

IMMIGRANT GENDER CONVERGENCE IN EDUCATION AND ON THE LABOR MARKET

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Abstract

Immigration tends to have a mitigating effect on the socioeconomic gender gap among immigrants. To explain this finding, we propose a gender convergence hypothesis that states that migration to a modern ‘open’ society offers women the opportunity to improve their position relative to that of men. In such a society, there are (almost) equal chances to participate in education and paid labor. The equalizing effect will be larger if the immigrants come from less developed regions, since women then have more room to improve their position. However, there may also be countervailing cultural powers within the immigrant group. The gender convergence hypothesis proposed here is tested for immigrants in the Netherlands. Using survey data, we investigate the educational and labor market position of Turkish, Moroccan, Surinamese, and Antillean males and females. We find convergent trends, particularly among Moroccan immigrants who come from less developed regions in their country of origin and who meet less cultural in-group barriers than, for example, Turkish immigrants.

I. INTRODUCTION

Gender inequality is a classical theme in economic research. Within this tradition and ever since the seventies of the last century, specific attention has been paid to differences in poverty. The generally disadvantageous position of women was characterized as the ‘feminization of poverty’ (Pearce, 1978; Goldberg and Kremen, 1990; Marcoux, 1998). When ethnic differences were added to the analysis, this led to the finding that minority women are more often poor than both minority men and white women. Palmer (1983) describes this situation as the ‘racial feminization of poverty’. US data on poverty confirm that migrant women are overrepresented among the poor, which led to a plea for more research on the origins and patterns of this phenomenon (Starrels, Bould, and Nicholas, 1994; Hardy and Hazelrigg, 1995). Three kinds of explanations are offered in such studies. The first one is the human capital theory that focuses on gender differences in labor market skills (e.g. Blau and Kahn, 1994). The second one provides a demographic explanation that stresses the importance of the changing family structure and, more specifically, the dismantlement of the husband-wife family (e.g. Farley, 1996; Glick, 1997; see also Bedard and Deschênes, 2005). The third explanation emphasizes the different immigration effects for men and women.

As the number of women in international migration has risen steadily (Castles and Miller, 1997), the ‘immigration explanation’ of the gender gap deserves more attention. This is especially the case since Elmelich and Lu (2004) found results that are opposed to earlier expectations, as immigration seems to have an equalizing effect on the socioeconomic gender gap in the USA. Their analysis shows that immigration carries a greater risk for men than it does for women, which explains the relatively low level of gender-poverty-gap among the Asian, central and southern Hispanic, and Mexican populations in the USA.

In this paper, the focus is not on the risks of immigration, but on its benefits. The main aim is to investigate whether or not immigration is more beneficial for women than for men. We formulate and test a *gender convergence hypothesis* that is related to modernization and meritocratization in modern society. This hypothesis is investigated using immigrant data from the Netherlands. Gender convergence is found to exist for education and employment, consistent with the assumption that female immigrants from less developed countries show more improvement as compared to males from the same group, unless cultural in-group barriers

restrict them. With regard to the attained job level, gender convergence exists and is due to the convergence in education level.

II. GENDER CONVERGENCE HYPOTHESIS

The gender convergence hypothesis presented here is related to present-day trends in Western societies, such as modernization and meritocratization. In its most general sense, ‘modernization’ is the process during which a pre-industrial, agricultural society transforms into an industrial society and subsequently into a post-industrial society (Black, 1966). This involves structural changes, like urbanization, scaling-up, economic growth, and social differentiation, as well as cultural changes, like individualization, rationalization, democratization, and inherent changes in opinions on gender roles.

The intertwined structural and cultural changes result in a more ‘open’ society, in which people’s life chances are increasingly dependent on their own talents rather than on ascribed characteristics, such as social descent, ethnic origin, and gender. The growing importance of individual talents, that is, people’s own merits, has led social scientists to use the word ‘meritocratization’ (Young, 1961). Empirical research confirms the declining significance of ascribed characteristics as well as the increasing importance of achieved status, with respect to, for instance, educational level and work experience. A well-known example of a study on meritocratization is ‘The American Occupational Structure’ (Blau and Duncan, 1967), which states that “the American occupational structure is largely governed by universalistic criteria of performance and achievement, with the notable exception of the influence of race” (p. 241). Meritocratization is typical not only for the USA. For example, recent studies in the Netherlands show that social descent has hardly any direct effect on children’s educational achievements anymore, although there still is an indirect effect as a consequence of social-class differences in the pedagogical climate at home (Dronkers and Ultee, 1995). As educational achievements strongly correlate with employment chances and job levels, meritocratization also affects the labor market. Because of such effects in the labor market, economists like Cawley, Heckman, and Vytlačil (1998) and Arrow, Bowles, and Durlauf (2000) used the concept of meritocratization in their research.

