

Zeitschrift: Schweizerische Zeitschrift für Soziologie = Revue suisse de sociologie
= Swiss journal of sociology

Herausgeber: Schweizerische Gesellschaft für Soziologie

Band: 20 (1994)

Heft: 3

Artikel: Assessing micro-level explanations of occupational sex segregation :
human-capital development and labor market opportunities in
Switzerland

Autor: Charles, Maria / Buchmann, Marlis

DOI: <https://doi.org/10.5169/seals-814927>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 30.04.2026

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

**ASSESSING MICRO-LEVEL EXPLANATIONS
OF OCCUPATIONAL SEX SEGREGATION:
HUMAN-CAPITAL DEVELOPMENT AND LABOR MARKET
OPPORTUNITIES IN SWITZERLAND ***

Maria Charles^{a)} and Marlis Buchmann^{b)}

a) Department of Sociology, University of California, San Diego

b) Soziologisches Institut der Universität Zürich,
Professur für Soziologie, ETH Zürich

The Swiss occupational structure is highly sex segregated, with women dramatically overrepresented in clerical, sales and service occupations, and men dominating managerial and production jobs (Bundesamt für Industrie, Gewerbe und Arbeit 1977; Eidgenössische Kommission für Frauenfragen 1979, 1987; Charles 1987, Calonder 1990). Although this *pattern* of distribution roughly parallels international trends, recent evidence suggests that the overall *level* of occupational sex segregation in Switzerland is among the highest in the industrial world. A comparison of standardized segregation-index scores in 25 industrial countries shows Switzerland to be second only to Luxembourg in its overall level of occupational sex segregation (Charles 1992). This distinction is due in large part to Swiss women's dramatic overrepresentation in sales occupations and their underrepresentation in management (see also Charles & Grusky, forthcoming).

But, despite this very high level of sex segregation, we are aware of no systematic explanatory analyses of sex-typing in the Swiss labor market. The overwhelming majority of quantitative research in this field has focused exclusively on the United States, a country with some markedly different institutional arrangements and cultural norms than are found in Switzerland. Remarkably little is therefore known about how such individual-level characteristics as educational attainment, labor-force continuity and family status affect the process of occupational sex-typing in the Swiss labor market. In the present paper, we aim to partially fill this gap by investigating some micro-level factors that have often been linked to incumbency in female-dominated occupations. Our main focus will be on how sex differentiated educational paths affect occupational sex-typing upon labor market entry and later in the career. We also hope to gain some preliminary evidence regarding

* We are grateful to Karen Bradley, Lisa Catanzarite, Paula England, and David Grusky for helpful comments on earlier drafts of this paper.

the cross-national generalizability of previous American results. Our analyses are based on a new representative survey of Swiss-German citizens born around 1950. Before turning to the empirical analysis, we will briefly summarize the most influential individual-level arguments about the causes of sex segregation. We will then provide some basic information about Swiss labor market and family structures, and about men's and women's overall occupational distributions in this country.

1. Micro-Level Explanations of Sex Segregation

Conventional economic and sociological theories (as well as common wisdom) link occupational sex segregation directly or indirectly to differences between men and women in family responsibilities. According to neoclassical economists, women's "comparative advantage" at childbearing and childrearing reduces their marginal productivity at market work, relative to men's (Becker 1975, 1981). This means that women will often plan for discontinuous labor force participation, and will invest less than men in "human capital" acquisition. Furthermore, more frequent labor force interruptions mean that women will gather less market-relevant experience over the life course, and their previously acquired skills may depreciate. Given these circumstances, they can maximize lifetime earnings by choosing occupations requiring less specific training and a shorter-term job commitment. Sex segregation, according to human-capital theorists, results from women's disproportionate concentration in these types of occupations (Mincer and Polachek 1973; Polachek 1979, 1981). Early socialization – through the family, the mass media and the schools – is thought to strengthen tendencies toward educational and occupational sex segregation by fostering deeply-rooted, gender-specific occupational and familial ambitions (see Marini and Brinton 1984 for a review).

Most previous explanatory analyses of occupational sex segregation have been based on American data and conceptualized from an American perspective. Results have generally suggested the inadequacy of micro-level interpretations that cite sex differences in human capital acquisition as the primary cause of sex segregation.¹ However, some important differences in social and cultural

1 First, American women and men hardly differ in their educational attainment (United Nations Educational, Scientific and Cultural Organization 1990; Roos 1985, Table 5.1), and the small differences that do exist cannot account for the tremendous dissimilarity in men's and women's labor market distributions (England, Chassie and McCormack 1982; Rosenfeld 1983; Roos 1985). Second, rates of mobility between female- and male-dominated occupations are very high over the labor market career (England 1982; Rosenfeld 1983; Corcoran,

context suggest that caution should be exercised before generalizing these conclusions to the case of Switzerland. Indeed, considering Switzerland's specific social and cultural environment – in particular its highly developed system of vocational education and its traditional family structure –, arguments that trace occupational sex segregation to differences between Swiss men and women in their “human capital” acquisition have a good deal of face validity.² First, the link between educational and occupational attainment is likely to be quite strong in Switzerland, given its highly differentiated, vocationally-oriented educational system. And second, substantial sex differences in educational attainment seem likely, given the tremendous structural and cultural barriers to combining occupational and familial roles in this country, and thus the built-in incentives for young girls to condition their educational choices on expectations of a discontinuous labor market career. It is, in any case, important to consider Switzerland's unique institutional arrangements before we attempt to understand the process of occupational allocation in this country.

2. The Institutional Context of Gender Stratification in Switzerland

The Swiss educational system is highly differentiated and vocationally-oriented. In some regions, occupationally-relevant tracking occurs as early as age eleven, when pupils are sorted into either academic or vocational tracks. After completing eight or nine years of compulsory schooling, young people can either join the labor force as unskilled workers, transfer to the *Gymnasium* (university-track) or enroll in vocational training – either in a full-time vocational school or in a

Duncan and Ponza 1984; Jacobs 1989; Rosenfeld and Spenner 1992). This runs counter to arguments asserting fundamental differences in the educational requirements of male- and female-dominated occupations. Third, occupational aspirations of American women appear to be quite adaptable over the life course (Gerson 1985; Jacobs 1989), which is inconsistent with the stable preferences and lifetime-utility calculations imputed to individuals by early socialization and human-capital models. Fourth, sex differences in labor force continuity appear to be at best weakly related to American patterns of sex segregation (England 1982, 1984; Corcoran, Duncan and Ponza 1983). And fifth, relatively small differences are found between American women with and without family obligations in their occupational distributions and attainment patterns (Beller 1982; England 1982; Rosenfeld 1983; Roos 1985; Rosenfeld and Spenner 1992; Glass and Camarigg 1992). (See Reskin and Hartmann 1986 for a review of this literature.)

2 With regard to *income* differences in Switzerland, Brüderl, Diekmann and Engelhardt (1993) were able to trace about 50 percent of the gender gap to men's greater human capital. The authors note that the relationship between human capital and the gender gap in income appears to be stronger in Switzerland than they had found in previous analyses of German data. It is also considerably stronger than has generally been documented for the United States (see Marini 1989).

part-time vocational school combined with an apprenticeship. Their options are in large part determined by their earlier educational careers. In 1986, more than two-thirds of 15- 16- and 17-year old school-leavers enrolled in traditional apprenticeship programs, combining part-time vocational schooling with hands-on job experience in a private or a public firm (see Buchmann and Charles 1993). The majority of others enroll in the university or attend a full-time vocational school. Thus, for the overwhelming majority of young Swiss people, the end of formal education occurs with their acquisition of an *occupation-specific credential*.

