# Family migration and gender differences in income – the importance of occupation


## Maria Brandén, Stockholm University Demography Unit
## maria.branden@sociology.su.se


A common starting point for studies on migration decisions is that long distance migration is something rational that takes place as a means for utility maximization. Although this utility maximization can be non-monetary, most theories also assume a strong monetary component driving migration decisions – individuals move long distances when the monetary gain is larger from moving than from staying (Lee 1966, Mincer 1978). Whereas this has been shown to be the case for men, whose earnings often increase following migration, the pattern is less clear for women. Especially partnered women's earnings do not seem to benefit from migration, rather the opposite (Cooke and Bailey 1996; Jacobsen and Levin 2000; Smits 2001; Cooke 2003; Yankow 2003; Nakosteen and Westerlund 2004; Böheim and Taylor 2007; Cooke at al 2009; Åström and Westerlund 2009)

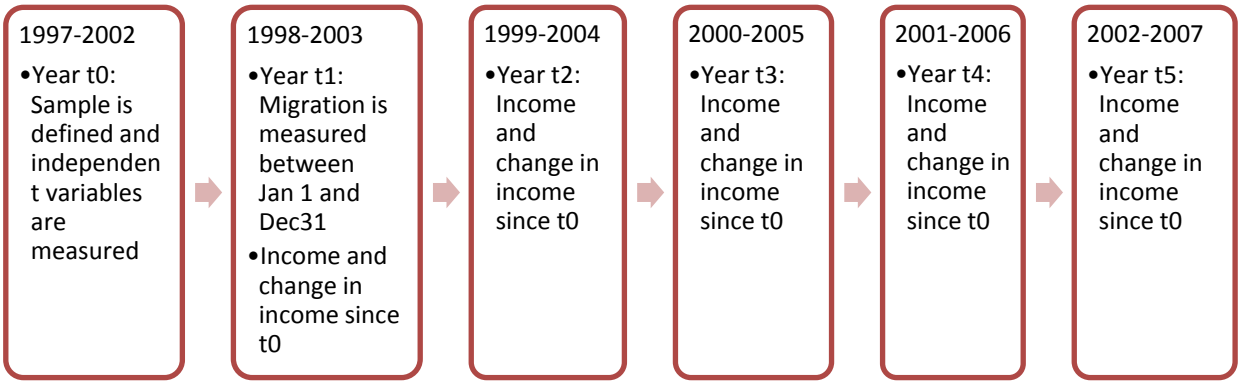
Couples hence seem to move when it benefits the man. Common explanatory factors for men driving couples' migration decisions include gender differences in bargaining power (couples move in favor of the man because he has greater power in deciding on couple migration) (Lundberg and Pollak 2003) and traditional gender roles (couples move in favor of the man because his occupation traditionally is seen as more essential for the family then the woman's) (Markham et al. 1983; Bielby and Bielby 1992; Jürges 2006; Cooke 2009). In this study, I am interested in another explanatory factor, namely the different occupations women and men hold. Female dominated occupations have been suggested to have a secondary migration status and it has been argued that this is why women do not gain from migration (Halfacree 1995). In this study I am interested in whether these differences can explain why women seem to gain less than men from migration, even in such an egalitarian country as Sweden (Åström and Westerlund 2009). Only a handful of studies have focused on this association before, generally finding male dominance in migration decision to remain even after adjusting for occupational differences (Lichter 1983; Boyle et al 1999; Shauman and Noonan 2007; Perales and Vidal 2012). These studies are however made on countries where the possibilities to combine work and family are much worse than in Sweden. Sweden stands out by being a country with a strong dual earner and dual carer norm, and many policies aimed at facilitating couples to consist of two earners and two carers. This is however combined with an extremely sex segregated labor market, as well as clear evidence of gender differences in career possibilities both between male and female dominated occupations as well as between women and men in the same occupation. This makes Sweden a very interesting context for testing the hypothesis of whether gender differences in occupations can explain male dominance in migration decisions.

## Hypotheses

*H1. Couple income will increase faster for moving couples compared to staying couples*
*H2. Individual income will increase faster for movers than for stayers*
*H3. The individual income gains from migration will be especially pronounced for men*
*H4. The average gender wage gap between the partners will increase following migration*
*H5. The gender wage gap will mainly increase for couples where the woman has less bargaining power than her partner*
*H6. After adjusting for gender differences in occupational characteristics, gender differences in income gains as well as the change in the gender wage gap will disappear.*

## Study design

**Figure 1: Data structure**




I use yearly pooled Swedish population data for the years 1997-2007, described in Figure 1. I include all individuals who were either cohabiting or married with common children with their current partner in year t0, and who were alive and residing in Sweden all the 6 studied years. Excluding individuals who were not gainfully employed at year t0, and individuals who are below age 18 or above age 65 any of the studied years, gives me a final population of 11,024,404 person years. Years 1997-2002 (year t0) I collect information on independent variables and years 1998-2003 (year t1) I measure whether the individual has moved to a new local labor market during that year. I then study how change in income between t0 and t2, t0 and t3, t0 and t4, and t0 and t5 is associated with migration status in year t1. Results in this extended abstract are purely descriptive but I will proceed with OLS regressions on change in yearly income from employment by migration status.

