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A foreigner who doesn't steal my job: The role of unemployment risk and values in attitudes towards foreigners

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Summary

Over the past three decades, immigration has become systematically politicized by parties on the right, and opposed by many individuals in society. Different hypotheses have been proposed to explain variation in the opposition to immigration among the population. Economic arguments highlight the competition between native workers and immigrants over limited resources. Sociological arguments underline additional factors like values and beliefs. Using cross-sectional data from the Swiss Household Panel 1999, we account for non-linearity in educational attainment, and consider relative risk to unemployment – and how these two variables interact. We examine individual attitudes towards equal opportunities for foreigners and Swiss citizens. Here we show that individuals with low levels of education tend to oppose equal opportunities for foreigners, while for individuals with high levels of education such opposition can be observed with increasing unemployment risk. Our analysis demonstrates that values and beliefs can account for the negative attitudes of individuals with low levels of education. The association with unemployment risk for individuals with high levels of education, by contrast, is robust to this control for values and beliefs. It becomes clear that attitudes towards equal opportunities for immigrants are not a simple reaction to changes in the demographic composition of the labour force. Both values and economic factors play a central role.

Keywords: Immigration, attitudes towards foreigners, labour market competition, unemployment risk, values and beliefs

A foreigner who doesn't steal my job: The role of unemployment risk and values in attitudes towards foreigners

Marco Pecoraro[1] & Didier Ruedin[2]

1. Introduction

Over the past three decades, immigration has become one of the most prominent topics in election campaigns, systematically politicized by parties on the right. Across Western Europe, there appears to be growing support for anti-immigrant policies and organizations associated with anti-immigrant sentiments. The most common and perhaps most basic explanation for attitudes towards foreigners revolves around the idea of economic competition. Following this approach, negative attitudes towards foreigners and immigrants are seen as a direct reaction against unwanted competition in the labour market. Despite a growing literature on the attitudes of the mainstream society towards foreigners and immigrants, the exact role of education remains poorly understood. While an association between low levels of education and negative sentiments towards immigrants can be found across countries, the underlying mechanism remains poorly specified.

In this article, we assess to which extent the labour market competition hypothesis is relevant in shaping attitudes towards foreign citizens in Switzerland. We focus on Switzerland for various reasons: With more than a fifth of the population being foreign citizens, and a concentration of immigrants in both low-skilled and high-skilled occupations, Switzerland offers an ideal case to increase our understanding of the role of education in attitudes towards immigrants. The high level of economic prosperity would lead us to expect low levels of grievances against foreigners, but Switzerland has seen the electoral success of the right-wing Swiss People's Party – a party drawing heavily on a rhetoric that depicts immigration as a negative influence on Swiss citizens. In this rhetoric, it is taken for granted that more immigration leads to wage dumping and job displacement through increased competition in the labour market among native workers.

Most studies on individual attitudes towards immigrants draw on competitive threat theory, implicitly assuming or accepting that individuals are fundamentally largely self-interested. The basic premise is that attitudes are negative towards immigrants

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because immigrants are unwanted competitors (Borjas, 2011). Competitive threat theory can be considered the staple in research on attitudes to immigrants (Ceobanu and Escandell, 2010), probably because it is a theory that allows the formulation of clear hypotheses (Coenders and Scheepers, 1998). Whilst there is some empirical support for the basic premise of economic competition (e.g. Scheve and Slaughter, 2001; Mayda, 2006; Ortega and Polavieja, 2012), both economists and sociologists have refined the argument. In particular, non-economic explanations have been formulated, such as the role of identities or values and beliefs (e.g. Hainmueller and Hiscox, 2007; Sides and Citrin, 2007; Mueller and Tai, 2010). According to this strand of the literature, the labour market channel plays a less significant role in shaping attitudes towards immigration when values and beliefs are accounted for. In contrast, Facchini et al. (2013) argue that economic and non-economic determinants play a complementary role in explaining attitudes towards immigration.

Previous literature reveals two significant shortcomings. First, existing studies assume that the immigrants in a receiving country are either predominantly unskilled or predominantly skilled. For most countries, this means that the immigrant population is regarded as lower skilled than the native population. Accordingly, only low-skilled individuals of the native population are exposed to competition from immigration. By so doing, however, these studies ignore the fact that the skill distribution of immigration tends to be somewhat bimodal, with peaks at both the high-skill and low-skill ends of the distribution (e.g. Borjas et al., 1997; Kahn, 2004; Felbermayr and Kohler, 2007). This means that highly skilled workers are also exposed to competition from immigrants, with corresponding implications on attitudes towards immigration. Second, most studies equate education with skills (Malhotra et al., 2013). As stressed by Ortega and Polavieja (2012), however, defining skills solely in terms of educational attainment constitutes a very narrow definition of the human-capital resources that characterize native-foreigner competition in the labour market. It follows that these studies provide an incomplete test for the labour-market competition hypothesis.

For a better understanding of the role of education, we assess the relevance of the labour market competition hypothesis in explaining individual attitudes towards equal opportunities for foreign and Swiss citizens. To fulfil this objective, in a first step we examine to what extent education and labour-market skills correspond, rather than making the assumption that they largely correspond. We control for non-economic factors such as opinions on Swiss tradition and trust in organisations for the defence of human rights to further establish if attitudinal effects of education are not driven by values and beliefs. These variables tend to correlate with levels of education, and may indeed reflect different propensities to control prejudice (Blinder et al., 2013). To check the robustness of our results, skills are defined not only in terms of educational attainment but also in terms of occupational level. In the empirical analysis, we thus improve on most existing studies in two important aspects. First, we account for non-linearity in educational attainment, to account for the fact that foreigners are over-represented at both the bottom and the top of the education distribution. Second, while labour market competition is commonly operationalized by education, we additionally allow for interaction between education and risk of unemployment in order to better assess exposure to competition from foreigners. This means we circumvent the

assumption that only workers in low-skilled occupations are exposed to economic pressure from immigrants.

Using these more sophisticated measures of exposure to market competition, we find no evidence that – once values and beliefs are accounted for – workers with low levels of education hold a priori negative attitudes towards foreigners. This finding contrasts with most prior research. Moreover, we show that even if workers with a tertiary education robustly appear to have more positive attitudes towards foreigners than their counterparts with an upper secondary education, a higher risk of unemployment is found to be negatively associated with positive attitudes towards foreigners only among the highly educated.

2. Swiss immigration policy and labour market

As in many Western European countries, the post-war period in Switzerland was characterized by strong economic growth and the gradual liberalization of international trade. Immigration policy served as a useful macroeconomic instrument allowing the pro-cyclical exploitation of a low-skilled foreign labour force in order to meet the demands of the economy. This guest-worker immigration was characterized by state control and corporatist agreements, and initially both settlement and contact with the indigenous population was actively discouraged. Following pressure from the public and international organizations, as well as competition from other Western European countries offering a ‘better’ deal for labour migrants, this approach changed during the 1960s towards a model of immigration (Skenderovic and D’Amato, 2008). As elsewhere, the political debate on immigration came to be dominated by two opposing movements: one side highlighted economic growth, the other side voiced concerns of overpopulation, wage dumping, and a threat to local culture. The German concept of Überfremdung combines these concerns, with concurrent connotations of there being too many immigrants and immigrants that are ‘too foreign’.