Access to nearly all medium- and high-status occupations in Switzerland is strictly limited to those who have completed the corresponding vocational education. The overwhelming majority of those completing apprenticeships in any given occupation work in the chosen occupation upon labor-market entry and long into their labor-market careers. This central role of formal education in occupational allocation sets Switzerland apart from most other industrialized countries, where *informal on-the-job training* is much more common, and where occupation-specific credentials tend to be concentrated toward the top of the labor market status hierarchy. Notable exceptions in this regard are Germany and Austria which have similar, occupationally-based educational systems.

In contrast to most other highly industrialized countries, differences between men and women in overall educational attainment remain substantial in Switzerland (Shavit and Blossfeld 1993). Women complete fewer years of formal education, are less likely to pursue vocational education and graduate from the university at a lower rate than men (United Nations Educational, Scientific and Cultural Organization 1990; Buchmann and Charles 1993). When women do complete vocational training, it is generally of shorter duration than men's (Weiss and Häfeli 1987). A substantial part of the "gender gap" in overall years of education can be attributed to *sex differences in specific programs of vocational training*. Given the important role of vocational credentials for occupational allocation, sex-differentiated educational trajectories are likely to have important and long-lasting implications for men's and women's labor market opportunities (see Blossfeld 1987, 1989 on Germany).

Another characteristic of Swiss society that may be relevant to the issue of occupational sex segregation is the extreme structural incompatibility of work and family roles. Although nearly all Swiss women are occupationally active prior to marriage, labor force participation of *wives* is dramatically lower than in many other highly industrialized countries. The overwhelming majority of women either give up or greatly curtail their labor force activity with the birth

of a first child. According to the Swiss data employed here, for example, only about 30 percent of women with children younger than age 6 are currently employed. Among these, the majority spend 15 hours or less at paid work (see also Streckeisen 1991).

A number of contextual factors limit Swiss mothers' labor market attachment. First, public and private childcare arrangements are extremely scarce in Switzerland. Second, school schedules are highly incompatible with the demands of two-earner families: Children return home daily for two-hour lunch breaks, and school hours vary widely from day to day and from child to child (see Buchmann and Charles, forthcoming). Third, the ideology of "motherhood" and of the sexual division of labor in the family are firmly entrenched in the Swiss culture (see Popenoe 1987; Charles and Höpflinger 1992). And fourth, male wages are quite high in Switzerland; it is generally possible to comfortably raise a family on a single income. (In addition, it might be noted that store opening hours coincide almost perfectly with normal working hours in Switzerland, which can create substantial organizational problems in single-parent or dual-earner families.)

The great demands placed on working mothers combined with institutional pressures toward long-range decision-making may indeed induce many Swiss girls and young women to condition their earliest educational choices on the assumption of a discontinuous labor market career. And, consistent with the arguments of neoclassical economists, these women may very well feel disinclined to make large educational investments. This may partially account for the large sex differences in educational attainment described above. Again, given the tight links between the educational and occupational systems in Switzerland, any early differences in human capital investments are likely to have important long-term implications. In this type of credential-based labor market, women who wish to move out of "female" occupations must often undergo *formal retraining*.

In the empirical analyses to follow, we will first briefly describe general patterns of occupational distribution and occupational mobility for a 1950 birth-cohort of Swiss men and women. Based on multivariate logistic regression models, we will then assess the explanatory power of conventional individual-level variables for predicting incumbency in sex-typed occupations at two different points in the labor market career.

3. Data

Our analyses are based on a 1989 mailed survey of two Swiss-German³ birth cohorts – one born between 1949 and 1951 and one born between 1959 and 1961 (Buchmann and Sacchi, forthcoming). The data include, among other things, detailed biographical information regarding educational, occupational and familial careers. The sample was drawn by a two-stage method whereby 100 communities (broken down by region and community size) were first selected. Cohort-members residing in the selected communities were then randomly sampled based upon information provided in the official register of community residents. Three out of five region-types were oversampled so that a sufficiently large number of cases could be secured for each type. The analysis presented here is based upon a sample weighted to be proportionally representative for the two birth-cohorts. The sample was limited to Swiss citizens. The final response rate was approximately 45 percent (2,274 individuals), which is relatively high for a mailed survey of this length. A saturated log-linear model showed no significant differences in participation by sex, cohort, region-type or community size. Further tests of representativeness indicate slight underrepresentation of individuals at the bottom of the educational and occupational hierarchies.

Occupations are coded according to 541 detailed categories defined by the Swiss Bureau of Statistics. The “sex-type” of each occupation is based on occupational distributions of men and women in the Swiss labor force as indicated by a 1980 complete population census (Bundesamt für Statistik 1985). We used the same occupational classification to assign a “sex-type” to each specific program of occupational training. In order to enhance the comparability of our analyses with the most recent large-scale American investigation of this sort, we have followed Jacobs’ sex-type classification: Occupations in which women make up less than 30.0 percent of incumbents are defined as “male-dominated”; those that are 30.0 to 69.9 percent female “integrated”; and those with 70 percent or more women “female dominated.”⁴

3 Swiss-Germans constitute approximately 65 percent of the Swiss population. Compared to other multilingual nations (such as Belgium, Canada, and South Africa), economic, political and cultural cleavages between the different language groups are modest (Lijphart 1979).

4 Our aim is to characterize occupations with regard to their sex composition. It is therefore not essential that our measurements show deviation from women’s overall share of the labor force. Although these cutoff points are in some sense arbitrary, preliminary examination of the data suggested that results are relatively insensitive to moderate changes in the cutoff points.

We restrict the present analysis to data for the 1950 cohort, so that we may gain some information about how early educational investments affect occupational opportunities later in the labor-market and family careers. Before moving on to the explanatory models, we will briefly describe Swiss men's and women's overall occupational distributions at different points in the labor market career.

4. Results

4.1 *General Patterns of Occupational Distribution in Switzerland*

Overall, the data suggest patterns of sex segregation similar to those previously reported for other industrial countries: Throughout the labor market career, women are crowded into fewer occupations than men and are much more likely to work in the service sector of the economy, especially in clerical, sales and service jobs. Men in this cohort are distributed across a broader spectrum of occupations than are women, ranging from high-status professional and managerial to relatively low-status blue-collar occupations (see also Charles 1987).

By far the largest share of men and women in jobs defined here as "*female-dominated*" are working as salespersons, although participation in this occupation declines considerably over the labor market career, especially for men.⁵ Jobs as low-level office employees, low- and medium-prestige health-care workers, and special educators also occupy a relatively large share of both men and women in female-typed jobs. For women (but not men) employment as domestic employees is also quite important, but this type of work is much more common as a first job than later in the occupational career.