The predominance of universalistic, meritocratic criteria in ‘open’ societies suggests that

men and women have equal chances in education and in the labor market. This differs strongly from the situation in more traditional regions where the lack of accessible general education and an open labor market implies that individual talents are not well detected and therefore not fully used. This is one of the main reasons why social mobility hardly exists in these regions. Because of traditional gender roles, women have even less chance than men to develop their talents and to fully participate in education and paid labor. The proportion of ‘hidden’ talents will therefore be larger among females, living in less developed regions. Migration to a modern ‘open’ society thus implies that women will have better chances to enhance and use their endowments, the more so if they come from less developed regions. As time goes by, or in a next generation, females are expected to improve their position in education and in the labor market relative to males from the same immigrant group. This gender convergence hypothesis is the core topic of this paper. We will test the hypothesis empirically, using survey data on different immigrant groups in the Netherlands. We expect that immigrant women will improve their socioeconomic position relative to men from the same (ethnic and age) group. To investigate this hypothesis, several factors apart from gender have to be taken into account. In particular, immigrant groups show differences in the degree of traditionalism in their region of origin, in the cultural in-group barriers with regard to women participating in education and labor, and in the degree of social cohesion and social control. If the gender convergence hypothesis is supported after controlling for these types of heterogeneity in different immigrant groups, this may provide a confirmation as well as an explanation of the aforementioned mitigating effect of migration on the socioeconomic gender gap.

The foregoing motivates our main research question: ‘Does gender convergence exist in educational achievements and in labor market position among males and females from the same immigrant group?’ The gender convergence hypothesis will be tested by comparing the relative position of women (that is, as compared to men) in two social categories, defined as the first and the second immigrant generation.¹ The hypothesis holds true if the gender differences are the smallest for the second generation. Our research question can be subdivided into the following two hypotheses. Firstly, the gender-education-gap within the second generation is smaller than

¹ The second generation comprises both children born in the Netherlands from at least one foreign-born parent who migrated to the Netherlands, and immigrants who arrived in the Netherlands before the age of six years (as they participate fully in Dutch education).

that within the first generation of the same immigrant group. Secondly, the labor market-gender-gap within the second generation is smaller than that within the first generation of the same immigrant group. The separate investigation of educational and labor market achievements takes into account that (formal) equality of men and women in education does not necessarily coincide with equal chances in the labor market.

III. IMMIGRANTS IN THE NETHERLANDS

Like many other Western countries, the Netherlands became an immigrant country after the Second World War. Since the beginning of the 1960s, more immigrants came than migrants went, especially because of labor migration. In the Netherlands, this type of immigrants came mostly from Turkey and Morocco. Another source of immigration consisted of political changes that induced people to leave (former) colonies and to settle in a Western country, often the colonist. In the Netherlands, such immigrants came mainly from Surinam and the Antilles. The number of immigrants in the Netherlands more than doubled in each of the decades 1960-1970 and 1970-1980, to reach a total number of about 730,000 at the beginning of 1980 (Penninx, Schoorl, and Van Praag, 1993). Since then, the number of immigrants increased even more, for a combination of reasons. While labor migration gradually diminished, chain migration in the form of family-reunification and family-formation became far more important. More recently, asylum seekers and political refugees added to the number of immigrants. Presently, more than one and a half million people live in the Netherlands who are considered immigrants by their own birthplace or that of at least one of their parents. Together, they comprise about 10% of the total population. Most immigrants live spatially concentrated in the larger Dutch cities, Amsterdam, Rotterdam, The Hague, and Utrecht.

Insert Table 1 around here

Table 1 shows that, in 2002, the immigrant groups from Turkey, Morocco, and Surinam do not differ much in size, whereas the Antillean group is less than half as large. The last group has a smaller second generation as compared to the other three groups, which is because Antilleans have the Dutch nationality and are therefore free to migrate to and from the

Netherlands. The smaller share of women in the Turkish and Moroccan groups can be explained from the fact that labor immigrants were mostly male. On arrival in the Netherlands, the Caribbean immigrants (Surinamese and Antilleans) had a thorough command of the Dutch language and were used to the Dutch education system. In fact, many of them migrated to improve their educational level in Dutch higher education. More recent Caribbean immigrants came for political reasons and to escape poverty in their home country. They arrived with far less human capital than earlier Caribbean immigrants.

In the 1960s, the Netherlands established labor recruitment agreements with Turkey and Morocco to alleviate labor shortages for unskilled jobs. Since 1973, when the Dutch government stopped labor recruitment, family-reunification of women and children became the primary form of immigration. These immigrants came mostly from the same regions in the country of origin as earlier Mediterranean immigrants. Originally, workers were recruited from the countryside of Turkey and from the Riff-area of Morocco. These regions are economically less developed and are characterized by a highly traditional culture. This explains why the educational level of these immigrants was low and why they were hardly prepared to integrate into the Dutch society, contrary to the Caribbean immigrants from Surinam and the Antilles. Another important feature of the Mediterranean groups is that Turkish immigrants show a relatively high degree of in-group cohesion and inherent strong social control as compared to Moroccans.

Because of these differences between the immigrant groups, it may be expected that there exist more opportunities for gender convergence in the Mediterranean group than in the Caribbean group. Within the Mediterranean group, convergence is expected to occur faster among Moroccans than among Turks, because of the larger in-group cultural barriers in the latter group.