Figure 1: newspaper adverts of the Swiss People's Party highlighting the purported impact of immigration on local wages and jobs, given both in French (left) and German (right). "That's enough! Stop mass immigration. To ensure that your salary does not drop and you do not lose your job!" The picture was alleged to connote an invasion by Nazi-Germans (Honegger, 2011)

The Swiss People's party (UDC/SVP) is the main actor for mobilizing anti- immigrant sentiments in Switzerland, taking up an issue about which a large part of the population is concerned (Ruedin, 2012). Between 1987 and 2007, the national vote share of this conservative party in parliament has increased from 11 per cent to 29 per cent.[3] During the same period, there were over 20 referendums and popular initiatives on immigration-related topics. Until recently, most attempts to introduce a more restrictive immigration regime using direct democratic means were defeated at the polls, such as in 2000 when voters rejected an initiative to limit the number of foreign citizens to 18 per cent. More recently, however, a ban on the building of new minarets was introduced in Switzerland using a popular initiative (in 2009), or a law on the automatic expulsion of foreigners guilty of crimes is awaiting enactment. The newspaper adverts in Figure 1 are recent examples of propaganda from the Swiss People's party according to which immigration induces wage dumping and job displacement. Whilst there appears to be growing support for anti-immigrant policies and organizations associated with anti-immigrant sentiments in some way, it is not the case that all Swiss voters have become more hostile to immigrants.

Since the 1990s, Swiss policy increasingly favoured European immigrants and introduced restrictive policies for so-called third-country nationals: immigrants from outside the European Union and the European Economic Area (EEA). With asylum seekers and family reunion, immigrant categories beyond labour immigration gained prominence, but the Swiss economy continued to struggle with a shortage of qualified labour (e.g. Huth, 2004; Zimmerli et al., 2009; Schellenbauer et al., 2010). Gradually

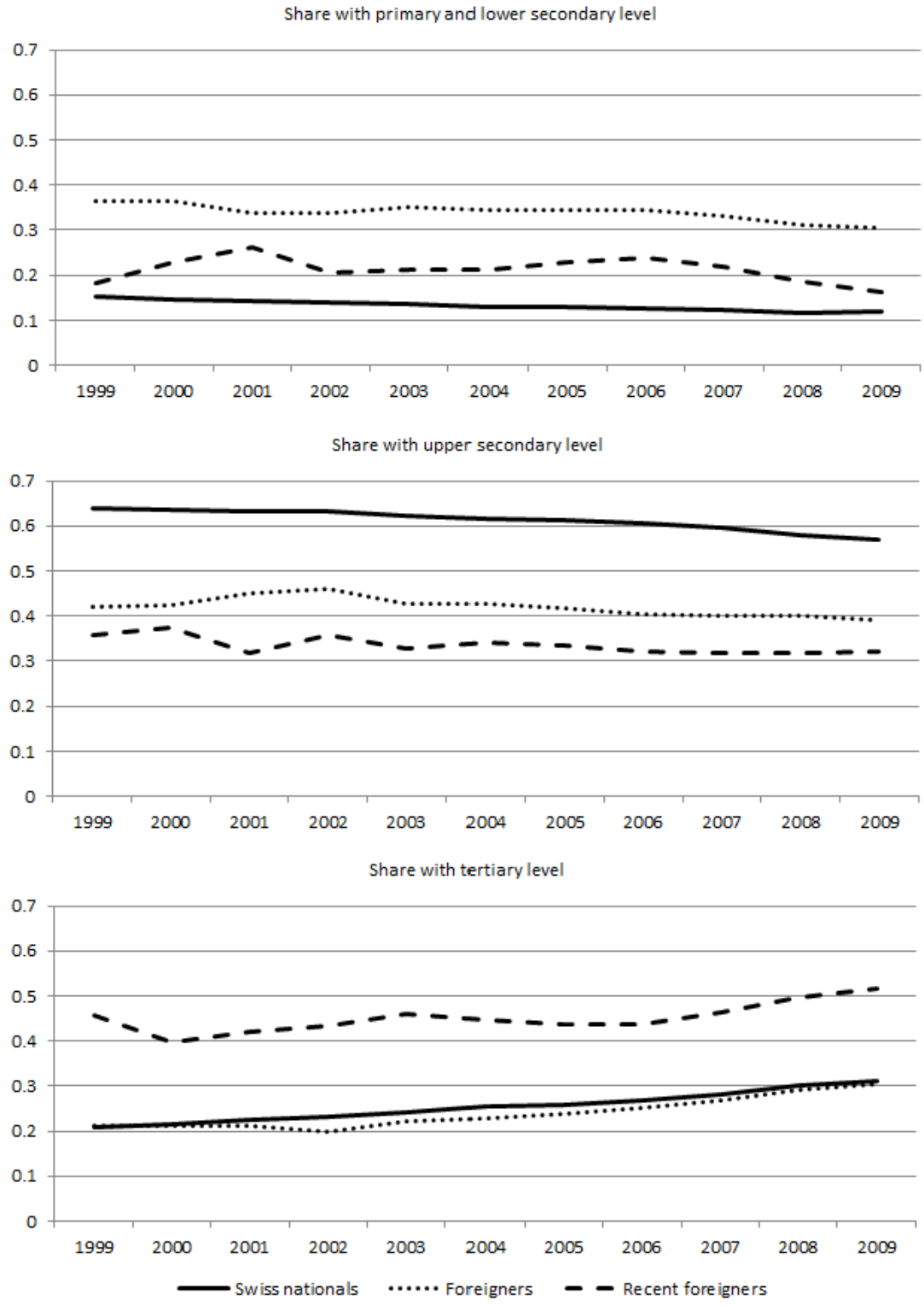
3 The party's growth seems to have slowed, and in the most recent national election in 2011, it was unable to increase its vote share, although it remains the largest party in parliament with 27 per cent of the vote.

working towards free mobility with EU/EEA countries, Swiss employers were advised to fill their needs with migrants from Western European countries since 1991 and particularly since 1998. It remains possible to recruit skilled workers from outside the EU/EEA, but quotas are in place. Non-European workers are only admitted if no Swiss or European worker can be recruited to fill the vacant job.[4] As a result of this focus on EU/EEA immigrants, the nature of migration flows has evolved from a mainly low-educated labour force to one favouring highly qualified labour (Pecoraro, 2005).

Figure 2 illustrates the result of this change in the nature of migration flows to Switzerland. It shows the distribution of educational attainment across the working-age population by different national groups (Swiss nationals, all foreigners, and foreigners settled in Switzerland within the previous five years). In the top panel, the highest fraction of workers with the lowest levels of education is found among foreign residents. On the one hand, this is a legacy of immigrant recruitment before the 1990s, where manual workers were actively sought. On the other hand, we note that recent immigrants are slightly more common in this category than Swiss citizens. This reflects the fact that the prioritizing of European immigration continues to attract immigrants with low levels of education – mostly from Italy and Portugal. The middle panel includes workers with upper secondary education, whose proportion is dominant among Swiss workers (around 60 per cent of Swiss workers fall into this category). By contrast, the proportion of tertiary-educated workers among recent foreigners clearly exceeds those among other groups in the bottom panel. Put differently, we observe a clear *bipolarity* in terms of educational attainment among foreigners. This concentration of immigrants at the high and low end reflects labour market shortages, and has not changed substantively in the decade under observation. The immigration policies in place seem successful in counteracting these shortages by means of immigration. Historically, this first meant a focus on low-skilled labour, and since the 1990s a focus on immigration of high-skilled labour. Immigration for other reasons than work (notably family reunification or asylum) along with continued immigration from countries like Italy and Portugal ensure a supply of low-skilled labour.

4 There are some exceptions with regard to intra-firm transfer and family reunification. Until 2004, priority was given to Swiss workers over EU-15/EFTA workers, but these restrictions have been removed.

Figure 2: Levels of education by national group, 1999 to 2009



Source: Swiss Labour Force Survey 1999-2009.

Notes: Individuals aged 18-65; recent foreigners are those residing in Switzerland for less than 5 years.

The increased focus on immigrants from European countries, however, did not abate concerns about immigration among the population. Immigration is consistently among

the most mentioned ‘most important problems’ in opinion surveys (Bornschier, 2010), and the continuing success of the Swiss People’s Party can be understood as an indication governmental policy does not sufficiently address concerns over immigration.