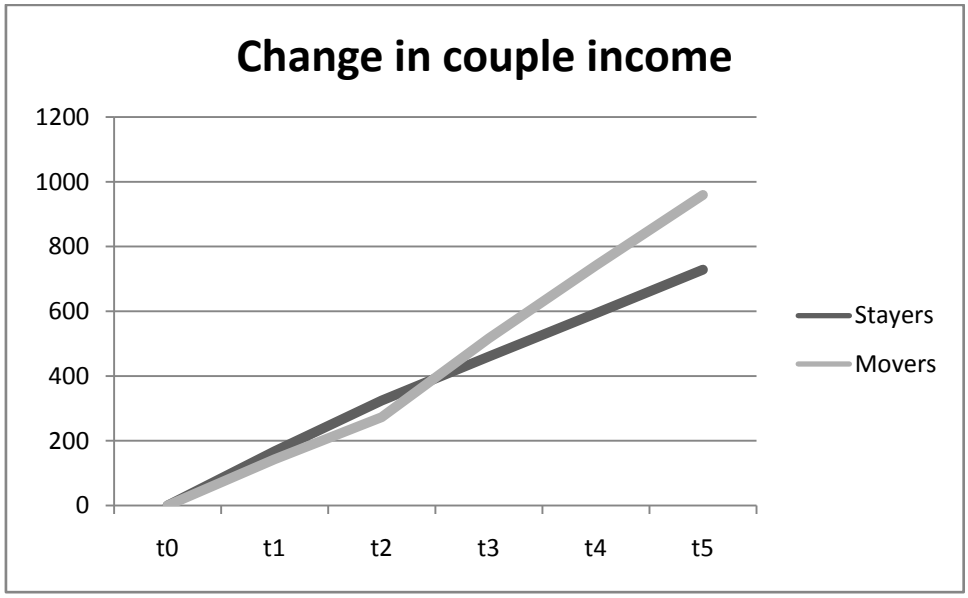
***Income*** includes all declared income from employment during the year in 100 Swedish kronor. The three outcomes studied are (1) change in couple income between year t0 and ti, (2) change in individual income between year t0 and ti, and (3) change in woman's share of couple income between year t0 and ti, where i =1, 2, 3, 4 and 5.

***Migration*** is measured by whether an individual has moved to a new municipality during year t1, and the new municipality is in a new local labor market. Local labor markets are clusters of municipalities that are distinguished by together being more or less self sufficient in terms of work force. Hence, most commuting takes place within these municipalities and only a small fraction of the inhabitants commute to outside the local labor market. The measure is constructed yearly by Statistics Sweden.

***Occupation*** will be included as three occupational characteristics. (1) To what extent the occupation exist all over the country (geographic ubiquity), (2) the wage differences between regions for the certain occupation, and (3) the earnings potential in the occupation, measured by the year and sex specific ratio of the $80^{th}$ and $20^{th}$ percentile. As opposed to most other studies (Shauman and Noonan 2007 and Shauman 2010 are exceptions), I do not only include occupational status or other measures of an occupation's level. Even within the same level there are gender differences in occupational characteristics. For instance, women with high education often work as nurses whereas men with similar education work as engineers. For this extended abstract, I have not included occupational characteristics in the analyses.

