

INTERNATIONAL COMMUTING BETWEEN BORDER REGIONS IN THE NETHERLANDS, GERMANY AND BELGIUM

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Motivation for studying cross-border commuting

1. Cross-border issues (economy, safety, labour market, migration, governance, InterReg, Brexit) are a big theme in Europe
2. Cross-border commuting can stimulate cross-border regional economic development (better matching, economies of scale, agglomeration effects) and solve discrepancies on cross-border labour markets.
3. Specifically for the Dutch border regions: policy initiatives stimulate cross-border commuting: exporting unemployed.
4. Now lack of insight in actual flows but also lack of insight in drivers and impact of cross-border commuting and policy
5. This paper: explanatory analysis of commuter flows from Netherlands to and from Germany and Belgium and the relation with personal and regional characteristics

BORDER REGIONS MEASURES TO BOOST GROWTH AND JOBS

The Single Market and freedom of movement are EU rights. Citizens enjoy being able to move, work, study or use services in other EU countries.

1 in 3 Europeans live in these regions – 150 million people

2 million EU citizens are frontier workers or students – they travel to work or school across a border daily or weekly

But now Brexit and more to come?

September 2017

Many Cross-border cooperation projects

The Netherlands in Europe

CASE STUDY INTERNATIONAL COMMUTING BETWEEN BORDER REGIONS IN THE NETHERLANDS, GERMANY AND BELGIUM

Figure 1. NUTS-2 border regions for the Netherlands and German the Netherlands and Belgium (Dutch NUTS-2 region Limburg borders both)

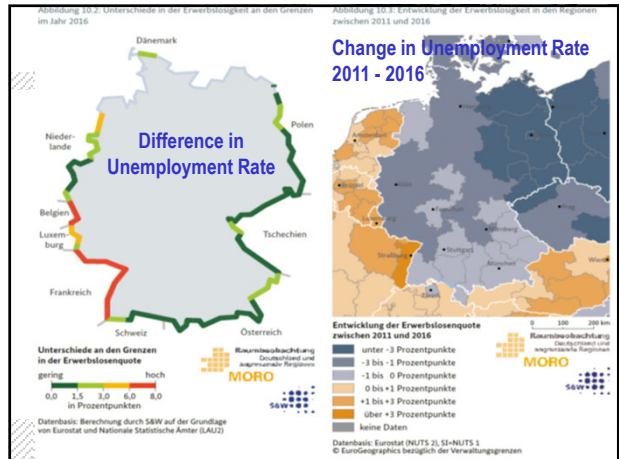
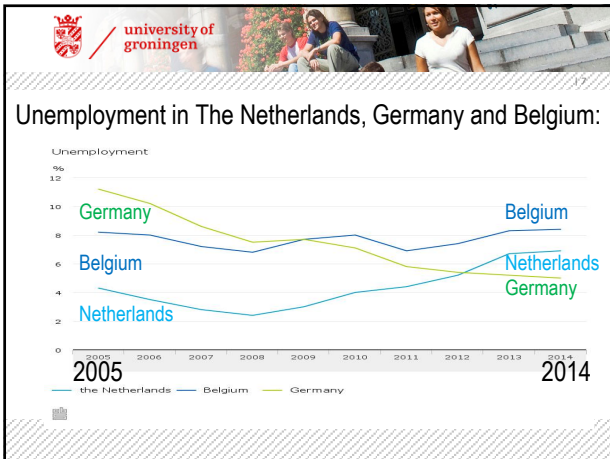
The Netherlands borders Germany and Belgium.

One region **Limburg** borders both countries.

Data on commuting flows are scarce, limited and inconsistent

NL initiated many cross-border policy initiatives





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Many Dutch policy initiatives to export unemployed

Noorderlingen vinden werk in Duitsland

JON VAN SCHILT

en de Fernat Institut regio (IDB) landen ervoor in twee jaar goed werkzoekenden in Duitsland aan werk te helpen. „In dit gaan we helpen“, zegt Van der Wal, die met zijn Duitse collega's van de Agentur für Arbeit in Nordhorn de balans opmaakt.

