

Changing Gender Roles, Shifting Power Balance and Long-distance Migration of Couples

Jeroen Smits, Clara H. Mulder and Pieter Hooimeijer

[Paper first received, June 2002; in final form, August 2002]

Summary. Long-distance migration of couples requires joint decision-making within the household. The uneven power balance between men and women and traditional gender roles have given rise to the concepts of ‘tied stayer’ (usually the male partner) and ‘tied mover’ (usually the female). Since these concepts were introduced, women have gained economic power and gender roles have changed. The paper analyses the effects of these changes on the determinants of the long-distance migration of couples, using data for the Netherlands. For 1977, the results reflect the ‘classic’ pattern of family migration: the male’s human capital counted more than the female’s and a male age advantage led to more migration. Women seemed to use their power mostly to prevent migration. By 1996, the dominance of the male’s human capital had largely disappeared and the effect of an age advantage had become more symmetrical. The results point to the emergence of a new pattern, with a more equal power balance within couples.

1. Introduction

Evidence from various countries has shown that the incidence of long-distance migration is lower among two-earner couples than among one-earner couples (Lichter, 1982; Mincer, 1978; Mulder, 1993; Wagner, 1989). The classic explanation for this phenomenon (Mincer, 1978) is that in one-earner couples the wife is a ‘tied mover’; she moves for the sake of the husband’s career. In two-earner couples, the labour force participation of the wife may inhibit the move, making the husband a ‘tied stayer’. However, several developments are affecting that pattern: the rise in earning capacity of women as a result of increasing educational levels and labour

force participation; and the overall shift in gender roles and in the balance of power between men and women. It seems that a new pattern is on the rise in which career-oriented women with good labour market prospects not only use their power to prevent family moves for the career of their partner, but also use it to initiate such moves for their own career, thereby turning the husband into a ‘tied mover’.

This paper studies the consequences of the changes in gender roles and in the balance of power within relationships for long-distance migration of couples on the basis of data for the Netherlands in 1977 and in 1995/96. The

Jeroen Smits is in the Department of Economics, Nijmegen School of Management, University of Nijmegen, PO Box 9108, 6500 HK Nijmegen, The Netherlands. Fax: 31 24 361 2379. E-mail: jeroen.smits@nsm.kun.nl. Clara H. Mulder is in the Department of Geography and Planning, University of Amsterdam, Nieuwe Prinsengracht 130, 1018 VZ Amsterdam, The Netherlands. Fax: 31 20 525 4051. E-mail: C.Mulder@frw.uva.nl. Pieter Hooimeijer is in the Urban Research Centre Utrecht, Utrecht University, PO Box 80115, 3508 TC Utrecht, The Netherlands. Fax: 31 30 254 0604. E-mail: P.Hooimeijer@geog.uu.nl. Part of Jeroen Smits’ and Clara Mulder’s research was undertaken while they were employed at the Urban Research Centre Utrecht of Utrecht University.

Netherlands is a very interesting country in this respect, because there was a spectacular increase in the labour force participation of married women over a rather short time-span. In the early 1970s, only 16 per cent of married women were engaged in paid employment. The traditional family type—of the breadwinner husband and the stay-at-home wife—was still very dominant. By the mid 1990s, however, more than half of the married women were gainfully employed. Over the same period, women caught up with men and even overtook them in terms of educational level. People increasingly accepted that married women had a right to pursue a career of their own (Hooghiemstra and Niphuis-Nell, 1993; Van der Lippe, 1997).

One would expect these changes to increase the influence of women on the migration decisions of families. However, recent findings suggest that, in the Netherlands, most long-distance moves are still prompted by the career of the male partner and still affect the female partner's career negatively (Smits, 1999, 2001). This classical pattern may persist because women have not yet caught up completely with men in occupational achievement and earning capacity. However, it is also possible that the 'tied mover' and 'tied stayer' phenomenon remains gendered. That is, women may be unable to push through a move for the sake of their own careers, even if their earning capacity is equal to or higher than that of their husband. To explore these dynamics, we analyse the migration decision of couples with logistic regression analysis, using characteristics of both partners and their household as explanatory variables. This will give an impression of the relative importance of each partner's characteristics and how it has changed between 1977 and 1996.

