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## Spatial mobility and wage profiles: The role of general and location specific human capital matching

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# **Spatial mobility and wage profiles: the role of general and location specific human capital matching**

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## **Abstract**

This paper studies the influence of spatial mobility on wage profiles. Two mechanisms through which the influence is exerted are examined: the matching of general and location-specific human capital. Rich micro-level register data for the Netherlands 2008-2012 is used. Preliminary explorative results indicate that the local human capital provides pecuniary benefits in the long term. However, the estimation strategy still needs to be improved and several ways are suggested for doing so in the future.

**Keywords:** labour mobility, geographical proximity, job matching, regional embeddedness wage profiles.

**JEL codes:** J24, J31, J61, J63

## 1. Introduction

This paper studies the influence of migration on wage profiles. The novelty of the paper is the examination of two mechanisms in which the influence is exerted: the matching of general and location-specific human capital.

The paper is inspired by the intuition that local knowledge is important for job seekers. The benefits of possessing local knowledge have been demonstrated in several contexts: local buyers pay less for real estate (Lambson et al. 2004, Ihlanfeldt and Mayock 2012); local entrepreneurs' ventures perform better (Dahl and Sorenson 2012). So also the local job seekers are better aware of opportunities and more familiar with the work organisation and culture of firms in their immediate environment, which enables them to find better jobs and perform better at them.

This stands in contrast to human capital theory predicting positive returns to migration. Also the majority of empirical accounts find positive pecuniary returns to migration at least for some groups after accounting for selectivity (for instance, Böheim and Taylor 2007, Nakosteen and Westerlund 2004, di Cintio and Grassi 2011, Lehmer and Möller 2008), though no statistically significant returns to migration are sometimes also reported (Smits 2001, Axelsson and Westerlund 1998, Zaiceva 2006). The local knowledge factor has been absent from the research on returns to spatial mobility, human capital portability in space has only received limited attention in international migration research (Friedberg 1996, Chiswick and Miller 2009).

The paper integrates the role of location-specific human capital into the traditional approach to spatial mobility. It argues that wage profiles are determined by good matching of location specific human capital, which favours geographical proximity, and good matching of general, location independent human capital, which sometimes comes at a cost of bridging distance. The paper strives to identify the effects of general and location-specific human capital matching. In most of the job matches those effects are intertwined; this paper presents a way to disentangle them by performing the analyses separately for special cases of job matches where spatial mobility can be expected not to introduce differences in the matching quality in terms of either general or location-specific human capital.

Such an investigation is interesting, for instance, for a better understanding of the persistence of regional unemployment and wage differentials. While the neoclassical macro migration

theory postulates that migration functions as an equalizing force eliminating regional differences, this has not been corroborated by empirical evidence (Sjaastad 1962, Elhorst 2003). Explanations offered for the lack of convergence are micro level investments required by spatial mobility (Sjaastad 1962) or the selective nature of spatial mobility (Kanbur and Rapoport 2005). This paper suggests that also location-specific human capital is a plausible alternative explanation for employee willingness to accept jobs far away and consequentially for the persistence of regional differentials.

The remainder of the paper is structured in the following way. In the second chapter I discuss the matching of general and location-specific human capital in space and formulate predictions. Data, empirical strategy and results are presented in the third and fourth chapters. Conclusions are given in the fifth chapter.

## **2. Matching general and location-specific human capital**

In this section a framework is presented for spatial job search also incorporating location-specific human capital. Location-specific human capital refers here to employees' knowledge of local production techniques, familiarity with local culture and possession of local networks. The reminder of knowledge, abilities and skills that can be transferred between locations is referred to as general human capital, similarly to Becker's (1964) general and firm-specific human capital.

### **2.1. Background**

Much of the knowledge is spatially embedded. It is available to individuals interacting in a locality but unfamiliar to outsiders (Maskell and Malmberg 2007). Local labour markets can be seen as islands characterised by spatial information asymmetries (Phelps 1969). Sharing common knowledge affects job matching both in identifying the best match in the search phase and in incorporating the new human capital later on. In the search phase, firms have an informational advantage concerning the local employees and vice versa (Venhorst and Cörvers 2009). Local employees' human capital is easier to recognise as within the boundaries of known local competencies, employers can easily identify what skills they need and determine criteria by which to judge job applicants. Employers and employees in the local environment can approach each other and establish their credentials more easily as they are more likely to share the same professional and social networks (Devillanova 2013). This is corroborated by empirical evidence showing that firms are dependent on local labour markets

(Hanson and Pratt 1992, Shaw and Pandit 2001) and that professional and social networks with limited geographical reach are used extensively in forming job matches (see Ioannides and Laury (2004) and Topa (2011) for reviews).