"*Male-dominated*" work is much less occupationally concentrated and considerably more likely to involve agricultural, industrial and craft jobs. Among men whose current job is male-dominated, the largest occupations include manager/director, technical manager, medical doctor, assembler ("*sonstige Monteur*") and farmer.⁶ Women working in sex-atypical occupations are considerably more likely than men to be found in professional and managerial jobs, or to be farm-owners (i. e., co-owners): The largest share of these women

5 Among women working in female-dominated *first* jobs, 25.0 percent were salespersons; among men the figure was 52.6 percent. For *last* (or current) jobs, the figures are 19.7 and 21.9 respectively.

6 These occupations employed 11.3, 3.5, 3.4, 2.9 and 2.5 percent of men in sex-typical current occupations respectively.

work as managers/directors, farmers, personnel specialists, wholesale and retail sales/direction and technical drafters (“*Hoch- und Tiefbauzeichner*”).⁷ Men’s and women’s participation in most of these occupations tends to increase over the work career (between first and last job).

By a large margin, the most common “*integrated*” occupation is *Kaufmännische Angestellte* (KV) which involves primarily lower-level managerial and upper-level clerical work. Under this title, such diverse jobs as secretary, bank teller, customs agent, assistant manager and insurance agent are defined as a single occupation. It again attests to the tight linkage between the educational and occupational systems in Switzerland that the defining characteristic of this occupation is completion of a three-year program of *kaufmännisches* vocational training. A great deal of occupational sex segregation is, of course, obscured in Swiss labor market statistics by the aggregation of such diverse types of work into a single occupation. This aggregation is especially unfortunate, given that KV is the single occupation employing the largest number of women and the second largest number of men in this country (11.4% and 5.0% of the 1980 female and male labor force respectively) (Charles 1987). Among women working in integrated first jobs, 47.2 percent are concentrated in this category. The corresponding figure for men is 40.2 percent. However, we found that men’s employment as KV decreases dramatically over the occupational career as they move into higher-level managerial positions. Other large integrated occupations are primary- and secondary-teacher and other types of vocational educators. Men are much more strongly concentrated in secondary-school teaching positions, while women work more often in primary and vocational schools.

Not surprisingly, we find that male-dominated jobs are considerably better paid and have higher occupational prestige than female-dominated jobs. For this cohort, the average wages of full-time workers are over 60 percent higher for incumbents of male- than of female-dominated current occupations.⁸ We also find the mean occupational prestige score (measured on the Treiman scale) to be about 24 percent higher for male-dominated occupations. T-tests comparing income and prestige scores between male- and female-dominated occupations show that these differences are statistically significant, and they

7 These occupations employed 9.9, 9.4, 9.3, 6.7 and 5.6 percent of the women in sex-atypical current (or last) occupations respectively.

8 Of course, large gender differences in salaries remain even after controlling for occupational sex distributions: among full-time incumbents of female-dominated occupations, we estimate that men earn an average of 67 percent more. For male-dominated occupations, the corresponding figure is 35 percent.

hold even when the sex of the incumbent is taken into account.⁹ Individuals in male-dominated occupations also work more hours although this difference is much larger for women.¹⁰ Women – but not men – working in male-dominated occupations tend to spend considerably more years in education than their counterparts doing female-typed work. This is not surprising, since women in male-dominated occupations are more likely to do higher-level white-collar and professional work while men are spread out across a wider range of blue- and white-collar jobs.

4.2 Sex-Type Mobility in Switzerland

We suspect that widespread requirements for occupation-specific credentials will mean that career mobility – both between occupations and between “occupational sex types” – will be relatively weak on the Swiss labor market. In order to provide a general idea regarding patterns of mobility between male- and female-dominated occupations at different points in the worklife, we have cross-tabulated the sex type of individuals’ first occupation by the sex type of their current (or last) occupation (for those individuals not currently employed, we consider the sex type of the occupation in which they were working immediately prior to labor force withdrawal. Results are shown in Table 1. The tables shown in Panel A include all individuals; those in Panel B include only the subsample of individuals who changed occupations during the period in question.

Not surprisingly, the distributions shown in Panel A indicate that for the overwhelming majority of both men and women (76 percent and 71 percent respectively), the first job and the most recent job were of the same sex type. The figures also show that when men and women did move, it tended to be *into a male-dominated occupation*. While only 4.9 percent of these women worked in male-dominated first jobs, this increases to 12.3 percent in the current (or last) job. Men increased their representation in “male” occupations from 69.9 to 76.2 percent. Similarly, we find a tendency for both women and men to move out of female-dominated occupations. The occupational distribution of

9 The income difference between *men* in male- and female-dominated occupations is, however, considerably smaller than that between *women* in male- and female-dominated occupations. Presumably, this reflects the tendency for men in “female” fields to work in the more desirable (often supervisory) positions.

10 Whether in a male- or a female-typed job, men generally work full-time (an average of 41.9 hours per week for the former, 47.2 hours for the latter). Women in male-dominated occupations most often work full-time schedules (42.4 hours per week reported on average), but those in female-dominated jobs report working considerably fewer hours (23.7 on average).

Table 1
Sex-Type Mobility: First to Current (Last) Job

A1. All: Men

| First Job | Last Job | | | Total |
|------------------|------------------|-------------|----------------|---------------|
| | Female-Dominated | Integrated | Male-Dominated | |
| Female-Dominated | 8 1.7% | 6 1.2% | 12 2.4% | 26 5.3% |
| Integrated | 6 1.2% | 58 11.9% | 57 11.7% | 121 24.8% |
| Male-Dominated | 10 2.1% | 28 5.8% | 303 62.0% | 341 69.9% |
| Total | 24 4.9% | 92 18.9% | 371 76.2% | 488 100.0% |

Chi²= 138.36, 4 df; Pearson's $r=.41$ ($p=.00$)

A2. All: Women

| First Job | Last Job | | | Total |
|------------------|------------------|--------------|----------------|---------------|
| | Female-Dominated | Integrated | Male-Dominated | |
| Female-Dominated | 176 40.6% | 48 11.0% | 18 4.0% | 242 55.7% |
| Integrated | 30 6.9% | 119 27.4% | 22 5.1% | 171 39.4% |
| Male-Dominated | 4 1.0% | 3 0.7% | 14 3.2% | 21 4.9% |
| Total | 211 48.6% | 170 39.1% | 54 12.3% | 434 100.0% |

Chi²= 186.79, 4 df; Pearson's $r=.50$ ($p=.00$)

table continued on the following page

continuation of table 1

B1. Occupational Changers Only: Men

| First Job | Last Job | | | Total |
|------------------|------------------|-------------|----------------|---------------|
| | Female-Dominated | Integrated | Male-Dominated | |
| Female-Dominated | 3 1.0% | 6 1.9% | 12 3.8% | 21 6.6% |
| Integrated | 6 1.9% | 16 5.1% | 57 18.2% | 79 25.2% |
| Male-Dominated | 10 3.2% | 28 9.0% | 175 55.9% | 213 68.1% |
| Total | 19 6.1% | 50 16.0% | 244 78.0% | 313 100.0% |

