
Marie Labussière & Maarten Vink


To link to this article: https://doi.org/10.1080/1369183X.2020.1724533

Marie Labussière and Maarten Vink

Department of Political Science, Maastricht University, Maastricht, The Netherlands

ABSTRACT
For many children of immigrants to Europe, being born in a European country does not give them rights of citizenship. To acquire citizenship of the country of their birth, they typically rely on their parents’ naturalisation. While many European countries have tightened requirements for citizenship over recent decades, the impact of new regulations on immigrants’ children propensity to naturalise has gone largely unexplored. This paper analyses the impact of two restrictive legislative changes in the Netherlands: the re-introduction of a dual citizenship restriction in 1997, and the introduction of civic integration requirements in 2003. Using register data and event-history models, we analyse the acquisition of Dutch citizenship by children born in the Netherlands between 1995 and 2010 to immigrant parents. We find that the dual citizenship restriction puts families off naturalising while mandatory civic integration sees them postpone naturalisation. The intergenerational impact of naturalisation reforms is also reflected in the extent to which both parents are involved in the naturalisation process. Children eligible under stricter requirements are more likely to naturalise with one parent instead of both, in contrast to earlier eligibility cohorts. These findings shed light on key family dynamics in the acquisition of host country citizenship.

Introduction
In recent decades, naturalisation requirements have become increasingly strict in Europe (Vink and de Groot 2010), with prospective citizens often required to meet language and country-specific requirements (Goodman 2010). At the same time, being born in a European country is not – or is no longer – enough to make a child one of its citizens, owing to the predominance of ius sanguinis citizenship provisions whereby children have rights to the citizenship of their parents, not their country of birth (Honohan and Rougier 2018, 350). In this context, children of immigrants rely on their parents’ ability and desire to naturalise if they are to acquire the citizenship of the host country (Honohan and...
Rougier 2018, 335). Therefore, restrictive naturalisation reforms not only affect immigrants’ propensity to naturalise, as previous research has shown (e.g. Peters, Vink, and Schmeets 2016), but we can also expect such reforms to prevent their children from becoming citizens of their country of birth and residence.¹ This potential intergenerational impact seems of crucial importance in European countries where the so-called second generation represents a sizeable and growing proportion of the population (Heath, Rothon, and Kilpi 2008).

To our knowledge, such intergenerational effect of naturalisation reforms has never been investigated. Overall, children’s citizenship has not received much attention, making it difficult to assess who acquires host country citizenship among second-generation children, let alone when and under which conditions. This lack of attention is puzzling considering growing evidence of the detrimental effects of legal insecurity on young people’s well-being and their opportunities for the future (Bean et al. 2011; Colombo, Domaneschi, and Marchetti 2011; Cebulko 2014; Patler 2017; Felfe, Rainer, and Saurer 2020). Analysing the potential intergenerational effects of naturalisation reforms requires a better understanding of how children’s citizenship relates to the legal status of their parents, which departs from the traditional individual- and adult-centred perspective prevailing in citizenship studies (Cohen 2005; Street 2014; Soehl, Waldinger, and Luthra 2018).

Building on recent developments in the field (Street 2013, 2014; Soehl, Waldinger, and Luthra 2018), we propose to explore the intra-family dynamics at play in the naturalisation of immigrants’ children. We discern two approaches that families take to naturalisation, differentiating whether parents seek citizenship for all members (complementary) or for their children only (differentiated). Based on these approaches, we analyse to what extent naturalisation reforms influence patterns of citizenship acquisition by second-generation children. Thanks to its methodological approach, this paper also contributes to work on the impact citizenship reforms have on the propensity of immigrants to naturalise (Mazzolari 2009; Green 2012; Van Oers 2013; Vink, Prokic-Breuer, and Dronkers 2013; Stadlmair 2017). Our use of longitudinal micro-level data and event history models enables us to move beyond the mere description of naturalisation trends and makes it possible to analyse how legal requirements affect naturalisation propensity over time. Depending on the kinds of barriers they face to acquiring host country citizenship, we expect immigrants either to postpone making an application to meet the new requirements or to be put off from applying altogether. We argue that such a distinction is both conceptually useful and empirically necessary in assessing the long-term consequences of naturalisation laws.

We focus on the Netherlands to illustrate the intergenerational impact of naturalisation reforms in Western Europe. We do so for two reasons. First, the Netherlands is representative for most European countries where, in order to acquire citizenship, children of immigrants primarily rely on their parents’ naturalisation (Honohan and Rougier 2018). Second, various naturalisation reforms in the Netherlands over the past three decades reflect those issues most widely debated in Western Europe: dual citizenship acceptance, on the one hand, and language and civic knowledge requirements for naturalisation, on the other (Goodman 2010; Van Oers 2013, 41–66). In this paper we focus on two significant reforms in particular: the end of a temporary dual citizenship liberalisation in 1997, and the introduction of a language and naturalisation test in 2003. Drawing on register data from Statistics Netherlands, we analyse the naturalisation propensity of children born
between 1995 and 2010 to two foreign-born parents. Using Cox regression models, we show that the Dutch naturalisation reforms are associated with a lower naturalisation propensity among second-generation children, with a much stronger though less lasting effect for the 2003 reform. Whereas the prohibition of dual nationality seems to dissuade some immigrant families from naturalising, the integration requirements mainly postpone naturalisation of children to a later date. In addition, a cause-specific hazards model shows that children are more likely to naturalise with only one of their parents instead of both when they are eligible after the implementation of the reforms, suggesting that naturalisation laws also affect immigrant families’ naturalisation patterns.