Once the job match is made, local skills and knowledge are easier to absorb because the employer already has similar skills and has developed routines to utilise them. Indeed, previous findings indicate substantial regional differences in production techniques (Rigby and Essletzbichler 1997, 2006) as well as in culture and business practices (Saxenian 1994, Aoyama 2010).

On the other hand, location-specific human capital matching is balanced against general human capital matching. In line with the research on returns to migration, expanding the job match search reach might provide with a better match of general human capital. However, the distant job matches will only be accepted if their quality is substantially higher than that of local job matches to justify the monetary and psychic costs involved (Sjaastad 1962, van Ommeren and Fosgerau 2009). Indeed, hiring remote employees is more prevalent for highly skilled positions (Russo 1996, Venhorst et al. 2011) requiring higher level of specialisation where adequate local match might be difficult to find.

It must be noted that while a distinction is made between general and location-specific human capital matching, they also to some extent overlap. Location-specific human capital can be important to perform job tasks in its own right but it can also be instrumental in helping find a good local job match in terms of general transferable human capital. If local human capital enables job matches that are of high quality in terms of general human capital, here the wage premium is attributed to location-specific capital.

## **2.2. Empirical strategy**

In order to compare local and nonlocal job matches, I build on Simon and Warner's application (1992) of Jovanovic's matching model (1979) and several other more recent works in similar direction (Sicilian 1995, Brown et al. 2012, Galenianos 2013, Dustmann et al. 2011) that enquire into the functions of employee referrals. Similar to Simon and Warner (1992), this paper postulates that jobs are experience goods, the productivity of employees is not known exactly when the job match is formed, but the certainty about productivity differs across groups of employees. Job matches are compared along two dimensions: the initial certainty about employee's productivity on a specific job and how those perceptions are

updated over time. Simon and Warner (1992) suggest that those dimensions are reflected by wage and turnover. The initial wage, controlling for employee's skill level, reflects the initial certainty. Wage and turnover are modified as employers and employees learn about employee's productivity on the job<sup>1</sup>.

So the differences in wage growth, both between jobs and within a job, are determined by nonlocal employees giving up their location-specific human capital in return for a better matching of general human capital. In most of the job matches, however, the effects of general and location-specific human capital matching are difficult to separate. Therefore this paper focuses on certain groups of job matches where the impact of spatial mobility on either general or location-specific human capital matching can be considered negligible.

For instance, if an employee is exogenously forced to migrate rather than chooses it freely, there is no reason to expect superior general human capital match in the new location, controlling for regional differences. Yet the employee still loses location-specific human capital. Married women are often considered to be such employees. Numerous studies report women in general to have returns to migration that are smaller and conditional on other factors (Mulder and van Ham 2005, Lemistre and Moreau 2008, Smits 2001) and find no positive returns for married women in the case of household migration in particular (Cooke 2003, see also a review of Cooke 2008). Wife's job characteristics have no bearing on household migration behaviour (Cooke 2008). Therefore I suggest that the differences in wage profiles of local and nonlocal married women are attributable to location-specific human capital matching, with the effect of general human capital matching being negligible. However, as some reversal of the traditional gender roles in family migration has been observed in the Netherlands (Smits et al. 2003) and keeping in mind that the women in this sample- employees switching between full time jobs- might be more career-oriented than an average woman, an additional selection criteria is added. To the extent that the traditional gender roles are relaxed, a household can be expected to prioritise the career of the primary

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<sup>1</sup> Due to the focus on job matches rather than employees, this approach is slightly different from the one commonly found in labour spatial mobility research: several authors that also trace wage changes in time add dummies in their wage regression to indicate whether spatial mobility has been observed a certain number of years earlier/later. Job changes and often also location changes outside selected framework are not taken into account (Hunt and Kau 1985, Glaeser and Maré 1994, Yankow 2003, Lehmer and Lundsteck 2010, Böheim and Taylor 2007).

earner. Therefore selection contains only the women that have partners and earn no more than 40% of the household income. Conducting regressions only on this group of job switchers, I can calculate the effects of location-specific job matching and decompose the total migration effects.

As a robustness check, also other groups of employees can be selected. If location-specific human capital is accumulated over time just like firm-specific human capital (Topel 1991), people that have not stayed in a location long have negligible magnitudes of local human capital. Then expanding job search area still offers better general human capital match possibilities yet local and nonlocal job matches are equal in terms of location-specific human capital matching. An exception might be an employee coming back to a location where he/she has been accumulating local human capital before the short stay in the new location.

