



TI 2004-002/1

Tinbergen Institute Discussion Paper

The Rationality Behind Immigration Preferences

Hendrik P. van Dalen^{1,2}

Kène Henkens¹

¹ Netherlands Interdisciplinary Demographic Institute, The Hague, ² Department of Economics, Erasmus Universiteit Rotterdam, and Tinbergen Institute.

Tinbergen Institute

The Tinbergen Institute is the institute for economic research of the Erasmus Universiteit Rotterdam, Universiteit van Amsterdam, and Vrije Universiteit Amsterdam.

Tinbergen Institute Amsterdam

Roetersstraat 31

1018 WB Amsterdam

The Netherlands

Tel.: +31(0)20 551 3500

Fax: +31(0)20 551 3555

Tinbergen Institute Rotterdam

Burg. Oudlaan 50

3062 PA Rotterdam

The Netherlands

Tel.: +31(0)10 408 8900

Fax: +31(0)10 408 9031

Please send questions and/or remarks of non-scientific nature to driessen@tinbergen.nl.

Most TI discussion papers can be downloaded at <http://www.tinbergen.nl>.

The Rationality Behind Immigration Preferences*

Hendrik P. van Dalen^{1,2} and Kène Henkens¹

¹ *Netherlands Interdisciplinary Demographic Institute*
P.O. Box 11650
NL-2502 AR The Hague
The Netherlands

² *Erasmus University Rotterdam, Department of Economics, and Tinbergen Institute*
P.O. Box 1738
NL-3000 DR, Rotterdam
The Netherlands
Email: vandalen@few.eur.nl

December 16, 2003

JEL-codes: F22, J15, J61

Keywords: Immigration, social interaction, population preferences

Abstract:

What drives stated preferences about the number of foreigners? Is it self-interest as stressed by the political economy of immigration? Does social interaction affect this preference or is the immigration preference completely in line with the preference for the aggregate population size? In this paper we distinguish each of these categories and show for the case of the Netherlands that each of these elements applies although the effect of population size preference and the self-interest are the most important elements. There is a clear divide across educational levels as the lower educated are more against immigration than the highly educated. Experience with foreigners arising from social contact matters in positively appreciating immigrants, especially if one meets (non-western) foreigners at work and school. Contact with foreigners while going out decreases the preference for immigrants. The ethnic composition of the neighbourhood in which one lives does not exert a noticeable effect on the evaluation of the number of foreigners present. The biggest effect on immigration preferences is, however, the aggregate population size preference of respondents.

* Comments by Frans Willekens and Aat Liefbroer are gratefully acknowledged.

1. Introduction

Immigration raises mixed emotions amongst politicians and the population at large. That is at least the impression that is raised by discussions on the pros and cons of immigration in Europe. On the one hand, views seem to be biased or outright xenophobic and some political parties earn a livelihood by catering to these feelings. Political parties taking explicit anti-immigration positions have found significant support in France, Austria, the Netherlands, Switzerland, Denmark and eastern regions of Germany. On the other hand, some governments and international organisations advocate immigration as a way to solve the financial problems associated with ageing populations or stabilising the geopolitical balance of powers in the face of widely divergent population growth rates (cf. Demeny, 2003).

Unfortunately the politics and economics of immigration cannot be split up in separate issues. The integration of immigrants in Western societies can stretch a number of generations as the work by Borjas (1999) demonstrates. Problems associated with integration and ethnic diversity are part and parcel of immigration flows and in that respect it becomes quite important to know how the population at large evaluates immigration flows. Why does immigration raise such mixed feelings? Is it simply a question of (economic) self-interest? The political economy of immigration (Borjas, 1995, Benhabib, 1996; Söllner, 1999, Krieger, 2003) suggests that it is quite likely that feelings about immigrants are completely in line with self-interest and that people will vote accordingly about issues of immigration and integration. Immigration flows generally affect owners of factors of production asymmetrically and immigration supporters are to be found among those who expect to gain (skilled workers, pensioners, multinationals) and immigration protesters among those who expect to lose (unskilled workers and unions who represent them). In this paper we will take a closer look at the empirical validity of the political economy model of immigration and offer alternative and complementary explanations why immigration preferences may differ across citizens.

Our hunch is that the political economy of immigration may overlook a number of issues that are tied to immigration. The first is related to the social psychological consequences of immigration. The reason why immigration raises such mixed feelings may well be the result of a lack of contact with foreigners, or perhaps even the reverse: intense contact with foreigners brings about (or reinforce) the anti-immigration pressure. Which way contact with foreigners will affect attitudes of natives is an unresolved question, but as numerous American studies (cf. Taylor, 1998) have shown it is a factor that should not be dismissed too easily from the issue of immigration.