Chi²= 9.13, 4 df; Pearson's r=.16 (p=.00)**B2. Occupational Changers Only: Women**

| First Job | Last Job | | | Total |
|------------------|------------------|-------------|----------------|---------------|
| | Female-Dominated | Integrated | Male-Dominated | |
| Female-Dominated | 91 37.6% | 48 19.7% | 18 7.2% | 156 64.4% |
| Integrated | 30 12.4% | 21 8.8% | 22 9.1% | 74 30.3% |
| Male-Dominated | 4 1.8% | 3 1.2% | 5 2.2% | 13 5.3% |
| Total | 126 51.8% | 72 29.7% | 45 18.6% | 243 100.0% |

Chi²= 17.50, 4 df; Pearson's r=.24 (p=.00)**Note**

Sex type is determined by the proportion female for the Swiss labor force during the 1980 Census. "Female dominated" is defined as 70–100% female; "integrated" as 30–69.9% female; and "male-dominated" as 0–29.9% female.

women thus appears to be less sex-typed later in their labor-market careers, while men become more concentrated in sex-typical jobs.¹¹ Similar evidence of increasing attachment to male-dominated occupations over the career has been found for the United States, and has sometimes been attributed to the accumulation of firsthand knowledge about the material and social disadvantages of “female” jobs. Consistent with this interpretation, our data suggest that a shift from female- to male-dominated occupations is associated with greater material and social rewards than is sex-type immobility or shifts from male- to female-dominated occupations. For example, women who moved from a female-dominated first job to a male-dominated current (or last) job experienced a 42 percent increase in occupational prestige, as measured by Treiman’s occupational prestige scale. This compares to just a 9 percent increase for the sample as a whole, and to a *decrease* of approximately 15 percent for those women who moved from male- to female-dominated work.¹²

Panel B shows patterns of sex-type mobility between first and last jobs for individuals who changed their detailed occupational category during this period. Among both men and women, the largest share of these “occupational movers” are concentrated in the persistently sex-typical cells. For women, we find a statistically significant association between occupational origins and destinations, with approximately 48 percent of women located on the main diagonal of this table. This suggests – in contrast to Jacobs’ results for the United States (1989) – a marked tendency toward sex-type persistence even among those women who change occupations (see also Rosenfeld and Spenner 1992 on mobility of U.S. women). Among men, we find an even greater share – 62 percent – distributed along the main diagonal, but this is primarily due to men’s tendency to remain in male-dominated occupations. Men’s persistence in female-dominated and in integrated occupations is relatively weak, which

11 The largest share of both men and women moving from female- to male-dominated employment originally worked as salespersons. The occupational destinations of these individuals were quite varied and in most cases unrelated to sales work (including such diverse occupations as farmer, baker, truck driver, night-watch person, assembler, and manager). Women originally employed as medical assistants (*Arztgehilfinnen*) and waiters are also well-represented among the “female” to “male” occupational shifters. Occupational destinations for these women include personnel specialist, medical doctor, machinist, and farmer. Among both men and women who made this sex-type shift, there is a general tendency to move out of occupations requiring relatively little formal training and into more “skilled” work.

12 For men the pattern was similar although the number of men moving from male- to female-dominated occupations was too small to allow any trend analysis. While we have no data on individual income for first occupation, it is noteworthy that the current hourly earnings of women who moved from female- to male-dominated occupations are generally higher than for women who do not change occupational sex types or who move from male- to female-dominated employment.

explains the lower chi-square score for this table. Men who initially worked in sex-atypical occupations were apparently often able to switch into more gender-appropriate jobs.

In any case, it is clear that for the overwhelming majority of young Swiss women and men, occupational origins and destinations are quite strongly associated. Requirements for occupation-specific credentials, which have been found to limit occupational mobility over the life course, are no doubt partially responsible for the strong concentration of men and women along the diagonal in Panel A (Lutz 1981; Maurice, Sellier and Silvestre 1979; Haller et al. 1985; König and Müller 1986). Given the great importance of initial vocational placement in Switzerland, we begin our explanatory analysis by investigating the determinants of incumbency in a female-dominated *first job*. Here, we are particularly interested in the effects of educational attainment and social background on occupational sex-typing. In a subsequent section, we will investigate the persistence of any educational effects later in the labor market career.

4.3 *Sex-Typing in the Early Career*

In the cohort under investigation here, approximately 94 percent of men and 87 percent of women reported having completed some type of occupation-specific education. This was most often in the form of a traditional apprenticeship or enrollment in a full-time vocational school, but it also included a smaller number of polytechnical-school ("*Fachschule*") and university graduates. With regard to time spent in education, men showed a sizeable advantage, with an average of 13.5 years compared to 11.9 for women. The most dramatic sex differences in educational attainment, however, related to the *specific programs* of occupational education pursued: about 50 percent of women and over 70 percent of men who completed some type of formal training did so in a sex-typical occupation (as defined above); for sex-atypical occupations, these figures were about 10 and 5 percent respectively.

In order to determine how directly these sex differences in educational attainment translate into sex-specific patterns of occupational distribution, we have computed multivariate logistic regressions predicting (the log odds of) *incumbency in female-dominated first jobs*. Here, we investigate the effect of total years of education, university completion and sex. We also control for social background by including dummy variables indicating whether or not respondents' mothers and fathers completed some form of post-secondary education. Because values on parents' educational attainment have an extremely

skewed distribution, we are unable to measure their education on a continuous scale as we would have preferred. We chose this cutoff point because possession of a post-secondary (i. e. occupation-specific) educational credential represented one of the most significant distinctions during the historical period when the parents were receiving an education. Definitions and descriptive statistics for the independent variables are given in Table 2. Among the independent variables, no correlation exceeds 0.59. Cases with missing values were deleted listwise. Logit coefficients and standard errors for this model can be seen in the first three columns of Table 3.

Table 2
Independent Variables

| | Men | | Women | |
|---|-------|-----|-------|-----|
| | Mean | N | Mean | N |
| Completed University? ^A | .14 | 481 | .05 | 437 |
| Years of Education ^B | 13.45 | 477 | 11.87 | 432 |
| Training in more than 1 Occup? ^A | .20 | 481 | .11 | 437 |
| LF Break GE 12 Months? ^C | .20 | 481 | .48 | 437 |
| Have Child(ren)? ^A | .75 | 479 | .78 | 436 |
| Ever Married? ^A | .76 | 481 | .89 | 435 |
| Female-Dominated Training? ^D | .05 | 450 | .50 | 436 |
| Post-Sec. Educ, Mother? ^E | .36 | 461 | .38 | 389 |
| Post-Sec. Educ, Father? ^E | .54 | 463 | .62 | 387 |

A Dummy Coding: 1=yes

B Standard deviation for this variable was 3.14 for men, 2.17 for women.

C Respondents whose labor force interruptions totaled more than 12 months over the period in question are coded 1 on this dummy variable.

D Respondents were coded 1 on this dummy variable if they indicated that they received a credential in an occupation that was over 70% female in 1980.

E Respondents were coded 1 on this dummy variable if they indicated that the respective parent completed some form of post-secondary education.

