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RESUMEN

¿Puede la emigración de un padre afectar el desarrollo de sus hijos? Si bien los migrantes pueden enviar remesas para cubrir los gastos educativos y de salud de sus familias en el país de origen, los migrantes no pueden proporcionar sus servicios de cuidado, como apoyo emocional, ayuda con las tareas o estar presentes como un modelo a seguir. De hecho, la literatura de Cadenas Globales de Cuidado (CGC) ha sugerido que el impacto general de la migración en el desarrollo de los niños abandonados podría ser negativo. Usando el Censo de Ecuador del 2010, este estudio investiga esta pregunta comparando el logro educativo y el embarazo adolescente de los hijos en familias con o sin un padre migrante. Al contrario de lo que CGC ha sugerido, este estudio no encuentra evidencia de impactos educativos negativos. Sin embargo, CGC sí logró predecir que el embarazo adolescente aumenta en hijas de migrantes.

Palabras clave: migración internacional, desarrollo, remesas, retraso escolar, embarazo adolescente, países de destino, países de origen.

ABSTRACT

Can the emigration of a parent affect the development of its children left behind? While migrants can send remittances to cover educational and health expenses of their families in the country of origin, migrants cannot provide their reproductive services, such as emotional support, helping with chores or providing a role model. In fact, the Global Care Chains (GCC) literature has suggested that the overall impact of migration on the development of children left behind could be negative. Using the 2010 Ecuadorian Census, this study investigates this question by comparing educational attainment and teenage pregnancy of children in families with or without one migrating parent. Contrary to what GCC has suggested, this study finds no evidence of negative educational effects of parental migration. At the same time, GCC correctly predicts higher rates of teenage pregnancy in children left behind.

Key words: international migration, development, remittances, school delay, teenage pregnancy, destination countries, home countries.

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INTRODUCTION

International migration becomes a complex topic when its effects on development are analyzed. One level of this analysis can be the families of migrants. In the case of the migration of a parent, there are questions that emerge on regards of the effects of the absence of the parent on the wellbeing of the family left behind. Those effects are mainly related to the services provided before by the migrant parent and the overall development of the members of the household. For example, the migration of a parent may be negative if once the family is forced to replace the services provided by the migrating parent are not as good in quality as before. This can be the case in which an elder sibling was forced to replace the duties and role of the migrating parent. Other example of the arguments brought to the analysis of international migration and development, can defend that as in the previous example, the absence of a parent can be diminished by the income generated in the destination country. In such scenario, the role of the migrating parent can be covered with money sent to the family left behind.

The case of Ecuador is special to analyze the relationship between the international migration and development. The migration that took place in Ecuador during the end of the 90s and the beginning of the 2000s was in its majority for parents that left their families to the care of a relative (Martinez Valle 2005, 160). These relatives that assumed the demanded role, had to become the new caregiver or the provider of the care services left unattended by the parent that emigrated. The case of Ecuador is important in the debates of migrations as the country experienced a significant wave of migration at the end of the 90s as never before in its history (Gratton 2005, 37). It produced a national debate on migration. In the same way, the

academy turned its interest on understanding this phenomenon, its main actors and implications for the country (Gratton 2005, 38).

In order to understand the relationship between international migration and developments, it was necessary to revise the main debates on this regard. In this sense, the so-called Global Care Chains approach presents a vision that considers that the costs of migration cannot be lessened nor covered by the benefits that it may bring to the migrants' families (Yeates 2005, 13). This research has been able to identify that there is a main approach addressing the relationship between migration and development. This approach defends that the costs of migration can be covered and even be surpassed by the income that remittances generate to the families left behind (Lee 1965, 49). In the case of this approach, it has been found that its arguments are presented as generally accepted, in the extent that this debate does not identify itself by any label or name. Given this, for purposes of this research, it has been necessary to name it "mainstream literature (on migration and development)".

While conducting this research it was found that the effects of international migration on child development have not been further analyzed. There is the challenge to understand the context of the families analyzed in order to test the literature on migration and development. This research has built and found variables that provide context to each household studied. By means of the data examined from the 2010 Ecuadorian Census. It has been found that both GCC and mainstream literature cannot explain by their own whether the effects of migration on development are completely beneficial or disadvantageous.

The first chapter of this research revises the main debates around migration and development. Followed by Chapter 2, that is the revision of the discourse of Ecuador in terms of parental migration. Chapter 3 is an overview of the characteristics of the data used and the methodology applied in this research, and the main variables utilized. Chapter 4 is an analysis of the results of this investigation.