An important issue to be addressed in the analysis is the degree to which the migration decision is influenced by age and educational differences between the partners. To a certain extent, the dominance of the male partner in long-distance migration might reflect the fact that in most couples he is older than the

female. This means that, even if the educational level of the partners is the same, the male partner will be somewhat further along in his career at any point in time and hence will earn more or have higher occupational prestige than the female partner (Markham and Pleck, 1986). In traditional marriages, the male partner also tended to start the marriage with a higher educational level than the female, so that, in many such marriages, the female partner suffered from a double disadvantage.

This paper seeks to establish the extent to which male dominance in the long-distance migration of couples was caused by either of these disadvantages. For this purpose, the migration propensity of the more traditional couples is compared with the migration propensity among the small number of couples in which the wife is older or has a higher educational level than the husband. This will be done by adding variables indicating the age and educational difference between the partners to our logistic regression models.

2. Theoretical Background and Hypotheses

Three more or less overlapping theoretical perspectives can be distinguished that lead to somewhat contradictory hypotheses about how the characteristics of the partners and their household situation affect a couple's propensity to move: human capital theory, marital power theory and gender role theory. According to human capital theory, long-distance migration is an investment in human capital intended to generate returns in the form of increased income, employment prospects and/or occupational status (Sjaastad, 1962; Blau and Duncan, 1967; Greenwood, 1975). The human capital perspective yields a number of factors that have a positive effect on migration at the individual level: a low age (because wage gains decrease with age as do the remaining number of years to recoup the costs), a high level of education (because highly educated workers tend to have faster career development and need job changes to step up the career lad-

der) and being unemployed (because of the lack of returns and the depreciation of the human capital of the unemployed) (Bartel and Lichtenberg, 1987; Simpson, 1992; Topel and Ward, 1992; van Ham, Mulder and Hooimeijer, 2001).

Living together with a partner is expected to increase the costs of migration and hence to reduce the migration propensity. This is especially true for partners who are employed and have to give up their job for the move. However, even though the overall spatial mobility of couples is presumably lower than that of singles because the costs of moving are higher, the individual factors suggested by human capital theory probably also stimulate the migration of couples. When both partners' earning capacity and power balance are equal and their gender roles non-specific, one would expect these factors to contribute equally to a couple's propensity to move, regardless of whether they pertain to the male or the female partner. So, the first prediction is that couples in which one partner is younger, has a higher educational level or is not employed will have a higher migration propensity than other couples. Because the effects of the characteristics of the partners are cumulative (the propensity to move is expected to be higher if both partners have a high educational level than if one of the partners does), this is termed the 'additive hypothesis'.

2.1 Differences between the Partners

In addition to the direct effects of human capital variables on the couple's migration propensity, the economic theory of 'tied movers' and 'tied stayers' in combination with marital power theory leads us to expect that the *difference* in earning capacity between the partners will affect their spatial flexibility or inertia (Mincer, 1978; Boyle *et al.*, 1999). According to marital power theory, the balance of power within conjugal units lies with the partner who brings more valued resources into the marriage (that is, the partner who earns more, has a higher educational level or has a higher occu-

pational prestige). Because the other partner is dependent on him/her, this partner may exert a disproportionately large influence on major family decisions, like the migration decision (Blood and Wolfe, 1960; Rodman, 1972). In conflicts about whether or not to migrate, this power may give this partner the possibility of pushing through a move for their own career and thus turning the other partner into a tied mover.

Although traditionally the male partner was the breadwinner and brought in more income than the female partner, the prediction of marital power theory is in essence gender aspecific. The balance of gains and losses favours a move for the sake of the partner with the highest earning capacity, who also has more power to push through a move. When their earning capacity is about equal, on the other hand, the gains of a move are less likely to outweigh the costs and neither partner has the power to push through a move. The second prediction, which is called the 'power-balance hypothesis', is that the migration propensity of couples will be low if the partners are equal with regard to such human capital factors as age, educational level or labour market situation. On the other hand, if only one of the partners is employed or if one is clearly older (and hence is on average further in his/her career) or has less human capital, we expect the couple to be more likely to move (and in favour of the partner with more capital) than if both partners are equal in these respects. The only exception is the situation in which both partners are unemployed, because then a move for either partner's career is most likely to favour both of them. In this situation, it would be expected that the couple is more likely to move.