Results provide only moderate support for human capital theory. While coefficients for the education variables are uniformly negative, the parameter estimates for university completion are not statistically significant (based on a two-tailed test) in any of the models,¹³ and the effect of the “years education”

13 If we apply a one-tailed test of statistical significance, which is arguably more appropriate here (given the clear directional relationship hypothesized), the negative coefficient for

Table 3
Logistic Regression Coefficients for Models Predicting Incumbency in a
Female-Dominated First Job

| | Men | Women | All | Men | Women | All |
|----------------------------|------------------|-----------------|-----------------|-------------------|-----------------|------------------|
| Completed University? | -.21 (.79) | -.98 (.82) | -.53 (.58) | 1.08 (1.16) | .94 (.95) | 1.08 (.68) |
| Years of Education | -.04 (.09) | -.23 (.05)** | -.18 (.04)** | .18 (.17) | -.15 (.09) | -.08 (.08) |
| Post-Sec. Educ, Mother? | -.67 (.50) | -.71 (.26)** | -.74 (.24)** | -1.04 (.91) | -.63 (.44) | -.67 (.40) |
| Post-Sec. Educ, Father? | 1.13 (.51)* | .10 (.27) | .33 (.23) | 1.44 (1.02) | -.45 (.46) | .09 (.40) |
| Female? | - | - | 2.99 (.24)** | - | - | 1.75 (.36)** |
| Female-Dominated Training? | - | - | - | 7.28 (1.11)** | 4.46 (.41)** | 4.97 (.37)** |
| Intercept | -2.81 (1.10)* | 3.19 (.61)** | -.50 (.54) | -8.09 (2.71)** | .33 (1.10) | -2.85 (.99)** |
| Model Chi-Square | 5.67 | 56.97** | 326.25** | 115.72** | 258.87** | 587.47** |
| Degrees of Freedom | 4 | 4 | 5 | 5 | 5 | 6 |
| N | 560 | 454 | 1014 | 524 | 396 | 920 |

Notes

Standard errors are in parentheses. Model chi-square is the difference between the log-likelihood of the observed results under the current model and that under a model including only a constant.

* p<.05, two-tailed test

** p<.01, two-tailed test

variable is significant only for women. The stronger effects for women may be due to men’s overrepresentation in the most “skilled” female-dominated occupations and in the least skilled male-dominated manufacturing occupations. Among women, educational duration appears to be a relatively strong predictor

university completion is statistically significant at the 5-percent level in the model predicting women’s (but not men’s) incumbency in a female-dominated occupation.

of incumbency in “female” occupations. We suspect that this relationship reflects differences in the duration of male- and female-dominated programs of vocational education.

Women whose mothers completed post-secondary education are substantially less likely to have worked in a sex-typical first job. Better-educated mothers are perhaps more likely to motivate high educational and occupational achievement in their daughters. Girls who grow up in households with an achievement-oriented female role model may feel less inhibited to transgress sex-type norms and be more apt to consider their options in the prestigious male-dominated professional and managerial jobs. Although we have no data on the occupational histories of the mothers, better-educated mothers presumably more often work in sex-atypical occupations themselves. They may also be more aware of the disadvantages of female-dominated work. Results of some explanatory logit models predicting sex-typical occupational *training* (not shown here) also indicated a significant negative effect of mother’s education.

Among men, we find no statistically significant effect of mother’s education. However, we were surprised to find that men whose fathers completed post-secondary education were significantly *more* likely to work in traditionally female-dominated jobs. This relationship requires further investigation, but may indicate a greater tendency for those from working class backgrounds to do blue collar work in such male-dominated (and integrated) fields as production, assembly, construction and transportation. Another interpretation is that highly educated fathers are more tolerant of their sons’ sex-atypical occupational choices. However, given the lack of material incentives for men to transgress sex-type norms, this argument is less convincing.

When the model is computed for both sexes, the coefficient for the “female” dummy dwarfs that of the other variables, indicating that women are much more likely than men to work in female-typed first jobs – *even net of differences in overall levels of education*. The model chi-square statistic for this model indicates a much better fit, suggesting that a substantial share of variation in occupational sex typing is unaccounted for by the individual-level characteristics considered here.

The above results for the female subsample provide some support for “human capital” interpretations of sex segregation that cite differences in the educational investments of incumbents in male- and female-dominated occupations. In three further models, we attempt to gain more precise information about the nature of these relationships by adding a dummy variable indicating training in a female-dominated occupation (Table 3, columns 4–6). Here we consider only individuals who attained some type of occupational credential

(through university or vocational education). This included 94 percent of men and 87 percent of women in this sample.¹⁴

Not surprisingly, we find very large effects of the additional variable for both sexes and the overall fit of the models is greatly improved. This strong relationship in large part reflects the natural tendency for individuals to seek work in exactly the same occupation for which they received training (in this sample, approximately 77% of women and men remained in the same occupation after completion of occupational education. In fact, 32 percent of women and 41 percent of men who completed traditional apprenticeships report staying with the same *firm*).

The effect of educational duration is indeed strongly attenuated in these models. It thus appears that women's weaker overall participation in vocational education and their overrepresentation in (generally shorter) female-typed educational programs are more important to the process of occupational sex segregation than are their shorter careers *within* given educational programs. Men in female-dominated occupations thus also tend to complete female-typical educational programs, although they appear to be overrepresented in the longer "female" programs (e. g. health care).

The effect of mothers' educational attainment on their daughters' occupational location is also much weaker when we control for female-dominated training. As would be expected, mothers' influence is greatest with regard to daughters' initial educational decisions.

Although it is still large, the coefficient for "female" in the pooled model is considerably smaller when the additional variable is included. This suggests that much of the effect of gender on occupational sex-type is indirect, operating through *sex differences in types of occupational training pursued*.

4.4 *Later Occupational Destinations: Persistence of Educational Effects*

Consistent with the predictions of human capital theory, the results shown in Table 3 indicate that sex differences in education – especially in specific programs of vocational training – have substantial effects on Swiss women's (and to a lesser degree men's) early occupational opportunities. In the following analyses, we investigate the persistence of these effects by modeling the determinants of incumbency in a female-dominated *current* occupation (in 1989). Explanatory

14 When the previous model was computed for a sample including only these "credentialled" individuals, the effect of women's educational duration continued to be statistically significant ($p < .01$).

variables are the same as in the earlier models – a continuous variable indicating total years of education completed, a dummy variable indicating whether or not a university degree was completed, and a dummy variable indicating whether or not the respondent completed training in a female-dominated occupation. We do not include a variable indicating the sex type of the respondent's first job because of its unacceptably high correlation with the female-dominated training variable.¹⁵ In addition, we control for family and labor market histories by including four further dummy variables – indicating the presence of one or more children, indicating whether the respondent has ever been married, indicating labor-force breaks totaling more than twelve months, and indicating formal training in more than one occupation (we include the latter because we suspect that occupational retraining may facilitate long-distance occupational moves and thus sex-type mobility).¹⁶ The zero-order correlation matrix (not shown) indicates no value greater than 0.61. Again, the definitions, means, and standard deviations for all variables are provided in Table 2.

Results are shown in Table 4. Among both men and women, by far the strongest relationship is found for the variable indicating female-dominated training. This provides further evidence that sex differences in educational attainment have profound and *long-lasting* implications for occupational opportunities in Switzerland. We find no evidence that second programs of vocational training are being used as a vehicle for mobility out of female-dominated occupations. Not surprisingly, the impact of parents' educational attainment is relatively weak at this point in the labor market career.

