

Immigration, Economy and Culture: Analysis of Attitudinal Responses

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Introduction

Migration has clear general economic benefits in efficient international allocation of labour

Also potential economic benefits to receiving countries if generating fiscal contributions

Nonetheless immigration attracts widespread antipathy

Addressing concerns requires understanding of source of hostility

Economic self interest: labour market competition I

From an economic perspective, immigration results in a change of skill mix

Suppose many labour types produce few types of output

Immigration increases the share of certain labour types in the workforce

Producers will be persuaded to employ these only if their relative wages fall - otherwise there will be growth in unemployment

Relative earnings of complementary labour types rise and average wages may increase

Under standard assumptions there is an aggregate 'immigration surplus' though unequally shared

Economic self interest: labour market competition II

If there are many types of traded output then firms will be encouraged to produce more of those goods using immigrating labour intensively

The whole of the impact may be absorbed by changes in the mix of output with no surplus and no distributional impact on already resident labour

Empirical evidence is not generally supportive of large labour market effects (Altonji and Card 1989; Pischke and Velling 1994; Hunt 1992; Winter-Ebmer and Zweimüller 1999; Dustmann, Fabbri and Preston 2005)

Fears of such effects may still be an important determinant of attitudes

Economic self interest: labour market competition III

Fears should be greatest among those economically active and most similar to immigrants eg those with similar skills, in similar age groups, recent immigrants, ethnic minorities

Recent economic literature uses variation of attitudes with economic characteristics (esp. labour market status, education) as evidence of economic motivation eg Scheve and Slaughter 2001; Gang, Rivera-Batiz and Yun 2002; Mayda 2002

However

- such skill gradients are observed not only in countries where immigration is predominantly low skilled (eg US, Germany, Scandinavia) but also where immigrant skills are similar to natives (eg UK, Spain)
- education is also strongly associated with other dimensions to attitudes

Card, Dustmann and Preston 2005

Economic self interest: welfare burden I

Immigrants pay taxes and consume public services and transfers

These effects may not balance and public finances may need adjustment (Borjas 1999; Auerbach and Greopoulos 1999)

Effect depends upon

- nature of immigration - older, low skilled immigrants pay lower taxes and are more likely to claim benefits
- horizon considered - immigrants may have distinctive age profiles to earnings and may or may not return to country of origin

No clear empirical consensus (Borjas 1994; Riphahn 1998; Fertig and Schmidt 2001, Sinn et al 2001; Lee and Miller 2000)

Card, Dustmann and Preston 2005

Economic self interest: welfare burden II

Incidence of implied effects depend upon political economy of fiscal response

- If tax rates are altered then effects (positive or negative) are felt most strongly by the rich (Fetzer 2000)
- If public benefits are altered then effects (positive or negative) are felt most strongly by the poor

Political process is likely to spread impact

Social and cultural self interest

Threat may also be perceived to social and cultural prerogatives of current residents (Blumer 1958; Campbell 1965; Blalock 1967; Bobo 1983; Quillian 1995)

Group threat may generate prejudice against immigrants which in turn strengthens within-group cohesion (Sidanius and Pratto 1999)

Negative attitudes to outsiders may sustain social identity in receiving country (Tajfel 1982; Tajfel and Turner 1986; Likata and Klein 2002)

Theories not based on self interest

International altruism can lead respondents to favour immigration if seen as in the interest of sending countries

Sense of international responsibility may be particularly strong where memories of colonial history are strong

Immigration may be seen as harmful to source countries if robbing them of skilled workers etc

Hostility may not be based in consideration of effects but arise from displaced aggression which may have roots in economic hardship (Le Vine and Campbell 1972; Green, Glaser and Rich 1998)

Evidence on relative importance

Citrin, Green, Muste and Wong 1995 show for US that conditioning on noneconomic attitudinal responses can weaken evidence of association between hostility and economic characteristics

Dustmann and Preston 2003 use British Social Attitudes Survey data from 1980s to show

- preference for tight immigration policy is much more strongly associated with expressions of racial prejudice than job insecurity or tax concerns
- labour market association is evident only for highly skilled workers