3. Attitudes towards immigration

Anti-immigrant sentiments may be abound in Western Europe, but it is not the case that everyone shares negative feelings towards foreigners. A common explanation is that individuals who directly compete against immigrants in the labour market are more likely to oppose immigrants. The Heckscher-Ohlin approach “predicts that immigrants pressure the wages of similarly skilled natives nationwide” (Scheve and Slaughter, 2001, p.133). It suggests that immigration leads to lower wages for native workers whose skills are substituted by immigrants (i.e. a negative wage effect). At the same time, wages are expected to increase for native workers with complementary skills to the immigrants (i.e. positive wage effect). It follows that if immigration increases the supply of unskilled labour relative to skilled labour, then the wages of skilled individuals are expected to rise, and the wages of unskilled individuals are expected to fall. The expectation is the opposite if immigrants are predominantly more skilled than the native workers. The implication on attitudes towards immigrants is that native workers who are more exposed to competition from immigrants are expected to have more negative attitudes, because it is in their rational self-interest to protect their wages.

Empirical research has generally supported this hypothesis, in particular that the relative skill composition of natives to immigrants in the receiving country determines the sign of correlations between education/skills and attitudes to immigration. In the US context, where it is often posited that highly skilled labour is the abundant factor and thus immigrants are less skilled than natives on average, individuals with lower levels of education are more likely to be against immigration (e.g. Espenshade and Hempstead, 1996; Scheve and Slaughter, 2001; Kessler, 2001). Low levels of education are also a consistent factor for studies covering Europe (e.g. Dülmer and Klein, 2005; Schneider, 2008; Ceobanu and Escandell, 2010). On the basis of cross-country survey data, Mayda (2006) and O’Rourke and Sinnott (2006) have confirmed this result. Moreover, they have shown that in countries where native workers are generally less skilled than immigrants – such as in the Philippines –, natives with lower levels of education tend to favour immigration. Using a more comprehensive measure of skills, Ortega and Polavieja (2012) have also provided support for the labour market competition hypothesis according to which individuals employed in jobs less exposed to competition from immigrants are relatively more in favour of immigration.

Only few studies reject the labour market competition hypothesis outright. For instance, Hainmueller and Hiscox (2007) have found that individuals with higher levels of education are more favourable to both skilled and unskilled immigrants. According to the authors, this result stems from the fact that education is a proxy for values and beliefs, suggesting that a different mechanism may be dominant rather than competitive threat. Sides and Citrin (2007) emphasize a social-psychological approach

to attitudes towards immigration, in which the role of values and identities outweighs the influence of material concerns. Their results show that cultural and national identities matter more than economic concerns for opinion formation. Malhotra et al. (2013) use a survey experiment to underline this explanation: cultural and economic threats are different phenomena, and individuals react differently depending on which threat they perceive. They find little evidence for labour-market competition as driving negative attitudes towards foreigners, but they only study a specific sector. The few studies using survey experimental settings apart, most of the aforementioned studies have tried to handle the association between education and values and beliefs by estimating specifications that account for indicators of individual values and beliefs. Despite these additional controls often being jointly significant, the relationship between education and attitudes towards foreigners remains strong. This finding suggests that the significant correlation between education and attitudes towards immigration is not primarily driven by differences in values and beliefs, reinforcing the relevance of the labour market competition hypothesis.

Few studies have examined the relationship between labour-market considerations and anti-immigration attitudes in Switzerland specifically, the case under study in this article. This relative lack of studies is surprising because a number of authors have used cross-country data from the European Social Survey (ESS) or the World Value Survey (WVS), both of which include Switzerland. Few of these cross-national studies, however, have presented their results per country or only for Switzerland. Exceptions are the studies from Hainmueller and Hiscox (2007) and Green et al. (2010). While Green et al. focus on how diversity in immigration influences attitudes across Swiss municipalities – drawing on contact theory and a perspective of cultural threat –, Hainmueller and Hiscox have demonstrated that, contrary to predictions by the labour market competition hypothesis, higher levels of education mean greater support for all types of immigration (i.e. both low- and high-skilled). To our knowledge, only Helbling (2011) has relied on data from a survey of Swiss citizens living in the city of Zürich. Investigating whether Swiss- Germans perceive German migrants as cultural and economic threats, Helbling claims to find support for the labour market competition hypothesis, in particular: negative attitudes towards immigrants from former Yugoslavia (who are more likely to have low levels of education) decrease with Swiss-Germans' level of education but there is no significant relationship between the level of education and the Swiss-Germans' dislike of German migrants.

4. Data

We use data from the Swiss Household Panel (SHP), a yearly panel following a random sample of households and their members in Switzerland since 1999. The SHP dataset provides useful information on various aspects of professional life as well as an indicator on whether respondents are in favour of Switzerland offering foreigners the same opportunities as those offered to Swiss citizens, or whether they favour better opportunities for Swiss citizens. Here we understand attitudes towards equal

opportunities for foreigners as a case of attitudes towards foreigners more generally, and use the two terms interchangeably.

The empirical analysis is based on the first wave of the panel, used as a cross-section. Accordingly, cross-sectional individual weights are used to produce representative estimates of the population in Switzerland.[5] The sample size in the first wave of the SHP is the highest, with the smallest amount of missing values. By choosing this year, we can circumvent complications associated with sample selection and attrition. More importantly, in 1999 the question on equal opportunities for foreigners was asked in a more fine-grained way than in subsequent years. While the variable capturing attitudes towards equal opportunities for foreigners is available in all waves, it generally uses an ordered response with three categories ('in favour of equal opportunities for foreigners' (1), 'neither of them' (2), 'in favour of better opportunities for Swiss citizens' (3)). In 1999, individuals responding 1 or 3 were also asked whether they are rather in favour or strongly in favour. This allows us to code the response as an ordered response with five categories. Moreover, two important variables of individual values and beliefs are only available for 1999, namely opinions on Swiss tradition and trust in organisations for the defence of human rights. Both variables correspond to concepts highlighted by the relevant theory.

Our sample consists of Swiss citizens of voting age who are active in the labour market, and we only keep respondents who reported valid information for the variables of interest (i.e. attitudes towards foreigners and risk of unemployment). In order to check whether education reflects non-labour-market considerations, we additionally used sub-samples of individuals not in the labour force: both the total sub-sample and only the retirees – i.e. those aged 65 and older. Table 6 in the appendix gives further details on the sample selection procedure.

5. Methods

To explain attitudes towards equal opportunities for foreigners, we estimate the following baseline equations broadly similar to the specification adopted in the literature analysing the determinants of attitudes towards immigration:

$$y_i^* = \alpha_S S_i + X_i \beta + \varepsilon_i \qquad (1)$$

$$y_i^* = \alpha_1 L_{1i} + \alpha_3 L_{3i} + X_i \beta + \varepsilon_i \qquad (2)$$

5 The SHP dataset includes cross-sectional weights to adjust for non-response at the individual and household level. See Graf (2009) for a detailed description of the procedures implemented for computing weights in the SHP. Using Stata's svy command, all regression analyses incorporate cross-sectional individual weights to take into account the sampling design of the SHP and obtain reliable estimates concerning the population of interest. Stata calculates robust standard errors using the 'linearization' variance estimator based on a first order Taylor series linear approximation.

where the dependent variable y_i^* is the unobserved latent variable for attitudes towards foreigners, X_i is a vector of observed personal characteristics, including a dummy for gender, age, age squared, a binary variable for father's and mother's national origin respectively. Two specifications are used: Equation (1) incorporates years of schooling S_i, while in equation (2) years of schooling are replaced by levels of schooling L_{hi} (with $h \in \{1, 2, 3\}$). According to the second specification, individuals with primary or lower secondary education (h=1) and individuals with tertiary education (h=3) are compared to those with upper secondary education (h=2). Years and levels of schooling are both derived from the highest level of education achieved, consisting of 10 levels classified in an increasing hierarchical order. While Table 7 in the appendix shows how each level of education is translated into the total number of years of schooling,[6] Table 8 in the appendix presents all explanatory variables included in the regression analyses, and descriptive sample statistics are shown in Table 9 in the appendix.