IV. DATA AND METHOD

The immigrant data are taken from a survey performed in the year 2002 (SPVA, survey on the 'Social Position and Use of Social Services by Immigrants').² The aim of the survey was to collect information on the socioeconomic and socio-cultural position of the four largest ethnic

² The survey has been carried out by the Institute for Sociological and Economic Research (ISEO) of the Erasmus University in Rotterdam.

minority groups in Dutch society. Because the immigrant population lives geographically concentrated, the survey consists of random samples of the target groups in thirteen cities in the Netherlands, resulting in a representative sample of the target groups' total population.³

In our study, we use a sub-sample of the survey by restricting the data to respondents aged twenty to forty years. The lower limit of twenty years is chosen because most of the younger people are still at school, whereas the upper limit is motivated by the fact that the second generation hardly contains people aged over forty.⁴ Both the first-generation and the second generation are included in the sample. Table 2 comprises an overview of the sub-sample used here.⁵

Insert Table 2 around here

Since trends need time to develop, one could try to compare men and women within different cohorts defined in terms of the duration of stay in the Netherlands. However, many first-generation immigrants have an age at immigration that does not permit them anymore to participate in regular education. They may also not be much interested in changing their way of life, despite their presence in a modern Western country. This applies particularly for many women who came as a chain migrant, many of whom stay at home to take care of the children. Stated more technically, age and cohort effects cannot be disentangled from cross-section data. For this reason, we confine our analysis of gender gaps to (the same age categories within) two migration generations. We expect to find gender convergence within the second generation as

³ The data for the native Dutch population come from the 'Enquête Beroepsbevolking', a nationwide survey on the labor force, carried out by Statistics Netherlands for the year 2002.

⁴ A lower limit of 25 years of age would have the advantage that the majority of people have finished their formal education at that age. However, the second generation contains much fewer people in the 25-40 age range (625 in the sample, as compared to 1,097 in the 20-40 age range). The differences are rather small for the first generation (2,678 in the 20-40 age range, as compared to 2,381 in the 25-40 age range). We therefore prefer to use 20 years of age as lower limit. Of course, this choice stresses the importance to control for age effects on education, employment, and job level.

⁵ Women are over-represented in the sample, by about 5% if compared to Table 1. Males showed higher non-response rates than females, mostly because of reluctance to participate in the face-to-face interview. The SPVA 2002 study is designed in such a way that selection effects are minimal, so that both the male and the female respondent group are representative for the respective immigrant groups.

compared to the first generation, since those who were born in the host country have, at least theoretically, better opportunities to participate in modern education from their first day at school.

We will elaborate on three aspects of the socioeconomic position of ethnic minority men and women. Firstly, we study their educational achievements. Individuals are included in the analysis when they have left initial, regular schooling and attained one of four educational levels, namely, primary education, junior secondary education, senior secondary education, and tertiary education (that is, higher vocational and university education). Secondly, we trace their employment integration. Individuals are considered to be employed when they have any kind of employment for at least twelve hours per week. Thirdly, we study the current job level of those who have a job. The job level is measured on a five-point scale, elementary level (no training required), lower level (some training required), medium level (trained administrative and industrial workers), higher-level (executive functions), and highest (academic) level.⁶

To control for additional individual characteristics that may affect the outcomes of the aforementioned comparisons, we employ multivariate methods. In order to explain the educational level, employment status, and job level, age and ethnic origin will be used as control variables. Age is used to correct for obvious effects on achieved education, work experience, and job level. The control for ethnic origin effects is achieved by estimating separate models for the ‘Mediterranean’ (Turks and Moroccans) and ‘Caribbean’ (Surinamese and Antilleans) groups, because of the earlier discussed differences between these two groups. As both of these groups contain two ethnic subgroups, the employed models incorporate possible heterogeneity effects between the two subgroups. In the analysis of employment rates and job levels, educational level is used as an additional control variable. The employed multivariate models consist of binary logistic regressions to predict the effect of the aforementioned variables on the probability to have a certain educational level, to be employed, and to have acquired a certain job level.

V. GENDER CONVERGENCE IN EDUCATION

Our analysis starts by comparing the educational attainments of native Dutch males and females to establish whether modernization is reflected in their respective positions. Table 3

shows that Dutch males and females achieve, on average, the same educational level. This finding is in accordance with the meritocratization hypothesis that implies equal chances for men and women.

Table 3 reveals the educational gap of ethnic minorities as compared to Dutch natives. Among immigrants, the proportion of those with senior secondary or tertiary education is higher for males than for females, although Surinamese women achieve about the same educational level as Surinamese men. In general, the gender-education-gap is larger among the Mediterraneans than among the Caribbeans.

Insert Table 3 around here

If the gender convergence hypothesis holds true for education, the educational achievements of women as compared to men from the same immigrant group should be better in the second generation than in the first generation. Table 4 shows that, in general, the second generation is far better educated than the first, which is in accordance with the modernization hypothesis. The table furthermore reveals that, in each group, women improved their educational position more than men did. In the first generation, males succeed better than females in attaining senior secondary or tertiary education, whereas the opposite is true for the second generation (Antillean males and females of the second generation are nearly equally successful). The largest relative improvement occurs among Mediterranean females, particularly among Moroccans. These findings are in line with our expectations, as cultural in-group barriers and social control are larger for Turkish than for Moroccan females.