The second neglected issue refers to the issue of population size preferences as the inflow of foreigners affects per definition the size and structure of the aggregate population. Immigration has become in the light of below replacement fertility a more important factor of population growth and instrument of government policy.¹ However, the extent to which immigration preferences are related to preferences about the total size of the population are underdeveloped. To what extent do people with concerns about a shrinking population have a more positive attitude toward immigration of foreigners? This is an important question since some regions in Europe (notably in Spain and East Germany) are confronted with decreasing population numbers, and the inflow of migrants is among the most discussed policy solution to prevent the evolution of 'ghost' towns and regions. However, the stand on immigration in relation to the population size preference could also go in the other direction as statements made by population pressure groups make clear. There are numerous political pressure groups in the international arena² that try to establish zero or negative population growth in order to prevent a 'tragedy of the commons' (Hardin, 1968). These population pressure groups are generally also negative about the consequences of immigration, not on account of potential ethnic conflict or racism but out of concern with the environment and spatial crowding. The Netherlands is no exception, where the so-called 'Club of Ten Million' – a pressure group and prospective national political party - advocates a population decrease as long as the Dutch population size is larger than the optimal population of ten million inhabitants.

In this paper we will take a closer look at the stated preferences of inhabitants about the number of immigrants. Of course, we are not the first to perform such a study and there are a number of studies that have examined the attitudes of national inhabitants towards immigrants.³ The novelty of this paper may well be the explicit inclusion of population size preferences. Besides including more conventional explanations for immigration preferences, like arguments related to the political economy of immigration and social interaction, the population size preference turns out to be essential for understanding stated immigration preferences.

The data that we use in this paper refer exclusively to the Netherlands. The case of the Netherlands is interesting in its own right for a number of reasons. First of all, the Dutch have

¹ More so as most governments in Western Europe abstain from pro-natalistic policies. In fact, 8 of the 15 European Union member states that were assessed by the United Nations (2002) considered the level of fertility 'too low' but the large majority of governments is reluctant to advocate higher fertility rates (only Luxembourg and Austria are pro-natalistic).

² See for instance the program of the association for *Negative Population Growth* (www.npg.org/), or the Dutch *Club of Ten Million* (www.tienmiljoen.nl/Eng/index.htm).

³ See, e.g., Bauer et al. (2000), Gang et al. (2002), and Boeri et al. (2002) and the literature cited in these studies.

come to realise that their country has become 'a nation of immigrants'. According to the latest statistics approximately 18 percent of the total population is of foreign origin (most broadly defined)⁴ and it would be of some interest to see whether the Dutch also employ the state of mind that belongs to a so-called nation of immigrants. Second, the Netherlands is one of the most crowded and urbanised nations in the world. The high population density would seem to make the Dutch sensitive to the issues of population size and structure.

Finally, a third reason, the Dutch case may well be exemplary for other European nations. Most European countries have to get used to the status of immigration nation, the presence of non-western immigrants who do not seem to adapt or integrate, and the Netherlands is no exception. Furthermore, although each and every European country has its idiosyncratic political movements, the stellar rise of political anti-immigration movements can be seen across a number of European nations – Austria (with the Freedom Party and party leader Haider), France (with National Front and Le Pen), Belgium (Vlaams Blok with De Winter), Denmark (Danish People's Party) and Italy (Northern League). The Netherlands is no exception to this unfortunate rule and the Dutch have witnessed the rise of a similar figure – Pim Fortuyn – whose political program was rather outspoken about closing borders and the forced integration of immigrants in the Netherlands.

All in all, the Dutch present us with an interesting case study and this will be explored in the remainder of this paper. First, we will state in section 2 what possible reasons may be given for explaining immigration preferences. Secondly, we will test for the importance of the various forces (in section 3) that are behind the evaluation of the number of foreigners in practice. Finally, section 4 summarises and puts the estimation results in perspective.

2. What's Behind Stated Immigration Preferences?

In explaining immigration preferences several research lines can be distinguished. First, common wisdom has it that people vote with their purse and these forces are frequently stressed by authors working in the domain of the *political economy of immigration*. The main driving force behind stating and expressing immigration preferences is economic self-interest (or group interest). Second, *social interaction* with foreigners becomes an important driving

⁴ Statistics Netherlands uses as of January 1999 a new definition of immigrants. An immigrant used to be defined by the fact that he/she was born abroad and at least one of his parents was of foreign origin or if both parents are born abroad. As of 1999, someone is designated as an 'immigrant' if he or she has at least one parent who is born abroad, with the further distinction of first generation immigrants - those born abroad with at least one parent who is of foreign origin (i.e. born abroad) - and second generation immigrants - those born in the Netherlands with at least one parent born abroad. Half of the 3 million immigrants in the Netherlands in 2002 is first generation (1 million of non-western origin and 0.5 million of western origin).

force for the evaluation of immigration flows. Within social psychology it is generally assumed that people categorise the world on the basis of the social groups to which they belong and/or with which they identify themselves. Others are evaluated in terms of the degree to which they are similar and dissimilarity of outgroup members is evaluated negatively (Tajfel and Turner, 1979). Third, evaluating immigration flows directly affects the population size of a country and in that respect one would expect *population size preferences* to be of some importance in evaluating immigration flows. These three strands in literature are briefly discussed below.