**Becoming a Dutch citizen**

According to the Migrant Integration Policy Index 2015 (MIPEX), Dutch law can be considered as ‘slightly favourable’ in terms of access to nationality.2 MIPEX takes into account several dimensions, including eligibility criteria, naturalisation requirements, and attitude towards dual citizenship. Compared to other European countries, both the minimum length of required legal residence of five years (three years if married to a Dutch citizen) and the A2 language proficiency requirement are considered moderate. However, acquiring Dutch citizenship is still not easy. The language exam incorporates a ‘knowledge of Dutch society’ component, which candidates have to prepare on their own (Van Oers 2013, 60–64). Furthermore, the costs of both the examination and the courses candidates often need to take have to be paid by candidates themselves, which can act as a substantial financial barrier (Van Oers 2013, 60–64). Finally the Netherlands does not recognise dual citizenship; it requires (with some exceptions) candidates to renounce their existing nationality in order to acquire Dutch citizenship (Vink and de Groot 2010, 721).

**Evolution of Dutch citizenship law: the 1997 and 2003 reforms**

This current citizenship regime is the result of significant changes over recent decades. As in a number of other countries in Western Europe (Vink and de Groot 2010), access to citizenship in the Netherlands has been reformed, especially since the 1990s (Van Oers 2013, 41–66). Two institutional changes are of particular interest for this paper. The first was the re-introduction in 1997 of a requirement that candidates for Dutch citizenship renounce their current nationality. Between 1992 and 1997, this dual citizenship restriction had been temporarily abolished, which is likely to have contributed to a considerable rise in the number of naturalisations (Mazzolari 2009; Van Oers, de Hart, and Groenendijk 2009, 17). The second key change was the introduction of a naturalisation test in 2003 with the passing of the revised Dutch Nationality Act. This act reflected a growing emphasis, which can also be observed in other countries, on the notion of ‘active citizenship’ and on the importance of immigrants taking responsibility for their own integration trajectories (Goodman 2010, 766; Van Oers 2013, 48). The act raised and formalised the level of skills candidates required for naturalisation, and it also brought a substantial increase in naturalisation fees. Added to the administrative cost of the procedure – €336 for one person and €427 for a couple – applicants had to pay to take the naturalisation test (€260).3 The new law led to a significant and seemingly
permanent decrease in the number of naturalisations, with a particularly detrimental effect on vulnerable groups (Van Oers 2013, 147–217). To our knowledge, however, no study has analysed how these reforms affected the acquisition of Dutch citizenship by children of immigrants.

**Acquiring Dutch citizenship when born in the Netherlands**

The legal provisions concerning the acquisition of Dutch citizenship are marked by the country’s *ius sanguinis* tradition, which determines citizenship by descent rather than by place of birth (Vink and de Groot 2010). The main consequence for individuals born in the Netherlands to immigrant parents is that they do not get automatic birthright citizenship. Instead, they may get Dutch citizenship through four main procedures, depending on the legal status of their parents and on whether they are below or above the age of majority (Figure 1).

The first option is to automatically receive Dutch citizenship by descent if at least one parent has naturalised before the child’s birth, though specific provisions apply if this is the father. Second, the children of immigrants can be included in the naturalisation procedure of (one of) their parents as minors. And third, they can apply for citizenship autonomously from the age of 18 onwards. In the latter case, young people born in the Netherlands may

---

**Figure 1.** Main procedures for the acquisition of Dutch citizenship by immigrants’ children born in the Netherlands. Source: Immigration and Naturalisation Service (IND).
benefit from the simplified ‘option procedure’, provided that they have been living in the Netherlands since birth. Acquiring Dutch citizenship by option procedure has several advantages compared to the naturalisation procedure: it is less costly, quicker, and does not involve a civic integration test. However, the condition of continuous residence in the Netherlands is a potential obstacle, one that especially affects children whose families have moved between countries at various times during their upbringing (van Geel and Mazzucato 2018). In all four procedures, it is important to note that the children of immigrants are exempted from the requirement to renounce their nationality. By contrast, their parents ‘must be willing to renounce’ their existing citizenship to be eligible for Dutch naturalisation, providing an additional obstacle for individuals who wish to maintain a formal citizenship link with their country of origin (Van Oers, de Hart, and Groenendijk 2009, 17–19; Soehl, Waldinger, and Luthra 2018, 14). Interestingly, relatively few children make use of the option procedure: between 2005 and 2009, applications submitted for Dutch citizenship on the grounds of continuous residence in the Netherlands since birth (article 6.1a RWN) represented between 4.6% and 6.6% of all applications (IND Informatie- en Analyse Centrum 2011, 26). This suggests that children largely depend on their parents when it comes to becoming a Dutch national, calling for a conceptualisation of citizenship acquisition at the family level.

Analytical framework

Bringing back the family

Becoming a Dutch citizen confers a number of rights, namely the rights to vote in national elections, to join the armed forces, and to access various high-ranking positions in the law and public sectors. It also provides the right to a Dutch passport, which allows for considerable international mobility. This is especially valuable for citizens of non-EU countries, who are granted the right to move, work and reside in every country within the EU and then to return to the Netherlands after having been abroad for an unlimited period of time.

While immigrants value these benefits differently according to their background and preferences, they also base their decision to seek Dutch citizenship on a number of constraining factors, since the naturalisation procedure involves substantial financial and non-financial costs. Owing to this self-selection process, a number of characteristics have been shown to be associated with naturalisation propensity (for an overview, see Peters and Vink [2016, 363–364]). Among the most common factors, income, level of education, length of residence and marriage are all positively associated with naturalisation. Immigrants’ country of origin, which shapes the relative attractiveness of host country citizenship, has also been found to be an important factor, together with other contextual variables related to the origin and destination countries (Vink, Prokic-Breuer, and Dronkers 2013).

Following the approach of Yang (1994), most studies model naturalisation as an individual decision, based on a cost-benefit calculation. Even when family characteristics are included, such as the presence of a spouse or of children (e.g. Peters, Vink, and Schmeets 2016), the decision to naturalise is not conceptualised at the family-level. As Street (2014) argues based on the German case, this methodological individualism limits our understanding of citizenship acquisition among immigrants and does not adequately account
for recent trends in naturalisation rates. By contrast, an altruistic model where parents may decide to naturalise for the sake of their children better explains why the partial introduction of *ius soli* in 2000 was followed by a decrease in naturalisation rates in Germany. Soehl, Waldinger, and Luthra (2018) have further highlighted the importance of family dynamics, showing that having a parent who naturalised in the same year is the most important factor in explaining the naturalisation propensity among 1.5 generation young adults in Los Angeles. While these recent developments in the literature show that intra-family dynamics do matter, we still know very little about how immigrant parents perceive host country citizenship for themselves and their children, let alone how these perceptions result in different family patterns of naturalisation.