Insert Table 4 around here

The results in Table 4 can be interpreted as the total effects of gender and generation on education, that is, as the gross effects without correction for possible heterogeneity between the various groups. An obvious control variable is the age of the respondent, as, for instance, few people will have completed tertiary education at an age of twenty. As the age distribution varies between the different groups, in particular between the first and second

⁶ The scale is obtained from Statistics Netherlands (CBS).

generation, it is important to correct for such age effects. This can be achieved by employing a multivariate model. Our model selection strategy is the following. For simplicity, we consolidate the four education levels into two classes, ‘lower’ (primary and junior secondary level) and ‘higher’ (senior secondary and tertiary level). Within the Mediterranean and Caribbean groups, we next investigate the sample correlations of this binary variable with a set of potential explanatory variables. This provides an indication of relevant factors that may be included in the model. We will use logit models because of their ease of interpretation in terms of odds ratios.⁷ We limit the discussion to results obtained by models that contain gender, generation, age, and interaction effects (between gender on the one hand and generation and ethnic subgroup on the other hand) as explanatory factors.⁸

The outcomes of the model resulting from our selection strategy are summarized in Table 5. For each variable, the indicated effect is a partial (or ‘*ceteris paribus*’) effect. The most important finding with respect to the gender convergence hypothesis is the significant and positive effect of the interaction between generation and gender for the Mediterraneans. This implies that, within this group, the gender gap in education in the second generation is smaller than that of the first generation. First-generation women take the worst position, whereas the position of second-generation women is even better than that of second-generation men. Within the Caribbean group, both males and females of the second generation have a better chance to achieve a higher education level than those in the first generation. The table furthermore shows significant but relatively small age effects for Mediterraneans, that is, the older are less well educated. For males, Moroccans do better than Turks, and Antilleans better than Surinamese.

Insert Table 5 around here

The degree of gender convergence can be evaluated further in terms of the relative odds ratio for achieving at least senior secondary education. For each individual, this ratio is obtained

⁷ The odds ratio is defined as the probability of ‘success’ divided by the probability of ‘no success’, where ‘success’ in this case is defined as ‘completed higher education’.

⁸ We also considered more elaborate models with additional factors like duration of stay in the Netherlands, marital status, having a child or not, education level of parents, and gender role opinions. We do not report the results of the bivariate correlations and of the more elaborate models here, which are available on request.

by dividing its odds ratio by that of a reference individual, for whom we take a first-generation Turkish male of the same age for Mediterraneans and a first-generation Surinamese male of the same age for Caribbeans. The results, shown in Table 6, are positive for the second generation, particularly for Moroccan women. Females from the other groups also show very positive results in the second generation, as do the Antillean males. As a further illustration, we compute the chance to achieve at least senior secondary education for an individual aged 30. For Moroccan women, this chance raises from 24% in the first generation to 62% in the second generation. Turkish women of the same age improve from 20% to 56%, Surinamese women from 43% to 65%, and Antillean women from 48% to 70%. With such a high percentage, the latter are comparable now to native Dutch women (also 70%). Males aged 30 show much less improvement in the second generation as compared to the first generation.⁹ Overall, second-generation immigrant women profit most from the accessible Dutch educational system.

Insert Table 6 around here

Summarizing our findings, the gender convergence hypothesis for education is confirmed. Within each immigrant group, second-generation women improve their position, relative to men, as compared to first-generation immigrant women. Mediterranean women show more improvement than Caribbean women, which is consistent with the assumption that women who come from less developed regions can profit more from migration to a developed country. Among the Mediterraneans, Moroccan women experience more improvement than Turkish women, which can be explained by the higher degree of cultural in-group barriers for the latter.

VI. GENDER CONVERGENCE IN EMPLOYMENT

Among Dutch natives aged twenty to forty years, employment rates are higher for males than for females (see Table 7).¹⁰ Since cohort effects in our cross section data prevent the valid

⁹For males of age 30, the percentage chance to achieve at least senior secondary education raises from 35 to 42 for Turks, from 42 to 49 for Moroccans, from 46 to 60 for Surinamese, and from 58 to 71 for Antilleans. Clearly, males improve much less than females and none of the male immigrant groups reach the actual percentage for native Dutch males (75%).

¹⁰ As stated before, being employed is defined as having a job for at least 12 hours per week.

comparison of different age groups, we cannot use our data to investigate whether meritocratization occurs among the Dutch natives. However, as employment rates are unequal for men and women, we can conclude that meritocratization did not yet blossom out.

Insert Table 7 around here

Table 7 shows that, also among immigrants, men have higher employment rates than women. The differences are quite large for the Mediterraneans, while the Caribbeans compare more to Dutch natives. Information on gender convergence in employment can be deduced from the differentiation of employment rates by generation and gender. Broadly speaking, the table shows higher employment levels for the second generation than for the first, particularly among females, which is in accordance with the modernization hypothesis. The highest degree of convergence is found among the Moroccans, followed by the Turks. Among Antilleans, the gender gap in employment decreased only marginally, while it did not decrease among Surinamese. Although the last result does not support the gender convergence hypothesis, the pronounced effects for the immigrant groups from more traditional regions, that is, the Mediterraneans, do confirm this hypothesis.

