Migration and Trust: Evidence on Assimilation from Internal Migrants

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Abstract

I study whether internal migrants assimilate culturally to the locals. In general, investigating this question with observational data is challenging because we need to disentangle assimilation from sorting, especially because data on the migrants before migration is typically not available. I overcome this challenge by studying the Swiss context, which provides an ideal setting for two main reasons. First, as a result of its history, Switzerland presents substantial cultural differences between its regions. Second, the Swiss Household Panel tracks individuals for a long period before and after they move. This provides a unique opportunity to compare early versus late migrants using a difference-in-differences framework. For the analysis, I focus specifically on trust in strangers, one of the most important components of culture. In particular, this cultural trait is also important because it predicts growth and other desirable economic, social and political outcomes. I find statistically and economically significant evidence for cultural assimilation in a relatively short period after migration. Finally, using the Sorted Effects Method, I find that assimilation is driven by the youngest immigrants, which is in line with the impressionable years hypothesis in psychology.

JEL: O10, J01, J15, R23, A13, D19

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hypothesis

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I. Introduction

Evidence suggest that migration has the potential to increase global efficiency and output, and decrease inequality by relaxing constraints on the optimal allocation of the labor force (Lagakos et al., 2018; Dustmann and Preston, 2019; Clemens, 2011). However, migrants differ in cultural values and beliefs from the local people and this may create frictions over cultural assimilation. These frictions could be further fueled by the media and politicians depicting immigrants as a cultural threat, who lack the capacity or the willingness to assimilate (Alesina and Tabellini, 2022). These concerns are not confined to international migration but apply to internal migration as well. The reason is that cultural differences do not necessarily coincide with country borders. In fact, substantial variation in cultural traits exists within countries (Obradovich et al., 2022; Tabellini, 2010). For instance, Alesina and Fuchs-Schündeln (2007) studies assimilation of migrants between the former East and West of Germany, Guiso et al. (2016) and Ichino and Maggi (2000) study internal migrants in Italy and Acharya et al. (2016) studies internal migrants in the United States.

In this paper, I study whether internal migrants assimilate culturally to the locals, where assimilation is defined as the process of becoming similar. Studying this topic is conceptually challenging because migrants face a trade-off. On one hand, they might want to assimilate because of economic reasons to integrate in the labour markets (Abramitzky et al., 2020) or to conform to the prevailing social norm (Bernheim, 1994). On the other hand, they might refuse to assimilate for the social/psychological costs by the sense of identity loss (Akerlof and Kranton, 2000; Bisin and Verdier, 2000; Olcina et al., 2017). Understanding which of these effects dominates is an empirical question.

Empirically, the challenge is to separate assimilation from sorting of migrants to places, i.e. migrants might move to a specific location *because* they share the same cultural traits. Disentangling assimilation from sorting requires a counterfactual of how the migrants' cultural traits would have evolved had they not migrated. Note, however, that non-migrants do not make a good counterfactual in this case because they are likely to differ from the migrants in many ways. Furthermore, studying this

research question using observational data requires, at least, data on the migrants' cultural traits before migration. But, this data is typically not available.

I overcome the empirical challenge by studying assimilation of internal migrants in the context of Switzerland, which offers an ideal setting for my study for two main reasons. First, Switzerland consists of 26 sovereign cantons that, for historical reasons, have evolved in substantial institutional differences, which map on to cultural differences (Rustagi, 2022). Thus, in my analysis I exploit the cultural variation at the cantonal level to study how it affects migrants' cultural traits. Second, the Swiss National Science Foundation, through the Swiss Household Panel (SHP), conducts a yearly survey, following a representative sample of the population since 1999 and covering social and economic topics. In particular, the SHP follows people when they move to different places and provides one of the longest longitudinal surveys in the world (17 years) allowing to observe internal migrants (and their cultural traits) repeatedly before and after migration. Hence, it allows me to compare early and late movers in a difference-in-differences framework.

I focus on assimilation of one of the most studied cultural traits, i.e, generalized trust towards others, where "others" refers to people the respondent does not know (Alesina and Giuliano, 2015; Guiso et al., 2015; Putnam, 1993). More specifically, trust is defined as the *beliefs* in other people's trustworthiness (Sapienza et al., 2013).³ This component of culture is also important because it predicts growth and other desirable economic, social and political outcomes (Nunn and Wantchekon, 2011; Algan and Cahuc, 2010; Knack and Keefer, 1997).

My analysis relies on two main strategies: First, an event-study approach (Callaway and Sant'Anna, 2021) allows me to test whether migrants' trust moves towards the average trust level of the host canton once they move. To illustrate the method, consider

¹Evidence of this are the outcomes from multiple referenda on diverse topics like restricting mass immigration (2014), joining the Schengen Area (2005) or same sex partnerships (2005).

²The cantons are the Swiss administrative areas and are equivalent to provinces or states.

³In the case of trust, Butler et al. (2016) argues that there is a "right amount of trust" that balances the trade-off between a high exposure to being cheated and losing opportunities for gains. From this point of view, assimilating to the right amount of trust is economically profitable in either direction. This is especially important if we consider that people use heuristics or imitate others when information is imperfect or costly to obtain (Boyd and Richerson, 1995, 1988).

two individuals with similar characteristics who move from canton A to canton B, which has higher levels of trust than canton A. If one of them moves later for reasons that are unrelated to their trust, I could use him/her as a counterfactual for the early mover. Then, if I observe a higher trust level for the early mover, I could conclude that there is assimilation. Similarly, I can do the same exercise with two people migrating to lower trust cantons, which allows me to test if migrants also assimilate downwards. The validity of these two comparisons rely on the assumption that the these migrants are in fact similar and the moving time is unrelated to their trust. I, thus, begin by showing that migrants moving to higher (lower) trust cantons have similar levels of trust in the years before moving (i.e., parallel trends). Furthermore, I show that early and late migrants are also balanced in demographic characteristics, which gives more confidence to my comparisons.

Second, instead of exploiting the direction of move (i.e., moving to higher or lower trust cantons), I combine all migrants in a single two-by-two difference-in-differences strategy with continuous treatment (see Callaway et al., 2021).⁴ This allows me to exploit the large variation in trust levels in the host cantons and study the effect of the treatment intensity. Furthermore, it also allows me to to hold constant all the time invariant individual factors (such as the canton of origin) via fixed effects and to control for important time varying characteristics, such as education and income. To verify that there are no composition effects, I show that migrants in the lowest and highest trust cantons, are balanced in demographic characteristics, both before and after migration (i.e., migrants leaving the lowest and highest trust cantons are similar and migrants arriving in the lowest and highest trust cantons are similar).

Using the event study approach, I find a large change in the migrants' trust, that is, migrants moving to a higher trust canton (compared to origin) increase their trust (5.3% from the baseline), whereas migrants moving to lower trust cantons (compared to origin) decrease their trust (3.9% from the baseline). This assimilation takes place in an average of 5 years. Using the difference-in-differences approach with the continuous

⁴Note that combining all migrants in the previous case will cancel out the effect of the assimilation to higher and lower cantons.

treatment, I find that, migrants increase their trust in 0.43 standard deviations for each standard deviation increase in the trust level at the destination.

To check the robustness of the results I run several tests: First, I run a placebo test with non-movers, assigning a random moving year between (2003-2017) to non-movers and find no systematic change in their trust level. Second, to address concerns about the reflection problem (i.e., the fact that the migrants could simultaneously have an effect on the local peoples' trust)(Manski, 1993), I consider the level of trust in the cantons in the year 2002 (i.e., before any migration in the sample occurs) as the independent variable of interest and find that the results remain unchanged. Third, I find no assimilation for trust in the federal government, which alleviates concerns about the results being driven by mechanical aspects of the survey implementation.

I further explore heterogeneity in the assimilation by estimating sorted partial effects (a recent data driven method developed by Chernozhukov et al. (2018)) and find that the 25% who adapted the most are more likely to be female and significantly younger, have at least one more year in the host canton, are poorer but with a higher increase in income and education after migration.

This paper contributes to the literature in several ways. First, it complements the previous literature on assimilation. Previous studies have shown assimilation in behaviour and preferences. For instance, (Alesina and Fuchs-Schündeln, 2007) shows that in Germany, immigrants from the East become more similar to Western Germans in preferences for government participation. Ichino and Maggi (2000) shows that internal migrants shirking behavior in a bank in Italy change with the host branch peers behaviour. (Perez-Truglia, 2018) shows that internal migrants in the U.S. change their contributions to presidential campaigns depending on the share of people in the destination supporting the party. On the other hand, (Atkin, 2016) shows that internal migrants in India make suboptimal food choices due to the persistence of their cultural preferences. The paper adds to this literature by studying an important cultural dimension, i.e. trust, which has been shown to be an important determinant of economic development (Guiso et al., 2015; Putnam, 1993; Nunn and Wantchekon, 2011; Algan and Cahuc, 2010; Knack and Keefer, 1997). Moreover, since trust implies a belief in

others' trustworthiness, the paper shows that also beliefs are malleable.

Second, previous papers in the literature have found that trust is persistent across generations (Michalopoulos and Xue, 2021; Nunn and Wantchekon, 2011; Algan and Cahuc, 2010). This paper shows that there is also substantial assimilation in trust that happens in very short periods for first generation immigrants.

Third, the papers studying assimilation in trust mainly focus on second or higher generation immigrants (Giavazzi et al., 2019; Ljunge, 2014; Moschion and Tabasso, 2014).⁵ Notice, however, that these people are technically not immigrants, as they were born and raised in the destination. Hence, these papers study the weights that parents and the host environment have on their cultural traits. We can also think of assimilation as a *change* in people's cultural traits when they move to a new place. A few exceptions studying first generation immigrants are Jaschke et al. (2022), Marino Fages and Morales Cerda (2022) and Cameron et al. (2015). However, none of these papers observe migrants before arriving to destination which does not allow us to quantify the change that take place within the individual. Hence, I complement the literature by providing causal evidence of assimilation as a *change* of first generation migrants in a relatively short period of time.

Fourth, by showing that assimilation is stronger for younger immigrants, I provide support for the impressionable years hypothesis in psychology, which "proposes that individuals are highly susceptible to attitude change during late adolescence and early adulthood and that susceptibility drops precipitously immediately thereafter and remains low throughout the rest of the life cycle" (Krosnick and Alwin, 1989).