2.2 Gender Roles

Whereas the additive and power balance hypotheses do not differentiate between men and women, gender role theory would predict the direct effects of the characteristics of the female partner on the migration decision to be weaker than those of the male partner.

The reason is that women are socialised to place family first and personal goals second when it comes to critical household matters (see, for example, Markham and Pleck, 1986; Shihadeh, 1991). This means that in a situation of equal human capital—or even when the female partner has more human capital than the male partner—the characteristics of the male will have a greater influence. Furthermore, when there is a difference in human capital, an advantage possessed by the male partner will lead to more migration than an advantage of the female partner. This prediction is called the ‘male-dominance hypothesis’.

2.3 Children

The effects of the human capital, power balance and gender factors may work out differently for couples in different circumstances. An important condition in this respect is the presence of children in the household. Couples without children can migrate more easily because they face fewer restrictions. If there are children, more persons are involved in the migration decision. For older children, it may be a problem to change to another school. Moreover, they probably do not want to give up their social network and start all over again in another place. If there are young children, the number of restrictions on the female partner is high. Even in the most modern societies, females still bear most responsibility for the children (Gregson and Low, 1993; van der Lippe, 1997). In addition to the characteristics of the partners themselves, therefore, the presence and age of children will also be taken into account in the analyses.

3. Data and Measurement

3.1 Data

The data used in this paper were derived from the Dutch Labour Force Surveys (LFS), which were conducted in 1977, 1995, and 1996 by Statistics Netherlands. The LFS are based on large samples representative of the

Dutch population aged 15 years and over not living in institutions. The data are gathered by oral interviews, conducted by specially trained interviewers of Statistics Netherlands. The general aim of the survey is to acquire data on the size, composition, and inflow and outflow of the working population, and on the short- and medium-term developments of the labour market. As well as information on the situation at the time of the survey, for some characteristics (geographical and labour market) information on the situation one year before the survey is also gathered. This makes it possible to use these data for the study of family migration.

The data-sets of the 1995 and 1996 LFS were pooled because the number of respondents in the recent 1995 and 1996 LFS is lower than in the 1977 LFS and because the number of long-distance moves is rather small in the Netherlands (Smits, 1999). Because the 1977 and 1995/96 files had to be analysed at different locations, it was necessary to perform separate analyses for both time-periods. For reasons of simplicity, we will speak of (data for) 1996 when referring to the combined 1995/96 data-set.

The analyses are restricted to married and cohabiting persons, aged 22–59 years. The lower age limit is set at 22 because the focus of this paper is on career migration and therefore it is desirable to rule out migration for reasons of education as much as possible. The upper limit is age 60 because in 1996 many persons of that age had already left the labour market due to retirement or disability. The analyses are restricted to those respondents who formed a couple before the potential move. Those who made a move to start living with a partner are left out of the analysis to avoid confounding effects of migration for reasons of household formation.

3.2 Method

To determine the effects of the characteristics of the partners on long-distance migration, logistic regression analysis was used. The dependent variable in these analyses is a

dummy variable which takes the value of 1 for couples who migrated over a long distance in the year before the survey and a value of 0 for couples who did not move or only moved over a short distance. The distinction between long-distance migration and other forms of migration is based on the division of the Netherlands into 12 provinces. All moves in which at least one province boundary was crossed are considered to be long-distance moves. This operationalisation on the basis of geographical units instead of in kilometres or miles is not ideal, because it will inevitably include some short-distance moves that just straddle the boundary between two adjacent provinces. However, it was necessary to use it because in the data no other comparable information about the distance of migration was available. This operationalisation issue will be discussed further in the final section of the paper.

