

GIRL'S EDUCATION IN COTE D'IVOIRE



Megan O'Donnell © 2017 ONE

EDWINA JOSEPH

Master of Public Policy Candidate Frank Batten School of Leadership and Public Policy



FRANK BATTEN SCHOOL
of LEADERSHIP and PUBLIC POLICY



Acknowledgments and Disclaimer

I would like to thank my A.P.P instructor, Professor Pennock. He has been a source of guidance throughout my A.P.P. in the fall and spring sand he has helped me bring my report together. I have benefitted a lot from his care, expertise, and attention to detail.

I would like to thank Professor Braithwaite for her guidance in finding my A.P.P client. She helped me narrow down my topic and helped me communicate with my client. I would like to thank my support team, Meghan Clancy and Heeyon Kim, who provided emotional support and help with my project this past year, especially during the shift to remote classes last year. Lastly, I would like to thank my husband, who has shown tremendous patience and emotional support and provided much-needed laughter during this pandemic.

Disclaimer: The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

On my honor, I pledge I have neither given nor received unauthorized help on this assignment

Table of Contents

| | |
|---|-----------|
| ACKNOWLEDGMENTS AND DISCLAIMER | 2 |
| TABLE OF FIGURES..... | 4 |
| LIST OF ACRONYMS | 4 |
| EXECUTIVE SUMMARY | 6 |
| PROBLEM STATEMENT | 7 |
| BACKGROUND | 8 |
| HISTORICAL OVERVIEW OF THE EDUCATION SYSTEM IN COTE D’IVOIRE | 8 |
| BRIEF DESCRIPTION OF THE EDUCATION SYSTEM IN COTE D’IVOIRE | 10 |
| THE 1990 COCOA CRISIS AND ITS IMPACT ON GIRL’S EDUCATION..... | 10 |
| THE IVORIAN CIVIL WAR AND ITS IMPACT ON GIRL’S EDUCATION..... | 11 |
| THE IMPACT OF THE 1990 COCOA CRISIS & CIVIL WAR ON THE ECONOMY AND THE EDUCATION SYSTEM | 13 |
| COSTS OF NOT EDUCATING GIRLS | 13 |
| LITERATURE REVIEW ON EDUCATION INTERVENTIONS AND POLICIES | 15 |
| CRITERIA | 18 |
| EFFECTIVENESS AT INCREASING GIRL’S ENROLLMENT/ATTENDANCE RATE..... | 19 |
| TOTAL FINANCIAL COSTS..... | 19 |
| POLITICAL SUSTAINABILITY | 19 |
| POLICY OPTIONS..... | 19 |
| POLICY OPTION 1: LET PRESENT TRENDS CONTINUE..... | 20 |
| POLICY OPTION 2: IMPLEMENT A CONDITIONAL CASH TRANSFER PROGRAM | 21 |
| POLICY OPTION 3: IMPLEMENT AN UNCONDITIONAL CASH TRANSFER PROGRAM..... | 21 |
| PROJECTED OUTCOMES | 22 |
| POLICY OPTION 1—STATUS QUO..... | 22 |
| POLICY OPTION 2—CONDITIONAL CASH TRANSFER | 23 |
| POLICY OPTION 3—UNCONDITIONAL CASH TRANSFER..... | 24 |
| OUTCOMES MATRIX | 25 |
| RECOMMENDATION | 25 |
| IMPLEMENTATION | 26 |
| CONCLUSION | 28 |
| WORKS CITED | 29 |
| APPENDIX 1: COST-EFFECTIVENESS ANALYSIS | 1 |

Deleted: 5

Deleted: 6

Deleted: 7

Deleted: 8

Deleted: 9

Deleted: 10

Deleted: 11

Deleted: 12

Deleted: 13

Deleted: 14

Deleted: 15

Deleted: 16

Deleted: 17

Deleted: 18

Deleted: 19

Deleted: 20

Deleted: 21

Deleted: 22

Deleted: 23

Deleted: 24

Table of Figures

Figure 1- Cote d'Ivoire Map

<https://educateachild.org/about>

Figure 2- Out-of-School Rates in Cote d'Ivoire, by Sex, Urbanicity, and School level (2016)

Figure 3- Women Education and Economic Development Diagram

<https://ro.uow.edu.au/cgi/viewcontent.cgi?article=4578&context=theses>

Figure 4- Outcomes Matrix

List of Acronyms

ACLED Armed Conflict Location and Event Database

| | |
|---------------|--|
| ADB | African Development Bank |
| CCT | Conditional Cash Transfer |
| GDP | Gross Domestic Product |
| IMF | International Monetary Fund |
| MIS | Management Information System |
| MoEF | Ministry of Economy and Finance |
| MoESP | Ministry of Employment and Social Protection |
| MoNE | Ministry of National Education, Technical Education and Vocational Training |
| OPA | Ouagadougou Peace Accords |
| PTA | Parent-teacher Association |
| SAP | Structural Adjustment Plan |
| UCT | Unconditional Cash Transfer |
| UNICEF | United Nations International Children's Emergency Fund |
| USD | United States Dollars |
| WB | World Bank |

Executive Summary

The gender gap in education has been a chronic social and economic issue in Cote d'Ivoire. The 2000 Civil war and the economic crisis caused by the cocoa crisis in 1990 have not only harmed the educational system but exacerbated the gender gap in education as more girls remain out of school (*Côte d'Ivoire*, n.d.). A large uneducated female population poses substantial economic and social challenges to society and its population (Wodon et al., 2018). The government is currently implementing its current education expansion program to remove barriers to access education and include more disadvantaged students such as girls or poor students in its education system (*More Education Opportunities for Students in Côte d'Ivoire*, 2018).

Among the many interventions designed to address the supply and/or the demand side of the education market, programs designed to reduce the costs of education have been the most effective at reducing the gender gap in education. Particularly, social protection programs were crucial at providing financial help to poor families withstanding economic and political shocks (Sperling & Winthrop, n.d.). With more potential conflicts on the horizon, added economic pressure because of high population growth, and now the COVID-19 pandemic, girls could find themselves out of school at a higher rate (*In Côte d'Ivoire, Protecting Children and Young People on the Move during COVID-19*, n.d.). In this report, I offer three policy alternatives as potential solutions for the Government of Cote d'Ivoire and the World Bank to consider:

1. Let present trends continue,
2. Implement a conditional cash transfer program, and
3. Implement an unconditional cash transfer program.

I evaluated the three alternatives above across the following three criteria:

1. Effectiveness,
2. Costs, and
3. Political Sustainability.

After conducting my analysis, the best alternative is to implement the unconditional cash transfer program, in addition to letting present trends continue. The policy ranks high in all the criteria (cost-effectiveness, costs, political sustainability). This option will aid in fulfilling their goal as the government of Cote d'Ivoire and the World Bank's goal is to expand access to education for all and lift the people of Cote d'Ivoire out of poverty. The concerns around costs and the political sustainability of the program are valid and must be addressed during the implementation phase of the program to avoid any additional costs or backlash. Other countries have succeeded at implementing these

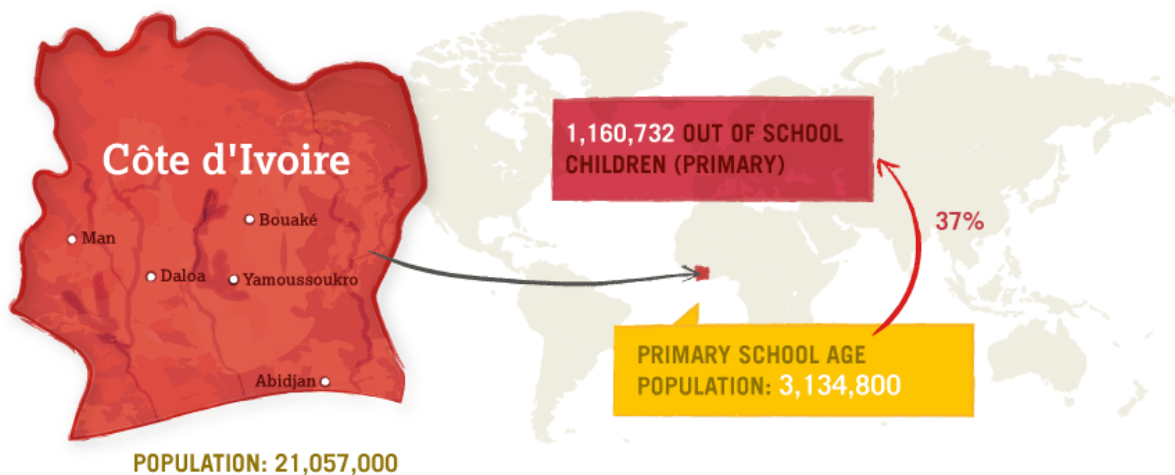
types of programs, and so we are confident the program can be successful in Cote d'Ivoire. The government of Cote d'Ivoire is encouraged to improve its statistical system and administrative capacity to implement more social programs to provide more financial assistance.

Problem Statement

Approximately, 56% of out-of-school children are girls in Côte d'Ivoire (*Millions of Girls Remain out of School*, 2015). The gender gap in primary and secondary schools in Cote d'Ivoire is a chronic social and economic issue, as girls experience systematically unequal access to education. Girls in rural areas or/and poorer areas are disproportionately affected. Girls, in Côte d'Ivoire, are less likely to enroll and attend primary and secondary school, are at a higher risk of dropping out, marrying before completing primary school, and perform household chores or work to support their family (Wodon et al., 2018).

This systematic exclusion of girls from schools is not only devastating for the girl's well-being, safety, and educational opportunities, but also has resulted in women's absenteeism in the formal workforce. Women in Cote d'Ivoire mostly occupy jobs in the informal sector, with little opportunity to work in the formal sector or earn a higher salary (*Cote D'Ivoire Systematic Country Diagnostic*, 2015). Despite recent government efforts to expand enrollment and attendance, girls still represent most out-of-school children across the nation (*Millions of Girls Remain out of School*, 2015). This masks huge system dysfunctionality and inefficiencies in the Ivorian education system and reveals persistent gender and cultural norms that are likely to worsen with more instability and high population growth.