The paper is organized as follows. Section II describes the field setting and data. Section III presents the empirical strategy. Sections IV and V present the results of the event study and the difference-in-differences, respectively. Section VI presents the heterogeneity analysis and Section VII concludes.

⁵See also Fernández and Fogli (2006), Fernandez (2007) and Giuliano (2007). These papers focus on second generation immigrants and argue that the descendants are "exogenously" allocated as the location decision was made by their parents.

II. Field Setting and Data

Switzerland is a federal republic founded in 1848 and composed of 26 cantons that keep strong autonomy from the central government. The country has a system of direct democracy where people's initiatives and referendums at the federal, cantonal and municipal levels give citizens the chance to influence the institutions. In particular, the cantons have the powers related to their identity—such as culture, religion, language-and public health and cross border cooperation.⁶ Furthermore, the number of referendums per year and the difficulty of proposing a popular initiative also varies between cantons (Rustagi, 2022; Frey and Schaltegger, 2021; Bühlmann et al., 2014; Barankay et al., 2003). These referenda generate institutional variation between cantons that accumulate over the years.

Despite its small physical space, Switzerland is also very culturally diverse. It has four official languages (German, French, Italian and Rhaeto-Rumantsch) and two main religions (Roman Catholic and Protestant). The cultural diversity is also driven by the differences in institutions (Alesina and Giuliano, 2015). In particular, Rustagi (2022) exploits a natural experiment in the middle ages that affected institutions to show that this shock had a long lasting effects on the cantons' culture.

On top of these differences, Switzerland has one of the highest shares of international immigrants among the western countries (according to the Swiss Federal Statistical Office, 30.5% of the population were immigrants in 2019) and a significant internal mobility (6% internal movers in 2019). Combined with the differences between the cantons in terms of culture and institutions, this makes Switzerland a particularly interesting setup for answering my research question, that is, do migrants assimilate their trust level to the local average when they move places?

⁶The federal state is responsible for monetary policy, foreign affairs, social security, customs and justice; and municipalities control mostly public service delivery -such as electricity, water and gas provision. Citizenship, education and taxes are split in the three levels (see https://www.wolf-linder.ch/wp-content/uploads/2010/11/Swiss-political-system.pdf). In some municipalities, even the citizenship is only granted after a vote by the locals (Hainmueller and Hangartner, 2013).

A. Measuring trust

Trust is broadly defined as an individual's willingness to be vulnerable based on an expectation of cooperation (irrespective of the ability to monitor or control that other party) (Johnson and Mislin, 2008; Gambetta et al., 2000; Rousseau et al., 1998; Mayer et al., 1995). Since the work of La Porta (1997) and Zak and Knack (2001), the generalized trust question has become the standard measure of trust (see Nunn and Wantchekon, 2011; Algan and Cahuc, 2010), which is found in many surveys such as the World Values Survey (WVS) or the European Social Survey (ESS).⁷ The exact wording is as follows: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" and respondents can answer from 0 to 10 where 0 means "Can't be too careful" and 10 means "Most people can be trusted". A relevant question is who are these "most people". Sturgis and Smith (2010) shows that, when answering the question, 35% of respondents in Britain think of unknown others and only 2% think of people in the local area. This is important because one might worry that respondents are just considering a different set of "most people".

B. Data

I use data from the Swiss Household Panel (SHP). This is a survey conducted yearly in Switzerland and is representative of the Swiss population aged 14 and over with respect to major demographic variables. Importantly, the survey tracks respondents when they move to different locations. Furthermore, in 2002 they introduced the generalized trust question, and hence this is our starting period. Between 2002 and 2018, a total of 31773 individuals (in 12842 households) were surveyed by computer-assisted telephone interviews. Of these individuals, 3.84% of the Swiss citizens move within Switzerland and 6.84% returned from living abroad in our period of study. Furthermore, 13.45% are not Swiss citizens. ¹⁰

⁷This measure is attributed to Rosenberg, see Sturgis and Smith (2010).

⁸The experimental literature has shown that generalized trust captures expected trustworthiness (beliefs) and altruism in studies with real stakes (I discuss the findings of this literature in the Appendix).

⁹See Murtin et al. (2018) and Alesina and La Ferrara (2002) for reviews of its determinants.

¹⁰It is worth noting that only a small fraction (2%) of them acquire Swiss citizenship, and thus, almost all the internal movers are likely to have been born in Switzerland (see https://www.swissinfo.ch/eng/naturalisation—

The SHP provides a unique opportunity for my study for three reasons.¹¹ First, the SHP is one of the longest panels asking the generalized trust question in the world. Second, the SHP contains a comparatively large number of migrants. Third, even when different parts of the country speak different languages, the migrants are interviewed in the same language before and after moving, which eliminates language effects.

In the next subsections I show that trust varies significantly among the cantons, describe the migration patterns and the main characteristics of the migrants, and finally present some initial evidence of the effect the host canton has on the migrant's trust level.

C. Trust in the cantons

The treatment I am analyzing in this paper is the effect of moving to a canton with a different average trust level than the one migrants have at the home canton. Hence, it is important to see if there is enough variation between the cantons' trust level. Throughout the analysis I compute the average level of trust in the cantons excluding migrants. Figure 1 and the map in Figure 2 show large variation in trust across cantons, even within the same language regions. Furthermore, these differences between the cantons are economically significant. To put it into perspective, the German speaking region is similar in terms of trust to Finland while the Italian speaking regions are similar to the trust in the United States. ¹²

D. Internal migrants

I define internal migrants as Swiss citizens who moved from one canton to another between 2002 and 2018.¹³ In practice, I identify them as migrants when the residence changes across survey waves. In order to have a cleaner comparison group and since the

 $^{{\}it no-thanks}_w hy - some - residents - choose - not - to - become - swiss/35624994).$

¹¹The WVS, ESS and the General Social Survey (GSS) are repeated cross sections; and the Global Preferences Survey (GPS) is only one cross section, and hence, they only observe migrants after they have moved, and only once. Other panel datasets are the German Socio Economic Panel (GSOEP), but it asks the trust question in some waves only and the UK Household Longitudinal Study (UKHLS) but only asks the trust question in the first wave.

 $^{^{12}}$ For this comparison, I use the wave 5 of the WVS, which, unfortunately is not disagregated at the canton level.

 $^{^{13}}$ Note that I do not observe the migrants before 2002, and hence, it is possible that I missclassify some migrants who moved before 2002 as non-migrants.

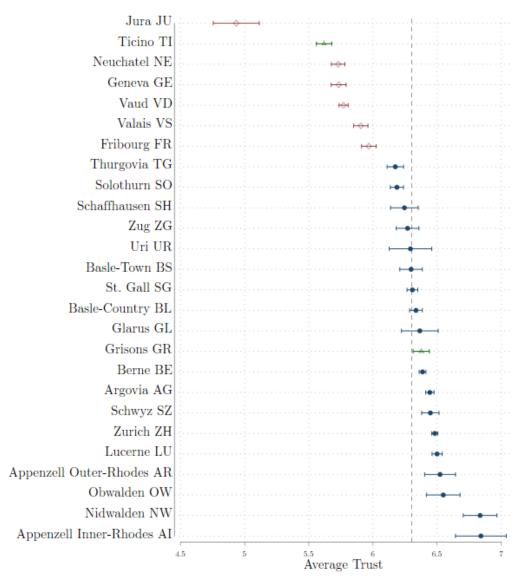


Figure 1: Trust in the cantons

Note: The figure presents the average trust (individual responses range from 0 to 10) for all non-migrants in each canton over the period 2002-2018 with 95% confidence intervals. The vertical dashed line shows the median average trust among the cantons. Finally, the different colors and symbols depend on the language region.

assimilation might take time to take place, I focus on migrants who moved only once

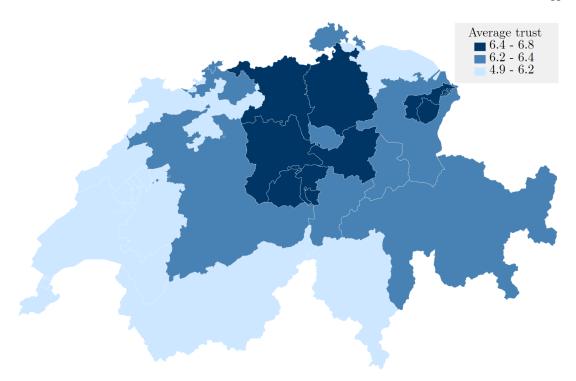


Figure 2: Trust in the cantons

Note: The map presents the average of trust (individual responses range from 0 to 10), in three terciles, for all non-migrants in each canton over the period 2002-2018. White lines represent the canton borders.

(this accounts for 71.5% of the migrants in the sample). Note that people who move within the canton are not considered migrants for our purposes because I am interested in the effect of the change in the culture of the host culture which varies mainly at the canton level. Migrants represent roughly 0.81% of the sample each year.

In order to understand the migration patterns of internal migrants, I divide the cantons at the median level of trust (see Figure 1). Table 1 shows the flows of migrants from the cantons below (low) and above (high) the median level of trust. Migrants from low trust cantons are equally split in both groups (48.7% moving to other low trust cantons and 51.30% moving to high trust cantons) but migrants moving from high trust cantons tend to go more to other high trust cantons (34.60% and 65.4%).

Since I am interested in the sign of the difference between the average trust at destination and average trust at the origin, I compute the percentage of people moving to a

Table 1—: Migration flows of internal migrants by canton trust level

		Trust in	Destination	
		Low	High	Total
Trust in Origin	Low	48.7%	51.3%	100%
	High	34.6%	65.4%	100%
	Total	40.1%	59.9%	100%

Note: The table shows the transition matrix from low/high trust canton of origin to low/high trust destination canton.

higher/lower trust canton. Table 2 shows that 44.65% of the migrants move to a lower trust canton and 55.35% move to a higher trust canton . The average size of the gap is similar in both groups. Finally, the last column shows the average trust level of each group in the last year before migration.

Attrition seems to be similar between migrants moving to a higher and lower trust cantons. Figure A12 presents the attrition rates in both groups and Table A5 in the Appendix presents a formal analysis showing that the level of trust in the destination canton has no effect on the attrition rate.

