



THE CASE FOR HOLISTIC INVESTMENT IN GIRLS

Improving Lives, Realizing Potential, Benefitting Everyone

Citi GPS: Global Perspectives & Solutions

October 2020



Citi is one of the world's largest financial institutions, operating in all major established and emerging markets. Across these world markets, our employees conduct an ongoing multi-disciplinary conversation - accessing information, analyzing data, developing insights, and formulating advice. As our premier thought leadership product, Citi GPS is designed to help our readers navigate the global economy's most demanding challenges and to anticipate future themes and trends in a fast-changing and interconnected world. Citi GPS accesses the best elements of our global conversation and harvests the thought leadership of a wide range of senior professionals across our firm. This is not a research report and does not constitute advice on investments or a solicitations to buy or sell any financial instruments.

For more information on Citi GPS, please visit our website at www.citi.com/citigps.



Ying Qin, PhD is a thematic analyst within Citi's Global Insights division working primarily on ESG related topics. She has contributed to several Citi GPS reports including the UN Sustainable Development Goals, the Energy Darwinism Series, as well as Feeding the Future. Prior to joining Citi, she worked at Chatham House and has a PhD in sustainable development from the University of Cambridge, focusing on natural resource use and management in China.

+44 20 7986 8325 | ying.qin@citi.com



Liz Curmi, PhD is a global thematic analyst within Citi's Global Insights division working on developing new research and themes mainly related to ESG related topics. Prior to joining Citi she worked as a researcher at the University of Cambridge focusing on the interconnections between resources and their impacts on CO2 emissions. She has published a number of academic papers and has also co-authored a number of Citi GPS reports including the United Nations Sustainable Development Goals, Energy Darwinism Series, Technology at Work, Feeding the Future and others.

+44 20 7986 6818 | elizabeth.curmi@citi.com



Miriam Gauer is a Research Manager within Plan International's Gender, Inclusion, Research and Learning Department. Miriam is a political scientist and gender expert who specializes in quantitative methods of data analysis to conduct her research. Previously to her role at Plan International she worked at the European Women's Lobby in Brussels and the European Institute for Gender Equality in Vilnius.



Jacqueline Gallinetti is a qualified lawyer with 25 years of experience, and is presently Director of Monitoring, Evaluation, Research and Learning at Plan International. She was previously an Associate Professor at the University of the Western Cape, in South Africa, where she taught International Human Rights Law and Constitutional Law. Her entire working career has been dedicated to working on human rights issues, in particular access to justice, children rights, and gender equality in both a development and humanitarian context. She has worked on numerous law reform processes in South Africa and other African countries which have resulted in various national laws protecting the rights of children being adopted.

+44 (0) 1483 755155 | Jacqueline.Gallinetti@plan-international.org

Expert Interviews



Celina De Sola
Co-Founder & VP of Programs
Glasswing International



Karen Kelly
Regional Partnership Manager
Laboratoria



Christina Lowery
CEO,
Girl Rising

Contributors

Albert Motivans
Head of Data & Insights
Equal Measure 2030

Richard Morgan
Director of Advocacy,
Plan International

Sigma Shams
M&E Specialist,
Plan International

Soumya Guha
Country Director,
Plan International Lao PDR

Gary Lee Baldrige
Former Country Director,
Plan International Mali

Lazare Charle Djibode
Country Director,
Plan International Mali

With special thanks to:

Dana M Peterson, former Global Economist at Citi

THE CASE FOR HOLISTIC INVESTMENT IN GIRLS

Improving Lives, Realizing Potential, Benefitting Everyone

Leave no one behind. That was the promise made by governments and international civil society in their commitments to achieve the Sustainable Development Goals by 2030. With less than a decade to go it is clear that, if we continue on our current trajectory, we will fall far short of those goals.

One challenge is the lack of high-quality and inclusive data to enable us to measure our successes and failures. Women and girls are consistently left out of data collection and analysis all over the world. We lack the data to monitor 80 percent of the indicators for SDG 5 on Gender Equality, and only 13 percent of countries dedicate any resources to compiling statistics on gender. Girls and adolescents are even more invisible, as most official sources only collect data about girls and women aged 15-49.

It is this crucial knowledge gap that inspired Citi and Plan International to partner and create one of the most holistic data sets yet on the economic and social benefits of investing in adolescent girls and young women. These investments yield triple societal benefits: for girls today; for the adults they will be tomorrow; and for the next generation raised by empowered parents.

Existing research on the economic benefits of investing in girls has taken a siloed approach, focusing largely on individual sectors such as education and health. It has been proven that by investing in these sectors, we can increase economic returns for the individual as well as national GDP. We argue in this report that a comprehensive and fully-costed series of interventions allowing economies to attain 100 percent upper secondary school completion rates for girls by 2030, could lift GDP in emerging economies by 10 percent on average compared to a business-as-usual scenario. Even greater economic returns would be observed beyond 2030, as the benefits are strongly cumulative. The results are staggering, especially when faced with the consequences of inaction.

Compared to currently existing studies, we believe the special value of our collaboration is that it brings together in one place the economic and social cases for investing in girls, as well as a multi-component intervention strategy ranging beyond just education, health, and economic empowerment. The analytical framework we created dives deeply into data from eight countries and suggests which combinations of interventions are most appropriate in which settings. Imagine the potential benefits if we could take an integrated approach to investing in girls and young women in all areas of their lives.

Making change happen is complex. We argue in this report that structured collaboration between governments, the private sector, NGOs, and philanthropic institutions is paramount to tackling the barriers that girls face. If stakeholders operate in siloes, change will still take place — but it will be achieved at greater cost, with lower impact, and over a longer timeframe. There is no time to waste.

We would like to thank the staff and research teams at Citi and Plan International for what has been a truly inspiring and collaborative journey. Hopefully we have shown that the research of complex societal topics can yield its greatest results through positive cross-sector collaborations.



Andrew Pitt
Global Head of Citi Research



Anne-Birgitte Albrechtsen
CEO, Plan International

A Holistic Approach to Empowering Girls

WHY FOCUS ON ADOLESCENT GIRLS?

\$15-\$30 trillion

Cost to the global economy from lifetime opportunity and earnings lost due to barriers to all girls completing 12 years of education.

Source: World Bank



64% and 59%

Drop in child and early forced marriage and girls becoming pregnant if all girls completed 12 years of education.

Source: UNESCO



18%

Increase in per capita GDP for each additional year of school completed.

Source: UNICEF



0.37 ppts

The amount GDP rises for a 1 percentage point increase in female education.

Source: UNICEF/UNESCO



85%

% of girls in low-income countries who do not complete secondary school.

Source: UNESCO



WHAT ARE THE BARRIERS PUT IN FRONT OF ADOLESCENT GIRLS?



