

Kin Ties and Migration Channels: Evidence of Cumulative Patterns from the Case of French Overseas-Mainland Migrations

Migrant networks increase one's probability to migrate on average (Boyd 1989; Garip 2008), but their effect varies with the type of migration, the type of ties, and the other assets individuals have at their disposal (Curran and Rivero-Fuentes 2003; Davis, Stecklov, and Winters 2002; Liu 2013; McKenzie and Rapoport 2010). Networks may indeed provide with different resources depending on the context: namely information on how to migrate, financial means to cover the costs of migration, or information on job opportunities in the host society (Dolfin and Genicot 2010). Migrant networks further act as brokers, alongside with other intermediaries, such as recruitment agencies, or even the state (Lindquist, Xiang, and Yeoh 2012). Brokers influence not only chances of migration, but also migrants' trajectories in the host society, with again varying influence depending on both brokers' and migrant's characteristics (Poros 2001). Over time, brokers create and maintain paths of integration that deeply shape how migrants succeed and are perceived in the host society (Baláž and Williams 2007; McCollum et al. 2013). While the literature on migrant networks is abundant, our understanding of the mechanisms behind these migration paths or channels is still limited. This paper studies a case of state-sponsored migration and assesses the influence of various types of kin ties on the chances of migration with and without public aid. It highlights the cumulative effects leading to segmented channels of migration.

Using a representative survey conducted in the French Overseas departments or DOM by the French Institute for Demographic Studies (*Migration, Family and Ageing*, 2010), this paper investigates migration from Martinique, Guadeloupe, French Guyana, and La Réunion¹ to metropolitan France, between 1960 and 2010. DOM migrants are French citizens who

¹ The four historical DOM were the oldest French colonies before becoming French departments with equal status to the mainland in 1946.

experience no legal barriers to migration to metropolitan France, which is by far their primary destination. However, they face costs related to the social and geographical distance between the DOM and metropolitan France. DOM-mainland migrations therefore fall in-between internal and international migration, which allows bridging the divide between those two types of mobility (King and Skeldon 2010). Additionally, since the 1960's the state has provided DOM migrants with mobility aid, which makes DOM-mainland migrations a great case to study networks effects in the presence of institutionalized migration intermediaries.

Focusing on family networks, we study whether siblings reproduce the same migratory behaviors or switch to different strategies depending on past experiences. We assess the effect of kin ties on chances of migration with and without public aid. We differentiate ties based on siblings' migration paths: the location (mainland France, another DOM, or abroad) and the recourse to public aid (with or without). We also look at the interaction between networks and family background. These specifications allow identifying the mechanisms through which networks may assist migration and shape migrants' trajectories. Results primarily show cumulative patterns of migration. Siblings migrating without public aid decrease the chances of migration with public aid and increase the chances of migration without it. Symmetrically, siblings migrating with public aid increase the chances of migration with public aid and decrease the chances of migration without it. Results also show how family background mediates the effect of networks on migration with public aid, but not without it. This paper's contribution to the literature is twofold. First, while some quantitative studies investigate migration from the French Overseas, this work is the first to systematically compare movers and stayers from these regions, accounting for the role of family relations and migration policies. Second, this paper broadens the scope of results on migrant networks. Differentiating both ties and migration outcomes based on the use of public aid shows how migrant ties not only influence the chances of migration, but the type of migration as well.

MIGRATION INTERMEDIARIES AND MIGRATION CHANNELS

Migrants often concentrate in the same geographical areas (McConnell 2008; Zavodny 1999) and in the same occupational sectors (Elliott 2001). An extensive literature documents this phenomenon, showing mixed effects of such concentration on migrants' integration in the host society. While it may have some advantages, the reproduction of origin-specific patterns can have detrimental effects on migrant's integration, by narrowing the opportunity structure offered to them (Baláž and Williams 2007; McCollum et al. 2013). Several factors play in concentration mechanisms, such as haven ports or access to ethnic goods (Chiswick and Miller 2005). Networks however explain a significant share of the unequal spatial and occupational distribution of migrants, as do other intermediaries like recruitment agencies (van den Broek, Harvey, and Groutsis 2016). The recourse to networks and its effect vary based on migrants' characteristics, especially their socioeconomic background, as well as on the type of resources ties provide (Bauer, Epstein, and Gang 2005; Drever and Hoffmeister 2008; Kalter and Kogan 2014; Sanders, Nee, and Sernau 2002).

