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How effective are integration policy reforms? The case of asylum-related migrants

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Abstract

The marked increase of asylum seekers arriving in Western Europe after 2014 has renewed debates on policy measures that countries should put into place to support their integration. Although implemented by many countries in recent years, research has neglected the effect of integration policy reform packages combining economic and social policy measures on asylum-related immigrants' adjustment processes. Exploiting a comprehensive integration policy reform in Switzerland, using survey data from the Health Monitoring of the Swiss Migrant Population, and registering data on the whole asylum-related population, our difference-in-differences analyses reveal that provisionally admitted individuals benefiting from the reform have higher employment probability, increased income levels, better language skills, and feel less lonely or without a homeland relative to comparable asylum seekers who did not benefit from the reform. Robustness checks assessing common pre-reform trends support our findings, which highlight the importance of evaluating entire reform packages when assessing integration policies' effectiveness.

INTRODUCTION

Recent humanitarian migration flows, which reached a peak during the "long summer of migration" in 2015 (OECD, 2015), triggered a lively public, political, and scholarly debate about how to best integrate asylum-related immigrants. In light of an increasingly rich literature on policies regulating immigrant integration and cultural diversity, a growing body of studies started assessing how these policies affect different aspects of immigrants' economic inclusion, socio-cultural adaptation, and psychological well-being.

Studies in this field can broadly be divided into two areas. One area of research assesses correlations between broad integration policy indices measuring policies regulating immigrants' rights and obligations in the socio-economic, civic–political, or cultural–religious realms and integration of individual immigrants (e.g. Aleksynska & Tritah, 2013; Bilgili et al., 2015; Filindra & Manatschal, 2020; Goodman & Wright, 2015; Pichler, 2011; Politi et al., 2021). While many of these studies are able to establish links between policies and integration outcomes, findings remain inconclusive. This may relate to the fact that researchers using overall integration policy indices often ignore that these policies may yield heterogeneous or mixed effects on various immigrant groups, such as asylum seekers and undocumented or high-skilled immigrants. Even when these index-based studies focus on a specific group, such as asylum-related immigrants (e.g. Slotwinski et al., 2019), empirical evidence on policy outcomes remains restricted to correlational studies.

Addressing this limitation, a second area relies on experimental or quasi-experimental research designs to identify the causal impact of specific integration policy instruments or aspects of the asylum procedure on (asylum-related) migrants' adaptation processes (e.g., Fossati & Liechti, 2020; Hainmueller et al., 2016; Neureiter, 2019). These studies can draw stronger conclusions on the effectiveness of single-policy instruments or measures, such as reduced waiting periods (Hainmueller et al., 2016; Hvidtfeldt et al., 2018) or optimised resettlement procedures (Bansak et al., 2018). At the same time, these studies often restrict their focus on particular policy interventions.

Policy makers, in turn, increasingly account for the complexity of the integration field and that different areas of integration, such as language skills and labour market integration, are interdependent and mutually reinforcing (Ager & Strang, 2008; Harder et al., 2018), by formulating and implementing encompassing integration policy reform packages. Exemplary of this trend is the European Union's action plan on integration and inclusion, first launched in 2016, and currently running for a second period from 2021–2027, which supports policy initiatives fostering inclusive education and training, improved employment opportunities, and access to health and affordable housing.[1] As a consequence of such reforms, (asylum-related) immigrants can be exposed to a whole new set of integration policy measures and procedures regulating distinct dimensions of integration ranging from labour market participation to social integration. Research assessing the effectiveness of such encompassing policy reforms is, however, still scarce.

The present article remedies this research gap by using an encompassing reform of the *Federal Act on Asylum* and the *Swiss Federal Act on Foreign Nationals and Integration* enacted between 2006–2008 as a source of exogenous variation to identify the impact of this reform package on various dimensions of asylum-related immigrants' adjustment process. The empirical setup of our study allows us to complement existing research in several respects: First, by assessing the effectiveness of an encompassing integration policy reform, our study accounts for the complexity of real-world integration policy measures. While we cannot disentangle the effects of single-policy measures included in the reform due to their simultaneous implementation, we can assess the so far neglected impact of an entire reform package. Second, this policy reform is clearly targeted. We can accurately identify policy beneficiaries, individuals in the asylum procedure who received a provisional admission status (F-permit) and compare them to a comparable but untreated control group, and asylum seekers (N-permit) who are not eligible for these policies. Third, our quasi-experimental difference-in-differences research design exploits an exogenous source of policy variation by comparing integration outcomes of F- and N-permit holders before and after policy reform. The imperfection of real-world quasi-experiments notwithstanding, this empirical strategy has clear inferential advantages over correlational studies in identifying policy effects (Neureiter, 2019; Robinson et al., 2009). Fourth, besides using individual survey data from the Health Monitoring Program of the Swiss Migrant Population

(*Gesundheitsmonitoring der Migrationsbevölkerung*, GMM) for the years 2004 and 2010, we also use longitudinal individual register data to analyse reform outcomes on integration, which allows us to assess the generalisability of our results to the entire population of F-permit holders in Switzerland.

Our difference-in-differences analyses with GMM survey data reveal that the reform improved both the labour market inclusion (employment, income) as well as the sociocultural adaptation (host-country language proficiency) and psychological wellbeing (reduced feeling of loneliness and of no longer having a homeland) of asylum-related Sri Lankans affected by the reform relative to their peers who remained unaffected.[2] The register data analyses confirm the generalisability of the beneficial effect of the policy reform on the labour market participation of all F-permit holders in Switzerland. Additional robustness checks lend support for our causal interpretation of the policy reform effects. Our findings for the Swiss case might be of interest for several other countries which implemented, or are discussing, similar comprehensive integration policy reform packages in recent years.

