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**Migration and Educational
Outcomes of Children**

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Abstract

This paper examines the impact of migration on educational outcomes of children. It looks at the outcomes of internationally as well as internally migrating children and identifies the specific barriers they face in access to quality schooling. It discusses the various channels through which migration affects the education and wellbeing of non-migrant children in migrant households. It subsequently examines the variations in educational attainment of second-generation migrant children. To conclude, the paper recognizes the policy challenges surrounding the migration-education linkage and considers some of the strategies that have been implemented to improve the schooling outcomes of children affected by migration.

Keywords: Migration, children, education, human capital, human development, policy.

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1. Summary

This paper examines the impact of migration on educational outcomes of children. It looks at the outcomes of internationally as well as internally migrating children and identifies the specific barriers they face in access to quality schooling. It discusses the various channels through which migration affects the education and wellbeing of non-migrant children in migrant households. It subsequently examines the variations in educational attainment of second-generation migrant children. To conclude, the paper recognizes the policy challenges surrounding the migration-education linkage and considers some of the strategies that have been implemented to improve the schooling outcomes of children affected by migration.

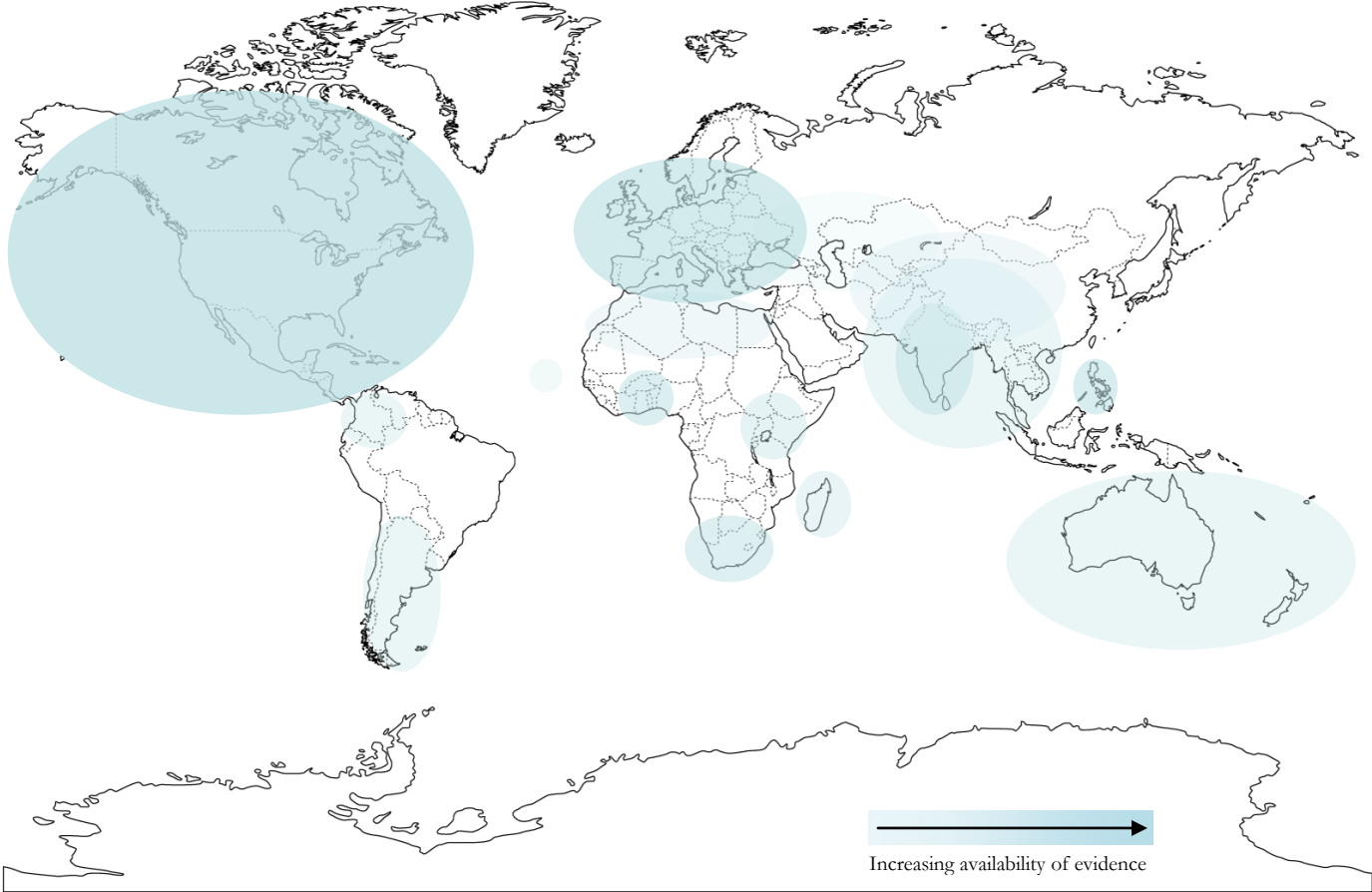
2. Data and Methodological Challenges

There are three broad criteria used in the literature to define education outcomes – access to quality education, participation in education, and academic performance. Studies rarely consider all three dimensions of schooling.

Empirical research seeking to assess the exact impact of migration on educational outcomes faces three key problems. Firstly, existing data is biased towards English-speaking host countries and quality data is limited, especially with regards to panel data and migrant characteristics, which leads to high rates of sample attrition. Moreover definitions of migration status or literacy often differ from survey to survey and country to country. Secondly, establishing causality is complicated by endogeneity, selectivity, and omitted variable problems. This is because decisions on migration, expenditure allocation, and education choices are usually made simultaneously and many variables that explain migration also determine expenditure choices and education preferences. Hence there is need for valid instrumental variables or exogenous shocks to the variable of interest, which are both hard to come by. And thirdly, the presence of indirect socio-economic effects makes it hard to establish the size of all the interrelated effects and the direction of the overall impact of migration on educational outcomes. Examples of such effects include the extra burden imposed by migration on members in the origin household; the transfer of knowledge, information, and values between migrants and their families; the emotional stress on children of family separation and so forth.

3. Regional Breakdown of Empirical Evidence

The diagram below illustrates the availability of empirical evidence on the impact of migration on educational outcomes of children. The majority of empirical studies on the topic are heavily skewed towards the OECD region. There is some evidence available also for South and South East Asia, Australia, parts of Africa and Latin America.



4. Impact of Migration on Educational Outcomes of Non-migrant Children in Source Regions

4.1 Introduction

The central question is whether migration can contribute to the human development of source countries. Literature on the subject has identified two main and several minor channels through which migration may, positively or negatively, affect outcomes for children. First, we need to ask if remittances are primarily used to finance current household consumption (Chami et al., 2003; Taylor et al., 1996; Durand and Massey, 1992; and Papademetriou and Martin, 1991 in Gonzalez and Mora Rivera, 2008), or if they are devoted to productive investments such as physical and human capital accumulation. Recently there has been some consensus that remittances allow credit-constrained households to reduce child labour and spend more at the margin on education and other investment goods. (Yang, 2008; Hanson and Woodruff, 2003; Edwards and Ureta, 2003; etc.)

However, there is also a potentially adverse effect of migration on human development. Migration and the continued absence of a close family member may disrupt child development and schooling. As family composition and roles change, children may be required to take on more child-rearing and household responsibilities and play a part in supporting the household. (Hanson and Woodruff, 2003) Furthermore, children face significant stress, lose adult role models, and parental absence at an early age could irreversibly damage the child-parent attachment. It is difficult to disentangle the two effects described above because of the considerable challenges involved in separating the effects due to increases in income, on the one hand, and parental absence on the other hand. (Yang, 2009) In addition, it is very hard to quantify the social impact of prolonged family separation on children and as such, by only examining variables like the number of grades completed and household expenditure on education, we may not be capturing the full effects of migration on child welfare.

There are other non-monetary channels through which migration may affect human capital in origin households. Social remittances popularised by Levitt (1998 in De Haas et al, 2008) refer to the cultural diffusion of ideas, beliefs, behaviours and social capital from receiving to source communities. Information from and interaction with migrants may shape household preferences with respect to investment decisions. Additionally, the perception of remittances as stable or transient, countercyclical or cyclical income flows might lead households to allocate them differently than ordinary income. (Rivera and Gonzalez, 2008) Finally, it is likely that the changes to behaviour induced by migration

will shape future migration preferences; thus we need to examine the effects of migration in a general equilibrium framework. Migration may become viewed as an accomplishment spurring a ‘culture of outmigration’ (Massey et al, 1993) or simply enhance the perceived returns to education and so alter the preferences for the length and course of study of students in source regions. Conversely, children left behind might be less motivated to study, expecting to migrate themselves. Besides the above channels migrants’ success abroad has the power to positively influence non-migrant children’s self-esteem and perceptions of their own potential, regardless of their own migration aspirations. The effect is certainly tangible even if hard to measure. (Clemens, 2009)

Overall, at the household and individual level, the precise impact of migration on children depends on individual child characteristics, household characteristics (total income, reference group, existence of a capable surrogate parent etc.), location-specific factors, and regional economic conditions. Migration can thus impact child development positively as well as negatively depending on how and what outcomes we value, the spatial and temporal frame of analysis, the context and selectivity of migration, and the population group considered. (De Haas et al, 2008) For example, international and internal migration has been shown to have differing effects on human capital outcomes with international migration exhibiting a consistently more significant positive impact. (Rivera and Gonzalez, 2008; Adams, 2005) The impact of migration is also likely to vary along gender dimensions as some studies show that girls tend to benefit relatively more than boys. (Mansuri, 2006; Hanson and Woodruff, 2003) Similarly, it is potentially inadequate to treat remittances using a unitary household model since the literature on household decision-making (Udry, 1996) has persuasively argued that different household members may control income from different sources. Consequently, we should be wary of making any definitive generalised claims.

4.2 Impact of remittances on the incentive to invest in children’s education¹²

¹ Note on estimation and methodology: A large portion of the earlier literature does not capture the full effect of remittance receipts on household expenditure patterns and so potentially underestimates the impact of migration on human capital accumulation. This is a consequence of assuming that household income is not fungible, i.e. only examining the indirect impact of remittances through their effect household budget constraints and not including remittance payments as an independent explanatory variable in estimated demand equations, and/or differing definitions of ‘productive investments’. (Rivera and Gonzalez, 2008) Because of narrow definitions of development schooling expenditures have often arbitrarily been treated as household consumption. (De Haas et al, 2008) In addition, the estimated magnitudes of impact across different studies are not easily comparable because of the varied methodologies and the non-comparability of measures of migration intensity used.

² See Appendix B for more detailed analysis of the shortcomings of the cited papers

A number of recent papers have sought to establish the causal impact of remittances on human development outcomes via the relaxation of household liquidity constraints. There is broad agreement that remittance flows do have a significant positive effect on child schooling attendance and literacy. Yang (2008) examines the effects of international Philippine remittances, using the East Asian Crisis as an exogenous shock to migrants' incomes, to find that a 10% increase in remittances in terms of initial income leads to an increase in school attendance in excess of 10% and at the same time child labour declines by almost 3 hours a week. Bryant's (2005) findings suggest that this may be because children from migrant-households have a higher probability of attending better quality private schools. Mexican data has been used extensively in the literature. Lopez-Cordova (2005) concludes that in Mexico remittances are correlated with improved child literacy and school attendance. In El Salvador, Edwards and Ureta (2003) find that remittance receipts lower the likelihood of children dropping out of school. Adams (2005) uses a large household data set from Guatemala to show that remittance-receiving households spend more at the margin on investment goods, particularly education, than on consumption. Conversely, Adams et al (2008) find that Ghanaian households do not spend more at the margin on educational investments. Finally, Deshingkar and Akter's (2009) rough evidence implies that households of migrants in India do spend more on education and this effect tends to be greater for long-term and recent migrants. But the majority of studies are concerned with the effect of migration on the quantity of education attained which does not necessarily imply improved quality of learning outcomes. As discussed in a later section and pointed out by Coronel and Unterreiner (2005), learning quality may well be jeopardized by parental absence.

Yang (2008) provides one of the most credible pieces of evidence of the effect of international migration and remittances on development and human capital accumulation in particular. He exploits the geographic dispersion of Philippine migrants and the unexpected exogenous variation in their income, due to exchange rate shocks generated by the Asian Financial Crisis in 1997-1998, to determine how origin households' expenditure responds to remittance receipts and transitory income shocks. Using comprehensive panel household survey data between July 1997 and October 1998 Yang is able to examine the causal effect of migration on educational outcomes of children. The appreciation of a migrant's currency against the Philippine peso is interpreted as a positive income shock channelled through an increase in remittance flows to the origin household (with a 0.60 implied elasticity of Philippine peso remittances with respect to the exchange rate). The presumption is that

liquidity-constrained households are likely to adjust their investment decisions following income changes.³

Overall, the findings show that more favourable income shocks lead to an increase in child schooling and a reduction in child labour. One standard deviation increase in the size of the exchange rate shock to migrant's income leads to a differential rise in the probability of being a student of 1.6% and a differential decline in hours worked in the past week of 0.35 hours. Yang finds essentially identical results for temporary and permanent migration. Bryant (2005) argues that remittances were used to send children to private schools, considered superior to public schools. He suggests that children in left behind households have a higher probability of attending private schools, and that on average they got better grades than non-migrant children.⁴ However, the latter result is disputed by a number of other studies. Yang's results also show that favourable exchange rate shocks are associated with a reduction in migrants' return rates. This may potentially have a negative social impact on children if it implies a longer separation from their migrant parents. But overall Yang's findings have important implications for developed and developing country government policies on migration and remittances, as he proves these to be associated with human capital accumulation (and increasing entrepreneurship activity) in developing households.

Whilst Yang (2008) sought to directly capture the effect of remittances on educational and labour outcomes for children in origin households, an important study on Mexican remittances by Ernesto Lopez-Cordova (2005) presents evidence supporting the view that international remittances tend to lead to improved development outcomes. The paper uses a 2000 cross-section of all Mexican municipalities to show that a rise in the fraction of international remittance-receiving households in the locality is associated with improved schooling outcomes. The results take into account potential endogeneity between migration, remittances and development outcome variables by using historical migration rates and distance from the US-Mexico border as instruments, as well as reverse causality and omitted variable biases. The finding of a strong causal impact from remittances to human development outcomes is very robust. Their estimates are statistically significant as well as

³ A concern with this paper is that the survey did not include unique identifiers for surveyed individual children which led to high levels of attrition at the individual level.

⁴ Based on: International Organization for Migration (2003), *Labour Migration in Asia: Trends, Challenges and Policy Responses in Countries of Origin*. Geneva: International Organization for Migration.

qualitatively important. A 5% increase in the fraction of households receiving remittances lowers child illiteracy by 5.3% and improves school attendance by 3%. Yet there are other factors that could also come into play. Borraz (2005) analyzes the impact of migration on education in Mexico after the “Tequila crisis”, showing that remittances have a small impact, but only on children living in urban areas with less than 2,500 inhabitants and whose mothers have low level of education. López (2005) maintains that in Mexico remittances have a significant impact on illiteracy but not on total education results (i.e., 1% average increases in remittances reduces children illiteracy by 5.4%).

Edwards and Ureta (2003) analyze the impact of international remittances on the hazard of dropping out of school in urban and rural areas of El Salvador. They use a nationally representative data set from the 1997 Annual Household Survey to examine a cross-section of 14,286 individuals aged 6-24. The sample contains a wide array of data on individual and household characteristics. Edwards and Ureta posit that household budget constraints and parental education⁵ are an important determinant of family decisions over school attendance. They argue that remittances are a randomly assigned source of income and can hence be used to infer the effect of extra income on educational attainment. However, their argument that, unlike household income, remittances are uncorrelated with parental schooling is unconvincing. The authors should have corrected for selectivity in their empirical model. Edwards and Ureta use the Cox proportional hazard model, which is adapted to the analysis of survival-time data. The model offers several advantages as it uses all of the available information in observations for children or young adults who are enrolled as well as for those who are no longer enrolled in school; the survival function allows us to compare the school enrolment pattern of adjacent cohorts; and the model also allows very flexible specifications.

