

Scared by Foreigners and their Products? Survey Evidence from France^{*}

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Abstract

The paper studies attitudes toward immigration and trade using an opinion survey of two thousand French individuals. We find that, beyond usual Stolper-Samuelson effects (skilled individuals are more pro-free trade than others, as in other countries) attitudes toward trade and immigration are correlated and both are ideologically loaded. Right-wing affiliation is robustly associated with protectionism. Moreover, right-wing protectionism concerns not just agriculture but appears to be a broader attitude. It may help explain the predominantly anti-trade rhetoric of France's right-wing governments, although outsiders would expect them to pursue more pro-market and pro-free trade policies than left-wing ones.

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1. Introduction

The analysis of how individual attitudes toward international trade are formed has been the object of a literature that is by now fairly substantial. Most of the work has attempted to find in individual attitudes or voting decisions a reflection of the distributional effects of international trade as predicted by the dominant models of international trade (Heckscher-Ohlin and Ricardo-Viner). In the Heckscher-Ohlin model, the Stolper-Samuelson theorem predicts that in a skill-abundant (industrial) country, skilled individuals stand to gain from trade. They should thus support free trade if those distributional effects are significant and perceived to be so.¹ This is indeed what Balistreri (1997) and Scheve and Slaughter (1998, 2001) found. In addition to evidence in favor of endowment-based distributional effects, Scheve and Slaughter found evidence that wealth effects were also significant in framing individual attitudes toward trade. That is, an individual owning a house in an area dominated by import-competing industries is, *ceteris paribus* (i.e. even if she's skilled in a skill-abundant country), less favorable to free trade because her net worth would suffer should factories close and unemployment rise in the area. Rogowski (1987, 1989), Midford (1993), and Beaulieu (1996) drew conclusions similarly in favor of the Stolper-Samuelson model on the basis of election results.

Evidence in favor of the specific-factor (Ricardo-Viner) model is less clearcut, perhaps because its distributional implications are themselves not so straightforward. In its simplest form, the model has little to say about individual attitudes toward trade because of the well-known "neo-classical ambiguity" whereby labor, being mobile, has no a-priori well-defined interests in terms of sectoral protection (on this, see e.g. Ruffin and Jones 1977).² Suitably re-interpreted, however, the model yields the prediction that employees

¹ The prediction is reversed for Southern, labor-abundant countries. There is little evidence on attitudes toward trade in Southern countries, but some evidence on broader attitudes toward globalisation can be found in the Pew Global Attitudes Project. On this, see Noland 2004. See also the analysis of cross-country ISSP data in Mayda and Rodrik (2001), discussed below.

² Although conveniently tractable, the Ricardo-Viner model also has the unfortunate implication that under plausible assumptions about the distribution of sector-specific capital, the median voter should not support

with sector-specific skills should form coalitions with employers in favor of sector-specific protection. This is indeed what Magee (1978) found by examining Congressional hearings on the 1973 Trade Reform Act, as employers in 19 out of 21 industries testifying before Congress voiced the same opinions as those of their labor unions. On the basis of British election results, Irwin (1994, 1996) also found limited support for a specific-factor perspective on trade.

A number of papers found evidence supporting both factor-endowment, i.e. skilled-based, and sector-specific perspectives on trade (Baldwin and Magee, 1998; Beaulieu and Magee, 2001; Anson and Cadot, 2003). Thus, evidence from national surveys and elections suggests that distributional effects do matter in framing opinions but fails to reject either model. The most compelling evidence in favor of Stolper-Samuelson effects arguably comes from cross-country surveys. Using the International Social Survey Program (ISSP) data, Mayda and Rodrik (2001) and O'Rourke and Sinnott (2001) simultaneously found that the marginal effect of education on the preference for free trade rises with GDP per capita, just as the theory predicts (although the ISSP covers only one developing country, the Philippines, leaving largely open the question of the Stolper-Samuelson theorem's implications for Southern countries).³

The effect of immigration on the welfare of host-country residents is less clear-cut than that of trade (see Faini, de Melo and Zimmerman 1999 for a survey). In the 2x2 Heckscher-Ohlin model, if factor-price equalization holds immigration has of course no price effect on labor markets. With more factors than goods, results are ambiguous: limited immigration is absorbed by Rybczynski effects (i.e. changes in the sectoral allocation of factors) with no effect on factor prices, unless the flow of migrants is sufficiently large or factor-intensity reversals take place. Results are most clear-cut in the Factor-Proportions Analysis (FPA) model used in labor economics (see e.g. Borjas et al.

trade protection, leaving us to believe that widely spread protectionist policies should be wholly ascribed to lobbying influences.

³ Without talking about individual attitudes, the distributional effect of trade liberalization in Southern countries is itself a matter of debate. For instance, Mexico's trade liberalization in the 1990s led to a widening of the skill gap, just the opposite of what would be expected in a Heckscher-Ohlin world. The reason was that Mexico's liberalization was sharpest in the low-skill textile & apparel sector, which was hitherto the most protected. On this, see e.g. Nicita (2004).

1996, Borjas et al. 1997, or Borjas 1999), which applies to a small open economy producing only one good with several factors, and where unskilled immigration raises the earnings of skilled residents. The relationship between trade and immigration is, likewise, dependent on which model is used. In the standard HO model, trade and factor movements are substitutes because trade leads to the convergence of factor prices across borders, but this convergence breaks down in other settings (e.g. in the presence of intra-industry trade).