Door de lancering van de website www.werkvindtoestand.nl in mei van dit jaar kwam de vaart er goed in. Op deze site is allerlei informatie te vinden over vacatures en banenstart. De provincie Drenthe, de gemeenten Barger-Obbeon, Emmen, Coevorden en Harenberg, het UWV

pen voor werkzoekenden, zoals een vertaalfunctie en een calculator om te berekenen wat er maandelijks aan de streep overblijft. Sinds kort is er ook een talent aan toegroep zodat mensen kunnen kijken hoe hun huis ervoor staat.

„We hebben bemiddeld voor mensen in allerlei sectoren. De grootste groep heeft laaggeschoold werk gevonden. Denk aan productie, onderhoud en hulpdiensten in de zorg. Het mooie is dat voor die laatste groep geen opleiding bestaat in Duitsland. De vraag naar deze mensen in de zorg is echter groot. Zo

kunnen mensen met weinig opleiding toch een goede toekomst verdienen“, zegt Van der Wal.

Na een proefperiode van een half jaar volgt doorgaan een vast dienstverband. Hooftel mensen een vast contract hebben gekregen. Van der Wal roept niet zeggen. „Maar er zijn voorbeelden van mensen die al na een paar maanden een vast contract kregen, omdat de werkgever heel graag wilde hebben. Veel Duitse ondernemingen zijn familiebedrijven. Die hebben een continuïteit aan voorzigtig.“

Om ervoor te zorgen dat de man

Source: DvHN, 3 december 2016

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Half a year later in June 2017: Project 'Werken in Duitsland' failed completely: zero unemployed found a job in Germany!

Banenplan voor Duits werk geflopt

BRUNO VAN DER WAL

Geen enkele Drent of Groninger aan de slag bij de oosterburen

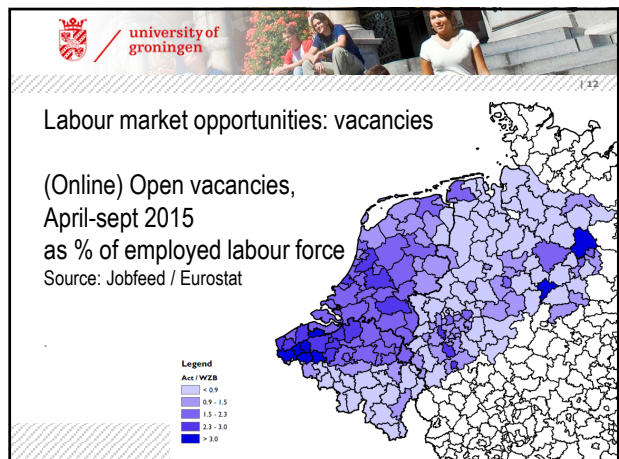
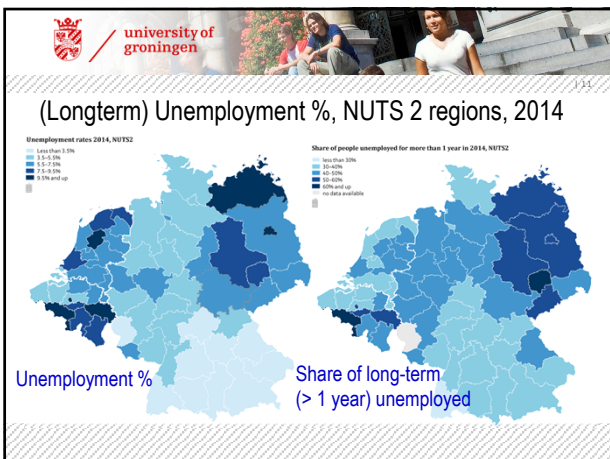
Het idee was vorig jaar januari om goed Drenthe en Groninger voor 1 half miljoen euro beschikbaar te maken om te helpen. Amper anderhalf jaar later reageert de minister van Werk op het plan Groningen. Werken in Duitsland is niet meer van de baan. Het plan is mislukt. Geen enkele Drent of Groninger kwam aan de slag bij de oosterburen.