Edwards and Ureta find that remittance receipts have a substantial impact on school retention rates and that this effect is larger than that of ordinary household income. In urban and rural areas, the effect of remittances is at least 10 and 2.6 times, respectively, the size of the impact of other income. The effect on the hazard of leaving school of receiving a remittance of US\$100 in urban areas lowers the hazard by 54% for children below the 7th grade, and 27% for students beyond the 6th grade. In rural areas, the same remittance amount, lowers the hazard by 14% and, combined with the effect of the presence of the remittance, decreases the hazard by 25% at all grade levels. The presence of remittances—

⁵ N.B. they cannot test for effects of maternal and paternal schooling separately since this would lead to a loss of too many observations.

irrespective of amounts—lowers the hazard of leaving school in rural areas but has no effect in urban areas.⁶

In Ecuador, teachers, health workers and local church members in areas with high and long-standing out-migration, have reported that educational performance among children in origin households is often unsatisfactory and sometimes associated with drugs and alcohol use. (Pinos & Ochoa, 1999; Mora, 2005) Aberman (2005) finds that in Nicaragua, where income constraints affect secondary rather than primary school attainment, remittances have been effective in increasing secondary school enrolment.

More recently, Adams et al (2008) use a new, nationally-representative household survey from Ghana to analyze, within a rigorous econometric framework, how the receipt of internal remittances (from within Ghana) and international remittances (from African or other countries) affects the marginal spending behaviour of households on a broad range of consumption and investment goods, including food, education and housing. Contrary to other studies, which find that remittances are spent disproportionately on consumption (food and consumer goods/durables) or investment goods (education and housing), the findings show that that households receiving remittances in Ghana do not spend more at the margin on food, education and housing than non-remittance receiving households with similar income levels and characteristics. The possible reasons for their finding include small sample size unable to generate sufficient variation in the variables or the fact that Adams et al are focusing on a low income country whereas most studies have focused on middle income countries, where households may be more likely to treat different sources of income differently.

The existing literature equally focuses on the role of women left behind and the use of remittances. Taylor and Martin (2001) demonstrate that remittances are associated with a change in social hierarchy, creating a new class of moneylenders such as women whose husbands are abroad. Women are free to assume new roles in their husbands' absence and can make decisions that were previously made together or by men alone. The authors further show that if women with access to higher incomes tend to spend it relatively more on their children's education and healthcare. Consequently we see how gender roles within a household may influence the use of remittances. Finally there is also the impact

⁶ If income from remittances is more stable than other sources of income, a likely situation for rural households, income from remittances is a better proxy for permanent income than is other income and this may explain the difference in estimated effects. Another possible explanation for the difference is that remittances recipients may exhibit a higher propensity to spend on their children's schooling out of remitted funds than other funds, perhaps because the expatriate family member has made it a condition for the financial support.

of remittances on cultural norms; specifically remittances have had some impact on the changing status of migrant and non-migrant women. (Wei Ha, 2008)

To conclude with a less rigorous treatment of data from India – Deshingkar and Akter (2009) state that in one study of 310 families from Jaunpur, Uttar Pradesh, 86% of surveyed participants with male migrants indicated that migration has enabled their children to access better schooling. The perceived impacts on education can thus be significantly larger than quantitative analyses show. Deshingkar and Akter also emphasize that there is variation in education spending between temporary and long-term migrants, with more permanent migration being associated with proportionately more spending. Interviews confirm that this is because of a longer run improvement in the households' economic situation. An interesting finding is that the most recent migrants (2006/7) exhibit higher spending on education than migrants from 2003/4. Unfortunately qualitative research was unable to shed light on the reasons for this finding. For example, in Andhra Pradesh, households with long-term migrants spent 9.5% of income on education, migrants from 2003/4 1.6% and new migrants 4.1%. Although, we should note that the data used suffers from small, inconsistent sample sizes and lacks strong quantitative indicators.

4.3 Parental migration and female education

As already discussed, it would be inappropriate to treat households in a unitary fashion. It is important to consider the full array of decision-makers and allow for the possibility that income from different sources may be used for different ends. Several studies have indicated that remittances increase the number of children, in particular girls, who complete schooling. (Hanson and Woodruff 2003; Rapoport and Docquier 2005; De Haas et al, 2008) Mansuri (2006) finds large positive effects of temporary economic migration on human capital accumulation, with the gains being much greater for girls, yielding a very substantial reduction in gender inequalities in access to education. Although, as some studies using different methodologies highlight, this effect may be the result of a comparatively worse impact of migration on boys' education rather than of a relatively better effect of migration on girls' education. (McKenzie and Rapoport, 2006)

Hanson and Woodruff (2003) compared the educational progress of children in households with migrants in the USA to the schooling outcomes of children with no external migrants. The authors used a 10% subsample of the 2000 Mexico Census containing unique detailed information on external migration to examine the causal impact of migration on educational attainment of 10-15 year-old Mexican children. Due to potential endogeneity in the impact of migration on education, they instrument for household migration decisions using an interaction term between historical state migration patterns and household characteristics. In their empirical model, children's variation in grade completion is a function of regional, household, as well as individual characteristics that shape the perceived returns and costs of additional education. Hanson and Woodruff (2003) find that migration to the US is associated with an additional 0.9 years of schooling for 10-12 year old girls and 0.7 extra years for 13-15 year old girls. However, this only applies to girls with mothers that have less than 3 years of schooling themselves, and the results for boys are not very precise or conclusive.⁷ Their paper thus highlights the importance of parental education, gender and age for the impact of migration on children's schooling.

McKenzie and Rapoport (2006) also instrument for current migration using historical state migration rates in order to assess the impact of emigration from rural Mexico on educational attainment by gender. They build on previous research by including the effects on children after the 15th year of age, when schooling is no longer compulsory and other channels through which migration affects education begin to appear. Using IV-Censored Ordered Probit results⁸, they find a significant negative effect on attendance and attainment for 12-18 year old boys (probability of attending school is lower by 16% for 12-15 year old males and by 21% for 16-18 year olds) and 16-18 year old girls (20% lower probability of attending school). The effects of migration are nonlinear and differ for different levels of schooling. It appears that migration has little marginal effect on the likelihood of finishing 7-8 years of schooling, but lowers the probability of attaining more years than this and increases the probability of achieving less schooling than this.

Educational attendance falls among boys in migrant households relative to non-migrant households from age 14 onwards. The finding that 16-18 year old boys in migrant households have significantly

⁷ However, we should note that the validity of the instrument – past state-level emigration rates – used can be questioned if people that are both likely to migrate and attend school live near each other, or if past emigration rates are influenced by omitted variables such as income inequality.

⁸ OLS and 2SLS estimation does not differentiate between the educational attainment of children still in school and those who have finished schooling, which leads to biased estimates. Hence the data used are right-censored for children who are attending school.

fewer years of schooling effectively reduces the gender gap in schooling among 16-18 year old children, but only via a net reduction in schooling for boys. In line with Hanson and Woodruff's (2003) findings, the negative impact is insignificant for younger girls with poorly educated mothers, which is consistent with remittances easing household credit constraints. McKenzie and Rapoport (2006) further show that the observed drop in schooling for 16-18 year olds can be explained by the current migration of boys and increased housework for girls. The findings are consistent with migration increasing the opportunity cost and lowering the expected return to education in Mexico.⁹

Mansuri (2006) uses household survey data and matched census data from rural Pakistan to examine whether temporary migration-induced resource flows allow households to extend better nutrition and health care protection to girls. He instruments¹⁰ for migration with historical village migration networks and proceeds to further validate his results by only restricting the sample group to migrant households and comparing the outcomes of siblings before and after migration. Using this empirical setup, Mansuri (2006) finds substantial potential positive effects of temporary economic migration on human capital accumulation. Furthermore, the benefits are much greater for girls (enrolment rates increase by 54% for girls vs. 7% for boys), yielding a large reduction in gender inequalities in access to education. The decline in dropout rate of 55% for girls is also larger than that of 44% for boys. Interestingly, these gains seem to be mainly a result of the greater resource flows to migrant households. Mansuri (2006) cannot detect any effect of future migration prospects on schooling decisions. More significantly, he also does not discern any protective effect of migration-induced female headship on female education. Instead female headship appears to protect boys at the expense of girls. This result may be driven by the fact that the higher opportunity cost of child time in female-headed households falls disproportionately on girls. Girls and boys appear to work approximately equally in income-generating activities, but because these measures do not include housework and child care (which are more likely to be carried out by girls) it is very likely that girls have a greater total work burden.

⁹ Unlike Hanson and Woodruff (2003), they use data from the 1997 Encuesta Nacional de la Dinámica Demográfica (ENADID) (National Survey of Demographic Dynamics) conducted by Mexico's national statistical agency (INEGI) in the last quarter of 1997.⁷ The ENADID is a large nationally representative demographic survey, with approximately 2000 households surveyed in each state, resulting in a total sample of 73,412 households. This allows them to consider a broader measure of household migration Experience and to examine what children are doing when they are not in school, enabling investigation of the channels through which migration is affecting schooling. Also unlike the 2000 Census this survey considers households with members that have ever migrated versus having members that only migrated in the past 5 years, which understates the proportion of households with migrant experience by almost 50%.

¹⁰ The key challenge of the paper is to adequately address the selectivity of migration.

4.4 Do international and internal migration lead to different educational outcomes?¹¹

First a note on the differing selectivity of these types of migration - international migration tends to be more selective than South-South regional or within-country migration. (De Haas et al, 2008) This, together with the characteristics of the destination country, clearly has implications for outcomes and inequality with respect to the migrants themselves as well as their families left behind. On average, South-North migration brings greater increases in income and livelihood security than internal or South-South migration. As demonstrated by studies from Burkina Faso (Hampshire 2002 and Wouterse 2006 in De Haas et al, 2008) and Morocco (de Haas 2006 in De Haas et al, 2008), migration within Africa is characterised by smaller welfare gains and an income diversification strategy seeking to strengthen the livelihood security of households. Conversely, outmigration to Europe resulted in wealth accumulation in excess of wealth needed to smooth incomes. (De Haas et al, 2008) Most studies on this topic conclude that international migration is associated with better educational outcomes. (Rivera and Gonzalez, 2008; Adams, 2005) One of possible explanations is that international remittances are perceived as more permanent or perhaps international migrants have stronger preferences over remittance spending on education. However, internal remittance receipts are also seriously under-reported because most flow through informal channels. This means that we may not be capturing the full economic effects of internal migration.

Rivera and Gonzalez (2008)¹² examine the effect of remittances on household expenditure patterns in rural Mexico and attempt to disentangle the differing impacts of internal and international remittances, primarily coming from the USA. They use a very comprehensive dataset for 1992-2005 from the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH), which is a national survey collected every two years. However, the major shortcoming of the paper is the lack of data on migrant characteristics which prevents them from controlling for selectivity bias. They first compare households with and without remittance receipts to show that they differ in their expenditure

¹¹ See Appendix B for more detailed analysis of the shortcomings of the cited papers

¹² The study is a working paper in the process of revision

behaviour. Intriguingly, a comparison of various education indicators reveals that these are higher for the non-receiving households (although educational outcomes for these households are very poor).

To determine what truly drives the variations in expenditure allocations across remittance receiving and non-receiving households Rivera and Gonzalez (2008) use a model with different empirical specifications whilst controlling for censorship in household demands. Their findings show that remittances are not disproportionately spent on financing consumption. Further internal and international remittances alter household demands independently of total income and there is some evidence that external remittances may be treated as permanent income. As far as education investment is concerned, a 1% rise in the share of internal remittances raises the expenditure share on education by 0.036% (based on the highly significant first specification tobit regressions). 0.013% is the corresponding figure for international remittances. The effects are lower in magnitude in the second and third specifications and the only major change is in the third specification, the second two-step estimation, where international remittances no longer have a significantly positive effect on educational expenditures. The authors conclude that overall internal remittances have a robust effect on education across specification whereas international remittances have a beneficial albeit weak significant effect.

Adams (2005) uses a large household data set from Guatemala (based on a nationally-representative household budget survey from 2000) to show that remittance-receiving households spend more at the margin on investment goods, particularly education, than on consumption. He further distinguishes between internal and international (from the USA) remittance receipts. International migration is consistently associated with higher educational expenditures at the margin than internal migration. Adams (2005) finds that, at the margin, households benefiting from internal and international remittances spend 45% and 48% more respectively on education than households that do not receive remittances. Furthermore, he finds differential impacts by level of education. Remittance-receiving households tend to allocate slightly more to preparatory and primary schooling, but at the secondary school level they allocate significantly more funds to education than non-receiving households. At the margin, internal and international remittance-receiving households spend 20% and 140% more respectively on secondary education than non-receiving households. Moreover households receiving international remittances also expend more on tertiary education. These results seem to reflect the expected differential rates of return to different levels of education. Unfortunately there is no data on

migrant characteristics in the survey and hence the study cannot control for selectivity bias in the migration decision.

Ping and Pieke (2003) discuss the role of internal remittances in China that are sent home on a regular basis each month, quarter or year by rural migrants. For example, in a poor Sichuan county in the mid-1990s annual remittances via the post system represented five times the revenue of the local county government. And this figure is likely to capture only about half of the total remittances as the rest is brought home directly by the migrants around harvest or New Year time. These remittances help improve rural livelihoods and are generally used for basic consumption expenses necessary for survival. Finally, Ping and Pieke (2003) point out that different types of employment are associated with different levels of remittances, with agricultural workers remitting the least and transportation, communication and industrial workers the most. The level of remittances also increases with the proximity of migrants to their home villages since in such a case the link with home is relatively stronger and transaction costs lower. Pink and Pieke (2003) equally highlight the positive correlation between migrant education and the level of remittances sent home.

Van der Geest (2003) finds evidence that seasonal internal migrants often remit more than permanent migrants. His study in Ghana showed that earnings of seasonal migrants accounted for approximately 7% of total household income compared to 3% from permanent migrants' remittances. Although he also finds that rural-rural migrants are more likely to send food to their families whereas rural-urban migrants tend to remit money. Cortes (2007) cites estimates from the Bangladeshi Coalition for the Urban Poor (CUP) who approximate that migrants to Dhaka send up to 60% of their income to relatives at home, for whom remittances provide up to 80% of their household budget.

4.5 General equilibrium consequences of migration for education¹³

Human capital is a mobile asset that provides a gateway for a better quality of life. The mere prospect of migration may thus alter the decisions of people who do not migrate with respect to human capital investments. The effect of this human capital externality may go both ways: it can be a motivational

¹³ See Appendix B for more detailed analysis of the shortcomings of the cited papers

effect that induces increased investments in schooling in anticipation of higher skill migration regardless of whether emigration takes place i.e. “brain gain” (Stark et al, 1997; Fan and Stark, 2007 in De Haas et al, 2008)¹⁴, or it may be one of the factors contributing to lower educational outcomes if migration affords higher wages without the necessity of additional schooling. Skilled worker emigration at a rate of 5 to 10% tends to be associated with a “brain gain”. This leads to concerns over the human development of some countries in Sub-Saharan Africa, Central America, and the Caribbean, where skilled labour emigration is well in excess of the 10% boundary. (World Development Report 2009) As the case studies below illustrate, the net effect varies by country context and human capital externalities are but one of the channels through which migration impacts educational attainment. Nonetheless, the incentives channel does challenge the view that migration itself results in national skill depletion. (Clemens, 2009) At this stage, we should at least point to other system-wide effects of migration on educational outcomes. Specifically, outmigration of qualified teaching personnel can have very negative effects on the quality of education in source countries, as expanded on by Abazov (2009) for the former Commonwealth of Independent States region (CIS). Conversely the return of foreign-educated migrants may improve source country educational services, especially at higher levels of schooling.