Empirically, however, several papers have found anti-immigration sentiment to be correlated, *ceteris paribus*, with low skills or unskilled occupations (see e.g. Citrin et al., 1997, Espenhade and Hempstead 1996, or Kessler 2001, Scheve and Slaughter 2001). Using cross-country data from the 1995 ISSP, Mayda (2004) also found this relationship to depend on the host country's factor endowment, the relationship between skills and pro-immigration attitudes being an increasing function of the host country's income per capita.

If the empirical literature so far suggests that distributional effects are important in framing individual attitudes toward international trade (and immigration), a number of other considerations, in particular ideological and ethical, are likely to be also at play. As concerns trade, for instance, social psychologists have stressed that notions revolving around fairness and reciprocity, whose importance is regularly highlighted in experiments, are likely to influence attitudes toward trade. For instance, Baron and Kemp (2004) found that survey respondents in New Zealand and the US were more favorable to free trade vis-à-vis reciprocating countries, even though Adam Smith argued over two centuries ago that free trade is a unilaterally dominant policy. The respondents' difficulty to grasp the concept of comparative advantage (documented by subjecting them to problems testing their comprehension of the concept) is, in the authors' view, related to what Bazerman, Moore and Gillespie (1999) called the "mythical fixed-pie". Under the mythical fixed-pie assumption, individuals mistakenly see interaction with others as a zero-sum game, preventing them from making trade-offs needed to reach the Pareto

frontier. This view, which Bazerman et al. discussed in the context of environmental negotiations, is likely to affect people's view of international trade.⁴

Other ideological considerations are likely to be at play in framing individual attitudes. For instance, under Quesnay's "laissez passer, laissez faire" doctrine, free trade is a special case of a broader prescription in favor of free markets. If right-wing individuals are, by and large, more favorable to markets than left-wing ones, they should also be more favorable to free trade as a special case. However, right-wing individuals are also more nationalistic. As nationalism is empirically associated with anti-foreigner sentiment and defiance vis-à-vis globalization (see e.g. Noland 2004), it may play in the opposite direction, making right-wing individuals hostile toward both immigrants and imports from foreign countries.

France, which is not part of the ISSP and where individual attitudes toward trade and immigration have not yet been studied, provides a good testing ground for ideological influences over trade preferences. The country stands out for its idiosyncratic views about international trade, and economic debates tend, generally, to be ideologically loaded. The "mythical fixed pie" view of the world is also particularly prevalent in France, having inspired labor policies predicated on the assumption that a fixed number of jobs must be shared by reducing working hours. Whether based on observable distributional effects or on subjective perceptions, popular attitudes are important inasmuch as they tend to influence policy. The limited evidence available on this is, as one would expect in democratic societies, suggestive of a non-negligible impact of popular perceptions on the conduct of trade policy. For instance, Mayda and Rodrik (2001) found some degree of statistical association between attitudes and trade policy; more recently, Disdier and Mayer (2004) found, interestingly, a significant and robust association between trade flows and bilateral perceptions of national affinities.

⁴ The analogy with comparative advantage comes through the notion that some industries should be "sacrificed" in order to reap the gains from specialization and trade. The opposite view, under which trade policy is a zero-sum game (or even a negative-sum one) in which countries jockey for control over key industries, has been spread by the writings of proponents of "strategic trade policy" in the 1980s.

This paper provides a first exploration of the determinants of French individual attitudes toward trade and immigration on the basis of an opinion survey carried out in 2002 on a stratified sample of about two thousand individuals.

We find, unsurprisingly, that skilled and high-income individuals are a lot more likely than others to support free trade, simply because they do not feel that their jobs or earnings are at risk. The same is true of individuals working for sheltered sectors (public or non-tradables). Conversely, people who see themselves as having a low status in society feel threatened by imports and support protectionism. Interestingly, this seems to be essentially a subjective perception, as past unemployment experience, however long, bears no relation with protectionist feelings, a result that parallels Citrin et al.'s (1997) finding that Americans' individual perceptions of immigration depend on *aggregate* rather than individual economic conditions. Our most striking finding is that protectionist sentiment is robustly associated with right-wing political affiliation, suggesting that anti-foreigner sentiment dominates over pro-market orientation. Attitudes toward immigration follow a very close pattern, anti-immigration and protectionist attitudes being correlated. However the direction of causation between attitudes toward immigration and political affiliation must be treated with some caution, as immigration has loomed so large over public debates that extreme-right political affiliation may be endogenous to anti-immigration feelings. We treat the endogeneity issue explicitly in our treatment of the immigration equation.

2. Estimation

2.1 Data

Our data set is a survey conducted in 2002 by SOFRES, a private polling institute, on a sample of about four thousand individuals under contract. Because of the contractual relationship between respondents and the polling institute, the response rate is very high

(over forty percent). The sample is stratified to be representative of the French population.

The survey included ninety-five questions, most of which related to attitudes vis-à-vis savings and retirement, and a small number of questions relating to attitudes toward immigration and trade. Respondents were typically presented with a statement and asked if they agreed completely, somewhat, not or not at all (in most cases “no opinion” was not a possible answer). Answers were then either coded from one to four or coded in binary form with “agree completely” and “somewhat agree” lumped together (and similarly for “somewhat disagree” and “disagree completely”). As discussed in the next section, for estimation purposes the two ways of coding answers did not make much difference.