Table 2—: Direction of the move and gap between the trust levels at origin and destination

			Trust gap between	Trust before
		Percentage	origin and destination	migration
Marring to	lower trust canton	44.65%	22 (0.24)	6.32
Moving to	higher trust canton	55.35%	.22(0.23)	5.92
	Total	100%	0.022 (0.32)	

Note: The table shows the percent of migrants moving to higher or lower trust cantons compared to their canton of origin and the average gap between them, and the standard deviation in parenthesis. The last column presents the average trust level of each group in the last year before migration.

The left panel of Figure 3 shows the share of internal migrants coming from each canton while the right panel shows the share of internal migrants moving to each canton. It is clear that there is also substantial variation in the origin and destinations of the movers.

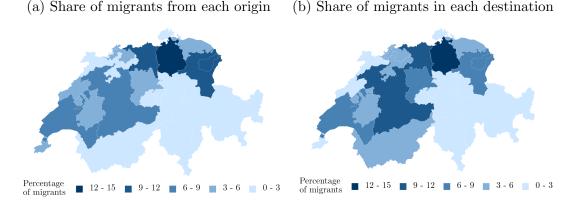


Figure 3: Canton of origin/destination of all migrants

Note: The left map presents the percent of all internal migrants coming from each canton. The right map presents the percent of all internal migrants in each destination canton. White lines represent the canton borders.

E. Descriptive Evidence

Marino Fages and Morales Cerda (2022) shows that migrant's trust correlate strongly with average trust level in the host country but only after migrating (i.e., after being exposed and immersed in the country). Figure 4 shows similar evidence, each panel plots a binscatter of migrant's trust and average trust in the destination canton (in order to account for sorting effects, I control for canton of origin fixed effects)(see Figure A1 in the Appendix for a non-parametric version of the binscatters). For this, I collapse all trust responses of each migrant by regressing the reported trust on calendar year dummies and average the residuals before and after migration by individual. Panel a shows the correlation for Internal migrants after migrating (controlling for canton of origin) and Panel b shows Internal migrants before migrating (controlling for canton of origin). Here I restrict to migrants moving between German cantons only to minimize the sorting effects. The pattern is clear, migrant's trust is highly correlated with the level of trust in the destination and there is no evidence of positive correlation before the migration occurs. Table A1 in the Appendix shows the regression results including those for international migrants and controlling for more covariates. This pattern, however, cannot be interpreted as causal because it does not distinguish between sorting and

assimilation. This is my task in the next section.

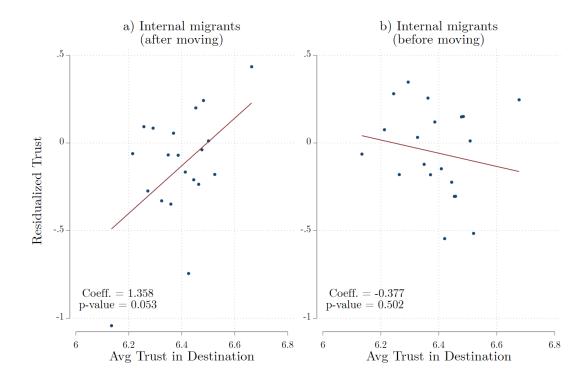


Figure 4: Correlation between Residualized Trust and Average Trust in the destination canton

Note: The figure presents binscatter plots of migrant's Residualized Trust and Average Trust in the destination canton (controlling for canton of origin) for internal migrants in German cantons after moving (left) and before moving (right). To compute the Residualized Trust, I first regress the Trust variable on calendar year dummies, and then average all the residuals by individual.

III. Empirical Strategy

I am interested in estimating the effect of the destination trust level on migrants' trust. The main difficulty is to disentangle assimilation from sorting effects, i.e., migrants moving to specific locations because these locations have certain characteristics such as the trust level. This is challenging because typically there is no pre-migration data on migrants. I exploit this longitudinal feature of the SHP in two different ways. First, I perform an event-study analysis with a binary treatment (i.e., moving to higher/lower trust canton with respect to the canton of origin) (Callaway and Sant'Anna, 2021) and

then a difference-in-differences approach with a continuous treatment (Callaway et al., 2021), where I exploit the full variation of trust in the cantons.

Traditionally, researchers using the event-study approach rely on static and/or dynamic two way fixed effects estimators (TWFE). However, a rapidly growing literature on difference-in-differences and event studies with variation in treatment timing has shown that one has to be careful in attaching a causal interpretation to these traditional estimators. Goodman-Bacon (2021) shows that these TWFE estimators recover a weighted average of all possible 2 x 2 difference-in-differences estimators for different group timings (this includes comparing treated units to those never treated, early treated and late treated). If the treatment evolves over time, some of those averages can take negative values because some already-treated units are acting as control groups and their outcomes are also evolving over time. For this reason, I follow Callaway and Sant'Anna (2021), which solves the negative-weights issue by estimating group-time average treatment effects and tailoring the aggregation weights with specific purposes in mind (I return to this below). Using the potential outcomes notation, Callaway and Sant'Anna (2021) defines the group-time average treatment effect as

(1)
$$ATT(m,t) = \mathbb{E}[Y_t(m) - Y_t(0)|M_m = 1]$$

where m is defined by the time period when a migrant moves to a new canton, M_m is a binary indicator equal to 1 when a migrant moves in year m, $Y_t(m)$ are the potential outcomes (i.e. trust levels) that migrants would realize at times t, $t = 1, ..., \mathcal{T}$, had the migrant moved in year m, $Y_t(0)$ are the potential outcomes for migrants that have not yet moved by time t. In other words, ATT(m,t) is the average treatment effect for the cohort that moved in year m, in year t. Then, if we fix m we can see how the average treatment effect evolves over time t.¹⁴ As I discuss in detail below, the main assumption to estimate each ATT(m,t), is that migrants who move at a later time are a good counterfactual for those migrating earlier.

 $^{^{14}}$ Instead, one could also fix t and see whether the average treatment effect is different for different cohorts m.

In practice, the ATT(m,t) parameter can be obtained by first restricting the data to only contain observations at time t and m-1 from units where $M_m=1$, and then, using only the observations in this subset, running the linear regression

(2)
$$Y = \alpha_1^{m,t} + \alpha_2^{m,t} \cdot 1[T = t] + \alpha_3^{m,t} \cdot M_m + \beta^{m,t} \cdot (M_m \cdot 1[T = t]) + \epsilon^{m,t}$$

where $\beta^{m,t} = ATT(m,t)$.¹⁵ Note that this is a standard difference-in-differences estimator with two periods. $\alpha_1^{m,t}$ is the baseline average of the control group (i.e., the migrants that have not yet moved), $\alpha_2^{m,t}$ is the time trend in the control group, $\alpha_3^{m,t}$ is the difference between the treated (i.e. migrants that have already migrated) and the control group in the pre-treatment periods. Finally, $\beta^{m,t}$ is the difference-in-differences estimator.

In order to use an event-study design, and prevent the effect from cancelling out, I split the sample based on whether migrants move to a higher or lower trust canton and run two separate regressions. This also works as a robustness check, since there is no mechanical reason to find that the effects mirror each other in both regressions (Cullen and Perez-Truglia, 2019). Another advantage of the methodology is that it allows me to control for time-constant covariates. I run an alternative specification controlling for the trust shock (i.e. the difference in average trust level in origin and destination canton).

Four assumptions are necessary for identification of these parameters. First, irreversibility of the treatment. In my case, this means I don't have migrants returning to their home cantons (nor migrants moving to a different level of trust canton). Second, random sampling, which imposes that each migrant is randomly drawn from a large population of interest, i.e., all migrants. Third, no treatment anticipation, that is, moving has no effect on migrants' before the actual move. Fourth, unconditional parallel trends based on not-yet-treated groups (in the Appendix I repeat the analysis assuming parallel trends conditional on size of the shock, income and education). This

¹⁵Alternatively, one could use the interacted TWFE regression proposed by Sun and Abraham (2021).

means that the average outcome (trust in my case) for the group m follows a parallel trend with groups that are not-yet-treated (i.e. not-yet-migrated) by time t.

I am interested in how the assimilation vary with the length of stay in destination, but I would also like to know the overall assimilation in the sample. Thus, I aggregate the ATT's in two different ways that are analogous to the traditional dynamic and static TWFE estimators. Formally my two aggregate measures are

(3)
$$\theta_{es}(e) = \sum_{m \in \mathcal{M}} 1[m + e \le \mathcal{T}]P(M = m|M + e \le \mathcal{T})ATT(m, m + e)$$

(4)
$$\theta_{sel}^{O} = \sum_{m \in \mathcal{M}} \theta_{sel}(m) P(M = m | M \le \mathcal{T})$$

where $\theta_{sel}(m)$ is the average effect of moving among units in group (m), across all their post moving periods; and \mathcal{M} is the last year for which there is still a non treated group available.

The first measure $(\theta_{es}(e))$ is the average effect of moving to a higher/lower trust canton of all migrants that moved and lived in the host canton for exactly e years.¹⁶ This measure consists of three parts: $1[m + e \leq T]$ takes the value 1 if migrants are observed for up to e periods after migrating; $P(M = m|M + e \leq T)$ is the weight of each group in the subset of migrants that are observed for up to e periods after migrating; and ATT(m, m + e) is the group-time average treatment effect for group m in year m + e.

The second measure (θ_{sel}^O) estimates the effect for each group m first, and then averages across all groups. This avoids putting more weight on the observations that are observed for a longer period and can be interpreted as the canonical two-period difference-in-differences setup over the entire sample. It consists of two parts. $\theta_{sel}(m) = \frac{1}{T-m+1} \sum_{t=m}^{T} ATT(m,t)$ is the average effect of moving for the cohort moving in period

¹⁶Note that these estimators may include compositional changes (see Callaway and Sant'Anna (2021)). I run robustness tests in the Appendix.

m, across all post moving periods. The other part, $P(M = m|M \leq T)$ are the weights applied to each cohort in the aggregation.

For inference I rely on the bootstrap method proposed in Callaway and Sant'Anna (2021), and report simultaneous confidence intervals (instead of pointwise) which do not suffer from multiple testing problems and are guaranteed to cover all ATT's with a probability at least $1-\alpha$. Due to the small number of clusters, I provide three types of standard errors. That is, robust, clustered at the canton of origin and clustered at the destination canton. Since the data contains some gaps, I interpolate the trust variable linearly and perform a sensitivity analysis in the Appendix with no interpolation and other interpolation methods (nearest neighbour splines and forward).