As a first analytical step towards a better understanding of family dynamics in naturalisation decisions, we distinguish between two main approaches families take to naturalisation. The first approach, which we shall term **complementary**, derives from Street’s (2014, 287) idea that citizenship may be a complementary good within the family, i.e. that it confers higher utility if consumed by all family members. A complementary approach to naturalisation stresses the idea of interdependence between family members. It translates into a preference for co-naturalisation of the whole family whenever possible. This is particularly important when it comes to international mobility, as parents may only be able to reap the benefits of the host country passport if all family members possess a passport as well, so as to be mobile together. The significant costs associated with naturalisation may also become more affordable if shared, as suggested by qualitative evidence from Austria (Street 2013).

The second approach that families take to naturalisation we term **differentiated**. A differentiated approach means that only some family members seek to naturalise. It emphasises the idea that while children largely depend on their parents when it comes to naturalisation, they have, at the same time, different motivations and interests in obtaining host country citizenship. Since they have lived in the host country since birth and have gone through its education system, children of immigrants are likely to be proficient in the host language and to subscribe to forms of belonging and self that are different from their parents (Heath, Rothon, and Kilpi 2008, 222–224; Colombo, Domaneschi, and Marchetti 2011; Kalmijn 2019, 1422). They are more likely than their parents to reap the long-term benefits of host country citizenship, with naturalisation sometimes yielding limited returns for parents, especially when they have already secured permanent resident status. The idea that children do not necessarily face the same trade-offs as their parents is supported by the evidence of an ‘intergenerational motive’ for naturalisation (Street 2014), with parents naturalising solely for the sake of their children in the absence of *ius soli* provisions. A differentiated approach to naturalisation thus emphasises the different costs and returns family members face vis-à-vis host country citizenship. In the Dutch context, we expect families taking a differentiated approach to naturalisation either to have the children co-naturalise with only one parent (assuming a two-parent household) to contain the overall costs of the procedure, or to rely on the option statement through which only the children would acquire Dutch citizenship.

Overall, we expect parents’ choice of whether to naturalise – together or not – with their children or to wait for the option procedure when the children reach the age of majority to be shaped by a number of family-level dynamics. These include parents’ socioeconomic resources and migration trajectories, but also family members’ levels of attachment to their country of origin and orientation towards the host society. By employing these
two main approaches to naturalisation, which call for further refining, we aim to elaborate on the concept of ‘embedded citizenship choice’ suggested by Soehl, Waldinger, and Luthra (2018), which stresses the inherent social dimension of the naturalisation process.

The institutional context and our hypotheses

Though we expect family to play a crucial role in the naturalisation propensity of the second generation, we also need to explore how decision-making processes take place within the family’s broader environment. Whereas a number of studies have highlighted the importance of the institutional context in a cross-country comparison perspective (e.g. Vink, Prokic-Breuer, and Dronkers 2013; Stadlmair 2017), less attention has been paid to studying the impact of legal provisions on individual ability or propensity to naturalise over time (Mazzolari 2009; Peters, Vink, and Schmeets 2016; Jensen et al. 2019). We have three hypotheses relating to the legal context.

First, we expect naturalisation rates to drop after the implementation of stricter legal requirements. This is because stricter naturalisation laws either reduce the number of eligible candidates or add additional barriers that individuals are no longer able or willing to overcome (Goodman 2010, 757; Jensen et al. 2019). While published studies usually observe decreased naturalisation rates after the introduction of stricter regulations (Perching 2010; Green 2012; Van Oers 2013), with the use of aggregated data it is not possible to analyse how this translates at the individual level: do people give up the idea of becoming citizens of their country of residence, or do they postpone naturalisation to a later date? The answer has consequences when assessing the long-term impact of restrictive naturalisation laws. Based on Goodman’s distinction between ‘restrictive’ and ‘thick’ changes (2010), we expect that the impact of citizenship law will differ based on the type of requirements. On the one hand, ‘restrictive’ changes limiting citizenship eligibility may permanently prevent certain categories of immigrants from naturalising. With a prohibition against dual citizenship, those who want to hold on to their existing nationality exclude themselves from becoming citizens of their new country. In the Netherlands, we thus hypothesise that the end of dual-citizenship tolerance in 1997 is associated with a durable drop in naturalisation propensity for families falling under this new requirement (hypothesis 1).

On the other hand, ‘thicker’ definitions of citizenship that increase candidates’ obligations (requiring, for example, good language skills or knowledge of the host country) may prevent naturalisation for some, but postpone it for others – for those who need more time and/or additional resources before beginning the naturalisation process. This is what we would expect following the 2003 reform in the Netherlands, which required candidates to pass a language and integration test which they were not necessarily prepared to complete right away. With postponement a possibility, we hypothesise that for those who were eligible after the 2003 reform, there is an initial drop in naturalisation rates that at least partly recovers over time (hypothesis 2).

Besides seeing a change in the total number of naturalisations, we also expect stricter requirements to affect the composition of the naturalised population (Van Oers 2013; Hainmueller et al. 2018). As candidates for naturalisation need more resources to go through the procedure (e.g. to finance language or integration courses), we expect naturalised citizens to be positively selected for income and level of education. But how are intra-family dynamics affected by the need for financial and educational resources?
We hypothesise that when more restrictive or thicker naturalisation requirements apply, families will find it harder to seek the naturalisation of all family members because of the costs and effort involved. Even if parents have a preference for the complementary approach, they are likely to adopt a differentiated approach when the naturalisation of both parents is too costly. In two-parent households, children may therefore naturalise with only one parent – the parent best equipped to negotiate the naturalisation process and for whom the costs are lowest. The costs may not only involve the time or money required for the application process and integration course, they may also be emotional, such as when parents are required to renounce their home country citizenship (Mazzolari 2009, 173). The requirements of naturalisation may thus lead to a strategic division of tasks between parents, which aims to minimise the cost of citizenship acquisition at the family level. When the costs of naturalisation are too great, naturalisation may be postponed to a later date or children may naturalise via the option procedure. Overall, we expect restrictive legal reforms to affect families’ decision-making processes, with available resources restricting the preferences families otherwise have for naturalisation. As a result, we expect that families falling under the new requirements of the 1997 and 2003 reforms will be more likely to follow a differentiated approach to naturalisation than a complementary approach, compared to those eligible before (hypothesis 3).