The survey also included a number of questions about individual characteristics and general attitudes (toward risk, mobility, etc.) which provided us with a set of candidate explanatory variables, some of which guided by theory (e.g. skills and capital holdings as endowment variables), some better thought of as control variables.

Descriptive statistics are given in Table 1.⁵ Our dependent variables fall in two categories: attitudes toward trade and attitudes toward immigration. In both cases, respondents were asked (i) if they felt that their job or earnings were threatened by trade [immigration], and (ii) whether they felt that the European Union should limit imports of foreign products [immigration]. In Table 1, all variables except four (Long unemployment, Income, Portfolio and Age) are in binary form, so means are the proportion of respondents answering either “completely agree” or “somewhat agree”, or, in clear, the proportion of “yes”. The proportion of respondents favoring limitations of either imports (65%) or immigration (79%) is significantly larger than the proportion of those feeling directly threatened (40% and 41% respectively for imports and immigration). In the case of immigration, one might conjecture that security and cultural

⁵ Descriptive statistics (e.g. the frequency of attributes, given by the mean of the attribute’s dummy variable) refer to the sample and not to the population. In the estimation, however, differences in response rates are corrected by the use of probability weights given in the survey as “*poids de redressement*”.

issues play an important role beyond economic issues in motivating the respondents' desire to see immigration limited. However the same cannot be said of trade, where the difference between the numbers feeling threatened and favoring limitations is, although smaller, still large (25 percentage points). One obvious conjecture is that anxiety is raised by scare stories spread by the media. Table 2 also shows that these two types of anxieties (with regard to imports and with regard to immigration) are fairly correlated (correlation coefficient of 0.51). Neither, however, is highly correlated with support for sectoral policies such as agricultural protection or —even less— the promotion of high-tech industries epitomized by Airbus and the Ariane space project. Note, finally, that the proportion of respondents favoring limits on imports is higher than the corresponding number for Continental Europeans in the International Social Survey Program (58% as reported by Mayda and Rodrik 2001 but equal to the US.

Table 1
Descriptive statistics

Among the explanatory variables, a few numbers are worth noting. The proportion of respondents having experienced at least one unemployment spell is high at 53%. The number of farmers is (unsurprisingly) very low (2%), but the proportion of respondents with relatives in agriculture is a full fifth of the sample. This, we expected, could provide a candidate explanation for favorable views toward the protection of agriculture, but, as we will see later on, it turns out not to have any statistically traceable effect on respondents' attitudes toward agriculture protection.

Table 2
Correlation matrix, dependent variables

The political spectrum in the sample is peculiar (see Figure 1). Although right-wing and left-wing coalitions come typically neck-to-neck in national elections, the proportion of respondents declaring themselves either center-right, right or extreme-right adds up to only 28% of the electorate. More suspicious, the proportion of the extreme right is a mere 4%, although Jean-Marie Le Pen's Front National, by all means an extreme-right party,

scores regularly above 15% nationwide in national and local elections. By contrast, the proportion of “don’t knows” is very high at 27%. The apparent under-representation of the extreme right may be ascribed to what sociologists call the “shameful-voter effect” whereby respondents feel embarrassed to admit that they vote for the extreme right and tend not to declare it to pollsters, even in writing.

Figure 1
Political spectrum

Thus, respondents declaring themselves as extreme-right in our sample can be considered to be hard-core ones, which may explain the high degree of significance of the “extreme right” variable in the determination of attitudes toward trade and immigration.

2.2 Procedure

With the exception of age, all variables in the survey, whether dependent or explanatory, are either binary or ordered. Thus, the first round of estimation we carried out were ordered probits. We then recoded dependent variables in binary form, bunching together “strongly agree” and “somewhat agree” answers into “agree”, and “strongly disagree” and “somewhat disagree” into “disagree”. Because we are primarily interested in qualitative results (explanatory variables are, with the exception of a few control variables such as age, also answers to the same questionnaire) there was little information loss in doing so but much gain in readability.

In a first round of estimation, we also decomposed ordered explanatory variables into sets of binary ones in order to avoid imposing an arbitrary linear structure on their effects. As the results suggested largely monotone effects, we reverted to the ordered form in order to avoid cluttering the result tables.

We ran four sets of regressions with largely the same regressors but different dependent variables. In the first set, the dependent variable was the respondent's attitude toward imports. Two questions were asked: one about whether the respondent felt that his or her job or earnings were threatened by imports, and one about whether he or she felt that imports into the European Union should be limited. In the second set, two similar questions were asked about immigration (perceived threat and whether it should be limited). In the third set, questions were asked about sectoral policies: one about high-tech promotion policies (whether the respondent felt that the Ariane space project and Airbus civil aeronautics project ought to be supported) and one about the protection of agriculture. In all three sets of regressions, explanatory variables include information about the respondent's endowments, his or her employment sector, basic controls (age and sex), and a number of attitude or preference variables.

In all regressions, political affiliation on an "extreme- left-to-extreme-right" spectrum (center excluded to avoid collinearity with the constant) was included among the regressors, and political affiliation indeed turned out to be a key determinant of attitudes, although not necessarily in the way one would have expected (more on this below). Of course, having political opinions on the right-hand side raises an endogeneity issue. For trade, the issue is unlikely to be serious, as trade issues have not been sufficiently salient in French politics to be serious determinants of overall political opinion.⁶ For immigration, however, the issue has been of extreme salience in French political debates over the last decade or so. Thus, one cannot a priori exclude the hypothesis that an individual positioning himself or herself at the extreme right of the political spectrum would do so *because* he or she feels strongly against immigration. The potential for reverse causation is thus real.