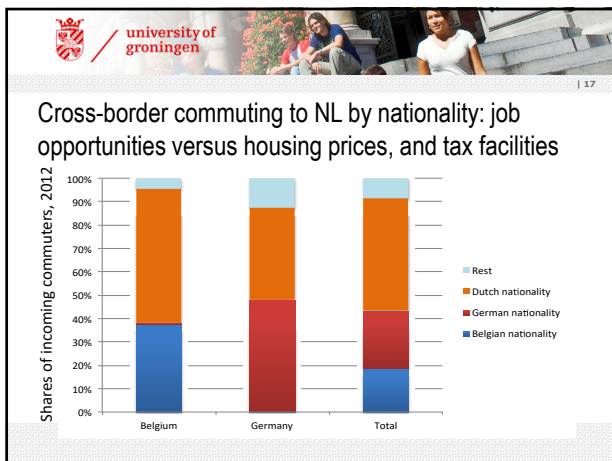
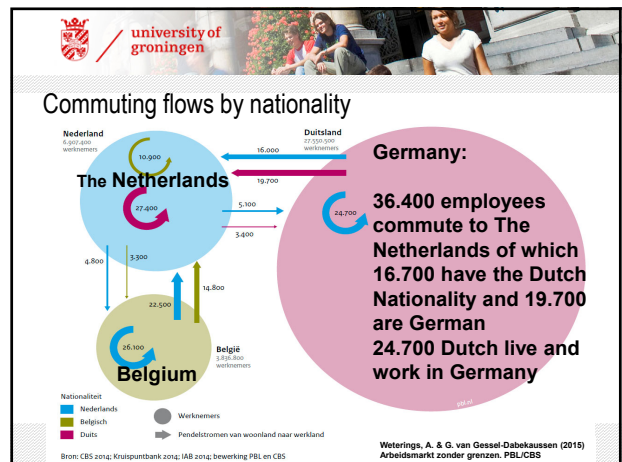
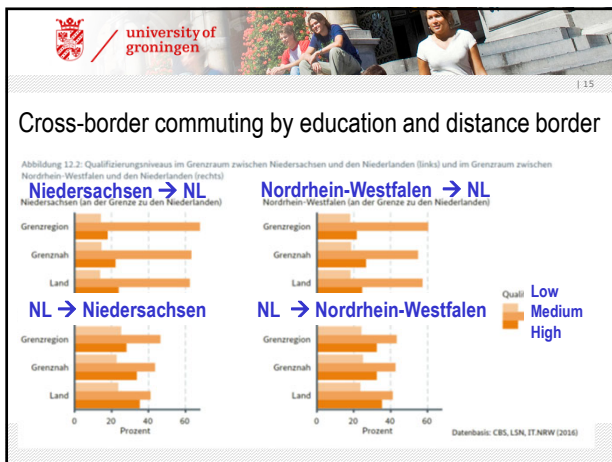
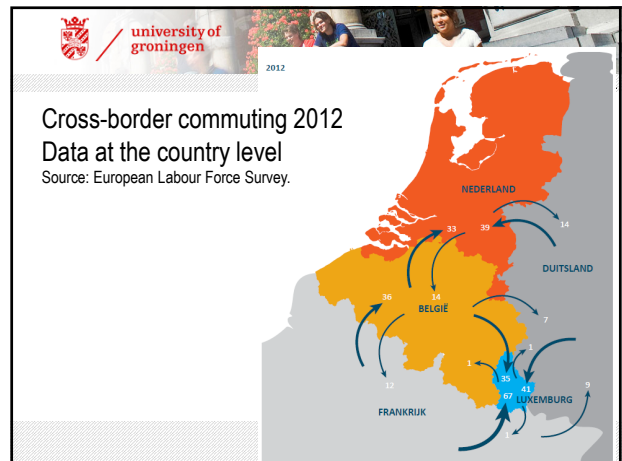
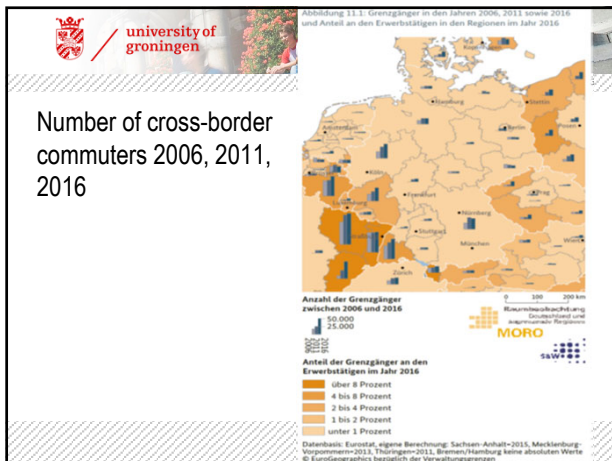
Van der Wal geeft niet dat de vraag naar arbeidskrachten in Duitsland van korte duur is. „De werkgelegenheid groeit er al sinds 2009. Er zijn in Nederland veel bedrijven die gebouwen in Duitsland bouwen voor in de zorg.“