The Philippines exhibit uncommonly high levels of tertiary education given the country’s income level with over 70% of higher education obtained at private universities. (Wei Ha, 2008) The cost of funding private university education is significant. The phenomenon is undoubtedly driven by the opportunities for emigration associated with higher education, particularly for Philippine women migrating to the US, since returns to tertiary education are very low for Filipinos that remain at home. International evidence supports the view that countries with high skilled worker emigration generally have a larger domestic pool of skilled workers, unless of course labour outflows are very large. (Beine et al. 2008 in Clemens, 2009) In fact, even the preferred field of study at college has been shifting according to the demands of the global market. (Lucas, 2005a in Wei Ha, 2008) The Philippines boast six times as many nurses per capita as other countries with comparable income levels, such as Thailand and Malaysia that experience lower emigration of medical personnel, and even more than richer countries like the UK and Austria. (WHO 2005: 50-52 in Clemens, 2009) This can but illustrate

¹⁴ For brain gain to be possible, education needs to ameliorate migration chances as well as be a gateway to documented, high skill employment. Hence, where illegal, unskilled migration prevails, migration may actually decrease educational investment. (Beine et al, 2008 in Clemens, 2009) McKenzie and Rapoport (2006) provide an example from Mexico and De Brauw and Giles (2006) from rural–urban migration in China. N.B. actual skilled emigration also must not exceed the incentive effect/brain gain.

the fact that considerable numbers of educated Filipinos whose schooling decisions were influenced by the prospect of international migration did not leave their home country. Hence it is perfectly possible for a country with high levels of brain drain to still amass a large proportion of educated workers. For the Philippines the generation of domestic skilled labour is generally seen as a benefit of outmigration.

Another example is Cape Verde which has the largest fraction of higher educated population living abroad in all of Africa. Batista et al. (2007 in Wei Ha, 2008) use a unique household survey with information on non-migrants as well as current and return migrants. This enables them to control for educational upgrading by migrants after migration and the impacts of future emigration prospects on schooling in the source region. They find a substantial effect of the brain gain channel on the non-migrant population, whereas other channels such as remittances and family disruption do not appear to be central. The authors conclude that migration and return migration can bring significant human capital gains. Fan and Stark (2007) go a step further to use this phenomenon to explain 'educated unemployment' in some developing countries such as in the MENA region. (De Haas et al, 2008) Brain gain could also have undesirable consequences if there is a mismatch between the skills the country needs for development and the skills of its population, a mismatch that could have detrimental political repercussions such as in the case of the skilled unemployed in Sri Lanka. (Ranis, 2007)

However, there is also some evidence to show that an increasing number of young people are losing interest in education because of, often false, hope of emigration. (Carling, 2005) Similarly negative incentives for education can arise if migration is dominated by often undocumented, low skill migration flows. This tends to be the case of migration from Turkey to the EU and Mexico to the USA that provide few if any benefits to additional schooling. (McKenzie, 2006) There is tension between the remittance effect that helps stimulate investment in education and the migration prospects effect which can enable the migrant to earn higher wages without additional education requirements. McKenzie and Rapoport find that the latter effect dominates in Mexico and that migration to the US actually diminishes educational attainment amongst rural Mexicans (McKenzie and Rapoport, 2005). Correspondingly, Boucher et al. (2005) analysed retrospective data of the Mexican National Rural Household Survey in 80 villages in 2003 and found that high-skill internal migration networks in Mexico increase the likelihood of children staying in school beyond compulsory age, whereas international migration networks do not have this effect. However, we should be cautious in drawing

definitive conclusions as the study does not control for the fact that secondary school enrolment and access to internal migration networks may be simultaneously determined. DeBrauw and Giles (2008 in Chand and Clemens, 2008) consider how labour market structure and migrant networks interact to render destination job opportunities low-skill intensive in China. The authors use the plausibly exogenous differences in the time of implementation of national identity cards (which make it easier to find documented urban employment) across Chinese provinces to instrument for migration propensity. The results suggest that increased likelihood of outmigration of a member of a rural household diminishes the educational attainment of children in that household.

Beine et al. (2008) investigate the net impact of emigration on human capital accumulation in a sample of 127 countries using a new dataset on international emigration rates by education attainment (Docquier and Marfouk, 2006)¹⁵. They regress the growth rate of the ex ante stock of human capital between 1990 and 2000 on a large set of explanatory variables. Beine et al. present evidence of a significant positive impact of skilled migration prospects on aggregate human capital formation in sample countries. The estimated migration coefficient lies between 0.042-0.050 for OLS and is at 0.050 after instrumenting. Thus the results show that doubling the high-skill (defined as tertiary education) emigration rate leads to a 5% increase in human capital accumulation in the source country (for both emigrants and residents). This is a marked improvement for many developing countries where the highly educated constitute 2-8% of the population. (Beine et al, 2008) The findings are robust to a number of specifications and estimation techniques.

Beine et al. (2008) also estimate the net brain drain effects on individual countries using counterfactual simulations (i.e. netting out skilled emigration).¹⁶ This is important since what matters for source countries' human capital formation is the number of educated citizens who remain in the country after their schooling is complete. The authors find that countries that exhibit both low levels of human capital and relatively lower emigration rates experience a beneficial brain drain effect. Conversely, skilled emigration is associated with an adverse impact when the high-skill migration rate is above

¹⁵ "DM collected census, register and survey data reporting immigrants' educational levels and countries of birth from 27 OECD countries in 2000 and 24 countries in 1990. For the few remaining countries for which census data were not available, existing data by country of birth were split across educational levels on the basis of the regional structure or of the OECD average. They use these data to compute emigration rates by education level for 195 emigration countries in 2000 and 174 emigration countries in 1990. South-South migration is not taken into account but, on the basis of census data collected from selected non-OECD countries, DM estimate that about 90% of all highly skilled migrants live in the OECD area ... The method used by DM is to rely on receiving country census or population registers." (Beine et al, 2008)

¹⁶ "A natural counterfactual experiment to make is to compare current human capital levels to their erstwhile value had skilled workers been allowed to emigrate at the same rate as unskilled workers in 1990 and 2000. We consider the initial stock of human capital, $H_a, 1990$, as given. In other words, people who were educated prior to 1990 are considered as having done so independently of their chances of migration. It is important to emphasize that this assumption increases the likelihood of our counterfactual experiment yielding a negative (detrimental) outcome." (Beine et al, 2008)

20% and/or the proportion of the higher educated exceeds 5%.¹⁷ Overall, there are more losers than winners, with the losers generally losing more than the winners gain. The most populous countries are all part of the winning group whilst the brain drain is associated with negative effects in small countries of Central America, the Pacific region, and to a certain extent in Sub-Saharan Africa. This suggests significant distributional consequences of migration that tend to be absent from policy debates. Nonetheless, in absolute terms, there is a clear overall gain for developing countries as a group.

Finally, Chand and Clemens (2008) take a different estimation approach and examine a quasi natural experiment in the Fiji Islands. After 1986 major political shocks resulted in an unexpected and large exodus of skilled workers, but only from a well-defined subset of the population, thus leaving us with a treatment and quasi-control groups. Chand and Clemens are able to bypass reliance on potentially endogenous past emigration rates, used in most other studies on the subject, and employ extensive census and education data to address issues of experimental validity.¹⁸ Moreover the setting is one in which policy in destination countries (Australia, New Zealand, Canada) restricts emigration opportunities to those with high skill levels. They are thus able to causally link emigration patterns to post-shock changes in human capital formation in Fiji. They find that the high rates of emigration of tertiary-educated Fiji Islanders increased investment in tertiary education in Fiji whilst at the same time raising the stock of tertiary education in the country, net of emigration. Despite Fiji being a developing country, Indo-Fijian children attain higher levels of tertiary education than children in the USA (but not higher levels of secondary education), as they acquire schooling for a global rather than a local labour market. We can conclude that the prospects of skill-selective emigration can greatly enhance human capital accumulation.

There are also other important non-monetary channels through which migration can affect human capital in origin regions. Social remittances (Levitt, 1998) shape lifestyles, values and aspirations of the population in origin countries. On the one hand, interaction with migrants may influence preferences over investment decisions of origin households. On the other hand, it may help stimulate a

¹⁷ However, the validity of the two instruments that Beine et al use – initial size of a country's diaspora and initial population size – relies on a set of jointly untestable exclusion restrictions.

¹⁸ Issues of internal validity include: concerns over treatment group, potential existence of crossovers, sample attrition; and issues of external validity: shock may arise from a decrease in human capital returns at home, unique traits of the sending country, unique traits of destination countries

“migratory syndrome” whereby non-migrant families have an impression of their relative social deprivation compared to households with a migrant and migration thus becomes both a cause and an effect of the syndrome. (Cortes, 2007) Coronel and Unterreiner (2005) discuss how in the Philippines having migrants visit or return (often with expensive gifts and the latest technology) improves a household’s social standing, which in turn inspires others to make migration their goal.

To draw our attention to some of the potential system-wide effects of migration Abazov (2009) describes how domestic and intra-CIS migration leads to a brain drain of teachers, especially from remote rural areas, causing severe teaching staff shortages and negatively impacting school and university level education systems. In addition, large numbers of lecturers and researchers are leaving universities in poor Central Asian countries to join institutions in Russia and Kazakhstan. Consequently the educational quality gap between rural and urban areas and low-wage and energy-rich countries of the CIS is widening. There is also an adverse indirect effect on the prestige of the teaching profession in source countries as low-skill employment in some destination countries offers higher wages than a career in education in countries of origin. (Abazov, 2009)

On the other hand, if the migration of educational professionals and students is temporary it may increase access to information, expertise and best practices and so raise the quality of the domestic education sector (this effect tends to disproportionately benefit the higher levels of education). Such migration also serves to empower disadvantaged groups in society such as women, who gain access to international scholarships and fellowships. An example of the new approaches brought back by migrants is the model of the private fee-based university. Newly created US-style liberal arts colleges (e.g. the American University of Central Asia in Kyrgyzstan) can boast a large proportion of native staff with foreign-obtained PhD degrees. (Abazov, 2009)

4.6 Social costs to children of prolonged family separation

The economic dimension of migration and remittances is well researched with a wealth of data available. But there is a gap in our understanding of the social impact of migration on children and their rights. Most studies make use of only qualitative research making it hard to draw generalised conclusions. There are a number of costs that especially long-term parental separation can impose on

child development and educational success. If these other impact channels are particularly strong, studies focusing only on the effects of remittances on schooling outcomes will tend to give biased estimates. The developmental trajectory of the child may be adversely affected as the child-parent attachment weakens, particularly if this is at a critical stage in the child's development. In this respect, the migration of mothers is likely to be particularly disruptive to child development and care arrangements in the household. (Mitrani et al, 2004; King and Vullnetari, 2006) Case et al. (2000 in Hanson and Woodruff, 2003) show that children raised by non-birth mothers receive less schooling than children raised by their own mothers. The age of the child at the time of migration also matters. Bowlby's (1982 in Wei Ha, 2008) research shows that child attachment behaviour forms in the first year of life and that after the age of 3 children begin to tolerate mother's absence, with their coping ability depending on factors such as familiarity with substitute carer (Andrea Smith *et al.* 2004 in Wei Ha, 2008). Overall, the potential for increased psychological distress and vulnerability of children left behind by migrating parents calls for our attention and explicit recognition by public policy.

Suarez-Orozco and Suarez-Orozco (2002) examined a non-clinical sample of 385 early adolescent immigrants from China, Central America, the Dominican Republic, Haiti and Mexico and concluded that those who had experienced separations from their parents were more prone to suffer from depressive symptoms than their non-separated peers. A psychologist quoted by UNICEF argued that "clinical evidence shows that parents' leaving for abroad may cause neurotic disorders, depression, anxiety, language disorders, behavioural disorders, and nutritional disorders in children of preschool age in Moldova".¹⁹ Findings from the 1994 Family and Youth Survey imply that growing up with both parents reduces the probability of an adolescent aged 15-19 to smoke, drink alcohol, or have premarital sex. (Choe, Hatmadji et al. 2004 in Bryant, 2005) However, relatively little is known about the potentially varied effects of different types of parental absence and whether separation due to migration impacts child behaviour differently than other types of absence. (Bryant, 2005)

Cortes (2007) cites a study from Moldova (National Report on the Phenomenon of Trafficking in Children for Sexual Exploitation and Labour in Moldova, quoted in Prohntichi, 2004) which notes that simultaneously with increasing migration in the 1990s (Moldova has a quarter of its population working abroad) there was a 50% rise in the juvenile crime rate with 55-60% of the offenders living

¹⁹ http://www.unicef.org/ceecis/media_7933.html

with their grandparents or relatives only. There are between 150-270,000 children age 0-14 with one migrant parent and 40,000 left behind by both of their parents. The study also notes that these children are more likely to face marginalization, mistreatment, or to become victims of human trafficking. (Cortes, 2007)

Smith et al. (2004 in Wei Ha, 2008) retrospectively analyse the experience of being separated and later reunited with their parents for 48 Caribbean children in Canada. The authors find unfavourable effects on children's self-esteem and behaviour and disruption of the parent-child bond which could not be wholly repaired with time. Prolonged and repeated separation and addition of new family members in the child's absence increased these risks and heightened emotional difficulties. Parental migration often represents a psychological trauma for children who may feel abandoned, hurt, angry or resentful. Moreover parents are often unaware of these feelings and this may create further tension within the family. (Smith et al, 2004 in Wei Ha, 2008) On the other hand, Bryant (2005) finds evidence that in the Philippines, Indonesia and Thailand the social costs to children are generally mitigated by the involvement of the extended family and that overall these children do not seem to face substantially greater difficulties than other children. Thus we have to be careful to distinguish between regions in terms of their social norms since these may result in differential outcomes for children.

There is some debate in the literature whether the negative effects of migration on child development can be counterbalanced by remittances and savings that enable households to make compensatory contributions towards education and substitute carers. (De Haas et al, 2008; and Beller and Chung, 1992; Berhman, 1997; Biblarz and Raftery, 1999 in Hanson and Woodruff, 2003) For example, Coronel and Unterreiner (2005) argue that even in the Philippines there are increasing signs of the adverse effects of family separation on children's rights and that these social impacts may take more time to surface than the economic effects.

Little research has been done on how drivers of parent migration may affect the total impact of migration on child welfare, with lack of controls for selection bias being a continued problem in past research. It could theoretically be possible that migration for solely economic reasons is not associated with such adverse effects. (Hanson and Woodruff, 2003) Whilst it is possible that the net effect on educational development may be positive, it is unlikely that psychological disruptions and reductions in ultimate wellbeing would be wholly offset through the income effect of migration.

Macours and Vakis (2008 in Wei Ha, 2008) employed a detailed household survey from 6 Nicaraguan municipalities close to the border with Honduras to examine the impact of seasonal migration on early childhood development (ECD) measured by standard test scores and anthropometric measures. Their results display a negative correlation between seasonal migration and ECD outcomes for children of preschool age. But the surprising finding is that this relationship does not hold when the migrant is the child's mother. Macours and Vakis (2008 in Wei Ha, 2008) instrument migration duration with the occurrence of various exogenous shocks in the household. The findings again show that mother's seasonal migration has a significant positive effect on ECD. It is possible that the positive income effect may be more than enough to offset the lack of parenting effect. The authors posit that the empowerment of women due to seasonal migration and the changes in intra-household allocation may be what leads to the observed positive impact on children's human capital.