Political economy of immigration

The story of immigration preferences will inevitably revolve around the political economy of immigration as this particular strand in the public choice literature takes into account how interests of diverse population groups are affected by the inflow of immigrants. The position on the labour market – according to standard model of welfare economics of immigration⁵ – is important for understanding who stands to gain and lose from immigration flows. Worker types with a higher education profit from an inflow of unskilled labour, whereas the unskilled labour force is expected to be dead set against such an inflow as the immigrants are in most cases low-skilled workers who will compete with the low skilled incumbent work force. The subsequent drop in wage for low skilled and the rise in high skilled wages makes divergent opinions about immigration quite understandable. Of course, the attitudes toward immigrants by skill type will depend in the end on the skill composition of actual immigration flows. High skilled workers could very well be supporting anti-immigration measures if a country is ‘flooded’ by high skilled immigrants. But given the stylised fact that the majority of immigrants are from outside the European Union and that these immigrants are distinctively less skilled than the average Dutch national worker, it can be expected that the skilled workers are significantly less averse to immigration than the low skilled Dutch workers.

However, immigrants do not only affect (perceived) outcomes on the labour market, they can potentially affect capital market asset returns. For a small open economy with more or less full capital mobility this possibility seems too farfetched to be true for financial assets. Nevertheless, one can imagine that immigration flows can affect asset prices that are set by local circumstances, like the housing market. Especially when negative externalities tied to ethnic concentration are present in a local housing market (c.q. neighbourhood) (cf. Saiz, 2003) it is understandable that immigrants are viewed as a threat. It should be stressed that

home-ownership has increased significantly over the years in the Netherlands and 52 percent of the housing stock in 2000 was owner-occupied. Furthermore, as a consequence of soaring housing prices during the nineties, the capital value of houses has become an important part of the asset portfolio, besides pension rights and private savings.

A final element that might raise mixed feelings amongst native voters is the fiscal impact of immigration. The possibility of low-skilled immigration not only harms the employment opportunities of competing native workers, it can also affect the general population by the fiscal consequences of immigration. Generational accounting exercises for the Netherlands (Roodenburg *et al.*, 2003) point out that immigrants offer by and large a net loss and given the strong progressive nature of income taxes, natives with a net wealth position may be just the ones who fear that extra redistribution will take place if immigration flows increase. The insight of Roodenburg *et al.* (2003) was also corroborated by other studies for European welfare states such as those calculations made for the German (Sinn and Werding, 2001) and the Swedish case (Storesletten, 2003).

Social interaction theory

Social interaction focuses on how non-market interaction of individuals affects social and economic decisions. Living amongst ethnic minorities and meeting people of different groups may affect choices in the public and private domain as individuals learn from such contacts and change their attitude about certain people or groups of people. The way in which ethnic concentration affects preferences may go either way. Ethnic concentration may create a perception of threat and alienation (a negative force), but it can also be a mechanism that offers possibilities for intergroup contact that might reduce unrealistic negative perceptions of one another (the 'contact' hypothesis). There is a large body of mainly American research (cf. Pettigrew, 1998, Taylor, 1998, Oliver and Wong, 2003 and studies cited there) in which ethnic concentration engenders negative attitudes towards ethnic minorities. The experience of living among ethnic minorities or having frequent contact with them may, however, also affect the opinions of people positively. Similarity attraction is the causal process alleged to underlie this *contact hypothesis*: consequences of contact are the discovery of similarity between groups. Hewstone and Brown (1986) show, however, that contact alone is often not enough and that several aspects of the contact such as frequency, quality, areas of contact, voluntary versus involuntary are also important. In short, it matters what type of contact the incumbent population has with foreigners.

⁵ Cf. Borjas (1995, 1999, 2003), Benhabib (1996), and Söllner (1999), Krieger (2003), Kemnitz (2003).

With respect to the *meeting places* where respondents have contact with the outgroup (as in our case foreigners) we need to stress that not every contact situation has high ‘acquaintance potential’ (i.e. it enables individuals to get to know each other as individuals, rather than as stereotypical outgroup members). In other words, in order to be confident about the salutary effect of having contact with foreigners one needs to vary the places and circumstances of contact. Some studies restrict attention to merely having contact with the outgroup but contact as such is often meaningless as the type of contact can vary from very superficial (meeting others in the street or in the bus) to a very intense contact, at school or at work. For instance, a well-known example is presented by Minard (1952) who discusses the case study of a mining community in West Virginia where black and white miners were willing to work side by side below the ground, but above the ground they went their separate ways. To account for this diversity of contacts and the effect on immigration preferences, we have used the different places of contact – at school, while going out, at work, and at sports clubs (see Hewstone and Brown, 1986). The effect of contact is *a priori* ambiguous as contact at the various meeting places can go in either direction.

Population size preference

In discerning the influence of population size preferences on preferences concerning the number of immigrants residing in a country one can consult the large body of insights provided by welfare economics. Of course, the main contribution of the welfare economics of population is to understand the ethics of population policies and related issues. But besides offering a ‘grammar’ for understanding the logic of population policy, the ethics of population may also be present in the minds of ordinary people.