Health

Education

Economic Independence

Child, early and forced marriage

Access to quality education

Access to quality paid work

Early and unwanted pregnancy

Completing education

Access to financial services

Intimate partner violence

School-related gender-based violence

Violence in the workplace

Violence



Source: Plan International

ECONOMIC BENEFITS OF INVESTING IN GIRLS

Investing holistically in adolescent girls – across education, health, violence and economic independence – to reach 100% upper secondary school completion rates by 2030 could lift GDP in developing economies by on average 10%. Impacts of intervention can take time to build in low-income countries given their current low completion rates, but they have the most to gain in the medium term and beyond.

Potential Contributions to Net GDP as a Result of Reaching 100% Secondary Completion Rates for Girls by 2030 (compared to base case)



MAKING IT HAPPEN

Investing in girls should be prioritized across economies not only because it is the right thing to do, but because it also delivers unparalleled returns and impact across society and generations. All parts of society – governments, private sector, NGOs etc. – need to do their part and work together to effectively tackle the barriers that adolescent girls are facing.

Government

Pass and implement laws and policies that tackle barriers faced by adolescent girls

Facilitate relationships between private sector actors and NGOs

Improve administrative data collection on the situation of adolescent girls



Private Sector

Provide additional capital and support to initiatives

Implement gender equality policies and strategies in own companies

Foster social norm change



NGO

Work with girls, families and communities to change harmful gender norms and stereotypes

Use front-line expertise to inform and influence policy



Financial Community

Provide capital

Innovate new forms of finance

Improve access to existing funding



Contents

Executive Summary	7
Key Takeaways from the Report	8
Defining the Subject Matter of the Report	9
Three Components for Success	11
Some Key Statistics Relating to Girls	11
Chapter 1: Report Objectives	12
What this Report Sets Out to Achieve	13
Chapter 2: Girls & Gender Equality	16
The Global State of Gender Equality	16
Adolescence: The Critical Age of Opportunity	22
Chapter 3: Key Barriers & Pathways in an Adolescent Girls' Life	24
The Lifecycle Approach to Adolescence	24
Determining Factors Affecting a Girl's Trajectory	26
Two Paths Through Adolescence	29
Early Adolescence	29
Child, Early and Forced Marriage	29
Education	34
Late Adolescence	37
Early and Unwanted Pregnancy	37
Economic Independence	39
Conclusion: Two Pathways for Girls	43
Chapter 4: Economic & Social Benefits of Investing in Adolescent Girls	45
Introduction	45
Analytical Framework	46
Findings: The Economic and Social Benefits of Investing Holistically in Adolescent Girls	50
Spending by Girls Also Contributes to Global Growth	59
Chapter 5: Making It Happen – Holistic Intervention to Realize Potential	62
Going Beyond Investments in Girls	62
Making it Happen: Collaborations Across Stakeholders	67
Conclusions: Three Key Components of Success	71
Chapter 6 – Interviews	73
An Interview with Christina Lowery, CEO at Girl Rising	73
An Interview with Celina de Sola, Co-Founder and Vice President of Programs at Glasswing International	78
An Interview with Karen Kelly, Regional Partnership Manager at Laboratoria	81
Appendix 1: Analytical Framework for Our Economic Analysis in Chapter 4	84
Data	84
Intervention	85
Impact Modeling	88
Appendix 2 – About Plan International	91

Executive Summary

It is now well proven that when women are given greater opportunity to participate in the labor force, economies grow and societies prosper. However, the role of adolescent girls in achieving growth and prosperity is often overlooked. Adolescent girls everywhere, but especially in developing economies, encounter barriers in accessing and completing quality education, becoming economically independent, participating in the labor force, and living a healthy life free from violence.

A major challenge in tackling this issue is the lack of high-quality and inclusive data to enable us to measure successes and failures. Women and girls are consistently left out of data collection and analysis all over the world. We lack the data to monitor 80 percent of the indicators for SDG 5 on Gender Equality, and only 13 percent of countries dedicate any resources to compiling statistics on gender. Girls and adolescents are even more invisible, as most official sources only collect data about girls and women aged 15-49.

It is this crucial knowledge gap that has inspired Citi and Plan International¹ to partner to create one of the most holistic data sets yet on the economic and social benefits of investing in adolescent girls and young women. We present our findings in this new report in the Citi GPS Women in the Economy series. Compared to currently existing studies, we believe the special value of our collaboration comes through bringing together in one place the economic and social case for investing in girls as well as our presentation of a multi-component intervention strategy that ranges beyond just education, health and subsequent economic independence. The analytical framework we created dives deeply into data from eight countries and we make suggestions as to which combinations of interventions are most appropriate in which settings.

Existing research on the economic benefits of investing in girls has taken a siloed approach, focusing largely on individual sectors such as education and health. It has been proven that by investing in these sectors, we can increase economic returns for the individual as well as national GDP. We argue in this report that a comprehensive and fully-costed series of interventions that allowed economies to attain 100 percent upper secondary school completion rates for girls by 2030 could lift GDP in emerging economies by on average 10 percent compared to a business-as-usual scenario. Even greater economic returns would be observed beyond 2030, as the benefits are strongly cumulative. The results are staggering, especially when faced with the consequences of inaction.

Making change happen is complex. We argue in this report that structured collaboration between the private sector, NGOs, philanthropic institutions and governments is paramount to tackle effectively the barriers that occur throughout a girl's life. If stakeholders operate in siloes change will still take place but it will most likely be achieved at greater cost, with lower impact, and over a longer timeframe when there is no time to waste.

¹ Plan International was founded in 1937 and is an independent development and humanitarian organization which works in 71 countries across the world, in Africa, the Americas, and Asia to advance children's rights and equality for girls.

Key Takeaways from the Report

- Adolescents makes up 16 percent of the world's population, but their development and needs are often overlooked. Gender discrimination leaves adolescent girls more vulnerable than adolescent boys, and around the world, girls face barriers in accessing and completing quality education, becoming economically independent, participating in the labor force, and living a healthy life free from violence.
- The scale of the challenge is immense, but so is the opportunity — more than 130 million girls worldwide are out of school, and 15 million girls of primary-school age will never enter a classroom. UNESCO recently reported over 11 million girls may not go back to school after the COVID-19 crisis.
- Education is key to unlocking girls' potential and has a multiplier effect across other dimensions. But it is not enough just to keep girls in school. There is growing evidence supporting the use of multi-component interventions in delivering the best outcome for girls, but very few studies have assessed a multi-component investment case. We have sought to address this knowledge gap.
- This report brings together the diverse expertise of Citi and Plan International and features three key components: a deep dive into the complex barriers facing adolescent girls, and what interventions are required to overcome them; an original economic analysis of the potential costs of an intervention package and the economic benefits that could be achieved through this; and recommendations on how different sectors can come together to effectively tackle the barriers holding adolescent girls back.
- Through a sample set of eight countries, we find that achieving 100 percent upper secondary completion rates by 2030 could lift national GDP levels in developing economies by 10 percent on average on a fully-costed basis compared to a business-as-usual scenario. This is incredible growth potential, especially as it takes into consideration the costs of intervention which equate to an average cost of approximately \$1.53 per day for a girl.
- Investing in the education and well-being of adolescent girls is not only a social and rights-based imperative, but is also economically critical and leads to positive outcomes for society at large. This ripple effect across society should not be underestimated and may hold the key to achieving many of the UN Sustainable Development Goals. Our economic analysis has focused on the impact that educating girls can have on employment and earnings, but in reality the benefits of educating and empowering girls are more far-reaching across their families and communities, which can translate into even greater economic returns. For example, improving the education and health of girls leads to a decrease in mortality and fertility rates, reduced health costs, healthier and more educated children, and can also help reduce inter-generational poverty. In the report, we highlight that girls can also accelerate GDP growth through increased spending, which shows they should not be seen only as beneficiaries but also as consumers and important economic agents.
- A multi-pronged investment approach can deliver the best outcome for girls' development, but this needs to go hand-in-hand with removing legal, cultural, and social barriers to women participating in the economy. We termed this the Women as Global Growth Generators effect ("WG3 effect") in our inaugural Women in the Economy Citi GPS report in 2015. Our recommendations call for a holistic approach to investment and interventions along with collaboration across sectors and stakeholders.