1. Migration and development

Migration and development generate many debates. In order to understand the nature and objective of such debates, it is necessary to explore the main definitions around these concepts. Migration is the mobility of one or more individual to a new permanent or semi-permanent place of residence (Lee 1965, 49) (Hill 2006, 3). Also, migration can occur on an “intra-country basis (rural-urban migration) or on a cross-border basis... or on an international/trans-regional basis” (Yeates 2005, 4). Particularity, this research is focused on international migration of a parent without his or her spouse or kids.

Development can be defined as a positive restructuring and desirable change (Bellù 2011, 2). This phenomenon is generally seen as a synonym of improvement, reflected on several elements of the system (Seers 1969, 2) (Bellù 2011, 2). Those elements being of an economic, political, social and environmental character. Depending on which of those elements is considered more relevant, development can be understood in different ways, some of them are economic, sustainable, territorial and human. Each of them is focused on a specific type of improvement. Human development, the type of development investigated in this study, is focused on the well-being of individuals and their “health, education, entitlements, capabilities, empowerment” (Bellù 2011, 2).

Migration and development mutually affect each other. On the specific topic of how migration of parents affects development, there are two important literatures: the ‘Global Care Chain’ (GCC) and *mainstream*. This chapter examines and compares these two theories. GCC approach is focused on addressing the human costs of international migration. It studies “(...) a series of personal links between people across the globe based on the paid or unpaid work of caring” (Yeats 2000, 131). The dynamic that GCC intends to explore is the one in which a migrant that now provides care services in the destination country has left his or her family with the same needs unattended. In such case, the family left behind must cover that empty

role. For instance, GCC investigates what happens when a head of household leaves his or her family behind to acquire a job in the care sector of another country. Care activities comprise,

“services as diverse as domestic cleaning, family care, health care, sexual care, educational care and religious/spiritual care, provided in a wide range of settings such as the home, hospitals, hospices, churches, schools and brothels and in a wider range of contexts such as individualized private settings and institutionalized state and non-state settings” (Yeates 2005, 8).

Thus, GCC is concerned about how migration affects the bonds and interactions between individuals on multiple spheres (Yeates 2005, 6). The GCC is concerned with possibly negative effects of migration. It analyzes migration as more than a mere human mobilization, but as a process encompassing many difficulties and hardships (Lee 1965, 49).

For GCC, the effects of migration go beyond the individuals that migrate. The GCC talks instead about a chain of individuals impacted by migration. The first link of the chain is composed of individuals that hire care services from migrants. The second link is composed of the migrants themselves, who offer care in one country while not offering their own care to family or employees in their country of origin. The third link is composed of individuals in the home country of the migrant who provide the care in their place.

The GCC is pessimistic on the impact of parent migration. The GCC “(...) presents the redistribution of care labour as one-way traffic, involving the transfer of emotional care labour away from the migrant dependents (may they be children or siblings) to the new individuals that he or she is paid to care for” (Yeates 2005, 13). Within this approach migration becomes a situation in which a family not only is drawn away from the individual that provides support, but also is left without the essential elements that came from that relationship.

The family left behind in this situation is urged to look for a substitute of the migrant, that can keep providing care. Under the GCC perspective, “(.) migration transforms the way in which care is carried out; the resources available for caregiving; the way in which family,

maternity and paternity are managed and understood; and the very concept of what it is to provide (good quality) care (Orozco 2016, 8)”. Likewise, most affected section of the chain is on the sending country, as “‘down’ the chain the value ascribed to the labour decreases and often becomes unpaid at the end of the chain” (Yeates 2005, 2). For example, a migrant’s family may require another member of the family (grandmother or aunt) to perform as caregiver to the children left behind, as a responsibility or favor without being paid for such work. The family is left with few options that can replace the role of the migrant, risking with this the quality of the care provided.

With this, GCC is concerned not only on the ‘trade’ of services that benefits the receiving country but on the duties that are left undone on the sending country. The GCC, identifies migration as a process in which the receiving country is being more benefited not only by the production made by migrants, but also on the “emotional surplus value” that the process generates (Yeates 2005, 7). With this, the sending country faces a ‘double infringement’ caused by abandonment and ‘emotional scarcity’.

The GCC was developed as a critique to what this study will call the “mainstream” literature on migration and development. Mainstream studies see migration as a source of development, both to individuals and countries. The home country of migrants benefits from their sending of remittances (Taylor 1999, 63). Within this approach migrants are seen as producers of development. The international market provides the conditions for migrants to send a percentage of their profits to the sending country.