Asis (2003 in Yang, 2009) compared the outcomes and views of children in migrant and non-migrant families across the Philippines. Her results suggest that children from migrant households are considerably better off along a number of socio-economic measures including household income and education. However, the study suffers from identification problems that plague the rest of the empirical migration literature. Asis (2003) cannot satisfactorily separate the impact of parental absence from the effects of remittances and other migration-related resources. Asis (2003) further does not control for possible selection bias stemming from the differential migration propensities of households of different types. (Yang, 2009) In order to be able to do so we would need quality survey information from within affected households. Yang (2009) recommends collecting data on care arrangements, time investments, and so forth before and after a change in a parental migration decision. Provided that there has not been a significant change in household financial resources in the short-run, we can connect changes in child outcomes to the change in migration decisions.

5. Impact of Migration on Outcomes of Migrant Children

5.1 Introduction

The migration education literature utilizes three broad criteria to define education outcomes – access to quality education, participation in education, and academic performance. Apart from children that

actively migrate in order to seek improved access to social services such as education, internal and international migration often tends to have an adverse effect on migrant children who face a number of obstacles in accessing high quality schooling, as the case of South Africa aptly illustrates (Landau and Segatti, 2009). This is particularly true for illegally migrating children, especially children migrating alone, or children migrating for economic reasons and the need to earn a living. The literature also points out that the effect may have different regional dimensions with children in urban centres faring better than children in rural areas due to the increased presence of NGO support services. (Landau and Segatti, 2009) However, even legally migrating children often face big problems in accessing educational services in destination countries because of language barriers and social marginalization. (Sabates-Wheeler and Taylor, 2009)

Internal migration is also characterized by diversity and context-specificity of outcomes. Harttgen and Klasen (2009) conduct research on the human development outcomes of internal migrants, as compared to non-migrants, in a sample of 16 low and middle income countries. They find the effect of migration on education attainment to be positive in most surveyed countries and better for rural than urban migrants, but overall there is variation in the size of the impact. Hashim (2005) draws on interview surveys in Ghana to illustrate how migration can expand independent child migrants' schooling and/or apprenticeship opportunities, which can perhaps explain the favourable outcome for Africa suggested by the HDI analysis. However, migration does also have some adverse effects and the final picture is rather ambiguous. Ping and Pieke (2003), for example, discuss how labour market structure can accentuate the negative aspects of the migration-education linkage. In addition, there may be significant gender differences in outcomes depending on the context with female students being more likely to drop out of school to finance their brothers' education. (Ping and Pieke, 2003) Munshi and Rosenzweig (2006) show how social systems interact with changing economic opportunities in Mumbai to differentially shape the educational and labour marker outcomes of migrant children. The big issue is also the intergenerational transmission of poverty and poor educational attainment and, since many internal migrants tend to be from disadvantaged backgrounds, it is crucial to understand the mechanisms that continue to exclude them.

5.2 Outcomes of internationally migrating children

According to several studies, the worst age to migrate for children, in terms of outcomes, is in their teenage years, possibly because of lower language acquisition sensitivity or greater assimilation difficulties. (Chiswick, 2005; Yaqub, 2009) For example, US migrants aged 15-18 years at migration acquire on average 3 years less of schooling than those arriving before the age of 4 (Chiswick and DebBurman 2003; Gonzalez 2003 in Yaqub, 2009) Other important factors that shape children's outcomes include migration status, type of migration (with respect to migrating alone or with family), motivations for migration, and destination country educational and welfare policies. Children migrating alone are possibly the most disadvantaged migrant type and face virtually insurmountable barriers in their access to schooling, particularly if they have migrated for economic reasons. (Landau and Segatti, 2009) Illegal migration status is also very detrimental to children's education, but even children of documented migrants experience barriers in access to quality education. (Sabates-Wheeler and Taylor, 2009) Case study evidence demonstrates that difference in host country legal structures and educational systems can have large impacts on migrants' ability to access schooling, especially above the level of compulsory education. Nonetheless, we equally need to keep in mind that many students migrate internationally in search of better quality education. Who these students are and which countries they come to is closely linked to their socio-economic background and their country's level of development. For example, Indian students accounted for 4% of all foreign students in tertiary education in the OECD region in 2001 and out of this almost 80% headed to US higher education institutions. (IOM, 2008)

International migration can have very different results in terms of outcomes for children migrating with their parents and children migrating alone. Witt's University Forced Migration Studies Programme (FMSP) research confirms that children, as early as at the age of seven, migrate alone regionally following loss of parents, monetary difficulties, or for lack of school attendance. (Landau and Segatti, 2009) About a third of migrants from developing countries are in the 12-24 age group. (Sabates-Wheeler and Taylor, 2009) As of now we do not know how many children migrate globally, but the number is significant and growing. Child migrants are often exploited by the police, detained illegally, working in poor conditions and lacking in the necessary resources to move beyond border areas and apply for asylum. (Landau and Segatti, 2009) A 2007 study by Save the Children (in Landau and Segatti, 2009) reports that as much as a quarter of interviewed children near the border of South Africa with Zimbabwe had no source of income. Another quarter collected trash for recycling and farm and domestic work were also common. On the other hand, migrant children living in cities have a

higher probability of accessing, accommodation, schooling and NGO support. However, as in many other receiving developing countries, support of South African governmental organizations has been inadequate. (Landau and Segatti, 2009)

Within international migration it is also important to reflect on how migration status impacts educational outcomes of migrating children. Sabates-Wheeler and Taylor (2009) use primary data and secondary evidence to show that the line between regular and irregular migrants is more blurred than is commonly believed. According to Rossi (2008), the worst challenges are faced by children migrating between developing countries alone or with parents on temporary worker visas. Most of these children are unable to access education at all because of extreme poverty, arduous work, poor health, severe language difficulties, and social marginalization.²⁰ (Sabates-Wheeler and Taylor, 2009) Unauthorised youths experience problems in accessing education when they reach the age at which schooling is no longer compulsory and free. It is estimated that in 2006 1,075,000 undocumented youths (5-24 years) in the US had serious difficulties in accessing schooling because of their illegal status (Batalova and Fix, 2006 in Sabates-Wheeler and Taylor, 2009); many because their undocumented status does not allow them to receive college funding, especially at public universities. 360,000 were already in this category at migration since they were over 18 years old. (Sabates-Wheeler and Taylor, 2009)

The authors argue that whilst inadequate access to education is of particular concern for illegal migrants (who are disproportionately poorer than regular migrants), it can also be an issue for documented migrants. This is primarily because of language barriers, which are rarely systematically addressed by destination country governments, and segregation of newly arrived migrants. The issues involved are further illustrated by the case study of South Africa below, in the later discussion of the PISA studies and the following examples from the USA and Germany. Almost a quarter of Turkish immigrant students (as opposed to 13% of all West German students) attend the Hauptschule, which represent the lowest track of secondary education, and due to language difficulties they have a higher probability of enrolling in schools for students with learning disabilities, the Sonderschule. Conversely only 6% of Turkish immigrants (versus a quarter of Germans) attend the prestigious gymnasiums. (IOM, 2008) In many migrant-receiving states of the US documented migrants do not receive any

²⁰ Statistics have not yet been collected for migration between non-OECD countries

targeted help with English language skills and many migrant children often face poorer schooling environments because of ethnic segregation into schools with no additional funding for language learning. (Sabates-Wheeler and Taylor, 2009) For example, only 40% of unauthorised Latino immigrant males, age 18- to 24 who migrated to the US before their age of 16, finished high school or a GED. (2000 US Census in Sabates-Wheeler and Taylor, 2009) Overall, migrants' access to education is also highly dependent upon the strength of the welfare state and supporting legislation and structures within each destination country. These institutional differences can then in part explain the divergent outcomes of migrant children.

5.3 Outcomes of internally migrating children

Little is known about the impacts of internal migration on human wellbeing. The main point to stress about internal migration is the diversity and context-specificity of outcomes. Harttgen and Klasen (2009) conduct research on the human development outcomes of internal migrants, as compared to non-migrants, in a sample of 16 low and middle income countries. They find the effect of migration on education attainment to be decisively positive in 13 of the surveyed countries and better for rural than urban migrants, but overall there is variation in the size of the impact. Hashim (2005) draws on interview surveys in Ghana to illustrate how migration can expand independent child migrants' schooling and/or apprenticeship opportunities, which can perhaps explain the favourable outcome for Africa suggested by the HDI analysis. However, migration does also have some adverse effects and the final picture is rather ambiguous. Ping and Pieke (2003), for example, discuss how labour market structure can accentuate the negative aspects of the migration-education linkage. In addition, there may be significant gender differences in outcomes depending on context. (Ping and Pieke, 2003; Kabeer, 2000) Munshi and Rosenzweig (2006) show how social systems interact with changing economic opportunities in Mumbai to differentially shape the educational and labour market outcomes of migrant children. A big issue is also the intergenerational transmission of poverty and poor educational attainment. Since many internal migrants tend to be from disadvantaged backgrounds, it is crucial to understand the mechanisms that continue to exclude them.

Harttgen and Klasen (2009) calculate HDI by internal migration status to assess the differences in human development outcomes between internal migrants and non-migrants, within and across

countries. Because of limited data availability they are only able to use a sample of 16 low and middle income countries.²¹ They are unable to control for selectivity, but link migrants with their household of origin and focus on creating a distribution sensitive HDI index (based on Grimm et al, 2008) that is simple, transparent and easy to interpret and in so doing they are forced to make serious simplifications. Although this renders their calculations illustrative as opposed to being accurate indicators of inequality, they can still serve to draw our attention to within country inequalities associated with migration. Overall, internal migrants achieve higher levels of human development than non-migrants (in 14 out of 16 countries), but this result is mainly driven by the higher incomes of migrants and the difference rarely exceeds 20%. Guatemala and Zambia are the two countries where the non-migrant population exhibits higher values of human development. In Guatemala, this means a level of 0.784 for non-migrants compared to 0.673 for migrants. Harttgen and Klasen (2009) believe that the result stems from the fact that a high proportion of Guatemala's internal migration is related to forced displacement during the 1980s civil conflicts. The negative association is likely to be greater for internal than international migrants as we would expect the more 'successful' migrants to be 'selected out' into international migration. The extent to which migrants benefit from moving is context specific and depends on factors such as the reasons for migration, networks, and the institutional environment. Our empirical analysis would thus greatly benefit from information on what motivates migration since this exerts significant influence on human development outcomes of migrants.

The existing empirical literature on the impact of internal migration on educational outcomes often paints a pessimistic picture as migration is believed to take children out of school. But Harttgen and Klasen's (2009) findings for educational inequality are more mixed showing again how the linkage is context specific (Hashim, 2005) and that families may move to improve their children's access to education. (Giani, 2006) In most countries, the differentials are not very large reflecting substantial efforts to improve education.²² The largest differences in educational achievement between internal migrants and non-migrants are found for Cote d'Ivoire, Guinea and Uganda. Whereas internal migrants in Guinea show a substantially higher index than the non-migrants (0.493 compared to 0.0.310), the non-migrants in Guatemala show a much higher educational index than the internal

²¹ The sample includes seven countries from Sub-Saharan Africa (Cameroon, Cote d'Ivoire, Ghana, Guinea, Madagascar, Uganda, and Zambia), six countries from Latin America (Bolivia, Colombia, Guatemala, Nicaragua, Paraguay and Peru), two countries from South-East Asia (Indonesia and Vietnam), and one transition country (Kyrgyz Republic)

²² One should note, however, that education is only using literacy and enrolment rates and says little about educational quality.

migrants (0.804 compared to 0.671). It is interesting that only in three countries (Guatemala, Vietnam, and Zambia) is the ratio of achievement in education between internal migrants and non-migrants decisively less than one²³, indicating a worse education for the internal migrants than for the non-migrants, whereas in the other 13 countries the education index is larger for the internal migrants than for the non-migrants. (Harttgen and Klasen, 2009) Also note that whilst the educational index exhibits a clear trend for higher values of internal migrants, enrolment and literacy rates are associated with reverse values for some countries. It would be interesting to see what drives this divergence, whether time since migration plays a role, and what the regional differences are in terms of educational institutions and policies. Hashim's (2005) case studies from Ghana may shed some light on the potential reasons behind this finding. But first, Harttgen and Klasen (2009) also find that human development tends to be higher for rural internal migrants (whose outcomes are consistently higher than those of rural non-migrants) than urban internal migrants. Moreover, only in nine of the studied countries do urban migrants fare better than urban non-migrants. The picture is similar for educational indices.

National participatory poverty assessments (PPAs) highlight that a common livelihood strategy for poor families involves sending children away to work in neighbouring villages or regions in times of economic hardship, thereby depriving them of educational opportunities. (Deshingkar and Grimm, 2004) Child labour and migration are particularly common in South Asia. For example, Bangladesh has high rates of child migration especially to Dhaka, which is also exemplified in the unflattering statistic of 6.3 million children under the age of 14 in the country's labour force. (Deshingkar and Grimm, 2004) Child migration has principally been seen as an economic necessity, but it is now also being increasingly seen by parents as a positive livelihood option for their children. The DARE project in Tanzania found that parents' attitudes to their children's migration have changed to such an extent that they are now actively encouraging them to seek success in the cities rather in schools. As a result, 23% of studied households had their male children migrate and 17% their female children. (Deshingkar and Grimm, 2004) Children who migrate, whether with their parents or on their own, tend to miss school. Deshingkar and Akter (2009) estimate that in India there are approximately 6 million migrating children who do not attend school.

²³ Although in Nicaragua and Peru, non-migrants show a higher value than internal migrants, the difference is small with a ratio very close to one.

Nevertheless, internal child migration can also be viewed in a more favourable light. Inadequate public services including poor education provision often serve as a push factor for migration as children seek access to better education. (World Development Report, 2009) Hashim (2005) emphasizes that the link between children's migration and education is very context-specific. He explores the interlinkages between independent child migration and education using two rounds of interview surveys of adults and migrant children who have moved from rural northern Ghana to urban and rural regions of central and southern Ghana (in 2000-1 and 2004). His findings hint at a complex relationship between education and child migration. Firstly, Hashim finds that large numbers of children migrate independently to the cocoa-growing areas of Ghana. For example, in March 2001 77 children (41 girls and 36 boys) out of a total population of 477 had migrated out of the surveyed village. There were also 48 children that immigrated into the village (again more girls than boys). Hashim outlines several reasons for migration including primarily migration for work due to poverty or to cover health costs of a family member, neglect, migration to help a relative, and three educational reasons: to attend school, to be trained in a vocation, or migrating for work to earn money to attend school or training (for themselves or a sibling). Note that children are rarely engaged only in one activity and so, for example, if education was the primary motivation children would still carry out other activities.

Fostering is a very prominent redistributive and risk-sharing strategy in Africa. Children may either go to live with relatives in order to further their education or apprenticeship²⁴, or, or they are transferred because of a labour shortage. But whatever the reason there is still an expectation that most children will be somehow educationally provided for. Hashim equally encountered many children that have dropped out of school because of lack of funds and migrated temporarily to acquire the necessary resources to continue schooling. A key precondition for these migration strategies is presence of the appropriate networks. The type of network then greatly impacts migration options. Punch's research on migration from Bolivia to Argentina (Punch 2002 in Hashim, 2005) shows that teenagers are more likely to have networks that can help them find work rather than networks that would support them in secondary education. As a result, at least in Punch and Hashim's surveys, more children migrated for work than schooling. So despite the apparently positive effects of migrating on education, there are also findings that present a more pessimistic view. Foster children, particularly girls, are sometimes 'demanded' by foster families because of their own children's increasing school enrolment.