- The international community must not forget about girls in its COVID-19 recovery plans — prioritizing girls' education and well-being can help communities and economies build back better and stronger.
- The UN has encouraged the development of collaboration between the private sector, the public sector, NGOs, and philanthropic institutions in pursuit of the SDGs. Our analysis shows that the research of complex societal topics can perhaps yield its greatest results through such positive inter-disciplinary collaborations.

Defining the Subject Matter of the Report

Adolescence is commonly defined as the second decade of life. Investing in the development of adolescents is more important than ever, with the highest proportion of young people ever being alive today — 1.2 billion adolescents make up 16 percent of the world's population. The highest proportion of young people today live in poor countries, where barriers to their development and fulfillment of their potential are the highest. Although risks and obstacles exist for both girls and boys, gender discrimination leaves adolescent girls more vulnerable than adolescent boys. The statistics are truly sobering and demonstrate the scale of the challenge — *more than 130 million girls worldwide were out of school before the COVID-19 crisis, and UNESCO has recently reported over 11 million girls may not go back to school after the crisis. Globally, 1 in 5 women were married before their 18th birthday, and intimate partner violence affects almost 30 percent of girls aged 15-19.* Harmful social norms, restricted assets and resources, and insufficient laws and policies represent the root causes of the barriers facing adolescent girls. For this report, we focus on some of the most critical factors relating to education, health, violence, and economic independence. The challenges facing adolescent girls across these four areas are often interlinked and weave through the course of their lives.

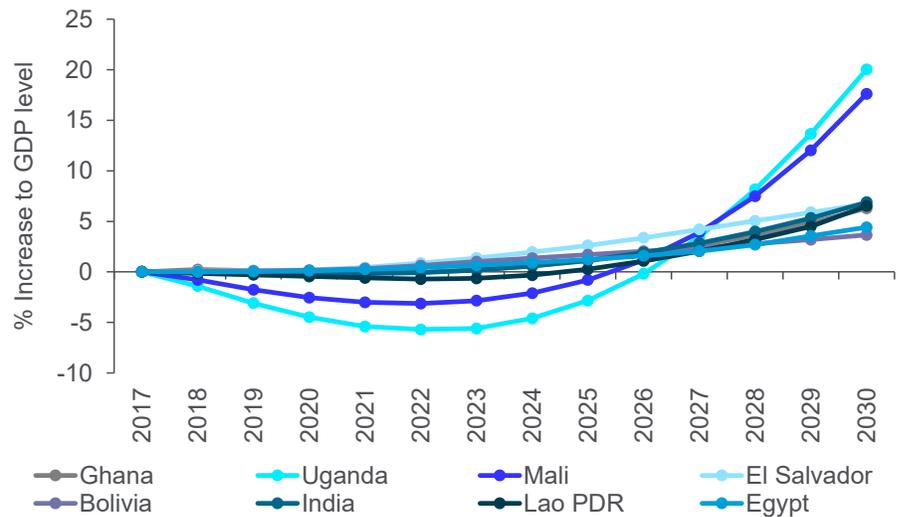
The scale of the challenge is indeed massive, but so is the opportunity. While education is the key to unlocking girls' potential and has a positive multiplier impact across the other major barriers, it is not enough on its own to keep girls in school. There is growing evidence supporting the use of multi-component interventions in delivering the best outcome for girls, but very few studies have assessed a multi-component investment case. We have sought to address this knowledge gap by developing an analytical framework to assess the costing of an intervention package and the potential economic benefits that can be achieved for eight low and lower-middle income countries — Ghana, Uganda, Mali, El Salvador, Bolivia, India, Lao PDR, and Egypt.

Through this sample set, we find that achieving 100 percent upper secondary school completion rates by 2030 could lift national GDP levels in developing economies by 10 percent on average compared to a business-as-usual scenario.

This is a very significant growth potential, especially as it takes into consideration the costs of intervention, which equate to an average cost of approximately \$1.53 a day for a girl — less than a daily cup of coffee. Even greater economic returns may be observed beyond 2030, as the benefits are cumulative and build as successive cohorts of girls graduate and start working. However, it is important to note these economic benefits cannot be delivered with a flick of a switch — they take time to build. Low-income countries such as Mali and Uganda may take longer than lower-middle income countries to reap the economic benefits given the current low education attainment for girls.

But they also have the most to gain in the medium term and beyond as the number of educated and skilled working females increase. This means that sustained interventions and investments are needed now to set girls and economies on an upward and stronger trajectory.

Figure 1. Potential Contributions to Net GDP as a Result of Reaching 100% Secondary Completion Rate for Girls by 2030



Source: Citi Global Insights

Our analysis was carried out before the COVID-19 pandemic. We recognize the current crisis will likely have long-lasting socio-economic impacts around the world, but there is currently not enough data to update our research for the countries in the study. However, girls in developing economies need to be prioritized in COVID-19 recovery plans.

Our economic analysis has focused on the impact educating girls can have on employment and earnings, but in reality the benefits of educating and empowering girls are more far-reaching across their families and communities, which can translate into even greater economic returns. For example, improving the education and health of girls leads to a decrease in mortality and fertility rates, reduced health costs, healthier and more educated children, and it can also help reduce inter-generational poverty. In the report, we also highlight that girls can accelerate GDP growth through increased spending, showing girls should not be seen as only beneficiaries but also as consumers and important economic agents.

The ripple effects across society should not be underestimated, especially when we consider our global pursuit of the UN Sustainable Development Goals (SDGs). Our Citi GPS [UN Sustainable Development Goals](#) report highlighted inter-linkages across the 17 goals, and how achieving one goal will involve addressing issues in others. We believe investing in the development of adolescent girls will have positive implications across the global goals beyond SDG 5 (Gender Equality) and is in fact key to achieving sustainable development overall. The importance of girls' education has been linked to several SDGs including reducing conflict, achieving clean water and sanitation, as well as tackling climate change.