Data and methodology

Register data and study population

Our data are drawn from Dutch administrative registers supplied by Statistics Netherlands. Registers offer longitudinal and individual-level data covering the entire legally resident population of the Netherlands (Bakker, van Rooijen, and van Toor 2014), limiting the possibilities of selection bias and guaranteeing sufficient statistical power. For our research, we followed nearly all immigrants legally residing in the Netherlands from 1995 to 2016 (our observation window), together with their partners and their children.8 Our analysis will focus on the children, restricted to the 1995–2010 birth cohorts, which we tracked for a period of 6 (cohort 2010) to 21 (cohort 1995) years.

We define second-generation children as those born in the Netherlands to two foreign-born parents, who themselves are born to at least one foreign-born parent. Children of mixed descent are excluded from the scope of our analysis because, having one native parent, they ought to obtain Dutch citizenship at birth by descent. Children born in the Netherlands from second-generation parents – the third generation – are not included either, since they acquire automatic birthright citizenship according to the so-called double ius soli principle. For related reasons, we also exclude children from specific origin groups from the analysis: children originating from the Caribbean territories of the Kingdom of the Netherlands, who are Dutch citizens; and children whose parents come from the former Dutch colonies and thereby had privileged access to Dutch territory and citizenship (Van Meeteren et al. 2013, 115–116).9 Finally, we exclude children who naturalised at a different date than their parents while minors, as well as children whose families engaged in non-standard naturalisation trajectories, involving a loss or renunciation of Dutch citizenship over time (N = 6780). This leaves us with a final dataset of 287,250 individuals.
Within this population, 66% of children were Dutch citizens at birth and thus acquired Dutch citizenship by descent through the prior naturalisation of their parents (for descriptive statistics, see Tables A1 and A2 in the supplementary materials). Among the remaining children, who are thus foreign citizens at birth, 21% acquired Dutch citizenship during our observation period (1995–2016), representing a naturalisation rate of nearly 62%, while 13% were still foreign citizens in 2016. These proportions change slightly if we only measure naturalisation for those who are eligible during the observation period, 3% of the children never being eligible due to their parents’ limited length of residence in the Netherlands. Among those who naturalised, 96% did so before age 18, in line with our hypothesis that children mainly depend on their parents to acquire host country citizenship.

Furthermore, the patterns of acquisition of Dutch citizenship evolved substantially over time. As Figure 2 shows, there is an upward trend in the percentage of children who are Dutch citizens at birth, which is consistent with the fact that immigrants eligible for naturalisation in the 1990s could acquire Dutch citizenship under favourable conditions; their children born in the early 2000s were more likely than their older peers to acquire Dutch citizenship at birth by descent. Figure 2 also indicates a decreasing naturalisation propensity, in line with the fact that more and more children are Dutch from birth over the period. However, we also observe an increase in the percentage of children who do not acquire Dutch citizenship at all during the observation period, which may reflect a detrimental effect of the 1997 and 2003 naturalisation reforms. However, the last two curves have to be interpreted with caution due to right censoring: the succeeding birth cohorts have less and less time to naturalise within the observation period. Besides, changes in the composition of the immigrant population may explain at least part of these trends, which requires controlling for other factors. The methodology we develop in the next section will address both points. We first discuss this methodology in general terms, before providing more detail about our specification when presenting our operationalisation and covariates.

Figure 2. Dutch citizenship acquisition by immigrants’ children born in the Netherlands, by year of birth (N = 287,250). Source: Statistics Netherlands.
**Empirical strategy**

To test our first two hypotheses pertaining to children’s naturalisation propensity over time, we use event history models. Event history analysis is well suited to analyse the timing and occurrence of an event over time once individuals under observation have entered a specific risk set. In our case, the event of interest is acquisition of Dutch citizenship and entrance into the risk set is based on children’s eligibility. Eligibility is defined as follows: children under 18 are eligible as soon as one or both of their parents become eligible (co-naturalisation); those above 18 are eligible if they have resided permanently in the Netherlands since birth (option procedure); otherwise, children are eligible after five years of uninterrupted residence in the Netherlands (standard naturalisation).\(^{11}\) Individuals are included in the estimation once they enter the risk set, which means that those who are never eligible during the observation period and those who are Dutch from birth are excluded from the analysis.

The main advantage of this approach is that it takes into account right censoring, which is particularly crucial here as we only observe children during a limited period of time, especially for the younger birth cohorts. To allow for the inclusion of both time-invariant and time-varying covariates when estimating the rate of naturalisation at a given time, we use a Cox proportional hazard model. For subject \(j\), the hazard rate has the following form:

\[
h(t|x_j) = h_0(t)\exp(x_j \beta_x)
\]

where \(x\) and \(\beta_x\) refer to the covariates and their associated coefficients, \(t\) to time, and \(h_0(t)\) is the baseline hazard. The main strength of the Cox model is that it allows us to estimate the effect of the covariates \(\beta_x\) on \(h(t|x_j)\) without making assumptions about the functional form of the baseline hazard. However, this flexibility comes at the price of the proportional-hazards assumption: the assumption that all subjects’ hazard ratios are proportional and that this proportionality is maintained over time. When the effect of covariates on the hazard varies over time, the proportionality assumption is violated, leading to biased estimates and decreased statistical power (Box-Steensmeier, Reiter, and Zorn 2003, 974). In this paper, we use two techniques to relax this assumption.