⁶ Because EU members have delegated the conduct of trade policy to the European Commission, the topic has somewhat (although obviously not completely) faded from national politics. Note that the survey question about limiting imports is appropriately worded (the level of decision is the European Union). This has the additional advantage of calling to mind images of trade with emerging countries as opposed to intra-industry trade with neighbouring member countries where distributional implications would be unclear.

We have dealt with the problem in two ways. First, we ran the immigration equation instrumenting for extreme-right using an instrumental-variable probit procedure discussed in Newey (1987). Second, we tried to provide a more general explanation for political attitudes by running a multinomial logit regression of political affiliations on individual characteristics and general attitudinal variables unlikely to be endogenous to either political affiliation or attitudes toward trade and immigration.

2.3 Results

Results for the trade equation are given in Table 3. Variables which are significant under ordered probit estimation (column (1)) remain so under simple probit (column (2), which reports marginal effects at the mean rather than coefficients). In conformity with Stolper-Samuelson effects, skilled individuals feel less threatened by imports,⁷ as do individuals with higher income, the two being correlated (but not perfectly collinear). Of course, as suggested by Baron and Kemp (2004), the positive effect of skills may simply reflect a better ability to grasp the concept of comparative advantage rather than an income-distribution effect.⁸ We attempted to control for this by including a variable labeled “informed” coding answer to a question about the stock exchange and the economy. The question asked whether the stock market (i) goes up when unemployment goes up, (ii) goes up when unemployment goes down, or (iii) bears no relationship with the unemployment rate. We took response (i) as signaling poor understanding of economics and marked those respondents as “uninformed”.⁹ “Informed” is one minus this variable. What is new here is that even after controlling for this effect (which anyway is not significant), skills remain significant determinants of attitudes toward trade.

⁷ Recall that the question is about extra-EU imports, which include imports from emerging countries with lower relative skill endowments.

⁸ They find that individuals who understand comparative advantage (based on a problem they had to solve as part of the survey) were more positively oriented toward free trade. However, they also found that prior training in economics did not make respondents more likely to solve correctly the comparative-advantage problem.

⁹ It is possible that respondents mistakenly interpreted the question as meaning that the stock market value of a particular company goes up when it reduces its workforce, a story often seen in the media. This type of perception is however captured (negatively) by our “pro-business” variable, and “informed” and “pro-business” are uncorrelated (correlation coefficient 0.02).

Employees of the public and non-tradable sectors obviously feel also sheltered. Employees of tradable services (banking and IT) do not feel threatened either, although this may be because the question referred explicitly to foreign “goods” rather than outsourcing. Although highly protected at present, farmers, by contrast, feel threatened, possibly because of recurrent rumours of Common Agricultural Policy reform. Employees of multinational enterprises also seem to feel at risk, presumably because multinationals are perceived as footloose. As for political opinions, right-wing individuals and “don’t knows” seem more subject to job-displacement anxieties than left-wing ones, as do those people who consider themselves as low status (after having controlled for income and skills).

As OLS estimates seemed to follow the same pattern (column (3)), we checked whether taking explicitly into account the fact that anxieties about imports and immigration could be subject to common shocks changed the picture. Thus, ignoring the categorical nature of the dependent variables, we estimated the trade and immigration equations together by Zellner’s Seemingly Unrelated Equations (SURE) procedure. SURE estimation of both equations (columns (4) and (5)), however, did not change the pattern of determinants.

Table 3
Regression results, attitudes toward trade

Results for the immigration equation are shown in Table 4. Again, ordered and simple probit yield essentially the same answer in terms of which individual characteristics seem to be significant, and the pattern is strikingly similar to the one observed for the trade equation. However, it is noteworthy that political effects loose their significance under IV estimation, where extreme-right affiliation is (admittedly very imperfectly) instrumented by individual characteristics available from the survey but a priori uncorrelated with attitudes toward trade or immigration. These instruments include, *inter alia*, whether the respondent has a pro-business attitude, is proud of being French, watches over his/her children’s social activities, thinks that bequests should follow the family’s tradition (elder

son or so), smokes, drinks, or regularly breaks speed limits when driving (an independent regression of the extreme-right dummy on these variables is reported in Table 6 below).

Table 4
Regression results, attitudes toward immigration

The results of regressions of attitudes toward two sectoral policies, agricultural protection and the promotion of high-tech industries, are reported in Table 5, columns (2) and (3), together with answers to a question about overall protection. Unsurprisingly, agricultural protectionism has the same pattern of determinants as “all-purpose” protectionism. No clear pattern emerges for high-tech promotion, except for the fact that income and the respondent’s portfolio of financial assets now come out as positive contributors, as one would expect from a Stolper-Samuelson perspective. This finding should not be “over-interpreted” given the scope for omitted-variable bias and measurement errors (all these regressions have low explanatory power, as is frequently the case in this type of exercise). However it does suggest that income-distribution considerations play a role in framing attitudes toward protection, something that confirms our earlier interpretation, namely that the effect of skills is genuinely driven by income-distribution considerations rather than better comprehension of the concepts. Incidentally, economic comprehension as measured by our stock-market question is now a positive influence on the respondents’ willingness to support high-tech industries, as is a positive attitude toward risk-taking. The pattern is thus definitely distinct from that of “traditional” protectionism.