Before shaping migrants' trajectories in the host society, migrant networks first influence the chances of migration (Boyd 1989; Garip 2008). Their effect on migration chances also varies based on potential migrants' characteristics and on the type of ties (Curran and Rivero-Fuentes 2003; McKenzie and Rapoport 2010). Both stages are dependent: it is likely that someone who benefited from the support of social ties to emigrate will then recourse to the same network to settle in. Networks further interact with other migration intermediaries in shaping migration trajectories. Boundaries between types of intermediaries – altruistic or profit-orientated, formal or informal, state or market – are indeed blurred (Lindquist et al. 2012). They may compete or cooperate in creating and sustaining integration paths or migration channels (McCollum et al. 2013). Yet, we still know little about the mechanisms through which migrant ties contribute to the perpetuation of migration channels.

The literature emphasizes at least five dimensions to explain networks' positive effect on migration chances. First, there is the direct assistance migrant networks provide, which can divide in information on how to migrate, information on job opportunities in the host society, and financial means to cover the cost of migration (Dolfin and Genicot 2010). Second and third, there is the normative pressure related to the emergence of a "culture of migration" and the network externalities, such as creation of institutions supporting later migrations (DiMaggio and Garip 2012). If we study family ties, we must also account for a fourth and a fifth dimension: collective decision-making to maximize family income or minimize risk and strategies of family reunification (Stark 1991; Toma and Vause 2014). Depending on the dimension, networks interact differently with migrants' socioeconomic background and with other migration intermediaries (Dolfin and Genicot 2010; Liu 2013). We focus here on kin ties and the state's action in brokering migration through mobility aid.

Migrant networks, mobility aid and family resources may display substitution or cumulative effects on migration chances. To better capture these effects, we differentiate ties with migrants who benefited from public aid and ties with migrants who did not. First, if migrant ties provide mainly with financial means to cover the cost of migration, migrant networks and family resources will be substitutable and the effect of ties will be lower for more affluent households (Boustan 2013). Yet, middle and upper class families tend to have access to networks with higher returns, such that networks enhance the advantages of economic and cultural resources (Bourdieu 1979) and we could expect instead the effect of migrant networks to be higher within households with higher economic resources.

Second, if migration programs provide with financial help, networks may also substitute for public aid: migrant networks will have a lower effect on migration with public aid than on migration without it, as will family resources. Similarly, both networks and migration programs provide with information on how to migrate, reinforcing this substitution effect. Yet, potential

migrants need information to access the migration programs themselves. If the effect of information on the programs exceeds the wider effect of information on migration, knowing migrants who benefited from aid will have a positive effect only on migration with aid and knowing migrants who did not benefit from it will have a positive effect only on migration without aid.

Through informational cascades, potential migrants are likely to reproduce mobility patterns of previous migrants they know, despite the fact that they may not be in the same positions as them (Epstein 2008). Networks circulate a “culture of migration” (Cohen 2004; Kandel and Massey 2002; Massey et al. 1990). While migrants carry knowledge on migration, this information is embedded in a system of representations and conveys a normative value. Carling and Åkesson (2009) use the expression “migration ideology” to designate the association of specific significations and causality to migration. Visits to the home society concentrate these mechanisms in a ritualized form (Massey et al. 1990; Olwig 2007; Werbner 1999). During such visits, migrants respond to expectations of social success, and often stage their living conditions in a more favorable light than they actually experience. They also play a role in negotiating future migrations, for instance promising to take care of a younger relative upon arrival. Migrants returning to their home society shape representations of a successful migration and, through their advice and patronage, incite future migrants to adopt the same tools of success. In that light, we could expect the effect of migration without aid to be positive for migration without aid and negative for migration with aid. Symmetrically, we could expect the effect of migration with aid to be positive for migration with aid and negative for migration without it.