THE REFORM OF SWISS INTEGRATION AND ASYLUM POLICY

Between 2006 and 2008, Switzerland implemented an encompassing reform of the *Federal Act on Asylum* and the *Swiss Federal Act on Foreign Nationals and Integration*. One of the purposes of this reform was to foster the economic and social integration of asylum-related individuals with a provisional admission status (F-permit), who often stay for a long time, if not permanently in Switzerland. Asylum seekers (N-permit), whose applications are still being processed, remained, in turn, unaffected by the reform. For a detailed discussion of the different legal statuses of asylum-related migrants in Switzerland, as well as on status attribution *via* Swiss authorities, see subsection A1 in the Appendix S1.

Until 2006, provisionally admitted individuals had very limited rights (Neubauer et al., 2004). They had, in general, no right to reunite their families in Switzerland. Access to the labour market was very difficult because in employment procedures, priority was given to Swiss citizens (*Inländervorrang*), EU citizens, or individuals with a permanent residence status. Individuals with an F-permit also faced restrictions with regard to vocational training after finishing school in Switzerland, and they had only reduced access to social benefits. Before 2006, the legal situation of and practice regarding F-permit holders was, thus, very similar to asylum seekers with an N-permit, and a change of status from an asylum seeker to a provisionally admitted immigrant was rarely perceived as an improvement (ibid.).

Between 2006 and 2008, the legal situation of provisionally admitted immigrants improved substantially. In 2006, a new decree abolished the prioritisation of permanently resident foreigners or Swiss workers, granting F-permit holders the same labour market access. With the new *Federal Act on Asylum*, which came into force in 2008, access to integration and labour market measures was extended to provisionally admitted individuals (Efionayi-Mäder & Ruedin, 2014). Measures specified in the new *Federal Act on Foreign Nationals and Integration* include a per capita federal integration allowance[3] as well as additional contributions to foster the sociocultural integration and economic independence of provisionally admitted individuals (article 87 of the new Federal Act on Foreign Nationals and Integration). The use of this federal per capita allowance is regulated by cantonal integration programmes, and it can be complemented by integration measures at the municipality level. These integration and active labour market measures, which are free of charge for provisionally admitted persons, include, for instance, language courses, employment-related integration courses, mentoring programmes, or specialised qualification courses. In spite of the decentralized nature of the implementation of these active labour market policies, which leaves cantons and municipalities considerable leeway, application of the new measures is compulsory for cantons and municipalities (SECO & BFM, 2012). The new Federal Act on Foreign Nationals and Integration allows further family reunifications for F-permit holders after three years of residence in Switzerland.

Asylum seekers with an N-permit, in turn, did not have access to these new policy measures. To be able to participate in language or other integration courses, asylum seekers first needed to obtain a provisional or permanent residence status. Moreover, as before the reform, N-permit holders needed to wait three to six months until

they were able to access the labour market after the reform, and individuals with an N-permit only got a job if no equally qualified Swiss, EU citizen, or other legal permanent residents could be found (Piguet & Wimmer, 2000).[4] Table 1 summarises these changes in the pre- and post-reform periods for provisionally admitted individuals (F-permit holders) as compared to N-permit holders.

STATE OF RESEARCH AND HYPOTHESES

While there are manifold definitions of and controversies about the concept of integration, there is consensus that integration policy is a transversal and multidimensional policy field. Adopting Entzinger's (2000) trichotomy who argues that immigrants need to find their place in the nation, the market, and the state, integration policies can be defined as policies steering immigrants' psychological and sociocultural adaptation, economic integration, and political incorporation (Berry & Ward, 2016; Goodman & Wright, 2015; Manatschal et al., 2020). Immigrant integration, thus, cuts across policy areas that are normally dealt with in separate literatures and by different disciplines, such as economics, political science, or social psychology. Different disciplinary backgrounds notwithstanding, these approaches build on the basic assumption that integration policies define inclusive vs. exclusive settings that shape individual affect, attitudes, and behaviour (Filindra & Manatschal, 2020; Green & Staerklé, 2013; Ward & Geeraert, 2016). Empirical evidence on the effectiveness of integration policies in fostering immigrants' labour market integration, sociocultural adaptation, and psychological wellbeing, on which this study focuses, is, however, mixed.

A first strand of research is directly concerned with integration policy effects on immigrants' labour market integration. One group of studies comprises large-N cross-national studies using policy data from the Migrant Integration Policy Index (MIPEX), yielding, however, mixed evidence. While Aleksynska and Tritah (2013) report a significant positive association between MIPEX and labour market outcomes, other studies find no significant correlation between integration policy and immigrants' unemployment propensity, labour force participation, or occupational class (e.g., Pichler, 2011). Summarizing multilevel studies examining the impact of the MIPEX, Bilgili et al. (2015) suggest that there is no systematic link between general integration policies and immigrants' individual labour market inclusion. The authors contend that this does not mean that integration policies do not matter, but rather that they are not properly implemented, targeted, or effective across countries (ibid.). Mixed evidence is further presented for civic integration policies, which require acquisition of country knowledge, language and values as conditions for immigration, and settlement and citizenship. While Goodman and Wright (2015) observe that these policies have no measurable effect, Neureiter (2019) documents a strong and positive effect on immigrants' level of economic integration. Slotwinski et al. (2019) further suggest that a more inclusive regime in terms of labour market access tends to increase the employment rate of asylum seekers.