To conclude, spatial mobility affects wage profiles through general and location-specific human capital matching. Nonlocal employees can be expected to have job matches that are superior in terms of general human capital matches but worse in terms of local human capital matching. In order to separate those effects of spatial mobility, I perform the analyses separately for special cases of job matches where spatial mobility can be expected not to introduce differences in the matching quality in terms of either general or location-specific human capital. Triangulating findings for different groups as described above ensures the robustness of findings.

### **3. Data and methods**

#### **3.1.Data**

To compare the wage profiles of local and nonlocal job matches, I construct a dataset consisting of observations of job transitions with the new jobs starting in years 2008 to 2010. Comparing job transitions enables me to unambiguously identify within-job wage changes, wage changes that are associated with job change in general and wage changes associated with spatial mobility (Yankow 2003). Employees are tracked between the jobs and on the new job until the new job ends or until 31 December 2012, whichever happens earlier. The job transitions are identified and the employment histories are tracked using register data, provided by Statistics Netherlands. The register data also provides rich background information for employers (industry, region), employees (age, gender, residential location)

and jobs (start and end date, wage, number of hours worked), enabling me to control for a variety of relevant variables.

Job switches are selected that happen between full-time jobs (0.8 FTE or more) with the gap between jobs being not less than 0 months (jobs do not overlap) and not more than 12 months (no long spell of unemployment in between). In order to be able to unambiguously define the transition, I select job switchers do not have other jobs for at least 3 months before the end of the last job and for at least 3 months after the start of the new job. Transitions to/from traineeships or state-subsidised workplaces are excluded as well. Lastly, both the new and the old job have to last at least two months to be selected. This threshold has been chosen as a result of balancing considerations of excluding job relationships that were meant to be temporary assignments with no potential for a long-lasting job relationship and including as much as possible relevant variation in tenure length.

Observations with missing variables are deleted listwise. Also jobs in firms in NACE rev. 2 category 78 *Employment activities* are excluded, due to it being dominated by temporary employment agencies that have somewhat atypical relationships with their employees, most of which are redirected to work in other industries and locations. Also the employee records with extreme values are excluded where employees experience more than twofold wage increase/decrease either between jobs or in any of the years on the job.

### **3.2.Methods**

In this section, the methodology is suggested to test the observations from section 2. It is tested whether local and nonlocal job matches are different in terms of between job wage growth, tenure length and within job wage growth; the regressions are conducted for different groups of employees separately.

Following broadly Simon and Warner (1992) I conduct OLS with the wage growth between jobs as the dependent variable, survival regression with tenure length as the dependent variable and OLS regression with annual within-job wage growth as the dependent variable. As the wage on the new job is recorded annually, the within-job wage growth is not measured for jobs that last less than a year. This is undesirable as job tenure is likely to be related to wage growth. Hence also Heckman regression is conducted on within-job wage growth to account for within-job wage growth being unobserved for short jobs. An OLS regression on



within-job wage growth is also performed on uncensored job matches only to see how the wage changes in the successful job matches that survive.

The key independent variable is a dummy variable indicating whether employee is nonlocal (employee is described as nonlocal if the NUTS3 area 6 months before the start of the job is not the same as the NUTS3 area 6 months after the start of the job), regardless whether the employee later relocates for the job or becomes a long-distance commuter.

### **3.3.Variable operationalisation**

This section lists the control variables used and describes how they are operationalised. Control variables such as education level, wage and tenure length at the previous job capture the skill level and position in the labour market of the employee. In such way the qualities of the new job match can be attributed solely to the type of job change rather than the underlying individual productivity. As job transitions are included with as much as one year gap between jobs, also duration between jobs variable is added to discriminate between job-to-job and job-unemployment-job transitions. Also demographic variables are added, such as age and gender, where the analyses are performed on both genders.

In addition, several regional characteristics are controlled for. Employees' willingness to migrate and the migration outcomes might depend not only on micro-level matching considerations but also on broad regional characteristics. I include the ratio of unemployment rates, ratio of average wages as well as ratio of average wages in the industry of old job in regions of origin and destination. The ratios equal one for job switches that happen locally. The ratio of real estate prices in regions of origin and destination accounts for access to different (dis)amenities that might affect migration decision and might be taken into account in wage negotiations.