Table 5
Regression results, information attitudes toward high-tech promotion

Finally, we explored the possible endogeneity of information and political opinions in two ways. We first ran a regression of the “informed” variable on other individual determinants (column (1)), and although the explanatory power of the regression is too low to raise a serious endogeneity issue, it seems that there is some correlation between information, skills and, in accordance with intuition, employment in tradable services, which include the financial sector. As for political opinions, we ran a probit regression of

extreme-right affiliation (column (2), marginal effects reported) and a multinomial logit regression of three aggregate categories —left, right and don't know— on all individual characteristics (columns (3)-(5)). The results are unspectacular. Extreme-right affiliation is associated with low skills, low income, low mobility, and —amusingly— speed-driving. National pride and conservative education are also explanatory factors although not estimated with sufficient precision to be significant. Extreme-right affiliation is also clearly a male phenomenon. As for the multinomial logit, the only clear explanatory factors are an anti-business attitude associated with the left and a national-pride attitude associated with the right.

Table 6
Multinomial regression results, political affiliation

3. Concluding remarks

All told, it is fair to say that the signals are faint but go in a direction that accords with intuition and theory. As in other countries, the income-distribution effects of trade and immigration seem to affect individual attitudes in a way that is quite consistent with the logic of the Heckscher-Ohlin model, although employment-sector effects are not absent either. The usual remark applies, namely that the concerns expressed by respondents about trade and immigration appear to be substantial even though empirical evidence points to small effects of both on labor markets (on trade, see e.g. Cline 1997; on immigration, see the essays collected in Faini et al. 1999). The essential originality of our results is that they highlight the interplay of ideological beliefs with income-distribution concerns in framing attitudes toward trade and immigration.

Several messages come out of the data. First, we find confirmation of a finding by Citrin et al. (1997) that the perception of immigration by US respondents depends on aggregate rather than individual economic conditions. In a similar vein, we find that past unemployment experience bears little relationship with the perception that immigration is

a threat to one's jobs, although a subjective feeling of low social status does. This suggests a conjecture that perceptions about immigration may be framed more by the media and the discourse of politicians than by the personal experience of economic hardship that could possibly be blamed on immigration or import competition.

Second, although the standard Heckscher-Ohlin model suggests substitutability between trade and immigration (and the EU's preferential trade agreements with its neighbours are typically sold as ways of fostering prosperity on the Union's outskirts and thereby of stemming the tide of immigrants), anti-immigrant and protectionist sentiments are positively correlated across individuals, having broadly similar determinants. Put differently, respondents expressing opposition to both trade liberalization *and* immigration do not seem to buy the argument that trade liberalization is a way of reducing migrant pressure.

Lastly —and relatedly— protectionism is in France essentially a right-wing phenomenon. Although intuition and the data itself suggest that right-wing individuals are more pro-market than left-wing individuals, this does not translate into a more free-trade orientation. In other words, the French right may be in favor of *laissez-faire* (although it may also be *dirigiste*) but definitely not of *laissez-passer*. According to our data, this seems to come from the fact that right-wing respondents are essentially scared of foreigners and that this attitude is directed against both the migration of people and the importation of their products.

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Tables and figures

Table 1
Descriptive statistics

Variable	Obs.	Mean	St. dev.	Min	Max
Immigr. threat	2'460	0.41	0.49	0	1
Limit immigration	2'460	0.79	0.41	0	1
Import threat a/	2'460	0.40	0.49	0	1
Protect	2'460	0.65	0.48	0	1
Protect agriculture	2'460	0.87	0.34	0	1
Promote Airbus	2'460	0.88	0.33	0	1
Unemployed	2'422	0.53	0.50	0	1
Long unemployment	2'422	0.87	1.05	0	4
Skilled	2'460	0.26	0.44	0	1
Income	2'322	2.34	1.28	1	6
Portfolio	1'890	3.62	1.86	1	8
Public sector	2'460	0.25	0.43	0	1
Non tradable	2'460	0.29	0.45	0	1
Tradable services	2'460	0.10	0.30	0	1
Farmer	2'460	0.02	0.16	0	1
Rel. in agriculture	2'460	0.22	0.41	0	1
Multinational employer	2'460	0.16	0.37	0	1
Mobile	2'367	0.52	0.50	0	1
Ext. left	2'460	0.03	0.16	0	1
Left	2'460	0.25	0.43	0	1
Center left	2'460	0.11	0.31	0	1
Center right	2'460	0.09	0.29	0	1
Right	2'460	0.15	0.35	0	1
Ext. right	2'460	0.04	0.20	0	1
Don't know	2'460	0.27	0.45	0	1
Informed	2'460	0.37	0.48	0	1
Low status	2'460	0.35	0.48	0	1
Risk taker	2'460	0.54	0.50	0	1
Pro-business	2'460	0.34	0.47	0	1
Proud French	2'460	0.53	0.50	0	1
Strict educator	2'460	0.33	0.47	0	1
Traditionalist	2'460	0.14	0.35	0	1
Smoker	2'460	0.17	0.38	0	1
Alcohol drinker	2'460	0.10	0.30	0	1
Speed-driver	2'460	0.18	0.39	0	1
Age	2'460	44.17	6.23	35	55
Male	2'460	0.50	0.50	0	1

Table 2
Correlation matrix, dependent variables

	Immigr. threat	Limit immigr.	Import threat	Protect from imports	Protect agriculture	Promote Airbus
Immigr. threat	1.00					
Limit immigration	0.57	1.00				
Import threat	0.51	0.30	1.00			
Protect from imports	0.37	0.44	0.33	1.00		
Protect agriculture	0.33	0.42	0.28	0.55	1.00	
Promote Airbus	0.04	0.16	0.05	0.13	0.25	1.00

Note: all variables in ordinal form. Correlations are uniformly lower when variables are in binary form.