De minister van Sociale Zaken, Volgen van Beem, er had aangetekend dat het project, maar van of staat het plan met medewerking aan bedrijven over de grens. „Zaar bleef het wettig.“ Want de voorwaarde van Groningen. Werken waren niet aantrekkelijk genoeg voor Duitse werkgevers. Dit is niet het ministerie voor dat de Duitse de helft van de salariskosten moeten betalen. Maar die wilden helemaal niet oplossen voor een deel van de trainingskosten voor de taal en werkloosheid.

Gedeponeerde Erikus Ekkema van de provincie Groningen vindt de opstelling van het ministerie teleurstellend. „Januari dat Sociale Zaken de flexibiliteit mist om het project los te trillen. Waaronder regels niet aanpassen zodat de Duitse werf moet weten dat het hebben noch bereikbaar. „Alle Ekkema. „Gisteren debatterende provinciale Staten van Drenthe heeft over een of mislukkers van het plan, maar het concreet avonds dat niet op.“

Bron: DvHN, 29 juni 2017





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- ### Empirical analysis: explanatory model
1. Commuting Data Statistics Netherlands and Eurostat 2006-2013
 2. We use data for all NUTS 2 border regions on both sides of the border of The Netherlands, Belgium and Germany.
 3. Limitation: we only know the NUTS 2 region of residence and the commuting flows to ALL other regions in Belgium or Germany. So, a person living in a German border region can also work in non-border regions in the Netherlands, e.g. in Amsterdam and person living in a Dutch border region can work in Berlin
- So, NO information about flows BETWEEN border regions!!

Table 3. Average annual cross-border commuters between the Netherlands and its two neighbouring countries for 2006-2013 from official statistics (x 1000)

Country of living	Country of work		
	Netherlands	Germany	Belgium
Netherlands			
country		19	14
NUTS-2 border area		16	12
Germany	44		
country	33		
NUTS-2 border area	37		
Belgium	37		
country	32		
NUTS-2 border area	32		

Source: Statistics Netherlands and Eurostat

Most commuters live in border regions

Commuting flows from Dutch and German border regions

Table 4. Cross-border commuting from Dutch and German border regions, 2006-2013

	persons (x1000)	share of employed labour force (%)
<i>Cross-border commuting from Dutch border regions to Germany</i>		
Groningen	0.8	0.3
Drenthe	1.0	0.4
Overijssel	2.1	0.4
Gelderland	2.7	0.3
Limburg	9.3	1.7
Netherlands	18.7	0.2
<i>Cross-border commuting from German border regions to the Netherlands</i>		
Weser-Ems	9.2	0.8
Münster	7.0	0.6
Düsseldorf	10.3	0.5
Köln	6.0	0.3
Germany	44.0	0.1

Source: Statistics Netherlands and Eurostat

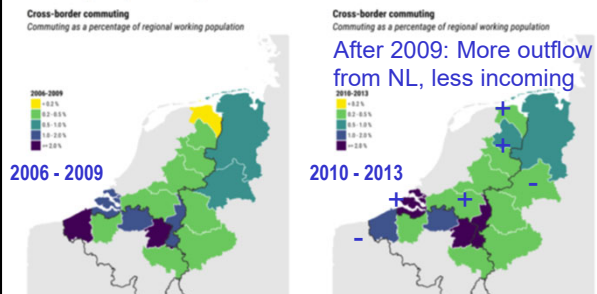
Commuting flows from Dutch and Belgian border regions