Three Components for Success

How do we break down the barriers that are holding adolescent girls back? We believe there are three key components to achieving success. The first is a *holistic approach to investment and interventions*, across not only areas of education, health, violence prevention, and economic independence, but also over the course of a girl's life.

Second, *collaborative approaches* are needed between governments, the private sector, and NGOs that best utilize the strengths of each sector and its resources, as well as between girls, their families, communities, and the state. If we act in silos, progress is still possible but might only be achieved at a greater cost, with less impact, and over a longer period of time. Lastly, there is a need for *systemic and long-lasting change* that creates an environment in which educated and empowered girls can thrive. This calls for consistent improvement of laws, policies, and norms that end discrimination of girls and women, and open up equal opportunities.

Finally, the report provides examples of targeted interventions in which different sectors can engage to improve opportunities for girls and young women. We have learned from case studies and interviews that if given the opportunity girls want to learn, work, and contribute to their families and communities. Now we need to come together and effectively tackle the barriers that are holding them back. Investing in the development of girls is not only the right thing to do, it also delivers unparalleled returns and impact across generations and societies.

Some Key Statistics Relating to Girls

- 132 million girls worldwide are out of school, which includes almost 100 million girls of secondary school age (UNESCO).
- More than 85 percent of girls in low-income countries do not complete secondary school (UNESCO).
- 15 million girls of primary school age (half of them in Sub-Saharan Africa) will never enter a classroom (UNESCO).
- Intimate partner violence affects an estimated 29 percent of girls aged 15-19 worldwide (WHO).
- Globally, 1 in 5 women were married before their 18th birthday (UN Children's Fund).
- Almost 1 billion girls and young women under the age of 24 (64 percent) are currently lacking key skills needed for life and work. In lower-middle income countries, this translates to 75 percent of girls and young women, and rises to 93 percent for low-income countries (Malala Fund).
- 90 percent of countries have at least one law restricting economic equality for girls and women (World Bank).

Removing barriers to girls being able to fully and equally enjoy their rights creates opportunities from which everyone benefits

Chapter 1: Report Objectives

It is now known that when women are given greater opportunity to participate equally in the labor force, economies grow and societies prosper. Analysis from our Citi GPS [Women in the Economy](#) series shows that reductions in workplace inequalities could add around 6 percent to GDP in advanced countries over the course of one or two decades and this figure could actually be higher in emerging economies. However, the role of girls, and in particular adolescent girls, in achieving growth and prosperity is often overlooked. In many countries, girls still face major barriers to their development. Unequal access to girls' rights and basic services from childhood to adulthood, such as nutrition, education, and healthcare, followed by their unequal access to economic and financial resources and markets later in life, is strongly linked to differences in the economic outcomes of girls and boys, women and men. This has far-reaching consequences for economies and societies. Removing barriers to girls being able to fully and equally enjoy their rights creates opportunities not only for girls to thrive, but for their families and society to benefit as well.

Adolescence is commonly defined as the second decade of life. The ages of 10 to 19 signify a particularly critical phase in life for both girls and boys when many transitional social, economic, biological, and demographic events set the stage for adult life.

“ If adolescence is a time of increased autonomy, however, it is also a time of particular sensitivity and vulnerability, a time characterized by doubt, mistakes, and the making and breaking of relationships with others.

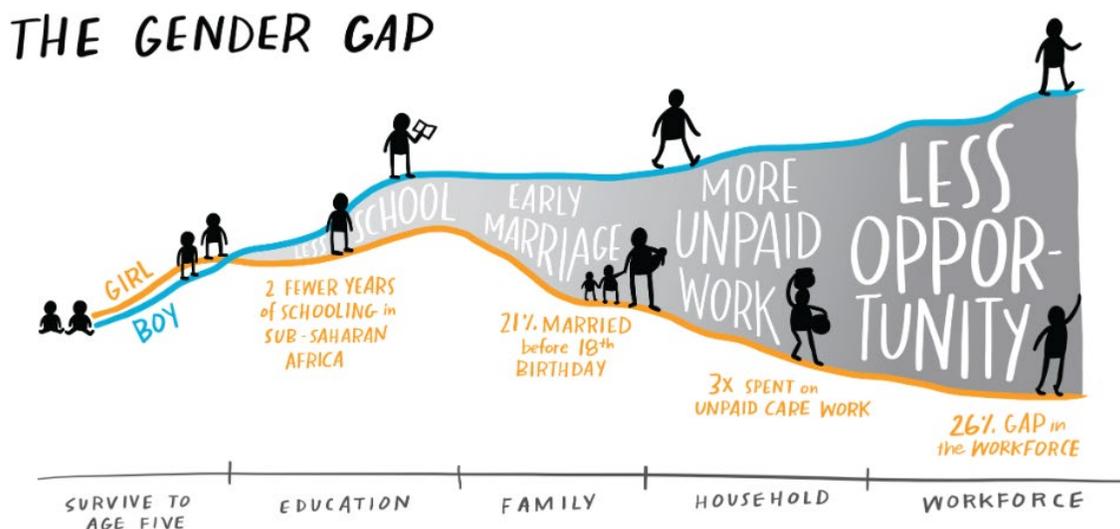
– VAN PRAAGH, S. (2005)²

”

Even though adolescence is a time of outstanding opportunities and risks for girls and boys, it is one of the most critical stages in a girl's development. Gendered stereotyping and discrimination increases during adolescence and leaves adolescent girls more vulnerable than adolescent boys. While it is recognized that in some parts of the world boys also face systematic barriers, such as access to quality education, this report will focus on the effect of advancing the opportunities of one of the most vulnerable population groups worldwide: adolescent girls.

² Van Praagh, S., 2005. "Adolescence, autonomy and Harry Potter: the child as decision maker". *International Journal of Law in Context*. Volume 1, Issue 4, pp 335 – 373.

Figure 2. The Gender Gap



Source: Bill and Melinda Gates Foundation (2019) Goalkeeper report 2019

What this Report Sets Out to Achieve

The success of the UN SDGs in many ways depends upon the investment the global community makes in adolescent girls

According to the World Bank, the success of the UN Sustainable Development Goals in many ways depends on the investment the global community makes in adolescent girls.³ However, most of the existing research on the economic benefits of investing in girls has focused on individual sectors, namely on education followed by health. Economic returns calculated by investing in these sectors include additional earnings for the individual as well as on GDP. Other economic analyses tend to focus on the cost of inaction of not investing in adolescent girls. This is particularly true for violence prevention where the majority of analyses have focused on the economic and social impact associated with the occurrence of violence to girls and women.⁴ One key limitation is the lack of consistent, good quality data on girls, which reflects the general status of gender data — we currently lack the data to monitor 80 percent of the indicators for SDG 5 “Gender Equality” and only 13 percent of countries dedicate a regular budget to gender statistics.⁵ The situation is even worse for younger girls as most official sources only collect data about girls and women aged 15-49.⁶

The need for quality data

In addition to better data, there is also a need for more rigorous research on what works and doesn’t work in improving the lives of adolescent girls across low- and middle-income countries. This is important not just for understanding the complex dynamics across different barriers encountered by girls, but crucial for guiding investment of limited resources.