In order to estimate the partial effects of gender and generation on employment, we follow the same model selection strategy as discussed in the previous section for education.¹¹ In addition to the factors gender, generation, age, and various interaction effects, we control for the effect of the attained education level on the probability to be employed. In this way, we can investigate whether, apart from convergence in education, any additional convergent trends exist in the labor market. We take primary education as reference level and include a dummy variable for each of the three higher levels of education. The estimation results are shown in Table 8.

Insert Table 8 around here

The most important finding in relation to the convergence hypothesis is the significant and positive effect of the interaction between generation and gender for the Mediterraneans.

¹¹ Again, bivariate correlations and results of models incorporating more factors are not presented here and are available on request.

However, within the Mediterranean group, first-generation females take a much worse position than males, and this disadvantage is not fully compensated by the positive second-generation effect for women. Further, Caribbean females are employed less often than males. This difference is the largest within the Antillean subgroup, and the second generation does not differ significantly from the first generation. A higher education level has a large positive effect on employment, for both the Mediterraneans and the Caribbeans. Finally, age has a positive effect for Caribbeans, that is, the older have higher employment rates.

The differences between groups can be further illustrated by computing relative odds ratios. As a basis for comparison we take again a Turkish first-generation male as reference for the Mediterranean group, and a Surinamese first-generation male for the Caribbean group. The odds ratio of an individual is compared to that of a reference individual with the same age and education. The results can be found in Table 9. Among Mediterraneans, females are more often employed in the second than in the first generation, and the opposite holds true for males. This is consistent with the gender convergence hypothesis. However, the degree of gender convergence is not yet large enough to close the gender gap in employment completely. A considerable gap still exists among second-generation Mediterraneans. Among Caribbeans, males and females are more often employed in the second generation, but the employment rate of women as compared to men has decreased somewhat. This means that there is no indication of gender convergence in employment among the Caribbeans.

Insert Table 9 around here

As a further illustration, we use the results in Table 8 to compute the chance of being employed for a 'reference individual' aged 30 who has completed junior secondary education. For Turkish women, this chance raises from 39% in the first generation to 58% in the second generation. Moroccan women with the same age and educational level improve from 38% to 57%, Surinamese women from 65% to 71%, and Antillean women from 49% to 55%. The Surinamese women come closest to native Dutch women (83%). The results for males are as follows: Turks go from 79% to 76%, Moroccans from 79% to 75%, Surinamese from 76% to 83%, and Antilleans from 72% to 79%. Women therefore improve their employment position relative to men among the Mediterraneans, but not among the Caribbeans.

Summarizing our findings for employment, the gender convergence hypothesis is confirmed for Mediterranean immigrants, who came from regions that are relatively more traditional. However, although women in this group have higher employment rates in the second generation as compared to the first, they still lag quite far behind men of the same generation. This means that the strong improvement in educational achievements, as discussed in the previous section, did not yet fully translate into equal employment rates. These results indicate that meritocratization, as far as labor participation is concerned, is still far from complete.

VII. GENDER CONVERGENCE IN JOB POSITION

Table 10 presents information on the job levels of male and female workers within different ethnic groups. Among Dutch natives, males are still overrepresented at the highest job level, but otherwise the job positions of males and females are roughly equivalent. This indicates that, for the native-born in the Netherlands, meritocratization is on its way, although it has not yet fully blossomed in this respect. We also find that native Dutch workers – both men and women – generally have higher job positions than immigrant workers. Particularly the Turks and Moroccans clearly lag behind the Dutch natives.

The last two rows in Table 10 show the percentage of males and females having a job of at least middle level. Within the first generation of each immigrant group (apart from the Turks), males achieve higher job levels than females. Factors like work experience and gender segregation are possible explanations of women's disadvantaged job position (Daymont and Andrisani, 1984). It would therefore not come as a surprise if second-generation immigrants also show a pattern with men in a more advantaged position than women. However, the opposite is true for the second generation, where we find females in an advantaged job position. This confirms the gender convergence hypothesis for job positions. If we compare the second with the first generation, the progress of women is roughly 20 percentage points for all four ethnic groups. This progress is much smaller for males, except for Turkish males. As the Mediterranean and Caribbean groups show similar trends, the expectation that the progress would be largest for Mediterraneans is not fulfilled. Further, as the difference between Turkish and Moroccan women stays roughly the same (7% in the first generation and 6% in the second), no effect of cultural in-group barriers can be established here. Note that these trends apply to employed people only,

whereas the results of the previous section show that employment rates have improved more substantially for Mediterranean females than for Caribbean females.