In the welfare economics of population the shadow of the work of ‘worldly philosophers’ like Jeremy Bentham, John Stuart Mill, Knut Wicksell and Thomas Malthus is still present in the minds and hearts of those who are concerned with population issues in the 20th and 21st century. Following the usage of Nerlove et al. (1987) we will divide the intellectual debate on population and welfare by the (implicit) social welfare criteria used by Bentham and Mill and their utilitarian followers. A welfare criterium is, of course, nothing more and nothing less than the measuring rod of judging morally correct courses of action - in this case population policy - and as modern population debates prove the revealed positions on population policy are strongly influenced by one's ethical position: either one invokes the Benthamite welfare function – which stresses the greatest happiness for the greatest number – or a Millian welfare function that simply evaluates welfare in terms of the population average. In fact, depending

on which welfare criterion one supports, one can arrive at opposite policy conclusions in matters of population policy. People endorsing the Benthamite view will support maximising the number of people no matter how small the increment in welfare is. In its most extreme form this will lead under circumstances of fixed resources to what Parfit (1984) calls the ‘repugnant conclusion’: a very low standard of living for a very large population. However, people endorsing the Millian welfare view will value a smaller population higher as it increases the average welfare, in the presence of some fixed resource. Clearly, the Millian welfare view is implicit in the (neo) Malthusian theory of population.

The same issues will return in matters of immigration as long as the social welfare function includes the welfare of immigrants and both immigrants and natives are ascribed the same utility function. Of course, immigration becomes a more complicated welfare exercise when immigrants are treated differently and indeed in most developed countries immigrants cannot count on the same treatment as nationals. Such an asymmetric treatment could imply that immigrants are valued for their productive contribution but they are not included (immediately) in matters of social welfare. In other words, the utility of immigrants is not valued at the same rate as that of natives.⁶ Whether a nation is inclusive or exclusive is quite essential when it comes down to evaluating immigration policies (see Quibria, 1990) and for this reason the evaluation of aggregate population growth may not coincide with the evaluation of immigration flows.

Methods

We will use data from a national representative survey that the Netherlands Interdisciplinary Demographic Institute (NIDI) conducts at regular intervals among the Dutch population about their attitudes and opinions concerning demographic developments. We have used the latest wave, conducted in May 2002. As the opinions, attitudes and preferences of the voters are the focus of attention, only respondents with the Dutch nationality are included in this sample.⁷ The data were collected by the databank *CentERdata* of the University of Tilburg (see for more details: centerdata.kub.nl) which maintains a representative Internet-based panel of two thousand households in the Netherlands. To correct for the possibility of two or more

⁶ Another complication is introduced by the issue of international trade, but as Quibria (1990) shows the general insights offered by Nerlove et al. (1987) for the case of a closed economy generally carry over to an integrated world economy.

⁷ An alternative to this restriction is to include only those born in the Netherlands. Both definitions have their shortcomings as the nationality criterion may include former foreigners, and the place of birth criterion may also include foreigners as defined by Statistics Netherlands, viz. second-generation immigrants. For the estimation results these definitional questions do not matter as the estimation results do not change significantly.

respondents per household and their reciprocal influence in stating preferences we have adjusted the standard errors by requiring the observations to be independent across clusters, i.e. households.⁸ The survey data are, however, linked to the 2002 census information of Statistics Netherlands about the respondents' neighbourhood.

The exact question around which this paper revolves is: "What is your opinion about the number of foreigners in the Netherlands?" The possible answer categories are: there are (1) too many foreigners; (2) neither too many, nor too few foreigners; and (3) too few foreigners. The question has a clear normative undertone as it forces respondents to evaluate the number of foreigners. By and large most of the Dutch think there are too many foreigners (60 percent), 39 percent thinks there are neither too many nor too few foreigners and hardly 1 percent thinks that are too few foreigners. Because the latter category is so small we will collapse the last two categories and restrict attention to those who think there are 'too many' foreigners and those who think otherwise.⁹ Estimation will be done by means of logit analysis.

The first three variables – age, number of children and religious denomination – are used as control variables. The age variable is introduced as each and every generation may have been formed by the era in which it grew up. The old generation, e.g., has enjoyed a youth in an 'all white'-society, contrary to the young who are more acquainted with the pros and cons of a multicultural society. The number of children is added as a control variable as a larger group of ethnic minorities may increase the chance that one of the children of the respondent will mix and or perhaps form relationships with the children of other 'outgroups'. By including this variable one can approximate the respondent's revealed preference for interracial mixing. Finally, the religion of the respondent may be an important control variable as population and immigration policies are to some extent affected by the religious beliefs of respondents, or the values that are instilled on the members of a religion. Furthermore, immigration can also be perceived as a threat to the viability of the 'ingroup' by its members and hence immigration evaluations may be coloured by such perceptions.

The other variables fall into the three general categories: political-economic variables, social interaction variables and last but not least, population size variables. In testing for the various hypotheses we will use the following explanatory variables:

⁸ Although this is a necessary step to rule out the possibility of dependence of outcomes, the subsequent estimation results hardly differ from the model in which standard errors are not adjusted.

⁹ Keeping the three outcomes to the survey question separately and analysing the categorical ordering by means of ordered logit analysis does not change the above conclusions in any way.

Demographic variables

- *Age* of the respondent in question. To check for non-linearities or age group-specific effects we have used four age groups in the estimation process: those whose age is (1) 16-29 years; (2) 30-44 years; (3) 45-64 years; and (4) 65 years and older.
- The *number of children* in the household of the respondent.
- *Religious denomination* is the self-reported membership of a religion to which the respondent says he or she belongs, with the following categories: (1) no membership; (2) Catholic church; (3) Dutch reformed church; (4) Dutch orthodox reformed church; (5) Other Christian religions (evangelical churches, Jehovah's witnesses, other Christian churches); (6) Small non-Christian religious groups (Jewish, Islam, no stated religious membership).