²⁴ Particularly popular among girls – perhaps because of changes in marriage practices

(Beauchemin, 1999, Innocenti Digest, 1999 in Hashim, 2005) Consequently it seems to often be the case that migration of foster children for labour reasons is associated with poor or no school attendance. (UNICEF, 1999 in Hashim, 2005)

Other negative aspects of the migration-education link are associated with the structure of labour markets and how this interacts with freedom of migration, leading to different retention rates at different levels of schooling. Although, in China, internal migrants tend to have, on average, a higher level of schooling than those who stay behind, the migration-education linkage is more complex. Ping and Pieke's (2003) review of children's migration in China suggests that because rural-urban migrants enter a strongly segmented labour market and often plan to return to their area of origin, they have little incentive to acquire education beyond elementary literacy and numeracy. As a result, most rural Chinese migrants only have primary or junior high school education and their search for city employment frequently leads them to drop out of school before completing compulsory education. De Brauw and Giles (2006) find that returns to elementary and middle schooling are positive and significant whereas the returns of a year of high school are low and insignificant. The 1988 easing of barriers to internal migration allowed more people to migrate and thus expanded existing migration networks. A 1% increase in the size of the migrant network was found to be associated with a 0.441 and 0.449 drop in high school enrolment. (Hashim, 2005) However, on a more positive note, in line with a 'collective family strategy for upward mobility' the earnings of young migrants can be used to finance the education of their siblings. (Ping and Pieke, 2003) But there is an important gender dimension to such migration as, for example, girls migrate for work to the 'entertainment sector' in southern China to support their brothers' schooling. (Ping and Pieke, 2003)

The potential for gender differences in outcomes is also illustrated by the Bangladeshi garment factories' demand for young, unskilled girls from rural areas. (Kabeer, 2000) This sector employs many children, especially girls aged 13 to 17, and young low-skilled women who migrate to Dhaka from rural areas with their children. These children often have to contribute to family income and either assist their parents in their work or become employed themselves. For example, the management of garment factories reports that they often have to employ children of their workers since they could not be left at home alone. (Zohir et al, 1996 in Giani, 2006) A similar pattern reappears for women working as domestic servants. A number of studies sought to quantify the effect of child work on educational outcomes. In Ghana, Heady (2003 in Dorman, 2008) calculated that on

average working children spent one hour a week less in school. Binder and Scrogin (1999 in Dorman, 2003) found that Mexican children that were working the previous day devoted an average 30 minutes less to school and study the next day. Note that the study does not take into account time horizons longer than one day and that education may be negatively affected by work commitments in the longer run as well. In addition, these results represent mere correlations and become weaker when we control for individual and household characteristics. (Dorman, 2003)

However, the child labour issue is not as straightforward and decisions over education and labour are simultaneously determined. Child labour may mean that a child drops out of school but also that a child allocates less time to schooling; both lead to different schooling outcomes. Furthermore, if vulnerable children are prevented from making a needed living they may resort to more exploitative forms of employment and not automatically begin attending school. A 1997 UNICEF qualitative study (Pelto, 1997) interviewed hundreds of Bangladeshi city children. The findings reveal that most migrant working children from Dhaka moved there from rural areas with family, friends or alone. Out of a sample of 1,423 surveyed children, a shocking 48% never attended school and the majority of the rest dropped out of school before completing the five year primary education cycle. Children most commonly cited poverty then time constraints due to work as the reason for not attending or withdrawing from school. Similarly, a World Bank study estimated that almost a half of the children out of 330,000 children living without their parents (9.5 percent of children 6-17 years old) in Burkina Faso migrated for work mainly because of poverty. (Kiehl and Sanogo, 2002) In these cases, flexible schools that allow for part time work may be a better solution to the combined economic and educational hardships facing children.

Doorman (2008) cites a study by Beegle et al. (2005) that used a 1990s dataset of 2,133 Vietnamese children and attempted to instrument for child labour using community level economic factors. The results pointed to an inverse relationship between school attendance and child labour with paid or unpaid work (taking an average number of working hours) associated with as much as a 30% decrease in the likelihood of being in school. Beegle et al. (2005 in Doorman, 2008) also found that an average level of labour in 1992-93 was associated with a 6% decline in the highest attained grade level in 1997-98. Although, again, household characteristics have not been controlled for and this could easily undermine the validity of the findings. (Doorman, 2008) Another study based on the Pesquisa Mensal de Emprego from six Brazilian cities between 1982 and 1999 (Neri et al., 2005 in Doorman, 2008)

sought to determine the effect of sudden parental unemployment on their offspring. Neri et al. discovered that children whose parents became unemployed were more likely to enter the labour force and drop out of school with a negative marginal effect of 24%. This impact was higher for households that earned less prior to the unemployment shock and in the bottom 20 percent of the income distribution the increase in dropout rates was 46%. Furthermore the findings show that for children in the bottom income quintile who already studied and worked at the time of the employment change, the likelihood of not progressing to the next grade rose by 30%.

There are many methodological problems inherent in studies on child labour and education. First of all, indicators of attendance and enrolment in school are not the best measures of child migration and labour impact on learning outcomes because they do not measure them directly. Gunnarsson et al. (2006) were able to estimate the effect of child labour directly on educational attainment using a unique dataset for nine Latin American countries that allowed them to control for a series of individual, household, school, and community characteristics. They further exploited cross-country variation in truancy laws as an exogenous shift in schooling ages for studies grade levels to control for the potential endogeneity between child labour and schooling outcomes. IV estimates are significant and higher than least squares suggesting children who work 1 standard deviation above the mean see their average scores fall by 16% in mathematics examinations and by 11% in language examinations. The results are consistent across all studied countries.

Munshi and Rosenzweig (2006) illustrate how social systems can interact with changing economic opportunities to differentially shape the educational and labour market outcomes of migrant children and so lead to differences in outcomes by gender. They use a household survey of the Maharashtrian community in Bombay's Dadar area over a 20 year period and a 2001-2002 survey of local schools. The authors point to an inefficiency in education acquisition by showing that, despite rising returns to white collar professions, lower cast networks tend to direct boys to schools in the local Marathi language that destin them for more traditional occupations. On the other hand, girls from the same networks but with historically little benefit from them in terms of labour market support are increasingly enrolled in English speaking schools that enable them to take advantage from new opportunities. Hence entrenched networking systems can result in intergenerational path dependency with repercussions for future income distribution regardless of ability or family income.

In addition, institutional factors and differing agendas of source and destination areas influence the status and rights of migrants and their dependants. Ping and Pieke (2003) use the example of Zhejiang village, a Beijing immigrant community from Zhejiang province, to show that urban immigrants are not respected by the Beijing authorities, have very little rights and are forced to fall back on their own resources, including for the education of their children. Most migrants face barriers in accessing social services such as education, particularly in municipalities where local governments primarily concentrate on the urban unemployment resulting from the restructuring of SOEs. Social security has traditionally only been reserved for permanent urban residents whilst most of the almost 100 million rural-urban migrants (Ping and Pieke, 2003) are seasonal or temporary. In 2003, the Chinese State Council declared that children of migrant workers, of whom there were over 6 million in 2003, should have the same access to schooling as children of urban residents. (Asciutti, 2006) This is a first step on the way, but there is still much to do to address the underlying inequality of treatment in practice.

Finally, we need to stress that very often is poor schooling conditions themselves that ‘push’ children from school, particularly children that are already lagging behind their peers. UN-HABITAT (2003) finds an undersupply of accessible and affordable schools for children in the slums. Banerji (2000) finds that the quality of schools in slum areas of Mumbai and Delhi is poor: schools are far from where families live, overcrowded, and plagued by teacher shortages. These strong de-motivating push factors leads to the emergence of the so-called “no where children”. (Chaudhri, 1996)

6. Educational Outcomes of Second-generation Children

6.1 Introduction

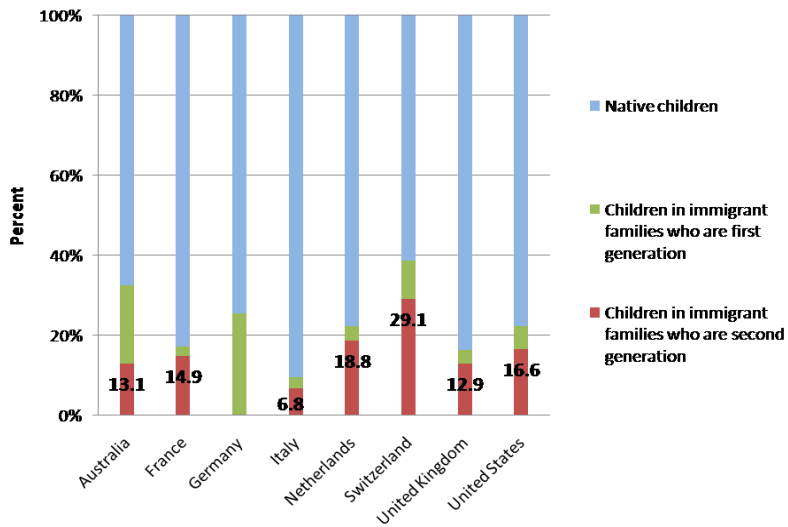
Second-generation students constitute a considerable proportion of the student body in many developed countries. In Brussels, for example, more than 40% of school-age children are children of immigrants (Crul, 2007 in Suarez-Orozco, 2007) and in Switzerland 29.1% of children are second generation (Figure 6.2.1). Yet to date there has been little research into their academic performance and its determinants such as the effect of cross-country differences in institutional policies and practices with regards to the children of immigrants. Second-generation students often lag behind in attainment, face higher dropout rates, and are more likely to repeat grades and attend institutions in the

lowest educational tracks. (Crul and Vermuelen, 2003) The OECD PISA studies illustrate that second-generation students' educational attainment varies across destination countries with segmentation and downward mobility often a serious concern. (OECD, 2000, 2003, 2006; Portes, 2007) In countries such as Israel, Qatar and New Zealand the first-generation outperforms the second-generation of students and in virtually all OECD countries both first and second generation students' performance falls well below the national and OECD average. (OECD, 2006)

A number of reasons account for the divergent schooling performance of second-generation students including constraints at the household level, social attitudes and variation in schooling conditions and policies across receiving countries. To determine whether national education policies advance the schooling attainment of second generation migrants we need to ask if they improve the students' access to quality education, stimulate equitable participation in schooling, and lead to learning outcomes at a par with native peers.²⁵ Crul, de Valk, and Pasztor (2008) illustrate the importance of immigrants' social and economic capital and the structure of educational systems in explaining the divergence of attainment among second-generation immigrants in different European countries compared to their native peers. In general, it is preferable to identify bad and best practices in education policy rather than a model institutional context. (Suarez-Orozco, 2007) Some of the practices that help alleviate second-generation students' unequal footing include language immersion programmes.

²⁵ OECD criteria for determining a migrant's successful integration into the educational system

Figure 6.2.1: Percent of Native, First and Second Generation Children in Eight Affluent Receiving Countries



Source: Data from UNICEF Innocenti Research Centre research on Children in Immigrant Families in Eight Affluent Countries (2009)

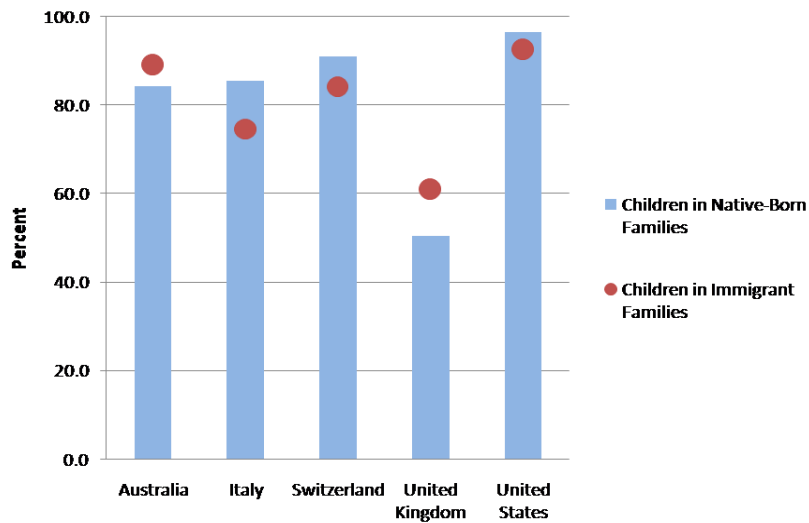
Note: Break down of first and second generation students for Germany was unavailable

6.2 Outcomes of Second-generation Children

Recent UNICEF data illustrates the difference in enrolment rates between native and immigrant students²⁶ aged 15-17 in five developed receiving countries. From Figure 6.2.2 we can see that in some developed countries immigrants actually tend to exhibit higher school attendance than natives, although the observed pattern is generally in the other direction.

²⁶ First and second generation students

Figure 6.2.2: Percent of Adolescents (aged 15-17) Enrolled in School

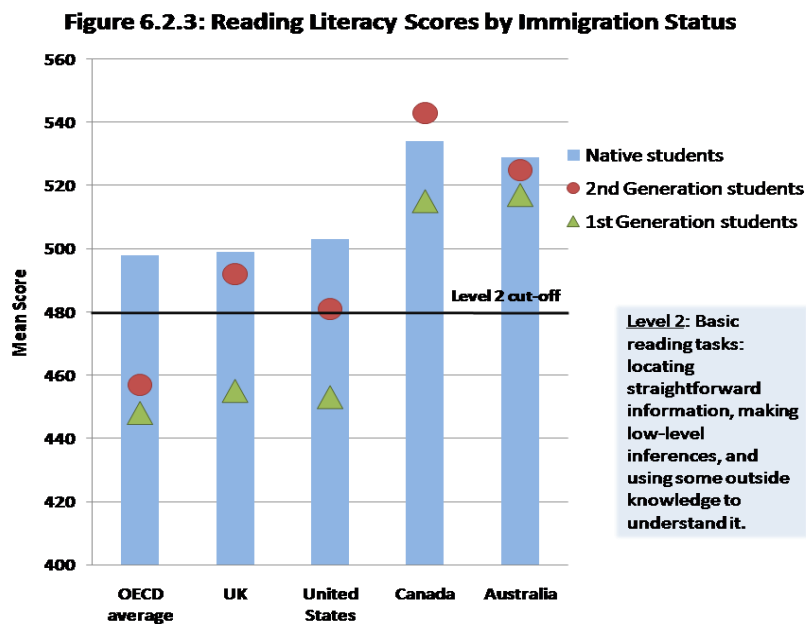


Source: Data from UNICEF Innocenti Research Centre research on Children in Immigrant Families in Eight Affluent Countries (2009)

The PISA studies (OECD, 2000, 2003, 2006) provide us with robust, internationally comparable evidence on the educational outcomes of second-generation students. Looking closely at select literacy scores by immigrant status in Figure 6.2.3 we observe that second-generation students tend to perform worse than native students and on average in the OECD they exhibit problems accomplishing basic reading tasks. This pattern is especially worrying because host country language proficiency is one of the key determinants of educational as well as labour market success.