Insert Table 10 around here

The results in Table 10 measure the total effects of gender and generation on the attained job level, including indirect effects that may be caused by other differences between the various groups. To control for such indirect effects, we follow the same strategy as in the previous two sections to select a model that incorporates a set of factors explaining the attained job level. For simplicity, the five job levels are consolidated into two classes, ‘low’ (elementary and lower levels) and ‘high’ (middle, higher, and highest levels).¹² In addition to the factors gender, generation, age, education, and various interaction effects, we include squared age. This is motivated by the fact that the effect of age on the attained job level may be somewhat ambiguous, as older employees often have more work experience but a less up-to-date education. The positive experience effect may therefore be mitigated for older ages. Table 11 shows the estimation results.

Insert Table 11 around here

The most important result for the convergence hypothesis is that the interaction between generation and gender is significantly positive only for Caribbeans. This finding implies an amendment on the interpretation of the crude data in Table 10. The results for the Mediterranean group in Table 11 show strong positive effects for the second generation and for higher education levels. Within each generation and for a given education level, there are no significant gender effects. This means that the convergent trend in job position, reported in Table 10, is mainly caused by the improved education level of second-generation females.

We discuss some further results of Table 11. The gender effects in the Caribbean group do not differ significantly between Surinamese and Antillean immigrants. Within the

¹² As before, bivariate correlations and results of models incorporating more factors are not presented here and are available on request.

Mediterranean group, Moroccan males have a higher probability to attain at least a middle level job as compared to Turkish males of the same generation and with the same age and education. Within both groups, education has the expected positive effect on achieving high job levels. For Mediterraneans, the age effect is positive until an age of about 34 years whereas the effect becomes negative for higher ages, and for Caribbeans it is positive over the complete range from 20 to 40 years.

As a further evaluation, Table 12 presents the relative odds ratios for attaining at least a middle level job. As before, we take as reference individual a first-generation Turkish or Surinamese male for respectively the Mediterraneans and Caribbeans. If we compare the position of females and males in the second with that in the first generation, we see only small improvements for the Turkish and Moroccan groups but more substantial gains for the Surinamese and Antillean groups. We also compute the chance of obtaining at least a middle level job for a reference individual of age 30 who has completed junior secondary education. For Turkish women, this chance raises from 39% in the first generation to 53% in the second generation. Moroccan women with the same age and educational level improve from 43% to 57%, Surinamese women from 37% to 49%, and Antillean women from 40% to 53%. The results for males are as follows: Turks go from 36% to 48%, Moroccans from 41% to 53%, Surinamese from 41% to 43%, and Antilleans from 47% to 49%. The results show that women improve their job level more than men, particularly among the Caribbeans, We further note that the rates for immigrant males and females surpass that of native Dutch men (38%) and women (31%) with the same age and education. This illustrates the fact that immigrants at this relatively low educational level have relatively better chances in the labor market, once they succeed in finding a job. An interpretation in terms of meritocratization might be that many immigrants at this low educational level are ‘underachievers’ in education, while their talents are better detected and rewarded in the labor market where ‘merits’ count.

Insert Table 12 around here

Summarizing our findings for the attained job level, the gender convergence hypothesis is clearly confirmed for the Caribbeans. For Mediterranean females, the positive total effects of gender and generation on job level largely disappear after controlling for indirect effects. The

positive educational achievements of second-generation Mediterranean females appear to be the major cause in this respect. This implies that for them, apart from evident convergent trends in education, no additional convergence effects exist on the labor market.

VIII. CONCLUSION AND DISCUSSION

Immigration has an equalizing effect on the socioeconomic gender gap. The explanation can be found, at least partially, in modernization, an important feature of contemporary Western societies. *Meritocratization* is the most important aspect of modernization in relation to education and the labor market. It implies more equality of chances, as educational achievements and labor market position are increasingly dependent on individual talent ('merit') and less on ascribed characteristics, like social descent, ethnic origin, and gender. This process exerts influence on immigrants in Western countries, who often have their origins in regions that are more traditional. In such regions, with less educational opportunities and a less accessible labor market, individual talents are less detected and developed. This affects both males and females. Since the latter also have to deal with traditional gender roles, they find themselves in an even more disadvantaged position. One could also say that they own more 'hidden talents'. Because of this, female immigrants are expected to have more room for improvement of their socioeconomic position than men from the same immigrant group. This is the core of the *gender convergence hypothesis* tested in this paper.

We qualified the general hypothesis by postulating that the relative improvement of women's position will also be dependent on the degree of traditionalism in gender roles within the immigrant group and on the degree of in-group cohesion and social control that may hamper equal chances. To test the gender convergence hypothesis, we analyzed the educational achievements, the employment rate, and the job levels of male and female Turkish, Moroccan, Surinamese, and Antillean immigrants in the Netherlands. Because of the more traditional background of Mediterranean women in comparison with Caribbean women, we expect gender convergence to occur particularly among Turks and Moroccans. Since Turkish immigrants have stronger in-group cohesion and social control, Moroccan women are expected to show the most progress. We compared two migration generations to find out whether or not these expectations are fulfilled.