Figure 1- Cote d'Ivoire Map



Background

Historical Overview of the Education System in Cote d'Ivoire

Once Cote d'Ivoire declared its independence in 1960, education became an essential instrument to build the nation. The first president of Côte d'Ivoire, Houphouët-Boigny, recognized the importance of an educated population and so invested heavily in the education sector while retaining the colonial legacy of the French education system. In 1963, 5.2% of Cote d'Ivoire's GDP was devoted to education, which UNESCO reported was, "if not the largest, at one of the highest [proportions] among African and even foreign countries (Prosperetti, n.d.).

Education remained at the forefront of the national agenda as nation-building became the main priority. The government of Cote d'Ivoire continued to invest heavily in its education sector for over a decade. By 1975, the education sector represented 20% of all public expenditures ((Andersson, n.d.). Despite limitations on further government expenditure towards the education sector because of the implementation of structural adjustment programs (SAPs) in the 1980s and 1990s, public expenditure on education increased by 57.5% from 1992 to 1999. The budget toward primary education increased by 43.5% from 1992 to 1999 (Odounfa, 2003).

These substantial government expenditures helped support many educational reforms led by the Ministry of National Education to improve the education system at large. Initiatives such as reorganizing primary and secondary school maps, hiring qualified teachers, decentralizing the organization of exams, registration of secondary school students were successfully implemented and improved education outcomes across the nation. Primary school enrolment rates increased by 36% from 1991/1992 school year to

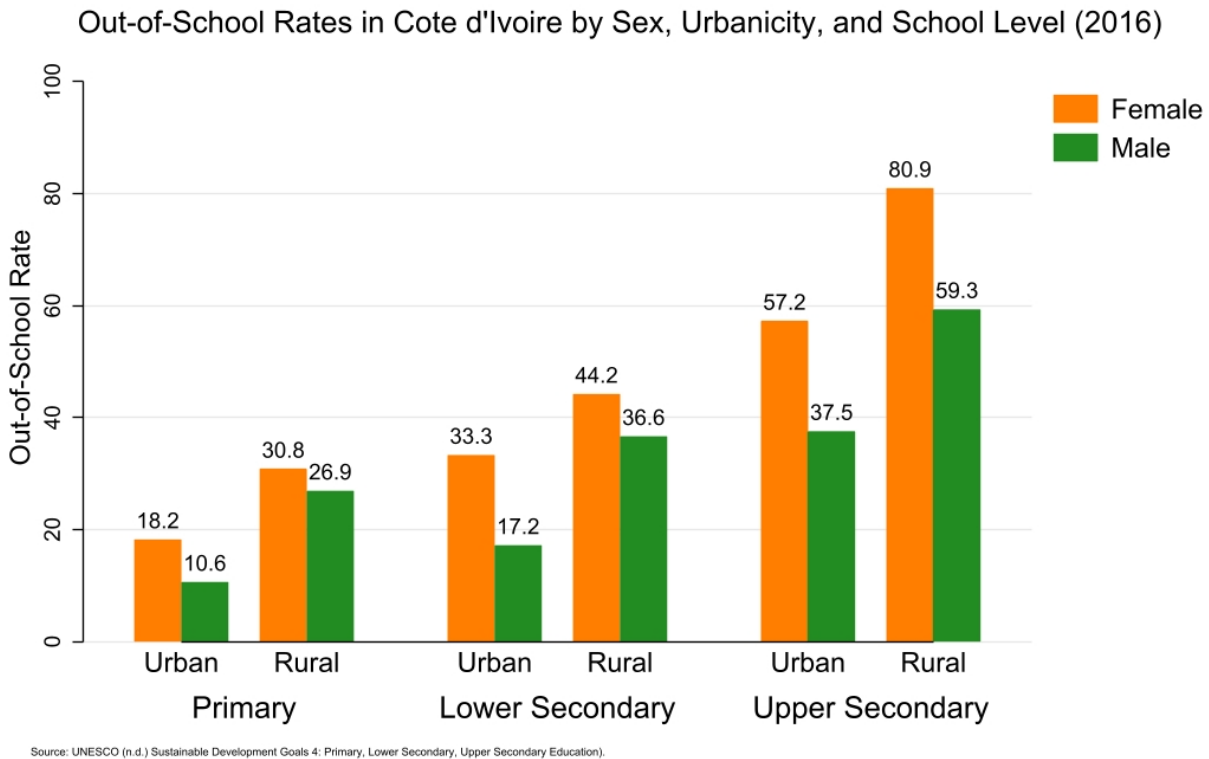
1998/1999 school year. The number of students in general high school rose increased by 43.3% during the same period (Oyeniran, 2017).

Besides these government-led reforms, funding programs and policies to further improve the education system and address specific challenges among different subgroups of the population were developed and implemented, with the technical assistance of the World Bank (WB), the African Development Bank (ADB), and UNICEF.

These partnerships have motivated the enactment of school legislation such as Law no.95-696, in 1995 (Odounfa, 2003). "Law no.95-686 reaffirms the right to education and equal treatment of all citizens, in the pre-school, primary and first cycle of general secondary education which makes up basic education. The purpose of the training is now that of man and the citizen. For the different levels of education, the specific objectives developed in the 1995 Law integrate the concern of national development, having as principles of neutrality equality and at no cost. especially in the public education system"(International Monetary Fund, 2009). To increase education access to all and provide a common policy and programming tool, the government with the support of the WB and UNICEF developed the National Education and Training Development Plan (PNDEF) in 1997 (Odounfa, 2003). The PNDEF is a report detailing annual/multi-year activity plans to improve the education system. The government still currently uses PNDEF to plan and report their yearly budget and activity plans for the education sector. Law no.95-696 was recently amended in 2015, to include a compulsory school for all children from the age of 6 to 16.

Increased public expenditure towards the education sector, government-led reforms, and partnerships with WB and UNICEF have played a key role in shaping the education system in Cote d'Ivoire. However, despite these financial and legal efforts, the rate of enrollment and attendance is still low across all levels of the education sector and among girls (International Monetary Fund, 2009). Girls in Cote d'Ivoire are still experiencing unequal access to education.

Figure 2- Out-of-School Rates in Cote d'Ivoire, by Sex, Urbanicity, and School level (2016)



Brief Description of the Education System in Cote d'Ivoire

The education system in Cote d'Ivoire still follows the centralized French educational system where the government plays a key role in curriculum development, coordination and allocation of resources, and the organization of national examinations through the ministries of Education, Vocational Education, and Higher Education (Smeyers, n.d.). The education system includes public and private schools and is composed of two types of education (1) general education (2) professional and technical education. General education comprises four levels of education: preschool education, primary school, secondary school (lower and upper secondary), and high school. Students must take a national exam, called baccalaureate which grants them access to higher education (Smeyers, n.d.)

Education policy in Cote d'Ivoire is conducted through the following ministries: The Ministry of Higher Education and Scientific Research for higher education and the Ministry of Education, Technical Training and Professional for primary and secondary education.

The 1990 cocoa crisis and its impact on girl's education

The 1990 cocoa crisis led to an economic crisis as Cote d'Ivoire was and continues to be the world's top producer of cocoa. In 2017, Cote d'Ivoire alone produced 44% of the

global output of cocoa (*Ghana and Côte d'Ivoire Taste Success in Raising Price of Cocoa*, 2020). The production of cocoa and other agricultural commodities plays a key role in the economy. The production of cocoa provides income for the government and cocoa-producing households as it contributes substantially to the gross domestic product (GDP) of the country. Approximately, four million people in Cote d'Ivoire depend on cocoa production for a substantial portion of their income (Gibson, 2007).

Volatility in the prices of cocoa in the short-term and long-term can directly affect the economy and the cocoa-producing households who depend on cocoa production. In the 1980s and 1990s, several structural adjustment programs (SAPs) were implemented by the WB and the IMF to accelerate privatization & reduce government expenditure (*The World Bank and IMF Policies in Cote d'Ivoire: Impact on Child Labor in the Cocoa Industry*, n.d.). "The goal was to remove government-created distortion and privatize cocoa production" as its production was initially a state-owned industry. The SAPs provided, in exchange, a low-interest rate loan of the amount of \$384 million with a flexible repayment plan (*Ibid*). The privatization of cocoa production led to a 50% cut in the prices of cocoa producers as cocoa prices plummeted on the world market in 1990 (Jedwab, n.d.). This change of prices led to an economic crisis. Also, the SAPs limited other government expenditure in other important sectors like education and health care.

During that time, net enrollment rates for girls declined substantially, especially among poor households. "Girls of very poor households enrollment rates fell by 16.7 percent" (Grootaert, n.d.). This decline is in sharp contrast to enrollment rates of children in non-poor households who rose during the same period. More concerning are the rates for enrollment for secondary enrollments. "Among very poor households, rates of girls dropped by almost 80 percent to 1.2 percent, one seventeenth the rate of girls in non-poor households" (*Ibid*). These substantial changes in enrollment rates for girls show the negative impact the economic crisis had on the poor, and their ability to leverage education as a way to escape poverty. SAPs also created many challenges in the supply of education. Teachers' wages were reduced to limit government expenditures. Teachers' wages were reduced to limit government expenditures. "A law implemented in 1991 cut starting salaries of primary, secondary, and university teachers to half the amounts of those hired previously" (*The World Bank and IMF Policies in Cote d'Ivoire: Impact on Child Labor in the Cocoa Industry*, n.d.). This led to a serious decline in the quality of education. Reduced investment in education for girls and cuts in social services disproportionately impacted girls' educational opportunities because women are the "shock absorbers" for economic instability and reductions in public spending, can the unpaid care economy compensate for fluctuating income security (*Make It Right: Ending the Crisis in Girl's Education*, n.d.)

The Ivorian Civil War and its impact on girl's education

Intra-state violent conflicts and civil strife in the past two decades have brought the country's economic and educational system to the brink of collapse. According to the Armed Conflict Location and Event Database (The ACLED), Cote d'Ivoire has experienced a total number of 965 conflict events between 1998 and 2008 (Dabalen & Paul, 2014). Conflicts in Cote d'Ivoire often take the form of either coup d'état or insurgency, which results in widespread violence between subgroups of its population

(political parties, ethnic groups, and/or religious groups). The Ivorian Civil war was caused by increasing racial tension between ethnic groups as the country was experiencing an unprecedented influx of immigrants from neighboring countries. An estimated 2,175,399 immigrants, approximately 9 percent of the total population, were living in the country in 2015 (*Cote d'Ivoire Migration Profile: Study on Migration Routes in West and Central Africa*, 2017). Immigrants' countries of origin include Burkina Faso, Guinea, Mali, Guinea, and Liberia (*Ibid*). This tension was exacerbated by exclusionary rhetoric used by political leaders called Ivoirité. Ivoirité identifies Ivorians as exclusively southerners and Christians. This term culturally excluded any foreigners, Muslims, and northerners from Ivorian national identity. Ivoirité was later legitimized in the constitution, in 2000, by requiring presidential candidates and their parents to be born in Cote d'Ivoire (Sany, 2010). This concept was also used to deny immigrants citizenship.