Beyond initial educational choices, *men's* probability of working in a female-dominated occupation does not appear to be related to any of the variables considered here. Family status and events occurring later in the labor market career do not appear to substantially influence (or be influenced by) the sex-type of men's occupation. It is perhaps worth noting that the never-married men are more likely to work in female-typed jobs, and the relationship approaches statistical significance. It may be that the lesser financial responsibilities of

15 In preliminary analyses (not shown here), replacing the training variable with an indicator for "female dominated first job" had virtually no effect on the parameters or the fit of the model. This again attests to the tight link between occupational training and occupational placement in Switzerland.

16 Because of the large number of women who either did not provide information about their weekly work hours or who (apparently) included domestic labor time in their work-hour calculations, we have not included any controls for part-time work in these models. Based on our best estimation of these distributions, inclusion of variables measuring weekly work time (i. e. part- versus full-time employment, hours of market work) results in no great differences in the parameter estimates for the other variables.

Table 4
 Logistic Regression Coefficients for Models Predicting Incumbency in a
 Female-Dominated Current Occupation

| | Men | Women | All |
|--------------------------------|---------------|--------------|---------------|
| Completed University? | -1.67 (1.43) | -1.22 (1.17) | -1.44 (.90) |
| Years of Education | .03 (.10) | -.10 (.09) | -.06 (.07) |
| Training in more than 1 Occup? | .43 (.60) | .28 (.56) | .27 (.40) |
| LF Break GE 12 Months? | -.73 (.74) | .24 (.38) | .20 (.31) |
| Have Child(ren)? | .09 (.79) | 1.00 (.45)* | .75 (.40) |
| Ever Married? | -1.34 (.86) | -.37 (.53) | -.74 (.46) |
| Post-Sec. Educ, Mother? | -.81 (.63) | -.36 (.37) | -.43 (.31) |
| Post-Sec. Educ, Father? | .16 (.53) | .69 (.39) | .48 (.31) |
| Female? | - | - | 1.82 (.34)** |
| Female-Dominated Training? | 2.07 (.59)** | 1.76 (.35)** | 1.83 (.30)** |
| Intercept | -3.63 (1.44)* | -1.22 (1.20) | -3.22 (.93)** |
| Model Chi-Square | 22.81** | 58.89** | 200.95** |
| Degrees of Freedom | 9 | 9 | 10 |
| N | 522 | 245 | 767 |

Notes

Standard errors are in parentheses. Model chi-square is the difference between the log-likelihood of the observed results under the current model and that under a model including only a constant.

* $p < .05$, two-tailed test

** $p < .01$, two-tailed test

never-married men puts them in a better position to accept the relatively low pay of female-dominated occupations.

For women, the coefficients for the labor force continuity and marital status variables are small and statistically insignificant. But we do find a significant net association between the presence of one or more children and incumbency in a female-dominated current occupation. Thus, in contrast to a number of American studies (e. g. Rosenfeld and Spenner 1992; Glass and Camarigg 1992), our results suggest that *Swiss mothers may indeed be more likely than childless women to work in female-typed occupations.*¹⁷ Of course, these cross-

17 Our sample includes only currently employed women. Thus, it is possible that the effect of children in this model simply reflects the greater likelihood that women in integrated or male-dominated occupations will withdraw from the labor force when they become mothers. Further logistic regression models (not shown) suggest however that (net of all other variables in our model) the housewives in our sample are in fact significantly more likely than the

sectional results do not allow us to determine the *causal* relationship between motherhood and occupational location: children may affect mothers' occupational distributions (by inhibiting switches *out of* female-dominated occupations and by encouraging switches *into* female-dominated occupations). But incumbency in a female-dominated occupation may also influence women's fertility (by limiting women's opportunities to expand their occupational role or by reinforcing a cultural definition of women's labor market activities as "marginal" and "temporary" [see Kanter 1977]). In order to determine the causal relationship between family events and labor market opportunities, analysis over time is required.

Turning to the cumulative model, which includes a dummy variable indicating whether the respondent is female, we again find very strong *net* effects of gender and a much better fitting model, as measured by the model chi-square statistic. Thus, while individual-level variables do show some important effects on women's occupational distribution, a great deal of variation remains unexplained: regardless of their educational backgrounds, labor force behavior and family status, Swiss women (like their American counterparts) are far more likely than men to work in female-typed occupations.

5. Discussion and Conclusions

In this paper we have attempted to gather some basic evidence regarding the individual-level determinants of occupational sex-typing in the Swiss labor market. A general examination of Swiss women's and men's occupational distributions reveals that sex segregation tends to occur very early in the individual lifecourse and persists far into the labor market career. Results of our explanatory analysis indicate *substantial and long-lasting effects of educational attainment on women's probability of working in a female-dominated occupation*. Specifically, we find strong links between occupational sex-typing and sex-differentiated programs of occupational education. And, contrary to results of similar American analyses, we find some evidence that Swiss mothers are more likely than their childless counterparts to work in sex-typical occupations. Overall, results thus lend somewhat more support to the claims of human capital theory than has generally been found using American data.

currently employed women to have worked in a female-dominated *last* occupation. The bias resulting from our inclusion of only currently employed women is therefore most likely conservative in nature, underestimating the effect of children on women's probability of incumbency in sex-typical jobs.

Although direct cross-national comparison is necessary to confirm significant cross-national differences, it is useful here to consider how the unique characteristics of Swiss society might affect relationships between individual attributes and occupational outcomes. The previous work of Charles (1990, 1992) helps identify some macro-level factors that contribute to Switzerland's extraordinarily high level of sex segregation – and which may also influence the *process* by which segregation occurs in this country. These include a relatively conservative ideological climate, a low rate of female labor force participation, a corporatist (i. e. consensus-based) style of interest intermediation and the relatively large proportion of the Swiss labor-force with employee (as opposed to self-employed) status (see also Charles and Grusky, forthcoming). In addition, we suspect that Switzerland's highly differentiated, vocationally-oriented educational system, combined with great structural barriers to combining occupational and familial roles, might work to increase segregation by strengthening the link between early educational attainment and labor market opportunities. In the following paragraphs we will describe in greater detail how cross-national differences in the structuring of formal education and in the organization of everyday life might influence the individual-level processes of human capital development and occupational allocation. These macro-level factors have to date received little attention in the sex segregation literature.

Education: In examining the case of Switzerland, we have identified three characteristics of the educational system that we believe may strengthen tendencies toward occupational sex segregation: educational differentiation, tight links between the educational system and the labor market, and built-in requirements for early occupational choice.

With regard to the first point, it is important to recognize that the association between educational and occupational attainment will tend to be stronger where the educational system is more differentiated. In the United States (and in many other industrialized countries) the majority of boys and girls complete their educational careers with a general high school degree, and large segments of the American population – men and women – are therefore virtually indistinguishable in terms of education. For the overwhelming majority of young Swiss people, on the other hand, the end of formal education occurs with their acquisition of an occupation-specific credential. In this sense, occupational sex segregation is built into the Swiss educational system, whereas it tends to occur after labor market entry in the American context. Highly differentiated, vocationally-oriented educational systems imply greater *opportunities* for sex differences in human capital development than exist in national educational systems emphasizing general knowledge.