In order to account for the ordinal nature of the observed dependent variable y_i, we use ordered probit estimations where

$$\varepsilon_i \mid \text{covariates} \sim Normal(0,1).$$

The continuous latent variable y_i^* can be thought of as the *propensity* to exhibit positive attitudes towards foreigners. The observed response categories are tied to the latent variable as follows:

$$y_i = \begin{cases} 1 & \text{Strongly in favour of better opportunities for Swiss citizens} & \text{if } y_i^* \le \mu_1 \\ 2 & \text{Rather in favour of better opportunities for Swiss citizens} & \text{if } \mu_1 < y_i^* < \mu_2 \\ 3 & \text{Neither of them} & \text{if } \mu_2 < y_i^* < \mu_3 \\ 4 & \text{Rather in favour of equal opportunities for foreigners} & \text{if } \mu_3 < y_i^* < \mu_3 \\ 5 & \text{Strongly in favour of equal opportunities for foreigners} & \text{if } \mu_4 < y_i^* \end{cases}$$

Foreigners recently settled in Switzerland are over-represented at both the bottom and particularly the top of the education distribution (compare figure 2). Following labour market competition theory, we expect low- and high-educated Swiss workers to be more opposed than those in the middle category. Accordingly, we formulate the following formal test of the labour market competition thesis:

$$\hat{\alpha}_1 < 0 \text{ and } \hat{\alpha}_3 < 0$$

6 Following Flückiger and Ramirez (2000) and de Coulon et al. (2003), a duration of 7 years has been attributed to workers with incomplete compulsory school; in terms of levels of schooling completed, these individuals have been included among those with primary or lower secondary education (h=1).

As recognized by an increasing number of scholars (e.g. Scheve and Slaughter, 2001; Hainmueller and Hiscox, 2007), if education is highly correlated with individual values and beliefs, the relationship between the educational attributes of workers and their attitudes towards foreigners should have very little, if anything, to do with fears about labour market competition:

$$\hat{\alpha}_1 = 0 \text{ and } \hat{\alpha}_3 = 0$$

Scheve and Slaughter (2001) propose two procedures to test whether education affects attitudes through non-economic factors. First, the baseline models are also estimated for the not-in-labour-force sub-sample; if the estimates associated with education deliver the same conclusion than those computed on the basis of the sample of workers, years or levels of schooling are probably unsatisfactory measures of labour-market skills. Another check consists of extending the baseline models to account for indicators of individual values and beliefs such as opinions on Swiss tradition and trust in organisations for the defence of human rights. In addition, we perform sensitivity analysis in which we replace levels of education by levels of occupation using the 1-digit ISCO code condensed into four categories, as did Dumont and Monso (2007).

$$y_i^* = \tilde{\alpha}_0 \tilde{L}_{0\mathrm{i}} + \tilde{\alpha}_1 \tilde{L}_{1\mathrm{i}} + \tilde{\alpha}_3 \tilde{L}_{3\mathrm{i}} + X_i\beta + \quad \varepsilon_i \qquad (3)$$

where $\tilde{L}_{0i}$ is a binary variable for missing values, $\tilde{L}_{1\mathrm{i}}$ is a binary variable for jobs demanding low skills (=1 for ISCO category 9), $\tilde{L}_{2\mathrm{i}}$ is a binary variable for jobs demanding intermediate skills (=1 for ISCO categories 4 to 8) and $\tilde{L}_{3\mathrm{i}}$ is a binary variable for jobs demanding high skills (=1 for ISCO categories 1 to 3). We will use separate models that include levels of education and levels of occupation to directly relate to the different approaches common in the literature. At the same time, this approach will demonstrate the robustness of the results – which will be immediately apparent from the juxtaposed figures and tables.

In line with Ortega and Polavieja (2012), we furthermore rely on an extended model to understand how *unemployment risk* induces more exposure to labour market competition from foreigners, which can be expected to lead to negative attitudes towards foreigners.

$$y_i^* = \alpha_1 L_{1\mathrm{i}} + \alpha_3 L_{3\mathrm{i}} + \gamma U_i + X_i\beta + \varepsilon_i \qquad (2')$$

$$y_i^* = \tilde{\alpha}_0 \tilde{L}_{0\mathrm{i}} + \tilde{\alpha}_1 \tilde{L}_{1\mathrm{i}} + \tilde{\alpha}_3 \tilde{L}_{3\mathrm{i}} + \gamma U_i + X_i\beta + \quad \varepsilon_i \qquad (3')$$

where the self-assessed risk of unemployment in the following 12 months U_i, based on a scale from 0 (‘no risk at all’) to 10 (‘a real risk’), is added as an additional variable to the models in equations (2) and (3). In order to investigate possible interactions between unemployment risk and education, we also estimate the model on three sub-samples: (i) individuals with (in)complete primary or lower secondary level education, (ii) those with upper secondary level education, and (iii) those with tertiary level

education. As an additional robustness check, we provide estimates by level of occupation rather than education.

It is important to keep in mind that the risk of unemployment is unlikely to be randomly determined; in other words, this variable is probably endogenous in our equations and thus correlated with ε_i . Ignoring this endogeneity problem may lead to biased estimates of the attitudinal effects associated with the risk of unemployment. We test for endogeneity of U_i using a similar version of the two-step approach developed by Rivers and Vuong (1988). Following Wooldridge (2010), we run the OLS regression U_i on our control variables and the variable *unemployment occurrence in the last 12 months* as an instrument,[7] save the residuals, and run the ordered probit y_i on our control variables, U_i and the residuals from the first step. The t statistic on the latter is a valid test of the null hypothesis that U_i is exogenous. Our choice of instrument is motivated by the well-documented *scarring* effects of unemployment experience on subsequent employment outcomes (e.g. Arulampalam et al., 2000, 2001; Gangl, 2003). Accordingly, we expect a significant impact of unemployment occurrences in the previous year on the future risk of unemployment at work.

6. Findings

In a first step, we examine the relationship between education and attitudes towards equal opportunities for immigrants. Ordered probit estimates from the baseline models are presented in Table 1. In line with prior research on the determinants of attitudes towards immigration, estimates from equation (1) in the first column show that the coefficient associated with years of education is significantly positive; this result is confirmed by estimates from equation (2) in the second column. Workers with low levels of education tend to exhibit anti-foreigner attitudes ($\hat{\alpha}_1 < 0$) while those with high levels of education tend to hold positive attitudes ($\hat{\alpha}_3 > 0$). Most of the other estimates have the expected sign, in particular: having a mother or a father of foreign origin increases the propensity to exhibit positive attitudes towards foreigners.

The negative relationship obtained between education and anti-foreigner attitudes may be attributed to the fact that individuals with low levels of education are more likely to be conservative in the sense of greater ties to Swiss tradition and lower trust in organisations for the defence of human rights (compare Kam, 2012; Hatemi et al., 2011, for potential underlying mechanisms). When running the ordered probit regression on the sub-sample of those out of the labour force, we get substantively the same results as for the baseline models, regardless of whether the entire sub-sample or only retired people are considered. Indeed, as shown in Table 2, all estimates associated with years of schooling are significantly positive and those derived from

7 Based on ordinal values of the variable 'unemployment occurrence in the last 12 months', we construct the following binary variable: no occurrence (reference category) vs. once or several times.

equation (2) provide the same pattern of results. According to this initial set of checks, the educational variables seem to measure non-labour-market considerations.

In a second series of check procedures, we control for individual indicators of values and beliefs when estimating the baseline models. *F* tests, reported in the last row of Table 3, indicate that their inclusion is jointly significant.[8] As presented in the fourth column of the same table, the coefficient associated with years of education is still significant when values and beliefs are taken into account. In contrast, when non-linearity in educational attainment is considered, the significant relationship between a low level of education and attitudes vanishes ($\hat{\alpha}_1 = 0$), while the coefficient associated with a high level of education remains significantly positive. Replacing levels of schooling with levels of occupation does not change the previous statement, in particular: only the category of workers in jobs demanding high skills is associated with positive attitudes towards foreigners, whether or not we control for values and beliefs.