³ World Bank, 2018. *LEARNING to realize education’s promise*. World Development Report 2018.

⁴ DFID, 2014. *Violence against women and girls*.

⁵ UN Women, 2016. *UN Women launches flagship program initiative making every women count*. UN Women news.

⁶ Plan International, 2016. *Counting the Invisible: Using Data to Transform the Lives of Girls and Women by 2030*.

According to the Population Council, in the absence of rigorous evidence, donors and practitioners often invest in interventions based on intuition alone.⁷ Very few studies have complete information on intervention, costing, and cost-effectiveness but efforts are particularly needed in the fields of violence prevention and wealth creation. This is supported by GAGE (Gender & Adolescence Global Evidence) who highlight that beyond improvements in education and health, the impacts of social programming on adolescent well-being are still poorly understood, and based largely on small-scale, experimental girl-focused programs.⁸ However, even though there is a need for better data collection and research, existing evidence demonstrating the social and economic benefits for investing in girls' well-being is undeniable and compelling (Figure 3).

Figure 3. Some Key Findings From the Literature

Finding	Source
If all girls completed 12 years of education, child, early and forced marriage rates would drop by 64% and 59% fewer girls would become pregnant	UNESCO, 2013
Every extra year a girl stays in primary school, her income increases by 10-20%, and an extra of year of secondary school increases her income by 15-25%	UN Women, 2012
Each additional year of schooling is associated with an 18% higher GDP per capita	UNICEF, 2015
One percentage point increase in female education raises the average level of GDP by 0.37 percentage points	UNICEF/UNESCO EFA, 2011
Limited educational opportunities and barriers to completing 12 years of education cost countries between \$15 and \$30 trillion in lost lifetime productivity and earnings	Wodon et al., 2018
One extra year of education is associated with a reduction of the Gini coefficient by 1.4 %	Patrinos and Psacharopoulos, 2013

Source: Citi Global Insights

In this report, Citi and Plan International have partnered to explore what are the economic and social benefits of investing holistically in adolescent girls

For this report, Citi and Plan International have partnered to explore the question of what are the potential economic and social benefits of investing holistically in adolescent girls. We argue that in order to improve the economic opportunities of adolescent girls, holistic investment needs to focus not only on education, but also on other major barriers facing girls, which are primarily violence, access to sexual and reproductive health and rights, and economic livelihoods which combat poverty and enable financial independence. There is a growing body of evidence⁹ showing the empowerment of girls through a layering of interventions can lead to the greatest impact. However, there do not appear to be many studies considering a holistic approach for investing in adolescent girls.

There are two key contributions this report makes to the existing literature and discussion

We believe there are two key contributions this report makes to the existing literature and discussion:

1. We bring together the economic and social case for investing in girls; and
2. We present a multi-component investment case considering education, child, early and forced marriage, violence prevention, and economic independence.

⁷ Population Council, 2020. The Girl Innovation, Research and Learning (GIRL) Center. <https://www.popcouncil.org/girlcenter>.

⁸ Marcus et al., 2017. *GAGE rigorous review – Girls' clubs, life skills programmes and girls' well-being outcomes*.

⁹ *ibid*; Haberland et al., 2018. *A systematic review of adolescent girl program implementation in low-and middle-income countries: Evidence gaps and insights*. Journal of Adolescent Health, 63(1), 18-31; Austrian, et al., 2018. *Adolescent Girls Initiative-Kenya: Midline Results Report*. Nairobi: Population Council.

In order to explore the potential economic and social benefits of investment, an analytical framework was developed estimating the costs and benefits of investing in girls using data from eight countries — Ghana, Uganda, Mali, El Salvador, Bolivia, India, Lao PDR, and Egypt. Overall the results show that investing holistically in adolescent girls — i.e., comprehensive investment in education, economic empowerment, prevention of violence and child, early and forced marriage — in order to reach 100 percent upper secondary completion rates by 2030 could lift GDP in emerging economies by 10 percent on average compared to a business-as-usual scenario. This takes into consideration not only the costs of education, but also the costs of other interventions such as reducing child, early and forced marriage and violence. Even greater economic returns may be observed beyond 2030, as the benefits are cumulative, and increase as successive cohorts of girls graduate and start working. The results are staggering, especially when faced with the costs of inaction. For example, a study by the World Bank found barriers to completing 12 years education for girls cost the global economy between \$15 and \$30 trillion in lifetime opportunity and earnings.¹⁰

How this report is organized

We start this report with a chapter setting the scene and exploring the current global position with regards to gender equality. This is followed by a chapter discussing in detail the key barriers adolescent girls encounter and how they are inter-connected. The chapter also outlines the social consequences of girls not being able to fulfil their potential and gives examples of holistic interventions that work to improve girls' opportunities. This is followed by a discussion of detailed economic analysis, some of the methodology of which is included later in the Appendix. The report concludes with some key recommendations on how we can collectively come together and improve the lives of adolescent girls. We have also carried out a series of interviews with female leaders of girl-focused initiatives to explore the commonality and diversity of what is being done around the world to empower adolescent girls. These interviews are collated in Chapter 6 and provide real insight into the challenges girls face as well as the immense benefits investing and empowering girls can have for themselves, their families, and the wider society.

¹⁰ Wodon et al., 2018. *Missed Opportunities : The High Cost of Not Educating Girls. The Cost of Not Educating Girls Notes Series*. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/29956> License: CC BY 3.0 IGO.

Chapter 2: Girls & Gender Equality

The Global State of Gender Equality

We have a long way to go to achieve gender equality but the social and economic benefits would be immense

Unfortunately, we still do not live in a world that is close to gender-equal. Globally, women are materially less likely to participate in the labor market than men. Women are paid less than men. Women are less likely to have access to social protection. Women face more disadvantages starting businesses.¹¹ The list goes on. In many parts of the world, being female means not being able to make your own decisions or freely partake in lifetime opportunities. Discrimination against girls and women is rooted in a long history of harmful gender stereotypes and social norms as well as biased laws and policies.¹² For example, social norms that ascribe women as the main caretaker in the household and men as the main breadwinner are an underlying reason for women bearing the disproportionate share of unpaid care work: 75 percent of the world's total unpaid care work is done by women and often mothers are performing household chores together with their daughters, passing down traditional gender roles to the next generation.¹³ However, there is growing evidence showing that women's economic empowerment will benefit not only the individual, her family, and her community but also the wider economy.¹⁴ A recent study from the International Monetary Fund (IMF) found the economic benefits of closing the gender gap may be even larger than previously thought. Using macroeconomic, sectoral, and firm-level data, the study¹⁵ found the economic gains from reducing barriers to women's participation in the labor force not only comes from adding more workers, but there is also a positive effect of gender diversity on productivity creating an additional benefit on growth. This suggests that men's wages will also increase as a result of greater inclusion of women in the labor force.