Table 5. Cross-border commuting between Dutch and Belgian regions, 2006-2013

	persons (x1000)	share of employed labour force (%)
<i>Cross-border commuting from Dutch border regions to Belgium</i>		
Zeeland	3.9	2.1
Noord-Brabant	4.7	0.4
Limburg (Dutch)	3.1	0.6
Netherlands	14.3	0.2
<i>Cross-border commuting from Belgian border regions to the Netherlands</i>		
West-Vlaanderen	0.8	0.2
Oost-Vlaanderen	2.2	0.4
Antwerpen	9.1	1.2
Limburg (Belgian)	19.3	5.4
Liège	1.2	0.3
Belgium	37.1	0.8

Source: Statistics Netherlands and Eurostat

Figure 2. Cross-border commuting between Dutch, German and Belgian border regions, for the period 2006-2009 and 2010-2013



Note: Data are flows from a border regions to ALL other regions in the other country; So, NO information about flows BETWEEN border regions!!

Empirical model:

Commuting = Wage + Road Density + Unemployment flows

$$\log\left(\frac{Y_{i,j,k,t}}{E_{i,j,t-1}}\right) = \rho + \alpha \log\left(\frac{w_{i,j,t-1}}{h_{i,j,t-1}}\right) + \beta \log\left(\frac{hw_{i,j,t-1}}{land_{i,j,t-1}}\right) + \gamma \log\left(\frac{u_{i,j,t-1}}{l_{i,j,t-1}}\right) + \delta D_{comp}$$

+ $\sum_i \delta_i D_{lang,i}$ + $\sum_m \theta_m D_m$ + Competitiveness index
 + Common + Region Language dummies

Estimation results:

	Total	Gender		Education			Age group	
		Male	Female	Low	Interm.	High	15-44	45+
Intercept	23.5 (4.00)	16.1 (2.43)	13.4 (1.21)	15.0 (1.18)	28.8 (3.22)	1.98 (0.25)	16.3 (2.46)	17.7 (2.12)
$\log\left(\frac{w_{i,j,t-1}}{h_{i,j,t-1}}\right)$	-13.9 (-3.43)	-9.41 (-2.05)	-7.67 (-1.01)	-10.0 (-1.14)	-17.7 (-2.87)	-0.42 (0.08)	-8.81 (1.92)	-10.8 (-1.87)
$\log\left(\frac{hw_{i,j,t-1}}{land_{i,j,t-1}}\right)$	1.16 (1.86)	0.71 (1.00)	1.13 (1.08)	-0.05 (0.04)	-1.71 (1.82)	0.06 (0.08)	1.16 (1.65)	0.86 (0.99)
$\log\left(\frac{u_{i,j,t-1}}{l_{i,j,t-1}}\right)$	0.59 (3.52)	0.70 (3.68)	0.35 (1.17)	1.46 (4.46)	0.48 (1.86)	0.19 (0.80)	0.42 (2.13)	0.91 (3.78)
Competitiveness index	-6.24 (-1.94)	-8.13 (-2.23)	4.09 (0.72)	-11.2 (-4.81)	-3.53 (3.09)	-0.45 (0.10)	-7.43 (-2.04)	-7.91 (-1.75)
Common language dummy	1.47 (5.52)	1.66 (5.44)	0.88 (1.94)	1.98 (3.61)	1.26 (3.09)	1.21 (3.35)	1.17 (3.84)	1.58 (4.25)
Regional dummies								
D _{Netherlands}	0.70 (3.24)	0.31 (1.25)	0.74 (1.86)	-0.23 (-0.50)	0.87 (2.65)	0.48 (1.66)	0.50 (2.04)	0.38 (1.24)
D _{Limburg (B)}	0.94 (2.18)	0.34 (2.77)	1.23 (0.85)	-0.09 (1.97)	-0.09 (0.09)	0.37 (2.60)	0.72 (2.54)	0.54 (1.84)
D _{West-Vlaanderen}	0.17 (0.72)	-0.37 (1.39)	0.24 (0.58)	-0.70 (-1.44)	-0.32 (-0.90)	-0.20 (0.63)	-0.06 (0.23)	-0.16 (-0.49)
D _{West-Vlaanderen}	0.70 (2.18)	-0.78 (-2.77)	-0.38 (0.85)	-1.00 (-1.97)	-0.03 (0.09)	-0.86 (2.60)	-0.72 (2.54)	-0.65 (-1.84)
D _{Liège}	0.48 (2.09)	0.21 (0.81)	0.21 (0.96)	0.39 (0.93)	-0.44 (1.78)	0.55 (2.08)	0.55 (2.08)	0.16 (0.48)
D _{Weser-Ems}	1.53 (11.7)	1.38 (9.25)	1.95 (7.66)	1.06 (3.20)	2.00 (9.90)	1.31 (7.08)	1.19 (8.04)	1.58 (8.33)
D _{Düsseldorf}	1.88 (11.8)	1.64 (9.11)	1.82 (6.18)	1.59 (4.59)	2.30 (9.31)	1.18 (5.14)	1.36 (6.98)	1.87 (7.98)
D _{Düsseldorf}	1.95 (5.87)	1.87 (4.96)	1.82 (3.20)	2.07 (2.97)	2.17 (4.29)	1.59 (3.58)	1.62 (4.31)	1.88 (4.04)
D _{Köln}	1.99 (8.76)	1.87 (7.10)	1.80 (4.44)	1.82 (3.69)	2.32 (6.65)	1.97 (4.93)	1.70 (6.56)	2.07 (6.37)
D _{Germany}	0.11 (1.17)	-0.02 (0.14)	0.10 (0.51)	0.35 (2.02)	0.06 (0.39)	-0.36 (2.19)	-0.43 (3.63)	-0.03 (0.20)

