinquart, M., & Silbereisen, R.K. (2004) "Human development in times of social change: Theoretical considerations and research needs", *International Journal of Behavioral Development*, 28, pp. 289-298.

<sup>20</sup> Silbereisen, R. K., & Pinquart, M. (2008) *Individuum und sozialer Wandel: Eine Studie zu Anforderungen, psychosozialen Ressourcen und individueller Bewältigung*. Juventa, Weinheim.

<sup>21</sup> Charles, see 1; England, see 2; Reskin & Maroto, see 8.

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