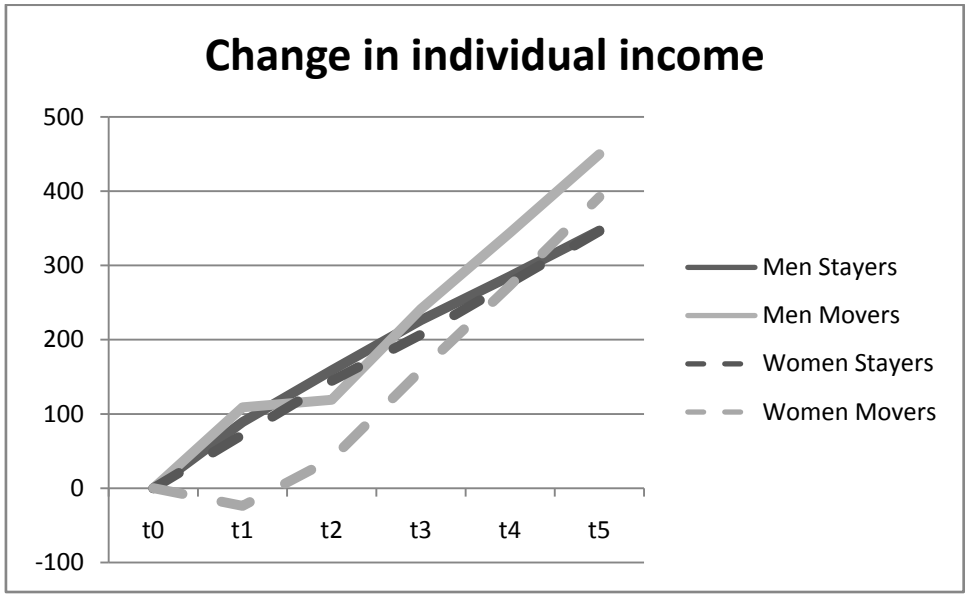
## First descriptive results

**Figure 2: Mean change in couple income since t0 in 100 SEK by year (t0-t5) and migration in year t1**



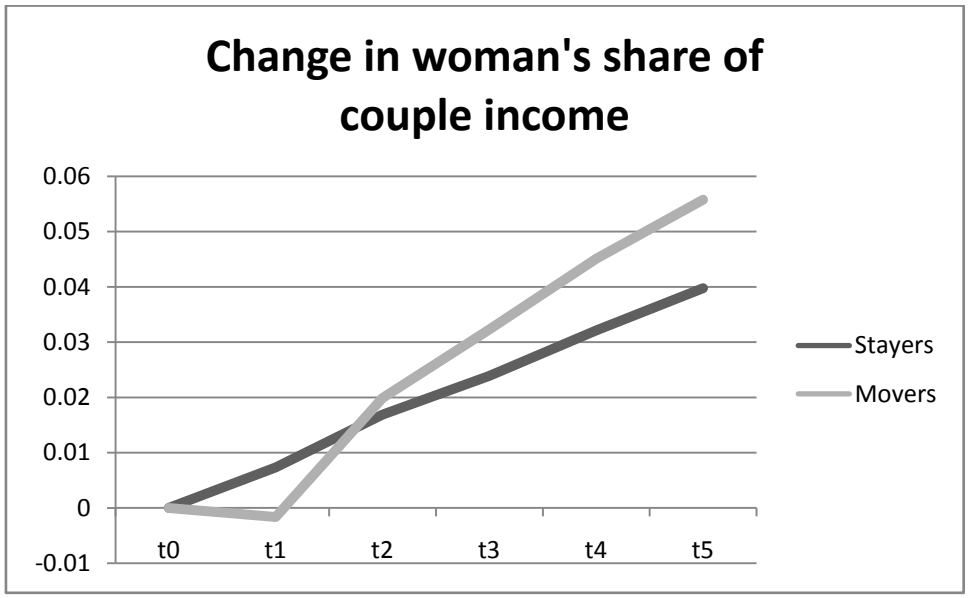

From Figure 2 (above) we see that after a short lag up until year t2, where moving couples have a worse development in income compared to staying couples, from year t3 and onwards moving couples have a better income development than staying couples. In year t5, moving couples have an average of 100 000 SEK better total couple income per year compared to their total couple income in t0, whereas the same for staying couples is 800 000 SEK.

**Figure 3: Mean change in individual income since t0 in 100 SEK by year (t0-t5) and migration in year t1**



From Figure 3 (above) we see that whereas the development in income is very similar for male and female stayers, there are large gender differences for movers. For moving couples, women's mean income decrease slightly the year of the move. However, after a few years the change in income increases to almost the same level as it is for female stayers. Male movers on the other hand have a substantially better development in income compared to male stayers. The patterns revealed in Figure 3 supports suggestions from Cooke et al (2009) on paying more attention to family migration in explaining the gender earnings gap.

**Figure 4: Mean change in woman's share of couple income since t0 in 100 SEK by year (t0-t5) and migration in year t1**




From Figure 4 we see that for the moving couples, the woman's share of the total couple income decrease slightly during t1, that is, the year of the move. However, this decrease is only temporary, and after a short decrease, for the moving couples the woman's share of the total couple income even increased faster than for the non-moving couples. However, even 5 years after the potential move, the women in the moving couples contribute to a lower share of the total couple income than the women in the staying couples (not presented here).

Next steps include doing OLS regressions on the three outcomes presented above, where I include age, age differences, being born outside Sweden, educational achievement of both partners, and educational differences between partners. I am especially interested in how the male dominance described in Figure 3 change when adjusting for occupational differences between women and men.

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