To complement the previous analysis, I combine all migrants in one regression. For this, I follow Bertrand et al. (2004) and collapse all periods in pre- and post-move and perform a standard difference-in-differences approach with a continuous treatment (see Callaway et al., 2021; Perez-Truglia, 2018; Angrist and Imbens, 1995). I do this for several reasons. First, it allows me to directly exploit the trust variation between the host cantons in the identification. Second, it allows me to control for time varying covariates and explore heterogeneity in a simpler fashion. Third, it reduces measurement error by averaging over repeated measures of the trust responses. Fourth, it serves as a robustness check to my sample split. Formally, I regress

(5)
$$Trust_{it} = \alpha_i + \beta_1 Post_t * AvgTrust_{it} + \beta_2 Post_t + \epsilon_{it}$$

where $Trust_{it}$ is the residualized trust level for individual i at time 0 or 1, $AvgTrust_{it}$ is the average level of trust in the host canton, $Post_t$ is an indicator taking the value 1 after moving, and ϵ_{it} individual-time specific error term. α_i stands for individual fixed effects and β_1 is our coefficient of interest. I interpret this effect as the average causal response on the treated (ACRT) to an incremental change in the dose, where the dose is the trust level in the host canton. The main identification assumption in this case is the parallel trends, i.e., for all doses, the average change in outcomes over time had they

not migrated is the same, conditional on observables and time invariant characteristics (Callaway et al., 2021).¹⁷

Finally, I conduct two robustness checks. First, I run a placebo using non-migrants, assigning them fake moving periods and destinations, and show that their average trust is not affected. Second, I repeat the analysis using trust in the federal government instead of the generalized trust and find no assimilation.

IV. Results: Event Study

As explained in the previous section, I split the sample in migrants who moved to a higher and lower trust cantons. Panel (a) and (b) in Figure 5 present the event study analysis (Eq. 3) for each sub-sample. I find that moving to a higher trust canton has a positive effect on the trust level reported by the migrant. Similarly, moving to a lower trust canton has a negative effect. The fact that both figures mirror each other gives extra credibility to my results because they are two completely disjoint tests (Cullen and Perez-Truglia, 2019). The effects seems to increase over time, supporting the use of the estimators proposed by Callaway and Sant'Anna (2021). Figure A2 in the Appendix presents a placebo test where I assign random destination cantons and moving dates (2003-2017) to each non-migrant. Even with significantly smaller confidence intervals (due to the larger sample size), the figure confirm that non-migrants do not change their trust level after the randomly assigned date. The Appendix, also presents the event study graphs clustering standard errors at the canton of origin and destination, without interpolating the data (and using other interpolation methods), and controlling for the difference in trust between the canton of origin and destination. In all cases, the graphs look remarkably similar.

Since I am also interested in the overall effect, I aggregate the ATTs in one estimate following Eq. 4. The overall effect of moving to a higher trust canton is 0.314 (p-value=0.057) and to a lower trust canton is -.247 (p-value=0.052). This is a large effect if we consider that the point estimates are larger than the average gap between

¹⁷Formally, let d be the dose and Y_t be the potential outcome in time t. Then, parallel trends implies: $E[Y_t(0) - Y_{t-1}(0)|D = d, X] = E[Y_t(0) - Y_{t-1}(0)|D = 0, X]$, where X includes observable characteristics and time invariant characteristics of the migrants.

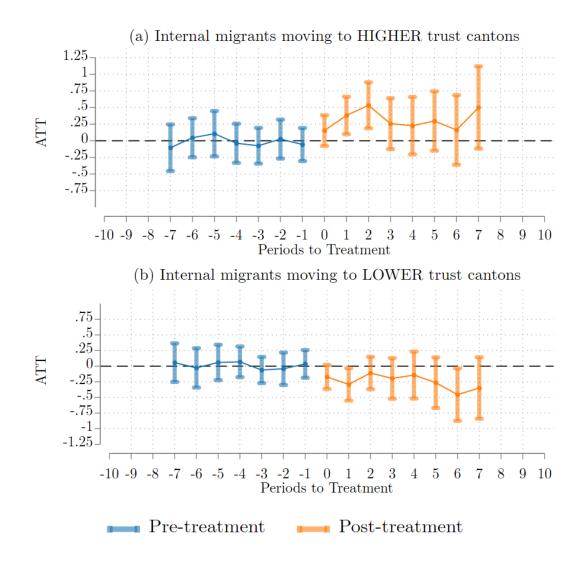


Figure 5: Event study

Note: Panel (a) and (b) present the event study results of each ATT on trust for the migrants moving to a HIGHER and LOWER cantons. In both cases, the base period (i.e. the last period before moving) is represented by the horizontal dashed line and the spikes show the 95% simultaneous confidence intervals around each ATT using wild bootstrap standard errors. I fill the gaps in trust in the survey by interpolating from the nearest neighbour. Results remain similar with clustered standard errors, with no interpolation and using other interpolation methods (forward, linear, splines), and controlling for the size of the shock (See Appendix). The analysis was performed using the Stata command csdid (Rios-Avila et al., 2021).

the canton of origin and destination (see 2). Relative to the baseline period, migrants moving to higher trust cantons increase their trust by 5.3% and migrants moving to lower trust cantons decrease their trust by 3.9%. This assimilation takes place in an

average of 5 years.

A. Robustness

In the previous subsection, I have shown graphically that the parallel trends condition is satisfied (i.e., the $\theta_{es}(e)$ estimates from the pre migration periods are indistinguishable from zero for both, migrants going to higher or lower trust cantons). In Table 3, I check whether early and late migrants are also similar before migration in terms of observable characteristics. I define late migrants as those who migrate on or after 2011. The top (bottom) panel compares early and late migrants going to higher (lower) trust cantons. None of the differences are economically nor statistically significant at the conventional levels, which reassures the validity of our counterfactual group.

V. Results: Difference in Differences

Another standard approach is to collapse all the data in periods before and after the migration occurs and perform a standard difference-in-differences analysis with two periods and a continuous treatment. In particular, I follow Bertrand et al. (2004) and regress the trust variable on interview year dummies and take the average of the residuals as my new outcome variable. I do this separately for periods before and after migration. This approach has several advantages. First, I avoid splitting the sample and exploit the intensity of the treatment directly in the identification. Second, it allows me to control for two important time varying covariates, i.e., income and education (two of the most important determinants of individual trust according to (Alesina and La Ferrara, 2002)). Third, it is easy to interpret and study heterogeneity. Finally, the method accounts for serial correlation and I reduce measurement error by keep migrants with 3 or more observations before and after moving.

A. Balance tests

In the previous section, I have shown that there are no pre-trends in trust within migrants going to higher or lower trust cantons than their origins. But migrants moving to higher and lower trust cantons may differ in many ways that might confound the

Table 3—: Early vs late migrants

	Early Movers		La	te Movers			
	N	Mean (s.d.)	N	Mean (s.d.)	Coeff.	p-value	
Moving to HIGHER trust canton							
Age	189	37.89	280	35.45	-2.445	0.10	
		(15.07)		(17.16)			
Female	189	0.53	280	0.50	-0.038	0.42	
		(0.50)		(0.50)			
Married	189	0.33	280	0.28	-0.050	0.23	
		(0.46)		(0.43)			
Income (CHF)	158	51818.99	233	47152.29	-4,666.697	0.29	
		(35288.32)		(51305.36)			
Education (years)	188	13.38	260	13.37	-0.009	0.97	
		(2.84)		(3.07)			
HH Size	125	2.26	146	2.12	-0.144	0.33	
		(1.32)		(1.08)			
Moving to LOWER	trust	canton					
Age	157	37.14	273	37.09	-0.053	0.97	
		(16.13)		(15.96)			
Female	157	0.55	273	0.52	-0.037	0.46	
		(0.50)		(0.50)			
Married	157	0.38	273	0.33	-0.053	0.25	
		(0.47)		(0.45)			
Income (CHF)	124	52000.03	223	49254.88	-2,745.147	0.46	
, ,		(33289.02)		(33455.39)			
Education (years)	155	13.13	248	13.60	0.465	0.12	
ζ- ,		(2.75)		(3.24)			
HH Size	93	2.26	153	2.27	0.012	0.94	
		(1.27)		(1.31)			

Note: The table shows the number of observations, means, standard deviations, coefficients and p-values of regressing each variable on an indicator that takes the value 1 for late migrants and 0 for early migrants. Late migrants are migrants who moved on or after 2011. The top (bottom) of the table describes internal migrants moving to HIGHER (LOWER) trust cantons.

analysis. For instance, if trust increases with income (or education) and migrants that get richer (more educated) when they move to higher trust cantons, I might mistakenly conclude that moving to such cantons has a positive effect on trust. For this reason, I start by testing the difference in important observable characteristics across the sets of migrants (i.e., age, gender, civil status, years of education, income, number of people in the household). Table 4 (top) shows that, before moving, internal migrants in the high

and low trust cantons are very similar. The only statistically significant variables are education and household size. Table 4 (bottom) compares internal migrants in high and low trust destination cantons. None of the variables is statistically significant, including years of education and size of the household which balanced out after migration.

Table 4—: Balance tests for Internal migrants

	Low Trust		Н	High Trust		
	N	Mean (s.d.)	N	Mean (s.d.)	Coeff.	p-value
Before moving						
Age	444	35.44	767	34.89	-0.550	0.57
		(15.82)		(16.49)		
Female	444	0.53	767	0.53	0.009	0.76
		(0.50)		(0.50)		
Married	444	0.30	767	0.29	-0.012	0.64
		(0.44)		(0.44)		
Income (CHF)	368	$48,\!845$	633	46,080	-2,765	0.30
		(42,910)		(36,780)		
Education (years)	422	13.50	737	12.80	-0.698	0.00
		(3.56)		(3.12)		
HH Size	261	2.10	406	2.30	0.200	0.03
		(1.10)		(1.31)		
After moving						
Age	522	41.14	810	40.65	-0.496	0.58
		(15.49)		(16.73)		
Female	522	0.53	810	0.54	0.010	0.72
		(0.50)		(0.50)		
Married	522	0.39	810	0.37	-0.013	0.61
		(0.46)		(0.46)		
Income (CHF)	452	61,044	706	61,988	944	0.70
		(39,163)		(41,348)		
Education (years)	522	14.53	810	14.40	-0.125	0.48
		(3.21)		(3.07)		
HH Size	434	2.10	694	2.13	0.030	0.63
		(1.02)		(1.05)		

Note: The table shows the number of observations, means, standard deviations, coefficients and p-values of regressing each variable on an indicator that takes the value 1 for respondents in cantons with trust above the median and 0 for respondents in cantons with trust below the median. The top (bottom) of the table describes internal migrants before (after) moving.