TABLE 1 Policy changes for provisionally admitted individuals

Integration policy domain	Until 2006 (pre-reform)		After 2008 (post-reform)	
	F-permit	N-permit	F-permit	N-permit
State funding of social and economic integration programs	-	-	✓	-
Family reunification	-	-	✓	-
Equal access to the labour market as Swiss/ EU citizens or legal permanent residents	-	-	✓	-

Notes: F-permit = provisionally admitted; N-permit = asylum seeker.

A second group of studies comprises small-scale policy evaluations based on single countries, which often allow for a more precise identification of the causal effect of specific labour market integration policies. These studies reveal that programmes that are closely linked to the labour market (e.g., specific types of active labour market policies) and language training and anti-discrimination policies appear to be effective in fostering immigrants' labour market integration (Rinne, 2013). Studies using experimental research methods document how a long waiting period for a decision on the asylum claim reduces the probability of subsequent employment (Hainmueller et al., 2016; Hvidtfeldt et al., 2018) and how optimised relocation schemes can leverage synergies between refugee characteristics and resettlement sites, resulting in considerable employment gains (Bansak et al., 2018).

A second strand of research regards cultural–linguistic integration, for example, *via* language policies. Existing studies address consequences of language skills and the respective policies, rather indirectly or implicitly, based on the observation that language proficiency entails important resources in terms of human or social capital, which, in turn, facilitate integration in other areas (Ager & Strang, 2008; Harder et al., 2018). Language proficiency, and other forms of sociocultural adaptation (e.g., understanding local value system, acquisition of cultural practices of host country, and interaction with host nationals), improve, for instance, the stock of human capital in the host labour market *via* increased knowledge and access to information, reducing job search costs and increasing immigrants' employability. Unsurprisingly, studies find that language courses count among the most effective policies in supporting immigrants' labour market integration (Clausen et al., 2009; Rinne, 2013). At the same time, evidence on the direct language policy—language skill link remains scarce.

Turning finally to policy effects on immigrants' psychological well-being, research from political and social psychology points to the role of "symbolic boundaries" (Lamont & Molnár, 2002) and socio-political climate (Ward & Geeraert, 2016) that integration policies in addition to political discourse, as well as host country majority attitudes and behaviour (e.g., discrimination) set up. Studies find that inclusive regional integration policies increase immigrants' attitudinal ties to the context of residence, for example, *via* attachment to the host country (Bennour & Manatschal, 2019) or support of the incumbent state governor (Filindra & Manatschal, 2020). An exclusionary receiving country context may, in turn, foster acculturative stress, resulting in reduced psychological well-being manifested as depression, anxiety, and other psychological maladaptations (Berry, 1997). Research, indeed, shows that restrictions on the right to work increase vulnerabilities and have negative consequences for the mental well-being of asylum seekers (Carciotto, 2020), and that social isolation, for example, in state-provided asylum accommodation, is negatively related to refugees' mental and physical health (Bakker et al., 2016).

Hypotheses

Due to the parallel implementation of the policies included in the reform under consideration, we are not able to single out the effects of particular policies empirically. Instead, we build on existing research to theorise how each of the policies included in the reform package conjointly foster immigrant integration. The beneficial impact of facilitated labour market access and active labour market policies and instruments included in this policy reform on labour market outcomes is widely documented. This effect unfolds either directly, for example, *via* facilitated access to the job market or indirectly, *via* the acquisition of skills and capacities needed in the labour market. In this context, research highlights the effectiveness of language policies in improving labour market integration. Both policies facilitating labour market access and social integration, in particular the family reunification policies enacted *via* the reform, create an inclusive reception context that should also increase F-permit holders' psychological well-being and sense of belonging.

As documented by existing research, successful integration in one area is interdependent with, and likely to reinforce, integration in other areas (Ager & Strang, 2008; Harder et al., 2018). Language skills are, for instance, an important precondition for successful labour market integration (Clausen et al., 2009), whereas both language proficiency and economic integration may improve psychological well-being (Esses et al., 2017). Given

this multilayered and cumulative nature of individual adaption processes, we expect that policy reforms targeting simultaneously different integration domains have the potential to accumulate individual policy benefits. We assume, therefore, an overall beneficial effect of the reform and formulate the following set of hypotheses.

> H1: *Labour market integration (employment, income) of provisionally admitted individuals (F-permit holders) improved after the integration policy reform, when compared to asylum seekers (N-permit holders).*

While we can test *H1* for the whole F- and N-population and Sri Lankans, due to data availability, our tests of *H2* and *H3* are restricted to Sri Lankans, one of the largest asylum-related groups at the time (see subsection A1 in the Appendix S1).

> H2: *Host language proficiency of provisionally admitted Sri Lankans improved after the integration policy reform, when compared to Sri Lankan asylum seekers.*

> H3: *Feelings of loneliness and marginalisation decreased among provisionally admitted Sri Lankans after the integration policy reform, when compared to Sri Lankan asylum seekers.*

DATA AND RESEARCH DESIGN

Data

The empirical analysis relies on two data sources: cross-sectional data from the Health Monitoring of the Swiss Migrant Population (GMM, section 4.1.1), as well as comprehensive panel data based on the combination of administrative register data on the asylum-related population and social security data providing information on the employment status in Switzerland (section 4.1.2).