“ Empowering women in the economy and closing gender gaps in the world of work are key to achieving the 2030 Agenda for Sustainable Development.

– UN SECRETARY GENERAL'S HIGH LEVEL PANEL ON WOMEN'S ECONOMIC EMPOWERMENT

”

Where are we now in terms of achieving gender equality? According to the EM2030 SDG Gender Index, there is no country that has fully achieved gender equality as intended in the UN Sustainable Development Goals. Globally, nearly 1.4 billion women and girls (40 percent) live in countries that are failing on gender equality.¹⁶

¹¹ UN Women, 2019. *Facts and Figures: Economic Empowerment*.

¹² Dilli et al., 2019. *Introducing the Historical Gender Equality Index*. *Feminist Economics* 25:1, 31-57.

¹³ OECD, 2014. *SIGI Index synthesis report*.

¹⁴ In addition to Citi's findings that pursuing gender equality within advanced economies could lift GDP by 6 percent, other studies have found that eradicating gender gaps could add up to 26 percent to global GDP relative to a “business-as-usual scenario” (McKinsey, 2015), and closing LFP gaps could add 12 percent to OECD GDP by 2030 (OECD, 2013).

¹⁵ Ostry et al., 2018. *Economic Gains from Gender Inclusion: New Mechanisms, New Evidence*.

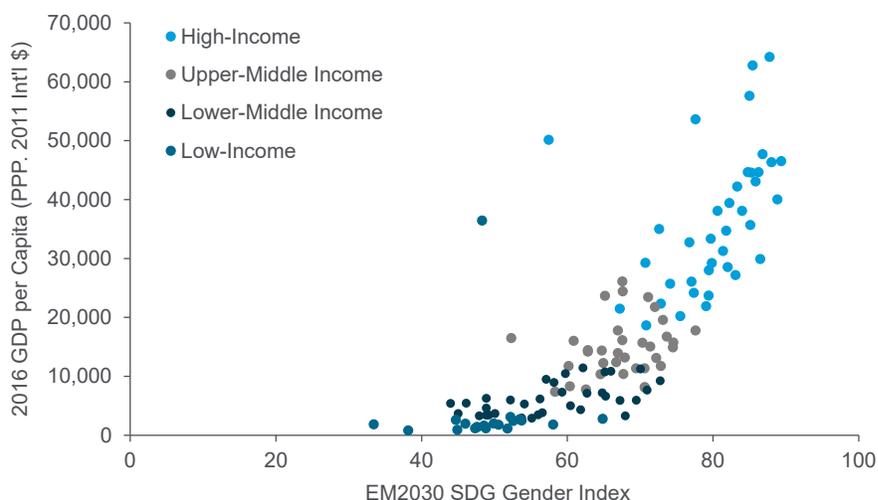
¹⁶ EM2030, 2019. *Harnessing the power of data for gender equality*.

In general, wealthier countries are more likely to have greater gender equality than poorer countries (See Figure 4), but that does not mean high-income countries have fully achieved gender equality. All countries have their own unique history, culture, and socio-economic circumstances, but this shows there is plenty of opportunity for countries (no matter rich or poor) to improve.

On some estimates, it will take almost 100 years to close the global gender gap

According to the WEF Gender Gap Index, which has tracked progress in gender equality since 2006,¹⁷ we have closed the gender gap globally by 4 percent since its inception, reaching 68.6 percent parity in 2019. Based on current trends, it will take us 99.5 years to close the global gender gap but this varies considerably across regions as well as the different dimensions the index takes into consideration.¹⁸ Overall we are moving towards gender parity but progress is rather slow, and stronger commitments and actions are needed across sectors and around the world to fast-track our path to gender equality.

Figure 4. EM2030 SDG Index vs. GDP per Capita (Constant 2001 International \$)



Source: EM2030, Citi Global Insights

Equal Measures 2030 and the SDG Gender Index

Equal Measures 2030 is a unique cross-sector partnership of leading organizations from civil society and the development and private sectors. It works to ensure that girls' and women's movements, advocates, and decision makers have the data they need, and in a format they can use, to guide and drive faster progress towards the gender equality commitments in the Sustainable Development Goals (SDGs).

In 2015, 193 countries signed on to the Sustainable Development Goals (SDGs) — the most ambitious development agenda in history — pledging to achieve gender equality and leave no one behind. The new global development framework makes clear that addressing gender inequality is critical to broader global progress across many development areas: gender equality is integrated in indicators throughout the majority of the global goals, with one stand-alone goal (SDG 5) specifically focused on it.

¹⁷ WEF Gender Gap Index consists of an overall gender gap index, which is made up of 4 subindexes – Economic participation and Opportunity, Political empowerment, Education attainment and Health and Survival.

¹⁸ WEF, 2020. *Global Gender Gap Report 2020*.

A number of mechanisms exist to measure gender equality or track progress against the SDGs. The SDG Gender Index, launched by Equal Measures 2030 in 2019, is the most comprehensive tool to measure gender equality aligned explicitly to the SDGs, and provides a bellwether for the progress and problem areas potentially impacting broader development gains. The approach used by Equal Measures 2030 in constructing its global index on gender equality was to get at a broad picture of core gender issues and enabling conditions for girls and women, including those not covered by other indices, but that are nonetheless critical to women's rights and lived realities.

The index is based on 51 gender-sensitive indicators across 14 of 17 Sustainable Development Goals. Indicators in the index are roughly aligned to SDG issues and targets agreed to measure progress toward the SDGs. Issues included in the index range from climate change, health, and nutrition to economic opportunities, property rights, and gender-based violence. Each country receives an overall score and individual goal scores on a scale from 0 to 100 ("very poor" = <59 points, up to "excellent" = >90 points). The average index score for the world (129 countries) — which represent 95 percent of the world's girls and women — is just 65.7 out of 100.

The SDG Gender Index results for 2019 show that all countries — but particularly the poorest countries and those facing fragility and conflict — have much more to do to realize the vision of gender equality laid out across the SDGs. The most interesting stories in the Index data can be found by looking beyond the top-level scores to examine how countries perform on the different issues that make up the index. Here we can see there are many gender equality issues that even the best performing countries overall need to improve on, but also that there are pockets of good practice and progress even in those countries with lower scores on the index overall.

For example, using the gender equality goal (SDG 5), some lower-to-middle-income countries score very well on this goal in the index: South Africa, Rwanda, and Namibia all rank within the top 35 countries in the world on SDG 5 while their overall index ranks are 71, 91, and 75, respectively. What drives the relatively high index scores on SDG 5 in these countries is "excellent" scores on two indicators related to women's political participation; all three countries have high representation of women in both national parliaments and in the most senior government positions. This underscores the importance of looking beyond the headline index findings to discover the compelling and sometimes surprising success stories on key gender equality issues in countries from all regions and all income levels.