Ivoirite and ethnic conflict led to the increase of violence against girls in schools. Girls from conflict-affected groups were at greater risk of insults, bullying, and sexual violence, from school staff, students, or other community members on their way to school (Croke & Smith, 2013). In addition to the increase in violence, the civil war also undermined children's self-confidence, leaving them vulnerable to prostitution, unsafe sex leading to HIV/AIDS, or even students joining political parties voluntarily or by abductions (Sany, 2010).

Because of the new law, Alassane Ouattara, the leader of the opposition was disqualified from running against President Laurent Gbagbo as he was considered a foreigner and a Muslim. After an unsuccessful coup d'état to overthrow President Gbagbo, a group of army officers called Forces Nouvelles (FN), led by Guillaume Soro, a loyalist to Alassane Ouattara seized control of the North, dividing the country into two territories: the northern region controlled by the rebel army FN and the southern region controlled by the army (*Ibid*).

The Ouagadougou Peace Accords (OPA), signed in 2007, by Laurent Gbagbo and Guillaume Soro, ended a long-standing stalemate between the north and the south. The agreement led to issuing identification and voter registration cards to those who were not eligible to vote during the civil war and those who were foreigners at the start of the conflict (Bartoli & Bekoe, 2010). Although the agreement was successful at providing a cease-fire, tensions between parties remained and were at once renewed with contested presidential elections in 2008, from which Alassane Ouattara was elected president. This led to another brief civil war, which ended with the detention of ex-president Laurent Gbagbo. Peace and security remain an issue in the region as presidential elections, immigration issues, and poverty have become the source of civil unrest and conflicts (*Ibid*).

The government prioritized rebuilding the education system after the civil war, however, the effect of the civil war on children's education can be substantial for poor children. Civil wars reduce educational attainment for Ivorian children by 0.2-0.9 years (Croke & Smith, 2013). The civil war affected girl's educational attainment, because of the

increase in violence in schools. Although there is little empirical evidence about this issue from the government side, there is anecdotal evidence pointing at the rise of violence against girls in schools in West Africa. A review of the literature on violence in West African schools points to disturbing evidence of sexual violence in schools such as the use of the expression “le droit de cuissage” (the right of teachers to deflower) (*Ibid*).

The civil war also added challenges to gender equality in the form of income shocks, which in some cases affect women and girls more than men and boys. In a country poverty assessment survey, families in Cote d’Ivoire reported favoring male children over their female children in a hypothetical situation in which an income shock prevented the family from educating all of their children (*Ibid*).

The civil war compromised the safety of girls in schools and reinforced the preconceived notion that girls' education is less valuable than boys' education prevalent in many households as families were forced to navigate income shocks.

The impact of the 1990 Cocoa Crisis & Civil War on the economy and the Education System

The cocoa crisis and the civil war negatively affected the country's economy and plunged a portion of the population into poverty. Between 1985 and 2008, the fraction of the population living below the national poverty line increased from around 10% to about 43% (*Cote D’Ivoire Systematic Country Diagnostic*, 2015). Living standards also deteriorated during that time leading to severe poverty levels in rural areas. About 5,000 people died during the conflict. 709,000 people were internally displaced, and 150,000 people fled to neighboring countries for shelter (Sany, 2010).

The conflict also severely affected public institutions like health care and education. Education fell at the bottom of the national priority list due to budget constraints. Many schools and universities were destroyed during the civil war, especially in the North, exacerbating current disparities between school systems in the north and the south. Schools closed for an indefinite amount of time, leaving children without access to education. The number of students in primary school dropped from 2.1 million in 2002 to 1.5 million in 2003 during the conflict (*CPD 2017-2020: Strategic Note ECD and Basic Education*, n.d.). As peace returned, the number of children enrolled in primary and secondary schools significantly increased. 1.2 million children from six to eleven years old and 0.8 million adolescents from 12 to 15 years old are still out of school (*Ibid*). Most of these children and adolescents are girls. Girls represent 52.6 percent of the number of out-of-school children (*Ibid*).

Costs of Not Educating Girls

One consequence of having large numbers of girls out of school is the loss of income & future employment opportunities. In Côte d’Ivoire, each year of schooling of a worker has associated with him or her receiving on average a 23% increment in earnings, after holding constant for other characteristics of the worker and the sector in which the worker is employed (Schultz, n.d.). The increase in earnings is more substantial for girls with secondary education (96.6%) and tertiary education (323.0%) (Wodon et al., 2018). Uneducated girls, later in life, mainly occupy jobs in the informal sector (*Cote*

D'Ivoire Systematic Country Diagnostic, 2015). Informal sector jobs are highly unstable, with very low earnings. This can lead to low living standards and generational poverty if women have little opportunities to earn higher wages in the formal sector.

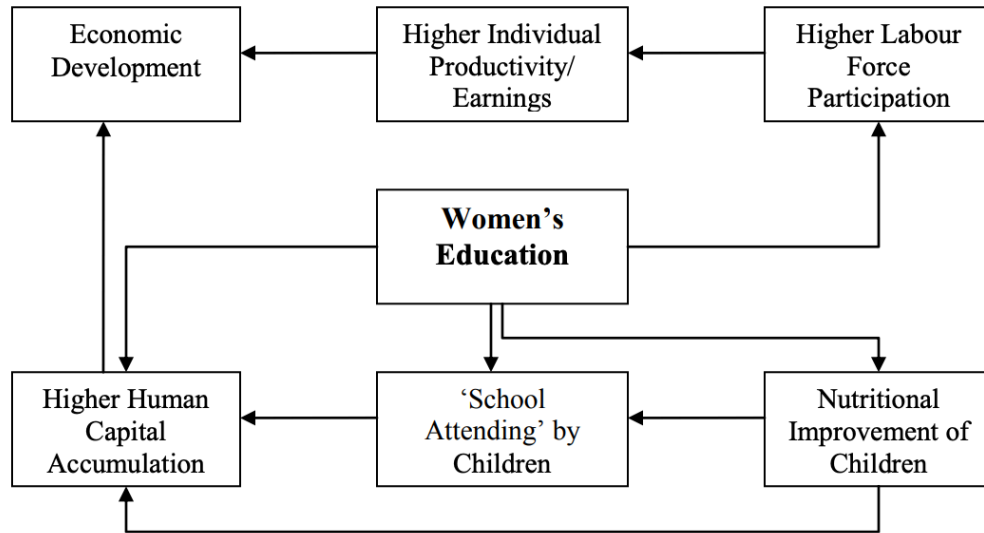
Another consequence of not educating girls is the increase in higher riskier sexual behaviors. Girls can also fall victim to sexual abuse at a higher rate, which leads to life-threatening health issues. In Côte d'Ivoire, 60.47 percent of adults living with HIV/AIDS are women, and young women are being affected with HIV at a higher rate. This is partly because of the misconception around the virus and the lack of knowledge on prevention and treatment of the virus, which can be mitigated with additional years of schooling (Levine et al., 2008).

Lack of education also contributes to higher fertility rates and early childbirth. Using modern contraception is often associated with higher education levels (mainly for secondary schooling). Secondary schooling increases the opportunity for girls to learn about safe sex and contraception, especially in areas where religion and gender norms still limit the use of protection (Wodon et al., 2018). Early pregnancies contribute to further health complications such as obstetric fistulas or even death during childbirth. Girl's children are also at risk for premature birth, suffer from chronic malnutrition, and at risk of dying before the age of five (*Ibid*). Children of uneducated girls are less likely to be educated themselves, contributing to higher rates of illiteracy and poverty. Out of school, girls fall victim to child marriage. Child marriage has many effects on girl's health and girl's children: increased risk for sexually transmitted diseases, cervical cancer, malaria, depression, isolation, domestic abuse, and the inability to decide on their healthcare (Nour, 2006). In Côte d'Ivoire, 43% of girls with no education were married before the age of 18, compared to only 12% who had completed secondary education or higher (Brides, n.d.). Education policies driven towards girl's inclusion can lower child marriage: each additional year of secondary education is associated with lower risks of marrying as a child and having a child under the age of 18 by six percentage points (Wodon et al., 2018).

Out of schoolgirls are also subjected to child labor. In 2016, a quarter of children, from the age of 5 to 15, in Côte d'Ivoire were reported working ((*2017 Findings on the Worst Forms of Child Labor: Cote d'Ivoire*, 2017)). These children work in the production of cocoa, coffee, and other goods, in hazardous conditions. Girls as young as age 9 work as domestic servants, often working 12 to 14 hours per day. Girls are subject to mistreatment including beatings and sexual abuse (*Ibid*). Educational policies aimed at keeping girls in school can reduce child labor.

Another impact on society is the loss in the gross domestic product (GDP) because of the loss in earnings from having a large uneducated female population. A one percentage point increase in female education raises the average GDP by 0.3 percentage points and raises annual GDP growth rates by 0.2 percentage points (Wodon et al., 2018). Indeed, in sub-Saharan Africa, the gap between the proportion of girls and boys in attaining secondary level education has cost the region a total lost annual growth of \$5.3 billion (*Ibid*). Increased dependence on government assistance and programs to sustain these women and their children was also found to be costly but not well estimated.

Figure 3- Women Education and Economic Development Diagram



Literature Review on Education Interventions and Policies

Interventions and policies that aim to increase educational attainment for girls in developing and developed countries have been well studied. Most interventions are gender-specific (boys or girls) or non-gender specific (boys and girls). Studies focus mainly on measuring quantifiable educational outcomes such as enrollment rates, attendance rates, test scores, graduation rates.

Interventions and policies to improve girl's enrollment rates and attendance rates can target the demand and/or supply side of the market (Sperling & Winthrop, n.d.)

Interventions targeting the demand side of the market in African countries are successful as most consider financial barriers and the opportunity costs to the parents for enrolling their children in school. Indeed, children in Africa can contribute between 11 to 36 percent of family income (Sakurai, 2006). Girls enrolled and attending school regularly cause an additional loss in income because housework and chores are no longer performed by the child.