3.3 Independent Variables

The characteristics of the partners that are used to explain the couple's migration behaviour include their age and educational level and several characteristics of their work situation. To indicate the household situation, information on the presence and age of children is used.

Because of the high correlation between the ages of married persons, the couple's 'age' is indicated by the age of the male. This age variable is measured in years. The educational levels of the partners are divided into four categories: primary education; lower-level secondary education (Dutch names *vbo*, *mavo*; duration until about age 16); upper-level secondary education (*mbo*, *havo*, *vwo*; duration until about age 17–18); and, tertiary education (*hbo*, university; duration until about age 21–22). These variables are entered in the form of three dummies, with the category 'primary education' as the reference category. The presence of children in the household is classified according to the following three categories: no children; chil-

dren including under age 6; and, only children aged 6 and older.

The labour force participation of the partners before the move was measured with a four-category variable indicating whether, one year before the survey: only the male was employed; only the female was employed; both partners were employed; or, both partners were unemployed. The industrial sectors of the partners one year before the survey were indicated by four categories: manufacturing and construction; agriculture; commercial services; and, non-profit sector. Dummies were used for these variables with 'manufacturing and construction' as the reference category. The distance over which the partners had to commute to their work one year before the survey was measured with dummy variables indicating whether (1) or not (0) the place of work was in the same province as the place of residence. We also included dummy variables to indicate employed individuals with missing values for the industrial sector and commuting distance variables.

The occupational prestige of the partners was measured with the U&S occupational prestige scale for the Netherlands (Sixma and Ultee, 1983). This variable was only available for the moment of the survey and hence only applies to males and females who were employed at that time. We substituted missing values on occupational prestige with the average prestige of the persons of the same sex and included dummy variables to indicate the couples for whom the prestige scores were substituted. For individuals without a job one year before the survey, the averages of the values for individuals of the same sex with a job were substituted in the dummies for occupational sector, commuting distance and occupational prestige. For reasons of clarity, the coefficients of the missing value dummies are not presented in the tables with the results.

To estimate the effects of age differences between the spouses, we use two different variables: the age difference in years (the male's age minus the female's age) and the absolute value of the age difference in years.

The variable for the absolute age difference indicates the difference regardless of which partner is older; it is denoted as the symmetrical age difference. The variable for the age difference as such (which will be called the asymmetrical age difference) indicates how many years older the male is, pointing to a greater importance of the male. To compute the effects of these difference variables, separate models are estimated. We test the contribution to the baseline model of each variable separately and choose the variable with the greatest contribution. For the effect of an educational difference between the partners, two variables are also used: the difference in educational level between the partners (the male's level minus the female's level; called the asymmetrical educational difference) and the absolute value of the educational difference (called the symmetrical educational difference). In the same way as with the age difference, the contribution to the baseline model of each of the educational difference variables is tested and the one contributing most is chosen.¹

4. Results

4.1 *The Number of Long-distance Moves*

Table 1 shows that the incidence of long-distance migration among married couples in the Netherlands is rather low. In 1977, only 1.2 per cent of the couples in the data-set had moved to a different province during the year before the survey. In 1996, the percentage of

interprovincial moves is even somewhat lower.

In 1977, couples in which only the male partner was employed tended to move the least, while (the rather small number of) couples in which only the female partner was employed tended to move the most. Couples with both partners employed and couples with both partners unemployed had an above-average propensity to move. At first sight, it might seem surprising that dual-earner couples are more likely to move than one-earner couples. It is hypothesised that this unexpected difference has to do with the fact that dual-earner couples are over-represented among the young, the highly educated and the childless couples; it is therefore expected that it will disappear in the multivariate analysis.

In 1996, still about 1 per cent of couples having only the male partner employed made an interprovincial move. However, this time the proportion of long-distance migrants among the other couples is hardly higher. The couples with only the female partner employed show the biggest change. Whereas in 1977 almost 5 per cent of these couples moved interprovincially, by 1996 this had decreased to only 1 per cent. The couples in which both partners are employed also moved less in 1996 than in 1977. The figures indicate that, in the period under study, the influence of the female partner on the migration decision—and especially her likelihood of preventing migration—had increased considerably.