MIGRATION FROM THE FRENCH OVERSEAS DEPARTMENTS

Despite differing contexts², Martinique, Guadeloupe, Guyane and La Réunion share a common colonial and postcolonial trajectory that makes it relevant to study them jointly. As “manufactured societies” (Waters 2001), they share a common sociopolitical structure, on which slavery had a lasting influence. After slavery was abolished in 1848, all DOM populations gained citizenship, which gave them a particular status within the French colonial empire, even if gaps between law and practices long persisted (Larcher 2014). Among other factors, this status explains why they chose assimilation after World War II – through departmentalization in 1946 – rather than independence like most of the other French colonies. After 1946, important socioeconomic, political and legal differences remained between the newly named *Départements d’Outre-mer* (DOM) and metropolitan France. High levels of unemployment and inequalities, combined with a separatist sentiment in some political groups, led to intense social conflict in the DOM, in the form of protests, strikes, and sometimes violent riots (Stora 2016). For French officials, the roots of those problems lied in the “overpopulation” of those regions (Domenach and Picouet 1992). They designed mass migration to the mainland as a response to it, as well as to answer the increased demand for unskilled labor in metropolitan France (Condon and Ogden 1991).

The Office for DOM migration (Bumidom) channeled DOM-mainland migration between 1963 and 1981. 160,300 migrants benefited from its services, ranging from training centers and job placement to small loans, including financing family reunification (Condon and Ogden 1991; Pattieu 2017). With the 1973 crisis and the economic depression that followed, migration policies faced new budgetary constraints and reduced employment prospects for the migrants. The demands of activists, who asked that public policies focus on local development

² If Martinique and Guadeloupe are neighbor islands located in the Caribbean, Guyane is a continental region located between Suriname and Brazil, and La Réunion is an island East of Madagascar, near Mauritius Island.

rather than forcing DOM population to emigrate, also became more pressing. In 1982, the National Agency for Integration and Protection of Overseas Workers (ANT) replaced the Bumidom, reflecting a narrowing of migration policies (Marie and Giraud 1987). Ladom (*Agence de l'outre-mer pour la mobilité* or Overseas agency for mobility) then replaced the ANT in 2006. Mobility programs still encourage migration to metropolitan France, but access to this aid is more restricted. Ladom mostly offers income-capped grants conditional on specific educational or occupational projects in metropolitan France (Leroux 2017).

DATA AND METHODS

Migration Family and Ageing (MFV) is a representative survey of adults living in Guadeloupe, Martinique, Guyane and La Réunion. The French Institute for Demographic Studies (INED) conducted the survey between 2009 and 2010, collecting information on 15,770 individuals, aged 18 to 79. The data includes information on respondents' children and their migration experience, whether adult or children, whether living in the DOM or elsewhere. Our study focuses on adult migration within this subpopulation, using the nesting of siblings in family clusters to account for unobserved heterogeneity. We reduce our analysis to respondents' children born in the DOM ($n=27,275$), aged 15 or more ($n=16,856$). We exclude individuals who migrated elsewhere than metropolitan France ($n=16,588$) and individuals who migrated before they were 15 ($n=15,179$). The survey does not provide dates of departure and return for return migrants: we cannot place their mobility on a timeline, but cannot consider them as non-migrants either. Consequently, we exclude them and their siblings from the sample³ ($n=13,998$). Once removed observations with missing data, the sample comprises 13,409 individuals. Table 1 reports migration outcomes in the final sample.

³ Static models including this subpopulation were estimated using multinomial logistic regressions, controlling for birth cohort instead of time-period. Their results are consistent with the duration models on the restricted population.

Table 1: Migration patterns in the sample

Migrant status	N	(%)
Living in the DOM	10,376	77.4
Moved to mainland France without public aid	2,433	18.1
Moved to mainland France with public aid	600	4.5

Source: MFV (INED, 2010)

We use discrete-time event history analysis and a multilevel structure to compare the probabilities of migrating with and without public financial aid. We reshape the data as a yearly panel. Individuals enter the panel at age 15 and leave it either the year after they migrate or the year of the survey (2010). The dependent variable is the migration status: “*still living in the DOM*”, “*has moved to mainland France without public aid*”, or “*has moved to mainland France with public aid*”. The time variable is age, introduced as a categorical variable (one indicator for each age). In a classic model, the coefficient associated with family migrant network captures not only the effect of ties, but also the effect of a set of unobserved characteristics that affect the family propensity to migrate (Palloni et al. 2001). Estimating a random intercept for each family cluster allows for limiting this bias.