European Social Survey

Immigration module

- distinguishes different sources of immigration
 - similar and different ethnicity
 - richer or poorer origin country
 - European or overseas
- asks directly about opinion on perceived impact
 - labour market effects
 - public welfare burden
 - cultural effects

Exploring data I

Partition questions on impact according to relevance to seven dimensions:

- labour market competition (wages down; take jobs; hurt poor; fill vacancies)
- public welfare burden (take out more; bad for economy)
- cultural protectionism (undermine culture; create social tension; worse place to live; common customs better; common language better)
- race (mind boss; mind marriage; should be white)
- religion (religious variety bad; should be Christian)
- crime (worsen crime)
- international altruism (helps home country; responsibility to poor; all countries gain)

Exploring data II

Take mean immigration preference across types (rich European, poor European, rich overseas, poor overseas)

Regress on individual characteristics, country dummies and leading principal components

Latter coefficients differ by country

Principal components I

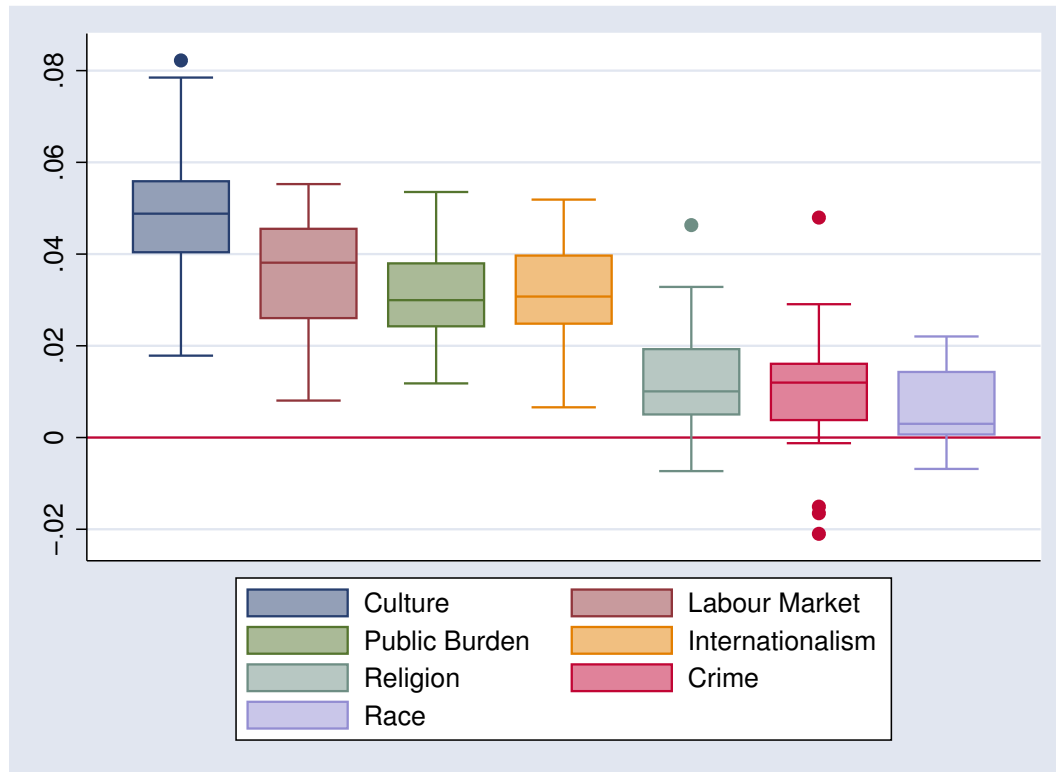


Figure 1: Factor coefficients

Principal components II

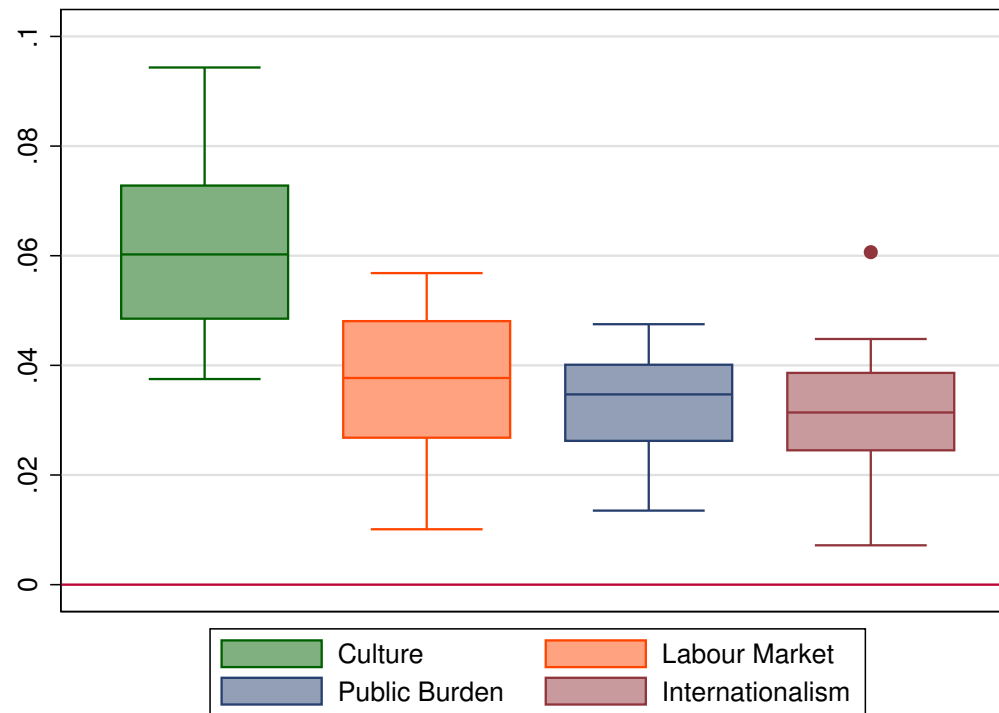


Figure 2: Factor coefficients

Principal components: Culture

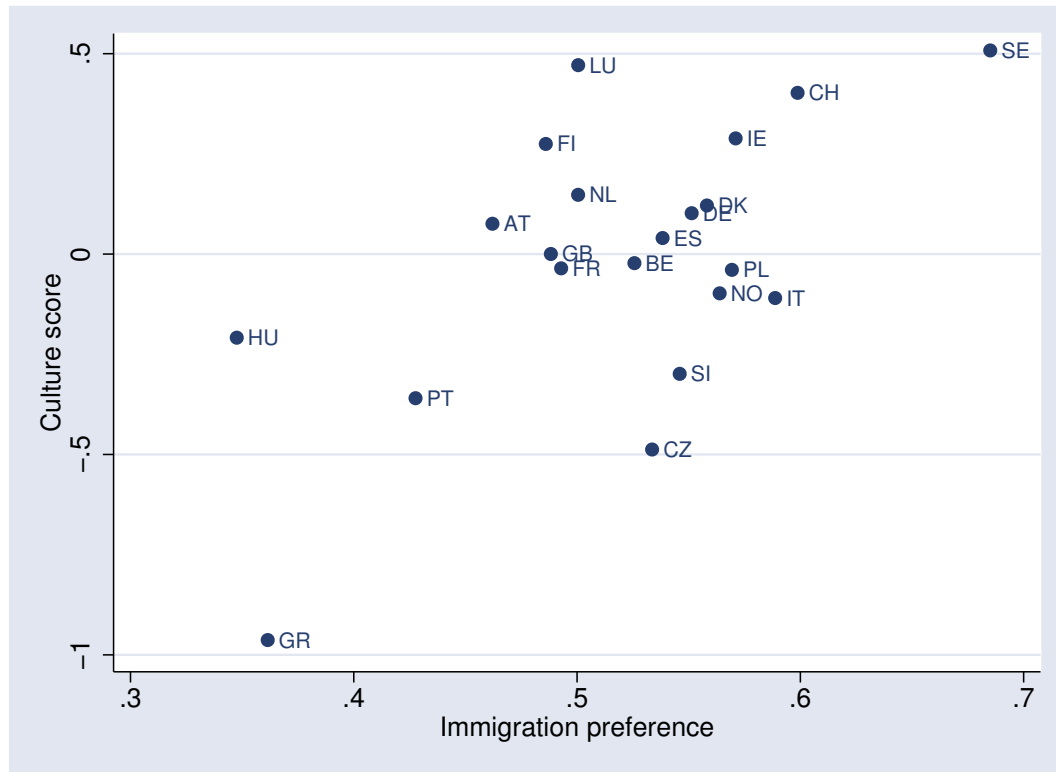


Figure 3: Factor coefficients

Principal components: Labour market competition

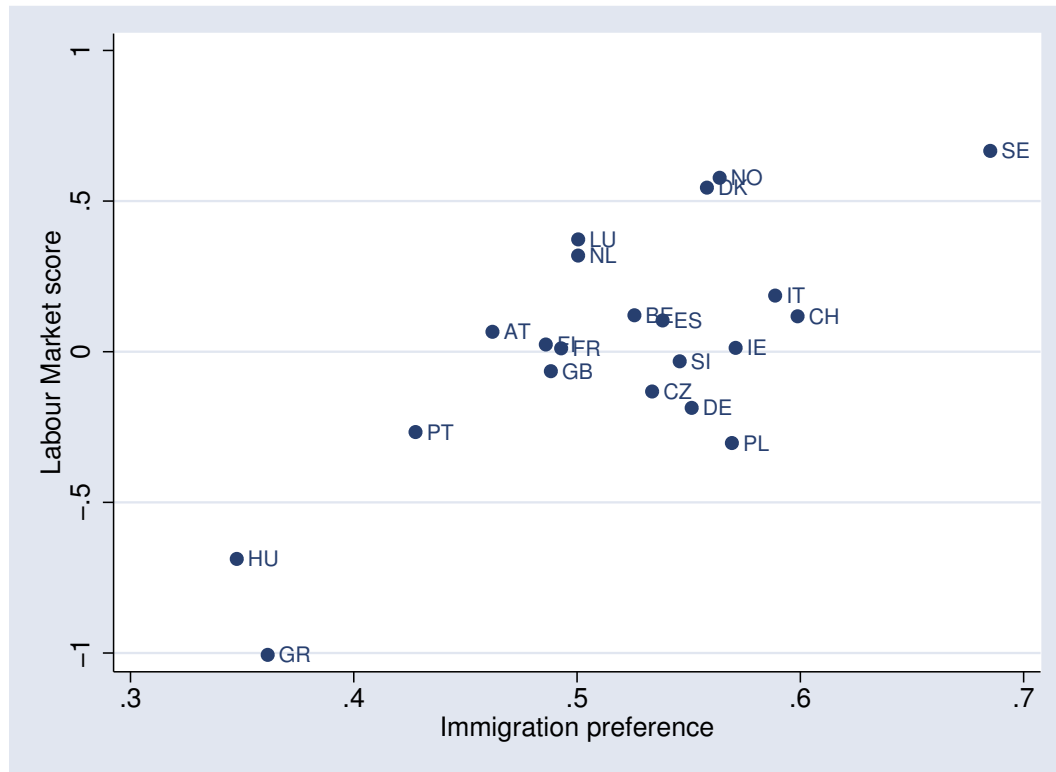


Figure 4: Factor coefficients

Principal components: Welfare burden

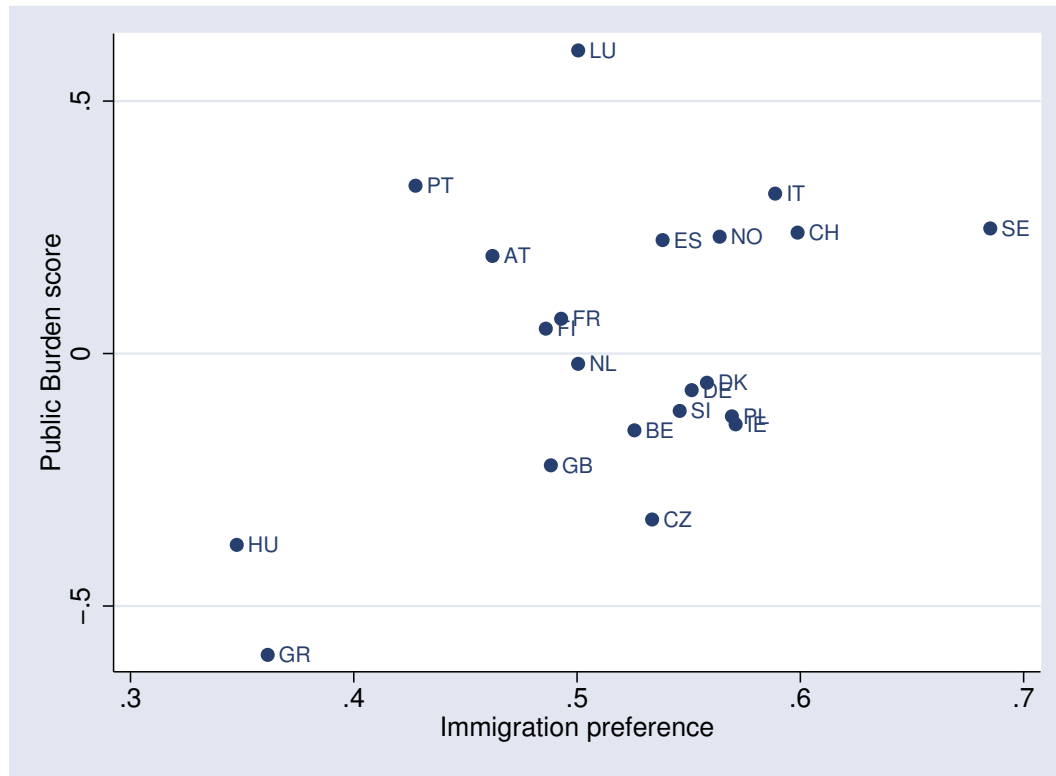


Figure 5: Factor coefficients

Principal components: Internationalism

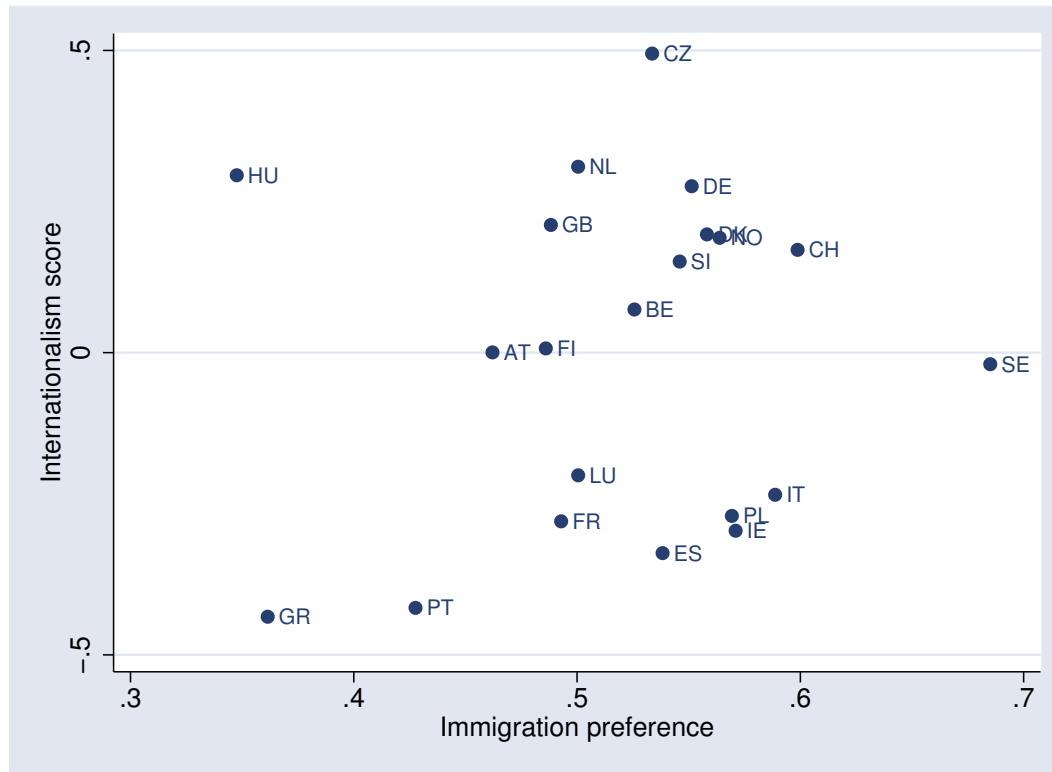


Figure 6: Factor coefficients