Political economy variables

- The (attained) *level of education* of respondents, and here each respondent can mark his or her (highest) level of education: (1) primary school or lower; (2) high school (lower level); (3) high school (higher level); (4) vocational training; (5) university.
- The *net wealth position* of the household, that is, the value of private assets minus the level of outstanding debts of the household. Respondents did not have to sum up their wealth position exactly, they could indicate which of the seven wealth intervals described their total wealth (current value of their own house, savings, stocks, etc. minus the value of debts and mortgages) position accurately. For the present study we collapsed the seven intervals into four categories: (1) €25.000 or less (base category); (2) €25.000- €100.000; (3) €100.000- €225.000; and (4) €225.000 or more.

Social interaction variables

- The aggregate *population density* of the neighbourhood in which one lives, split up into four categories with the urban category as the base category. The neighbourhood is approximated by area circumscribed by the postal code level, which gives quite detailed information on neighbourhood characteristics such as the number of persons and households, the ethnic composition, the average level of income (as can be found on www.statline.nl). To arrive at the population density, we have divided the total number of persons living in a postal code area by the exact surface (in square kilometers; as given by Geodan IT, see <http://www.geodan.nl/uk/>).

Table 1: Descriptive statistics

Evaluation number of foreigners	Mean	Standard deviation
Too many foreigners	0.592	0.49
Not too many foreigners	0.408	0.49
Age category: 16-29 years	0.137	0.34
30-44 years	0.349	0.48
45-64 years	0.374	0.48
65+ years	0.140	0.35
Number of children	1.577	1.38
Religious denomination: None	0.541	0.50
Catholic	0.231	0.42
Dutch reformed	0.104	0.30
Orthodox reformed	0.079	0.27
Other Christian religions	0.025	0.16
Non-Christian religious groups (Jews, Islam, etc.)	0.020	0.14
Education achieved: Low education	0.294	0.46
High school (lower level)	0.212	0.41
High school (higher level)	0.137	0.34
Vocational training	0.246	0.43
University	0.111	0.31
Net wealth ^a : Less than €25.000	0.324	0.47
€25.000- €100.000	0.221	0.42
€100.000 - €225.000	0.267	0.44
More than €225.000	0.187	0.39
Population density neighbourhood: more than 4.54 (in thousands)	0.243	0.43
1.87 - 4.54 inhabitants per km ²	0.257	0.44
0.50 - 1.87 inhabitants per km ²	0.249	0.43
Smaller than 0.50 inhabitants per km ²	0.251	0.43
Ethnic composition neighbourhood	0.083	0.10
Contact with foreigners: At school	0.214	0.41
At work	0.538	0.50
When going out	0.164	0.37
At clubs (sports and other)	0.220	0.41
Population size evaluation: Should decrease	0.301	0.46
Should remain constant	0.615	0.49
Should increase	0.085	0.28

Valid sample N = 1726

(a) Value of the assets (housing, financial assets) minus the value of private debts (mortgages, loans).

- The *ethnic concentration* in the neighbourhood as measured by the percentage of non-western foreigners living in the neighbourhood.
- The *place of contact* where respondents meet (non-western) foreigners of various ethnic groups. In the survey respondents were asked about whether they meet non-western foreigners and if so where. In the survey a number of places were asked (where the respondent with no contact at all with non-western foreigners served as the base category): (1) at school; (2) at work; (3) while going out (e.g. in a disco or a pub); and (4) at society clubs or sports clubs.

Population size preference

- *Population size preference* as measured by the answers to the question “Should the number of inhabitants of the Netherlands in the future: (1) decrease; (2) remain the same; or (3) increase.

The summary statistics of the various groups of explanatory variables stated above are presented in Table 1.

3. Putting the forces to the test

In the previous discussion of factors affecting stated preferences about immigration we have introduced three groups of factors based on the insights from the political economy of immigration, social psychology and the welfare economics of population policy. Three models have been estimated to explain the immigration preferences of the Dutch population. The first model includes (besides the individual level control variables) the political-economic characteristics such as education and wealth. The second model includes additional variables concerning social interaction with immigrants. The third model encompasses not only these two elements but also the evaluation of the population size by the respondents. The estimation results for the three separate models are presented in Table 2.

The last column of Table 2 shows that each of the three cited forces seems to be of some relevance in explaining immigration preferences. It is not just economic self-interest or social contact or population size preferences that can explain immigration preferences, but it is clearly a result of all three forces. We will elaborate on these results below.