GMM data: Health monitoring of the Swiss migrant population

The primary objective of the GMM survey is to provide information on migrants' health state, their health behaviour, and use of health services. This survey includes migrant groups which due to language problems had not been adequately represented in standard health surveys or, as asylum-related immigrants, have not explicitly been addressed by those surveys.[5]

The first monitoring carried out in 2004 focuses on different migrant groups who permanently resided in Switzerland or were in a process of asylum admission (either provisionally admitted or still waiting for a decision). Regarding the foreign permanent population, the GMM includes representative samples of the Portuguese, ex-Yugoslavian, Turkish, and Sri Lankan communities taken from the Register of foreigners (*Zentrales Ausländer-Register*). In addition, two representative samples of asylum-related migrants from Kosovo and Sri Lanka were randomly selected from the register of asylum seekers (*Automatisiertes Personenregister, Asyl*). The second monitoring took place in 2010. Just as in the first monitoring, four focus countries were selected among the foreign permanent population (Portugal, Turkey, Kosovo, and Serbia) and two among foreigners seeking asylum in Switzerland (Sri Lanka and Somalia). Details on the sampling methodology and characteristics of the GMM samples are documented in reports by the Federal Office of Public Health (FOPH, 2007, 2012).

Since we are interested in the effects of the new integration policy on asylum-related immigrants, who are provisionally admitted (F-permit) relative to those who are still waiting for a decision (N-permit), and we also

need to examine a group of immigrants who share the same ethnic background and are surveyed over the two periods 2004 and 2010, we then focus the analysis on Sri Lankans in a process of asylum admission whose age ranges from 17 to 74.[6] When analysing labour market outcomes, we further select the working age population (17–65 years old) with at least one year of residence in Switzerland. The latter restriction is important given that asylum seekers are forbidden to work the first three to six months of residence (Art. 43 Loi sur l'asile LAsi; Piguet & Wimmer, 2000). Summary statistics of the selected samples, by year and permit, are presented in Table A1 in the Appendix S1.

Although there are only few common variables between the two GMM waves, we are, nevertheless, able to gather the necessary outcomes and controls to adequately study the impact of the new integration policy. We consider five outcomes to measure economic inclusion (employment, income), sociocultural adaptation (language skills), and psychological well-being (feeling of having no homeland, loneliness) among asylum-related Sri Lankans. We use two labour market outcomes: *employment* (=1 if employed, 0 if non-employed) and the *log household monthly net income* (deflated into 2000 Swiss francs).

We operationalise *knowledge of a national language* with three variables based on the respondents' self-assessment of fluency in Swiss language. The first outcome is coded 1 if respondents indicated one Swiss language (German, French, or Italian) when asked 'which of the national languages do you master best' and 0 otherwise. The second and third outcomes are based on questions whose wording in the 2004 GMM sample is slightly different from the one in the 2010 GMM sample. Respondents speaking one national language were asked in 2004 'How well do you understand this language in your opinion?' and 'How well do you speak this language?' on a 1 to 5 scale, where 1= 'very well', 2= 'well', 3= 'average'. 4= 'badly', and 5 = 'very badly'. Both these questions measure the same concept—how well someone masters a national language—given that the coefficient of correlation between these two variables is high ($r = 0.84$, $p < 0.01$). In 2010, a single alternative question for those speaking a national language is implemented as follows: 'How well do you master this language in your opinion?', with answers on the same 1-to-5 scale. We construct two binary outcomes, each of them proxying good knowledge in a Swiss language, where the question in 2010 is combined with either the question relating to understanding or speaking asked in 2004. Each of these outcomes takes the value 0 when respondents know no national language or at least one national language very badly/badly or the value 1 when they know at least one national language moderately/well/very well. Our results are robust to these different definitions of perceived language proficiency.

In terms of psychological well-being, we analyse two self-assessed indicators. The *feeling to have no longer a homeland*, akin to marginalisation as one does not feel part of the receiving country nor of one's country of origin, is measured on an ordinal scale using the question 'When you live as an immigrant in Switzerland, over time you may feel that you no longer have a homeland. You do not really belong anywhere, so to speak. How often does it happen that you have such feelings?' We collapse its ordinal scale into a binary indicator which equals 1 if the respondents felt homeless at least once (i.e., rarely, sometimes, often, or very often) or 0 otherwise. The outcome for the *feeling of loneliness* is derived from the question 'How often do you feel lonely? Does that happen very often, quite often, sometimes, or never?'. We construct a dummy variable equal to 1 (0 otherwise) if the answers range from sometimes to very often.

For the analysis, the two GMM samples are pooled as a cross-section. Using STATA's *svy* command, we incorporate cross-sectional individual weights to take the sampling design of the GMM into account and, thus, obtain reliable estimates concerning the population under study. *Via* this command, STATA calculates robust standard errors using the "linearisation" variance estimator based on a first-order Taylor series linear approximation (Eltinge & Sribney, 1997). For additional testing purposes, we further complement the GMM samples with random samples drawn from the Census data 2000, following the random sampling strategy applied in GMM (see *Methods* section for more details).

Register data

In a second step, we rely on individual longitudinal data from official registers to estimate the employment effects of the policy shift over time within individuals for the overall asylum-related population in Switzerland. In doing so, we aim to find support for the generalisability of our approach beyond Sri Lankans. The used dataset is derived from two registers—the Registers of foreigners and asylum seekers and the Register of the Central Compensation Office (*Caisse de Compensation*)—that are linked by a unique identification number (see Steiner & Wanner, 2015, for the description of the procedures). The linked dataset allows us to examine the universe of asylum-related immigrants in Switzerland during the period 2000–2013,[7] and to track their employment trajectories over time.

Every foreigner in Switzerland, including asylum seekers and temporary admitted, is recorded upon arrival in the Registers of foreigners and asylum seekers. They are assigned an identification number, the social security number which is available in almost all national registers. Using this identification number, it is possible to link the information on individual asylum seekers, including their legal status based on registers of foreigners and asylum seekers, with information on their professional earnings and, thus, on the participation in the labour market, available in the register of the Central Compensation Office.[8] In line with the *employment* variable derived from the GMM data, the main and only dependent variable from the register data is a dummy equal to 1 if employed and 0 otherwise (i.e., non-employed). Summary statistics for asylum-related Sri Lankans and migrants, by period of years and permit, are presented in Tables A5.1 and A5.2 in the Appendix S1, respectively.