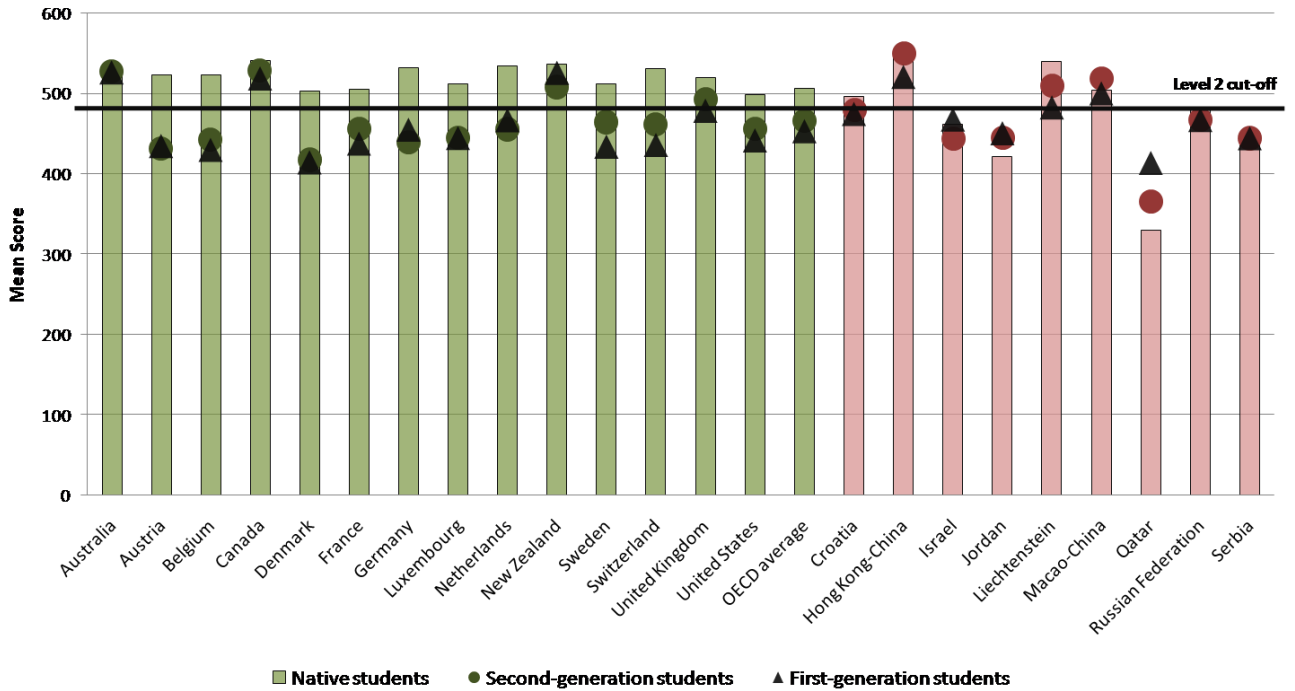
Similarly, 80.8% of OECD students can perform science tasks at least at Level 2 i.e. “students have adequate scientific knowledge to provide possible explanations in familiar contexts or draw conclusions based on simple investigations; they are capable of direct reasoning and making literal interpretations of the results of scientific inquiry or technological problem solving.” (OECD, 2006) Yet most first or second generation migrants do not on average reach this potential. For example, in Denmark approximately 15% of native students do not reach level 2 on the science scale as opposed to almost half of second-generation students. (OECD, table 4.2b, 2006) Nonetheless, the good news brought by PISA is that students with immigrant backgrounds tend to have higher reported levels of motivation to learn key subjects. In the vast majority of surveyed countries, children with immigrant background report higher levels of personal value and enjoyment of science, despite cross-country

differences in immigration policies, immigrant populations and immigrant student performance. In fact, the only OECD country to report lower levels of science engagement for immigrant students is Germany. (OECD, Figure 4.4, 2006) Across the OECD second-generation students perform slightly better than migrants, but in some countries the situation is reversed hinting at a disturbing trend of downward mobility. The results, displayed in Figure 6.2.4, show that whilst in some countries such as Canada and Sweden second-generation migrants perform better in science tests than their first-generation counterparts, in others such as Germany, Israel and Qatar their attainment is relatively poorer. For example, in one of the OECD partner countries, Jordan, the percentage of second-generation students below level 2 is about 30% whereas the corresponding figure for native students is 45%. (OECD, table 4.2b, 2006)



Source: OECD PISA 2006 database

Figure 6.2.4: Student Performance on the Science Scale by Immigrant Status



Note: Only countries with at least 3% of both first and second generation students are included
Source: Adapted from OECD PISA 2006 database, Table 4.2a

The segregation and downward assimilation of second-generation children has been noted as a problem in many receiving countries. (Portes, 2007) For example, Portes (2007) details how the lack of economic and social resources of migrant households, racism, and bifurcation of the American labour market contribute to the downward educational mobility of second-generation Mexicans in the USA. Kasinitz et al. (2008) summarise the findings of a decade long interview-based study of the children of 5 groups of immigrants to New York.²⁷ Although as a group they outperform their parents with regards to their education outcomes, within the group variation in outcomes persists. Whilst children of Dominicans are still experiencing poor school performance students of Russian and Chinese origin had better high school and college graduation rates than their native white peers. Some of the reasons advanced to explain the Dominicans poor performance include racial discrimination, their parents’ comparatively poor English proficiency and segregation in the poorest neighbourhoods. Nevertheless, we should note that all the studied groups outperformed native-born black and Puerto Rican students of their age. The TIES project in Europe (2008) uncovered that Turkish and Moroccan

²⁷ The subjects of the study were 18 to 32 at the time of the initial interviews in 1998 and were either born in the United States to at least one immigrant parent, or arrived in the United States by age 12

second-generation students in Amsterdam and Rotterdam face dropout rates of around 25% (with further significant differences by gender). Yet again this is an example of the divergence of outcomes of students from different ethnic backgrounds for other second-generation students are performing well with as much as a third progressing to higher education.

There are a number of factors, apart from migrant status and ethnicity, such as schooling conditions that may help explain the observed differences in outcomes. The PISA surveys show that students with an immigrant background tend to attend schools with a lower economic, social and cultural status than their native peers. For example, in Denmark, Germany and France immigrant-attended school characteristics are less favourable by at least 0.5 index points; and only in three studied countries does the OECD find more favourable characteristics of immigrant attended schools. Not surprisingly Canada and New Zealand display comparable socio-economic school contexts for native and immigrant students. (OECD, Figure 4.3, 2006) Differences in the quality of educational and human resources do not appear to be significant in most countries. (OECD, 2006) Crul, de Valk, and Pasztor (2008) present their initial findings on the comparative performance of second-generation Turkish students in Sweden, Germany, the Netherlands and France.²⁸ The preliminary results from their model show that although ethnicity initially appears to be a significant predictor of outcomes, it later turns insignificant in Sweden and the Netherlands. Parental background and home environment generally contribute significantly to predicting performance and so does the schooling environment, although the latter can explain only a small part of the variance in outcomes. However, before taking their results too conclusively, we should note that the model is associated with large R^2 and cannot yet explain a large part of the variance in attainment.

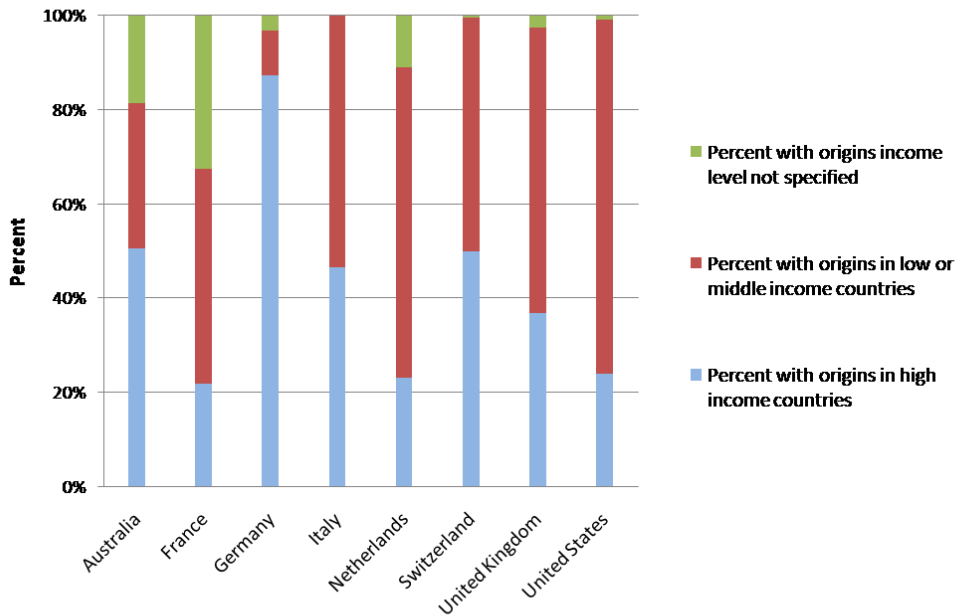
Crul, de Valk, and Pasztor (2008) further stress the importance of social and economic capital and school system differences in explaining variation in outcomes. They find that the typical school career of a Turkish second-generation student differs from and is shorter than that of native students in all studied countries. In the class-based German system this means that many second-generation students only complete the *hauptschule* as many other students from the lowest socio-economic section of society (PISA data shows that the probability of children with migrant backgrounds repeating a grade

²⁸ TIES (The Integration of the European Second Generation) is an international initiative looking at the children of Turkish, Moroccan and former Yugoslavian migrants in 15 cities in eight European nations. It focuses on cities with large concentrations of migrant ethnic communities. In a survey 10,000 people between the ages of 18 and 35 in Sweden, Germany, Austria, France, the Netherlands, Belgium, Spain and Switzerland are asked a standard set of questions – about education, employment and different attitudes to identity; and the subjects are compared with control groups made up of the offspring of native citizens.

in grades 1 to 3 is four times higher than for German children), whilst in France the pattern is mainly illustrated by shorter higher education careers. In the Netherlands, approximately a quarter of second-generation Turks discontinue schooling after secondary school or drop out of vocational training without obtaining a diploma. For those that do progress to higher education the routes are more diverse than for the comparison group; hence social capital and parents' knowledge of how to navigate the stratified Dutch system become very important in determining outcomes. In Sweden, on the other hand, routes into higher education levels are less complex indicating the greater permeability of the Swedish system. There is also limited differentiation of outcomes up to upper secondary school. Nevertheless, participation in tertiary education is poor and it appears that a large portion of the selection is informal and based on the type of school attended as in the American case. Overall, Crul, de Valk, and Pasztor (2008) hypothesize that more open, permeable schooling systems improve second-generation students' access to higher education; vocational-oriented systems are associated with lower dropout rates; and the presence of alternative long routes and second chances offer additional opportunities to students with immigrant backgrounds.

Nonetheless, there are also examples of second-generation students experiencing highly favourable outcomes. Kucera (2009) finds that the educational attainment of Canadian second generation students was better than that of their native peers (for both genders), controlling for observable characteristics. Kucera (2009) traces their relative success back to the selectivity of the Canadian immigration system and the quality of the Canadian education system, which helps eliminate initial disadvantages of children of migrant parents. However, it is also plausible that the results are driven by the background of migrants themselves as most emigrated from more economically advanced regions in Europe or the USA. Children from more educated and well off families are, for example, more likely to receive better help from their parents with school work and to enjoy more non-school activities that stimulate their cognitive development. Although experiencing a migrant flow from higher income countries does not mean policy makers can sit back and do nothing. The performance of German migrant students certainly has scope for improvement yet migration to Germany is prevailingly from high income countries. Nevertheless, given that migration patterns have been changing recently with more immigrants coming from non-European origin regions, it is important for Canadian policy makers to pay more attention to the changing ethnic composition of immigration when designing educational policies.

Figure 6.2.5 : Children in Immigrant Families by Income Level of Origin Country



Source: Data from UNICEF Innocenti Research Centre research on Children in Immigrant Families in Eight Affluent Countries (2009)

Such reasoning is indirectly supported by evidence from other OECD countries. Australia (with a third of all children having an immigrant background) has experienced an uncommon immigration pattern as the selectivity of the national immigration policies and predominance of OECD migrants led to migration dominated by documented, better educated, better-off migrants than in most other countries. (Katz and Redmond, 2009) From Figure 6.2.5 we see that around half of child immigrants to Australia come from high income origin countries. Additionally, adult immigrants have on average higher educational qualifications than their native-born peers. Consequently it is not surprising that children in immigrant households do equally well or better than native children in terms of their wellbeing and educational attainment. Liebig's (2007 in Katz and Redmond, 2009) analysis of the PISA data confirms that test score outcomes of children with immigrant background do not significantly differ from native-born children, with or without the inclusion of controls for a series of background variables. Moreover, outcomes for students with English or non-English speaking families are similar, although there are some exceptions for specific countries of immigrant origin. (Katz and Redmond,

2009) Likewise the PISA studies support the view that some countries are more successful at integrating students with immigrant backgrounds into the educational system and helping them succeed. Hong Kong-China, with 25% of second-generation and 19% first-generation students (the majority from mainland China), is an excellent example because all of its student groups outperform the OECD average in the PISA assessments. (OECD, 2006)

Crul (2007 in Suarez-Orozco, 2007) demonstrates the danger of settling for a best educational system based on simple statistics. He examines the educational experiences of Turkish second-generation students, 15 years or older and relatively homogenous in terms of their background characteristics, in a number of European countries. The starkest differences can be seen in the numbers enrolled in vocational tracks which range from about a quarter in France to somewhere between two thirds and three quarters in Germany and Austria.²⁹ But if we consider dropout rates we see that they are considerably higher in France than in Germany or Austria. Countries with established apprenticeship systems tend to be better at facilitating second-generation migrants' entry into and participation in the labour market. Therefore we should always examine the specific institutional frameworks in place to identify which institutional features contribute to better or worse outcomes for immigrants' children.

The main institutional factors that influence migrants' children's educational success appear to be age at which education begins, number of face-to-face contact hours, and school selection mechanisms. (Crul, 2007) Crul (2007) outlines three possible sets of options to improve the outcomes of second-generation children – instituting an early start in the schooling system to stimulate receiving-country language acquisition, creating second chances to help students cope with cultural disadvantages, and introducing a dual track system such as apprenticeships that can help reduce dropouts and ease the integration into the labour market.

Djajic (2003) discusses how the pace and extent of assimilation of immigrants also affects second-generation children's rate of human capital accumulation. Trust between migrants and natives is likely to be stronger if they share a common language, ethnicity, religion, customs, experiences, skin colour and so forth. These similarities help reduce transaction costs in economic and social interactions. (Djajic, 2003)³⁰ We can thus see asymmetries in assimilation as being a significant determinant of the

²⁹ Statistics range from 1996 to 2001 depending on country

³⁰ Although there is a degree of endogeneity here as the strength of the connection is likely to depend on migrants' degree of choice in their migration decision, the type of migration (temporary versus permanent), etc

variation in human capital accumulation by the second generation. Note that the rate of assimilation may be different for different members of the immigrant household. For example, female children in immigrant families may face more restrictions with regards to their social interaction and opportunities. Poor language proficiency of immigrants especially can be very detrimental to the success of their children. Again there is scope for public policy to help migrants overcome language barriers by introducing programmes to promote migrant destination-country language acquisition, which have already been adopted by many host countries. Australia has been very successful at implementing measures to help migrants and second generation students succeed. As many as 30% of Australian students do not speak English at home, yet at age 15 there is no visible difference (and if there is it is more likely to favour the NESB students) in the educational attainment of Australians with and without an English-speaking background. (OECD, 2008) One of the programmes introduced by the government is the Adult Migrant English Programme (AMEP) that offers basic English skills tuition to migrant adults and a whole range of other language support programmes provided by individual states. (OECD, 2008)

7. Policies to Improve Educational Outcomes of Children

7.1 Introduction

The numbers of migrant children and children of foreign-born parents are rising in most destination countries. According to the OECD (2007) the proportion of foreign-born students or students with foreign-born parents exceeds 10% and sometimes even 20% of the total student population in several OECD countries. (Nusche, 2009) It is thus increasingly important to consider the ways in which policies can positively shape the system and school level factors that influence education outcomes of migrant children. There is significant variation in the design of system-wide and school-level policies in destination countries (OECD, 2007) that results in stark differences in educational outcomes of mobile children.

One strand of research has focused on examining factors shaping migrant children's access to quality education in destination regions and the ways in which policies can influence them to ameliorate children's outcomes. Nusche (2009) categorised them as structural features of the education system

including national policies on school choice, ability grouping, human resources, and language learning support systems; and school level policies such as teacher expectations, effective intercultural education and school-home relationships. One example of possible interventions to aid migrant children adapt to a new school environment and instruction in a new language is the ELLIS Preparatory Academy in New York City and the Internationals Networks for Public Schools teaching model.