Table 2: Explaining immigration preferences^a (logit analysis)

	Model I		Model II		Model III	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
<i>Age category</i> (16-29 years =0)						
30-44 years	0.29	1.61	0.18	0.99	0.25	1.32
45-64 years	0.29	1.57	0.24	1.27	0.26	1.27
65+ years	-0.21	0.86	-0.13	0.50	-0.04	0.16
<i>Number of children</i>	-0.06	1.26	-0.06	1.24	-0.11*	2.06
<i>Religious denomination</i> (none=0)						
Catholic	-0.36*	2.47	-0.33*	2.25	-0.44**	2.75
Dutch reformed	-0.41*	2.06	-0.37	1.82	-0.40	1.86
Orthodox reformed	0.07	0.33	0.09	0.41	-0.09	0.39
Other Christian religions	0.54	1.38	0.71*	1.81	0.43	1.11
Non-Christian religious groups	0.91*	2.26	0.96*	2.39	1.07**	2.74
<i>Education achieved</i> (low education = 0)						
High school (lower level)	0.52**	3.37	0.50**	3.15	0.46**	2.79
High school (higher level)	0.90**	5.20	0.84**	4.72	0.83**	4.36
Vocational training	1.39**	9.16	1.32**	8.52	1.37**	8.54
University	1.64**	8.43	1.51**	7.60	1.50**	7.23
<i>Net wealth</i> (less than €25.000 = 0)						
€25.000- €100.000	-0.41**	2.60	-0.40**	2.51	-0.44**	2.69
€100.000 - €225.000	-0.36*	2.37	-0.33*	2.10	-0.41*	2.55
More than €225.000	-0.57**	3.21	-0.50**	2.70	-0.47*	2.47
<i>Population density neighbourhood</i> (> 4.54 = 0)						
1.87 – 4.54 inhabitants per km ²	-	-	-0.17	1.01	-0.20	1.12
0.50 - 1.87 inhabitants per km ²	-	-	-0.26	1.42	-0.21	1.07
Smaller than 0.50 inhabitants per km ²	-	-	-0.63**	3.14	-0.66**	3.12
<i>Ethnic concentration neighbourhood</i>	-	-	-0.15	0.21	0.09	0.13
<i>Contact with foreigners</i> (no contact = 0)						
At school	-	-	0.33*	2.34	0.40**	2.75
At work	-	-	0.30*	2.47	0.36*	2.48
When going out	-	-	-0.33*	2.10	-0.36*	2.12
At clubs (sports and other)	-	-	-0.10	0.80	-0.11	0.82
<i>Population size evaluation</i> (decrease=0)						
Should remain constant	-	-	-	-	1.35**	9.41
Should increase	-	-	-	-	2.07**	8.93
Constant	-0.88**	4.99	-0.71**	2.77	-1.70**	5.75
Pseudo R ²	0.08		0.10		0.16	
χ^2 (df)	152.7		171.7		257.3	
Loglikelihood	-1069.0		-1052.2		-979.0	

(a) Note: N = 1726; the symbol ** denotes significance at the 1 % level and the symbol * at the 5% level. T-values refer to absolute t-values. All coefficients are adjusted with Huber-White correction.

Political economy of immigration

The political economy argument is clearly reflected in the estimation coefficients as the evaluation of the number of foreigners is positively correlated with the level of education of respondents. To get an impression from some bivariate (weighted) statistics: 76 percent of the respondents with a low level of education judges the level of foreigners too high. The higher educated are least worried about the number of foreigners as 39 percent thinks there are too many and the remaining 61 percent thinks that there are neither too many nor too few. The almost linear increasing pattern of coefficients with respect to education is in line with standard welfare theoretical analysis of immigration shocks, as set out by Borjas (1995).

The wealth variable clearly shows that people with a net wealth position are not enthused about foreigners. However, the difference across wealth categories is not that large as one can deduce from the coefficients in Table 2: for the three largest wealth categories the coefficients are more or less the same. In that respect one could argue that the presence of immigrants divides the 'haves' and 'have nots', where the 'haves' are more negative about the number of foreigners.

Social interaction arguments

The population density character of the neighbourhood in which respondents live is not as important as one is bound to deduce from popular policy debates: the linear relationship between population density and the intensity of negative attitudes towards foreigners cannot be found, as one can deduce from the insignificant coefficients in Table 2. The people who are living in urban surroundings are used as the base category and as one can see, there is hardly a difference between respondents who live in different crowded neighbourhoods. This finding is somewhat of a surprise as anti-immigration supporters (like the party of Pim Fortuyn) are generally found in large cities where ethnic minorities are concentrated and often segregated. Ethnic minorities, like Turks and Moroccans, are concentrated in cities like Rotterdam, The Hague and Amsterdam and the concentration has remained quite stable over the years (Bolt *et al.*, 2002). The only effect that one can detect from population density is quite the reverse from what one would expect: anti-immigration sentiments among the respondents are stronger among those who live in localities with low population densities. In a way this may be the result of the effect that people who live in crowded, urban areas are better adapted to living with newcomers, contrary to people living in smaller towns and villages where newcomers and immigrants are more easily spotted and perhaps seen as a sign that 'the good old times' will never return. The second neighbourhood characteristic – the ethnic

concentration in the neighbourhood - is of no significant importance. The absence of an effect of ethnic concentration is puzzling as numerous other studies, primarily based on US data, show quite strong effects. The reason why such effects may well appear in other data sets can perhaps be traced to the type of data sets used. A large number of studies focus on attitudes in large metropolitan areas where ethnic concentration is high and of an entirely different level than can be found in most European cities and certainly not at the level of a national representative survey that is used in the present study.