Methods

First, we analytically exploit the exogenous reform occurring between the two GMM waves from 2004 and 2010, which aimed at facilitating the labour market and linguistic and social integration of one specific group of asylum-related immigrants, namely, those with a provisional admission (F-permit). This quasi-experimental pre- and post-scenario allows us to test whether labour market outcomes and social well-being of Sri Lankans with an F-permit improved significantly after the integration policy reform, compared to Sri Lankan asylum seekers with an N-permit, who could not benefit from these policy changes (*H1*, *H2*, and *H3*). Consider the following cross-sectional difference-in-differences (DID) model:

$$y_{it} = \alpha_0 + \alpha_1 d2010_{it} + \alpha_2 \text{F-permit}_{it} + \delta_{\text{did}} \left(d2010_{it} \times \text{F-permit}_{it} \right) + \mathbf{X}_{it}\beta + \text{error}_{it}, \tag{1}$$

where y_{it} denotes the outcome of interest for individual i in year t. $d2010_{it}$ is a dummy variable which equals 1 if time t is 2010, meaning after the reform implementation, and 0 otherwise. F-permit$_{it}$ is also a dummy variable which equals 1 for provisionally admitted refugees (F-permit) and 0 for asylum seekers (N-permit). Because the implementation of the integration policy reform only affects F-permit but not N-permit holders, δ_{did} represents the effect of the reform shock. The vector of control variables $\mathbf{X}_{it}$ includes gender, age, age squared, years since migration, years since migration squared,[9] education level, marital status, number of children below 15 years, and a region dummy (=1 for French and Italian regions and 0 otherwise).[10] Another control is a vector of dummies for mastering either the Swiss German, French, or Italian language when estimating the employment and wage equations as well as models for psychological well-being outcomes, given that language proficiency is one dimension of immigrants' human and social capital. A further check consists in applying the difference-in-differences estimator to compare changes in outcomes between F-permit and N-permit Sri Lankans before the reform. If there are no pre-existing differences between treated and control groups, the common trend assumption is likely to hold, and the difference-in-differences estimator around the policy shift will produce unbiased estimates.[11]

In a next step, we replicate the DID regression analysis for the likelihood of employment (*H1*) using individual longitudinal data from linked registers, the Registers of foreigners and asylum seekers, and the Register of the

Central Compensation Office The difference-in-differences specification is estimated using the fixed effects (FE) method in which the error term includes the individual unobserved heterogeneity c_i:

$$y_{it} = \alpha_0 + \alpha_1 \tau_t + \alpha_2 \text{F-permit}_{it} + \delta_{did} \left(\tau_t \times \text{F-permit}_{it} \right) + \mathbf{X}_{it}\beta + c_i + \varepsilon_{it}, \tag{2}$$

where τ_t is a vector of year fixed effects. Control variables include only time-varying variables: age squared, years since migration squared, marital status, and canton dummies. This additional analysis has three notable advantages over our analysis based on GMM survey data. First, it allows us to assess the effectiveness of the policy reform on labour market participation not only for Sri Lankans but all immigrants in the asylum process. Second, since these data are available on a yearly basis from 2000 on, we are able to track the impact of the policy reform on the individual employment propensity over time. In particular, it is possible to use pre-treatment trend comparisons or placebo-interventions to test the common-trend assumption as data coverage begins at least five years prior to the real intervention (from 2000 to 2005). Finally, given the longitudinal nature of the data, it is straightforward to use the fixed effects (FE) estimator which allows us to control for self-selection on unobserved characteristics that are constant over time. Under the hypothesis that holding an F-permit (instead of an N-permit) is positively correlated with unobserved heterogeneity, then omitting the latter component should bias upward the OLS estimates, that is, $\delta_{did}^{FE} < \delta_{did}^{OLS}$. However, the fixed effect estimator does not account for time-varying unobserved heterogeneity in individuals' traits. For instance, supposing that F-permit migrants are granted the right of family reunification after a certain period spent in Switzerland, and that this event is positively correlated with labour market participation, the omission of the latter factor may bias the employment effect of the policy shift upwardly when using the fixed effects method. In that respect, the fixed effects estimates of δ_{did} can be seen as upper bounds of the "true" estimates.

RESULTS ANALYSIS I: DID BASED ON GMM SURVEY DATA

This section presents the results of the effects of the comprehensive reform of the Swiss integration policy on asylum-related Sri Lankans' labour market and sociocultural and psychological integration based on GMM survey data. The following results centre on our five outcome variables: employment and income for labour market outcomes (subsection 5.1), host-country language proficiency as an indicator for sociocultural integration (subsection 5.2), and feeling to have no longer a homeland and feeling of loneliness as proxies of psychological well-being (subsection 5.3).[12]

Labour market outcomes (H1)

As shown in the first column of Table 2, the integration policy reform improved the employment rate of Sri Lankans with an F-permit relative to their peers with an N-permit. More specifically, the reform increased the probability of employment by 29.4 percentage points. The size of this effect is fairly important, meaning that the implementation of the new integration policy measures has been a fruitful instrument to foster the asylum-related immigrants' rapid transition to the labour market. The common time trend test reported in Figure A1 in the Appendix S1 suggests that both F-permit and N-permit Sri Lankans would have behaved equally in terms of labour market participation in the pre-treatment period (i.e., in absence of the policy).