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Estimation results (1) main explanatory variables:

	Total	Gender		Education			Age group	
		Male	Female	Low	Medium	High	15-44	45+
Intercept	23.5 (4.00)	16.1 (2.43)	13.4 (1.21)	15.0 (1.18)	28.8 (3.22)	1.98 (0.25)	16.3 (2.46)	17.7 (2.12)
Wage	-13.9 (-3.43)	-9.41 (-2.05)	-7.67 (-1.01)	-10.0 (-1.14)	-17.7 (-2.87)	-0.42 (-0.08)	-8.81 (-1.92)	-10.8 (-1.87)
Road access	1.16 (1.86)	0.71 (1.00)	1.13 (1.08)	-0.05 (-0.04)	1.71 (1.82)	0.06 (0.08)	1.16 (1.65)	0.86 (0.99)
Unemployment	0.59 (3.52)	0.70 (3.68)	0.35 (1.17)	1.46 (4.46)	0.48 (1.86)	0.19 (0.80)	0.42 (2.13)	0.91 (3.78)
Competitiveness	-6.24 (-1.94)	-8.13 (-2.23)	4.09 (0.72)	-11.2 (-1.81)	-3.53 (-3.09)	0.45 (0.10)	-7.43 (-2.04)	-7.91 (-1.75)
Common language	1.47 (5.52)	1.66 (5.44)	0.88 (1.94)	1.98 (3.61)	1.26 (3.09)	1.21 (3.35)	1.17 (3.84)	1.58 (4.25)

Regional dummies Bold: significant

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Estimation results (2) Belgian → NL regional dummies:

Regional dummies	Total	Gender		Education			Age group	
		Male	Female	Low	Medium	High	15-44	45+
Antwerp	0.70 (3.24)	0.31 (1.25)	0.74 (1.86)	-0.23 (-0.50)	0.87 (2.65)	0.48 (1.66)	0.50 (2.04)	0.38 (1.24)
Limburg (B)	0.94 (3.14)	0.34 (0.99)	1.23 (2.32)	-0.09 (-0.15)	1.40 (3.07)	0.37 (0.92)	0.72 (2.11)	0.54 (1.27)
East-Flanders	0.17 (0.72)	-0.37 (-1.39)	0.24 (0.58)	-0.70 (-1.44)	0.32 (0.90)	-0.20 (-0.63)	-0.06 (-0.23)	-0.16 (-0.49)
West-Flanders	0.70 (2.18)	-0.78 (-2.77)	-0.38 (-0.85)	-1.00 (-1.97)	-0.03 (-0.09)	-0.86 (-2.60)	-0.72 (-2.54)	-0.65 (-1.84)
Liege	0.48 (2.09)	0.21 (0.81)	0.39 (0.96)	-0.44 (-0.93)	0.28 (0.82)	0.55 (1.78)	0.08 (0.30)	0.16 (0.48)