Furthermore, where the linkage between the educational system and the labor market is tight, any sex differences in educational attainment should translate quite directly into sex differences in occupational distribution that *persist* long into the labor-market career. Whereas financial, family and/or career considerations may induce American men and women to move across sex-type boundaries (England 1982; Rosenfeld 1983; Corcoran, Duncan and Ponza 1984; Jacobs 1989), requirements for occupation-specific credentials are likely to inhibit inter-occupational mobility in Switzerland, so that early (sex-typed) vocational choices are likely to have long-term career consequences. Thus, the institution of vocational credentialing may contribute to the long-term persistence – and perhaps amplification – of early sex-differences in educational investment. Blossfeld's findings (1987, 1989), which document the long-term importance of sex-typed educational trajectories to occupational sex segregation in Germany (another country with a strong tradition of vocational education), lend some support to this argument.

Tight links between the educational and occupational worlds may also increase the likelihood that cultural gender definitions prevailing in the labor market will be manifested as sex differences in *educational* careers. In Switzerland, for example, the sex gap in educational attainment certainly represents more than the utility-maximizing choices of women anticipating a discontinuous labor market career; educational distinctions must also *reflect* the gendered nature of the labor market.

Finally, the relationship between early sex-role socialization and occupational outcomes may be intensified where individuals must choose a vocation at a young age. Most vocational education takes place during adolescence, a lifestage when reluctance to deviate from gender norms is generally very great, when the approval of peers is of enormous concern, and when real labor market experience is limited (Entwisle and Greenberger 1972; Gaskell 1985). Firsthand knowledge of the disadvantages of traditionally female occupations may cause many women to revise their original occupational goals after some actual labor force experience. American data, for example, indicate that women are decreasingly likely to be found in female-dominated jobs over the labor force career, as they attempt to respond to unexpected situations and new opportunities (Kane and Frazee 1979; Rosenfeld 1983; Jacobs 1989). Institutional constraints on mobility limit long-distance occupational moves and thus may lock in some of Swiss boys' and girls' earliest sex-typed occupational ambitions.

Role Incompatibility: We have also suggested that the explanatory power of human capital arguments may be greater (and sex segregation more pronounced) in contexts where work and family roles are most incompatible. Organizational arrangements that structure motherhood and career as mutually

exclusive options may make women more likely to condition their earliest educational and occupational choices on the assumption of a discontinuous labor market career, and may thereby diminish girls' and young women's incentives for making large educational investments (see also Hakim 1992). In countries like Switzerland, where such organizational constraints are combined with built-in institutional pressures toward long-range occupational decision-making, early educational choices are likely to have important and long-lasting effects on women's labor market opportunities.

Incompatibility of occupational and family roles may also contribute to a *cultural* understanding of women's labor market activity as temporary and marginal. In such a context, institutional structures that require individuals to decide on a lifetime occupation at a very early age are especially conducive to sex-typed choices, since young girls (most of whom someday hope to become mothers) are unlikely to have much interest in transgressing cultural norms about gender-appropriate occupations.

Organizational barriers to combining occupational and family roles may also increase sex segregation *directly* by amplifying the relationship between women's family status and their occupational distributions (in fact, results of our analysis provide some preliminary evidence of a direct association between motherhood and incumbency in a female-dominated occupation). It may be that such considerations as working hours, flexibility and required labor market commitment play a greater role in determining mothers' occupational choices in contexts where "career" and "motherhood" are structured as mutually exclusive alternatives for women (see also Buchmann and Charles, forthcoming). Furthermore, we suspect that Swiss women who are interested in pursuing relatively demanding or time-consuming occupations may often do so at the expense of family goals, whereas this might not be the case in countries where institutional arrangements are more conducive to combining motherhood and career. Researchers should thus consider the possibility that specific social policies (e. g. those pertaining to childcare provisions and school hours) may either accentuate or diminish the relationship of individual women's family status (or family aspirations) to their educational and occupational distributions.

In conclusion, we wholeheartedly agree with Mary Brinton (1988) regarding the importance of understanding the institutional context when studying the individual-level processes of human capital development and social stratification. In designing and interpreting this analysis, we have attempted to keep the unique structural and cultural characteristics of Swiss society in mind. Systematic cross-cultural analysis is needed before any definitive statements can be made about how macro-level factors mediate micro-level processes of gender stratification. In the future, we hope to contribute to this research effort through

a comparative event history analysis of women's labor market transitions in the United States and Switzerland.

REFERENCES

- Becker G. S. (1975), *Human Capital*, Columbia University Press, New York.
- Becker G. S. (1981), *A Treatise on the Family*, Harvard University Press, Cambridge, Mass.
- Beller A. H. (1982), Occupational Segregation by Sex: Determinants and Changes, *Journal of Human Resources* 17, 371–92.
- Bielby W. T., Baron J. N. (1986), Men and Women at Work: Sex Segregation and Statistical Discrimination, *American Journal of Sociology* 91, 759–99.
- Blossfeld H.-P. (1987), Labor-Market Entry and the Sexual Segregation of Careers in the Federal Republic of Germany, *American Journal of Sociology* 93, 89–118.
- Blossfeld H.-P. (1989), *Kohortendifferenzierung und Karriereprozess: Eine Langsschnittstudie über die Veränderung der Bildungs- und Berufschancen im Lebenslauf*, Campus, Frankfurt.
- Bridges W. P. (1982), The Sexual Segregation of Occupations: Theories of Labor Stratification in Industry, *American Journal of Sociology* 88, 270–95.
- Brinton M. C. (1988), The Social-Institutional Bases of Gender Stratification: Japan as an Illustrative Case, *American Journal of Sociology* 94, 300–34.
- Brüderl J., Diekmann A., Engelhardt H. (1993), Einkommensunterschiede zwischen Frauen und Männern in der Schweiz, *Schweizerische Zeitschrift für Soziologie*, 19, 573–88.
- Buchmann M., Charles M., with Sacchi S. (1993), The Lifelong Shadow: Social Origins and Educational Opportunity in Switzerland, Pp. 177–92 in Shavit Y, Blossfeld H-P (eds), *Persistent Inequality: Changing Educational Qualification in 13 Countries*, Westview Press, Boulder, Colorado.
- Buchmann M., Charles M. (1994, forthcoming), Organizational and Institutional Determinants of Women's Labor Force Options: Comparing Six European Countries, *International Journal of Sociology*.
- Buchmann M., Sacchi S. (forthcoming), *Berufsverlauf und Berufsidealität im soziotechnischen Wandel*. Report to the Swiss National Science Foundation, Bern.
- Bundesamt für Industrie, Gewerbe und Arbeit (1977), Betrachtungen zur Stellung der Frau auf dem Arbeitsmarkt, *Die Volkswirtschaft*, 261–65.
- Bundesamt für Statistik (Switzerland) (1985), *Eidgenössische Volkszählung 1980*. Bundesamt für Statistik, Bern.
- Calonder Gerster A. E. (1990), *Zur Situation der erwerbstätigen Frau*. Bundesamt für Industrie, Gewerbe und Arbeit, Bern.
- Charles M. (1987), Geschlechterspezifische Arbeitsmarkt-Segregation in der Schweiz, *Schweizerische Zeitschrift für Soziologie*, 13, 1–27.
- Charles M. (1990), *Occupational Sex Segregation: A Log-Linear Analysis of Patterns in 25 Industrial Countries*. Ph. D. dissertation, Department of Sociology, Stanford University.
- Charles M. (1992), Cross-National Variation in Occupational Sex Segregation, *American Sociological Review* 57, 483–502.
- Charles M., Grusky D. B. (forthcoming), Modeling Cross-National Variability in Occupational Sex Segregation, *American Journal of Sociology*.