Model

Latent attitudes to immigration:

$$y^* = f \Lambda + X A + u,$$

and latent indicator responses:

$$z^* = f M + X C + w,$$

driven by factor structure:

$$f = X B + v,$$

where $u \sim N(0, \Sigma_u)$, $v \sim N(0, \Sigma_v)$, $w \sim N(0, \Sigma_w)$ mutually uncorrelated and Σ_w diagonal

Reduced form

$$Y^* \equiv \begin{pmatrix} y^* \\ z^* \end{pmatrix} = X\Gamma + \epsilon,$$

where

$$\Gamma = B \begin{pmatrix} \Lambda \\ M \end{pmatrix} + \begin{pmatrix} A \\ C \end{pmatrix} \equiv \begin{pmatrix} \Gamma_1 \\ \Gamma_2 \end{pmatrix}$$

$$\epsilon = v \begin{pmatrix} \Lambda \\ M \end{pmatrix} + \begin{pmatrix} u \\ w \end{pmatrix}.$$

Reduced form

Then $\epsilon \sim N(0, \Sigma_\epsilon)$, where

$$\Sigma_\epsilon = \begin{pmatrix} \Sigma_u + \Lambda \Sigma_v \Lambda' & M \Sigma_v \Lambda' \\ \Lambda \Sigma_v M' & \Sigma_w + M \Sigma_v M' \end{pmatrix} \equiv \begin{pmatrix} \Sigma_{11} & \Sigma_{12} \\ \Sigma'_{12} & \Sigma_{22} \end{pmatrix}$$