The most important finding is that women improved their position considerably as compared to that of men. In education and employment, Mediterranean women show more improvement than Caribbean women. This supports the expectation that females from less developed regions profit more from the educational and labor market chances in a modern open society. Among the Mediterraneans, Turkish women achieve less improvement than Moroccan women, which shows that in-group cultural barriers may hamper women in their development. These results for education and employment all fulfill the expectations. However, this is only partly the case for the results on the attained job level. Immigrant women improve their job level compared to men from the same group, but Mediterranean women do no better than Caribbean women in this respect, and their improvement as compared to men is no longer significant after controlling for indirect effects. One reason for this finding is that, within the Turkish group, both men and women of the second generation improve their position nearly equally as compared to the first generation. Another important factor is education, which has a strong effect on the attained job level. Our interpretation is that gender convergence does exist also for the attained job position, but for Mediterranean women this convergence in the labor market is explained mainly by their improved education level.

We add that, within the second generation, females still lag behind males from the same immigrant group, notwithstanding their improvement with regard to employment and job level. The same applies to native Dutch women, so that meritocratization did not yet fully blossom in the Netherlands. This may be due to selection processes in firms and to ambitions and preferences of women. Since these factors are intertwined, it may take some time before educational equality is translated more fully to the labor market.

In order to shed more light on the gender convergence process, we distinguish three potential avenues for future research. The first one is simply to wait until the third generation is old enough to be in the labor market, and to incorporate this generation in the analysis. Although we expect interesting results from such an analysis, it should be realized that, in the Netherlands, it will take about twenty years before it becomes possible to study the third generation on a large enough scale. The second avenue of research is to involve more immigrant groups into the analysis, including groups both from more traditional and from more modernized countries. Finally, a third avenue is to extend the research to more immigrant countries, preferably with

different degrees of modernization. It may be attractive to analyse the position of immigrants from the same country of origin, although selection because of migration history might disturb the picture. Such an international comparison may provide further clarification of the question whether or not immigration has an equalizing effect on the socioeconomic gender gap. This may also help to understand trends in the 'racial feminization of poverty'.

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TABLE 1

Stock of natives and four largest immigrant groups in the Netherlands (1971, 1981, 1990, and 2002), and percentages of women and of second generation (2002)

	Year	Tur	Mor	Sur	Ant	DuN
Stock (×1,000)	1971	30	21	38	18	
Stock (×1,000)	1981	139	83	165	40	
Stock (×1,000)	1990	206	168	237	81	12,668
Stock (×1,000)	2002	331	284	315	125	13,140
Women (%)	2002	48	47	53	51	51
Second Generation (%)	2002	44	44	41	34	

Source: Niesing (1993), and Statline, Statistics Netherlands.

Note: The ethnic groups are denoted by Tur (Turks), Mor (Moroccans), Sur (Surinamese), Ant (Antilleans), and DuN (Dutch Natives).

TABLE 2

Descriptive statistics of survey data by ethnic group, generation, and gender, aged 20-40

Statistic	Generation	Tur	Mor	Med	Sur	Ant	Car	DuN	Total
Number	1	955	760	1715	451	512	963		2678
Women (%)	1	54	54	54	61	57	59		56
Number	2	297	285	582	323	193	516		1098
Women (%)	2	49	52	51	55	60	57		54
Number	1 and 2	1252	1045	2297	774	705	1479	772	4548
Women (%)	1 and 2	53	53	53	59	58	58	52	55

Source: SPVA 2002, and Statistics Netherlands, 2002.

Note: See Table 1 for ethnic groups; Med stands for Mediterranean, and Car for Caribbean.

TABLE 3

Educational level (percentages) by ethnic group and gender, aged 20-40

Gender	Tur		Mor		Sur		Ant		DuN	
	M	F	M	F	M	F	M	F	M	F
Primary (%)	33	51	37	49	14	17	11	14	4	4
Junior Secondary (%)	31	21	20	17	33	31	28	32	16	14
Senior Secondary (%)	27	24	30	26	40	39	39	34	36	36
Tertiary (%)	9	4	13	8	13	13	22	19	44	46

Source: SPVA 2002, and Statistics Netherlands, 2002.

Note: Educational level is the highest achieved level in formal education.

TABLE 4

Educational level (percentages) by ethnic group, generation, and gender, aged 20-40

Generation	Gender	Tur		Mor		Sur		Ant	
		1	2	1	2	1	2	1	2
Primary (%)	M	38	16	44	17	15	13	11	9
	F	60	16	62	12	22	11	17	5
Junior Secondary (%)	M	28	41	17	30	39	26	30	22
	F	19	30	16	19	36	22	34	27
Senior Secondary (%)	M	24	36	26	43	35	45	39	39
	F	17	49	17	52	32	49	32	40
Tertiary (%)	M	10	7	14	10	11	16	20	30
	F	4	5	5	17	10	18	16	28
Senior Secondary or Tertiary (%)	M	34	43	40	53	46	61	59	69
	F	20	54	22	68	42	66	49	68

Source: SPVA 2002, and Statistics Netherlands, 2002.

Note: Educational level is the highest achieved level in formal education.