Under the perspective of the mainstream literature, migration is beneficial for home countries, destination countries, migrants and their families. In general, “migration is typically seen as a strong engine of growth and convergence” (Faini 2007, 185). In the case of home countries, it has been recorded, that in countries with economic crises, remittances come to represent two times the size of aid (Nyberg-Sorensen et, al. 2003, 5). Was it not for remittances,

mainstream argues, these countries could face even worst crises. One example of the uses of remittances is that they can specifically be used “for community projects in the migrants’ region of origin, in which construction of infrastructure can be extended into economically productive projects” (Ould 2007, 179). In general migration is advantageous for home countries as it produces market corrections in situations in which there are excesses in the supply of workers (IOM 2004, 3).

According to the OECD, in the case of destination countries, the benefits of migration are reflected on three specific areas, labour markets, public purse and economic growth (2014, 1). In the case of the benefits on labour markets, it can be highlighted that migrants generate increments in the labour force. For example, “(...) over the past ten years, immigrants represented 47% of the increase in the workforce in the United States, and 70% in Europe” (OECD 2014, 2). Migration becomes an important mechanism to reactivate declining occupations. It has also been recorded that migrants possess a “labour market adjustment capacity” (OECD 2014, 2). Punctually, in Europe only, “(...) as much as a quarter of the asymmetric labour market shock can be absorbed by strategic: unless families are irrational or misinformed, migration happens because it improves the wellbeing of the household (Taylor 1999, 64).

In brief, the question that confronts both the GCC literature and the mainstream between each other tries to understand; what is the overall impact of a migrating parent on the development of its children left behind? According to the GCC, the absence of a migrant parent can produce detrimental effects on the health and academic performance of the children left behind. For the mainstream literature, these potential negative effects are counterbalanced, or even surpassed, by the positive effect of remittances on purchasing health and education services.

This study is agnostic about the overall effect of migration. In chapters 3 and 4 we examine the data in search for the effect of parental migration on the education attainment and teenage pregnancy of its children left behind. For some families the “net effect of migration may be negative, while for others it is positive, depending on context migration within a year” (Jauer 2014 in OECD 2014, 2).

Regarding the contributions towards the public purse, it has been registered that migrants do not represent a burden in public spending. Instead, in countries like Luxembourg and Switzerland, “immigrants provide an estimate of net benefit of about 2% of GDP to the public purse” (OECD 2014, 2). In terms of the benefits brought to economic growth, migration has impacts over the demography of the destination countries. Specifically, migration increases “the size of the population and also changes the age pyramid” in the regions of destination (OECD 2014, 3).

According to the mainstream literature, migration is beneficial for migrants as through this process they are able to “provide safety, security, and opportunities for themselves and their families, [or to pursue any other] common goals of all human beings” (IOM 2004, 2). Migration becomes a process in which individuals are able to broaden the scope of opportunities to change or even improve their lifestyle and condition. There are new connections and spaces that migrants have access to that allow them to provide to someone at their charge or to grow personally. The OIM highlights that migrants have the opportunity to “benefit from higher wages and better working conditions and by acquiring new work-related skills and knowledge that they can eventually take back home” (2004, 3).

The mainstream literature also highlights the benefits of migration on the families left behind. For the mainstream literature, remittances “represent an essential non-debt creating, safety-net vehicle” for migrants’ families (Brown 2006, 55). Families of migrants rely on the income generated in the destination country by their relatives to cover several needs (Obrzut

2019, 2). It is argued that remittances not only are used to meet basic necessities, but to invest on areas that allow the migrants' family to develop (Obrzut 2019, 2). It defends that both, "migration and remittances may reshape migrant's sending [origin] economies" (Taylor 1999, 64). Such reshaping is thought to be on a positive way, for example, taking a family out of poverty to a better economic condition. This approach sees migration as the phenomenon that generates the resources to improve the lives of the families left behind. According to this perspective, families consider migration as a process that brings several benefits.

Both, the GCC and the mainstream literature identify different impacts of migration on the families of migrants. For the mainstream literature, remittances become the perfect element to prove and track the benefits of migration on several scales of the families' economies (Ratha 2007, 2). The services of care that the head of household provided before migrating can now be covered by virtue of remittances. For this approach, this argument is proved as "remittances finance education and health expenditures, and ease credit constraints on small businesses" (Ratha 2006, 19). The benefits of migration are evidenced on the possibility that migrants' families have to cover those specific 'care needs. In conclusion, for the mainstream perspective, migration is strategic: unless families are irrational or misinformed, migration happens because it improves the wellbeing of the household (Taylor 1999, 64).

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2. The case of Ecuador

There are recordings of significant waves of international migration from Ecuador since the 1960s. However, the wave of migration generated after the economic crisis of 1999, raised many concerns as more people were leaving Ecuador than ever before (Gratton 2005, 37). It was a starting point to generate a national debate and to better understand international migration as it entails several economic, political and social impacts (Bonilla & Cadena 2005, 11). After 1999, international migration becomes an attractive option to overcome the crisis and to look for better opportunities in general (Gratton 2005, 38). In 2001 alone, it is registered that 4% of the population left Ecuador; by 2003 1.7 millions of Ecuadorians lived abroad (Gratton 2005, 38).