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Estimation results (3) German → NL regional dummies:

Regional dummies	Total	Gender		Education			Age group	
		Male	Female	Low	Medium	High	15-44	45+
Weserm- Ems	1.53 (11.7)	1.38 (9.25)	1.95 (7.66)	1.06 (3.20)	2.00 (9.90)	1.31 (7.08)	1.19 (8.04)	1.58 (8.33)
Münster	1.88 (11.8)	1.64 (9.11)	1.82 (6.18)	1.50 (4.59)	2.30 (9.31)	1.18 (5.14)	1.36 (6.98)	1.87 (7.98)
Düsseldorf	1.95 (5.87)	1.87 (4.96)	1.82 (3.20)	2.07 (2.97)	2.17 (4.29)	1.59 (3.58)	1.62 (4.31)	1.88 (4.04)
Köln	1.99 (8.76)	1.87 (7.19)	1.80 (4.44)	1.82 (3.69)	2.32 (6.65)	1.57 (4.93)	1.70 (6.56)	2.07 (6.37)

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Estimation results (4) Dutch → German regional dummies:

Regional dummies	Total	Gender		Education			Age group	
		Male	Female	Low	Medium	High	15-44	45+
Groningen	Not enough valid observations							
Drenthe	0.11 (1.17)	-0.02 (-0.14)	0.10 (0.51)	0.35 (2.02)	0.06 (0.39)	-0.36 (-2.19)	-0.43 (-3.63)	0.03 (0.20)
Overijssel	0.99 (11.4)	0.93 (9.03)	0.79 (4.65)	1.03 (6.58)	1.00 (7.25)	0.54 (3.95)	0.80 (7.39)	0.63 (4.81)
Gelderland	1.14 (5.58)	1.26 (5.34)	0.76 (2.15)	1.53 (3.66)	0.95 (3.02)	1.02 (3.63)	0.83 (3.52)	1.13 (3.91)
Limburg (N)-Germ	1.31 (5.34)	1.43 (5.08)	1.06 (2.54)	1.74 (3.46)	1.17 (3.11)	1.16 (3.49)	0.83 (2.96)	1.51 (4.38)

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Estimation results (5) Dutch → Belgian regional dummies:

Regional dummies	Total	Gender		Education			Age group	
		Male	Female	Low	Medium	High	15-44	45+
Zeeland	-0.51 (-1.95)	-0.79 (-2.63)	-0.14 (-0.32)	-0.94 (-1.68)	-0.17 (-0.42)	-1.04 (-3.02)	-0.52 (-1.74)	-0.76 (-2.09)
Noord-Brabant	Reference region							
Limburg (N) Belgium	-0.63 (-7.29)	-0.68 (-6.91)	-0.51 (-3.51)	-0.75 (-5.07)	-0.58 (-4.40)	-0.63 (-5.61)	-0.64 (-6.68)	-0.67 (-5.53)
Adj. R2	0.94	0.92	0.86	0.82	0.91	0.88	0.93	0.91
Obs. N	133	133	120	110	131	115	126	125

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Conclusions

- Cross-border commuting flows are very small; data are very limited.
- Potential gains: more economic activity and lower unemployment
- Empirical results: higher wages and competitiveness lower commuting, higher unemployment and better accessibility increase commuting, but the effects differ by gender, education and age.
- Common language increases commuting; regional dummies show country clustering, institutional differences play an important role in favouring commuting in one direction. Most: Germany → Netherlands
- Many Dutch policy initiatives to stimulate cross-border commuting with low success rates; wrong perceptions about existing flows (much more in- than out-flows!) and job opportunities for Dutch unemployment. Residential migration + return commuting might be more important than commuting for job opportunities. Risk: Policy may stimulate the commuting of the wrong type of people that we want to keep.