In addition to the neighbourhood variables we have used explicit contact variables to test for the so-called 'contact hypothesis': the hypothesis that attitudes of the ingroup members change as a consequence of contact with outgroup members. The contact variables measure the contact that the incumbent population has with (non-western) foreigners at various places in society. To limit selectivity bias (see Pettigrew, 1998) in these settings we have excluded meeting places where respondents have a clear choice in meeting foreigners, as in home, and restricted our attention to cases where the choice is to some extent circumscribed. Meeting foreigners at work and at school are important measures of integration and as the estimation results in Table 2 show: work and school contacts affect evaluations positively. In other words, school and work are important mechanisms for making integration of (non-western) foreigners possible. Of course, common wisdom has it that school and work are important for the integration of foreigners because it increases their human capital. The estimation results suggest not only that work and school increase their social capital, the results suggest also that this type of social capital has the characteristics of a 'public good' as it can generate large positive (or negative) externalities as a favourable (bad) contact not only makes the immigrant better (worse) off, the effect transcends the personal level of the contact and makes the entire outgroup better (worse) off.

Although contact at work and school favourably improves the image of foreigners, contact with foreigners while going out at night affects the attitude towards foreigners negatively. The contact with foreigners while going out is perhaps more justly described as contact in the public domain, which probably will not always result in actual contact as one will encounter in contact in the private domains of work or school. In that respect, contact may in this particular case be an approximation of a threat, which apparently discredits the image of foreigners.

Population size preference

Last but certainly not the least, we have assessed in model III the significance that population size preferences may add to the above set of variables. To test for this effect we have included the aggregate population size evaluation variable in our statistical analysis. As can be clearly seen by the two coefficients at the bottom of Table 2 (model III), the evaluation of the number of foreigners is greatly affected by the respondent's population size preference. The explanatory power of the model is greatly improved by including the population size variable. One might expect that the population size variable is not entirely independent from the evaluation of the number of foreigners. There are, however, two telltale signs that suggest otherwise. First of all, the correlation between these two variables is remarkably low ($r = 0.27$).¹⁰ A second telltale sign is the fact that the coefficients do not change substantially when switching from model II to model III.

Demographics

Finally, we end with examining the demographics of respondents. It is noteworthy that age is of no importance in evaluating the number of foreigners as, e.g., pensioners are the ones who share a life-course history in which non-western immigrants (save those from the Dutch colonies) were hardly present. Religion and the number of children are, contrary to age, of some importance. Apparently, having children reveals that respondents are either against interracial mixing or afraid of the consequences of a multicultural society for the future of their children. The effect of religion is, however, the most interesting of the three control variables. The larger religious groups in the Netherlands – the Catholics and the Dutch and orthodox reformed members - are more set against immigration than the base category: the Dutch with no ties to a religion. This stance is in stark contrast to members of the smaller non-Christian religious groups who are more in favour of immigrants. The contrast between these two religious groups is some extent understandable as the traditional Christian groups perhaps perceive immigrants as a threat, whereas the non-Christian groups (like Jews and Muslim) perceive existing immigration flows not as a threat but as a strengthening of the existing religious group.

4. Conclusions

European countries are struggling with relatively large inflows of immigrants. The acceptance of foreigners is a process that seems to give rise to large anti-immigration groups in countries

that used to be quite liberal. The Netherlands is no exception to this rule. In forming their opinion about the number of foreigners most of the Dutch respondents (60 percent) claim that there are too many foreigners. The standard political economy of immigration (cf. Söllner, 1999) would suggest that labour market position is the dominant force in voting on immigration issues. However, the reason why the majority of Dutch think that there are too many foreigners can be explained by a number of forces besides the labour market position. In order to unravel the preferences for the number of foreigners we studied the importance of three forces: (1) self-interest, revealed by positions on the labour market and capital market; (2) social contact with foreigners; and (3) a population size preference.

Each of the three forces is of relevance in explaining immigration preferences, and judging from the magnitude of effects the labour market position of inhabitants in conjunction with the population size preference dominate outcomes. Most studies about the consequences of immigration for western economies take the political economy of immigration as the standard model (see for overview Drinkwater *et al.* 2002) and indeed this model makes the prediction that incumbents are affected differently by their labour market and capital market status. Depicting winners and losers on the labour market from immigration is a relatively easy exercise and the results from our analysis suggest that welfare theoretical exercises (cf. Borjas, 1995, 2003) are not far off the mark. However, the consequences from the capital market position are less clear and our estimates suggest that the negative externalities of immigration could be more important than the straightforward capital market consequences, although this negative wealth effect could also be explained by future fiscal claims that result as a consequence of the inflow of foreigners, who seem to involve a considerable net present value loss to European welfare states (cf. Storesletten, 2003, and Roodenburg *et al.*, 2003).

Additional insight on the driving forces behind immigration preferences of the incumbent population is derived from social interaction and population size preferences that people share. Both are elements that are not often encountered in public choice literature but that do seem relevant. Contact with (non-western) foreigners can improve attitudes, especially if the incumbent population has contact with foreigners at work or at school. Contact with foreigners while going out affects the evaluation negatively. The novel element in our empirical analysis is to connect the issue of immigration preferences to that of the preferences concerning population size. It stands to reason that immigration policy views are influenced by population size preferences as net immigration affects population size per definition.

¹⁰ The full correlation matrix can be obtained upon request from the authors.

Hence, in unravelling the forces behind immigration preferences one cannot do – in a world with common goods and scarce space - without population size preferences.