The most disadvantaged migrant group when it comes to accessing education are undocumented migrants. Many countries do not officially cater for their needs. Their education outcomes could be much improved with clear enforceable ‘education access for all’ national policies and with simpler and more transparent documentation required to access schooling. For example, the EU recognizes that “in order to successfully integrate and participate in all aspects of life, migrants must be provided with basic rights in terms of access to education.”³¹

Policies to improve the schooling outcomes of internally migrating children have also been more sporadic and less well documented. Internally mobile children tend require flexible school hours and face language difficulties if languages vary across regions. Whilst government policies supportive of these children are important, case study evidence from India and Bangladesh illustrates the vital role played by NGOs in providing access to tailored education services and in educating working children. Sometimes the best policy may be to offer an alternative to migration by providing residential schools in the home region.

7.2 System-wide strategies for addressing the barriers faced by internationally migrating children and the determinants of access to these services

As the PISA studies illustrate, performance gaps between first generation migrant children and native students are substantial with migrant children falling behind by as much as 1.5 school years on average. (OECD, 2007 and Nusche, 2009) However, cross-country comparisons equally highlight that such disconcerting outcomes can be avoided with the appropriate educational policy mix. For

³¹ European Commission (2006) Second Annual Report on Migration and Integration. Commission Document SEC (2006) 892.11526/06 Limite Migr 107. Soc 355. The Council of the European Union, Brussels, 11 July 2006

example, as seen in the previous section, students of Turkish origin perform markedly better in Switzerland than they do in Germany and Austria despite having similar background characteristics. There are numerous sector-wide policy factors that can crucially influence migrants' access to quality education and increase their schooling participation. These include a favourably structured education system with inclusive national policies on school choice, ability grouping, human resources, and language learning support.³²

Segregation of students based on socio-demographic characteristics such as ethnicity can result in polarised systems with clusters of disadvantaged, migrant students. Nusche (2009) cites evidence (Schnepf, 2004; Scheeweis, 2006; Karsten *et al.*, 2006; Nordin, 2006; Szulkin and Jonsson, 2007) showing that concentration of migrant students is often harmful to their academic performance. Regression analyses of OECD country data (TIMMS, IRLS, PISA) leave a higher unexplained test score gap between native and migrant students for education systems characterised by more segregation. (Nusche, 2009) Clustering of migrant students in certain schools is often a consequence of residential patterns, particularly for educational systems operating a catchment area model. (Field et al, 2007) This may be aggravated by ability grouping policies and native parents exercising their school choice more actively than migrant parents (Hastings et al., 2005 and Rangvid, 2007b in Nusche, 2009). In such systems, migrant students have a higher probability of being placed in classrooms with lower academic standards and performance. (Resh, 1998 and Mickelson, 2001 in Nusche, 2009)

One of the ways to reduce educational segregation is increasing school choice for all. However empirical studies report mixed results, as there is a danger that choice may aggravate socio-demographic segregation. (Resh, 1998; Mickelson, 2001; Prenzel et al., 2005; Strand, 2007 in Nusche, 2009) If the selection of students by oversubscribed schools is based on ability alone it may reinforce migrant marginalisation. For example, Sweden implemented a school reform that enabled schools to select their own students by ability and one consequence of the change was a significant increase in segregation by immigrant status. (Björklund et al., 2004 in Nusche, 2009) Field et al (2007) are further concerned that ability grouping, if instituted at an early age, may amplify native-migrant learning

³² Framework adapted from Nusche, 2009

differences and lock migrant children into a poor learning environment, especially when curricular differentiation is involved (Entorf and Lauk, 2006 in Nusche, 2009). The OECD estimates that age at selection into academic tracks can explain over half of the differences between schools in OECD countries and such selection tends to be correlated with larger socio-economic inequalities. (OECD, 2007 in Nusche, 2009)

But it is not school choice per se that can lead segregation, but rather the design of school choice interventions. Choice plans could adopt lotteries with governments providing financial incentives to schools to take on migrant students. (Field et al, 2007). Yet we should be careful that we do not move to the other extreme where student ability is disregarded. Other possible interventions include investments in improving teachers' diagnostic competencies (to eliminate potential biases in teacher judgments); instituting fair and transparent sorting criteria and assessments taking into account linguistic and cultural differences; postponing early tracking; and combining several lower school types into one. (Nusche, 2009) For example, tracking in Poland was postponed from age 14 to 15 in 2002. When PISA data from 2000, 2003 and 2006 is compared, it seems that this reform is associated with improvements in the performance of low-performers without harming the achievement of high-performers (OECD, 2007).

Another potential problem with school choice is the so-called "native flight". Denmark introduced free public school choice in the 1990s and this change was associated with heightened segregation as native students tended to opt for schools with fewer students from immigrant and low socio-economic backgrounds. (Bloom and Diaz, 2007 in Nusche, 2009) Rangvid (2007b in Nusche, 2009) demonstrated that native students increasingly left schools when the share of migrant students exceeded 35%. The corresponding figure in the Netherlands is over 50%. (Karsten, 1994 in Nusche, 2009) Possible strategies to improve migrants' schooling involve locating attractive, specialized schools in relatively disadvantaged areas or improving the quality of schools with large numbers of migrant students. An example of this is the Swiss authorities' introduction of the QUIMS programme of quality assurance in multi-ethnic schools to raise their performance and stem the flight of Swiss middle class families from inner city areas. The scheme gives multi-ethnic schools, defined as schools with at least 40% of students with a migrant background, additional financial resources and support. (Gomolla, 2006 in Nusche, 2009)

It is equally essential to give migrant parents the necessary information and logistical support to allow them to practice informed school choice. (Field et al, 2007) Studies find that parental ability to exercise school choice is highly correlated with their level of language proficiency, level of education and socio-economic background. (Schneider et al, 2000; Hastings et al, 2005 in Nusche, 2009) To address this issue a large urban district in North Carolina ran a school choice information campaign. Each school distributed promotion materials and organised information sessions for parents. The campaign also comprised of home visits to immigrant and low socio-economic background households, district information fairs, and information hotlines in English, Spanish and Vietnamese. As a result the participation of African-American families in the school choice programme rose and overall participation levels reached 95%. (Godwin et al., 2006 in Nusche, 2009) The Danish Copenhagen Model for Integration was also introduced to shape migrant and native parents' preferences. In this programme schools with a substantial share of native students develop preparation materials and training for their teachers and employ an integration worker or ethnic minority translator in order to attract more migrant students. Schools with high shares of migrant students on the other hand run promotion campaigns (for example in collaboration with kindergartens) to attract native Danish students. (Bloem and Diaz, 2007 in Nusche, 2009)

Strategies employed to allocate and disburse additional resources for migrant children are another important determinant of the efficacy of these resources. Nusche (2009) proposes that policy makers select target groups for extra funding, decide the administrative level at which these will be disbursed, and allocate funding across different schooling levels accordingly. Whilst it is certainly true that migration status tends to overlap with low socio-economic status, it is also the case that in some countries migrants' educational disadvantage does not disappear when we control for socio-economic status. (Brind et al, 2008 in Nusche, 2009) Furthermore, we may wish to specifically target the differential needs of migrant children. Examples of funding schemes include the French Priority Education Zones and the more successful British Excellence in Cities programme. The British Ethnic Minority Achievement Grant (EMAG) is distributed according to each school's share of students from nationally underperforming ethnic minority groups and their share of English learners. (DFES, 2004 in Nusche, 2009) This special fund is intended to help schools meet the needs of bilingual learners and narrow the gap in performance between native and immigrant students. Tikly et al.'s (2005 in Nusche, 2009) evaluation of the scheme shows that improvement was greatest for Pakistani and Bangladeshi students, although the results for other ethnic groups were more mixed.

When allocating extra funds governments have to prioritise between different levels of education. There is very strong international evidence that investing in the earliest stages of migrant children's education yields the highest returns and holds the power to promote social justice. (UNICEF, 2008) Migrant children are less likely to enrol in early child education and if they fall behind at an early age the gaps in their cognitive, linguistic and social skills will be difficult to overcome later in life. (Cunha et al, 2005 in Nusche, 2009) In addition, quality as well as access is important with early childhood programmes needing continual support for their benefits to be sustainable. (Barnett, 1995 in Nusche, 2009) Early age gains must also be reinforced by follow-up programmes at later ages. (Heckman, 2006 in Nusche, 2009) For example, immigrant children in Germany are less likely to be enrolled in pre-school and four times more likely to repeat the first three grades of primary school than their native peers. (UNICEF, 2008) Hence, there is an important moral argument here since childhood care may give all children equal opportunity to develop their capabilities from the start. Although we need to recognise that household and parental characteristics will continue to exert an important influence over children's outcomes. Studies evaluating pre-school education of immigrant children in Germany show that immigrant children's attendance of pre-school narrows the gap between them and native children in terms of German language skills and improves their educational record putting them at a par with children from low-income German families. The level of immigrant children's German proficiency is likely to be less if the proportion of children of the same ethnic group is high in their pre-school. (UNICEF, 2008)³³

Apart from targeting, it is equally important to determine the most efficient way of managing funds intended for disadvantaged and migrant children. OECD country experience shows that we need to account for the regional dimensions of migration and that strategies where intermediate authorities and schools work closely together to allocate funding tend to produce good results. Earmarking funds to migrant education rather than education in general further increases the effectiveness of target school spending. Migrant students could also be given 'portable entitlements' which they could carry with them from school to school and so vote with their feet. (Karsten, 2006 in Nusche, 2009)

Teaching quality is one of the key determinants of student educational outcomes. This is especially true for migrant children, yet they are often the least likely students to benefit from it. (Field et al,

³³ Note that some of the studies cited may not be nationally representative, and that school performance is likely to reflect household and neighbourhood characteristics which have not been controlled for.

2007) Research suggests that the more qualified and experienced teachers may be disproportionately allocated to schools with mostly native students. (Hanushek et al., 2001 and Bénabou, 2003 and Karsten et al., 2006 in Nusche, 2009) For example, the French ZEP or educational priority zones³⁴ (with a higher percentage of students with migrant and lower socio-economic backgrounds) have a higher share of inexperienced teachers and higher rates of teacher turnover than the national average. (Bénabou, 2003 in Nusche, 2009) Consequently, schools with large numbers of migrant children need to focus on recruiting and retaining better quality teachers. This can be achieved by increasing teacher salaries, but it appears that pay increases would have to be large to stem high teacher turnover rates; (Nusche, 2009) or increase the numbers of teachers with migrant backgrounds. Empirical evidence on this subject is scarce, but overall supportive. Nevertheless, it is likely that improved teacher training directed towards teaching diverse student populations would be a relatively better investment. (Nusche, 2009) International evidence also shows that class reductions have significant positive effects on outcomes of migrant children, with the impact being greatest at earlier ages, specifically in kindergarten and primary school (Nusche, 2009)

7.2.1 Strategies for helping undocumented migrant children

If schools require proof of legal residence or asylum status to enrol children in school then undocumented migrant children tend to be left behind. Clear lessons emerge from this finding – school systems need to be set up to allow all children, including undocumented migrants to access education in a non-discriminatory fashion and/or national administrations need to allow unauthorised migrants to acquire some form of documentation. For example, the USA and France both strongly adhere to the right of all children to education irrespective of migration status. Another example is the Thai government's launch of a scheme to register foreigners in Thailand in July 2004, with one of the motivations being the desire to improve migrant children's access to social services. Unlike previous registration schemes, under the current policy migrant workers could change employers without losing the right to remain in Thailand, thus having a greater incentive to register. Although there is also the

³⁴ The programme was first established in 1982 and directed at helping students from disadvantaged backgrounds. The following criteria were used for the student population: parents' social and professional background, parents' rate of unemployment, fraction of students who are not native French speakers, and fraction of students that had to repeat a grade.

question of how may a potential future reduction in the number of migrants legally mandated to work in Thailand affect migrant children's education. (Bryant, 2005)

However, any legal entitlements must also be translated into actual usage. They need to be enforceable, national legal frameworks need to be aligned, with migrants having a full understanding of their rights, and institutions need the adequate resources to cater to migrant children. An FMSP Discussion Brief (2007) stresses the need for universally recognised documentation for irregular migrant children to enrol in South African schools. This documentation would include the child's identity and place of residence, but would not require a birth certificate or parents' identity card. The government would further need to ensure that school principals adhere to the legal requirements and do not continue to discriminate against undocumented children.

An issue to bear in mind is that equitably providing education and other services to undocumented migrants and their children is likely to impact the numbers of new migrants coming in or existing migrants opting to settle permanently. (Bryant, 2005) It is hard to assess what the effect of such a change would be on the receiving country's educational system and social fabric. Consequently, it is both economically as well as politically difficult to firmly institute service provision for irregular migrants.

7.3 School-level strategies for addressing the barriers faced by internationally migrating children and the determinants of access to these services

Education sector-wide interventions are clearly imperative for establishing a migrant-friendly education framework. Nonetheless, there are also many policies that can be implemented at the school level to aid migrant students every day. Chief among these are support programmes for destination country language acquisition as school achievement is closely linked to language of instruction proficiency. (Nusche, 2009) The focus should be on intervening as early as possible, with as little segregation as possible and on integrating language learning with the academic curriculum. As evidence from the UK and other OECD countries highlights, the integration of intercultural education into school curricula and practices, positive teacher expectations, and the stimulation of parental

involvement in education can also do much to ameliorate migrant students' performance and wellbeing.

Regressions of OECD data (PIRLS, TIMMS, PISA) imply that primary and secondary school achievement is negatively correlated with speaking a foreign language at home.³⁵ (Schnepf, 2004 in Nusche, 2009) The PISA analyses show that the difference between migrant children that do and do not speak the destination country language at home is as much as half a grade. (Christensen and Stanat, 2007 in Nusche, 2009) As a result language learning support policies can make a substantial difference to migrant outcomes. Although we need to keep in mind that national strategies and policies for inclusion are only one part of the story. There are four factors that we need to consider when thinking about migrant language acquisition – efficiency (concerned with individual characteristics), the learning environment, motivational factors (intrinsic and extrinsic), and the social and economic consequences of language proficiency. (Rodriguez-Chamussy et al., 2009) Chiswick (2005) estimates that English language skills of immigrants are greater the lower the age at migration; the longer the duration of residence in the host country; the higher the level of initial education; for non-Asian immigrants; and the shorter the linguistic distance between the native language and the host country language (Rodrigues-Chamussy et al, 2009). There are also significant unmeasured correlations within the family that further determine language proficiency.

Again, as before, early childhood language support, although very rarely systematically implemented by host countries, tends to be most effective (and should be extended to second generation as well as first generation migrants). This is true whether we believe in a critical or sensitive period for learning a new language. However, even after acquiring communication and literacy skills migrant children remain at a disadvantage in school. Research shows that it may take up to seven years to acquire academic language proficiency necessary to succeed in school environments. (Cummins, 1979 in Nusche, 2009) Therefore continuing language support is necessary. US evidence supports the necessity of learning basic language skills early on in a systematic way in order to improve academic performance. An example would be the Success for All scheme focused on pre-school and primary school level language instruction. Slavin and Yamploski (1992 in Nusche, 2009) found that low

³⁵ The one drawback of the available literature on the subject is that research is very heavily skewed towards examining the impacts in English-speaking destination countries. This may bias our results if English-speaking countries differ substantially in terms of the linguistic difficulties involved or policy environments.

income Asian students in the programme in Philadelphia reached grade level by the end of the first grade.

Despite the need for preparatory language instruction, migrant students should not be segregated into special streams for too long. For example, Field et al.'s (2007 in Nusche, 2009) research from Norway finds that as much as 20% of migrant students never move on from their special language classes. Their research in Switzerland reveals that the majority of migrant students are not considered ready to integrate the main school system even after two years of special instruction. Moreover, academic and language teaching should happen simultaneously to enhance language learning motivation. Countries may equally wish to support non-native mother language instruction as part of intercultural education and making migrant students feel appreciated in their new home. Some researchers also argue that mastery of mother language enables students to better master a second language. (Brind et al., 2007 in Nusche, 2009)

Entrance tests to secondary or tertiary education that include a significant language component may discriminate against migrants. For example, Japan's language entrance tests to universities tend to act as a barrier to entry for many Brazilian immigrant students. Hence the adjustment or removal of such national policies could also have beneficial effects on migrant students' access to higher educational services.