The interventions on the demand side are also successful because these interventions focus on providing financial assistance to poor girls and parents (Sperling & Winthrop, n.d.). Many of these interventions are social safety net programs.

Policymakers have utilized social safety net programs to improve the lives of girls in developing countries. Social safety nets' goals are to alleviate poverty by providing financial assistance to poor households.

These households can qualify for three types of social safety nets: transfers in-kind, cash transfers, and fee-waivers. According to the World Bank, from 1.9 Billion recipients of social safety programs, 44% receive transfers in-kind, 37% receive cash transfers while the remaining 19% receive fee-waivers (Arshad, n.d.) The use of cash transfers has rapidly increased over the past decade. 40 countries have adopted unconditional cash transfer programs in 2015, as opposed to 20 countries in 2010 (*Ibid*). The use of cash transfer programs has increased considerably because of its effectiveness in alleviating poverty, using methods to target the poorest segment of the population. Cash transfer programs can also increase human capital in the education and health care sector in the long run (*Ibid*).

There are two types of cash transfer programs: unconditional cash transfers (UCT) and conditional cash transfers (CCT). These programs vary according to the design of the program and the end objectives of the program. Conditionality is the main difference between CCTs & UCTs; UCT offers cash assistance to poor households without any conditions, while CCT offers cash assistance to poor households conditional to behavioral changes (*How Should We Design Cash Transfer Programs?*, n.d.). The conditionality feature of the program involves additional costs related to the implementation and monitoring of the program. The objective of the program in the short run also differentiates the two types of programs from each other. CCTs can have a greater impact on intermediate participation indicators such as health and/or educational participation outcomes, and UCTs can have a greater impact on human capital outcomes like learning achievement or other health indicators (*Ibid*).

CCTs & UCTs programs are seen as expensive programs to implement. For larger CCTs, programs can cost about 0.4% of a country's GDP (Lindert, 2013). However, these costly programs often replace or complement ineffective, badly targeted programs. For example, “the government of Brazil spends 3.07% of GDP to cover the deficit in the main federal pension programs which deliver more than 50% of their benefits to the richest 20% of the population. On the other hand, Brazil's Bolsa Familia, covering the poorest 20% of the population, cost about 0.4% of GDP in 2007, which is a tenth of the federal pension programs” (Son, 2008). Despite the high costs of the programs, cash transfer programs are effective at providing immediate financial assistance and improving many health and education outcomes in Latin America and Africa. Unconditional cash transfer programs are mostly used in Africa (*Evidence over Ideology*, 2017).

A CCT program, called PROGRESA, was implemented in 1997, in Mexico, to improve children's health, and education. Eligible poor households were brought into the program, in phases, and for a total of three years. Households can receive either a monthly stipend of US\$ 7 conditional on family members obtaining preventive medical care or a monthly stipend of US\$3-\$11, conditional on children attending school a minimum of 85 percent of the time and not repeating a grade more than twice (*The*

Impact of PROGRESA on Health in Mexico | The Abdul Latif Jameel Poverty Action Lab, n.d.). The impact on school enrollment rates was positive and substantial for boys and girls. Girls who participated in the program, under the age of 12, were 30 percentage points more likely to obtain some secondary schooling and men were 18 percentage points more likely (*Conditional Cash Transfers Boosted Education and Earnings*, n.d.). PROGRESA also improved the health status of children, their families and thus, improving household socio and economic status.

The Zomba Cash Transfer Program, led by researchers Sarah Baird, Craig McIntosh, and Berk Ozler, was implemented in Malawi to improve educational and reproductive health outcomes amongst eligible girls aged 13-22 and compare the effects of CCT and UCT on these girls (*The Impact of Cash Transfers on the Educational Attainment, Sexual Behavior, and HIV Status of Adolescent Girls in Malawi | The Abdul Latif Jameel Poverty Action Lab*, n.d.) Girls from eligible households were placed in three groups: one group receiving cash transfers of the amount of US\$1-\$5 (and household heads receiving US\$4-\$10) conditional to regular school attendance, the second group receiving cash transfers without any school attendance requirements and the third group receiving no intervention (*Ibid*). The UCT and CCT results suggest improvements in education and health outcomes. However, CCT had a larger effect on educational outcomes while CCT had larger effects on early marriage and teenage pregnancy. Girls were 2.35 more likely to enroll in more terms, and girls were 27% less likely to become pregnant (*Ibid*). Other similar programs were implemented in Ghana, Lesotho, Kenya, South Africa, & Zambia, and have seen increases in enrollment rates between 5-12 percentage points (*Primary School Age Education*, n.d.).

Other smaller-scale subsidies and transfer programs to reduce school-related fees for girls have seen little to no impact on educational outcomes. Free uniforms were distributed to girls in 6th graders, in Kenya, to eliminate user fees and increase school participation. School participation for girls only increased by 3.1 percentage points, which is lower than the average increase in enrollment rates. A similar program implemented in Ecuador resulted in the decrease of school participation of girls by 1.4.

The above example illustrates some of the tradeoffs between CCT & UCT programs and many of the limitations of the programs. The tradeoff between CCT and UCT programs can be resolved by viewing them as complements instead of alternatives to each other (*How Should We Design Cash Transfer Programs?*, n.d.). Cash transfer programs present some limitations related to the design of the program. Lack of or/and inconsistent data can create exclusions errors when targeting participants for the programs, leaving girls out of the program who qualify for the program. There is also a negative impact associated with non-participants who do not benefit from financial assistance but often reside near participants. Denying non-compliant girls' access to the program also poses ethical concerns around CCT interventions.

In addition, many effects of CCT and UCT programs are evaluated in the short term. To see bigger or smaller impacts, the literature review on CCT & UCT could benefit from a long-term evaluation of the findings. Finally, political will and capacity building seem to be critical for implementing these programs. Skepticism regarding cash transfers and

how the cash is used has often been a barrier to many politicians. The lack of capacity of many governments in implementing cost transfer programs also creates additional skepticism.

Interventions targeting the supply side of the market are less impactful than interventions targeting the demand side of the market (Sperling & Winthrop, n.d.). These interventions are focused, for example, on increasing schools in remote areas, improving school environments for girls such as building more toilets, and exposing students to better school materials and teachers among other interventions.

These types of interventions have produced small but inconsistent changes in girl's enrollment and attendance rates. These types of interventions must be evaluated in more depth in Africa. Scarce evidence is because it is hard to isolate the impact of some of these interventions in the actual world. The design, costs, and low monitoring capacity in many developing countries related to implementing randomized controlled trials also contribute to the lack of evidence.

In sum, research has shown that policymakers can intervene on the demand and/or supply side of education to improve enrollment and attendance rates for girls. The demand side has shown to have a high impact on girl's education outcomes. UCT & UCTs are effective social safety net tools that can be used to drive girls' demand for education. Intervention on the supply side can be also effective but are less substantial and somewhat inconsistent. Finally, governments in other countries have led nationwide interventions to reduce the gender gap in education and were successful at improving girl's education in their respective country.

Criteria

The government of Cote d'Ivoire is currently reevaluating its education system, to remove current barriers to access education, improve the quality of education, and improve its governance of the education system across the nation. With the support of the World Bank, the government of Cote d'Ivoire's goals is to reach a 100% enrollment rate in primary school by 2025, raise enrollment rates for secondary school and drive more inclusive policies to include more women, girls, and other disadvantaged students (Oyeniran, 2017). To determine what policy would be best for the government of Cote d'Ivoire and the WB, I evaluate my alternatives against three criteria. The first two criteria will be quantified, and the last will be evaluated rankly. The criteria are:

1. Effectiveness at Increasing Girl's Enrollment/Attendance Rate,
2. Total Financial Costs, and
3. Political Sustainability.

Effectiveness at Increasing Girl's Enrollment/Attendance Rate

This criterion measures the cost of each alternative per additional school day gained by the girls. I will calculate the effectiveness of each policy at increasing the number of school days gained by using cost-effectiveness analysis. Cost-effectiveness is useful to compare all the alternatives against the same outcome. Here, the outcome is the increase in girl's attendance rates. There are various ways to account for the costs when analyzing policies. For simplicity, the costs in this report were limited to program costs and any additional opportunity costs borne by other stakeholders, and the benefits were limited to additional school days.

Total Financial Costs

This criterion measures the total financial costs of each alternative. As these alternatives are expansive, a cost criterion will be critical for the WB and the Government of Cote d'Ivoire. The costs will be calculated by adding all the direct and indirect costs of each alternative. The costs will then be estimated yearly, accounting for different discount rates (sensitivity analysis). The costs will then be scaled to the number of households in the program, as well as the duration of the program itself. The costs will be measured in USD.

Political Sustainability

This criterion will estimate each alternative political and administrative feasibility and sustainability. The political and administrative feasibility will attempt to predict any unpopularity and difficulty related to implementing the program from the public standpoint and the government & the World Bank standpoint. This will also consider any capacity-building challenges from the government or the WB. The sustainability of each alternative measures the capacity of each alternative to sustain periods of instability. As Cote d'Ivoire experiences periods of instability around presidential elections and/or major political elections which can cause a coup d'état or insurgency, this component of the criteria is critical to consider when evaluating the implementation aspect of each alternative.

Policy Options

I have selected the following potential policy alternatives for the Government of Cote d'Ivoire and the World Bank to review. The following policy alternatives represent the best solutions to this problem. The selection was made after a thorough review of the political and economic landscape of Cote d'Ivoire and previously implemented programs aimed at increasing girls' education in developing countries funded by the World Bank and/or other donors.

- Policy Option 1: Let present trends continue

- Policy Option 2: Implement a conditional cash transfer program
- Policy Option 3: Implement an unconditional cash transfer program

Policy Option 1: Let Present Trends Continue

Overview:

The government of Cote d'Ivoire has changed the education system to close the gender gap in education and increase enrollment and attendance rates across the country in the past decade. By 2015, the government had built 8,201 classrooms in preschool, primary school, and colleges, resulting in 696 000 additional students attending school (*Summative Evaluation of GPE's Country-Level Support to Education Cote d'Ivoire*, 2018).