TABLE 5

Estimation results of logit model for the probability to attain at least senior secondary education by ethnic group, aged 20-40 (2168 observations for Med, and 1424 for Car)

Variable	Mediterraneans		Caribbeans	
	Effect	Odds Ratio	Effect	Odds Ratio
Female	----	0.46		0.87
Generation 2		1.35	++	1.77
Female x Generation 2	++	3.83		1.44
Age	--	0.98		1.01
Male x Ethnic group	+	1.33	++	1.63
Female x Ethnic group		1.27		1.23

Source: ISEO, SPVA 2002.

Note: 'Ethnic group' has value 0 for Turks and Surinamese, and value 1 for Moroccans and Antilleans. Effects ++ and ---- (+ and --) are significant at the 1% (5%) significance level. The estimated model contains also a constant term that is not shown in the table.

TABLE 6

Relative Odds Ratios for achieving at least senior secondary education, by ethnic group, generation, and gender (derived from Table 5)

Gender	Generation	Tur	Mor	Sur	Ant
M	1	1	1.33	1	1.63
F	1	0.46	0.59	0.87	1.06
F / M	1	0.46	0.44	0.87	0.65
M	2	1.35	1.79	1.77	2.87
F	2	2.39	3.04	2.19	2.70
F / M	2	1.77	1.70	1.24	0.94

TABLE 7

Employment rate (percentage) by ethnic group, generation, and gender, aged 20-40

Generation	Gender	Tur		Mor		Sur		Ant		DuN
		1	2	1	2	1	2	1	2	
Employed (%)	M	75	76	74	75	83	82	77	86	91
	F	33	53	29	66	75	72	58	69	83

Source: SPVA 2002, and Statistics Netherlands, 2002.

TABLE 8

Estimation results of logit model for the probability to be employed, by ethnic group, aged 20-40 (2166 observations for Med, and 1424 for Car)

Variable	Mediterraneans		Caribbeans	
	Effect	Odds Ratio	Effect	Odds Ratio
Female	----	0.17	--	0.59
Generation 2		0.82		1.49
Female x Generation 2	++	2.69		0.87
Age		0.99	++	1.09
Education is Junior Secondary	++	1.90	++	2.08
Education is Senior Secondary	++	2.31	++	4.28
Education is Tertiary	++	3.18	++	12.56
Male x Ethnic group		0.96		0.79
Female x Ethnic group		0.95	----	0.51

Source: ISEO, SPVA 2002.

Note: See Table 5 for the meaning of 'Ethnic group' and of the 'Effect' codes.

TABLE 9

Relative Odds Ratios for being employed, by ethnic group, generation, and gender
(derived from Table 8)

Gender	Generation	Tur	Mor	Sur	Ant
M	1	1	0.96	1	0.80
F	1	0.17	0.16	0.59	0.30
F / M	1	0.17	0.17	0.59	0.38
M	2	0.82	0.79	1.50	1.19
F	2	0.37	0.35	0.76	0.39
F / M	2	0.45	0.44	0.51	0.33

TABLE 10

Job level (percentages) by ethnic group, generation, and gender, aged 20-40

Generation	Gender	Tur		Mor		Sur		Ant		DuN
		1	2	1	2	1	2	1	2	
Elementary (%)	M	28	21	22	18	13	11	10	13	6
	F	38	8	30	8	13	2	12	5	2
Lower (%)	M	43	36	37	38	33	35	28	22	15
	F	33	42	34	37	41	34	34	21	18
Middle (%)	M	21	32	30	34	37	34	39	38	29
	F	21	37	25	41	34	41	30	37	27
Higher (%)	M	7	9	9	7	11	15	16	18	29
	F	7	13	10	10	10	17	19	25	38
Highest (%)	M	2	2	2	3	6	5	7	8	21
	F	1	0	1	4	3	6	5	11	15
Middle, Higher, or Highest (%)	M	29	43	41	45	54	55	62	65	78
	F	29	49	36	55	47	64	54	73	80

Source: SPVA 2002, and Statistics Netherlands, 2002.

TABLE 11

Estimation results of logit model for the probability of workers to have a job of at least middle level, by ethnic group, aged 20-40 (1158 observations for Med, and 1003 for Car)

Variable	Mediterraneans		Caribbeans	
	Effect	Odds Ratio	Effect	Odds Ratio
Female		1.11		0.84
Generation 2	++	1.60		1.06
Female x Generation 2		1.09	+	1.55
Age	++	1.38	+	1.20
Square of Age / 100	----	0.61		0.80
Education is Junior Secondary	++	1.46	++	1.50
Education is Senior Secondary	++	1.95	++	2.81
Education is Tertiary	++	4.73	++	6.72
Male x Ethnic group	+	1.23		1.26
Female x Ethnic group		1.19		1.14

Source: ISEO, SPVA 2002

Note: See Table 5 for the meaning of 'Ethnic group' and of the 'Effect' codes.

TABLE 12

Relative Odds Ratios for achieving at least middle job level, by ethnic group, generation, and gender (derived from Table 11)

Gender	Generation	Tur	Mor	Sur	Ant
M	1	1	1.23	1	1.27
F	1	1.12	1.34	0.85	0.97
F / M	1	1.12	1.09	0.85	0.76
M	2	1.60	1.97	1.07	1.35
F	2	1.95	2.32	1.39	1.59
F / M	2	1.22	1.18	1.30	1.18