The results in columns 2–4 in Table 2 further show that the income effect of the integration policy reform is positive and statistically significant. As indicated in the second column, the reform is associated with a considerable income gain of 67.7 per cent. Other specifications including standardizsd versions of the household income—based on the square root scale or the per-capita scale, respectively—lead to the same conclusion (columns 3 and 4), the additional coefficient estimates of δ_{did} being not statistically different from the one in the second column.

TABLE 2 Employment and household monthly income: DID results

Outcome	(1) Employment	(2) log(income)	(3) log(equivalent income)	(4) log(per-capita income)
$\delta_{did2010}$	0.294**	0.677**	0.723**	0.769**
	(0.111)	(0.209)	(0.211)	(0.229)
Controls	Yes	Yes	Yes	Yes
Observations	369	266	266	266
R-squared	0.290	0.392	0.331	0.340

Notes: Coefficient estimates, linearised standard errors in parentheses.

Data are weighted. Outcome variable in column (1): Non-employed (= 0) and employed (= 1). Outcome variables in other columns: log household monthly income (deflated into 2000 Swiss francs). The equivalent income is equal to the household income divided by the square root of household size. The per-capita income is equal to the household income divided by the household size. Control variables: Gender, age, age squared, years since migration, years since migration squared, education level, marital status, number of children below 15 years, language proficiency (speaking a Swiss language), and regional dummy. Without control for language proficiency, all coefficient estimates of δ_{did} are slightly higher and equally significant. Full results are displayed in Table A2 in the Appendix S1.

Significance: ** $p<0.05$, * $p<0.10$.

As for employment (column 1), the size of the policy impact is substantial, lending support to the importance of an active integration policy in improving the income level of asylum-related households.

Knowledge of a national language (H2)

The first column of Table 3 shows the linear probability model of our difference-in-differences estimate, where the outcome measures if immigrants speak German, French, or Italian. The integration policy reform slightly misses the 10 per cent significance level, but indicates the expected positive trend on the probability of speaking one of these languages: it increases language proficiency probability by 8.8 percentage points for provisionally admitted Sri Lankans (F-permit) compared to those whose asylum application is being processed (N-permit).

The results for the two definitions of good knowledge in a Swiss language, presented in the second and third columns, are quite similar and point in the same direction: the effects of the reform on the probability of having a good knowledge in a Swiss language is significantly positive, corresponding to an increase in this probability of at least 20 percentage points. All in all, these findings lend support to the beneficial effect of inclusive integration policy on Swiss language proficiency.

Psychological well-being (H3)

The first column of Table 4 presents the results for the outcome measuring the *feeling to have no longer a homeland*, proxied by a dummy variable. The difference-in-differences estimate is negative and significant at the 10% level. Put differently, the integration policy reform has decreased the probability of feeling homeless by 18.0 percentage points for Sri Lankans with an F-permit relative to their peers with an N-permit.

The second column of Table 4 displays the difference-in-differences results for the dummy specification for *feeling of loneliness*. The effect of the integration policy reform is negative and significant at the 5% level: the estimated decrease in the probability of feeling lonely almost reaches 20 percentage points for Sri Lankans with

TABLE 3 Knowledge of a Swiss language: DID results.

	(1)	(2)	(3)
		Good knowledge in a Swiss language	
Outcome	**Speaking a Swiss language**	**Understanding (2004)**	**Speaking (2004)**
$\delta_{did2010}$	0.088	0.202**	0.232**
	(0.060)	(0.101)	(0.104)
Controls	Yes	Yes	Yes
Observations	441	441	440
R-squared	0.190	0.294	0.286

Notes: Coefficient estimates, linearised standard errors in parentheses.

Data are weighted. Outcome variable *speaking a Swiss language*: Speaking no national language (= 0), speaking one national language (= 1). Outcome variables *good knowledge in a Swiss language* (understanding or speaking in GMM 2004): no or very bad/bad knowledge of a national language (= 0), moderate/well/very well knowledge of a national language (= 1). Control variables: Gender, age, age squared, years since migration, years since migration squared, education level, marital status, number of children below 15 years, and regional dummy. Full results are displayed in Table A3 in the Appendix S1.

Significance: **$p < 0.05$ and *$p < 0.10$.

TABLE 4 Psychological well-being: DID results

	(1)	(2)
Outcome	**Feeling to have no homeland**	**Feeling of loneliness**
$\delta_{did2010}$	−0.180*	−0.197**
	(0.102)	(0.087)
Controls	Yes	Yes
Observations	437	441
R-squared	0.099	0.298

Notes: Coefficient estimates, linearised standard errors in parentheses.

Data are weighted. Outcome variable *feeling to have no homeland*: Never (= 0), rarely, sometimes, often or very often (= 1). Outcome variable *feeling of loneliness*: Never (= 0), sometimes, quite often, or very often (= 1). Control variables: Gender, age, age squared, years since migration, years since migration squared, education level, marital status, number of children below 15 years, language proficiency (speaking a Swiss language), and regional dummy. Full results are displayed in Table A4 in the Appendix S1.

Significance: **$p < 0.05$ and *$p < 0.10$.

an F-permit compared to those with an N-permit. Overall, these results point to the beneficial effect of inclusive integration policy on psychological well-being.

RESULTS ANALYSIS II: DID BASED ON REGISTER DATA

In a next step, we replicate the cross-sectional results for employment (*H1*) using an alternative data source with a longitudinal structure, resulting from the linkage of the registers of foreigners and asylum seekers with the register of the Central Compensation Office.