In 2015, the Ivorian government amended Law no. 95-696, originally enacted in 1995, to establish compulsory education for all children from the age of 6 to 16. The government's goal is to reach 100% enrollment rates in primary school by 2025 (Oyeniran, 2017). To support the new goal, the government started a joint task force with the Ministry of National Education, Technology and Training Professional & the Ministry of Superior Education and Research Scientist, to increase their efforts on removing barriers to access education, increase the quality of education and better its governance of the education system (*Summative Evaluation of GPE's Country-Level Support to Education Cote d'Ivoire*, 2018). In the 2016-2025 Plan Sectoriel Education/Formation, detailed in the Plan National de Développement, the government has allocated and planned to allocate additional capital to its expansion plan (*Plan Sectoriel Education/Formation 2016-2025*, 2017).

With the support of international agencies and local stakeholders, the government plans to continue to build more schools in remote areas. According to President Alassane Ouattara, the government plans to build an additional 4,500 classrooms, recruit 5,000 teachers and re-train current teachers, improve teacher assignments and revise the curriculum to improve teaching materials (Oyeniran, 2017).

With past and current efforts, enrollment rates in primary and secondary schools have improved. In 2016, enrollment rates in primary school increased from 0.86 to 0.89, and enrollment rates in secondary schools increased from 0.69 to 0.74 (*Summative Evaluation of GPE's Country-Level Support to Education Cote d'Ivoire*, 2018). Cote d'Ivoire still has room for improvement to achieve universal primary (and secondary) education. A fairly large number of children, predominantly girls, remain out of school because of financial and social constraints.

One option for the Ivorian government is instead of further investing in the reforming of its education system, they could let present trends continue. This will cause a steady number of out-school girls as many students are still facing financial constraints despite increased accessibility of schools.

Policy Option 2: Implement a conditional cash transfer program

Overview:

Conditional cash transfer (CCT) is a policy tool often used to increase educational outcomes, such as enrollment and attendance rates in developing countries and reduce poverty. This policy tool is a social protection program offering cash assistance to a select group of participants who meet the conditions required to be part of the program.

In Côte d'Ivoire, CCT would be funded by the Ivorian Government in partnership with the World Bank. The funding system would employ a matching system where the Ivorian Government would pay 50 percent of the cost of the program and the World Bank would pay the other half. The grant matching system has been implemented by the World Bank for over two decades in the private sector; mainly in Africa and Latin America & Caribbean countries with a 73% success rate in Africa (*How to Make Grants a Better Match for Private Sector Development*, 2016).

The program would target households in school districts on the following characteristics: 1) the presence of at least one girl under the age of 11; 2) being poor, defined as making under US\$2.96 PPP per day, the national poverty line for Côte d'Ivoire as of 2015; 3) a copy of a birth certificate for proof of age. The updated poverty numbers based on a new regional statistics program (not yet available) should measure poverty levels among households. The household would be randomly assigned with girls aged 6-11 in two groups: one group receiving cash transfers of \$15 upon regular school attendance and another group, the comparison group, receiving no intervention. This pilot will allow girl enrollments in 2 phases to get buy in to the program and reduce upfront costs of the program (while assessing the initial impact of the program).

The program would offer cash assistance to eligible households. The households would be able to opt-in. We expect a 100% take-up rate because of the harsh living conditions experienced by poor households. The program would be a three-year pilot program where eligible households with a child enrolled in primary school would receive \$15 per month. This financial assistance should cover tuition costs or other school-related costs like uniforms, books, etc. Students must continue to be enrolled the whole year and miss only 3 days of classes per month (86% attendance rate). Students who miss up to three classes can be eligible for a meeting with an outreach team member and their parents who would communicate the importance of attending classes and explain the conditions under receiving cash assistance.

Policy Option 3: Implement an unconditional cash transfer program

Overview:

Unconditional cash transfer (UCT) is a fairly new intervention used by policymakers to increase educational and attendance rates in Kenya and Malawi. This program administers cash directly to parents of school-aged children with no conditions attached.

The UCT approach would be a partnership between the World Bank and the Ivorian Government. The World Bank would pay 40 percent of the cost of the program and the Ivorian government would pay 60 percent of the cost of the program with the understanding that the cost of the program would become the government's sole responsibility if prolonged past the pilot years. The program would run for the entire school year, for three consecutive years, and would be eligible for households who live in rural areas whose girls are the age 12. US\$18 per month per household will be given to the parents of the girls understanding that the money could cover student fees. However, this cash would be given under no conditions on behalf of the family. The results of the program would be monitored by a small, appointed team from the World Bank to ensure the checks are being attributed accordingly.

Projected Outcomes

Policy Option 1—Status Quo

Total Financial Costs

Letting the present trend continue will allow the government to maintain its current budget allocation towards present education investments aimed at increasing enrollment for young boys and girls. As stated in its 'Plan Sectoriel Education/Formation 2016-2025' report, the government has allocated 2020, \$1.8 billion to achieve universal, inclusive, and quality primary and secondary education. It also projects to allocate an additional \$1.9 billion in the next 5 years to support its goal for enrollment and attendance (*Plan Sectoriel Education/Formation 2016-2025*, 2017). The financial costs of the program will only reflect government allocation from 2022-2025. The total financial costs were estimated at \$1.1 trillion. These current and future investments reflect the government's commitment towards educating the population, especially with the considerable debt the government owes. In 2020, the national debt accounted for 41.73% of the gross domestic product, estimating it at \$27.2 billion. More concerning, bilateral creditors debt such as the IMF, the World Bank, and Paris Club represent 52 percent of Cote d'Ivoire external debt (*Africa's Growing Debt Crisis: Who Is the Debt Owed To?*, 2018). The government maintaining its current level of investment in education could help mitigate further debt and government expenditure towards education. This alternative ranks high on costs.

Effectiveness at increasing girl's attendance rates

This criterion uses cost-effectiveness analysis to compare the current policy effectiveness at increasing attendance rates against the other two alternatives. Assuming enrollment leads to class attendance and 50% of the expansion plan will be allocated to girls, we have calculated the cost of one additional school day the out-of-school girls would get relative to the cost of the plan from 2022-2025. With a 5% discount rate, we estimated the cost of an additional school day for girls to be \$4.66. Letting present trends continue, with no additional increase of the current budget, this plan could

increase enrollment and attendance rates at a high cost per additional school day. Despite the remarkable progress the government has made so far, population growth will cause an issue of scarcity of resources as it will directly contribute to the decline in the volume of public resources per young between 6 and 15 years to 50 percent, and the increase of girls schooling (Oyeniran, 2017). Without meeting these population increases with incremental, growing investments in education, enrollment and attendance rates will remain at similar levels. The status quo is simply not enough to address the current and future inequities in education in Côte d'Ivoire. This alternative ranks medium on effectiveness.

Political Sustainability

This policy would be in alignment with the President's plans for prioritizing education during his presidency. In 2015, the President, Alassane Ouattara, and the Ministry of Education reassured equal access to social services "particularly for women, children and other vulnerable groups" as an important part of the Education for All initiative by improving access to basic education and improving the quality of education (UNESCO, 2015). This alternative would be financially appealing for bilateral creditors, as they can invest in other sectors of the economy or other countries that are facing similar challenges. Finally, this alternative has the potential to not last past an election cycle as government priorities change drastically from one administration to the other. Corruption is deeply ingrained in the public and private sectors. This alternative ranks high for political sustainability.

Policy Option 2—Conditional Cash Transfer

Total Financial Costs

This alternative would first administer cash assistance randomly to 83,345 Ivorian girls who are currently not enrolled in school in Côte d'Ivoire (UNESCO, 2020) from 2022-2025. We expect the transfer costs to amount to \$12.5 million for the entire school year, and \$60 million when accounting for deadweight loss. The administrative costs which include the implementation and evaluation costs were modeled after a similar social cash transfer program implemented in Kenya and scaled appropriately to the number of households in this program, considering, exchange rates, and discount rates. The first year of the administrative cost will be the highest, reaching \$9.4 million. We expect the costs to drop after the start-up phase. We expect the administrative costs to reach \$27.5 million for the length of the program. The total cost of the program will amount to \$83 million. This alternative ranks high on cost.

Effectiveness at Increasing Girl's Enrollment and Attendance Rates

This criterion uses cost-effectiveness analysis to compare this policy's effectiveness at increasing attendance rates against the other two alternatives. We have calculated the cost of this program related to one additional school day the participants would earn under the CCT. With a 5% discount rate, we estimated the cost to be \$10.77. Not measured under this cost-effectiveness analysis are the other added benefits produced by CCTs. CCTs, implemented in other African countries, were seen to improve health

outcomes and other social outcomes for both parents and students, enhancing the quality of life of girls later in life, which are an added, indirect benefit (Akhter, 2012). These alternative ranks high in effectiveness.

Political Sustainability

This policy would be popular among the government, as it would align with their primary goal of increasing access to basic education and quality of education for women and children. The policy would also be popular with the World Bank as it also aligns with its mission to lift low-income countries and poor individuals out of poverty and create sustainable living standards. This policy might receive some backlash because of its high cost, reducing its potential to remain sustainable. The expected backlash from non-participants related to the exclusionary design of the program is also expected. Also, the success of this policy depends on uninterrupted funding and coordination from the World Bank and the government, which can restrict its longevity if political instability occurs. This alternative ranks as a medium for political sustainability.

Policy Option 3—Unconditional Cash Transfer

Total Financial Costs

This alternative would first administer cash assistance randomly to 165,500 Ivorian girls who are currently not enrolled in secondary school in Côte d'Ivoire (UNESCO, 2020) from 2022-2025. We expect the transfer costs to amount to \$29.8 million for the entire school year, and \$142 million when accounting for deadweight loss. The administrative costs which include the implementation and evaluation costs were also modeled after a similar social cash transfer program implemented in Kenya and scaled appropriately to the number of households in this program, considering, exchange rates, and a discount rate.

The first year of the administrative cost will be the highest, reaching \$9.4 million. We expect the costs to drop after the start-up phase. We expect the administrative costs to reach \$20.5 million for the length of the program. The total costs will amount to \$163.9 million. This alternative rank medium on costs.

Effectiveness at increasing girl's enrollment and attendance rates

This criterion uses cost-effectiveness analysis to compare this policy's effectiveness at increasing attendance rates against the other two alternatives. We have calculated the cost of this program related to one additional school day the participants would earn under the UCT. With a 5% discount rate, we estimated the cost to be \$5.36. Not measured under this cost-effectiveness analysis are the other added benefits produced by UCTs. UCTs implemented in other African countries were seen to improve health and other social outcomes for both parents and students, enhancing the quality of life of girls later in life, which are an added, indirect benefit (Wodon et al., 2018). This alternative ranks medium on effectiveness.