Supporting effective intercultural education is also important for migrant students' integration. High-quality intercultural education requires institutional adjustments such as changes in curricula and teaching materials, and changes in the expectations and attitudes of teachers and schools. Low teacher expectation in particular act as a barrier to migrant students' achievement since they often turn into self-fulfilling prophecies. Research suggests that teachers may have lower expectations and poorer valuations of students from different ethnic backgrounds. (Nusche, 2009) As a result, ongoing teacher training directed towards providing equal instruction for all students is vital. Formative assessment abilities are especially important for tailoring teaching style to individual students. An example of such a programme is the UK Department for Children, Schools and Families' development scheme for primary teachers aimed at improving their expertise and confidence in supporting bilingual students. Qualitative evidence on the effects of the programme found that teacher confidence has indeed been

improved and that the pilot scheme (2004-2006) succeeded in raising migrant students' confidence, expectations of themselves, and focus. (White et al., 2006 in Nusche, 2009) The positive findings are supported by a statistical assessment using multilevel modelling, which shows that over the course of the pilot Key Stage 2 performance in English improved more for programme schools relative to non-programme schools with similar characteristics. (Benton and White, 2007 in Nusche, 2009) Following the end of the pilot in 2006 the scheme was expanded into a national programme which also included best practice sharing between enrolled schools.

Finally, evidence clearly indicates that parental involvement is crucial for children's education outcomes. Because of various barriers, including language difficulties, immigrant parents tend to be less involved in their children's schooling than their native counterparts. (Turney and Kao, 2006 in Nusche, 2009) As such policies fostering migrant parent interest are important and need to address the factors that hinder their involvement in the first place. Home visiting programmes are a common policy intervention, particularly at the pre-school level. Many OECD countries such as the USA, Mexico, Germany, the Netherlands, Israel and Australia already have a Home Instruction Programme for Pre-school Youngsters (HIPPY). (BarHava-Monteith et al., 1999 in Nusche, 2009). The scheme is focused on disadvantaged families, including migrant families, and its goal is to improve parents' home educating abilities and awareness of such possibilities. The programme is structured around biweekly visits by tutors to targeted communities and makes use of workbook activities. Assessment of the scheme from different countries finds improvement in the cognitive abilities of participating children relative to the control group. (Lombard, 1994; Alder, 1995; Burgon, 1997 in Nusche, 2009) Schools can equally stimulate parental involvement in school-based activities, for example, by appointing special liaisons between schools and parents. (Nusche, 2009)

7.3.1 ELLIS Preparatory Academy in NYC Case Study³⁶

³⁶ Sources: ELLIS Preparatory Academy – Hedin Bernard and Principal Norma Vega (n.vega12@schools.nyc.gov); New York Times, 25th January 2009, page A1; ELLIS student memoirs; <http://schools.nyc.gov/SchoolPortals/10/X397/default.htm>; <http://www.internationalsnps.org> (Internationals Network for Public Schools); can also contact directly the Internationals Network, Bronx International high School (Principal: Joaquin Vega), Manhattan International High School (Principal: Alan Krull)

- NYC has 150,000 migrant children with poor English, an estimated 15,100 classified as “students with interrupted formal education”, over 50% of these new students are in their late teens.
- NYC provides very little extra support to these students
 - How to acquire necessary social skills to attend school for the first time
 - Overcome language and cultural barriers
 - Earn a living
- This group’s graduation rate in 2007 was only 29%, which is less than ½ the average rate in NYC

ELLIS Prep Academy

- Set up in Sept 2008 to cater to 83 such students: any NYC resident 16-20 years old with limited English language proficiency and living in the USA for less than one year is eligible to attend the school
- Students come from deprived rural areas or were forced to flee their home countries - a large proportion from the Dominican Republic, followed by other Latin American countries and West Africa

ELLIS Approach:

- Broadly follows the Internationals model
- All classes highly language intensive
- Teachers and academic coaches provide personal attention
- Collaborative work in small groups with older students as mentors
- “Defence of learning” projects every 28 days
- Summer internship programme

Internationals Network of Public Schools

- Roots go back to 1985 and the establishment of the first international high school in LaGuardia
- By 2006 the 2004-formed network could boast 8 schools
- The plan is to initiate targeted national expansion over the course of the next five years
- Success record:
 - Internationals graduating 65% of students in 4 years vs. 33% for the ELL population in NYC and 52% for the general NYC high school population
 - Internationals have av. drop-out rate of 5% compared to 26% for ELLs in other NYC high schools and 16% for the general NYC high school population

7.4 Strategies for addressing the barriers faced by internally migrating children

Policies for aiding internally migrating children have been comparatively more neglected in the literature as well as in practice. What these children need most is a school system with flexibility around time commitments, grade levels, and the language of instruction. Case studies from India and Bangladesh illustrate that both government and civil society involvement is necessary to make a tangible difference.

National policies and interventions can provide the needed climate and framework to improve the access and quality of education of internally mobile children. For example, India’s government scheme for universal primary education with an emphasis on gender equality – the Sarva Shiksha Abhiyan (SSA) – supports mobile schools, examinations on demand, bridge courses, residential camps and drop-in centres for street and slum children. (Deshingkar and Akter, 2009) However, legal mandate

alone tends to be insufficient to improve educational outcomes of internally migrating children. The involvement of local governments, civil society, businesses and NGOs is essential to ensure that government policies can be effectively utilised. Examples of supporting non-governmental interventions include NGO schools in high migration areas, which are often run as residential schools. Vikalpa and Lok Drishti in India run ‘hostel’ schools and bridge courses for returning children in the high outmigration districts of Bolangir and Naudapa since 2004. Parents can now leave their children behind to continue their studies. The programmes covered 1,700 children by 2005-6. Another example of a successful initiative discussed by Deshingkar and Grimm (2004) is Sadhana, an Andhra Pradesh NGO in India supported by UNICEF and the district administration, which runs a residential school for the children of migrants in the high migration area of Narayankhed. It allows children to stay in their native region and continue their education. The NGO migrant support programme seems to have fared much better than government programmes, however support from donors remains vital.

Many working children are unfortunately not in a position to give up on work entirely. Hence flexible programmes allowing children to combine work and school have been particularly successful. Although such non-formal systems remain inferior to the traditional full time system, which does not allow a ‘double burden’ on students. (Giani, 2006) In Bangladesh, for example, some schools offer a 3 hour school day, with the specific timing decided on by the Parents and Teachers’ Association, combined with a 5 year cycle that allows re-entry at the formal secondary school level. (Kabeer, 2003 in Giani, 2006) In 2000, NGO schools claimed 8.5% of all primary school enrolments. (Nath and Chowdhury, 2000 in Giani, 2006) India can also boast of innovative solutions to internal migrants’ educational needs. The Mumbai Night Schools, in operation since the early 1900s, catered only to newly arrived children from Karnataka and the Coastal Belt who were employed in small South-Indian eateries.³⁷ Mobile children often do not attend school or are disadvantaged because they are not sufficiently proficient in the language of instruction. This tends to be an issue in countries with many ethnic groups such as India. To address this problem Action Aid in Andhra Pradesh set up schools directly at brick kilns for over 2,700 children migrating with their parents and is teaching in Oriya, the students’ native language. In a similar vein Pratham affiliated educators use local languages when interacting with children all over India.

³⁷ Migration, Globalization and Poverty research centre at Sussex University, <http://www.migrationdrc.org/research/projects/project3f.html>

8. Conclusion

Migration holds the potential to both impede and advance the educational development of children. In fact internal migration for educational purposes is often a necessity in developing regions. The effect of migration on schooling outcomes of mobile children is highly context-sensitive and the key factors shaping it include migrant status and type, motivation for migration, and the institutional and policy environment in the receiving countries or regions. Undocumented migrants in particular face great obstacles in accessing education and international migrants often face language barriers and social marginalization. (Sabates-Wheeler and Taylor, 2009)

The impact of migration on non-migrant children's education also operates through multiple direct and indirect channels with different directions and magnitudes of effects. The key issue is whether the aggregate effect stimulates human development in source regions. There is some consensus that remittances, in particular international remittances (Rivera and Gonzalez, 2008; Adams, 2005), result in higher household investment in human capital accumulation. (Yang, 2008; Hanson and Woodruff, 2003; Edwards and Ureta, 2003; etc.) The positive impact of remittances appears to be greater for girls (Mansuri, 2006), low levels of parental education, and for migration to destination countries requiring higher-skill migrants.

Nevertheless migration can also have a negative effect on children's educational outcomes and wellbeing since prolonged absence of a close family member may disrupt child development and education. It is hard to ascertain which effect is stronger due to the web of causal linkages. Furthermore, there are other non-monetary channels that impact household behavior such as social remittances (Levitt, 1998 in De Haas et al, 2008) and general equilibrium effects of migration, which push future preferences either towards or away from migration. The chief challenge in establishing causal relationships between migration and education and the size and direction of the effect is that the impact of migration is closely tied to the determinants of migration itself, including the incentives for and the selectivity of migration. Empirical research is complicated by the scarcity of datasets encompassing quality information on migrant as well as non-migrant characteristics and the availability of valid instruments or natural experiments to address the endogeneity problem.

Migrant children's education outcomes vary substantially across destination regions. This is partly because their policy environments are significantly different. We can learn much from examining national institutional climates and how they heighten or weaken migrants' barriers to access to quality education services. Based on the case study evidence presented here, the focus for policy should be on system-wide and school level strategies promoting migrant integration and destination country language acquisition; the strengthening of migrant legal status and access to basic social services; and on innovative ways of addressing the educational needs of child labourers. But above all we need more rigorous research into what specific interventions work and why. Our conclusions regarding the impact of migration and remittances on children's welfare and human capital in source countries also have implications for sending and receiving countries' policies. For example, if we find that migration has strong positive repercussions for educational attainment in source countries and/or in destination countries we may wish to consider policies liberalizing migration flows.

9. Appendices

9.1 Table 1: Summary of the Evidence: Impact of Migration on Non-migrant Children

Group	Country	Authors	Main findings	Correction for selectivity?	Year	Source
<i>Impact of Remittances on the Educational Outcomes of Non-migrant Children</i>	Mexico	Lopez-Cordova (2005)	A 5% increase in the fraction of households receiving remittances lowers child illiteracy by 5.3% and improves school attendance by 3%	Yes	2000	Primarily 2000 Mexican Population and Housing Census, using a cross-section of all Mexican municipalities
		Borraz (2005)	Remittances have a small impact but only on children living in urban areas with less than 2,500 inhabitants and whose mothers have low level of education		After Tequila crisis	
	El Salvador	Edwards and Ureta (2003)	Receiving a remittance of US\$100 in urban areas lowers the hazard of leaving school by 54% for children below the 7th grade, and 27% beyond the 6th grade. In rural areas, it lowers the hazard by 14% and, combined with the effect of the presence of the	No	1997	1997 El Salvador Annual Household Survey

			remittance, by 25% at all grade levels.			
	Philippines	Yang (2008)	A 10% increase in remittances in terms of initial income leads to an increase in school attendance in excess of 10% and decline in child labour by almost 3 hours a week.	Yes	1997-1998	Panel data from 4 household surveys conducted by the Philippine National Statistics Office: the Labour Force Survey, the Survey on Overseas Filipinos, the Family Income and Expenditure Survey and the Annual Poverty Indicators Survey
		Bryant (2005)	Remittances were used to send children to private schools, with		2003	Source: International Organization

			children in left behind households having a higher probability of attending private schools, and on average attaining better grades than non-migrant children			for Migration (2003), <i>Labour Migration in Asia: Trends, Challenges and Policy Responses in Countries of Origin</i> . Geneva: International Organization for Migration.
	Ghana	Adams et al (2008)	Households receiving remittances in Ghana do not spend more at the margin on food, education and housing than households with similar income levels and characteristics that do not receive remittances		2005-2006	2005/06 Ghana Living Standards Survey (GLSS 5), a nationally-representative survey of 8,000 households carried out by the Ghana Statistical Service (GSS)

<i>Differential Gender Impact of Migration</i>	Mexico	Hanson and Woodruff (2003)	Migration to the US is associated with an additional 0.9 years of schooling for 10-12 year old girls and 0.7 extra years for 13-15 year old girls. But only for girls with mothers that have less than 3 years of schooling themselves. The results for boys are not very precise or conclusive.	Yes	2000 (rural)	10% subsample of the 2000 Mexican Population and Housing Census
		McKenzie and Rapoport (2006)	Find a significant negative effect on attendance and attainment for 12-18 year old boys (probability of attending school is lower by 16% for 12-15 year old males and by 21% for 16-18 year olds) and 16-18 year old girls (20% lower probability of attending school).	Yes	1997 (rural)	1997 Encuesta Nacional de la Dinámica Demográfica (ENADID) (National Survey of Demographic Dynamics) conducted by Mexico's national statistical agency (INEGI) in the last quarter of

						1997
	Pakistan (rural)	Mansuri (2006)	Potential positive effects of temporary economic migration on human capital accumulation are large. The gains are much greater for girls (enrolment rates increase by 54% for girls vs. 7% for boys), yielding a very substantial reduction in gender inequalities in access to education. The decline in dropout rate of 55% for girls is also larger than that of 44% for boys.	Yes	2001-2002	Pakistan Rural Household Survey (PRHS) 2001-02
<i>Differential Impact of Internal and International Migration</i>	Mexico	Rivera and Gonzalez (working paper)	A 1% rise in the share of internal remittances raises the expenditure share on education by 0.036%; 0.013% is the corresponding figure for international remittances.	No	1992-2005 (rural)	1992-2005 dataset from the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) - national survey collected every

						two years
	Guatemala	Adams (2005)	At the margin, households benefiting from internal and international remittances spend 45% and 48% more respectively on education than households that do not receive remittances. There are also differential effects by level of education with more funds being spent at the margin on schooling with higher rates of return.	No	Jul-Dec 2000	Large national household budget survey (Instituto Nacional de Estadística)
<i>General Equilibrium Effects of Migration on Education</i>	Sample of 127 developing countries	Beine et al (2008)	Find a significant positive impact of skilled migration prospects on aggregate human capital formation in sample countries with the elasticity of human capital formation to skilled migration of app. 5% But N.B. that skilled emigration is associated with an adverse impact	Yes	1990-2000	Docquier and Marfouk (2006) dataset, World Development Indicators (2005), International Country Risk Guide (1984), UN data

			when the high-skill migration rate is above 20% and/or the proportion of the higher educated exceeds 5%. Moreover smaller countries tend to be net losers.			
	Fiji Islands	Chand and Clemens (2008)	High rates of emigration of tertiary-educated Fiji Islanders increased investment in tertiary education in Fiji whilst at the same time raising the stock of the tertiary education in the country, net of emigration. This led to unprecedented levels of tertiary education for Fiji's level of economic development.	Yes	1986-1996	Full-universe census micro data from the Fiji Bureau of Statistics; supplemented by Household Income and Expenditure Survey 2002-2003 and enrolment data from the Fiji Ministry of Education

9.2 Appendix A: Data & Methodological Concerns

A large portion of the earlier literature does not capture the full effect of remittance receipts on household expenditure patterns and so potentially underestimates the impact of migration on human

capital accumulation. This is a consequence of assuming that household income is not fungible, i.e. only examining the indirect impact of remittances through their effect household budget constraints and not including remittance payments as an independent explanatory variable in estimated demand equations, and/or differing definitions of ‘productive investments’. (Rivera and Gonzalez, 2008) Schooling expenditures have arbitrarily been treated as household consumption, “which also reflects rather narrow views on what actually constitutes development.” (De Haas et al, 2008) In addition, the estimated magnitudes of impact across different studies are not easily comparable because of the varied methodologies and the non-comparability of measures of migration intensity used.

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