Table 5 presents the results of the difference in differences regressions (Equation 5). Column 1 shows the results with no covariates. Column 2 controls for income, education and age (which are arguably the main time varying confounders). Note that age is the average age in all the periods in which the migrant is observed either before or after migration, hence, the difference is also a proxy for the time gap between the periods. The results are in line with the event study, an increase in one standard deviation in the canton's average trust increases individual trust of the migrant by 0.43 standard deviations, the result is virtually unchanged when adding the controls. This is a strong effect, meaning that the migrants are closing half of the trust gap between the cantons in an average of 5 years. Table A3 in the Appendix shows that the effect almost identical for men for women in split regressions. I also note that there is no effect of migration itself, captured in the "Post move" variable.

A pervasive issue in the literature of endogenous social effects is that of the reflection problem that arises when one wants to infer whether the average behavior in some group influences the behavior of the individuals that are part of it (Manski, 1993). In my case, it is possible that the migrants are also affecting the local people trust level, making both variables to move together. To explore this possibility, I compute the average trust in the cantons using responses from the year 2002 only (i.e., before any of the migrants in the sample move). The idea is that the trust level in a canton should not be affected by the migrants before they arrive. ¹⁸ Columns 3 and 4 show an effect of identical size and statistically more precise.

Finally, since I am worried that the response to trust is capturing anything mechanical of how people respond to questions in different locations (although the interview language do not change regardless of the canton the respondent is living at the time), I repeat the analysis for trust in the federal government (columns 5 and 6).¹⁹ I find that migrants do not adapt their responses regarding their trust in the federal government, which alleviates my concern. One possible interpretation of these results is that the

 $^{^{18}}$ Of course, they might be affected by migrants who moved on or before 2002 that I cannot observe.

¹⁹I show the variation of trust in the federal government in the Appendix.

views about the federal government are not affected as much as the generalized trust because it relates to others' beliefs as opposed to others' behavior.

Table 5—: Difference in differences results

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Trust	Trust	Trust	Trust	TrustFed	TrustFed
Avg trust in canton	0.489	0.432				
X Post move	(0.204)	(0.212)				
	,	,				
Avg trust in canton			0.408	0.428		
(2002) X Post move			(0.152)	(0.169)		
			,	,		
Avg fed trust in canton					0.004	0.016
X Post move					(0.442)	(0.465)
11 1 050 1110.0					(0.112)	(0.100)
Post move	-0.005	-0.063	0.107	0.048	0.032	0.118
1 ost move	(0.030)	(0.139)	(0.046)	(0.136)	(0.034)	(0.178)
Age	(0.000)	0.014	(0.010)	0.015	(0.001)	-0.006
1180		(0.019)		(0.019)		(0.023)
Education (years)		0.008		0.007		-0.025
Education (years)		(0.018)		(0.018)		(0.021)
Log(income)		-0.085		-0.088		-0.035
Log(mcome)						
Gtt	0.046	(0.045)	0.046	(0.044)	0.027	(0.048)
Constant	-0.046	0.237	-0.046	0.253	-0.037	0.882
	(0.015)	(0.792)	(0.015)	(0.781)	(0.017)	(1.016)
I. 4:-: 41 EE	V	V	V	V	V	V
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	726	676	726	676	624	612
R-squared	0.890	0.883	0.891	0.885	0.873	0.874

Note: The table presents OLS estimates of regressing migrants Trust (FedTrust) on the average trust in the canton (Equation 5). Trust (FedTrust) is the individual average of the residuals of regressing individual trust in strangers (trust in the federal government) on year dummies. The main independent variable is the average trust in strangers (trust in the federal government) in the host canton either measured over the period 2002-2017 or 2002 only. Columns 1 and 2 present the main specification. Columns 3 and 4 use the average trust in the canton as measured in 2002 only. Columns 5 and 6 use the trust in the federal government instead of trust in strangers. All regressions include individual fixed effects. Standard errors (in parentheses) clustered at the individual level. Income is measured in Swiss Francs.

VI. Heterogeneity

In previous sections I showed that on average internal migrants assimilate their trust level towards the local level (i.e., $\beta_1 > 0$ in Eq. 5). However, underlying this average

treatment effect there might be some variation in how individuals respond to the shock caused by migrating to a place with a different level of general trust (i.e., different β s for different individuals). I am interested in the following questions: a) Do all immigrants assimilate? b) Do some migrants assimilate more than others? c) What are the main characteristics explaining these differences? Exploring this is important for at least three reasons. First, it can provide insights on the mechanisms by which the assimilation occurs. Second, it can be useful to assess the generalizability of the results to other contexts (e.g. predicting assimilation of international migrants). Third, it can help design policies to facilitate assimilation by targeting the least affected groups.

To explore this questions I compute the Sorted Partial Effects (SPEs) proposed by Chernozhukov et al. (2018).²⁰ In my difference-in-differences analysis, the coefficient $\beta_1 = \frac{\delta Trust}{\delta (Post*AvgTrust)}$ represents the average partial effect (APE) (also known as average treatment effect). Instead, the sorted partial effects method reports the entire range of conditional average treatment effects (CATEs) sorted in increasing order and indexed by a ranking $u = \in [0, 1]$ with respect to the population of interest. In practice, I estimate Eq. 5 controlling for age, education, log of income and individual fixed effects (as in column 2 of Table 5); and interactions of the treatment variable with gender, average time between the measures, age of moving, and the level of education and log of income before migratin three forms: the value pre move, after move and the difference. Figure 6 presents the average treatment effect (black line) and the SPEs (blue line) with 90% boostrap uniform confidence intervals. Although these intervals are very broad, we see that all point estimates are positive and crossing the APE at the 60th percentile. Following Chernozhukov et al. (2018), Table 6 compares the 25% that assimilated the most with the 25% that assimilated the least. Again, the standard errors are very large but the estimates are still economically significant. For instance, the 25% who adapted the most are more likely to be female and 36 years younger which is consistent with the impressionable years hypothesis which "proposes that individuals are highly susceptible to attitude change during late adolescence and early adulthood and that susceptibility drops precipitously immediately thereafter and remains low throughout the rest of the

 $^{^{20}}$ For this I use the R package Sorted Effects (Chen et al., 2019).

Table 6—: Summary statistics and differences between the 25% who assimilated the most and the least

Variables	Most	Least	Difference	JP-value	P-value
Trust	-0.19	-0.03	-0.16	0.95	0.14
	(0.09)	(0.10)	(0.15)		
Female	0.64	0.39	0.25	1.00	0.28
	(0.19)	(0.24)	(0.43)		
Age when moved	22.70	59.20	-36.50	0.12	0.00
	(5.64)	(6.95)	(12.21)		
Year difference	7.11	6.03	1.08	1.00	0.27
	(0.70)	(1.20)	(1.74)		
Log(income) before moving	8.16	11.67	-3.51	0.01	0.00
	(0.51)	(0.32)	(0.80)		
Difference in log(income)	2.35	-0.42	2.77	0.09	0.00
	(0.55)	(0.34)	(0.87)		
Log(income) after moving	10.51	11.25	-0.74	0.99	0.19
	(0.42)	(0.44)	(0.85)		
Education (years) before moving	10.56	14.38	-3.82	0.76	0.05
	(1.08)	(1.44)	(2.39)		
Difference in education years	3.77	-0.12	3.89	0.16	0.00
	(0.99)	(0.52)	(1.38)		
Education (years) after moving	14.33	14.26	0.07	1.00	0.49
	(1.10)	(1.43)	(2.53)		
Post move X Avg trust in canton	0.03	0.03	0.00	1.00	0.41
	(0.01)	(0.01)	(0.01)		
Avg trust in canton	0.03	0.05	-0.02	0.99	0.19
	(0.02)	(0.01)	(0.02)		
Post move	0.49	0.51	-0.01	1.00	0.42
	(0.04)	(0.04)	(0.06)		

Note: The table presents the estimates, differences and bootstrap standard errors (in parenthesis) for the most and least assimilated migrants. The last two columns present the JP-value, which accounts for simultaneous inference of all variables; and the P-value, which stands for pointwise p-values. Trust is the individual average of the residuals of regressing trust in strangers on year dummies before and after migration. Year difference is the difference between the average year before and after migration.

life cycle" (Krosnick and Alwin, 1989). I explore this further below. The 25% who adapted the most also have a one year larger difference between the age before and after migration which is a proxy for time of exposure to the new environment. This is consistent with Marino Fages and Morales Cerda (2022) and reassures the assimilation argument. Furthermore, a novel result is that these 25% are also poorer but with a higher increase in income and education after migration. This is partially in contrast with Jaschke et al. (2022), which finds that refugees who assimilate the most culturally do not exhibit faster economic convergence.

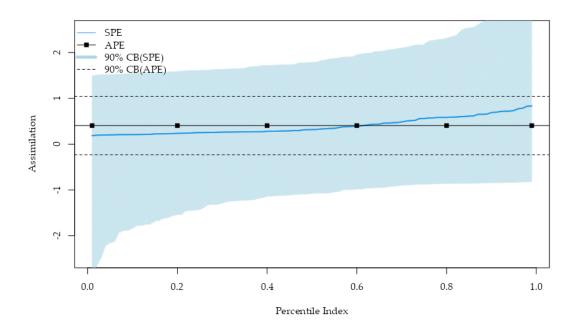


Figure 6: APE and SPE of host canton average level of trust on migrants' trust

Note: The figure shows the average partial effect (APE) and sorted partial effects (SPEs) from Chernozhukov et al. (2018). Estimates and 90% bootstrap uniform confidence intervals based on Eq. 5 controlling for age, education, log of income and individual fixed effects (as in column 2 of Table 5); and interactions of the treatment variable with gender, average time between the measures, age of moving, and the level of education and log of income before migratin three forms: the value pre move, after move and the difference. The plot was made using the R package SortedEffects (Chen et al., 2019).