Variable	Operationalisation
Individual level	
WAGEGRBETWEEN	Difference between natural logarithms of the starting wage on the new job and the end wage on the old job. The wage in the second month of the new job is taken as the wage on the new job; the wage on the same calendar month one year earlier is taken as the wage on the old job. If the old job does not yet exist in this calendar month, also the wage in the second month from the start is taken. All wages are relative to the number of hours worked. In all wage calculations, irregular payments (such as year-end bonuses) are spread out throughout the year.
TENURE	The duration of new job in years. Right-censored on 31 December 2012.
WAGEGRWITHIN	The annual change in natural logarithm of wage on the new job.
NONLOCAL	Dummy variable, equals 1 if the NUTS3 area 6 months before the start of the job is not the same as the NUTS3 area 6 months after the start of the job.
UNEMPLGAP	Time in years between the end of the old job and the start of the new job.
WAGELAST	Natural logarithm of the wage on the old job.
TENURELAST	The tenure length of the old job
AGE	Employee's age in years at the start of the job.
GENDER	Dummy variable, equals 1 if the employee is female.
INTERIND	Dummy variable, equals 1 if the employee switches to another 3-digit industry, based on NACE rev.2, measured at firm level.
EDUCLEVEL	Ordinal variable, 1=everything up to lower secondary education, 2=higher secondary education, 3=associate degree, higher professional education bachelor degree, university bachelor degree, 4- master degree, doctorate or their equivalents.
Other variables	
IND	2-digit level industry based on NACE rev.2 code.
YEAR	Year when the new job starts
WAGERATIOREG, WAGERATIOREGIND	The ratio of average natural logarithm of wage in NUTS-3 areas of old and new jobs and the ratio of average natural logarithm of wage in NUTS-3 areas of old and new jobs in the industry of the old job. Extreme values are excluded from calculations.
UNEMPLRATIO	The ratio of unemployment rates in NUTS-3 areas of old and new jobs.
REALESTATERRATIO	The ratio of real estate prices in NUTS-2 areas of old and new jobs.

**Table 1.** Description of variables used in regressions

## 4. Results

In this section the first preliminary results are presented exploring how migration affects wage profiles through modifying the general and location-specific human capital matching. First, I present some descriptive findings illustrating the wage differences between migrants and non-migrants for different groups of employees. The findings are interpreted in the light of general and location-specific human capital matching. Next, as proposed in the previous sections, I focus specifically on women that have a partner and that contribute relatively little to household income (referred further in the text as GPI - group selected on basis of gender, partner, income). Here I compare the regression results indicating how migration affects earnings for GPI and other groups of employees.

### 4.1. Descriptive findings

Graphs 1-5 illustrate the wage profiles of migrating and non-migrating job switchers. The data points reflect the differences between the natural logarithm of the wage on the new job at different times and the natural logarithm of the wage in the old job. As Graph 1 shows, nonlocal employees receive higher wages and the wage difference increases with the time spent on the job.

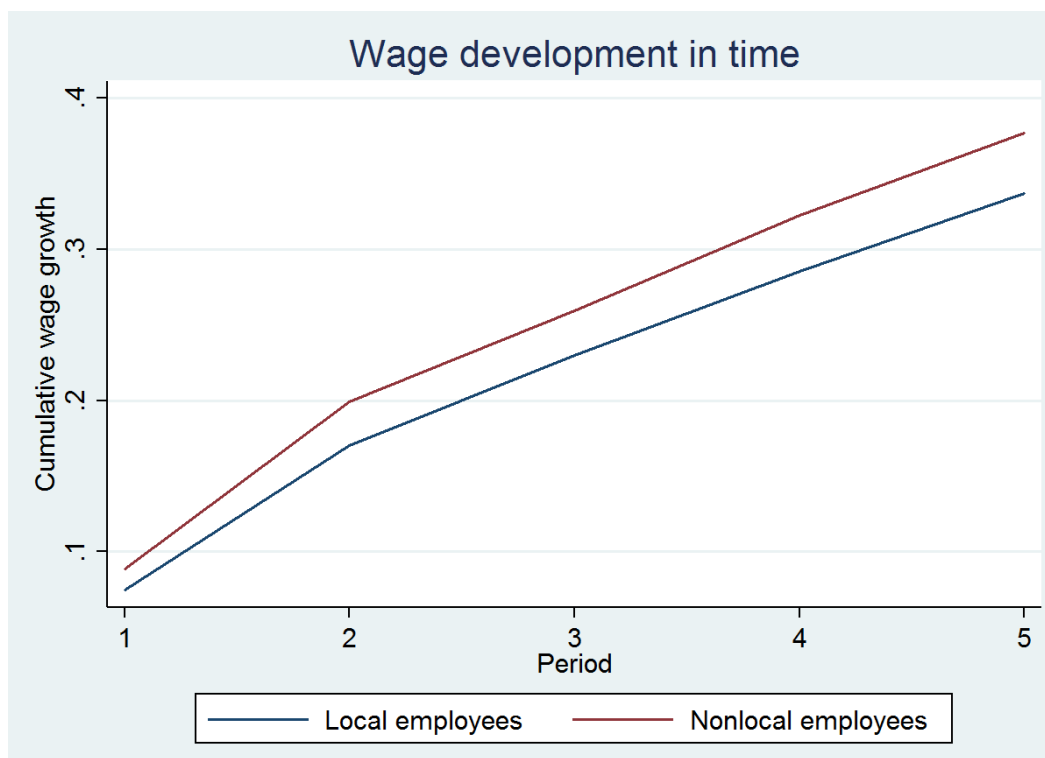


Figure 1. Wage profiles of local and nonlocal job switchers. The data points reflect the differences between the natural logarithm of the wage on the new job at different times and the natural logarithm of the wage in the old job.