Table 1. Interprovincial migration in the year before the survey among couples aged 22–59 years in the Netherlands

	1977		1996	
	Percentage migrated	Total N	Percentage migrated	Total N
Only male employed	1.0	44 934	0.9	29 976
Only female employed	4.8	944	1.0	3 643
Both employed	1.4	12 795	1.1	27 149
Both unemployed	1.4	4 102	1.3	7 592
Total	1.2	62 775	1.0	68 360

4.2 Logistic Regression Results

Table 2 shows the results of the logistic regression analyses. The findings for 1977 are very well in line with what could be expected in a rather traditional society—as the Netherlands was at that time. The male's human capital has the expected effects on migration: a higher educational level and greater occupational prestige lead to significantly more migration; a higher age to significantly less. The male's industrial sector is also important, with higher migration levels in commercial services and in the non-profit sector than in manufacturing.

The educational level of the female partner has a positive effect on migration, although it is not as strong as the effect of the male's educational level. Couples in which the female partner has upper secondary or tertiary education migrate significantly more than couples in which the female has only primary education. However, the female's occupational prestige and industrial sector have no effect on migration.

With regard to the couple's employment situation, asymmetry is seen in the effects. In both situations where the male is not employed (with and without employment of the female), the migration propensity is significantly increased. Thus, the unemployment of the male partner stimulates migration, regardless of the labour market situation of the female partner. When both partners are employed, the couple's migration propensity is significantly reduced. So, when the need to migrate is not very strong (because the male has a job), the female partner's employment does reduce the couple's migration propensity.

This finding of a reduced migration propensity among dual-earner couples in the multivariate analysis seems to confirm the expectation that the increased migration propensity among these couples found in the bivariate analysis was caused by the overrepresentation of the young, highly educated and childless couples among them.

Employment of either partner outside the province has a strong positive effect on mi-

gration—although again more so when this pertains to the male than to the female partner. This indicates that reducing commuting distance was an important reason for migration in the 1970s. In contrast, the presence of children, and especially of school-aged children, tended to reduce the migration propensity of couples.

The finding for 1977 that the male's human capital and employment characteristics have consistently stronger effects than those of the female fits in with the male dominance hypothesis rather than with the additive hypothesis. However, another finding for 1977—that, when both partners are employed, the migration propensity of the couple is lower than in any other situation—suggests that male dominance is not prevalent in all circumstances, which is more in line with the power balance hypothesis.

To test the power balance hypothesis further, the models were re-estimated with variables for the effects of the age and educational differences between the partners added. This was done separately for the symmetrical and asymmetrical age and educational difference effects, so that for each year four extra models were estimated. The age and educational difference parameters of these models are presented in the lower part of Table 2. The parameters of the other variables are not presented, because they are largely the same as in the models without age difference.

In 1977, the asymmetrical versions of the educational and age difference variables contributed more to the model than the symmetrical versions of these variables. With regard to the educational difference effect, neither variable (asymmetrical version or symmetrical version) is significant. Thus, it seems that educational differences between the partners do not contribute very much to the explanation of the couple's migration propensity over and above what is already explained by the main educational effects. For age, the difference effect is quite substantial in 1977. The coefficient of the asymmetrical age difference variable is

Table 2. Logistic regression coefficients (*B*) for the effects of selected characteristics of the male and female partner on interprovincial migration of couples in the Netherlands, and differences between the coefficients