The model is specified as follows:

$$\log\left(\frac{\mathbb{P}(\text{migrates without public aid})_{jit}}{\mathbb{P}(\text{stays})_{jit}}\right) = \alpha_1 X_{ji} + \beta_1 K_{ji(t-1)} + \gamma_{0j} + \varepsilon_{jit}$$

$$\log\left(\frac{\mathbb{P}(\text{migrates with public aid})_{jit}}{\mathbb{P}(\text{stays})_{jit}}\right) = \tilde{\alpha}_1 X_{ji} + \tilde{\beta}_1 K_{ji(t-1)} + \gamma_{0j} + \tilde{\varepsilon}_{jit}$$

Where X_{ji} is a vector of fixed individual characteristics, K_{jit} is a vector of time-dependent characteristics, and γ_{0j} the random slope for each cluster of siblings.

For each relative currently living outside the DOM, respondents answer the following question: “*To your knowledge has <NAME OF THE RELATIVE> received any public assistance for this stay?*” They select one or several options among the following: “No, none”;

“Bumidom”; “ANT”; “Cnarm”⁴; “Crous”⁵; “Regional funding”; “State (*passport mobilité*)”; “Other”. While respondents may not know the answer for their aunt or their cousin, we expect their knowledge of their children’s migration to be much more reliable. We consider that individuals migrate without public aid when their parents report that they received no public assistance and that they migrate with public aid when their parents report that they received any type of aid, including educational grants or “Other”.

Table 2: Family size in the sample

Number of children	N	(%)
1	839	14.0
2	1,777	29.6
3	1,479	24.6
4	814	13.6
5	468	7.8
≥ 6	629	10.5

Source: MFV (INED, 2010)

Large families are common in the sample (table 2), which makes it relevant to use continuous measures of networks, such as the number of migrant siblings, and to test theoretical scenarios with a diversity of migration trajectories within the same family. Five variables capture the family migrant network. First, the model includes the number of siblings living in mainland France who used public aid for their migration, the number of siblings living in mainland France who did not use public aid for their migration, and their squared values. This specification allows for estimation of a non-linear effect of networks’ size, as previously highlighted by the literature (Stark and Jakubek 2013). Regressions also include the number of siblings living in another DOM, the number of siblings living abroad, and a variable indicating if the parent is living in mainland France. All network variables are lagged time-variant variables.

⁴ National Committee for Reunionese in Mobility (*Comité national d'accueil et d'actions pour les Réunionnais en mobilité*)

⁵ Regional Centre for University and School Works (*Centre régional des œuvres universitaires et scolaires*)

Four variables capture socioeconomic resources. At the individual level, we only use an indicator of having obtained at least a junior high degree⁶. The three other variables are captured at the family level. We use a relative measure of parental education that has proven robust to investigate migrant selection (Feliciano 2005; Ichou 2014): the share of the parent's birth cohort with a lower educational level than the parent. We also use the occupational status of the parent (lower; intermediate; upper) and an indicator of land or home ownership for the parent. The model includes the interaction between the three family background variables and the number of migrant siblings living in metropolitan France (distinguishing between migration with and without public aid). Regressions also control for age (the time variable in the duration model), time period (1960-1981; 1982-1997; 1998-2010), region of birth (Martinique; Guadeloupe; French Guyana; La Réunion), gender, birth order, and number of siblings.

RESULTS

Cumulative patterns of migration

First, we assess the extent to which the three types of migration trajectories coexist within the same families, computing descriptive statistics at the family level. Seven migration patterns are considered, based on the combination of the indicators of having at least one sibling still living in the DOM, having at least one sibling settled in metropolitan France without public aid, and having at least one sibling settled in metropolitan France with public aid (Table 3). 90% of families count at least one sibling over 15 who still lives in the DOM. In 68% of families, no sibling is living in mainland France. 16% of families count at least one sibling who migrated without public assistance and one sibling who did not leave the DOM. Families with only

⁶ The survey does not indicate when respondents' children have obtained their degree. We cannot treat education as a time-variant variable, while many migrants have achieved their education after moving to metropolitan France (Temporal, Marie, and Bernard 2011). Using the threshold of the junior high degree, which is most commonly obtained at age 15 or before, ensure that the education variable and the migration outcome are not endogenous. It is discriminating enough (30% of individuals in the sample do not hold a junior high degree)

migrants who have not used public aid are slightly more common than ones with both non-migrants and migrants who used public aid (8% and 5% respectively).