Exploring strengths and weaknesses across goals and countries can also show where there are potential gains for both individuals and markets that can come from a greater focus on gender equality. As the world's economy is increasingly driven by advanced technologies, closing the global gender gap in science, technology, engineering, and math (STEM), for example, is crucial. How else can countries build a full pipeline of qualified workers in these fields? Yet the index data reveal some challenging findings: women continue to be under-represented in science and technology research positions, even in countries with relatively high levels of gender equality overall. There are 17 countries in Europe and North America, where less than 35 percent of science and technology researchers are women. Several of these countries with very low female representation in science and technology research — including Germany and Austria — are heavily invested in research and development (R&D) overall. This indicates several global powerhouses in engineering are missing out on the potential STEM talent pool amongst women, who make up half of the population. On the positive side, lessons can be drawn from those countries which have reached gender parity in science and technology research: Bulgaria, Canada, Croatia, Georgia, Latvia, and Moldova.

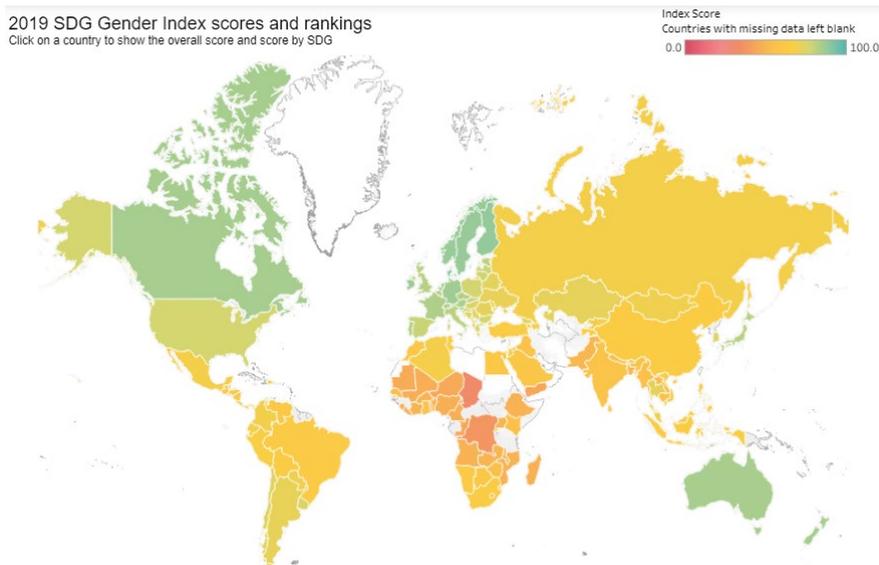
Another example where the index points to missed opportunities for shared growth can be seen in countries where strong investments in education for girls and women have been made but where other factors hold girls and women back from carrying that education through to active participation in work and in the economy. Barriers such as discriminatory laws for women in the workplace and lack of access to assets such as bank accounts mean that many countries are not reaping the full benefits of their educational investments in girls and women, not to mention the impact of those barriers on girls and women themselves. Amongst the 15 countries with the highest scores on the education goal (SDG 4) in the index — where participation in secondary and continuing education is the norm for girls and women — four countries (Kazakhstan, Japan, South Korea, and Ukraine) score "poor" on the extent to which they have laws mandating women's workplace equality, and three (Georgia, Kazakhstan, and Ukraine) score "poor" on women's access to financial institutions. While these countries may promote equal learning opportunities, they need to address the barriers faced beyond schooling in order to turn this investment into improved women's empowerment, and into growing economies.

These examples illustrate how the index can be used to provide new insights into the relationships and linkages between different SDGs and a wide range of gender equality issues, and how it can shine a light on where progress is being made and where it is lagging. The current SDG Gender Index provides baseline data from the start of the SDG agenda (around 2015, depending on data availability) and it will be updated every two years until 2030 so that it can track changes in gender equality over time.

The urgency for change cannot be overstated. Given the evidence that focusing on the advancement of girls and women accelerates progress across the entire development spectrum, champions for gender equality from all sectors can and should continue to use the data in the index to ensure that gender equality — in all its breadth and complexity — is at the top of the agenda in boardrooms and in policymaking circles. The index can be used to build consensus around priorities for action. It can also be used to drive attention to the data gaps hampering our ability to track all the gender equality issues requiring resolution for all girls and women, to ensure we leave no one behind. And it can shine a bright and relentless spotlight on gender equality, using data to systematically track whether, where, and how quickly the goal of full gender equality is being achieved.

For more about the Index and the EM2030 partnership, please visit www.equalmeasures2030.org

Figure 5. 2019 SDG Gender Index Scores and Rankings



Source: EM2030

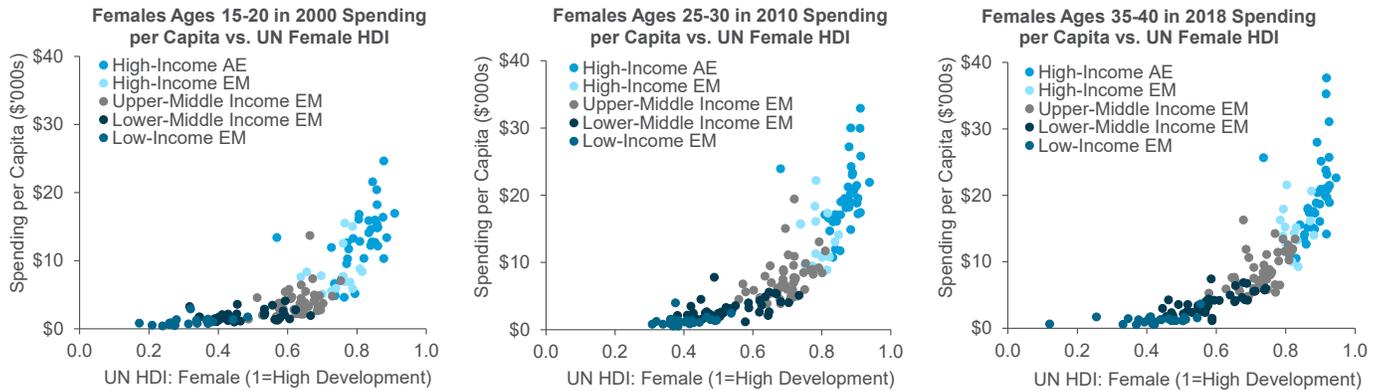
Economies that have invested in improving gender equity over the last two decades have experienced faster GDP growth

Economies which have invested in improving gender equity over the last two decades have experienced faster GDP growth. Spending is a useful proxy for growth and economic improvement — measured as the number of persons lifted out of poverty. Tracking average spending per capita for the representative young woman over the last 20 years suggests that as economies increased the human development of women, including narrowing gender equity gaps, spending increased. Unsurprisingly, high-income advanced economies that narrowed human development gaps for females gauged by the UN’s Human Development Index (HDI)¹⁹ saw notable improvements in spending per capita for women as they aged from 2000 to 2018. Per capita spending among high-income advanced economy women increased from an average of \$13,313 at ages 15-20 in 2000 to \$20,300 by 2018 at ages 35-40, while the average HDI rose from 0.82 to 0.89.