	1977		1995/96		1995/96–1977 Difference ^b
	<i>B</i>	SE(<i>B</i>)	<i>B</i>	SE(<i>B</i>)	
Constant	– 5.141***	0.404	– 3.588***	0.398	1.553***
Age male	– 0.049***	0.006	– 0.073***	0.006	– 0.024***
<i>Education male</i>					
Primary	Reference category		Reference category		
Lower secondary	0.478***	0.139	– 0.225	0.195	– 0.703***
Upper secondary	0.801***	0.145	0.088	0.178	– 0.713***
Tertiary	0.905***	0.166	0.549***	0.193	– 0.356
<i>Education female</i>					
Primary	Reference category		Reference category		
Lower secondary	0.085	0.109	0.118	0.194	0.033
Upper secondary	0.468***	0.127	0.526***	0.185	0.058
Tertiary	0.474***	0.166	0.724***	0.202	0.250
<i>Employment situation couple</i>					
Only male employed	Reference category		Reference category		
Only female employed	1.401***	0.199	– 0.036	0.193	– 1.437***
Both employed	– 0.578***	0.134	– 0.533***	0.103	0.045
Both unemployed	1.381***	0.155	0.882***	0.132	– 0.499**
Occupational prestige male ^a	0.014***	0.003	0.004	0.003	– 0.010**
Occupational prestige female ^a	0.008	0.006	0.000	0.005	– 0.008
<i>Industrial sector male^a</i>					
Manufacturing/construction	Reference category		Reference category		
Agriculture	0.194	0.287	0.245	0.306	0.051
Commercial services	0.570***	0.106	0.341***	0.117	– 0.229
Non-profit sector	0.532***	0.118	0.327**	0.133	– 0.205
<i>Industrial sector female^a</i>					
Manufacturing/construction	Reference category		Reference category		
Agriculture	– 0.384	1.043	0.617	0.479	1.001
Commercial services	0.107	0.239	0.161	0.215	0.054
Non-profit sector	– 0.218	0.233	0.124	0.214	0.342
Workplace male outside province ^a	2.259***	0.093	1.968***	0.101	– 0.291**
Workplace female outside province ^a	1.175***	0.230	1.052***	0.131	– 0.123
<i>Children</i>					
None	Reference category		Reference category		
Youngest < 6	– 0.211**	0.107	– 0.350***	0.093	– 0.139
Youngest > = 6	– 0.670***	0.126	– 0.541***	0.128	0.129
<i>Difference effects (separate models)</i>					
Asymmetrical age difference	0.032***	0.012	0.025**	0.012	– 0.007
Symmetrical age difference	0.027	0.015	0.033**	0.014	0.006
Asymmetrical educational difference	0.166	0.140	0.081	0.115	– 0.085
Symmetrical educational difference	0.064	0.057	0.071	0.058	0.007
<i>N</i>	62 775		68 360		
<i>N</i> migrated	723		672		
– 2 Log likelihood	6 443		6 312		
Model chi-squared/DF	1 449/28		1 238/28		

^aThe dummy variables for cases with missing values on these variables are not presented.^bSignificance of the differences between the years is tested with *t*-tests for independent samples.

***indicates significant at the 1 per cent level; **indicates significant at the 5 per cent level.

significantly positive, whereas the coefficient of the symmetrical age difference variable is not. This means that there is an asymmetrical effect to the advantage of the male partner: the more years the male is older than the female, the higher the propensity of the couple to move. This result is more in line with the male dominance hypothesis than with the power balance hypothesis.

The picture of male dominance that arises from the results for 1977 is hardly discernible in 1996. For education, occupational prestige and employment situation, no stronger effect was found for males than for females. Only for working outside the province of residence and industrial sector does a stronger effect for the males remain.

With regard to education and employment situation, the changes are rather striking. The effect of the male's education on the couple's migration propensity has decreased significantly over time (as is clear from the difference parameters in the last column of Table 2) and is no stronger than the effect of the female's education. Furthermore, the large difference in migration propensity between couples in which only the female partner was employed and couples with only the male partner employed has completely disappeared by 1996.

At the same time, the negative effect of dual-earnership on migration has not changed at all in the period under study. As in 1977, in 1996 dual-earner couples were less likely to migrate than couples with any other pattern of labour market participation. After controlling for the other explanatory variables, dual-earner couples are only $\exp(-0.533) = 0.59$ times as likely to migrate as couples with only a male earner.