Γ estimated by independent ordered probits

Σ_ϵ estimated element-by-element by bivariate ordered probit given corresponding elements in Γ

Computation of variance-covariance matrix follows the standard procedure of expanding the score vector - see Muthén 1984, Muthén and Satorra 1995

Structural estimation

Restrictions imposed by minimum distance

$$\Sigma_{12} = M \Sigma_v \Lambda'$$

$$\Sigma_{22} = \Sigma_w + M \Sigma_v M'$$

Diagonal weighting matrix preferred (Altonji and Segal 1996)

No use of Γ or Σ_{11} so no need to assume

- zeros in A or C
- diagonality of Σ_u

Factor identification

Identification clearest if M assumed block diagonal:

- within block correlation identify elements of M
- cross block correlations identify elements of Σ_v
- correlations between indicators and immigration responses identify elements of Λ

Considerable overidentification provides degrees of freedom to relax block diagonality

Local identification checked by rank condition

Indicator loadings I

Table 1: M matrix: Economic effects

Variable	Labour Market Competition		Public Burden	
	Coeff	t-ratio	Coeff	t-ratio
Wages down	0.621	110.75		
Hurt poor	0.696	131.87		
Fill jobs	-0.335	-50.41		
Take jobs	0.180	15.89	0.498	51.76
Take out more			0.665	132.65
Bad for economy	-0.019	-1.20	0.855	66.32

Indicator loadings II

Table 2: *M* matrix: Other effects

Variable	Cultural Protectionism		Internationalism	
	Coeff	t-ratio	Coeff	t-ratio
Undermines culture	0.716	166.95		
Share customs	0.484	93.86		
Religious variety	-0.411	-77.90		
Share language	0.210	32.61		
Social tension	0.660	142.23		
Worse place to live	0.756	178.66		
Bad for home country			-0.109	-13.49
All benefit			0.447	63.03
Responsibility			0.781	79.44