Only 2% of households experience both types of migration, highlighting the segmentation of migration trajectories within families, based on the use of public aid. We could expect that migration with aid is rarely followed by migration without aid because these families, even with the support of public aid, can only afford the migration of one sibling. Yet, 35% of families with at least one migrant who benefited from public aid count more than one migrant sibling. In addition, the difference in the total number of migrants between families who benefited from public aid and did not is small: on average, families with at least one migrant who benefited from public aid count 1.5 migrant siblings against 1.6 in families with at least one migrant who did not benefit from public aid⁷.

Table 3: Siblings’ migration patterns

At least one non-migrant	At least one non-subsidized migrant	A least one subsidized migrant	(%)
Yes	No	No	67.8
Yes	Yes	No	14.5
No	Yes	No	8.7
Yes	No	Yes	5.3
No	No	Yes	1.7
Yes	Yes	Yes	1.1
No	Yes	Yes	0.9

Source: MFV (INED, 2010) | weighted distribution

The results of the duration models confirm this cumulative pattern. Table 4 reports the average marginal effects of the five measures of family migrant network. The number of siblings who migrated to metropolitan France without public aid has a significant positive effect on migration without public aid and a significant negative effect on migration with public aid. Symmetrically, the number of siblings who migrated to metropolitan France with public aid has

⁷ Note that these categories are not mutually exclusive but their intersection is thin (families with both at least one migrant who benefited from public aid and one migrant who did not represent 2% of families).

a significant negative effect on migration without public aid and a significant positive effect on migration with public aid. In addition, the other measures all have a positive effect on migration without public aid and no significant effect on migration with public aid.

Table 4: Average marginal effects of family migrant networks on migration chances

	Migration without public aid		Migration with public aid	
Siblings in mainland (no public aid)	0.007***	[0.005,0.009]	-0.002*	[-0.003,-0.000]
Siblings in mainland (public aid)	-0.007**	[-0.012,-0.003]	0.003***	[0.002,0.005]
Siblings in another DOM	0.004*	[0.000,0.008]	-0.000	[-0.003,0.002]
Siblings abroad	0.007**	[0.002,0.011]	0.002	[-0.000,0.004]
Parent in mainland	0.016***	[0.012,0.019]	-0.000	[-0.003,0.002]
<i>N</i>	126,477			

95% confidence intervals in brackets | * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ | Source: MFV (INED, 2010)

Siblings outside metropolitan France cannot provide direct assistance to migrants settling in the mainland. Yet, they may experience upward social mobility, which increase the family's overall resources to finance migrations. In addition, they change families' views on leaving the DOM, especially on moving away from one's parents. They initiate a renegotiation of family relations that then benefits other siblings. This might explain the positive effect associated with the number of siblings living in another DOM and with the number of siblings living abroad. The positive effect associated with migration of the parent to metropolitan France most likely reflects family reunification strategies. It is common for parents to migrate to the mainland, before bringing their children with them. When they return to the DOM, often after a change in their marital or occupational status, or when they retire, children commonly remain in metropolitan France. Our results shows that parent-child reunification does not only concern minor children. In the sample, 193 individuals migrated while their mother or father lived in metropolitan France (8% of migration without aid and 3% of migration with aid). By construction, they were all at least 15 when they migrated; half of them were over 21; a quarter of them over 25. Research documents mothers' strategies to maintain links with their children

left behind in the home society (Hondagneu-Sotelo and Avila 1997; Parreñas 2005). The dynamics of these relations over time, including through family reunification, would deserve further study (Ambrosini 2015; Gonzalez-Ferrer, Baizan, and Beauchemin 2012).