All in all, these findings indicate that the labour market competition hypothesis is rejected since the strong relationship between a low level of education and anti-foreigner attitudes is mainly due to the omission of values and beliefs. This finding is in line with Malhotra et al. (2013) and their limited meta-analysis. The insignificant attitudinal effects for the low-educated workers and those in low-skilled jobs are consistent with results from recent studies on the wage impact of immigration in Switzerland (Gerfin and Kaiser, 2010; Favre, 2011) showing no evidence for negative wage effects in low-skilled occupations. Favre argues that there is little room for downward adjustment of wages in low skill occupations since most of the latter are covered by collective agreements ensuring minimum wage protection. Put differently, immigration flows to Switzerland may simply not put native workers under pressure.

With respect to the remaining significant positive association between a high level of education/skills and positive attitudes, recall that our proxies only cover some aspects of relevant values and beliefs. For instance, workers with higher education may be more prone to have friends from different countries, a characteristic that we are not able to capture on the basis of our data. We are also unable to capture the tendency to control prejudice (Blinder et al., 2013), which is more prevalent among those with higher levels of education. On the other hand, it could indeed be in the interest of skilled natives to ensure equal access for legally admitted migrants to the labour market more generally. Recent research has stressed the role of skilled migration in

8 As noted by Hainmueller and Hiscox (2007) and Ortega and Polavieja (2012) among others, the indicators of individual values and beliefs might be endogenous, in the sense that the relationship between the values/beliefs and education may result from concerns about labour market competition. To deal with this issue, we follow the procedure suggested by Hainmueller and Hiscox which consists of estimating levels of (a) trust in organisations for the defence of human rights, and (b) attachment to Swiss tradition using education as a predictor. If the indicators of individual values and beliefs are endogenous to labour market concerns, the relationship between these indicators and education should be significant among individuals in the labour force, but not significant among those out of the labour force. Table 12 in the appendix presents significant estimates of the same sign for the education variable among both sub-samples, meaning that the association between values and education is *not* driven by labour market concerns. The same conclusion follows when education is replaced by occupation.

generating benefits for destination countries (e.g. Chiswick, 1999; Hunt and Gauthier-Loiselle, 2010; Kerr and Lincoln, 2010; Stuen et al., 2012). This is particularly relevant in the Swiss case where some professional fields are regularly experiencing a shortage of qualified labour, despite increasing levels of highly-skilled immigrants (e.g. Huth, 2004; Zimmerli et al., 2009; Schellenbauer et al., 2010).

Table 1: Ordered probit model: Baseline models with education

Equation	(1)	(2)
S: Years of schooling	0.086**	
	(0.007)	
L_2 (base)		
L_1: Compulsory education		-0.199**
		(0.054)
L_3: Tertiary education		0.349**
		(0.040)
Male (base)		
Female	0.003	0.003
	(0.035)	(0.035)
Age	0.015*	0.017*
	(0.009)	(0.009)
Age^2	-0.000**	-0.000**
	(0.000)	(0.000)
Father: Swiss (base)		
Father: dual nationality	0.306**	0.318**
	(0.135)	(0.136)
Father: foreign nationality	0.171**	0.183**
	(0.074)	(0.073)
Father: missing nationality	0.256	0.244
	(0.167)	(0.165)
Mother: Swiss (base)		
Mother: dual nationality	0.130	0.132
	(0.082)	(0.082)
Mother: foreign nationality	0.191**	0.200**
	(0.076)	(0.075)
Mother: missing nationality	0.088	0.079
	(0.172)	(0.171)
Canton dummies	yes	yes
Observations	4222	4222
Percentage correctly predicted	33.59%	33.63%

Linearized standard errors in parentheses, ** p<0.05, * p<0.10

Source: Swiss Household Panel, first wave in the *SHP_I* sample (1999).

Notes: Coefficient estimates, data are weighted.

Dependent variable: attitudes towards equal opportunity for foreigners; the label 'compulsory education' captures primary and lower secondary education.

Table 2: Ordered probit model: Active in the labour market (baseline models) vs. Out of the labour force

	Active in the labour market		Out of the labour force			
			Total sample		65 years old & more	
Equation	(1)	(2)	(1)	(2)	(1)	(2)
S: Years of schooling	0.086**		0.061**		0.059**	
	(0.007)		(0.010)		(0.015)	
L_1: Compulsory education		-0.199**		-0.198**		-0.250**
		(0.054)		(0.061)		(0.095)
L_3: Tertiary education		0.349**		0.281**		0.253**
		(0.040)		(0.075)		(0.109)
Control variables	yes	yes	yes	yes	yes	yes
Canton dummies	yes	yes	yes	yes	yes	yes
Observations	4,222	4,222	1,877	1,877	776	776
Percentage correctly predicted	33.59%	33.63%	32.98%	33.03%	33.76%	33.89%

Linearized standard errors in parentheses, ** p<0.05, * p<0.10

Source: Swiss Household Panel, first wave in the *SHP_I* sample (1999).

Notes: Coefficient estimates, data are weighted.

Dependent variable: attitudes towards equal opportunity for foreigners; the label 'compulsory education' captures primary and lower secondary education.

Table 3: Ordered probit model: Adding individual values and beliefs

	No proxies for values and beliefs			Proxies for values and beliefs		
Equation	(1)	(2)	(3)	(1)	(2)	(3)
S: Years of schooling	0.086**			0.054**		
	(0.007)			(0.007)		
L_1: Compulsory education		-0.199**			-0.057	
		(0.054)			(0.055)	
L_3: Tertiary education		0.349**			0.222**	
		(0.040)			(0.041)	
$\widetilde{L}_0$: Missing			0.011			-0.064
			(0.100)			(0.102)
$\widetilde{L}_1$: Low skills			-0.005			-0.007
			(0.079)			(0.080)
$\widetilde{L}_3$: High skills			0.470**			0.307**
			(0.036)			(0.038)
Proxies for values and beliefs	no	no	no	yes	yes	yes
Control variables	yes	yes	yes	yes	yes	yes
Canton dummies	yes	yes	yes	yes	yes	yes
Observations	4,222	4,222	4,222	4,222	4,222	4,222
Percentage correctly predicted	33.59%	33.63%	33.92%	40.50%	40.67%	40.67%
Test for joint significance of values and beliefs						
$\succ F(16,4200)$				34.02**	35.70**	34.10**

Linearized standard errors in parentheses, ** p<0.05, * p<0.10

Source: Swiss Household Panel, first wave in the *SHP_I* sample (1999).

Notes: Coefficient estimates, data are weighted.

Dependent variable: attitudes towards equal opportunity for foreigners; the label 'compulsory education' captures primary and lower secondary education.

6.1. Risk of Unemployment

Thus far we were unable to find clear support for the labour competition theory. Relying on education or occupation variables, however, provides an incomplete picture of the labour market exposure to foreign competitors. Accordingly, in this section we go a step further by including the risk of unemployment in the models in equations (2) and (3). As shown in the first column of Table 4 and Table 5 respectively, the findings outlined above remain valid when including individual risk of unemployment in the models: only the workers with a tertiary education or in high-skilled occupations have significantly more positive attitudes towards foreigners. Moreover, the risk of

unemployment does not seem to be relevant in explaining attitudes towards foreigners in itself; its coefficient estimates are statistically insignificant. However, estimating the ordered probit model separately for each level of education or occupation shows that the propensity to hold positive attitudes towards foreigners decreases with an increasing risk of unemployment only among high-educated workers or those in jobs demanding high skills (cf. second, third and fourth column in Table 4 and Table 5 respectively). Put differently, among highly educated workers, attitudes towards foreigners become more negative with higher risk of unemployment. This result is independent of whether values and beliefs are controlled for (cf. Table 10 and Table 11 in the appendix).