As Graph 2 demonstrates, the highest wage premiums are received by the highly educated migrants, which is a common finding in the migration literature (for example, Lemistre and Moreau 2009). This can be explained by highly educated having higher levels of general human capital and therefore more specialised knowledge and skills. Thus the highly educated face thinner labour markets and benefit more from migration. The expectation that the returns to migration are higher for migrants with more specialised skills is also confirmed by Graph 3, comparing wage profiles of migrants and non-migrants in different age groups. The migration premium is predominantly received by the older age groups. Among employees under twenty, local employees earn more than migrants and in the age group 21-30 the earning profiles are very similar for migrants and non-migrants. Only among employees older than 30, migration yields mostly positive returns. Young employees benefit little from general human capital matching as they are not very specialised in terms of general human capital, for instance all graduates of a study programme have very similar knowledge and skills but diverge later in their professional careers.

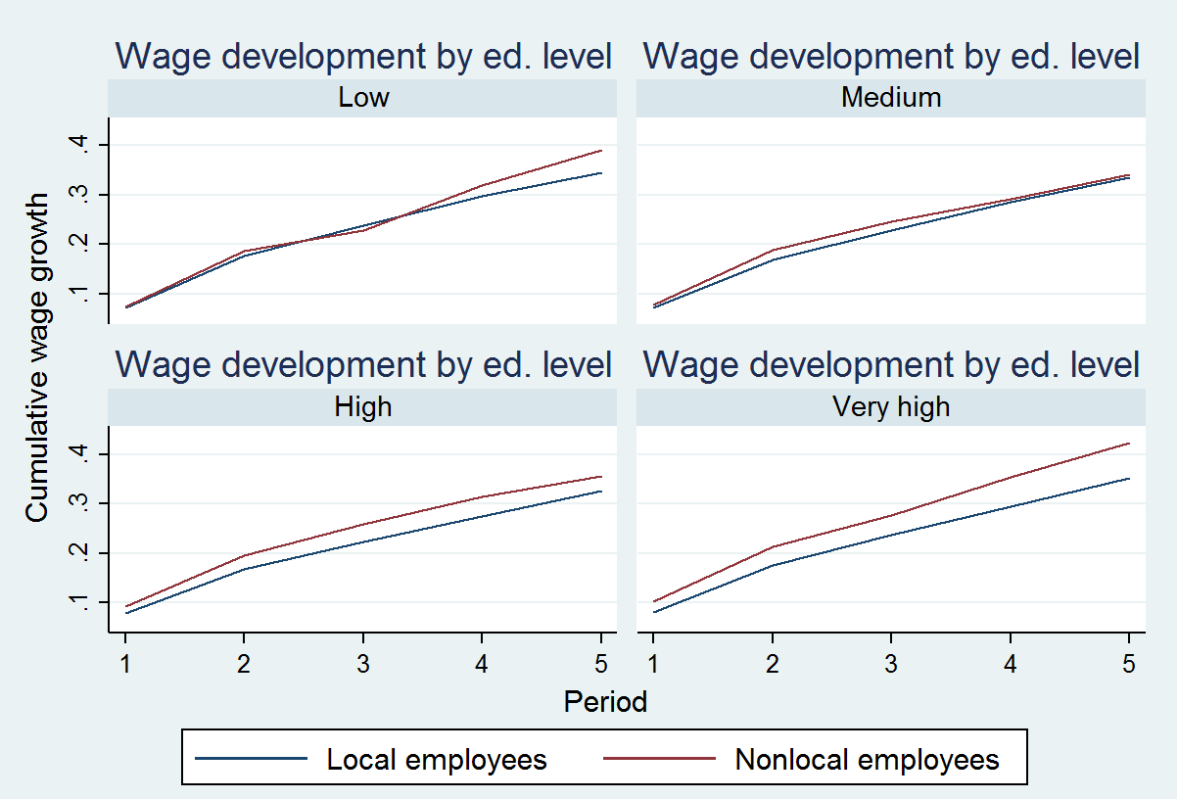
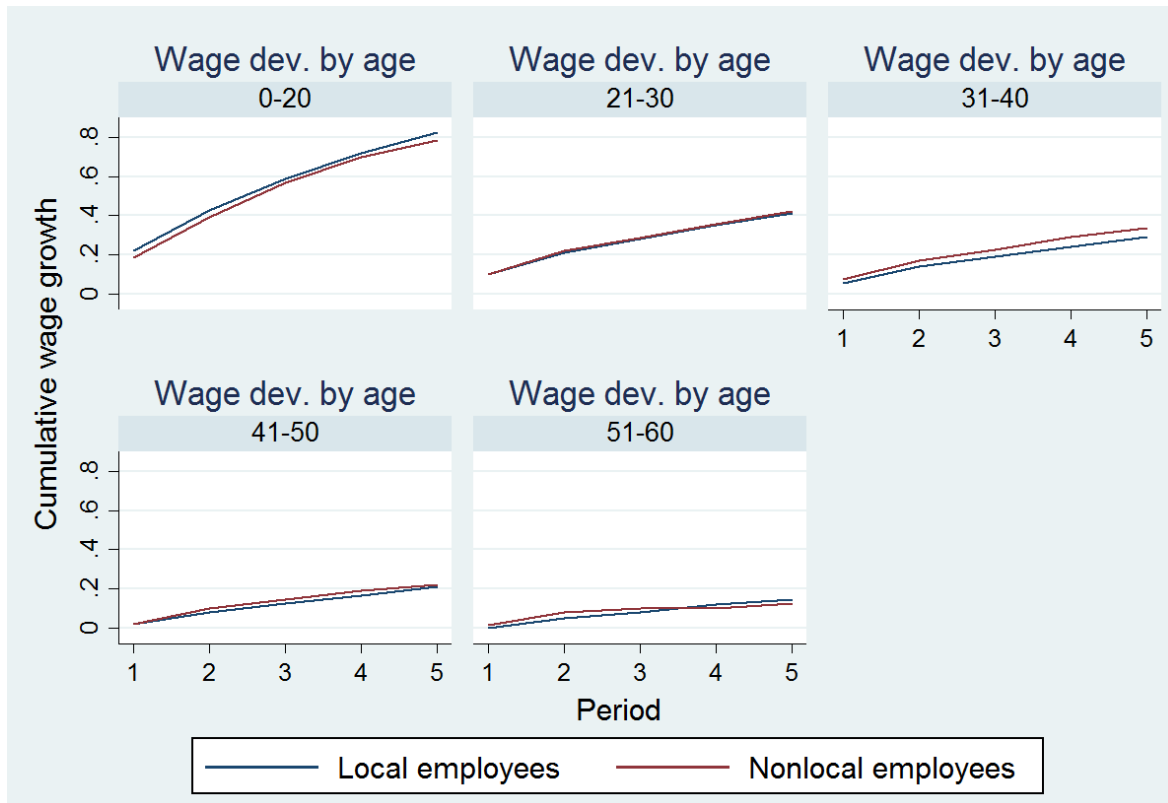