Figure 1
Political spectrum

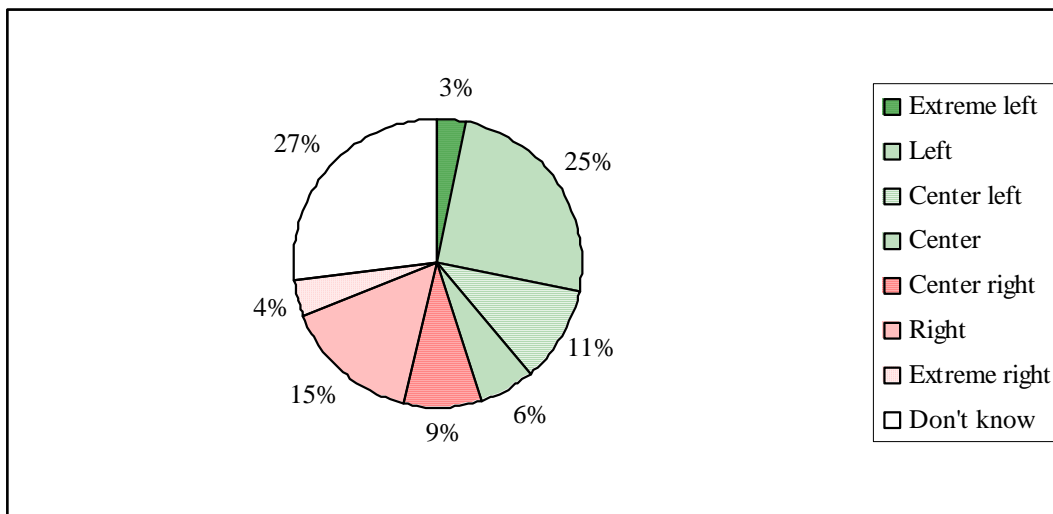


Table 3
Regression results, attitudes toward trade

Dep. var.	(1) Import threat	(2) Import threat a/ Probit, marg. eff.	(3) Import threat OLS	(4) Immig. threat SURE	(5) Import threat
Long unemp.	0.015 (0.472)	0.011 (0.720)	0.010 (0.429)	-0.037* (1.654)	0.007 (0.326)
Skilled	-0.252*** (3.772)	-0.109*** (3.542)	-0.178*** (3.804)	-0.242*** (4.989)	-0.183*** (4.047)
Income	-0.061** (2.112)	-0.021 (1.454)	-0.043** (2.106)	-0.074*** (3.908)	-0.044** (2.463)
Portfolio	-0.005 (0.262)	-0.004 (0.522)	-0.004 (0.319)	-0.024** (2.066)	-0.003 (0.298)
Public sector	-0.307*** (3.663)	-0.144*** (3.951)	-0.220*** (3.726)	-0.218*** (3.732)	-0.219*** (4.031)
Non tradable	-0.148* (1.950)	-0.105*** (3.102)	-0.109** (2.008)	-0.098* (1.885)	-0.109** (2.241)
Tradable services	-0.242** (2.474)	-0.145*** (3.277)	-0.177** (2.552)	-0.149** (2.013)	-0.181*** (2.625)
Farmer	0.751*** (3.554)	0.277*** (3.118)	0.534*** (3.674)	-0.064 (0.611)	0.532*** (5.461)
Multinat. employer	0.159** (2.065)	0.048 (1.325)	0.112** (2.027)	0.062 (1.079)	0.104* (1.951)
Mobile	-0.088 (1.476)	-0.032 (1.127)	-0.063 (1.478)	-0.033 (0.800)	-0.058 (1.494)
Ext. left	0.135 (0.549)	0.163 (1.626)	0.102 (0.583)	-0.262* (1.766)	0.107 (0.779)
Left	0.054 (0.471)	0.085 (1.551)	0.039 (0.486)	-0.345*** (4.260)	0.043 (0.574)
Center left	0.077 (0.605)	0.101* (1.654)	0.056 (0.619)	-0.148 (1.592)	0.061 (0.704)
Center right	0.118 (0.854)	0.089 (1.354)	0.082 (0.840)	0.017 (0.185)	0.081 (0.951)
Right	0.244** (2.073)	0.154*** (2.629)	0.172** (2.063)	0.232*** (2.684)	0.176** (2.186)
Ext. right	0.889*** (4.798)	0.364*** (4.762)	0.636*** (4.975)	0.991*** (8.437)	0.640*** (5.855)
Don't know	0.344*** (2.922)	0.159*** (2.870)	0.245*** (2.931)	0.283*** (3.388)	0.251*** (3.234)
Informed	-0.016 (0.261)	0.020 (0.694)	-0.010 (0.216)	-0.097** (2.281)	-0.009 (0.219)
Low Status	0.162** (2.404)	0.073** (2.407)	0.117** (2.411)	0.141*** (3.061)	0.117*** (2.738)
Risk taker	-0.055 (0.927)	-0.042 (1.486)	-0.039 (0.918)	-0.063 (1.526)	-0.037 (0.946)
Age	0.005 (1.070)	0.005** (2.201)	0.004 (1.208)	0.008** (2.353)	0.004 (1.256)
Male	0.157** (2.412)	0.038 (1.298)	0.110** (2.361)	0.172*** (3.836)	0.113*** (2.715)
Constant			2.230*** (11.854)	2.387*** (12.962)	2.235*** (13.042)
Observations	1'729	1'775	1'729	1'721	1'721
R-squared b/	0.055	0.080	0.127		

Robust z-statistics shown in brackets; *: signif. at 10%; **, signif. at 5%; ***: sign. at 1%
Notes: a/ variables in binary form; b/ Pseudo R-square for probit.