The first technique consists in stratifying the model by the non-proportional variable (s), which relaxes the hypothesis that the baseline hazard is the same across strata. The hazard ratio depends then on the specific stratum \(s\) to which the subject \(j\) belongs:

\[
h(t|x_j) = h_{0s}(t)\exp(x_j \beta_x)
\]

Though this allows for more flexibility, this technique is mostly suitable for control variables, as it is no longer possible to directly estimate the effect of the variables used for the stratification. When the proportional-hazards assumption is violated for variables of interest, we instead use time-by-covariate interactions to directly model time dependency. This is the second technique, which leads to the following specification:

\[
h(t|x_j, y_j) = h_{0s}(t)\exp(x_j \beta_x + y_j \beta_y + \alpha_y y_j f(t))
\]

where \(y\) refers to the covariate(s) for which an interaction with time has been added, \(\alpha_y\) to the time-varying coefficient(s) and \(f\) to a function of time. Following Box-Steensmeier, Reiter, and Zorn (2003), we have chosen the natural logarithm for \(f\) (\(ln(t)\)), which reflects a decreasing effect of the covariate(s) over time (further details below).
Time-varying coefficients have been added based on an analysis of the Schoenfeld residuals (see Figures A1–A2, supplementary materials).

Finally, to test our third hypothesis about the impact of the Dutch legislative reforms on families’ approaches to naturalisation, we follow a cause-specific approach by applying separate Cox regression analyses to different events (Dignam, Zhang, and Kocherginsky 2012). This method allows differentiating between (1) naturalisation with only one parent and (2) naturalisation with both parents.12

Operationalisation and covariates

Our main variable of interest is children’s cohort of eligibility (eligibility cohort), based on the year they first became eligible to seek Dutch citizenship. In order to study the impact of the requirement that candidates for Dutch citizenship both renounce their existing citizenship and complete a civic integration test, we cluster eligibility cohorts into three main categories: eligibility between 1995 and 1997 (when dual nationality was tolerated); eligibility between 1998 and 2002 (when the citizenship renunciation requirement was re-introduced); and eligibility from 2003 (when language and naturalisation tests were introduced). Examining the potential intergenerational impact of the legislative reforms through the lens of eligibility cohorts allows us to assess the impact of the new requirements on the length of time individuals take to become Dutch citizens once they become eligible. While individuals choose their date of application, they can hardly manipulate their eligibility and the specific legislative conditions they will face.

Our approach does have some drawbacks. We do not estimate the impact of the reforms strictly speaking, but rather the effect of being eligible in a specific legislative context, with varying opportunities for facilitated naturalisation. In addition, the longer the duration between the time a person becomes eligible and their actual naturalisation, the more likely candidates are to fall under different requirements. Two factors help to mitigate these limitations. First, an analysis of children’s naturalisation propensity shows that the bulk of second-generation children naturalise shortly after eligibility, half of them within seven years (see Figure A3). Secondly, the decreasing relevance of the eligibility cohort over time can be assessed and modelled in a Cox regression. While an analysis of the Schoenfeld residuals confirms that we tend to overestimate the effect of the eligibility cohort over time (Figures A1-A2), with a deviation from the proportional-hazards assumption after approximately 12 years, we can account for this decreasing effect by adding an interaction with the natural logarithm of time in our model.

We control for a set of family characteristics that are usually associated with naturalisation propensity (e.g. Peters, Vink, and Schmeets 2016). Parents’ socioeconomic status is proxied by two categorical variables (mother SES and father SES) that indicate whether the parents are in employment (including self-employment), are social benefit or pension recipients, or lack any registered source of income.13 A time-varying dummy EU origin country captures whether, in a given year, mother’s or father’s country of origin is a member state of the European Union, as naturalisation is expected to be of little value for those who already enjoy the rights and benefits attached to EU citizenship.14 To take into account potential dynamics at the family level, and notably the fact that parents may wish to start the naturalisation procedure at the same time, we add a time-varying dummy (both parents eligible) which equals one from the moment both parents...
are eligible to naturalise. Finally, we include mother’s country of origin (origin country)\textsuperscript{15} to account for unobservable immigration and settlement patterns at the country level, together with national regulations concerning citizenship renunciation. Descriptive statistics show substantial variation in naturalisation propensities across countries of origin (see Table A3), which results in a violation of the proportional-hazards assumption when looking at the residuals. As we are not interested in the effect of the origin country \textit{per se}, we include mother’s country of origin as a stratification variable in the model. Fifteen clusters have been distinguished based on the most represented groups in our population (see ‘country of origin’ in Table A1).

For our competing risks specification, we identify whether the child naturalised with only one or with both parents by comparing parents’ and children’s dates of naturalisation. The variable obtained (naturalisation with whom) is used as a proxy for the family’s approach to naturalisation. But this comes with an important caveat. A given family’s approach is the result of a decision-making process, though the data do not allow us to unpack this. For example, the co-naturalisation of the child with only one parent may reflect parents’ low interest in having all family members acquire Dutch citizenship, or it may reflect a default choice due to strict naturalisation laws. Though we are not able to identify the driving mechanisms, this imperfect lens helps to open further the ‘black box’ of decisions about naturalisation by drawing attention to the diversity of naturalisation patterns at the family level over time.

The descriptive results are interesting in that regard. While 39% of the children becoming Dutch during the observation period naturalised at the same date as their parents, around 60% naturalised with only one – the mother or the father in equal proportions (Table A2). Furthermore, this pattern changes quite drastically over the observation period. As Figure 3 shows, there is a sharp decrease in the proportion of children naturalising with both parents from 2004 onwards, after which the proportion stagnates between 20% and 35%. Conversely, the percentage of children naturalising with only one parent increases during the same period, with a reversal of the trend between fathers and mothers.

\textbf{Analysis}

\textit{Assessing the impact of the eligibility cohort on naturalisation propensity}

Before conducting a Cox regression analysis, it is helpful to estimate the probability that a person will naturalise within a given number of years using the Kaplan-Meier estimator. This method considers right censoring but, contrary to the Cox model, does not require making any assumptions about how covariates change experience of the event (naturalisation). Figure 4 shows the distribution of naturalisation time by cohort of eligibility.