The main results based on this alternative longitudinal data are displayed in Figure 1. The left panel shows the DID effects on employment for asylum-related Sri Lankans, while the DID estimates in the right panel are derived
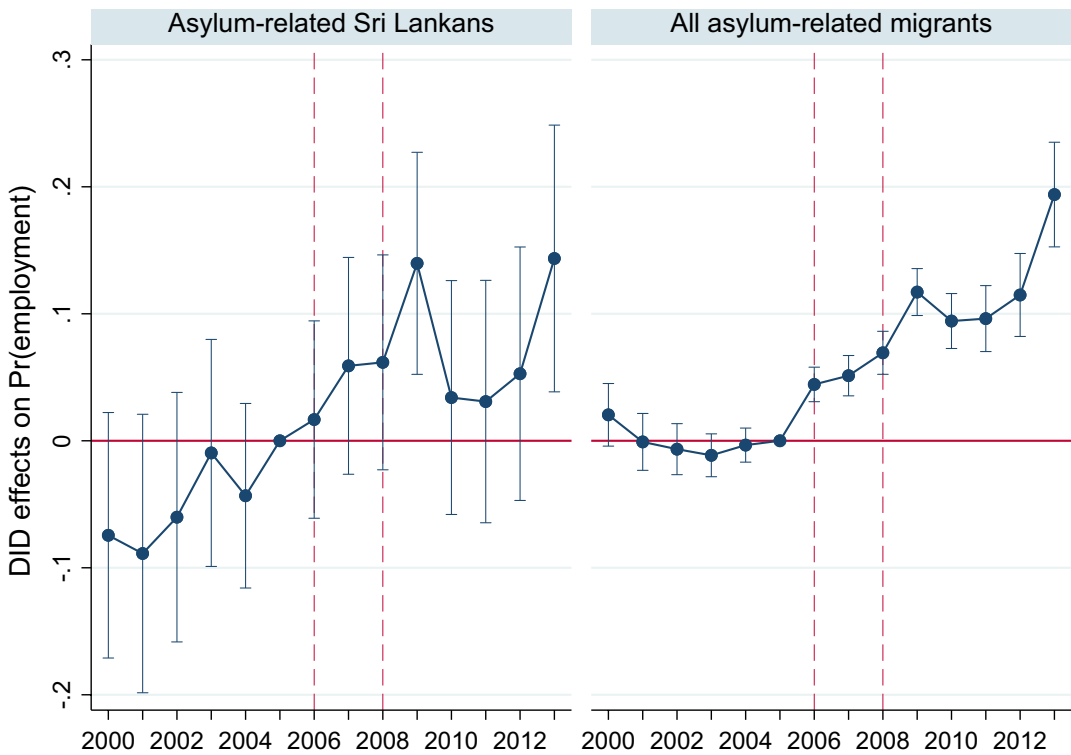
FIGURE 1 Employment effects of the reform for provisionally admitted Sri Lankans and all provisionally admitted migrants. *Notes*: The figures are based on DID models with fixed effects (see Table A6 in the Appendix S1), where we regress employment on permit and year dummy variables, interactions between permit and year (i.e. the DID effects), and other controls (age squared, years since migration squared, marital status, and canton dummies). The reference year is 2005 and the reference permit (red horizontal zero-line) is the N-permit (asylum seekers). The DID effects for provisionally admitted individuals (F-permit) are plotted with the 95 per cent confidence intervals. The vertical dashed lines indicate the beginning (2006) and end (2008) of the integration policy reform.

from the entire population of asylum-related migrants in Switzerland. Partially in line with our results based on the GMM data, the likelihood of employment is positive from 2006 (the first year of the policy reform implementation) for provisionally admitted individuals and this positive effect is significant at $p < 0.05$ in 2009 and 2013. The left panel in Figure 1 seems to suggest that an increasing trend begun few years before the implementation of the reform. The confidence intervals for the DID-fixed effects estimates for Sri Lankan pre-reform are, however, very wide, and we cannot infer any significant pre-trend from these results, neither for Sri Lankans nor for F-permit holders overall.[13] The very clear, positive, and significant trend for all F-permit holders from 2006 on displayed in the right panel in Figure 1 lends strong support for the generalisability of these findings beyond Sri Lankans. Last but not the least, the employment effects appear to keep growing in more recent years, emphasising the long-term beneficial impact of the policy shift.

CONCLUSION

At the peak of the most recent humanitarian migration crisis in 2015, EU countries registered more than 1.2 million new asylum applications, more than in any previous refugee crisis in Europe since World War II (OECD, 2015). Questions around the permanent inclusion of asylum-related individuals in destination countries, and the

recognition that individual integration processes in different societal areas are mutually dependent and reinforc-ing, reinvigorated national and supranational discussions on comprehensive integration policy reform packages and multifaceted dimensions of immigrant integration. So far, scientific evidence on the effectiveness of these reform packages in fostering individual integration processes is, however, scarce.

Our article remedies this research gap by assessing how the encompassing Swiss integration policy reform en-tering into force between 2006 and 2008 affected asylum-related migrants using a quasi-experimental research design. This reform entailed various policy measures such as financial support for language, qualification or men-toring courses, as well as legal changes that decisively facilitated labour market access and family reunification for provisionally admitted individuals. The results of our difference-in-differences analyses point to substantial beneficial effects of this reform on integration outcomes. The findings based on GMM data reveal that among provisionally admitted Sri Lankans, employment probability and income increased considerably after the reform. While these cross-sectional estimates are possibly biased upward due to the omission of unobserved heterogene-ity, panel data estimates that account for time-invariant unobserved heterogeneity based on register data confirm the positive employment effects of the policy shift in the short- and medium-run for the whole population of provisionally admitted individuals in Switzerland. They can be seen as upper bounds of the true estimates given that the fixed effects method does not allow to control for time-varying unobserved heterogeneity. Our GMM analyses further show that provisionally admitted Sri Lankans were also significantly more likely to have a good knowledge of a Swiss language and tended to feel less lonely and less marginalised after policy reform.