Table 4
Probit regression results, attitudes toward immigration

Dep. variable	(1)	(2)	(3)	(4)	(5)
	Immigr. threat	Immigr. threat a/	Immigr. threat a/	Immigr. threat a/	Limit immigr. a/
Procedure	Ordered probit	Probit	Probit, marg. eff.	Probit, IV	Probit
Long unemp.	-0.048 (1.441)	-0.020 (0.510)	-0.008 (0.510)	-0.016 (0.406)	-0.016 (1.514)
Skilled	-0.303*** (4.681)	-0.444*** (5.389)	-0.165*** (5.389)	-0.365*** (3.703)	-0.128*** (5.429)
Income	-0.105*** (3.474)	-0.085** (2.444)	-0.033** (2.444)	-0.066 (1.358)	-0.027*** (2.910)
Portfolio	-0.029 (1.636)	-0.043** (2.072)	-0.017** (2.072)	-0.028 (1.382)	-0.003 (0.494)
Public sector	-0.274*** (3.183)	-0.307*** (3.090)	-0.115*** (3.090)	-0.304*** (3.018)	-0.025 (0.849)
Non tradable	-0.114 (1.444)	-0.085 (0.941)	-0.033 (0.941)	-0.117 (1.073)	-0.063** (2.231)
Tradable services	-0.177* (1.855)	-0.237* (1.910)	-0.089* (1.910)	-0.087 (0.615)	-0.003 (0.087)
Farmer	-0.063 (0.350)	-0.134 (0.630)	-0.051 (0.630)	0.076 (0.320)	0.018 (0.246)
Multinat. employer	0.090 (1.150)	0.068 (0.715)	0.026 (0.715)	-0.034 (0.321)	-0.004 (0.143)
Mobile	-0.049 (0.818)	-0.018 (0.251)	-0.007 (0.251)	0.047 (0.544)	-0.057*** (2.764)
Ext. left	-0.350 (1.435)	-0.341 (1.303)	-0.124 (1.303)	0.865 (0.754)	-0.065 (0.931)
Left	-0.469*** (3.985)	-0.460*** (3.402)	-0.170*** (3.402)	0.881 (0.805)	-0.091** (2.356)
Center left	-0.196 (1.503)	-0.230 (1.497)	-0.086 (1.497)	1.016 (0.934)	-0.007 (0.166)
Center right	0.017 (0.111)	-0.002 (0.012)	-0.001 (0.012)	1.202 (1.115)	0.084** (2.312)
Right	0.287** (2.366)	0.371*** (2.581)	0.146*** (2.581)	1.507 (1.400)	0.161*** (5.157)
Ext. right	1.342*** (6.656)	1.252*** (5.382)	0.449*** (5.382)	4.765 (1.523)	0.181*** (3.714)
Don't know	0.330*** (2.784)	0.412*** (3.025)	0.161*** (3.025)	1.678 (1.504)	0.105*** (3.083)
Informed	-0.126** (2.001)	0.018 (0.239)	0.007 (0.239)	0.006 (0.078)	-0.010 (0.468)
Low Status	0.177*** (2.621)	0.245*** (3.127)	0.095*** (3.127)	0.130 (1.333)	0.004 (0.175)
Risk taker	-0.088 (1.432)	-0.102 (1.407)	-0.040 (1.407)	-0.120* (1.658)	-0.040** (1.979)
Age	0.010* (1.899)	0.021*** (3.479)	0.008*** (3.479)	0.019*** (3.214)	0.001 (0.819)
Male	0.235*** (3.746)	0.199*** (2.654)	0.077*** (2.654)	0.082 (0.788)	0.032 (1.485)
Constant		-0.756** (2.394)		-1.975* (1.697)	
Observations	1'737	1'775	1'775	1'775	1'775
R-squared b/	0.092	0.144	0.144	0.113	0.140

z-statistics shown in brackets; *: signif. at 10%; **, signif. at 5%; ***: sign. at 1%
Notes: a/ variables in binary form; b/ Pseudo R-squared for probit and ordered probit.