Children who became eligible before the 1997 and 2003 reforms have a higher naturalisation propensity than those who became eligible later on. While the length of time between eligibility and naturalisation only slightly increases for those who became eligible between 1998 and 2002, there is a clear gap for those eligible after the 2003 reform. We can see that about half of the children eligible in the first two periods had naturalised within 5 years, whereas this is only the case for 30% of those who became eligible in 2003 or afterwards. Notice that these discrepancies do not narrow much over time. The Kaplan-Meier
estimates give a first indication of how being in a different eligibility cohort matters for children of immigrants’ naturalisation propensity, suggesting a more substantial impact for the 2003 reform.

We now turn to the Cox proportional-hazard model to see whether this trend is robust when adding covariates. Table 1 presents the results of our main Cox model (the coefficients have been exponentiated for ease of interpretation). As explained above, the regression has been stratified by mother’s country of origin, and an interaction with the natural logarithm of time has been included for our main variable of interest, the eligibility period. In the first year following eligibility, the hazard rate associated with those eligible in 1998–2002 is 0.58 times that of those who were eligible in the first period, while the ratio

Figure 3. Family patterns of naturalisations before the age of majority among immigrants’ children born in the Netherlands, by year of naturalisation (N = 57,884). Source: Statistics Netherlands.

goes down to 0.19 for those eligible after 2003. The eligibility cohort effect is precisely estimated and its magnitude is comparable to having a father without any registered source of income in the first case, or to having a parent coming from an EU member state in the second case.

Figure 5, which plots the hazard ratios over time, shows the results of the eligibility variable interactions with \( \ln(\text{time}) \). We see that the large detrimental effect attached to the cohorts eligible after 2003 is substantially reduced a few years after eligibility: the hazard ratio comes closer to one over time, suggesting that parents needed more time to meet the stricter requirements of the naturalisation procedure. This delay may be necessary for people to prepare and pass the language and naturalisation test, but it may also allow them to save money for what is now a costlier procedure. The hazard ratio even passes 1 after 12 years, indicating that the cohorts eligible after 2003 need more than ten years to completely catch up with the older eligibility cohorts in terms of naturalisation propensity. Overall, this supports our expectation that naturalisation of children is mainly postponed after the introduction of civic integration requirements (hypothesis 2). However, as reflected in the larger confidence intervals, estimates are less reliable for long durations due to the lack of observations at the upper end. When looking at the lower bound of the confidence interval, the hazard ratio indeed remains below 1 even 15 years after eligibility.

Figure 5 offers a different picture of the effect on naturalisation propensity attached to the cohorts eligible between 1998 and 2002. The hazard ratio slightly increases but overall remains between 0.6 and 0.8. Contrary to the 2003 eligibility cohorts, the number of years since eligibility seems to have a limited impact on the hazard ratio, suggesting that some families have been permanently dissuaded from naturalising due to the citizenship renunciation requirement for parents. This is in line with our expectation that the end of dual citizenship tolerance in 1997 deterred families from acquiring Dutch citizenship.

### Table 1. Cox proportional-hazard model for the risk of naturalisation among immigrants’ children born in the Netherlands.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hazard ratio</th>
<th>Std. Error</th>
<th>z</th>
<th>( P &gt; z )</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligibility cohort (ref: 1995–1997)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligibility 1998–2002</td>
<td>0.587</td>
<td>0.014</td>
<td>−21.950</td>
<td>0.000</td>
<td>0.560 0.616</td>
</tr>
<tr>
<td>Eligibility 2003 and after</td>
<td>0.199</td>
<td>0.006</td>
<td>−57.250</td>
<td>0.000</td>
<td>0.188 0.210</td>
</tr>
<tr>
<td>EU origin country</td>
<td>0.209</td>
<td>0.011</td>
<td>−28.910</td>
<td>0.000</td>
<td>0.188 0.233</td>
</tr>
<tr>
<td>Mother SES (ref: employed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recipient of benefits</td>
<td>1.014</td>
<td>0.014</td>
<td>0.980</td>
<td>0.326</td>
<td>0.986 1.042</td>
</tr>
<tr>
<td>No income</td>
<td>0.782</td>
<td>0.010</td>
<td>−18.960</td>
<td>0.000</td>
<td>0.762 0.802</td>
</tr>
<tr>
<td>SES unknown</td>
<td>0.530</td>
<td>0.015</td>
<td>−22.680</td>
<td>0.000</td>
<td>0.502 0.560</td>
</tr>
<tr>
<td>Father SES (ref: employed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recipient of benefits</td>
<td>0.907</td>
<td>0.011</td>
<td>−8.240</td>
<td>0.000</td>
<td>0.887 0.929</td>
</tr>
<tr>
<td>No income</td>
<td>0.501</td>
<td>0.011</td>
<td>−31.580</td>
<td>0.000</td>
<td>0.480 0.523</td>
</tr>
<tr>
<td>SES unknown</td>
<td>0.915</td>
<td>0.022</td>
<td>−3.720</td>
<td>0.000</td>
<td>0.873 0.959</td>
</tr>
<tr>
<td>Both parents eligible</td>
<td>1.339</td>
<td>0.017</td>
<td>22.910</td>
<td>0.000</td>
<td>1.306 1.372</td>
</tr>
<tr>
<td>Interacted with ( \ln(t) )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligibility cohort (ref: 1995–1997)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligibility 1998–2002</td>
<td>1.083</td>
<td>0.014</td>
<td>5.960</td>
<td>0.000</td>
<td>1.055 1.111</td>
</tr>
<tr>
<td>Eligibility 2003 and after</td>
<td>1.883</td>
<td>0.032</td>
<td>37.370</td>
<td>0.000</td>
<td>1.822 1.947</td>
</tr>
</tbody>
</table>

Number observations 717,009
Number of failures 57,493
LR Chi2(12) 9623.2
Number of individuals 91,066
Time at risk 717013
Log likelihood −503890.1
Stratification by country of origin
Probability > Chi2 0.000

Source: Statistics Netherlands.
(hypothesis 1). The moderate size of the effect is in line with the selective targeting of the renunciation requirement, from which a number of nationalities are exempted. By contrast, the 2003 reform offered very little ground for exemptions (Van Oers 2013, 61–62), which is consistent with a stronger effect in terms of magnitude. Altogether, these results support the idea that the naturalisation reforms have an effect on children’s citizenship acquisition, though this effect differs based on the nature of the requirements that applicants for citizenship face: while we observe a decrease in naturalisation propensity for those who became eligible after the end of dual citizenship tolerance in 1997, there is an increase in the length of time between eligibility and naturalisation for those who became eligible after the 2003 reform.