The parameters for the difference effects also suggest that the dominance of the male partner has decreased over time. The educational difference variables are again not significant in 1996. However, both the asymmetrical and the symmetrical age difference effects are significantly positive. The positive effect of the asymmetrical age difference variable would indicate that a larger age advantage of either partner increases the mi-

gration propensity. However, this conclusion is not completely unequivocal, for the coefficient of the symmetrical variable is significant too. It is therefore concluded that there is indeed a trend towards more equality, but that by 1996 the situation of male dominance has not yet completely disappeared.

5. Conclusions

The migration propensity of couples in the Netherlands has been analysed from a perspective of gender differences in human capital, marital power and gender roles. Compared with previous research, this paper contributes to the literature by making a comparison between 1977, when gender roles were quite traditional and the share of married women in the workforce was very low, and 1996, when the number of two-earner couples was much higher and the Netherlands had become a much more modern society. From human capital theory, power balance theory and gender role theory, three alternative hypotheses were derived: the additive hypothesis (stating that the influence of the partner's labour market resources is cumulative); the power balance hypothesis (stating that it is the difference in resources that counts, regardless of whether they belong to the male or the female); and, the male dominance hypothesis (stating that the male's resources count more than the female's).

For 1977, the results are mostly in line with the male dominance hypothesis. The human capital factors of the male partner were more important at that time than the human capital factors of the female partner. The female's employment situation only played a role when the need for migration was not very high because the male was employed. Only in that case did the female's employment reduce the couple's migration propensity. The effect of an age difference in 1977 was also in line with the male dominance hypothesis: the more years the male was older than the female, the higher the probability of migration. These findings sug-

gest that married women who were older than their husband used their power to prevent migration, instead of using it to migrate for their own careers.

By 1996, the picture had changed considerably. For education, occupational prestige and employment situation the effect was not stronger for the male than for the female. The most remarkable difference, however, was that couples in which only the female was employed did not migrate any more frequently than couples in which only the male was employed. The results for 1996 seem to be mostly in line with the prediction of the power balance hypothesis that an unequal balance in earning capacity will contribute to the couple's migration propensity, regardless of which partner has this higher capacity. Support for this hypothesis is also given by the finding that the effect of the age difference has become more symmetrical over time. In other words, any age difference—regardless of which partner was older—had more predictive power than an age advantage ascribed to one of the partners. However, with respect to the effect of an age difference, the dominance of the male partner, which was found for 1977, has not yet disappeared completely. The asymmetrical age difference variable (age of male minus age of female) also had a significantly positive effect in 1996 (in a separate analysis). This somewhat contradictory result suggests that, when the male is older, the positive effect of an age difference on migration is stronger than when the female is older.

The analyses show that in both periods reducing the commuting distance of the partners was an important reason for long-distance migration in the Netherlands. When one of the partners was employed outside the province of residence, the couple's propensity to migrate was considerably greater. This effect was strongest if the male had a long commuting distance, but it was also quite substantial if the female had a long journey to work.

The results of the multivariate analyses confirm earlier findings that, *ceteris paribus*, dual-earner couples and families are less

likely to migrate than their one-earner counterparts. There are no signs that the effect of dual earnerhip is changing—the estimated effect is about the same for 1996 as for 1977. Combined with the increase in dual earnerhip that has occurred in the Netherlands, this result indicates that, over time, more and more individuals have become restricted in their migration possibilities because of the presence of a working partner. Our findings also suggest that the 'tied mover' phenomenon has become less gendered and that males with less human capital than their partners are becoming 'tied movers'. However, the likelihood of becoming a 'tied stayer' seems to have increased for both males and females, because of the greater equality in their relationship.

One last point should be made in interpreting the findings of this study. As was stated in the method section, it is possible that the operationalisation of long-distance migration on the basis of geographical units instead of distances has introduced bias in the results. Some of the interprovincial moves may in fact have been short-distance moves for housing reasons of people living close to the provincial border. No information exists concerning the extent of this bias. However, it is known that the effects of education and labour market characteristics on short-distance migration in the Netherlands are weaker than their effects on long-distance migration (Mulder, 1993). A possible bias, therefore, is most likely to have led to an underestimation of the true effects of these characteristics.