The previous analysis serves as a data driven approach to identify the most relevant characteristics of those who adapt the most *versus* those that adapt the least. I now

look at this from a different angle by splitting the sample according to pre move income and age at moving (Table A3 in the Appendix also shows that females assimilate slightly more than males). First, I run the regression from Equation 5 for three different migration age groups, i.e., 14-31, 32-49 and 50-90 years old. Figure 7 shows clear results. The effect is strongest for the youngest migratns. This is important since the vast majority of migrants move between the ages of 15 and 29 years old (Milasi, 2020). Second, I rank the pre move income levels and split it in three equal group sizes. Figure 8 shows that the effect is driven by the poorer group. Note, however, that income and age are highly correlated and disentangling these would require at least a larger sample.

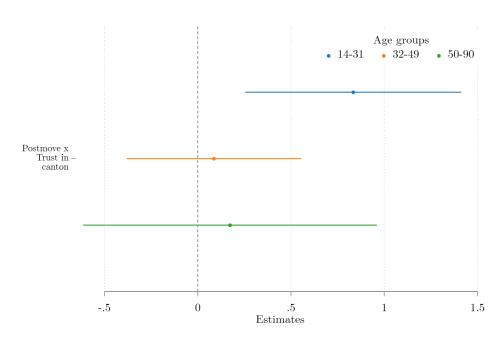


Figure 7: Assimilation effects for different moving age groups

Note: The figure shows the coefficients of Equation 5 for different samples. The dependent variable is the individual average of the residuals of regressing trust on year dummies. The independent variable is the average trust level in the host canton. 95% confidence intervals computed using clustered standard errors at the individual level.

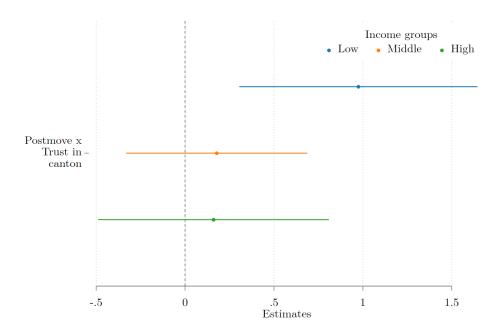


Figure 8: Assimilation effects for different pre move income groups

Note: The figure shows the coefficients of Equation 5 for different samples. The dependent variable is the individual average of the residuals of regressing trust on year dummies. The independent variable is the average trust level in the host canton. 95% confidence intervals computed using clustered standard errors at the individual level.

VII. Conclusion

When migrants arrive in a new country, they face the challenge of inserting themselves into society. This implies joining the labour market, learning the language and culture, marrying, making friends, and so on. At the same time, trust, as a component of culture, has been shown be a predictor of many desirable social, political and economic outcomes. Thus, in this paper, I study how first generation internal migrants in Switzerland assimilate in their trust levels towards the average trust of the locals. The main challenge in this kind of research is in disentangling assimilation from sorting. This problem is worsened by the fact that, in general, it is a challenge to find large longitudinal datasets following first generation immigrants over time (Abramitzky et al., 2020), and let alone, observing pre migration information. In fact, even for non migrants, it is not very common for surveys to ask the generalized trust question more

than once to the same individual. The unique panel characteristic of the Swiss Household Panel allows me to provide the first *causal* evidence on migrants' assimilation in their trust level towards the local level.

I rely on a 17-year-panel survey that is representative of the Swiss resident population and a difference-in-difference and event-study like approach. Migrants moving to higher (lower) trust cantons have parallel trends in trust and balance in other demographics before moving. Furthermore, early and late migrants are also balanced in demographics. These observations allow me to identify a causal effect of moving to a canton with a different level of trust.

I find a large change in the migrants' trust, that is, migrants moving to a higher trust canton (compared to origin) increase their trust (5.3% from the baseline), whereas migrants moving to lower trust cantons (compared to origin) decrease their trust (3.9% from the baseline). This assimilation takes place in an average of 5 years. Using the difference-in-differences approach with the continuous treatment, I find that, migrants increase their trust in 0.43 standard deviations for each standard deviation increase in the trust level at the destination. The results are unchanged if I consider the level of trust in the cantons in the year 2002 (i.e., before any migration in the sample occurs), which eases concerns about the reflection problem. I also show that the results are not driven by differential attrition, as the attrition rate is similar for migrants in higher and lower trust cantons. On the other hand, I find no assimilation for trust in the federal government, confirming that my results are not driven by aspects of the survey implementation.

I further explore heterogeneity in the assimilation using the data driven method by Chernozhukov et al. (2018) and find that the 25% who adapted the most are more likely to be female and 36 years younger (supporting the impressionable years hypothesis in psychology (Krosnick and Alwin, 1989)), have at least one more year in the host canton, are poorer but with a higher increase in income and education after migration. Finding more robust evidence on these heterogeneities in assimilation not only would be helpful to inform international migration policy but also to correct native's missperceptions about immigrants' assimilation (Alesina and Tabellini, 2022).

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APPENDIX

A1. Measuring trust: Experimental literature

Some early papers, comparing self reported trust with experimental measures found mixed results.²¹ Glaeser et al. (2000); Lazzarini et al. (2005); Ermisch et al. (2009) found no correlation with the sending decision in the trust game but a strong and significant correlation with the return decision (i.e. trustworthiness). Both of these papers, however, were based on small and unrepresentative samples (Murtin et al., 2018). Fehr et al. (2003) used a large representative sample in Germany and found no correlations between self-reported trust in others and experimental measures of either one's own's trust or trustworthiness.

On the other hand, in a meta-analysis of experiments run in 35 countries, Johnson and Mislin (2012) finds a strong positive correlation with the experimental measure. Similarly, Murtin et al. (2018) finds a positive correlation between our generalized trust question and the experimental measures using representative samples from France, Germany, Italy, Korea, Slovenia and the United States.

Sapienza et al. (2013) reconciles these findings by separating the preferences and beliefs components in the senders decision in the trust game. They conclude that self-reported trust mainly captures beliefs while the amount sent in an experiment is confounding the two components.²² Partially confirming this, Murtin et al. (2018) finds experimental measures of expected trustworthiness (i.e. beliefs) and altruism (i.e. preferences) to be the strongest predictors of self-reported trust. Furthermore, Fehr (2009) shows that self reported trust is also driven by risk and betrayal aversion.

In sum, by capturing expected trustworthiness and altruism, self-reported trust is a good predictor of many desirable social, political and economics outcomes (Kim et al., 2019; Nunn and Wantchekon, 2011; Algan and Cahuc, 2010) and, thus, understanding

²¹Experimental measures operationalize trust as the amount sent and trustworthiness as the money returned in a Berg-Dickhaut-McCabe Investment Game (commonly known as the Trust Game)(Berg et al., 1995).

²²Interestingly, the papers finding no correlation with trust but with trustworthiness did not endow the trustee. According to Aksoy et al. (2018), this induces more altruism from the part of the trustor, which worsens the confounding between beliefs and preferences (see also Ashraf et al. (2006) and Cox (2004)). They replicate the experiment endowing both parties and find a significant correlation between the self-reported and experimental measure.

how migrants develop this is important. Although disentangling assimilation in beliefs from assimilation in preferences would be a difficult task with non experimental data, one can expect that both components (beliefs and preferences) affect behavior in the same direction (Alesina and Giuliano, 2015; Tabellini, 2008).²³

 $^{^{23}}$ One could potentially argue, as Fehr (2009) conjectures, that the speed of assimilation can give some evidence since beliefs are likely to be more malleable and change more quickly in response variations in the prevailing conditions.

The large majority of the literature on cultural assimilation (mostly in adjacent fields) have relied on the epidemiological approach (See Fernández and Fogli, 2006; Fernandez, 2007; Giuliano, 2007) sometimes exploiting the time spent in the destination (Marino Fages and Morales Cerda, 2022; Helliwell et al., 2016; Wu, 2020, 2021; Cameron et al., 2015; Dinesen and Hooghe, 2010; Dinesen, 2013, 2012; Nannestad et al., 2014; Kim, 2021). The approach involves studying individuals from different backgrounds in one specific location (holding culture and institutions at the destination constant). I do the opposite analysis, by controlling for origin fixed effects and observing the effect of the destination on the migrants' trust level. Formally, I run the following equation:

(A1)
$$Trust_{irh} = \alpha + \beta_1 \overline{Trust}_r + \beta_2 X_i + Origin_h + \epsilon_{irh}$$

where, $Trust_{irh}$ is individual i level of trust in canton r from canton h, \overline{Trust}_r is the average trust level in the residence canton r, $Origin_h$ are canton(country) of origin h fixed effects, X_i is a vector of control variables and ϵ_{irh} is the individual specific error term. β_1 is the coefficient of interest. I run three separate regressions: 1) International migrants, 2) Internal migrants in the destination, and 3) Internal migrants before they move as a falsification test. For this analysis I restrict the sample to the german regions only and report bootstrapped standard errors.

Table A1 presents the results. The first two columns show that the average trust in the destination canton is a significant predictor of the individual trust for both internal and international migrants. The coefficient of interest for internal and international migrants are both positive and significant at conventional levels. A standard deviation increase in the average cantonal trust is associated with a 2.49 (1.35) standard deviation increase in the residualized trust of the internal (international) migrant.

The assumption needed to interpret these results as causal is that, conditional on observables, migrants' destinations are as good as random. For the internal migrants I also have data on their pre-move trust level. This allows us to check whether internal

migrants look similar in terms of trust to the destination cantons, even before moving to those cantons. Column 3 shows that, a negative and non-significant effect of the destination canton on migrants before they migrate which provides evidence against a selection mechanism.

Table A1—: Effect of average trust in the canton on individual trust of migrants

	(1)	(2)	(3)
	Trust	Trust	Trust
VARIABLES	International	Internal	Internal (premove)
Avg trust in the canton	1.590	2.492	-0.160
	(0.631)	(1.353)	(1.223)
Age	0.004	-0.002	-0.011
	(0.006)	(0.006)	(0.006)
Female	-0.016	0.243	0.189
	(0.126)	(0.160)	(0.161)
Married	0.268	0.265	-0.174
	(0.158)	(0.189)	(0.228)
Years of Education	0.114	0.122	0.091
	(0.022)	(0.030)	(0.038)
Log(income)	-0.097	-0.011	-0.134
	(0.078)	(0.132)	(0.089)
${ m time_here}$	0.001	, ,	, ,
	(0.006)		
Constant	-1.073	-2.615	0.183
	(0.821)	(1.340)	(0.839)
	` ,	, ,	, ,
Observations	1,097	530	508
R-squared	0.133	0.094	0.096

Note: The dependent variable is the individual average of the residuals of regressing trust on year dummies. The independent variable is the average trust level in the host canton. All regressions control for age, gender, civil status, years of education, income (in logs) is measured in Swiss Francs. The first column also includes years since arriving in Switzerland. All regression control for either country of origin or canton of origin fixed effects. Bootstrap standard errors in parentheses.