- Charles M., Höpflinger F. (1992), Gender, Culture, and the Division of Household Labor: A Replication of U. S. Studies for the Case of Switzerland, *Journal of Comparative Family Studies* 23, 375–87.
- Corcoran M., Duncan G. J., Ponza M. (1983), Work Experience and Wage Growth of Women Workers, In Duncan G J, Morgan J (eds), *Five Thousand American Families: Patterns of Economic Progress*, Volume 10, 249–323.
- Corcoran M., Duncan G. J., Ponza M. (1984), Work Experience, Job Segregation and Wages, Pp. 171–91 in Reskin B F (ed), *Sex Segregation in the Workplace: Trends, Explanations, Remedies*, National Academy Press, Washington D. C.
- DiPrete T.A. (1987), The Professionalization of Administration and Equal Employment Opportunity in the U. S. Federal Government, *American Journal of Sociology* 93, 119–40.
- Eidgenössische Kommission für Frauenfragen (1979), *Die Stellung der Frau in der Schweiz*, Eidgenössische Kommission für Frauenfragen, Bern.
- Eidgenössische Kommission für Frauenfragen (1987), *Frauen und Männer: Fakten, Perspektiven, Utopien*, Eidgenössische Kommission für Frauenfragen, Bern.
- England P. (1982), The Failure of Human Capital Theory to Explain Occupational Sex Segregation, *Journal of Human Resources* 17, 358–70.
- England P. (1984), Wage Appreciation and Depreciation: A Test of Neoclassical Economic Explanations of Occupational Sex Segregation, *Social Forces* 62, 726–49.
- England P., Chassie M., McCormack L. (1982), Skill Demands and Earnings in Female and Male Occupations, *Sociology and Social Research* 66, 147–68.
- Entwisle D. R., Greenberger E. (1972), Adolescents' Views of Women's Work Role, *American Journal of Orthopsychiatry* 42, 648–56.
- Gaskell J. (1985), Course Enrollments in the High School: The Perspective of Working-Class Females, *Sociology and Education* 58, 48–59.
- Gerson K. (1985), *Hard Choices: How Women Decide about Work, Career, and Motherhood*, University of California Press, Berkeley.
- Glass J., Camarigg V. (1992), Gender, Parenthood and Job-Family Compatibility, *American Journal of Sociology* 98, 131–51.
- Hakim C. (1992), Explaining Trends in Occupational Segregation: The Measurement, Causes and Consequences of the Sexual Division of Labor, *European Sociological Review* 8, 127–52.
- Haller M., König W., Krause P., Kurz K. (1985), Patterns of Career Mobility and Structural Positions in Advanced Capitalist Societies: A Comparison of Men in Austria, France, and the United States, *American Sociological Review* 50, 579–603.
- Jacobs J. A. (1989), *Revolving Doors: Sex Segregation and Women's Careers*, Stanford University Press, Stanford.
- Kane R., Frazee P. (1979), *Adult Women in Vocational Education: Reentrants and Career Changers*. Final Report to Office of Education, U. S. Department of Health, Education and Welfare.
- Kanter R. M. (1977), *Men and Women of the Corporation*, Basic Books, New York.
- König W., Müller W. (1986), Educational Systems and Labour Markets as Determinants of Worklife Mobility in France and West Germany: A Comparison of Men's Career Mobility 1965–1970, *European Sociological Review* 2, 73–96.
- Lijphart A. (1979), Religious vs. Linguistic vs. Class Voting: The "Crucial Experiment" of Comparing Belgium, Canada, South Africa, and Switzerland, *American Political Science Review* 73, 443–458.

- Lutz B. (1981), Education and Employment: Contrasting Evidence from France and the Federal Republic of Germany, *European Journal of Education* 16, 73–86.
- Marini, M. M. (1989), Sex Differences in Earnings in the United States, *Annual Review of Sociology* 15, 343–80.
- Marini, M. M., Brinton M. C. (1984), Sex Typing in Occupational Socialization, Pp. 192–232 in Reskin B F (ed). *Sex Segregation in the Workplace: Trends, Explanations, Remedies*, Academy Press, Washington, D. C.
- Maurice M. Sellier F., Silvestre J. J. (1979), Die Entwicklung der Hierarchie im Industrieunternehmen: Untersuchung eines gesellschaftlichen Effektes, *Soziale Welt* 30, 295–327.
- Mincer J., Polachek S. (1973), Family Investments in Human Capital: Earnings of Women, Pp. 397–429 in Schultz T W (ed), *Economics of the Family: Marriage, Children and Human Capital*, University of Chicago Press, Chicago.
- Polachek S. (1979), Occupational Segregation Among Women: Theory, Evidence, and a Prognosis, Pp. 137–57 in Lloyd C, Andrews E, Gilroy C (eds). *Women in the Labor Market*, Columbia University Press, New York.
- Polachek S. (1981), Occupational Self-Selection: A Human Capital Approach to Sex Differences in Occupational Structure, *Review of Economics and Statistics* 63, 60–69.
- Popenoe D. (1987), The Situation of the Family in Contemporary Switzerland: A Comparison with Sweden, Unpublished working paper, Rutgers University.
- Reskin B. F., Hartmann H. I. (eds) (1986), *Women's Work, Men's Work: Sex Segregation on the Job*, National Academy Press, Washington, D. C.
- Roos P. A. (1985), *Gender and Work: A Comparative Analysis of Industrial Societies*, SUNY Press, New York.
- Rosenfeld R. (1983), Sex Segregation and Sectors: An Analysis of Gender Differences in Returns from Employer Changes, *American Sociological Review* 48, 637–55.
- Rosenfeld R., Spenner K. I. (1992), Occupational Sex Segregation and Women's Early Career Job Shifts, *Work and Occupations* 19, 424–49.
- Shavit Y., Blossfeld H-P (eds) (1993), *Persistent Inequality: Changing Educational Qualification in 13 Countries*, Westview Press, Boulder, Colorado.
- Snyder D., Hayward M. D., Hudis P. M. (1978), The Location of Change in the Sexual Structure of Occupations, 1950–1970: Insights from Labor Market Segmentation Theory, *American Journal of Sociology* 84, 706–717.
- Streckeisen U. (1991), "More and More Women Work": Inquiries into the Work Patterns of Adult Swiss Women, *Women's Studies International Forum* 14, 77–84.
- United Nations Educational, Scientific and Cultural Organization (1990), *Statistical Yearbook*, United Nations Educational, Scientific and Cultural Organization, Paris.
- Weiss D., Häfeli K. (1987), *Die Entwicklung der neuabgeschlossenen Lehrverträge in der Schweiz: 1955–1984*, Schweizerischer Verband für Berufsberatung, Zürich.

Authors' addresses:

Maria Charles

Department of Sociology, University of California, San Diego
9500 Gilman Drive, La Jolla, California 92093–0102, USA

Marlis Buchmann

Professur für Soziologie, ETH Zentrum
CH–8092 Zürich