Another finding relates to the time-varying dummy both parents eligible, which is positively associated with naturalisation propensity. The hazard rate is multiplied by 1.3 when children’s parents are both eligible, suggesting an overall preference for parents to naturalise at the same time. This sheds additional light on the interpersonal dynamics involved in the naturalisation decision at the family-level (Street 2013; Soehl, Waldinger, and Luthra 2018). Although the data do not allow identification of the mechanisms at play, the substantial cost difference between a single person and a multiple persons request for citizenship in the Netherlands might be one of the reasons. This is in line with earlier qualitative findings (Street 2013). Finally, we note that the coefficients associated with parents’ socioeconomic status are in line with the literature on naturalisation propensity (e.g. Hainmueller et al. 2018): for children of immigrants whose parents are not employed the risk of naturalisation is substantially reduced, down to a hazard ratio of 0.5 for those whose fathers are recipients of benefits.
To assess the robustness of our findings, we compared the results of several alternative specifications. The main model was successively estimated without time-varying coefficients, with clustered standard errors by country of origin instead of stratifying, and with a more precise method for handling tied events (see Annex A3). Estimates are fairly comparable across models and do not substantively alter our interpretation. As additional robustness checks, we also conducted the analysis with different eligibility groupings (2-year clusters, Table A4) and without any multi-year eligibility grouping (Table A5). This does not change the results substantially; while naturalisation propensity constantly decreases over time, we observe stair-step effects when comparing the eligibility cohorts 1997 (1997–1998) and 2003 (2003–2004) to the ones that precede.

**Differentiated family naturalisation patterns in context**

To test our third hypothesis – that the 1997 and 2003 reforms increased the likelihood of families taking a differentiated approach to naturalisation – we use a proportional cause-specific hazards model where naturalisation with both parents and naturalisation with only one parent are treated as competing events. We followed the same procedure as the main model for the specification; both regressions have been stratified by mother’s country of origin and interactions with time have been added for the eligibility cohort following an analysis of the Schoenfeld residuals. The results of the two models are compared in Figure 6 (see Tables A7-A8 for full results and Annex A3 for the robustness checks).

The first year after eligibility, the hazard ratios for the second eligibility category (1998–2002) are similar across the two models. This is not the case for the last category (2003 and after), whose hazard ratio is far smaller when comparing naturalisation with both parents (coefficient estimate of 0.10) with naturalisation with one parent (0.29). Figures 7(a and b) highlight the differences over time, comparing between eligibility cohorts the risk of

![Figure 6](image_url)

**Figure 6.** Acquisition of Dutch citizenship after birth by immigrants’ children born in the Netherlands: coefficient plot for cause-specific hazards models. Source: Statistics Netherlands.

Note: Coefficients associated with eligibility cohorts are main effects (i.e. one year after eligibility); interactions with the logarithm of time are represented on Figure 7(a and b).
naturalisation with both parents (Figure 7(a)) and with only one parent (Figure 7(b)). We find that, for those children eligible for citizenship from 2003 onwards, the risk of naturalising with one parent only temporarily decreases (Figure 7(b), hazard ratio crosses 1 in less than ten years), while the risk of naturalising with both parents durably diminishes (Figure 7(a), hazard ratio is below 0.7 after 15 years). We observe a similar pattern for the children who are eligible after the dual citizenship restriction, though to a lesser

![Figure 7](attachment:image.png)

**Figure 7.** (a) Acquisition of Dutch citizenship with both parents among immigrants’ children born in the Netherlands: odds ratio associated with eligibility cohort categories (ref. 1995–1997), by years after eligibility (N = 91,066). (b) Acquisition of Dutch citizenship with only one parent among immigrants’ children born in the Netherlands: odds ratio associated with eligibility cohort categories (ref. 1995–1997), by years after eligibility (N = 91,066). Source: Statistics Netherlands.
extent. While the hazard ratio of naturalising with both parents slightly decreases before stagnating around 0.5 (Figure 7(a)), the one of naturalising with one parent converges towards one (Figure 7(b)). Furthermore, comparing the coefficients of the other covariates shows that traditional negative factors for naturalisation are more negatively associated with the propensity to naturalise with both parents. This is especially true for those children whose father has no registered source of income, compared to those whose father is (self-)employed (hazard ratio of 0.27 versus 0.63, see Figure 6).

These results support hypothesis 3, according to which families falling under the requirements of the 1997 and 2003 reforms are more likely to secure host country citizenship at the lowest cost (via a differentiated approach) than to seek citizenship for all family members (complementary approach). Several mechanisms could be at play. First, the prohibition of dual citizenship may increase the emotional cost of naturalisation and prompt only one partner to naturalise, with the other retaining their origin-country citizenship. This would secure dual citizenship at the family level rather than at the individual level and preserve some legal ties with the country of origin. Second, the introduction of civic integration requirements may incentivize families to leave naturalisation to the parent who is the most equipped to navigate the procedure. This would especially apply to households where parents did not arrive in the Netherlands at the same time and/or where they faced different opportunities to learn Dutch and acquire other country-specific skills. Further empirical work, both quantitative and qualitative, is needed to identify the relevant mechanisms. Yet, our preliminary findings suggest that the naturalisation reforms not only influenced whether and when second-generation children acquire Dutch citizenship, but also with whom.