This pattern is highlighted in Figure 3 and Figure 4 where predicted probabilities for y_i=1 (i.e. strongly against equal opportunities) and y_i=5 (i.e. strongly in favour of equal opportunities) are plotted as a function of self-reported risk of unemployment by education or occupation level, respectively. All explanatory variables in X_i are set to their mean. While the highest change in predicted probabilities – visible by the steepest curve – is found among highly-educated workers or those in jobs demanding high skills, there is no significant change with an increasing risk of unemployment when considering other levels of education or skills. As illustrated in Figure 3, for a ten-unit increase in unemployment risk (from 0 to 10), the highly educated see the predicted probability of being strongly against equal opportunities doubling from 0.05 to 0.1 whereas their predicted probability of being strongly in favour of equal opportunities decreases by more than 10 percentage points. The predicted probabilities by occupation level shown in Figure 4 lead to the same conclusion.

Table 4: Ordered probit model: Adding unemployment risk in equation (2)

Sample	All	Education level		
		L_1	L_2	L_3
L_1: Compulsory education	-0.055			
	(0.056)			
L_3: Tertiary education	0.212**			
	(0.041)			
U: Unemployment risk	-0.008	0.009	-0.002	-0.037**
	(0.007)	(0.019)	(0.009)	(0.016)
Control variables	yes	yes	yes	yes
Canton dummies	yes	yes	yes	yes
Proxies for values and beliefs	yes	yes	yes	yes
Observations	4,090	537	2,412	1,141
Percentage correctly predicted	40.78%	40.97%	39.34%	45.66%
Test for joint significance of the excluded instruments in the first stage				
$\succ$ F statistic	46.24**	6.82**	29.59**	12.36**
Test for exogeneity of U_i				
$\succ$ t statistic	-0.64	-0.17	-1.10	0.18

Linearized standard errors in parentheses, ** p<0.05, * p<0.10

Notes: Coefficient estimates, data are weighted.

Source: Swiss Household Panel, first wave in the *SHP_I* sample (1999).

Dependent variable: attitudes towards equal opportunity for foreigners; the label 'compulsory education' captures primary and lower secondary education.

Table 5: Ordered probit model: Adding unemployment risk in equation (3)

Sample	All	Occupation level		
		$\widetilde{L}_0$ & $\widetilde{L}_1$	$\widetilde{L}_2$	$\widetilde{L}_3$
$\widetilde{L}_0$: Missing	-0.058			
	(0.112)			
$\widetilde{L}_1$: Low skills	-0.004			
	(0.081)			
$\widetilde{L}_3$: High skills	0.288**			
	(0.038)			
U: Unemployment risk	-0.008	-0.006	0.011	-0.037**
	(0.007)	(0.029)	(0.010)	(0.011)
Control variables	yes	yes	yes	yes
Canton dummies	yes	yes	yes	yes
Proxies for values and beliefs	yes	yes	yes	yes
Observations	4,090	305	1,651	2,134
Percentage correctly predicted	40.86%	40.66%	37.19%	43.91%
Test for joint significance of the excluded instruments in the first stage				
$\succ$ F statistic	45.67**	6.28**	24.07**	18.31**
Test for exogeneity of U_i				
$\succ$ t statistic	-1.18	-0.28	0.62	-1.30

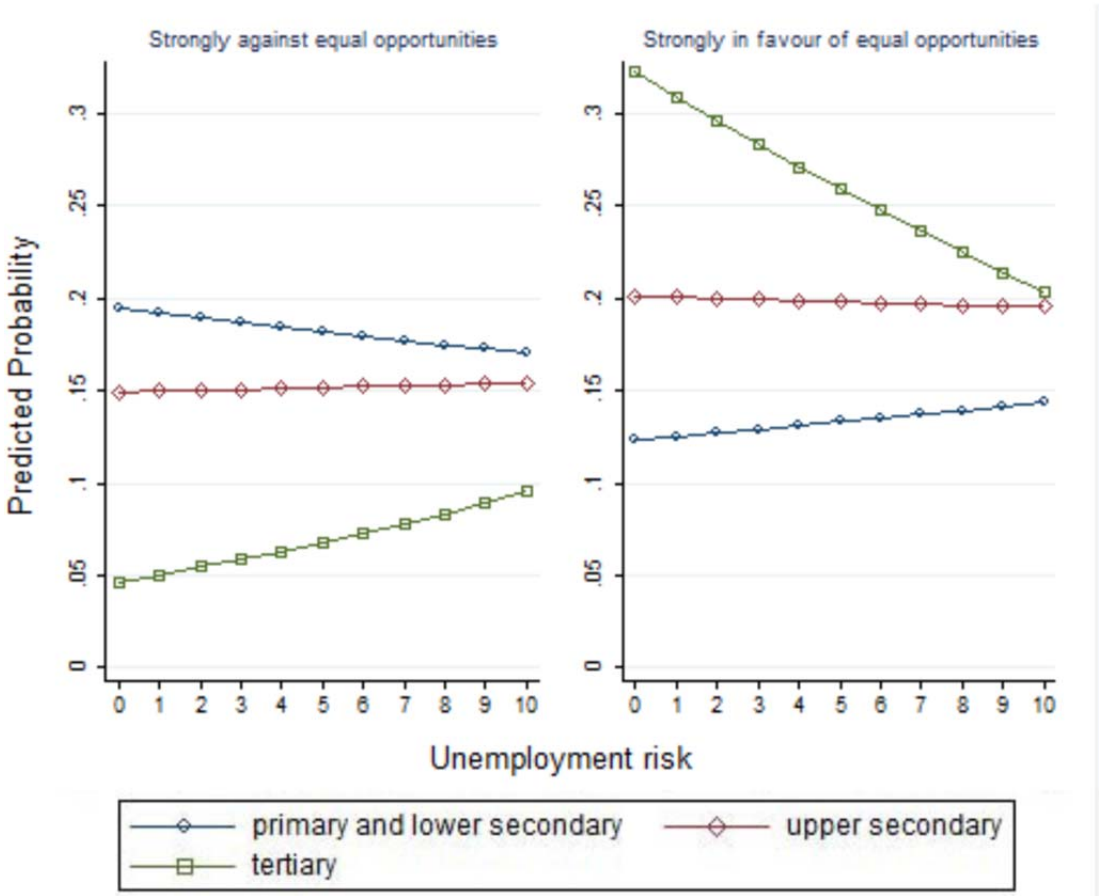
Linearized standard errors in parentheses, ** p<0.05, * p<0.10

Notes: Coefficient estimates, data are weighted.

Source: Swiss Household Panel, first wave in the *SHP_I* sample (1999).