Political Sustainability

The policy would be popular with the government and the World Bank as they share similar goals and interests towards education. With a centralized system where the government plays a key role in education, this alternative would require coordination between the World Bank and the Ivorian government and school districts. This program can be unsuccessful if the World Bank or the Ivorian government cannot sustain an amicable relationship because of growing concerns around human rights violations because of widespread child labor and human trafficking. This alternative ranks as a medium for political sustainability.

Outcomes Matrix

| Criteria | Impact Category | Let Present Trend Continue: Continued Implementation of the Education for All Plan | Policy Alternatives | |
|---|-----------------------------------|--|--|---|
| | | | Unconditional Cash Transfer | Conditional Cash Transfer |
| Number of Girls | Costs to the Government | 497,690 | 165,500 | 83,345 |
| Total Financial Costs | Costs to the World Bank | High | Medium-cost saving over status quo due to 60/40 matching scheme | Low- considerable cost saving over unconditional cash transfer due to 50/50 matching scheme |
| | Costs to Parent & Student | N/A | Low- cost saving compared to conditional cash transfer | High- require implementation costs |
| | Total Program Costs | Low-loss in wages \$ 1.1 trillion | Medium-small loss in time & wage due to the design over unconditional cash transfer \$163.9 million | High- loss time & wage due to the design compared unconditional cash transfer \$83 million |
| Effectiveness at Increasing Enrollment/Attendance Rates for girls | Cost-Effectiveness | Medium- \$4.66 per additional schoolday attended | Medium- \$5.36 per additional schoolday attended | High- \$10.77 per additional schoolday attended |
| Policy Sustainability | Likelihood on Successful Adoption | | | |
| | By the Government | High- already in place | Medium-potential of program to be successful but corruption issues | Medium |
| | By the World Bank | N/A | High-similar programs were implemented successfully in neighboring countries | High |
| | Sustainability of the policy | High- until the end of the initiative in 2025 | Medium- possibility to be eliminated due to budget cuts or political instability | Medium to Low- relies on stakeholder relationship |

Recommendation

Recommendation— Let Present Trends Continue & Unconditional Cash Transfer

The policy alternatives discussed above, and the criteria used to analyze them are summarized in the matrix above. The impact of the policy alternatives was assessed through research on the literature on cash transfer programs implemented in developing countries. After evaluating all three alternatives, the best option for the World Bank and the government of Cote d'Ivoire is to adopt the Unconditional Cash transfer program, along with the current enrollment plan. The unconditional cash transfer program is currently ranked second highest in terms of cost-effectiveness at increasing enrollment and attendance rates because it would cost lower per additional school days, than the conditional cash transfer program.

While it is in addition to the current plan, it will be easier to implement and monitor than the conditional cash transfer program and will provide a steppingstone to a more permanent social assistance program. As the government of Cote d'Ivoire is currently

focused on increasing its enrollment and attendance rates across the nation, this program functions well at targeting the poorest families who can benefit from immediate help while staying in alignment with the World Bank and the government goals. Concerns over spillovers because of the design of the program are to be considered with this policy. The feasibility and sustainability of the policy are also a concern due to frequent political instability and corruption. However, other countries have succeeded at implementing and managing effective social protection programs and showed large impacts on girls' education outcomes. As this alternative can be successful, it is important to consider other existing social protection programs in Cote d'Ivoire that can be integrated with UCT to maximize impact on outcomes

Implementation

Implementing an unconditional cash transfer program is a process that involves many stakeholders. The stakeholders of the program will be involved at different times and stages of the program to ensure the project is successful. The project stakeholders include three ministries of Cote d'Ivoire, the beneficiaries of the cash transfers (including parents), the World Bank, and a service provider in charge of delivering the cash transfers.

Three state members each appointed from the Ministry of National Education, Technical Education and Vocational Training (MoNE), the Ministry of Economy and Finance (MoEF), and the Ministry of Employment and Social Protection (MoESP) will serve as the point of contact at the government concerning this program. The state members will facilitate communication between the ministries and the World Bank. They will attend meetings and sharing any concerns or demands with the team at the World Bank and update regularly their offices on the progress of the program.

The World Bank will own the program. The office of the World Bank, in Abidjan, will appoint a team responsible for the program. The team will be made of an implementation manager, program manager, and 2-3 experts on implementing social protection programs. The implementation manager will be the head of the team and the ultimate decision-maker. The implementation manager will be in charge of designing the implementation plan. The implementation plan will include budget estimates, details on the set up of new technology systems & ongoing training on the system. It will also provide any current or foreseeable organizational /technical issues, as well as respond to any concerns brought by the state members. The implementation manager will hold meetings every two months to update the team and the state members on the progress of the project.

The program manager will maintain the management information system (MIS) for the program and ensure operational processes are implemented successfully. The MIS will help the program manager build a centralized database about the program processes, which will be accessible by the entire team. The MIS will report on several indicators: registration information (number and list applicants/beneficiaries organized by profile), targeting information (number of nonparticipants & participants and success rate upon

completion of the program), enrollment & attendance rates (before & after the program), payments (number & amount of payments, including failed payments/data correction errors) and complaints (list of complaints with information on the complainers (*Management Information Systems Guidelines For Social Protection Programmes in Kenya*, 2012)). The program manager should produce monthly reports and share them with the implementation manager during the meetings. The program manager will also establish an account with the service provider and monitoring the issuance of the cash transfers.

A team of experts (2-3 people) should be hired, consultatively, by the World Bank to review the implementation plan, the technical system, and advise on dealing with local banks. They should also offer insights on how to manage all the stakeholders involved in this program and thus, are expected to attend meetings, read the progress reports and communicate regularly with the team. Experts can be recruited from Universities or Professional Associations not based in Cote d'Ivoire.

First, The World Bank team will work together with state members, to structure the matching system according to the terms agreed upon and ensure any reallocation or increases in the federal budget needed for the project is executed promptly.

Second, the World Bank will use data from its poverty assessment report based on household/living conditions surveys to come up with a comprehensive list of all households and their living condition (*Poverty and Equity Brief: Sub-Saharan Africa, Cote d'Ivoire*, 2020). (To identify eligible recipients for the cash transfers from that list, the implementation manager will use means testing and proxy means-testing. Means testing will evaluate households' income while proxy means testing will evaluate characteristics that are highly correlated with wellbeing or deprivation (Devereux et al., n.d.). The implementation manager will share the list with the program manager so he or she can update the MIS and with the state members for approval. Once the list is approved, the program manager will coordinate with local banks to issue payments monthly.

Third, the payments will be administered via cash to the participants. The participants will show a picture and photo identity of themselves and their children to avoid issues of identity theft. The option to switch to electronic payment via mobile phone should be considered after initial monitoring and evaluation is completed (*Cash Delivery Mechanism Assessment Tool*, n.d.). Eligible households may not have consistent access to a network or mobile phones, and thus, administering cash, regardless of their access to technology, will be beneficial at first. We expect this implementation process detailed above to take approximately 6 months to complete from the approval date.

The program presents several implementation risks which need to be addressed to ensure the success of the program. One of the key challenges with targeting mechanisms is identifying which households are poor and thus eligible for the program. A mixed mechanism involving proxy-means testing relies on surveys and censuses taken by the potentially eligible households. Households may strategically misreport their living conditions (Banerjee et al., n.d.). Another challenge has to do with the often lack of

documentation proving participants' age or other vital information to qualify for the program. The program has the potential to miss a portion of its targeted households because of a lack of information.

These implementations and targeting challenges can lead to both inclusion and exclusion errors. Inclusion error refers to the scenario where the transfer is given to a child who doesn't meet the age requirement of the program. Exclusion error refers to the scenario where the eligible household does not receive its transfer (Devereux et al., n.d.). Exclusion errors can lead to a life-threatening situation, as many of these households live in extreme poverty. These errors can cause the program cost to increase and its impact to decrease, along with its effectiveness (and reputation). Substantial errors like these could lead to the termination of the program. Another challenge to consider is capacity building and training requirements to manage a complex information system like MIS, which could lead to staff turnover (Browne, 2014). Finally, corruption issues and grievance issues can negatively impact the program. These challenges should be studied further and considered when designing the implementation plan of the program to avoid its termination.

Conclusion

The number of out-of-school girls in Cote d'Ivoire is an urgent matter that causes an immediate policy response. Political and economic instability, additional pressure caused by population growth on education infrastructure, and now COVID-19 threaten the education system. The Government of Cote d'Ivoire with the help of the World Bank must implement a social protection program to support parents and their children through these tumultuous times. An unconditional cash transfer can provide that support and help lift many households from poverty and provide them with an education to break the cycle of poverty, in addition to the government current expansion plan.

As this policy alternative will provide temporary financial assistance for the girls and their parents to afford school-related fees and encourage them to attend school, this policy option will not eradicate girls having systemic unequal access to education. The Government of Cote d'Ivoire must continue to work to remove barriers to education, especially in poor rural areas. This can be achieved through implementing additional social protection programs that address other barriers to education and the quality of education. Many developing countries, in Latin America, were successful at implementing sweeping reforms and reducing the gender gap in education. The Government of Cote d'Ivoire will also benefit from improving the statistical system and

modernizing its administrative capacity to design better policy alternatives that fit the needs of its population.

Works Cited

2017 Findings on the Worst Forms of Child Labor: Cote d'Ivoire. (2017). U.S. Department of Labor.

https://www.dol.gov/sites/dolgov/files/ILAB/child_labor_reports/tda2017/CotedIvoire.pdf

Africa's growing debt crisis: Who is the debt owed to? (2018). Jubilee Debt Campaign.

https://jubileedebt.org.uk/wp/wp-content/uploads/2018/10/Who-is-Africa-debt-owed-to_10.18.pdf

Akhter, S. (2012). *Indirect Benefits of Women's Education: Evidence from Bangladesh.*

University of Wollongong.