Note

1. We would have preferred to use more (and more sophisticated) measures of power balance—for example, the number of hours worked by each partner or the difference in occupational prestige. However, this was not feasible. Information about the number of hours worked was not available for the year before the survey. In the 1977 data, the share of women with known occupational prestige was too small to allow inclusion of both the prestige itself and the difference between the male's and the female's prestige.

References

- BARTEL, A. P. and LICHTENBERG, F. R. (1987) The comparative advantage of educated workers in implementing new technologies, *Review of Economic Statistics*, 69, pp. 1–11.
- BLAU, P. M. and DUNCAN, O. D. (1967) *The American Occupational Structure*. New York: Wiley.
- BLOOD, P. M. and WOLFE, D. M. (1960) *Husbands and Wives. The Dynamics of Married Living*. New York: Free Press.
- BOYLE, P., COOKE, T., HALFACREE, K. and SMITH, D. (1999) Gender inequality in employment status following family migration in GB and the US: the effect of relative occupational status, *International Journal of Sociology and Social Policy*, 19, pp. 109–142.
- GREENWOOD, M. J. (1975) Research on internal migration in the United States: a survey. *Journal of Economic Literature*, 13, pp. 397–433.
- GREGSON, N., and LOW, M. (1993) Renegotiating the domestic division of labour?, *Sociological Review*, 41, pp. 475–504.
- HAM, M. VAN, MULDER, C. H. and HOOIMEIJER, P. (2001) Spatial flexibility in job mobility: macro-level opportunities and micro-level restrictions, *Environment and Planning A*, 33, pp. 921–940.
- HOOGHIEMSTRA, B. and NIPHUIS-NELL, M. (1993) *Sociale atlas van de vrouw, Deel 2*. Rijswijk: SCP; Den Haag: VUGA.
- LICHTER, D. T. (1982) The migration of dual worker families: Does the wife's job matter? *Social Science Quarterly*, 63, pp. 48–57.
- LIPPE, T. VAN DER (1997) Verdeling van onbetaalde arbeid, in: M. NIPHUIS-NELL (Ed.) *Sociale Atlas van de Vrouw. Deel 4 Veranderingen in de primaire leefsfier*, pp. 117–157. Rijswijk: Sociaal en Cultureel Planbureau.
- MARKHAM, W. T. and PLECK, J. H. (1986) Sex and willingness to move for occupational advancement: some national sample results, *Social Science Quarterly*, 27, pp. 121–143.
- MINCER, J. (1978) Family migration decisions, *Journal of Political Economy*, 86, pp. 749–773.
- MULDER, C. H. (1993) *Migration Dynamics: A Life Course Approach*. Amsterdam: Thesis.
- RODMAN, H. (1972) Marital power and the theory of resources in cultural context, *Journal of Comparative Family Studies*, 3, pp. 50–57.
- SHIHADDEH, E. S. (1991) The prevalence of husband-centered migration: employment consequences for married women, *Journal of Marriage and the Family*, 53, pp. 432–444.
- SIMPSON, W. (1992) *Urban Structure and the Labour Market: Worker Mobility, Commuting and Underemployment in Cities*. Oxford: Clarendon Press.
- SIXMA, H. and ULTEE, W. (1983). Een beroepsprestigieschaal voor Nederland in de jaren tachtig, *Mens en Maatschappij*, 58, pp. 109–131.
- SJAASTAD, L. A. (1962) The costs and returns of human migration, *Journal of Political Economy*, 70, pp. 80–93.
- SMITS, J. (1999) Family migration and the labour-force participation of married women in the Netherlands, 1977–1996, *International Journal of Population Geography*, 5, pp. 133–150.
- SMITS, J. (2001) Career migration, self-selection, and the earnings of married men and women in the Netherlands, 1981–1993, *Urban Studies*, 38, pp. 541–562.
- TOPEL, R. H. and WARD, M. P. (1992) Job mobility and the careers of young men, *Quarterly Journal of Economics*, 107, pp. 439–479.
- WAGNER, M. (1989) *Räumliche Mobilität im Lebensverlauf. Eine Empirische Untersuchung sozialer Bedingungen der Migration*. Stuttgart: Enke.