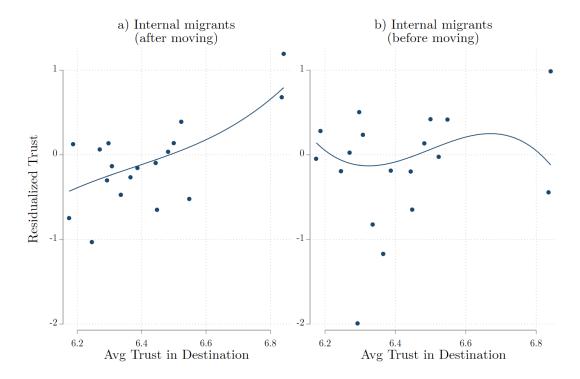


Figure A1 : Correlation between Residualized Trust and Average Trust in the destination canton

Note: The figure presents bins reg plots with cubic polynomial (Cattaneo et al., 2019) of migrant's trust and average trust in the destination canton (controlling for canton of origin) for internal migrants in German cantons before and after moving. To compute the Residualized Trust, I first regress the Trust variable on calendar year dummies, and then average all the residuals by individual.

A3. Balance check international

Table A2 shows that international migrants going to higher and lower trust cantons are very similar in terms of age, gender, civil status, years of education, income and time spent in the country. If anything I can observe a lower income and time spent in the country, but all variables are statistically insignificant.

It is also important to note that, in terms of these observable characteristics, international migrants seem to be younger, less educated, earning less; and less likely to be female and more likely to be married than internal migrants.

Table A2—: Balance tests for International migrants

	Low Trust		Hi	High Trust		
	N	Mean (s.d.)	N	Mean (s.d.)	Coeff.	p-value
After moving						
Age	2,211	37.39	2153	37.21	-0.175	0.77
		(19.66)		(19.06)		
Female	2,211	0.48	2153	0.48	-0.000	0.98
		(0.50)		(0.50)		
Married	2,211	0.47	2153	0.48	0.011	0.45
		(0.49)		(0.49)		
Income (CHF)	1,130	$53,\!563$	1,070	$52,\!196$	-1,366	0.59
		(74,743)		(39,747)		
Years since arrival	1,592	19.73	1582	18.94	-0.798	0.13
		(15.02)		(14.34)		
Education (years)	1,987	11.26	1939	11.13	-0.122	0.43
		(4.97)		(4.76)		
HH Size	1,071	2.68	1017	2.70	0.026	0.64
		(1.23)		(1.28)		

Note: The table shows the number of observations, means, standard deviations, coefficients and p-values of regressing each variable on an indicator that takes the value 1 for international migrants in cantons with trust above the median and 0 otherwise.

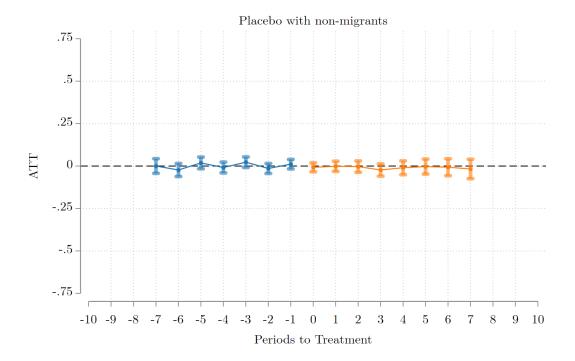


Figure A2 : Placebo

Note: The figure presents a placebo test where I assign random destination and moving dates to non-migrants. The horizontal dashed line represents the last period before the assigned moving time and the spikes show the 95% simultaneous confidence intervals around each ATT using wild bootstrap standard errors. I fill the gaps in trust in the survey by linear interpolation. The analysis was performed using the Stata command csdid (Rios-Avila et al., 2021).

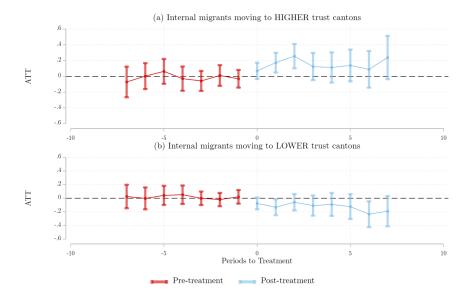


Figure A3: Event study: Controlling for shock size

Note: Panel (a) and (b) present the event study results of each ATT of migrants moving to a HIGHER and LOWER cantons controlling for shock size. In both cases, the base period (i.e. the last period before moving) is represented by the horizontal dashed line and the spikes show the 95% simultaneous confidence intervals around each ATT using wild bootstrap standard errors. I fill the gaps in trust in the survey by interpolating from the nearest neighbour.

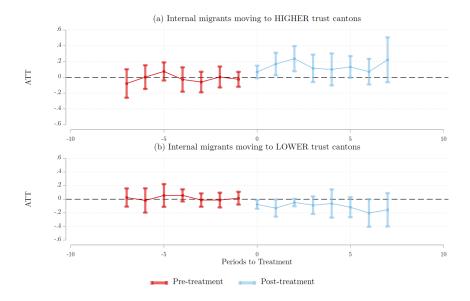


Figure A4 : Event study: Canton of origin clusters

Note: Panel (a) and (b) present the event study results of each ATT of migrants moving to a HIGHER and LOWER cantons. In both cases, the base period (i.e. the last period before moving) is represented by the horizontal dashed line and the spikes show the 95% simultaneous confidence intervals around each ATT using wild bootstrap standard errors clustered at the canton of origin. I fill the gaps in trust in the survey by interpolating from the nearest neighbour.

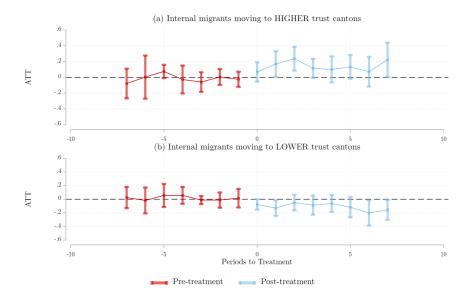


Figure A5: Event study: Canton of destination cluster

Note: Panel (a) and (b) present the event study results of each ATT of migrants moving to a HIGHER and LOWER cantons. In both cases, the base period (i.e. the last period before moving) is represented by the horizontal dashed line and the spikes show the 95% simultaneous confidence intervals around each ATT using wild bootstrap standard errors clustered at the canton of destination. I fill the gaps in trust in the survey by interpolating from the nearest neighbour.

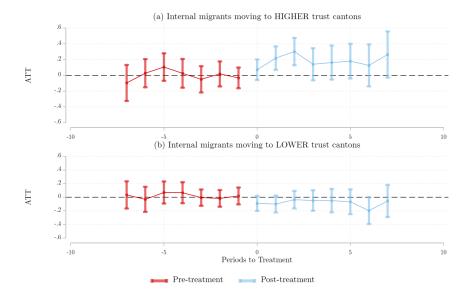


Figure A6: Event study: no interpolation

Note: Panel (a) and (b) present the event study results of each ATT of migrants moving to a HIGHER and LOWER cantons. In both cases, the base period (i.e. the last period before moving) is represented by the horizontal dashed line and the spikes show the 95% simultaneous confidence intervals around each ATT using wild bootstrap standard errors.

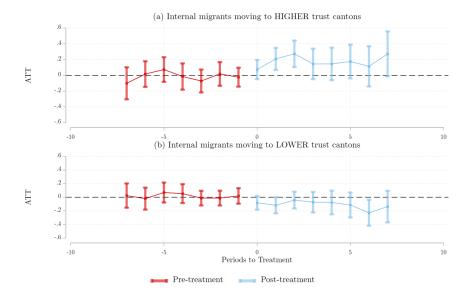


Figure A7 : Event study: linear interpolation

Note: Panel (a) and (b) present the event study results of each ATT of migrants moving to a HIGHER and LOWER cantons. In both cases, the base period (i.e. the last period before moving) is represented by the horizontal dashed line and the spikes show the 95% simultaneous confidence intervals around each ATT using wild bootstrap standard errors. I fill the gaps in trust in the survey by linear interpolation.

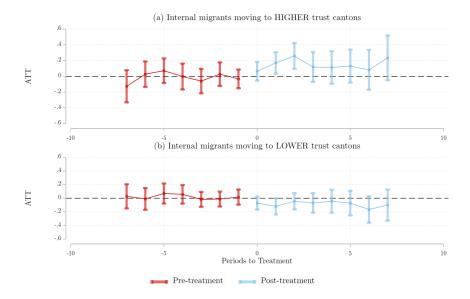


Figure A8: Event study: forward interpolation

Note: Panel (a) and (b) present the event study results of each ATT of migrants moving to a HIGHER and LOWER cantons. In both cases, the base period (i.e. the last period before moving) is represented by the horizontal dashed line and the spikes show the 95% simultaneous confidence intervals around each ATT using wild bootstrap standard errors. I fill the gaps in trust in the survey by forward interpolation.

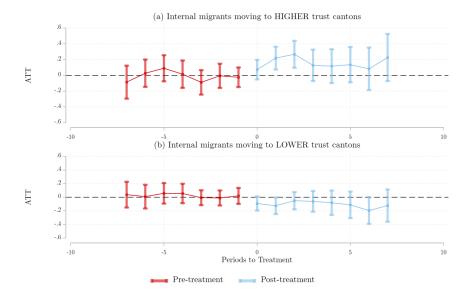


Figure A9: Event study: splines interpolation

Note: Panel (a) and (b) present the event study results of each ATT of migrants moving to a HIGHER and LOWER cantons. In both cases, the base period (i.e. the last period before moving) is represented by the horizontal dashed line and the spikes show the 95% simultaneous confidence intervals around each ATT using wild bootstrap standard errors. I fill the gaps in trust in the survey by splines interpolation.