Analyzing the case of Ecuador is relevant on the studies of parents' migration (Gratton 2005, 39). The demographic profile of the Ecuadorian migrant after the 1999 crisis generally was of a group of 25 years old or more, coming from both urban and rural areas (Gratton 2005 39). Additionally, the Ecuadorian migration is particular in the extent in which there is a gender gap, that shows that women are leaving the country more than men (Gratton 2005, 47). Most of the Ecuadorian migrant women reported to being married before migrating from Ecuador. The migration of Ecuadorian women after the crisis is produced to a larger extent than in the case of men, as there was "greater demand for female labor in the large cities...caused women to become the first link in the migratory chain" (Pedone 2005, 116). The feminization of

migration has produced domestic changes in terms involving social relations and care (Pedone 2005, 116).

Another pattern identified in the Ecuadorian migration is that the majority of people living were parents (Gratton 2005, 49). According to a study of Colectivo IOÉ, “(...) 80% of Ecuadorians migrants surveyed, said that they had at least one child in Ecuador, and 25% had left three or plus” (Colectivo IOÉ in Gratton 2005, 49). In the context of Ecuador, the migration of parents has been described as a process that ‘breaks the family nucleus’. Parents are seen as the principal structure of the family. The absence of a parent (or person that is in charge of the household) is considered to be threatening for the wellbeing and union of the family (Pedone 2005, 116). The migration of a parent is particular in the sense that it requires to look for a ‘replacement’ that can fulfill the duties of the absent parent (Pedone 2005, 116). The role of providing care in the majority of cases was left to be performed by grandparents or other relatives.

The migration of parents created a situation in which families left had to learn how to function with the absence of the ‘original providers and caregivers’. This is, families had to transform their relationships due to the distance (Martínez Valle 2005, 160). With these new dynamics migrant families produced "transnational communities" (Martínez Valle 2005, 160). Families left behind had to function and adapt to new care services and authority relations, while maintaining international ties with parents that turned into distant and diffuse authorities (Yeates 2005, 8).

On regards of the economic profile of the Ecuadorian migrants it has been found that there was no class difference (Pedone 2005, 118). It has been found that,

“(...)inside of the Ecuadorian population that considers migration as an alternative, there are those who must resort to scarce resources with those who tell their whole

family and even their relatives or get into debt with networks that generate migration trade. Other people have certain capital to make the decision to migrate, therefore, do not have the need to resort to any type of networks and the migratory project is circumscribed only to the migration chain” (Pedone 2005, 118).

As in the context of Ecuador migrants came from different socio-economic context, remittances were seen as tools to boost several activities. For example, remittances could be linked to the local productive activities (as investments or family business) and not only with the family consumption (Martinez Valle 2005, 160)”. Remittances are seen as multi-purpose tool. It has been found that in addition to satisfying the consumption and payment of debts, remittances can be assigned the destiny that families decide (Martínez Valle 2005, 160). In the context of Ecuador, “(...) [international migration] is not only characterized by the mobility of the labor force but also by the effects in the mobility of financial capital” (2005, 160).

3. Data

This research investigates the impact of parental migration on development of children left behind using data from the Ecuadorian 2010 Census by means of quantitative regressions. The effects of migration are analyzed by comparing the development of children of migrants with children of non-migrants. This is, the units of observation of this research are children.

There has been a shift on how to measure development, from only focusing on economic factors to look for a broader set of aspects (Kurniawan & Managi 2018). As an example, of this new way of determining development, the United Nations Development Programme’s Human Development Index, “(...) puts back people as the center of development and measure it with three essential dimensions that are Health, Education, and Living Standard” (Kurniawan 2018). This study follows this guideline as development is going to be tested by focusing on education and health, which are correlated with living standards.