These results have rather strong implications for the economic analysis of migration as it would seem like a natural step to extend the political economy of immigration by using models of social interaction and diffusion (see Durlauf, 1999) and by paying close attention to the evolution of social norms, in particular about issues of population size. The bottom line of this paper would seem to be that the political economy of immigration is a highly relevant tool of analysis but that it is only captures part of the truth. In order to sketch a richer map of integration models should also include elements of social interaction - whereby preferences of incumbents change during the process of interaction - as well as a preference of the native population for the aggregate population size.

5. References

- Bauer, T.K., Lofström, M. and Zimmermann, K.F. (2000). Immigration Policy, Assimilation of Immigrants and Natives' Sentiments Towards Immigrants: Evidence from 12 OECD countries, *Swedish Economic Policy Review*, 7: 11-53.
- Benhabib, J. (1996) On the Political Economy of Immigration, *European Economic Review*, 40: 1737-1743.
- Boeri, T., Hanson, G. and McCormick, B. (2002). *Immigration Policy and the Welfare System*, Oxford: Oxford University Press.
- Bolt, G., Hooijmeijer, P. and Kempen, R. van (2002). Ethnic Segregation in the Netherlands: New Patterns, New Policies?, *Tijdschrift voor Economische en Sociale Geografie*, 93: 214-220.
- Borjas, G.J. (1995). The Economic Benefits of Immigration, *Journal of Economic Perspectives*, 9: 3-22.
- Borjas, G.J. (1999). *Heaven's Door*, New Jersey: Princeton University Press.
- Borjas, G.J. (2003). The Labor Demand Curve Is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market, *Quarterly Journal of Economics*, 1335-374.
- Demeny, P. (2003). Population Policy Dilemmas in Europe at the Dawn of the Twenty-First Century, *Population Development Review*, 29: 1-28.
- Drinkwater, S., Levine, P., Lotti, E., and Pearlman, J. (2002). The Economic Impact of Migration: A Survey, Working paper, University of Surrey.

- Durlauf, S.N. (1999). The Memberships Theory of Inequality: Ideas and Implications, in: E.S. Brezis and P. Temin (eds.), *Elites, Minorities, and Economic Growth*, Amsterdam: Elsevier, pp. 161-177.
- Gang, I.N., Rivera-Batiz, F.L. and Yun, M.-S. (2002). Economic Strain, Ethnic Concentration and Attitudes Towards Foreigners in the European Union, IZA Working Paper, no.578, Bonn.
- Hardin, G. (1968). The Tragedy of the Commons, *Science*, 162: 1243-1248.
- Hewstone, M., and Brown, R. (1986). Contact is not Enough: An Intergroup Perspective on the 'Contact Hypothesis', in: M. Hewstone and R. Brown (eds.), *Contact and Conflict in Intergroup Encounters*, Oxford: Basil Blackwell, pp. 1-44.
- Kemnitz, A. (2003). Immigration, Unemployment and Pensions, *Scandinavian Journal of Economics*, 105: 31-47.
- Krieger, T. (2003). Voting on Low-Skill Immigration under Different Pension Regimes, *Public Choice*, 117: 51-78.
- Minard, R.D. (1952). Race Relations in the Pocahontas Coal Field, *Journal of Social Issues*, 8: 29-44.
- Nerlove, M., Razin, A. and Sadka, E. (1987). *Household and Economy - Welfare Economics of Endogenous Fertility*, New York: Academic Press.
- Oliver, J.E., and Wong, J. (2003). Intergroup Prejudice in Multiethnic Settings, *American Journal of Political Science*, 47: 567-582.
- Parfit, D. (1984). *Reasons and Persons*, Oxford: Oxford University Press.
- Pettigrew, T.F. (1998). Intergroup Contact Theory, *Annual Review of Psychology*, 49: 65-85.
- Roodenburg, H., Euwals, R. and ter Rele, H. (2003). *Immigration and the Dutch Economy*, The Hague: CPB.
- Quibria, M.G. (1990). On International Migration and the Social Welfare Function, *Bulletin of Economic Research*, 42: 141-153.
- Saiz, A. (2003). Room in the Kitchen for the Melting Pot: Immigration and Rental Prices, *Review of Economics and Statistics*, 85: 502-521.
- Sinn, H.W., and Werding, M. (2001). Immigration Following EU Eastern Enlargement, *CES Ifo Forum*, Summer 2001: 40-47.
- Söllner, F. (1999). A Note on the Political Economy of Immigration, *Public Choice*, 100: 245-251.
- Storesletten, K. (2003). Fiscal Implications of Immigration – A Net Present Value Calculation, *Scandinavian Journal of Economics*, 105: 487-506.

- Tajfel, H., and Turner, J.C. (1979). An Integrative Theory of Intergroup Conflict, in: W.G. Austin and S. Worchel (eds), *The Social Psychology of Intergroup Relations*. Monterey, CA: Brooks-Cole, pp. 33-47.
- Taylor, M.C. (1998). How White Attitudes Vary with the Racial Composition of Local Populations: Numbers Count, *American Sociological Review*, 63: 512-535.
- United Nations (2002). *National Population Policies 2001*, Department of Economic and Social Affairs, New York: UN.