Table A3—: Difference in differences results by gender

	(1)	(2)	(2)	(4)
MADIADIDO	(1)	(2)	(3)	(4)
VARIABLES	Trust	Trust	Trust	Trust
	All	All	Males	Females
Avg trust in the canton X Post move	0.489	0.432	0.419	0.431
	(0.204)	(0.212)	(0.323)	(0.288)
Post move	-0.005	-0.063	0.092	-0.241
	(0.030)	(0.139)	(0.177)	(0.214)
Log(income)	,	-0.085	-0.044	-0.096
-		(0.045)	(0.064)	(0.057)
Age		0.014	-0.007	$0.037^{'}$
_		(0.019)	(0.025)	(0.028)
Education (years)		0.008	-0.021	$0.023^{'}$
,		(0.018)	(0.026)	(0.024)
Constant	-0.046	0.237	1.036	-0.674
	(0.015)	(0.792)	(1.095)	(1.131)
	` /	` ,	` /	, ,
Individual FE	Yes	Yes	Yes	Yes
Observations	726	676	302	374
R-squared	0.890	0.883	0.895	0.878

Note: The table presents difference-in-differences regressions (Equation 5) for trust in strangers (Trust) in columns 1 and 2. Separate regression for each gender are presented in Columns 3 and 4. The dependent variable is the individual average of the residuals of regressing Trust on year dummies. The main independent variable is the average Trust level in the host canton. All regressions include individual fixed effects. Standard errors (in parentheses) clustered at the individual level. Income is measured in Swiss Francs.

Table A4—: Summary statistics of trust by canton in the full sample and year 2002

TD + / 1		T /	2002)
`	,		
Mean	s.d.	Mean	$\mathrm{s.d.}$
4.93	2.61	3.33	4.16
5.62	2.49	4.99	2.79
5.73	2.37	5.09	2.76
5.73	2.48	4.86	3.00
5.77	2.42	5.12	2.71
5.91	2.37	5.00	3.03
5.97	2.39	5.26	2.97
6.17	2.18	5.55	1.99
6.19	2.08	5.82	2.05
6.25	2.07	5.67	1.72
6.27	2.05	5.5	2.13
6.29	2.29	6.29	2.97
6.3	2.41	5.97	2.36
6.31	2.17	5.71	2.34
6.34	2.06	5.83	2.17
6.37	2.28	5.77	2.12
6.38	2.08	5.81	2.12
6.39	2.13	5.8	2.25
6.44	2.05	5.76	2.17
6.45	1.99	6.05	2.09
6.48	2.07	5.94	2.35
6.5	2.00	5.91	2.22
6.52	2.14	6.68	2.19
6.55	1.96	5.83	2.42
6.84	2.04	6.05	2.27
6.84	1.83	5.67	2.08
	Mean 4.93 5.62 5.73 5.62 5.73 5.77 5.91 5.97 6.17 6.19 6.25 6.27 6.29 6.3 6.31 6.34 6.37 6.38 6.39 6.44 6.45 6.48 6.5 6.52 6.55 6.84 6.84	4.93 2.61 5.62 2.49 5.73 2.37 5.73 2.48 5.77 2.42 5.91 2.37 5.97 2.39 6.17 2.18 6.19 2.08 6.25 2.07 6.27 2.05 6.29 2.29 6.3 2.41 6.31 2.17 6.34 2.06 6.37 2.28 6.38 2.08 6.39 2.13 6.44 2.05 6.45 1.99 6.48 2.07 6.5 2.00 6.52 2.14 6.55 1.96 6.84 2.04 6.84 1.83	Mean s.d. Mean 4.93 2.61 3.33 5.62 2.49 4.99 5.73 2.37 5.09 5.73 2.48 4.86 5.77 2.42 5.12 5.91 2.37 5.00 5.97 2.39 5.26 6.17 2.18 5.55 6.19 2.08 5.82 6.25 2.07 5.67 6.27 2.05 5.5 6.29 2.29 6.29 6.3 2.41 5.97 6.31 2.17 5.71 6.34 2.06 5.83 6.37 2.28 5.77 6.38 2.08 5.81 6.39 2.13 5.8 6.44 2.05 5.76 6.45 1.99 6.05 6.48 2.07 5.94 6.5 2.00 5.91 6.52 2.14 6.68

Note: The table presents the mean and standard deviation of the trust variable for the Swiss population that are not moving internally in the full sample and for the year 2002 separately. The Pearson correlation coefficient between both means is 0.88.

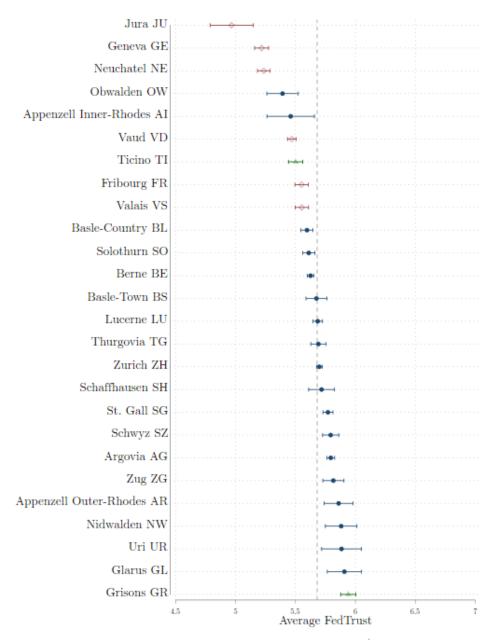


Figure A10 : FedTrust in the cantons

Note: The figure presents the average trust in the federal government (ranging from 0 to 10) for all non-migrants in each canton over the period 2002-2018 with 95% confidence intervals. The vertical dashed line shows the median average trust in the federal government among the cantons. Finally, the different colors and symbols depend on the language region.

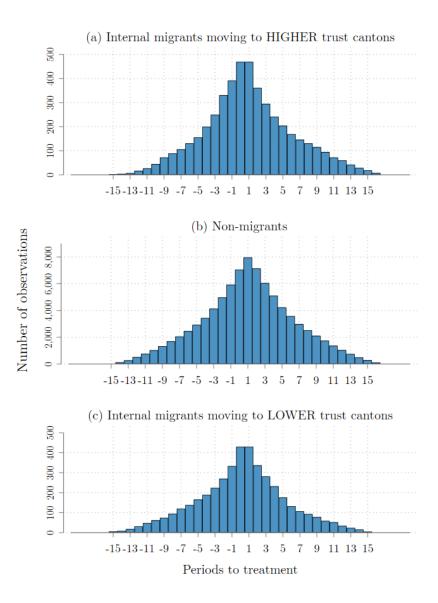


Figure A11: Number of observation per period

Note: Panel (a) and (c) present the number of observations per period (relative to the moving period) for migrants moving to a HIGHER and LOWER cantons. Panel (b) shows the number of observations per period in the sample of non-migrants where the moving period is randomly assigned.

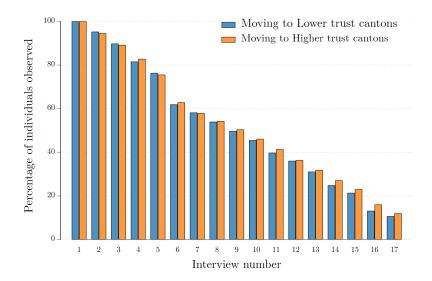


Figure A12 : Attrition for migrants moving to higher and lower trust cantons

Note: The figure presents the percentage of respondents observed in each interview number relative to the first interview. E.g. roughly 81% of the respondents (moving to higher and lower trust cantons) are observed at least four times, and roughly 40% are observed 11 times.

Table A5—: Effect of average trust in the host canton on attrition

		Dep. variable: Prob. of non response				
		(1)	(2)	(3)	(4)	(5)
VARIABLES		Coef.	s.e.	P-value	C.I. low	C.I. high
Avg trust in the	canton X Post move	0.040	(0.056)	0.476	-0.070	0.150
Avg trust in the		-0.062	(0.053)	0.235	-0.166	0.041
Post move		0.002	(0.009)	0.819	-0.016	0.020
Interview year:			()			
J J	2003	-0.050	(0.029)	0.081	-0.107	0.006
	2004	-0.014	(0.022)	0.529	-0.056	0.029
	2005	0.033	(0.026)	0.202	-0.018	0.084
	2006	-0.001	(0.025)	0.954	-0.050	0.047
	2007	-0.003	(0.024)	0.898	-0.049	0.043
	2008	0.008	(0.025)	0.741	-0.040	0.056
	2009	0.010	(0.024)	0.683	-0.037	0.057
	2010	0.010	(0.025)	0.691	-0.039	0.058
	2011	0.001	(0.025)	0.964	-0.048	0.050
	2012	0.028	(0.025)	0.267	-0.022	0.078
	2013	0.064	(0.026)	0.014	0.013	0.114
	2014	0.075	(0.026)	0.003	0.025	0.125
	2015	0.088	(0.027)	0.001	0.036	0.141
	2016	0.112	(0.027)	0.000	0.060	0.164
	2017	0.104	(0.030)	0.000	0.046	0.162
	2018	0.110	(0.023)	0.000	0.064	0.155
Interview number			,			
	2	0.096	(0.021)	0.000	0.054	0.138
	3	0.113	(0.017)	0.000	0.078	0.147
	4	0.090	(0.019)	0.000	0.052	0.128
	5	0.094	(0.019)	0.000	0.057	0.132
	6	0.087	(0.018)	0.000	0.052	0.121
	7	0.090	(0.020)	0.000	0.051	0.128
	8	0.090	(0.019)	0.000	0.052	0.128
	9	0.064	(0.020)	0.001	0.025	0.103
	10	0.068	(0.020)	0.001	0.028	0.107
	11	0.038	(0.021)	0.071	-0.003	0.079
	12	0.014	(0.021)	0.502	-0.028	0.056
	13	0.025	(0.022)	0.248	-0.018	0.069
	14	-0.027	(0.023)	0.241	-0.073	0.018
	15	-0.018	(0.021)	0.389	-0.060	0.023
	16	0.009	(0.028)	0.757	-0.046	0.064
Constant	-	-0.021	(0.015)	0.165	-0.050	0.008
Individual FE		Yes				
Observations		8,280				
R-squared		0.344				
	the regression of the prob			41	1.	

Note: The table presents the regression of the probability of non response on the average trust level in the current canton (postmove takes the value 1 after moving and zero otherwise) controlling for interview year, interview number and individual fixed effects. Bootstrap standard errors in parentheses. I report 95% confidence intervals.