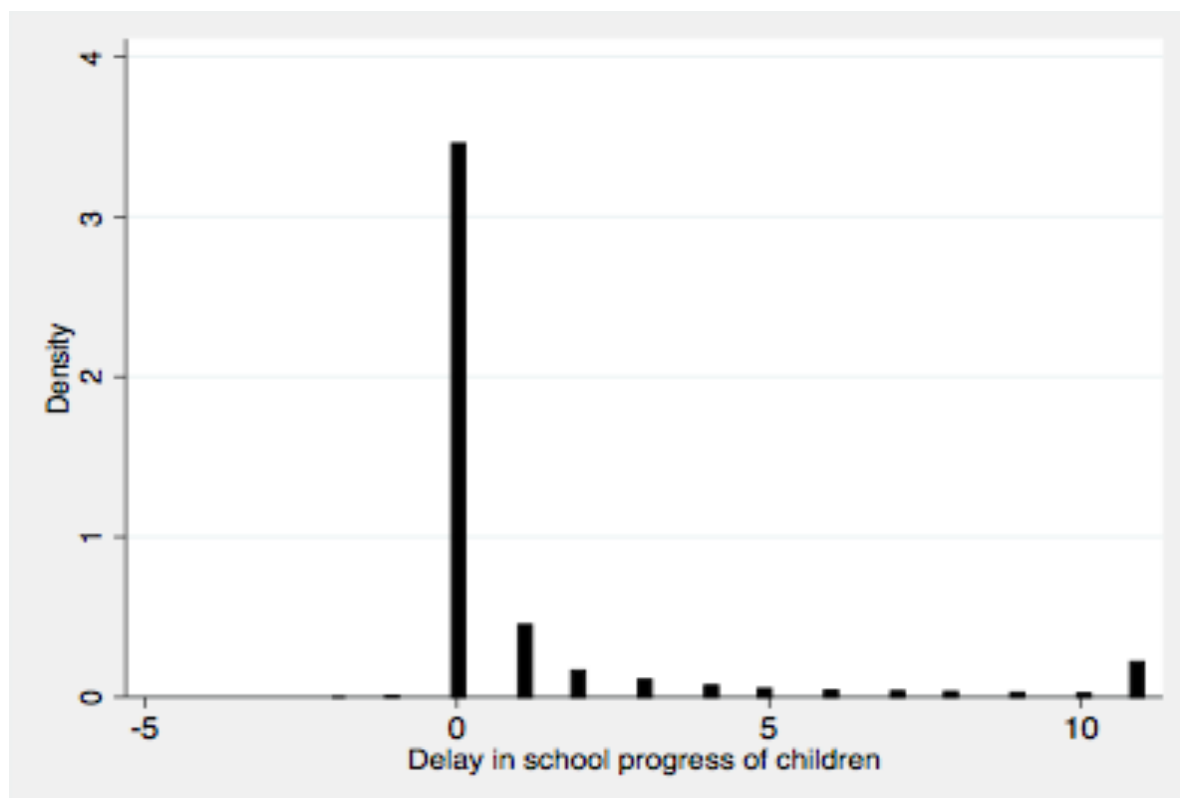
3.1 Methodology

This research uses cross-sectional data. More specifically, detailed demographic information of individuals sampled by the Ecuadorian Census of 2010 been obtained from IPUMS. Because this is a Census, there was access to information at one point in time. Therefore, variations in outcomes of interest have been analyzed by making comparison between individuals but not within individuals, as we have only one observation per individual. This research cannot establish a timeline of events, such as whether a parent that currently is a migrant elsewhere has left its family before or after one of its children got pregnant 3 years ago. For this reason, the empirical results of this research are more suggestive and preliminary than assertive of the relationship between parental emigration and child development¹. The database reflects 1 out of 10 responses collected at the 2010 Ecuadorian Census. From such data, this study has constructed variables such as *DelayChild*, *TeenMom*, *YrsSchMom*, *YrsSchPop* and *remit* (remittances).

To analyze development of children in the sphere of education, school attainment is going to be measured by variable *DelayChild*, which counts years of delay in school progress. According to Ecuadorian educational norms, children should be enrolled in a grade that is equal to their age minus 5. Therefore, *DelayChild* will assume value 0 for a 12-year-old child that is enrolled in the 7th grade, and it will assume value 3 for a child age 15 who is also enrolled in the 7th grade. *DelayChild* variable is generated out of the calculus of subtracting the age of the child in household minus the years spent on school, minus 5 that is the standard and minimum age to enter into school. In this way, the *DelayChild* variable is going to show the years of delay in school progress of children. This variable can adopt values from -2, -1, 0, 1, 2 up to 12. Those values reflect years that the child is ahead or behind in school. (See Graph 1).

¹ Future research revisiting this topic should use time series, with the aim to understand changes in each observation in order to perform inference with regards to causality.

Graph 1. Years of school delay



This research's health variable is *TeenMom*, and it reports whether the children in a household was pregnant while teenager. This variable is constructed by checking whether female children of household heads have children themselves, and then calculating their age when those children were born. If the youngest such age was lower than 18, that female individual is considered to be a teenage mother. Variable *TeenMom* was generated for female members in household who are registered as of the household head and whose age is between 18 to 50 years. This variable is going to assume a value of 0 if this female child identified was a not a mother, and a value of 1 the child was a mother³. If the GCC theory is correct, this research would expect that children left behind by migrating parents have higher levels of

² As the graph shows there are many cases in which some observations (children) are ahead in school. The cases that report more than 10 years of school delay may be regarded as children that were not even enrolled in school.