Substitution effects between ties and family resources

Table 5 reports the full results of the duration model expressed in relative risk ratios. Looking at the interaction between kin ties and family background, results first show no significant difference based on parental characteristics in the effect of siblings' migration on the chances of migration without public aid. While individuals with parents with higher human and economic capital are more likely to migrate without public aid (both relative education and occupation have a significant positive effect on migration without public aid), neither the positive effect of siblings who migrated without public aid nor the negative effect of siblings who migrated with public aid vary with those characteristics. This suggests that the resources provided by migrant kin ties are not mainly economic and that the effects of information and migrant culture dominate.

The pattern for migration with public aid is more complex. Parental education has a significant positive effect on the chances of migration with aid, while parental occupation has no significant effect. This confirms our hypothesis that, while migration programs provide with financial means to cover the costs of migration, they remain restrictive. Educational resources may provide individuals with the tools necessary to access migration aid, whether information or the right profile to meet the programs' criteria. On the one hand, the interaction between parental education and the number of siblings who migrated without aid is positive, while the interaction between education and number of siblings who migrated with aid is negative. On the other hand, the interaction between parental occupation and number of siblings who migrated without aid is negative, while the interaction between occupation and number of siblings who migrated with aid is positive.

Table 5: Results of the duration model expressed in relative risk-ratios

	Migration without public aid		Migration with public aid	
	Risk ratio	Conf. interval	Risk ratio	Conf. interval
Period (ref: 1960-1981)				
1982-1997	0.65***	[0.55,0.77]	0.66*	[0.46,0.95]
1998-2010	0.85	[0.70,1.02]	1.45*	[1.01,2.09]
Male	1.07	[0.97,1.17]	1.24*	[1.05,1.48]
Birth region (ref: Guadeloupe)				
Martinique	0.81**	[0.70,0.93]	0.69**	[0.54,0.88]
French Guyana	0.89	[0.75,1.04]	0.54***	[0.40,0.74]
La Réunion	0.42***	[0.36,0.50]	0.91	[0.72,1.14]
At least junior high degree	1.74***	[1.53,1.99]	2.56***	[1.95,3.36]
Birth order	0.97	[0.93,1.01]	0.95	[0.88,1.03]
Number of siblings	1.08***	[1.04,1.12]	1.04	[0.98,1.11]
Siblings in mainland (no aid)	1.72***	[1.41,2.09]	0.72	[0.42,1.22]
Siblings in mainland (no aid) ²	0.90***	[0.87,0.93]	1.00	[0.85,1.18]
Siblings in mainland (aid)	0.76	[0.49,1.19]	5.30***	[3.47,8.09]
Siblings in mainland (aid) ²	1.03	[0.94,1.14]	0.79***	[0.72,0.87]
Siblings in another DOM	1.33*	[1.01,1.75]	0.91	[0.45,1.83]
Siblings abroad	1.60**	[1.18,2.17]	1.63	[0.92,2.87]
Parent in mainland	2.90***	[2.30,3.64]	0.91	[0.49,1.70]
Parental education	1.71***	[1.37,2.12]	1.66**	[1.15,2.38]
Parental occupation (ref: lower)				
Intermediate	1.22*	[1.04,1.44]	1.03	[0.78,1.36]
Upper	1.72***	[1.33,2.22]	1.07	[0.69,1.67]
Land ownership	1.10	[0.97,1.25]	1.33**	[1.08,1.63]
Parental education × Siblings in mainland (no aid)	0.98	[0.77,1.24]	2.36*	[1.22,4.57]
Parental education × Siblings in mainland (aid)	0.47	[0.21,1.04]	0.12***	[0.05,0.29]
Intermediate × Siblings in mainland (no aid)	1.03	[0.86,1.23]	0.82	[0.45,1.52]
Upper × Siblings in mainland (no aid)	0.95	[0.66,1.36]	0.65	[0.24,1.76]
Intermediate × Siblings in mainland (aid)	1.27	[0.74,2.17]	1.71*	[1.03,2.83]
Upper × Siblings in mainland (aid)	2.10	[0.76,5.85]	3.58*	[1.10,11.67]
Land ownership × Siblings in mainland (no aid)	1.03	[0.91,1.16]	0.61*	[0.41,0.90]
Land ownership × Siblings in mainland (aid)	0.87	[0.62,1.22]	0.78	[0.58,1.07]
N	126,477			

95% confidence intervals in brackets | * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Coefficients for each age omitted | Source: MFV (INED, 2010)

The substitution effect between ties and education suggests that ties do not only mediate access to migration but also access to migration aid. Knowing someone who used migration aid makes it easier to enter the process. For someone with a higher educational background, the barriers to access are lower and any type of ties will encourage migration with public aid. The cumulative effect between ties and occupation is more puzzling. One way to look at it is to consider the framing of migration programs and the representations associated with them. While they may restrict access to aid through administrative procedures and requirements of educational or training projects, migration programs still target individuals from the more modest households of the DOM. When coming from a middle-class background, you would need stronger incentives – for instance in the form of normative pressure or selective information – to migrate using public aid.