Table 5
Probit regression results, sectoral policies

	(1)	(2)	(3)
Dep. var.	Protect from imports a/	Protect agricult. a/	Promote Airbus a/
Procedure	Probit, marg. eff.	Probit, marg. eff.	Probit, marg. eff.
Long unemp.	-0.028** (1.998)	-0.012 (1.271)	-0.011 (1.395)
Skilled	-0.086*** (2.949)	-0.055*** (2.649)	-0.002 (0.098)
Income	-0.023* (1.853)	-0.019** (2.426)	0.017** (2.218)
Portfolio	-0.013* (1.675)	-0.008* (1.666)	0.011*** (2.654)
Public sector	-0.005 (0.143)	-0.001 (0.042)	0.002 (0.081)
Non tradable	-0.050 (1.450)	-0.018 (0.739)	0.010 (0.497)
Tradable services	-0.076* (1.723)	-0.048 (1.516)	-0.020 (0.698)
Farmer	0.161** (2.215)	0.084** (2.147)	-0.033 (0.676)
Multinat. employer	-0.019 (0.536)	-0.026 (1.072)	-0.021 (0.971)
Mobile	-0.042 (1.604)	-0.024 (1.372)	0.001 (0.057)
Ext. left	-0.073 (0.780)	-0.055 (0.941)	-0.122* (1.814)
Left	0.016 (0.322)	0.016 (0.538)	-0.011 (0.381)
Center left	-0.002 (0.043)	0.038 (1.268)	0.049 (1.586)
Center right	0.034 (0.604)	0.104*** (4.015)	0.036 (0.934)
Right	0.137*** (2.776)	0.101*** (3.237)	0.031 (1.000)
Ext. right	0.262*** (4.212)	0.123*** (3.866)	0.003 (0.063)
Don't know	0.079 (1.594)	0.061** (2.161)	-0.055* (1.790)
Informed	-0.044* (1.646)	-0.026 (1.453)	0.060*** (3.525)
Low Status	0.064** (2.216)	0.016 (0.833)	0.009 (0.530)
Risk taker	-0.047* (1.812)	-0.018 (1.035)	0.027* (1.721)
Age	0.002 (0.814)	-0.002 (1.159)	-0.001 (0.437)
Male	-0.020 (0.711)	-0.002 (0.130)	0.009 (0.540)
relfarmer		-0.022 (0.994)	
Observations	1'775	1'775	1'775
Pseudo R-squared	0.057	0.085	0.090

z-statistics shown in brackets; *, signif. at 10%; **, signif. at 5%; ***, sign. at 1%;

Table 6
Regression results, information & political opinions

	(1)	(2)	(3)	(4)	(5)
Dep. var.	Informed	Ext. right	Left	Right	Don't know
Procedure	Probit, marg. eff.	Probit, marg. eff.	Multinom. logit, base cat. "center"		
Long unemp.		-0.002 (0.486)	0.008 (0.062)	0.023 (0.166)	0.060 (0.426)
Skilled	0.038 (1.267)	-0.024** (2.524)	0.095 (0.354)	0.303 (1.113)	-0.101 (0.355)
Income	0.029** (2.412)	-0.013*** (3.087)	-0.029 (0.308)	-0.031 (0.312)	-0.360*** (3.501)
Portfolio	0.028*** (3.676)	0.001 (0.536)	-0.032 (0.492)	0.036 (0.539)	-0.047 (0.644)
Public sector	-0.017 (0.467)	0.002 (0.143)	0.533 (1.611)	0.036 (0.106)	0.195 (0.563)
Non tradable	0.033 (0.956)	0.009 (0.880)	0.586* (1.795)	0.553* (1.669)	0.476 (1.419)
Tradable services	0.171*** (3.812)	-0.019 (1.496)	-0.197 (0.580)	-0.171 (0.493)	-0.703* (1.868)
Farmer	0.158* (1.882)	-0.016 (0.862)	-1.078* (1.693)	-0.798 (1.361)	-0.783 (1.243)
Relative in agric.		-0.004 (0.388)	-0.000 (0.002)	0.342 (1.221)	0.164 (0.549)
Multinat. employer	0.034 (0.954)	0.027** (2.330)	-0.206 (0.732)	-0.269 (0.915)	0.282 (0.937)
Mobile		-0.017** (2.118)	-0.228 (0.940)	-0.165 (0.676)	-0.169 (0.667)
Informed		0.015* (1.855)	-0.495** (2.039)	0.063 (0.252)	-0.777*** (2.997)
Low Status		0.013 (1.552)	0.312 (1.153)	0.030 (0.109)	0.077 (0.273)
Risk taker		0.003 (0.426)	-0.059 (0.240)	-0.159 (0.628)	-0.350 (1.355)
Pro-business		0.004 (0.487)	-0.641*** (2.580)	0.219 (0.887)	0.178 (0.705)
Proud French		0.013 (1.628)	-0.187 (0.798)	0.818*** (3.435)	-0.123 (0.500)
Strict educator		0.013 (1.537)	-0.456* (1.849)	0.013 (0.051)	-0.258 (1.000)
Traditionalist		-0.006 (0.534)	0.316 (1.020)	0.209 (0.661)	0.140 (0.425)
Smoker		-0.015 (1.559)	0.720* (1.711)	0.632 (1.472)	0.592 (1.393)
Alcohol drinker		0.011 (0.856)	0.354 (0.849)	0.505 (1.168)	0.492 (1.126)
Speed-driver		0.022** (2.134)	0.020 (0.062)	0.698** (2.146)	0.124 (0.361)
Age	0.001 (0.252)	0.000 (0.056)	-0.000 (0.006)	0.007 (0.342)	-0.029 (1.386)
Male	0.103*** (3.738)	0.024*** (2.713)	0.175 (0.663)	0.140 (0.515)	0.107 (0.389)
Constant			2.268** (2.105)	0.218 (0.199)	3.917*** (3.496)
Observations	1'831	1'775	1'775	1'775	1'775
Pseudo R-squared		0.104			

z-statistics shown in brackets; *: signif. at 10%; **, signif. at 5%; ***, sign. at 1%