³ Variable *TeenDad* variable is built by identifying that the child in household was a teenage father, the values adopted by the variable are going to be of a questionable quality. Both variables, *TeenMom* and *TeenDad* are going to show cases in which the child in household became a teenage parent.

DelayChild and higher incidence of TeenMom. If the mainstream hypothesis is correct, this research would expect the opposite: that children left behind have lower levels of both.

In order to understand how the emigration of parents affect children left behind, this research compares how the children fare in terms of school delay and pregnancy depending on the migration status of their parents, who are household heads for Census purposes. We examine 5 types of family. Our baseline family has both household heads living with their children—no parent left the house. This research's group of interest—families with one emigrated parent—is subdivided into two types, depending on the gender of the emigrated parent.

Comparing the development of children from these families with the children of the baseline families is the main objective of this study. To further the analysis, this research also check whether what matters for children development is the "absence" of a parent, instead of its status as emigrated. For this reason, there also included in the analysis families in which one of the parents is absent, but not a migrant. Those families may have a disappeared parent, a parent that leaves in a different city of Ecuador, a parent that has terminated its marriage with the parent left with the children, though not officially. (See Table 1).

Table 1.

Family Types

Nickname	FamilyType	Description	Freq.	Percent	Cum.
	0	Other	608,432	42.01	42.01
Traditional family	1	Couple, kid(s), no migrants	693,168	47.86	89.88
Male parent absent	2	female parent, kid(s), no migrants	94,931	6.55	96.43
Female parent absent	3	Male parent, kid(s), no migrants	18,183	1.26	97.69
Male migrant parent	4	Female parent, kid(s), migrant(s)	8,376	0.58	99.87
Female migrant parent	5	Male parent, kid(s), migrant(s)	1,918	0.13	100
		Total	1,448,233	100	

Note: Family types generated to understand changes in DelayChild and TeenMom.

3.2 Control

The main variables of this study, DelayChild and TeenMom have been controlled by variables such as remitt (remittances), and others outcome variables that describe characteristics of the parents such as YrsSchMom, YrsSchPop. The Human Development literature shows that children's education attainment is strongly influenced by the education of their parents. For this reason, this research includes as controls in our analysis variables YrsSchMom and YrsSchPop, which record the years of schooling of the female and male head of the household. This research expects YrsSchMom and YrsSchPop to be negatively correlated with the outcome variables (UNICEF & UNESCO 2007)." Other outcome variables built in this study have been *stepmom* and *steppop*. Additionally, the main variables have been controlled by characteristics of the household with variables such as *phone*, *cell* (cellphone), *internet*, *computer*, *ownership*, *electric* (electricity), and *roof*.

Variable YrsSchMom reports the years of education of the female head of household. This variable has been built to understand whether the level of education of the female head of household influences on the chances to become teenage mother or to be behind school. In order to generate the variable YrsSchMom, it was identified the member in second position in relation with the head of household that registers to be a woman with years of schooling ranging from 0 to 18. This variable shows the years of schooling of the partner of the head of household. The variable YrsSchPop was generated by identifying the head of household that is a male and register to have a range of years of schooling from 0 to 18. The variable YrSchPop shows the years of school of the male head of household.

Outcome variables stepmom and steppop identify cases of probable stepfathers. This variable is important to identify effects of the presence of different heads of household in both school delay and teenage pregnancy. Variables that help to identify the conditions of housing of the families such as variables phone and cell (cellphone), report whether the members in household had phone and cellphone availability. Likewise, variables electric (electricity), internet and computer register the access of the household to these services. Through the variable ownership, it is possible to identify which families live in a property that legally belongs to them. In addition, variable remitt (remittances) reports if the household receive remittances from a relative. These variables are used to understand the context and living conditions of each household, and how the presence or absence of them affects school delay and teenage pregnancy.

The GCC would predict that families in which there is one migrating parent are going to have worst educational results than families in which both parents are present. In

comparison, the mainstream literature is predicts that children left behind by migrating parents are going to have better results if they receive remittances.

The data shows strong support for the mainstream literature, and rejects the GCC hypothesis. Children in families with a mother in charge and an emigrated father families (FamilyType Male migrant parent) will be delayed on average 0.203 years less than traditional. Families with a father in charge and a migrant mother (FamilyType Female migrant parent) present an effect of 0.465 in reducing DelayChild (See Table 2). These effects are significant in magnitude and statistically.

The empirical model was also controlled by characteristics of the parents and the characteristics of the household. The analysis shows that being a child in a household in charge of a mother in which the father is absent but is not a migrant (FamilyType Male parent absent), has a 0.134 effect on reducing school delay. Families in which a father is charge and the mother is absent (FamilyType Female parent absent) present and effect of 0.086 in reducing school delay.