DISCUSSION AND CONCLUSION

Using a case of state-sponsored migration and focusing on kin ties, this paper investigates the effects of migrant networks on chances of migration and highlights the mechanisms behind the formation and perpetuation of migration channels. Based on data from the MFV survey (INED, 2010), it studies migration from Guadeloupe, Martinique, French Guyana and La Réunion to metropolitan France, between 1960 and 2010. Using discrete-time event history analysis, our study assesses the respective influence of kin ties with migrants who used public aid and kin ties with migrants who did not use public aid on chances of migration with and without public aid. The multilevel structure of the model accounts for unobserved heterogeneity at the family level and limits the potential bias related to unmeasured factors influencing the family propensity to migrate.

First, results show cumulative migration patterns within families. The more their siblings migrate to metropolitan France without public aid, the more individuals are likely to migrate without public aid. At the same time, they become less likely to migrate with public aid, compared to staying in the DOM. Symmetrically, the number of siblings who migrated with public aid significantly increases the chances of migration with public aid and significantly decreases the chances of migration without public aid. Second, other type of migrant ties – namely having siblings who migrated to another DOM or abroad and having a mother or father who migrated to metropolitan France – increase the chances of migration without public aid but have no significant effect on migration with public aid. Last, family background does not mediate the effect of migrant networks on the chances of migration without public aid, but it does alter the effect of migrant networks on the chances of migration with public aid.

These results highlight the different dimensions of migrant networks' influence on migration outcomes. First, ties provide direct assistance for migration through financial means, information on how to migrate and information on jobs and other opportunities in the host society. They may be substitute both for family resources and migration intermediaries, such as state migration programs. In the case of DOM-mainland migration, our results show that this assistance is more informational than economic. Migrant networks do not have a smaller effect on the chances of migration without aid of individuals from higher SES households, which means there are no substitution effects between networks and family resources. They do not have a smaller effect on the chances of migration with aid either, which means there are no substitution effects between networks and public aid. While migration program provide both financial means and information on how to migrate, individual need information on the program themselves to access the aid. That may explain why ties with migrant who used public aid have such a strong effect on chances of migration with public aid: they give potential migrants information on how to access mobility aid.

Second, ties also participate in a culture of migration and exert normative pressure on potential migrants. This explains the cumulative patterns of migration as much as informational mechanisms do. Migrants already settled incite potential migrants to move through the same channels as them, not only because of the information they give but also because they make these channels appear more accessible and successful, or even inevitable. In the case of kin ties, the migration of siblings also contribute to normalize the idea of living far from one's parent and one's home region, as the positive effect of the number of siblings abroad and in another DOM suggests. Last, the effect of kin ties also reflect family reunification strategies: while we cannot isolate this dimensions from the others, the positive effect associated with the migration of one's mother or father to metropolitan France seems particularly reflective of that mechanism.

While migration programs aimed at encouraging mobility from the DOM to metropolitan France have been discussed in the public sphere and in social sciences, few studies quantitatively assess the role of those programs in shaping migration flows. This work is the first to systematically compare movers and stayers, differentiating migration outcomes based on the use of public aid. It furthers our understanding of the way DOM populations receive and engage with migration policies, stressing the role of family relations in driving cumulative patterns of migration. This paper also contributes to the literature on migrant networks by stressing how network mechanisms influence the chances of migration, but also the type of migration. While previous literature has mainly focused on the choice of location (Bauer et al. 2005; Epstein 2008; McConnell 2008), our results stress the impact of migrant network on the resources mobilized by migrants to facilitate their journey, which are as likely to influence migrants' integration paths.

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