**Conclusion**

In countries with a *ius sanguinis* citizenship tradition, such as the Netherlands, second-generation children mainly depend on their parents to naturalise in order for them to become citizens of their country of birth and residence. We show that restrictive naturalisation laws not only prevent immigrants from accessing host country citizenship, they also make it harder for their children to become citizens of the country in which they were born. This paper has shed light on the intergenerational impact of Dutch naturalisation laws, revealing the detrimental effect that two significant reforms have had on people’s propensity to naturalise. While we found that naturalisation propensity durably decreased for those who became eligible for Dutch citizenship after the end of dual citizenship tolerance in 1997, those who became eligible after the introduction of civic integration requirements in 2003 seem to have postponed, rather than completely put off, their applications for citizenship.

The consequences of these delayed or abandoned naturalisation projects for children’s well-being and future opportunities remain to be assessed, but several studies point to the impact of legal status on immigrant youth trajectories, perceptions and expectations (Colombo, Domaneschi, and Marchetti 2011; Cebulko 2014; Patler 2017). A limited body of literature has also highlighted the potential positive effect of holding host country citizenship on a variety of educational outcomes (Bean et al. 2011; Kilpi-Jakonen 2014; Felfe, Rainer, and Saurer 2020). Altogether, while further research is needed to explore underlying mechanisms, our findings support the idea that naturalisation reforms have a lasting impact.
on children. Given that most European countries, like the Netherlands, are both characterised by a descent-based birthright regime and have witnessed changing requirements for citizenship over the past decades, the intergenerational consequences of naturalisation reforms merit research beyond the Dutch case.

This paper has also shown that the 2003 reform was associated with a change in immigrant families’ naturalisation patterns: children who only became eligible under the stricter requirements were far more likely to naturalise with one parent than with both. To a more limited degree, we observe a similar pattern for those eligible after the restriction on dual citizenship was re-introduced in 1997. These findings are in line with those who have highlighted the importance of analysing immigrant naturalisation at the family level (Street 2014; Soehl, Waldinger, and Luthra 2018). In a context where candidates for naturalisation are increasingly required to show proof of integration (Van Oers 2013), it is unsurprising that families develop different strategies to cope with the tightening of naturalisation requirements. Fine-grained data and qualitative methods are necessary to shed light on the decision-making processes at play, but this paper shows that a family perspective on naturalisation offers one fruitful avenue for future research in citizenship studies.

Notes

1. This paper only focuses on children who were born in the host country and leaves aside the so-called ‘1.5 generation’, i.e. children who were born in a foreign country before migrating at a young age. Although the 1.5 generation may also be affected by restrictive naturalisation laws, the specific requirements it faces in terms of citizenship acquisition warrant a separate analysis. The term ‘children of immigrants’ thus exclusively refers to the second generation. Note that the term identifies individuals in their capacity as offspring of immigrants rather than as minors.
3. See the overview of naturalisation costs over time in the supplementary materials (Annex A1).
4. In 2003 the option procedure cost €128, against €336 for a single naturalisation application (Annex A1). While the latter continuously increased over time to €881 in 2019, the fees for the option procedure have remained relatively stable (€187 in 2019).
5. Waiting times are a maximum of 13 weeks for the option procedure, versus 12 months for the naturalisation procedure (Van Meeteren et al. 2013, 129).
6. Unfortunately, the IND does not provide information about the number of applications submitted by second-generation individuals. The given percentage is therefore an approximation of how frequently Dutch citizenship is acquired on the grounds of continuous residence among the second generation. Yet, the idea that children largely rely on their parents to acquire Dutch citizenship is confirmed by our descriptive statistics (Table A2), which show that 96% of those who become Dutch after birth do so before the age of 18.
7. In the Netherlands, naturalising together with a partner is far cheaper: in 2003 couples paid €363 (i.e. €181.50 each) to submit a joint application, against €272 to apply on their own. This premium of about €90 in 2003 has steadily increased over time to reach more than €300 in 2019 (Annex A1).
8. Due to the administrative nature of the data, those identified as ‘parents’ in the dataset are children’s legal guardians but not necessarily the ones with whom children are actually living. However, minors can only naturalise together with their legal guardians. Potential divorces or remarriages are also not captured by our data, at least when this does not result in a change in parental authority. Note that children who changed both of their legal guardians during the observation period (N = 529) have not been included in the analysis.
9. The countries in question are Suriname, Indonesia and Netherlands New Guinea, which are former Dutch colonies, and Aruba and the Netherlands Antilles, which belong to the Kingdom of the Netherlands.

10. This percentage drops to 9.8% if we restrict the sample to those born in 1995 and 1996, who had respectively 21 and 20 years to naturalise within our observation window.

11. The construction of the eligibility variable is further detailed in the supplementary materials (Annex A2).

12. Due to our limited observation window and the fact that most children naturalise as minors, we do not have a sufficient number of independent naturalisations after the age of majority (N = 2367) to perform a separate analysis.

13. Data for parental socioeconomic status is only available from 1998 onwards and may be missing over time (e.g. in case of outward migration). Missing values were grouped in the category ‘SES unknown’ and included in all our models.

14. We expect children whose parents come from an EU country to inherit EU citizenship since all countries of the European Union have *ius sanguinis* provisions (Honohan and Rougier 2018, 150).

15. Note that 88% of children have parents who share the same country of origin and that there is a slightly higher number of missing parental identifiers among fathers. As a robustness check, we also conducted the analysis using father’s country of origin, which led to highly similar estimates (Table A6).

**Acknowledgements**

The authors wish to thank Mark Levels, the editor and the anonymous reviewers for their helpful comments and suggestions.

**Data availability**

Replication files for this article can be accessed https://doi.org/10.7910/DVN/5XYHJD.

**Disclosure statement**

No potential conflict of interest was reported by the author(s).

**Funding**

This work was supported by H2020 European Research Council [grant number 682626].

**ORCID**

Marie Labussière http://orcid.org/0000-0003-4115-7883
Maarten Vink http://orcid.org/0000-0001-7143-4859

**References**