- Andersson, J. A. and M. (n.d.). *Beyond Miracle and Malaise. Social Capability in Côte d'Ivoire and Senegal during the Development Era 1930–1980* | EndNote Click. Retrieved April 14, 2021, from <https://click.endnote.com/viewer?doi=10.1007%2Fs12116-019-09283-4&token=WzEwNjY3MjcsIjEwLjEwMDcvczEyMTE2LTAxOS0wOTI4My00Il0.C58DUIXUaCEBsbwQj492yq0OS7M>
- Arshad, A. A. and N. M. and F. (n.d.). *Conditional vs unconditional cash transfers: A study of poverty demographics in Pakistan* | EndNote Click. Retrieved April 29, 2021, from <https://click.endnote.com/viewer?doi=10.1080%2F1331677x.2019.1661006&token=WzEwNjY3MjcsIjEwLjEwODAvMTMzMjY3N3guMjAxOS4xNjYxMDA2Il0.QnWJSfgItvy7zTqN-EqCSnUqc7Q>
- Banerjee, A., Hanna, R., Olken, B., & Surmarto, S. (n.d.). *The (lack of) Distortionary Effects of Proxy-Means Tests: Results from a Nationwide Experiment in Indonesia*. https://www.povertyactionlab.org/sites/default/files/research-paper/The-lack-of-Distortionary-Effects-of-Proxy-Means-Tests_Banerjee-Hanna-Olken-Sumarto_Sept2019.pdf
- Bartoli, A., & Bekoe, D. (2010). *Persistent Challenges to Long-Term Peace in Cote d'Ivoire*. United States Institute of Peace. <https://www.usip.org/sites/default/files/PB%2060%20Persistent%20Challenges%20to%20Long%20Term%20Peace%20in%20Cote%20d%27Ivoire.pdf>
- Brides, G. N. (n.d.). Cote d'Ivoire—Child Marriage Around The World. Girls Not Brides. *Girls Not Brides*. Retrieved December 2, 2020, from <https://www.girlsnotbrides.org/child-marriage/cote-divoire/>

Browne, E. (2014). *Social Protection Management Information System (MIS)*.

<http://gsdrc.org/docs/open/hdq1180.pdf>

Cash Delivery Mechanism Assessment Tool. (n.d.). UNHCR.

Conditional Cash Transfers Boosted Education and Earnings. (n.d.). NBER. Retrieved April 29, 2021, from <https://www.nber.org/digest/jun18/conditional-cash-transfers-boosted-education-and-earnings>

Côte d'Ivoire: Civil war disrupts education on both sides of the frontline - Côte d'Ivoire. (n.d.).

ReliefWeb. Retrieved April 14, 2021, from <https://reliefweb.int/report/c%C3%B4te-divoire/c%C3%B4te-divoire-civil-war-disrupts-education-both-sides-frontline>

Cote d'Ivoire Migration Profile: Study on Migration Routes in West and Central Africa. (2017).

Maastricht Graduate School of Governance.

<file:///Users/edwinanguessan/Downloads/1518183449.pdf>

Cote D'Ivoire Systematic Country Diagnostic (No. 98178). (2015). World Bank.

CPD 2017-2020: Strategic Note ECD and Basic Education. (n.d.). UNICEF Cote d'Ivoire.

http://files.unicef.org/transparency/documents/Cote%20D'Ivoire_CPD2017-2020_StratgicNote_Education-24%20May%202016.pdf

Creighton, M., & Park, H. (2010). *Closing the Gender Gap: Six Decades of Reform in Mexican Education*. Comparative Education Review.

Croke, K., & Smith, E. (2013). *Cote d'Ivoire Gender Background Note* (Learning on Gender & Conflict in Africa). The World Bank.

Dabalen, A. L., & Paul, S. (2014). Estimating the Effects of Conflict on Education in Côte d'Ivoire. *The Journal of Development Studies*, 50(12), 1631–1646.

<https://doi.org/10.1080/00220388.2014.959501>

Devereux, S., Masset, E., Sabates-Wheeler, R., Samson, M., Rivas, A.-M., & Lintelo, D. te.

(n.d.). *Evaluating the Targeting Effectiveness of Social Transfers: A Literature Review*

[Data set]. Koninklijke Brill NV. https://doi.org/10.1163/2210-7975_HRD-0148-

2015184

Evidence over Ideology: Giving Unconditional Cash in Africa. (2017, August 2). Evidence for

Action. [https://blogs.unicef.org/evidence-for-action/evidence-over-ideology-giving-](https://blogs.unicef.org/evidence-for-action/evidence-over-ideology-giving-unconditional-cash-in-africa/)

unconditional-cash-in-africa/

Ghana and Côte d'Ivoire taste success in raising price of cocoa. (2020, September 8). The

Africa Report.Com. [https://www.theafricareport.com/40945/ghana-and-cote-divoire-](https://www.theafricareport.com/40945/ghana-and-cote-divoire-taste-success-in-raising-price-of-cocoa/)

taste-success-in-raising-price-of-cocoa/

Gibson, J. (2007). *Consistently Inconsistent: Addressing income volatility among cocoa*

producers in Ghana and Cote d'Ivoire. International Institute for Sustainable

Development.

[https://www.iisd.org/system/files/publications/trade_price_case_cocoa.pdf?q=sites/default/](https://www.iisd.org/system/files/publications/trade_price_case_cocoa.pdf?q=sites/default/files/publications/trade_price_case_cocoa.pdf)

[files/publications/trade_price_case_cocoa.pdf](https://www.iisd.org/system/files/publications/trade_price_case_cocoa.pdf)).

Grootaert, C. (n.d.). *Education, poverty, and structural change in Africa: Lessons from Côte*

d'Ivoire | EndNote Click. Retrieved April 29, 2021, from

<https://click.endnote.com/viewer?doi=10.1016%2F0738-0593%2894%2990018->

[3&token=WzEwNjY3MjcsIjEwLjEwMTYvMDczOC0wNTkzKDk0KTkwMDE4LTMi](https://click.endnote.com/viewer?doi=10.1016%2F0738-0593%2894%2990018-3&token=WzEwNjY3MjcsIjEwLjEwMTYvMDczOC0wNTkzKDk0KTkwMDE4LTMi)

[XQ.2c6T7UOksPnEncMdvJtYIqGdn1o](https://click.endnote.com/viewer?doi=10.1016%2F0738-0593%2894%2990018-3&token=WzEwNjY3MjcsIjEwLjEwMTYvMDczOC0wNTkzKDk0KTkwMDE4LTMi)

How should we design cash transfer programs? (n.d.). Retrieved February 12, 2021, from

[https://blogs.worldbank.org/developmenttalk/how-should-we-design-cash-transfer-](https://blogs.worldbank.org/developmenttalk/how-should-we-design-cash-transfer-programs)

programs

How to Make Grants a Better Match for Private Sector Development. (2016). The World Bank.

<https://openknowledge.worldbank.org/handle/10986/26434>

In Côte d'Ivoire, protecting children and young people on the move during COVID-19. (n.d.).

Retrieved April 14, 2021, from <https://www.unicef.org/stories/cote-divoire-protecting-children-and-young-people-move-during-covid-19>

International Monetary Fund. (2009). *Cote D'Ivoire: Poverty Reduction Strategy* (No. 09/156).

<https://www.imf.org/external/pubs/ft/scr/2009/cr09156.pdf>

Jedwab, D. C. and R. (n.d.). *Commodity Price Shocks and Child Outcomes: The 1990 Cocoa*

Crisis in Côte d'Ivoire | EndNote Click. Retrieved April 14, 2021, from

<https://click.endnote.com/viewer?doi=10.1086%2F664017&token=WzEwNjY3MjcsIjEwLjEwODYvNjY0MDE3Il0.2wb3Z3PxE3iP9tUkqF-EGO3syEo>

Levine, R., Lloyd, C. B., Green, M., Grown, C., & Center for Global Development. (2008). *Girls count: A global investment & action agenda.*

Lindert, K. (2013). *Conditional & Unconditional Cash Transfers.*

[file:///Users/edwinanguessan/Downloads/1.%20Lindert_UCTs%20and%20CCTs%20for%20SSNCC%20\(1\).pdf](file:///Users/edwinanguessan/Downloads/1.%20Lindert_UCTs%20and%20CCTs%20for%20SSNCC%20(1).pdf)

Make It Right: Ending the Crisis in Girl's Education. (n.d.). GLOBAL Campaign for Education, RESULTS Educational Fund.

Management Information Systems Guidelines For Social Protection Programmes in Kenya.

(2012). Social Protection Secretariat.

Millions of girls remain out of school. (2015, March 30). Africa Renewal.

<https://www.un.org/africarenewal/magazine/april-2015/millions-girls-remain-out-school>

- More education opportunities for students in Côte d'Ivoire.* (2018, March 11). Oxford Business Group. <https://oxfordbusinessgroup.com/overview/access-granted-increased-interest-private-sector-and-continued-efforts-state-level-broaden>
- Nour, N. M. (2006). Health Consequences of Child Marriage in Africa. *Emerging Infectious Diseases*, 12(11), 1644–1649. <https://doi.org/10.3201/eid1211.060510>
- Odounfa, A. (2003). *Le Défi de l'éducation pour tous en Côte d'Ivoire*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000146821>
- Oyeniran, R. (2017). Basic Education in Ivory Coast: From Education for All to Compulsory Education, Challenges and Perspectives. *Journal of Education and Learning*, 6(2), p283. <https://doi.org/10.5539/jel.v6n2p283>
- Plan Sectoriel Education/Formation 2016-2025.* (2017). UNESCO. <http://www.unesco.org/education/edurights/media/docs/d705eb1ab09df6a1dc47968eb82e8aca457e6901.pdf>
- Poverty and Equity Brief: Sub-Saharan Africa, Cote d'Ivoire.* (2020). World Bank. https://databank.worldbank.org/data/download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_CIV.pdf
- Primary School Age Education.* (n.d.). UNICEF DATA. Retrieved April 29, 2021, from <https://data.unicef.org/topic/education/primary-education/>
- Prosperetti, E. (n.d.). '*BETWEEN EDUCATION AND CATASTROPHE*': CÔTE D'IVOIRE'S PROGRAMME D'ÉDUCATION TÉLÉVISUELLE AND THE URGENCY OF DEVELOPMENT (1968–1983) | *EndNote Click*. Retrieved April 14, 2021, from <https://click.endnote.com/viewer?doi=10.1017%2Fs0021853718000464&token=WzEwN>

jY3MjcsIjEwLjEwMTcvczAwMjE4NTM3MTgwMDA0NjQiXQ.XpqsuoB1WjnCSp-
Y9SX1gYANbh0

Sakurai, R. (2006). *Child Labour and Education*. UNESCO.