Beyond Switzerland, our results should be of interest for the numerous countries that have implemented or are discussing comparable integration policy reforms. Similar reforms focusing on language courses, labour mar-ket, and social integration have, for instance, been introduced with the National Integration Plan in Germany in 2007, via France's reform of the aliens' law in 2016, or, at the supranational level, *via* the European Union's action plan on integration and inclusion, which was first launched in 2016 and is currently running for a second period from 2021–2027. Evaluating comprehensive integration policy reform packages in other countries would be im-portant to validate or qualify the findings presented here for other country contexts.

While our findings suggest that, overall, the reform had a comprehensive beneficial effect on various integra-tion outcomes, we were not able, nor was it our purpose, to assess the performance of single policy instruments. Nor can we tell, based on our results, if there is one particular measure or a certain combination of measures that is most efficient. Individual data on policy implementation, for example, on who participated in the different in-tegration measures and active labour market programs in the full sample of F-permit holders—information that is not available for the period covered in this study—would further allow to trace down mechanisms behind reform effects.

In spite of these limitations, our study shows that the increasing popularity of integration policy reform pack-ages increasingly also demands for a simultaneous assessment of different policy measures, as well as their in-terplay, in affecting integration outcomes. We call for future research that builds on and refines the approach suggested here. Multifactorial survey experiments could, for instance, be used to assess which aspects of policy reform packages or which combination of integration measures are considered most helpful for individual inte-gration processes. This assessment should not base only on experts, for example, bureaucrats or practitioners working in the integration field but also on immigrants who are targeted by these policies. Research efforts in this direction, which account at the same time for the complexity of integration policy reform packages and analytic precision, promise more complete, precise, and potentially more consistent findings on the effectiveness of inte-gration policies.

DATA AVAILABILITY STATEMENT

Please note that none of the data used in the manuscript can be made available in a public data repository. As a matter of fact, our research team is bound by a confidentiality agreement with the Swiss Federal Statistical Office (SFSO) that does not allow us to preserve and share the register data to the public. The same applies

to survey data from the Health Monitoring of the Swiss Migrant Population provided by the Federal Office of Public Health (FOPH). The only way to have access to these data is to request them from the SFSO and the FOPH directly.

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ENDNOTES

1. https://ec.europa.eu/home-affairs/sites/default/files/pdf/action_plan_on_integration_and_inclusion_2021-2027.pdf [last accessed on November 29, 2021].

2. We focus the GMM survey data analyses on Sri Lankans as they were the only asylum-related migrants surveyed in both GMM waves and constitute an important share of asylum-related immigrants in Switzerland at the time of the reform (see subsection A1 of the Appendix S1).

3. At the time, this allowance was 6000 CHF (approx. 5400 Euro) per provisionally admitted individual. In 2019, this allowance was increased to 18,000 CHF (https://www.kkf-oca.ch/wissen-integration/ [last accessed: November 29, 2021]).

4. See https://www.kkf-oca.ch/themen-erwerbstaetigkeit/ (last accessed: November 29, 2021).

5. In 2004, the GMM survey was conducted in the following languages: German, French, Serbo-Croatian, Albanian, Turkish, Portuguese, and Tamil (OFSP, 2007). This list was extended by Somalia in the GMM survey 2010 (OFSP, 2012).

6. In additional analyses, we ran regression models in which all asylum-related respondents are included (that is, also those from the Kosovar communities surveyed only in 2004 and those from the Somali communities interviewed in 2010 only). In most cases, i.e., for eight out of our nine outcome variables, these additional results back up those based on the sample of Sri Lankans only (see Tables A7–A9 in the Appendix S1).

7. Linked information is exhaustive, even if it can be assumed that there are cases of undeclared work among asylum seekers and temporarily admitted migrants.

8. The register of the Central Compensation Office is managed by the Central Compensation Office in charge of the old-age and survivors' insurance.

9. As a robustness check, we have also included the cubic term of the years since the migration variable in the estimation models. The results are qualitatively similar to those presented hereafter and are displayed in Tables A10–A15 in the Appendix S1.

10. The linguistic area (Latin or German) is the only region unit available in the GMM data.

11. To test for the common trend assumption (based on the hypothesis that $\delta_{did} = 0$ for this pre-treatment period), we draw 5000 random samples of size 250 from the asylum-related Sri Lankan population using the 2000 Census data. The same procedure was originally applied to construct the GMM sample of asylum-related Sri Lankans in 2004: 250 Sri Lankans with both F- and N-permit were randomly selected from the Register of asylum seekers. We run 5,000 difference-in-differences models using each of these samples and the GMM sample for 2004, so that δ_{did} represents the interaction between the dummy variables for 2004 and F-permit (see results supporting common time trends in subsection A2 of the Appendix S1).

12. Note that besides controlling for gender, we also run separate models for men and women as an additional check to account for varying gender distribution (see descriptive statistics in Table A1 in the Appendix S1). Our findings on policy effects remain robust for male respondents across all outcomes. This also applies to women, except for labour market participation (analyses available upon request). While the latter points to a gendered pattern of the employment effects, the small sample sizes for Sri Lankan women prevent us from inferring a systematic trend.

13. Additional analyses where the DID-FE models are run without control variables reveal that the parallel trend assumption does not hold during the pre-reform period. As a result, conditioning on human capital factors is important for the parallel trend assumption to hold. The results of these additional analyses are available upon request.

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SUPPORTING INFORMATION

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