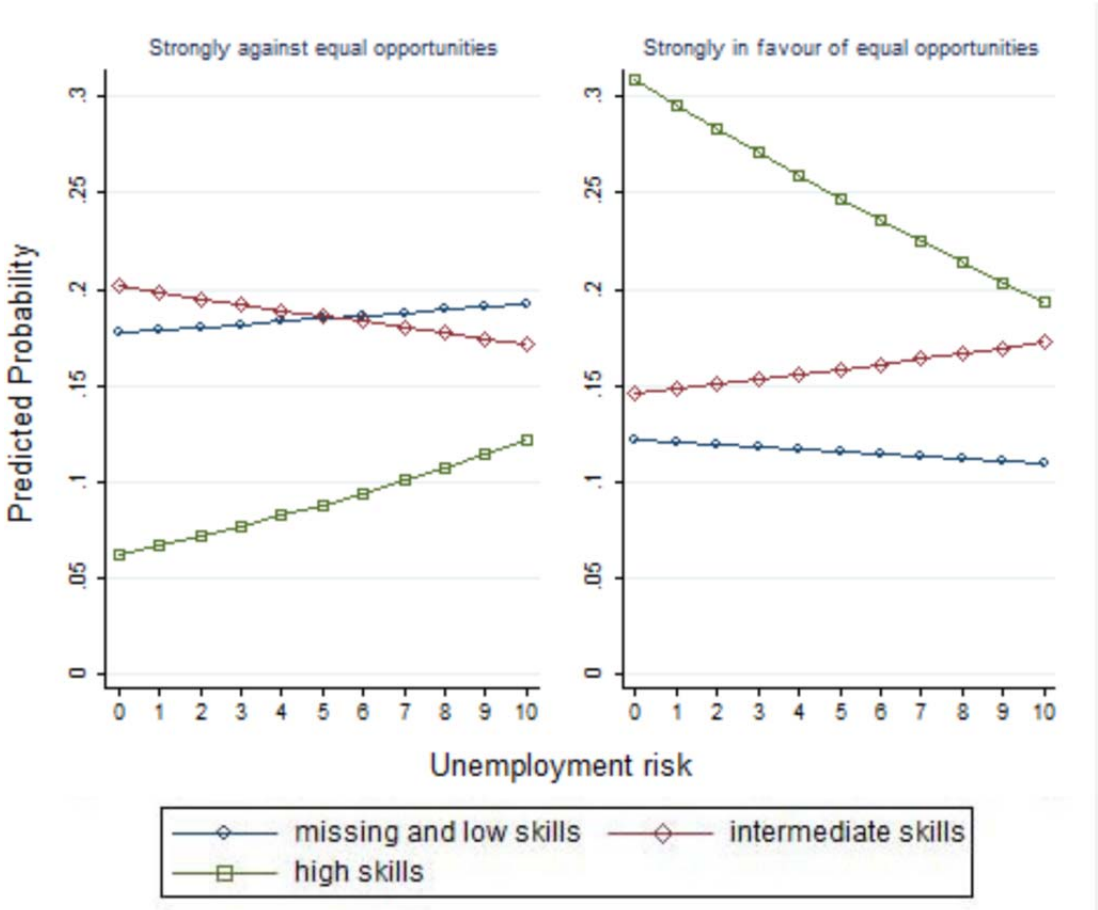
Dependent variable: attitudes towards equal opportunity for foreigners.

Figure 3: Predicted probabilities by level of education



Note: Predicted probabilities for y_i=1 ('strongly in favour of better opportunities for Swiss citizens') and y_i=5 ('strongly in favour of equal opportunities for foreigners') based on estimates from Table 4 (2nd, 3rd & 4th columns) when all explanatory variables in X_i are set to their mean values. This figure corresponds to figure 4 where the level of occupation is used.

Figure 4: Predicted probabilities by level of occupation



Note: Predicted probabilities for y_i=1 ('strongly in favour of better opportunities for Swiss citizens') and y_i=5 ('strongly in favour of equal opportunities for foreigners') based on estimates from Table 5 (2nd , 3rd & 4th columns) when all explanatory variables in X_i are set to their mean values. This figure corresponds to figure 3 where the level of education is used.

As a final test, we consider endogeneity bias using the variable *unemployment occurrence in the last 12 months* as an instrumental variable. The result of the exogeneity test is presented at the bottom of Table 4 and Table 5. It should be emphasized that our instrument is a significant predictor of U_i in the first- stage equation, with most values of the *F* statistic exceeding 10 (cf. penultimate rows).[9] In addition, low values of the *t* statistic indicate that the residuals in the second stage are never significant at a level of 10% (cf. last rows), meaning the null hypothesis of exogeneity is not rejected in all samples. Thus, there is no evidence of endogeneity bias in the estimated coefficients of U_i.

9 Stock and Watson (2003) suggest a simple rule of thumb according to which a first-stage *F* statistic less than 10 indicates weak instruments, i.e. instruments in first-stage linear regressions are weakly correlated with the included endogenous variables.

7. Conclusion

This paper has examined the labour-markets determinants of attitudes towards equal opportunities for foreigners, using data from the 1999 wave of the Swiss Household Panel survey. The case of Switzerland was chosen because of its high share of foreign citizens and a clear concentration of immigrants in both low-skilled and high-skilled occupations. This makes Switzerland an ideal case to study the labour market competition hypothesis, compared to countries where immigrants are concentrated at one end of the scale only. While most existing studies use educational attainment to measure labour-market skills, it is increasingly acknowledged that such an approach is likely to lead to incorrect conclusions. The level of education attained reflects non-economic unobservables in addition to actual skill endowment. Here we control for proxies of values and beliefs – opinions on Swiss tradition and trust in organisations for the defence of human rights – when estimating the attitudinal effects of education. Moreover, unlike most earlier studies, we account for non-linearity in the relationship between education and attitudes since foreign workers are over-represented at both the bottom and the top of the education distribution. In a further step, the self-assessed risk of unemployment in the following 12 months is added to the baseline models to capture individual exposure to competition from foreigners. As an additional contribution to the literature, we also interact this variable with the level of education in order to relax the assumption that the attitudinal impact of unemployment risk is the same for different educational levels. To assess the robustness of our findings, we have also tested the labour market competition hypothesis using levels of occupation rather than levels of education.

Based on the strong assumption that education is uncorrelated with values and beliefs, estimating the attitudinal effects of education by ordered probit produces results in line with the literature on the determinants of attitudes towards immigration: higher levels of education are positively related to positive attitudes towards foreigners. Put differently, low-educated workers are least in favour of equal opportunities for foreigners, while we find the opposite direction for highly educated workers. These results, however, are consistent with omitted variable bias, because once indicators for values and beliefs are taken into account in a model that allows for non-linear education effects, the impact of having a low level of education on anti-foreigner attitudes is no longer significant: low-educated workers do not exhibit anti-foreigner attitudes as predicted by the labour market competition hypothesis. This result contrasts with most existing studies in the field.

With regard to highly educated workers, they are more likely to express positive views towards foreigners than their counterparts with an upper secondary education. This is true irrespective of the control for values and beliefs. Put differently, the variables of values and beliefs included here are unable to explain the attitudinal difference between individuals with upper secondary and tertiary education. In contrast to the other groups considered, however, highly educated workers have increasingly negative attitudes towards foreigners with an increasing risk of unemployment. This finding somehow complements research by Ortega and Polavieja (2012) who showed that highly educated workers protected by more job-specific human capital tend to have

more favourable attitudes towards immigrants. According to our results, the labour market competition hypothesis does hold, but only for Swiss workers with a tertiary education or in high-skilled occupations.

On the whole, the findings in this article reveal that attitudes towards equal opportunities for foreigners cannot be entirely attributable to the skill composition of the foreign workforce within the Swiss labour market. Indeed, we have demonstrated that the strong negative link between a low level of education and positive attitudes towards foreigners is driven by differences in values and beliefs. At the same time, the positive link between a high level of education and positive attitudes towards foreigners hides a more complex picture, in which a higher risk of unemployment leads to less positive attitudes towards foreigners. With this, we find support for labour-force competition theory, but only for specific groups: highly educated and highly skilled workers. At the other end of the skills scale, negative attitudes towards foreigners seem to be driven by individual values and beliefs. We would argue that economic and cultural explanations should not be seen as competing theories for attitudes towards foreigners, but as complementary mechanism that affect different parts of the population in distinct ways.

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Appendix A

Table 6: Individuals retained in the empirical analysis

Selection criteria	Sample/Year					
	SHP_I/1999					
	Active in the labour market		*Out of the labour force*			
			Total sample		65 & more	
	No. of *i*	%	No. of *i*	%	No. of *i*	%
Individual interview completed	5,172	100.0	2,498	100.0	845	100.0
Registered Swiss voters	4,378	84.6	1,958	78.4	804	95.1
Valid information on						
▷ attitudes towards foreigners	4,222	81.6	1,877	75.1	776	91.8
▷ risk of unemployment	4,090	79.1				

Source : Swiss Household Panel, first wave in the *SHP_I* sample, data are unweighted.