Sany, J. (2010). *Education and Conflict in Cote d'Ivoire* (No. 235). United States Institute of Peace. https://www.usip.org/sites/default/files/SR235Sany_final_lowres-1.pdf

Schultz, T. P. (n.d.). EVIDENCE OF RETURNS TO SCHOOLING IN AFRICA FROM
HOUSEHOLD SURVEYS: MONITORING AND RESTRUCTURING THE MARKET
FOR EDUCATION. *Yale University*, 55.

Smeyers, M. (n.d.). *Sector Study: Education in Ivory Coast*. Comoe Capital.

Son, H. (2008). *Conditional Cash Transfer Programs: An Effective Tool For Poverty
Alleviation?* (ERD Policy Brief Series No. 51). Asian Development Bank.

Sperling, G. B., & Winthrop, R. (n.d.). *What Works in Girls' Education: Evidence for the
World's Best Investment*. 338.

Summative Evaluation of GPE's Country-level Support to Education Cote d'Ivoire (Batch 2,
Country 3 No. V3). (2018). Global Partnership.
[https://www.globalpartnership.org/sites/default/files/2018-10-gpe-evaluation-report-cote-
divoire.pdf](https://www.globalpartnership.org/sites/default/files/2018-10-gpe-evaluation-report-cote-divoire.pdf)

*The Impact of Cash Transfers on the Educational Attainment, Sexual Behavior, and HIV Status
of Adolescent Girls in Malawi | The Abdul Latif Jameel Poverty Action Lab*. (n.d.). The
Abdul Latif Jameel Poverty Action Lab (J-PAL). Retrieved February 16, 2021, from
[https://www.povertyactionlab.org/evaluation/impact-cash-transfers-educational-
attainment-sexual-behavior-and-hiv-status-adolescent](https://www.povertyactionlab.org/evaluation/impact-cash-transfers-educational-attainment-sexual-behavior-and-hiv-status-adolescent)

The Impact of PROGRESA on Health in Mexico | The Abdul Latif Jameel Poverty Action Lab.

(n.d.). The Abdul Latif Jameel Poverty Action Lab (J-PAL). Retrieved April 29, 2021,

from <https://www.povertyactionlab.org/evaluation/impact-progres-health-mexico>

The World Bank and IMF Policies in Cote d'Ivoire: Impact on Child Labor in the Cocoa

Industry. (n.d.). International Labor Rights Fund.

<https://laborrights.org/sites/default/files/publications-and-resources/COCOAWBIMF.pdf>

UNESCO. (2015). *Rapport Bilan de mise en oeuvre de l'EPT en Cote d'Ivoire 2000/2014.*

Education pour Tous. Cote D'Ivoire. Ministre de l'éducation nationale et de

l'enseignement technique. <http://unesdoc.unesco.org/images/0023/002311/231166f.pdf>

UNESCO. (2020). *Côte d'Ivoire: Country Snapshot.* <http://uis.unesco.org/en/country/ci>

Wodon, Q., Montenegro, C., Nguyen, H., & Onagoruwa, A. (2018). *Missed Opportunities: The*

High Cost of not Educating Girls. World Bank.

Appendix

Appendix A: Cost-Effectiveness Analysis

| Status Quo | | Sensitivity Analysis | | | |
|-----------------------------|---------------|----------------------|----------------------|----------------------|----------------------|
| | | 5% | 3.00% | 7.00% | 8.00% |
| | Sum | (\$902,910,240.00) | | | |
| | PV | (\$1,074,893,142.86) | (\$1,095,764,854.37) | (\$1,054,801,682.24) | (\$1,045,035,000.00) |
| | Total Impact | (\$4.66) | (\$4.75) | (\$4.57) | (\$4.53) |
| | | | | | |
| | | | | | |
| Conditional Cash Transfer | | Sensitivity Analysis | | | |
| | | 5% | 3.00% | 7.00% | 8.00% |
| | Sum | (\$93,293,380.44) | | | |
| | PV | (\$82,970,881.12) | (\$86,863,881.79) | (\$79,357,642.21) | (\$77,647,664.97) |
| | | | | | |
| | Total Impact: | (\$10.77) | (\$11.28) | (\$10.30) | (\$10.08) |
| | | | | | |
| Unconditional Cash Transfer | | Sensitivity Analysis | | | |
| | | 5% | 3.00% | 7.00% | 8.00% |
| | Sum | (\$183,556,451.67) | | | |
| | PV | (\$163,872,843.55) | (\$171,302,133.96) | (\$156,970,475.20) | (\$153,701,414.83) |
| | | | | | |
| | Total Impact: | (\$5.36) | (\$5.60) | (\$5.13) | (\$5.03) |

Appendix B: Costs Calculations

ALTERNATIVE 1 CALCULATIONS:

- **The cost of implementing the government enrollment plan was calculated as follows:**

Amount Allocated to expand Girl's enrollment and attendance rate:

2022-2025: **\$1,074,893,142.86**

**this number includes 20% deadweight loss & present value calculations for 2022-2025 values*

*** please refer to excel sheet for more cost's breakdown*

****this number was based on the Plan Sectoriel Education/Formation Report issued by the government of Cote d'Ivoire*

- **The benefit of implementing the government enrollment plan was calculated as follows:**

Number of girls that are out of school primary and secondary school age: **497,690**

School Days Per year: **231**

Average Attendance Rate: **55.8%*****

Estimated Average Attendance Rate Post Plan: **106%***

Number of Additional School Days Attended: **$231 * (106\%) - 231 * (55.8\%) = 115.96$**

Number of Additional School Days Attended Adjusted to Sample Size & Length of the program: **$4 * (115.96 * 497,690) = 280,852,511.12$**

**number based on estimations from a similar nationwide enrollment plan implemented in other developing countries*

*** please refer to excel sheet for more cost's breakdown*

****attendance rates based on UNESCO Institute of Statistics*

Total Impact: $\$1,074,893,142.86 / 280,852,511.12 = \4.66 at 5% discount rate

ALTERNATIVE 2 CALCULATIONS:

- **The cost of implementing a conditional transfer program was calculated as follows:**

2022: Transfer Costs Per Year: $\$15 * 10 \text{ (months)} * 83,345 \text{ students} = \$12,501,750$

Additional Deadweight Loss Per Year (20%): **\$2,500,350**
 Administration Costs: **\$ 9,443,943.83**
 Total Program Costs: **\$26,409,426.07**
 2023: Transfer Costs Per Year: $\$15 * 10 \text{ (months)} * 83,345 = \$12,501,750$
 Additional Deadweight Loss Per Year: **\$2,500,350**
 Administration Costs: **\$ 6,149, 544.82**
 Total Program Costs: **\$22,430,126.28**
 2024: Transfer Costs Per Year: $\$15 * 10 \text{ (months)} * 83,345 = \$12,501,750$
 Additional Deadweight Loss Per Year: **\$2,500,350**
 Administration Costs: **\$ 5,773,352.41**
 Total Program Costs: **\$21, 927, 08.07**
 2025: Transfer Costs Per Year: $\$15 * 10 \text{ (months)} * 83,345 = \$12,501,750$
 Additional Deadweight Loss Per Year: **\$2,500,350**
 Administration Costs: **\$ 6,229, 264.88**
 Total Program Costs: **\$22, 526,420.03**

Estimated Opportunity Costs Girls & Parents Per Year: **\$345***

**number based on Cote d'Ivoire minimum wage*

Total Costs: \$82,970,881.12

**this number includes 20% deadweight loss & present value calculations*

*** please refer to excel sheet for more cost's breakdown*

- **The benefit of implementing a cost conditional transfer program was calculated as follows:**

Number of girls that are out of school primary school age: **83,345**

School Days Per year: **231**

Average Attendance Rate: **74.1%**

Estimated Average Attendance Rate Post Plan: **84.1%***

Number of Additional School Days Attended: **$231 * (84.1\%) - 231 * (74.1\%) = 23.1$**

Number of Additional School Days Attended Adjusted to Sample Size & Length of the program: **$4 * (23.1 * 83,345) = 7,701,078$**

** attendance rates based on UNESCO Institute of Statistics*

*** estimation based on average increase in attendance rates from different CCT programs implemented in Africa*

Total Impact: \$82,970,881.12/7,701,078=\$10.77

ALTERNATIVE 3 CALCULATIONS:

- The cost of implementing an unconditional transfer program was calculated as follows:

Year 1: Transfer Costs Per Year: \$18* 10 (months) * 165,500= **\$29,790,000**

Additional Deadweight Loss Per Year: **\$5,958,000**

Administration Costs: **\$ 9,443,943.83**

Total Program Costs: **\$58,399,778.32**

Year 2: Transfer Costs Per Year: \$18* 10 (months) * 165,500= **\$29,790,000**

Additional Deadweight Loss Per Year: **\$5,958,000**

Administration Costs: **\$ 4,008, 185.46**

Total Program Costs: **\$42, 793, 756. 63**

Year 3: Transfer Costs Per Year: \$18* 10 (months) * 165,500= **\$29,790,000**

Additional Deadweight Loss Per Year: **\$5,958,000**

Administration Costs: **\$ 3,317,459.8**

Total Program Costs: **\$40, 807,775.13**

Year 4: Transfer Costs Per Year: \$18* 10 (months) * 165,500= **\$29,790,000**

Additional Deadweight Loss Per Year: **\$5,958,000**

Administration Costs: **\$ 3,690,491.19**

Total Program Costs: **\$41, 555,141.59**

Estimated Opportunity Costs Girls & Parents Per Year: **\$345**

**number based on Cote d'Ivoire minimum wage*

Total Costs: \$163,872,843.55

**this number includes 20% deadweight loss & present value calculations*

*** please refer to excel sheet for more cost's breakdown*

- **The benefit of implementing a cost conditional transfer program was calculated as follows:**

Number of girls that are out of school primary school age: **165,500**

School Days Per year: **231**

Average Attendance Rate: **37.55%**

Estimated Average Attendance Rate Post Plan: **57.6%***

Number of Additional School Days Attended: **$231*(57.6\%)-231*(37.55\%) = 46.2$**

Number of Additional School Days Attended Adjusted to Sample Size & Length of the program: **$4*(46.2*165,500) = 30,784,400$**

** attendance rates based on UNESCO Institute of Statistics*

*** estimation based on average increase in attendance rates from different CCT programs implemented in Africa*

Total Impact: $\$163,872,843.55/30,784,400=\5.32