Factor correlations

Table 3: Σ_v matrix:

Variable	Labour Market Competition		Public Burden		Cultural Protectionism		International Altruism	
	Coeff	t-ratio	Coeff	t-ratio	Coeff	t-ratio	Coeff	t-ratio
Lab Market	1.000		0.647	68.42	0.679	113.59	-0.328	-38.64
Welfare	0.647	68.42	1.000		0.808	177.29	-0.395	-49.88
Culture	0.679	113.59	0.808	177.29	1.000		-0.476	-60.27
International	-0.328	-38.64	-0.395	-49.88	-0.476	-60.27	1.000	

Immigration loadings

Table 4: A matrix: Immigration opinion

Variable	Labour Market Competition		Public Burden		Cultural Protectionism		International Altruism		diag(Σ_u)
	Coeff	t-ratio	Coeff	t-ratio	Coeff	t-ratio	Coeff	t-ratio	
Rich European	-0.084	-7.04	-0.034	-2.30	-0.283	-17.14	0.088	10.31	0.822
Poor European	-0.114	-9.59	0.033	2.12	-0.439	-25.63	0.189	20.89	0.629
Rich overseas	-0.081	-6.86	0.001	0.10	-0.348	-21.01	0.112	12.99	0.779
Poor overseas	-0.117	-9.93	0.082	5.32	-0.501	-29.26	0.190	21.19	0.599

Identification of B

If $C = 0$ then $B = \Gamma_2 M' (M M')^{-1}$

Hence first stage probit coefficients from indicator questions can be used to calculate effects of characteristics on factors

Factor regression I

Table 5: Factor regression: Economic characteristics

Variable	Labour Market Competition		Public Burden		Cultural Protectionism		International Altruism	
	Coeff	t-ratio	Coeff	t-ratio	Coeff	t-ratio	Coeff	t-ratio
Unemployed	0.323	9.559	0.246	7.119	0.133	3.924	-0.042	-1.233
Inactive	0.181	4.361	0.162	4.120	0.146	3.933	-0.071	-1.794
Retired	0.095	6.808	0.041	3.076	0.098	7.244	0.044	3.260
Housework	0.033	1.543	0.013	0.622	0.030	1.468	0.007	0.331
High School Grad	-0.264	-6.848	-0.231	-6.417	-0.306	-8.179	-0.025	-0.659
College	-0.475	-29.34	-0.403	-25.400	-0.553	-34.025	0.105	6.562

Factor regression II

Table 6: Factor regression: Demographic characteristics

Variable	Labour Market Competition		Public Burden		Cultural Protectionism		International Altruism	
	Coeff	t-ratio	Coeff	t-ratio	Coeff	t-ratio	Coeff	t-ratio
Age	0.571	16.454	0.481	13.85	0.597	17.11	0.286	8.633
Age ²	-0.286	-7.530	-0.244	-6.479	0.218	5.660	-0.008	-0.224
Male	0.032	0.973	-0.115	-3.534	0.060	1.778	-0.096	-3.102
Native	0.131	3.092	0.296	7.279	0.205	4.858	-0.093	-2.241
Minority	-0.133	-3.597	-0.175	-4.767	-0.216	-5.817	0.219	5.843
Father Immigrant	-0.070	-2.155	-0.153	-4.720	-0.172	-5.047	0.171	5.103
Mother Immigrant	-0.159	-9.754	-0.194	-12.612	-0.146	-9.104	0.042	2.667
Urban	-0.036	-1.132	-0.134	-4.184	-0.137	-3.844	0.052	1.650
Rural	0.042	1.080	0.069	1.671	0.101	2.203	-0.029	-0.746

Conclusion

Economic issues do matter but less than other concerns especially cultural protectionism

Further work:

- More attention required to group differences

Allow Σ to differ by group and impose restrictions allowing M or Λ to differ

Differences across skill groups and across country may be important

- Breakdown cultural effects further

Cultural homogeneity and cultural harmony may be different dimensions of concern