The variables of this research can be analyzed by regressions that include characteristics such as age and years of school of each parent. In this sense, the age in which the parents had their kids reflects changes in DelayChild. For example, TeenMom shows and effect of 1.405, while TeenDad presents and effect of 1.160 in increasing DelayChild. The years of school of the parents decrease school delay. In the case of the mother, the effect is -0.393, while in the years of schooling of the father show a positive effect of 1.15. With this, it can be noted that the years of schooling of the mother have higher effects on reducing school delay on children than the ones of the father. Following the analysis of the characteristics of the parents, this study shows that the presence of a stepmother (variable stepmom) has an effect that increases

DelayChild in 0.067, while the presence of a stepfather (variable steppop) has an effect of 0.173. (See Table 2).

Table 2.

School Delay (DelayChild variable)

DelayChild	Coef.	Std. Err.	t
FamilyType			
Traditional family	0 (base)		
Male parent absent	-0.1338558	0.0119126	-11.24
Female parent absent	-0.0865269	0.0210468	-4.11
Male migrant parent	-0.2037638	0.0297029	-6.86
Female migrant parent	-0.4656644	0.0645177	-7.22
remitt	-0.0359354	0.0152126	-2.36
TeenMom	1.405061	0.0439065	32
TeenDad	1.159201	0.1353848	8.56
YrsSchMom	-0.0392719	0.0008676	-45.27
YrsSchPop	-0.0208461	0.0009057	-23.02
headAge1	0.0056341	0.0003934	14.32
stepmom	0.0066909	0.0053701	1.25
steppop	0.1728367	0.020099	8.6
ChildCount	0.0866348	0.0029271	29.6
nativity	0.3031287	0.0342743	8.84
phone	-0.1623676	0.0084514	-19.21
cell	0.1112156	0.008402	13.24
internet	0.0361261	0.0110947	3.26
computer	-0.2022437	0.0092646	-21.83
ownership	0.0668426	0.0068623	9.74
electric	0.2563104	0.0158226	16.2
roof	0.0055515	0.0003958	14.02

Note: There are variables such as *headAge1* (reporting age of the head of household) and *ChildCount* (presenting number of children in household) that can also be interesting in this research.

This study also controls the DelayChild, by the characteristics of the household. The variable 'phone' presents an effect of 0.163 in reducing school delay. Variables 'cell' (cellphone) and internet, present effects of 0.111 and 0.361 in increasing school delay. Registering to have a computer in household, reflects a reducing effect of 0.202 on school delay. Variables such as 'ownership', 'electric' (electricity), and roof present effects of 0.668, 0.256 and 0.005 respectively on increasing school delay. Likewise, reporting to receive remittances has an effect of 0.0359 in reducing DelayChild. (See Table 2)

The data displays a weak support for the GCC on the issue of teenage pregnancy. An effect of 0.0064 seen on families with a mother in charge and a migrant father (FamilyType Male migrant parent) in increasing teenage pregnancy. Families with a father in charge and a migrant mother (FamilyType Female migrant parent) present an effect of 0.0068 in increasing TeenMom (See Table 3). In other words, having one migrating parent increases the probability of teenage pregnancy by 0.6%. Because of the small sample size of children left behind by migrating mothers, this effect is statistically significant only when the migrating parent is male.

The variable TeenMom was also controlled by characteristics of the parents and the characteristics of the household. The analysis shows that being a child in a household in charge of a mother in which the father is absent but is not a migrant (FamilyType Male parent absent), has a 0.01 effect on reducing teenage pregnancy. Families in which a father is charge and the mother is absent (FamilyType Female parent absent) present and effect of 0.035 in reducing teenage pregnancy.

Table 3.

Teenage Pregnancy (TeenMom variable)

TeenMom	Coef.	Std. Err.	t	P>t
FamilyType				
Traditional family		0 (base)		
Male parent absent	-0.0012365	0.0009114	-1.36	0.175
Female parent absent	0.0035545	0.0015273	2.33	0.02
Male migrant parent	0.0064015	0.0021076	3.04	0.002
Female migrant parent	0.0067887	0.0045035	1.51	0.132
YrsSchMom	-0.0003202	0.0000672	-4.77	0
YrsSchPop	-0.0002948	0.0000703	-4.19	0
headAge1	-0.0000444	0.000032	-1.39	0.165
stepmom	0.0000967	0.0004394	0.22	0.826
steppop	0.0006795	0.0014078	0.48	0.629
ChildCount	-0.0006951	0.0002304	-3.02	0.003
nativity	0.0050244	0.0030014	1.67	0.094
phone	-0.0019451	0.0006527	-2.98	0.003
cell	-0.0005511	0.0006704	-0.82	0.411
internet	-0.001638	0.0008384	-1.95	0.051
computer	-0.0033425	0.0007142	-4.68	0
ownership	0.0009908	0.0005497	1.8	0.071
electric	-0.0006824	0.0013033	-0.52	0.601
roof	0.0000819	0.0000314	2.61	0.009

Note: There are variables such as *headAge1* (reporting age of the head of household) and *ChildCount* (presenting number of children in household) that can also be interesting in this research.