Table 7: Conversion scale between levels and years of schooling

Description	Years of schooling
Primary and lower secondary levels	
Compulsory school, elementary vocational training	9
Domestic science course, 1 year school of commerce	10
Upper secondary level	
General training school	12
Apprenticeship	12
Full-time vocational school	12
Maturity (high school)	12
Tertiary level	
Technical or vocational school	15
Higher vocational college	15
University	18
PhD	21

Source: Codebook for CNEF variables in the SHP (Lipps and Kuhn, 2009).

Table 8: Explanatory variables included in the empirical analysis

Ccontinuous variables	Dummy variables	Ref.
Years of education (S)	**Gender**	
	Male	×
Age in year of interview	Female	
	Levels of education	
Age squared	(In)complete primary and lower secondary (L_1)	
	Upper secondary (L_2)	×
Risk of unemployment in the following 12 months $(0, 1, \ldots, 10)$	Tertiary (L_3)	
	Levels of occupation	
	Missing occupation ($\widetilde{L}_0$)	
	Jobs demanding low skills ($\widetilde{L}_1$)	
	Jobs demanding intermediate skills ($\widetilde{L}_2$)	×
	Jobs demanding high skills ($\widetilde{L}_3$)	
	Father: nationality at birth	
	Swiss nationality	×
	Dual nationality	
	Foreign nationality	
	Missing value	
	Mother: nationality at birth	
	Swiss nationality	×
	Dual nationality	
	Foreign nationality	
	Missing value	
	Opinion on Swiss traditions	
	Strongly in favour of defending traditions	×
	Rather in favour of defending traditions	
	Rather open towards other countries	
	Strongly open towards other countries	
	Neither of them	
	Missing value	
	Trust in organisations defending human rights	
	0 (no confidence)	×
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10 (full confidence)	
	Missing value	

Table 9: Summary statistics

Variables	Mean	Linearized S.E.	95% C.I. Lower	95% C.I. Upper
$y_i = 1$	0.1608761	0.0057755	0.1495531	0.1721992
$y_i = 2$	0.1784	0.0060009	0.1666351	0.190165
$y_i = 3$	0.0971861	0.0046759	0.0880188	0.1063534
$y_i = 4$	0.3166985	0.0073206	0.3023463	0.3310508
$y_i = 5$	0.2468392	0.0067239	0.2336567	0.2600216
S_i: Years of schooling	12.90623	0.0416415	12.82459	12.98787
L_{1i}: Compulsory education	0.135282	0.0053964	0.1247022	0.1458617
L_{2i}: Upper secondary education	0.5826827	0.0077678	0.5674537	0.5979118
L_{3i}: Tertiary education	0.2820353	0.0071061	0.2681036	0.295967
$\widetilde{L}_{0i}$: Missing occupation	0.0332058	0.0028549	0.0276088	0.0388028
$\widetilde{L}_{1i}$: Low skills	0.0477776	0.0033813	0.0411484	0.0544068
$\widetilde{L}_{2i}$: Intermediate skills	0.4034345	0.0076877	0.3883626	0.4185064
$\widetilde{L}_{3i}$: High skills	0.5155822	0.007825	0.5002411	0.5309232
Female	0.4561178	0.0077708	0.440883	0.4713526
Age	42.3076	0.2129871	41.89003	42.72517
Father: Swiss nationality	0.8423333	0.0056971	0.831164	0.8535027
Father: dual nationality	0.0207178	0.0022695	0.0162684	0.0251672
Father: foreign nationality	0.1072982	0.0048472	0.0977952	0.1168012
Father: missing nationality	0.0296506	0.0025951	0.0245629	0.0347384
Mother: Swiss nationality	0.8083484	0.0061339	0.7963228	0.820374
Mother: dual nationality	0.051101	0.0034551	0.0443271	0.0578748
Mother: foreign nationality	0.1134897	0.0049382	0.1038082	0.1231713
Mother: missing nationality	0.0270609	0.0024736	0.0222114	0.0319104
U_i: Unemployment risk	1.701035	0.0394802	1.623633	1.778438

Source: Swiss Household Panel, first wave in the *SHP_I* sample (1999).
Notes: Data are weighted; all mean values are calculated based on $N = 4,222$, except for U_i (based on $N = 4,090$).

Table 10: Ordered probit model: Adding unemployment risk in equation (2)

Sample	All	Education level		
		L_1	L_2	L_3
L_1: Compulsory education	-0.196**			
	(0.055)			
L_3: Tertiary education	0.344**			
	(0.040)			
U: Unemployment risk	-0.010	-0.008	-0.003	-0.032**
	(0.007)	(0.017)	(0.009)	(0.015)
Control variables	yes	yes	yes	yes
Canton dummies	yes	yes	yes	yes
Proxies for values and beliefs	no	no	no	no
Observations	4,090	537	2,412	1,141
Percentage correctly predicted	33.69%	32.59%	31.18%	40.67%
Test for joint significance of the excluded instruments in the first stage				
$\succ$ F statistic	46.49**	7.29**	28.62**	11.98**
Test for exogeneity of U_i				
$\succ$ t statistic	-0.38	0.30	-0.78	0.34

Linearized standard errors in parentheses, ** p<0.05, * p<0.10

Notes: Coefficient estimates, data are weighted.

Source: Swiss Household Panel, first wave in the *SHP_I* sample (1999).

Dependent variable: attitudes towards equal opportunity for foreigners; the label 'compulsory education' captures primary and lower secondary education.

Table 11: Ordered probit model: Adding unemployment risk in equation (3)

Sample	All	Occupation level		
		$\widetilde{L}_0$ & $\widetilde{L}_1$	$\widetilde{L}_2$	$\widetilde{L}_3$
$\widetilde{L}_0$: Missing	0.006			
	(0.110)			
$\widetilde{L}_1$: Low skills	-0.007			
	(0.079)			
$\widetilde{L}_3$: High skills	0.455**			
	(0.037)			
U: Unemployment risk	-0.010	-0.001	0.008	-0.035**
	(0.007)	(0.028)	(0.010)	(0.010)
Control variables	yes	yes	yes	yes
Canton dummies	yes	yes	yes	yes
Proxies for values and beliefs	no	no	no	no
Observations	4,090	305	1,651	2,134
Percentage correctly predicted	34.11%	35.41%	28.41%	38.19%
Test for joint significance of the excluded instruments in the first stage				
$\succ$ F statistic	45.99**	4.26**	25.19**	18.05**
Test for exogeneity of U_i				
$\succ$ t statistic	-1.59	0.21	0.70	-1.08

Linearized standard errors in parentheses, ** p<0.05, * p<0.10

Notes: Coefficient estimates, data are weighted.

Source: Swiss Household Panel, first wave in the *SHP_I* sample (1999).

Dependent variable: attitudes towards equal opportunity for foreigners.

Table 12: Testing for Endogeneity of values. Ordered probit model: Active in the labour market vs. Out of the labour force

Dependent variables	Active in the labour market				Out of the labour force			
	Trust in human rights organisations		Attachment to Swiss tradition		Trust in human rights organisations		Attachment to Swiss tradition	
S: Years of schooling	0.045**		-0.093**		0.022**		-0.058**	
	(0.006)		(0.007)		(0.011)		(0.011)	
$\widetilde{L}_0$: Missing		0.147		-0.164*		-		-
		(0.106)		(0.097)				
$\widetilde{L}_1$: Low skills		0.023		0.058		-0.044		0.209*
		(0.093)		(0.083)		(0.122)		(0.115)
$\widetilde{L}_3$: High skills		0.240**		-0.441**		0.114**		-0.300**
		(0.035)		(0.036)		(0.055)		(0.057)
Control variables	yes	yes	yes	yes	yes	yes	yes	yes
Canton dummies	yes	yes	yes	yes	yes	yes	yes	yes
Observations	4,265	4,265	4,272	4,272	1,847	1,847	1,890	1,890

Linearized standard errors in parentheses, ** p<0.05, * p<0.10

Source: Swiss Household Panel, first wave in the *SHP_I* sample (1999).

Notes: Coefficient estimates, data are weighted.