Figure 2. Wage profiles of local and nonlocal job switchers by education level. The data points reflect the differences between the natural logarithm of the wage on the new job at different times and the natural logarithm of the wage in the old job.



**Figure 3. Wage profiles of local and nonlocal job switchers by age group. The data points reflect the differences between the natural logarithm of the wage on the new job at different times and the natural logarithm of the wage in the old job.**

Next I compare the earnings of migrant and non-migrants for employee groups defined by their gender and marital status. As Graph 3 shows, the migration premium is lower for women and lower still for women that have partners. The migration premium is negligible and at times negative for women that have partners and contribute no more than 40% of the household income (Graph 4) , which is consistent with the expectations that the location choices for this group are determined exogenously.

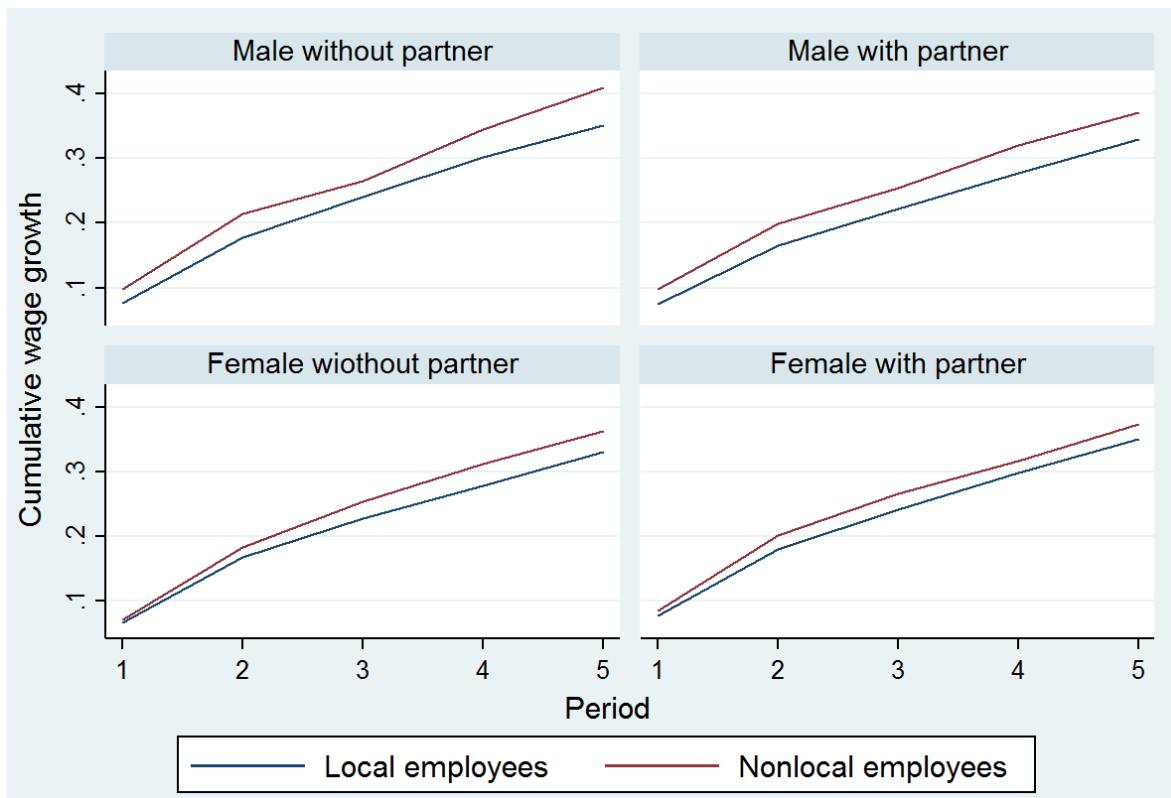


Figure 4. Wage profiles of local and nonlocal job switchers by gender and marital status. The data points reflect the differences between the natural logarithm of the wage on the new job at different times and the natural logarithm of the wage in the old job.



Figure 5. Wage profiles of local and nonlocal job switchers, for a selection of women that have partners and earn no more than 40% of the household income. The data points reflect the differences between the natural logarithm of the wage on the new job at different times and the natural logarithm of the wage in the old job.

## 4.2. Regression results

Next I focus on the specific group of women that have partners and contribute not more than 40% of the household income (GPI). Regressions are conducted separately for groups of employees defined by their gender and marital status. The effects of a dummy variable indicating whether an employee is nonlocal can be compared across groups. This provides the first impression of the differences across the groups; the differences are not formally tested at this stage. The following regressions are performed: 1) OLS on between-job wage growth, 2) survival regression on the tenure length of the new job, 3a) OLS on within-job wage growth, (3b) Heckman regression on within-job wage growth to account for within-job wage growth being unobserved for short jobs, 3c) OLS regression on within-job wage growth for uncensored job matches only to see how the wage changes in the successful job matches that survive.

Table 2 shows the effects of the migration dummy for different groups of employees. The control variables used are as listed in Table 1 but they are now not reported nor commented on. The results are shown for the full sample, combinations of gender and marital status and separately for GPI.

For the full sample, migration has no statistically significant effect on wage in the short term and negative effect in the long term: migrants stay shorter in their new jobs and experience lower within-job wage growth. If tenure length is interacted with NONLOCAL dummy in the OLS regression on within-job wage growth, we see that migrants in general experience lower within-job wage growth (the coefficient is -0.001 and statistically significant at 0.05 level) but every year of tenure increases the wage growth of migrants by 0.005 (statistically significant at 0.05 level).

No positive effect of migration on wages has been previously also reported by Axelsson and Westerlund (1998), Zaiceva (2006). Yet a question naturally arises why people choose to undergo costly migration if it offers no pecuniary benefits? To provide some insights I divide the sample and compare the returns for different groups of employees. Men, that the literature reports to be the main beneficiaries of migration (Cooke 2003, 2008), indeed receive a migration premium in terms of between-wage growth. However, even men experience negative migration effects later on in terms of shorter tenures and lower within-job wage growth. The pattern is reversed for single women that could also be expected to choose location based on personal monetary returns: the migrants receive no migration premium

when changing jobs but their job duration is not statistically significantly different from that of non-migrants and there is some evidence suggesting higher within-job wage growth. Those positive migration effects, however, disappear for women with partners and even more so for GPI.