The variables that describe the characteristics of the household are phone, cell (cellphone), internet, computer, ownership, electricity, and roof. The variable phone has an effect of 0.002 in reducing the effects of teenage pregnancy. The variable cell (cellphone), internet, computer, presents reducing effects of 0.005, 0.002, 0.002, on teenage pregnancy respectively. (See Table 3).

The GCC arguments predicted the results that point out that development of children is affected by the international migration of their parents. In this case the GCC approach can be applied to understand the cases in which being a female child in a household with one migrant parent increases the possibilities to be a teenage mother, as it can be identified in the results of Male migrant parent and Female migrant parent type of families. According to GCC, the absent of one parent reduces the chances to receive quality care services that may prevent such an outcome (Yeates 2008, 5).

Meanwhile the mainstream literature supports the results that indicate that being a child in household with one migrating parent is beneficial to the development. According to this perspective, care services can be covered by means of remittances. With this, possible negative effects can be subverted by the income generated in a destination country (Ratha 2006, 19). The results have provided that children in households with one migrating parent (FamilyType Male migrant parent and Female migrant parent), have better rates on school delay. The effects of international migration of one parent resulted to be beneficial in the school progress of children in relation with the other type of households analyzed by this research.

CONCLUSIONS

Motivated by the Global Care Chains theory, this research has investigated whether international migration of a parent affects the development of its children left behind in the country of origin. Yet, while the GCC theory is mostly pessimistic about this potential impact,

this study has found a more nuanced picture. On one hand, the migration of parents improves school performance of children left behind; on the other hand, it increases the chance of teenage pregnancy on female children left behind.

As this study uses cross-sectional data it is difficult to determine the relationship between parent migration with higher possibilities to have a kid while teenager. On this regard, this part of the analysis can be revised in the future to reveal whether parents' migration caused teenage pregnancy or if the pregnancy of one of the children in household pushed a parent to emigrate in order to cover the need required by the new member in household.

The debates addressing the relation between migration and development should not be limited to considered migration as completely beneficial or disadvantageous. That is to say, the arguments of GCC and mainstream alone, cannot explain completely the effects of international migration of a parent over child development. The process of international migration is context-based. In certain aspects of development, being the children of a migrant can be beneficial, while in other aspects it can be counterproductive. Further research on this topic may help to enhance the knowledge on the relationship of international migration and child development.

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**APPENDIX 1: SCHOOL DELAY IN RELATION
WITH EACH FAMILY TYPE (DELAYCHILD AND
FAMILYTYPE)**

FamilyType	Delay in school progress of children														Total
	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	
Other	4	634	466,662	30,528	11,899	8,090	5,614	4,157	3,245	3,013	2,706	2,359	1,968	25,297	566,176
Couple, kid(s), no mi	6	1,058	402,009	74,241	25,853	16,522	10,726	7,550	6,114	5,295	4,711	3,767	3,084	25,127	586,063
female parent, kid(s)	2	204	46,100	12,961	4,997	3,297	2,247	1,603	1,257	1,088	1,010	882	697	5,643	81,988
Male parent, kid(s),	0	37	9,336	1,948	987	711	500	374	317	273	250	206	179	1,552	16,670
Female parent, kid(s)	0	13	4,274	1,252	469	325	206	134	139	103	116	85	71	496	7,683
Male parent, kid(s),	0	8	1,021	218	108	78	61	40	30	31	24	26	23	160	1,828
Total	12	1,976	943,773	123,113	45,128	29,579	19,787	14,146	11,374	10,031	9,034	7,515	6,202	59,839	1,281,509

APPENDIX 2: CASES OF TEENAGE PREGNANCY

Was this kid a teenage mother? (0) No (1) Yes.

FamilyType	0	1	Total
Other	606,598	1,834	608,432
Couple, kid(s), no mi	690,986	2,182	693,168
female parent, kid(s)	94,333	598	94,931
Male parent, kid(s),	18,034	149	18,183
Female parent, kid(s)	8,292	84	8,376
Male parent, kid(s),	1,899	19	1,918
Total	1,443,233	5,000	1,448,233