	1. OLS on between-job wage growth	2. Survival regression on tenure length	3a. OLS on within-job wage growth	3b. Heckman regression on within-job wage growth	3c. OLS on within-job wage growth for jobs with uncensored duration	N
Full sample	0.002 (0.001)	0.904 (0.008) ***	0.002 (0.002)	-0.006 (0.002) ***	0.002 (0.002)	423716
Males without partner	0.008 (0.003) **	0.929 (0.016) ***	0.002 (0.004)	-0.003 (0.004)	0.004 (0.005)	71810
Males with partner	0.005 (0.003) **	0.911 (0.014) ***	-0.000 (0.003)	-0.007 (0.003) **	-0.004 (0.004)	217981
Females without partner	0.001 (0.003)	0.991 (0.020)	0.009 (0.004) **	0.003 (0.005)	0.008 (0.005) *	48451
Females with partner	0.002 (0.003)	0.889 (0.016) ***	0.001 (0.004)	-0.008 (0.004) *	0.003 (0.004)	85474
Females with partner, contribute not more than 40% of the household income	0.006 (0.004)	0.864 (0.023) ***	-0.002 (0.006)	-0.013 (0.006) **	-0.000 (0.007)	35853

**Table 2.** The effects of migration on between-job wage growth, tenure length and within-job wage growth for different groups of employees. Robust standard errors in parentheses. \*\*\* p<0.001, \*\* p<0.05, \* p<0.1.

It can be concluded that GPI ds worse in case of migration than other employees in general or than other women in particular. However, ideally GPI would be compared to employees similar along all other characteristics except how migration is determined. Men might be different not only in terms of migration determination mechanism but might also work in different industries with different wage structures. Single women are also likely to be different from GPI along dimensions important in determining wage development, such as age. To address this, I compare migration effects on GPI to migration effects in a matched sample. GPI are matched to women that are single but share other characteristics- here I specify age, industry, education level and wage in the previous job. Some cases are excluded where no satisfactory match could be found.



As Table 3 demonstrates, the matched women compared to GPI do worse in terms of between-job wage growth but experience positive returns later on in terms of longer tenures and higher within-wage growth. Thus the results suggest that the local human capital provides pecuniary benefits in the long term. It is a bit puzzling as why its effect is negative in the short-term. Possibly, GPI and the matched sample differ along unobserved characteristics. Part-time work is prevalent among women in the Netherlands, it can therefore be expected that women that self-select into full-time employment have higher earnings growth potential. This self-selection might be stronger for women with partners than for single women.

	1.OLS on between-job wage growth	2.Survival regression on tenure length	3a. OLS on within-job wage growth	3b. Heckman regression on within-job wage growth	3c. OLS on within-job wage growth for jobs with uncensored duration	N
Females with partner, contribute not more than 40% of the household income	0.006 (0.004)	0.865 (0.023) ***	-0.002 (0.006)	-0.013 (0.006) **	-0.000 (0.007)	35700
Matched sample	-0.029 (0.005) ***	1.179 (0.039) ***	0.028 (0.006) ***	0.029 (0.006) ***	0.0047 (0.007) ***	35700

**Table 3.** The effects of migration on between-job wage growth, tenure length and within-job wage growth for different groups of employees. Robust standard errors in parentheses. \*\*\* p<0.001, \*\* p<0.05, \* p<0.1.

The results presented are in no way final and several improvements and extensions need to be made before final conclusions can be reached. In future, the matching strategy for finding comparable matches to GPI is going to be improved. The differences between coefficients in different samples are going to be formally tested. In the regressions on within-job wage growth interactions are going to be added between migration dummy and tenure length, possibly also allowing nonlinear effects of tenure. In such a way, the migration premium can be calculated taking account all of the dimensions measured – between-job wage growth, tenure length, within-job wage growth. With the current results, only qualitative comparisons are made.

The results section focuses now on one way to disentangle general and location-specific human capital matching: explore the migration premium to women that have a partner and

contribute relatively little to household research as their migration decisions can be expected to be determined exogenously. In section 2.2 I also suggest another way – focusing on the migration of employees that have not stayed long on one location. In this case, migration is expected to not affect location-specific human capital matching rather than general human capital matching as in the GPI case. Triangulating findings for different groups would ensure the robustness of findings.

## 5. Conclusions

This paper suggests that migration affects both the general and location-specific human capital matching. It presents a way to decompose the migration effects attributable to general and location-specific human capital matching by looking into certain groups of employees where migration can be expected not to affect either the general or the location-specific human capital matching.

The preliminary explorative results indicate that local human capital provides pecuniary benefits in the long term. However, the estimation strategy still needs to be improved and several ways are suggested for doing so in the future.

The preliminary findings offer an additional explanation for the persistence of regional employment and wage disparities. Evidence is found that local human capital benefits job seekers, thus nonlocal employees are less desirable than local employees with comparable levels of geographically transferable human capital. This reduces the incentives for migration.

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