¹⁹ The Human Development Index is a tool used to measure a country’s achievement across social and economic dimensions. Indicators include life expectancy, education, and per capita income.

High- and upper-middle income emerging markets also experienced increased spending as the HDI rose. High-income emerging markets generated an improvement in HDI from 0.75 to 0.82 and a pick-up in spending of \$3,700 per capita, while the upper-middle income emerging markets HDI rose from 0.63 to 0.73 with an uptick in spending of \$4,261 per capita on average. The improvement is also noticeable among poorer emerging markets that saw an increase in the average HDI (lower-middle income emerging markets from 0.48 to 0.59; low-income emerging markets from 0.32 to 0.42) and per capita spending (+\$1,827 for lower-middle income and +\$172 for low-income emerging markets).

Figure 6. Investment in the Development of Young Women Likely has Helped to Bolster Consumer Spending and GDP Over the Last 20 Years



An example of how adolescent girls are adversely affected by gender inequality is in relation to SDG 4, which addresses education. The latest progress report on gender parity in education shows that while two-thirds of countries have reached parity in primary education enrollment, only one in two countries have reached gender parity in lower secondary education enrollment and one in four in upper secondary education enrollment.²⁰ Globally, 9 out of 10 girls complete primary education, but only 3 in 4 complete their lower secondary education.²¹ Girls across Africa are particularly at risk of being left behind, where roughly 28 million girls aged between 5 and 15 are currently not in school, and many will never set foot in a classroom.²² Sadly, the current COVID-19 pandemic is likely to worsen the situation in regions which already faced severe educational challenges before the crisis. In the following section, we discuss how COVID-19 is impacting girls and women.

Impact of COVID-19 on Girls and Women

Implications on girls and young women due to the COVID-19 pandemic are likely to be serious

In times of crises, the world's poorest and most vulnerable are often the most severely impacted, and adolescent girls are particularly at risk. The current COVID-19 pandemic is a rapidly evolving situation, and while we do not have clarity around the final implications for girls and young women, we know they will be serious and could turn back the clock on decades of progress for girls' equality. Around the world, schools have closed as part of COVID-19 containment measures. At its peak UNESCO²³ estimated an astounding 89 percent of the 1.5 billion children enrolled in education were out of school including 743 million girls, and within that more than 110 million living in the world's least developed countries.

²⁰ UNESCO, 2019. *Global Education Monitoring Report – Gender Report: Building bridges for gender equality*. Paris, UNESCO.

²¹ Wooden et al., 2018. *The cost of not educating girls – missed opportunities: the high cost of not educating girls*.

²² UNESCO, 2015. *Left behind – Girls' education in Africa*.

²³ UN Policy Brief, 2020. *Education during COVID-19 and beyond*.

Lack of access to education during crisis also heightens other issues and barriers, including violence, child marriage, pregnancy and lack of economic independence

Limited access to computers, internet, and even electricity make it near impossible in some communities to continue with online learning, and boys are more likely than girls to have internet access. Even before the COVID-19 pandemic, Plan International has been researching girls in crises settings, and found across several studies that adolescent girls in crises identify a lack of access to education as a major concern in their lives.

School closures have impacts beyond the direct loss of education. When girls are out of school, the risk of other issues and barriers which we discuss in the report are further heightened — violence, child marriage and pregnancy, and lack of economic independence. These in turn also increase the risk of girls not returning to school, and once a girl drops out of school, it is generally very difficult for them to return. Lockdown measures can also make girls more vulnerable to violence, exploitation, and abuse, and at the same time prevent access to vital social and health services. During the 2014-2016 Ebola epidemic in Sierra Leone, schools were closed to stop infection and teenage pregnancies increased by over 60 percent. The UN Development Programme (UNDP) reported the increase in adolescent pregnancies during the outbreak has been largely attributed to the closure of schools, and that more girls died from childbirth complications than from Ebola itself.²⁴

The economic hardship that comes with crises will also have cascading impacts for girls and basic needs such as access to drinking water, food, and healthcare may not be met. Families may no longer be able to afford schooling, and instead prefer girls to find work versus returning to school. Girls may also be driven into child marriage and early pregnancy, which feeds into the cycle of re-enforcing barriers. Even if girls are able to go back to school, the economic crisis triggered by the pandemic will likely have an impact on their prospects in the job market for years to come. COVID-19 is already eroding female labor force participation (LFP) and its contribution to global growth. Citi's Global Economics team found women are bearing the brunt of layoffs at a much higher rate than men — a total of 44 million employees will likely face layoffs due to the pandemic, with ~31 million likely to be women. If these estimates are correct, the equivalent loss to real GDP could be ~\$1 trillion (or 1.2 percentage points of the 3.6 percent year-on-year drop in GDP growth expected in 2020). Women are also more likely to be caretakers, which increases the risk of them not returning to the workforce. These two factors added together could mean that any gains made in female LFP over the past five years will be lost. The situation and potential impact will likely be worse in developing economies where the majority of women's employment is in the informal economy with little protection or safety nets.

Girls and young women are disproportionately impacted by emergencies and are often chronically overlooked

The harsh reality is that girls and young women are disproportionately impacted in emergencies and are often chronically overlooked. Even when services are provided, they are not tailored to their specific needs. Crises like COVID-19 only exacerbate and magnify the barriers that adolescent girls across developing economies already face. Investments in girls are needed now more than ever across developing economies to ensure (1) girls' basic needs are met; (2) they feel safe and secure; (3) they can go back to school and stay in education; and (4) they have access to economic opportunities. This will not only deliver invaluable social benefits but may be critical to economic recovery.

²⁴ UNDP, 2015. *Socio-Economic Impact of Ebola Virus Disease in West African Countries*.

Plan International's ongoing research on girls in crises has led to the development of an adolescent programming toolkit to help girls' empowerment in crises settings. More information can be found [here](#).

Adolescence: The Critical Age of Opportunity

Of the 7.2 billion people worldwide, over 3 billion are under the age of 25 and around 1.2 billion of these young people are adolescents aged between 10 and 19

As alluded to above, if countries want to achieve gender equality across the SDGs, actions need to be taken to enable gender equality from a young age onwards. Investing in adolescents is more important than ever before with the highest proportion of young people ever being alive today. Of the 7.2 billion current worldwide population, over 3 billion are under the age of 25 and around 1.2 billion of these young people are adolescents aged between 10 and 19.²⁵ The highest proportion of young people today are living in poor countries, where barriers to their development and fulfilment of their potential are the highest. Given that today's world population consists of more young people than ever before, investment in adolescent development is not only crucial for individual development but also for the advancement of society as a whole.²⁶

“ Young people are the greatest resource for societies to thrive. I encourage more countries to invest in improving the health of young people and engaging them in decision-making processes and initiatives to achieve health for all. ²⁷

—DR. TEDROS ADHANOM GHEBREYESUS, WHO DIRECTOR-GENERAL

It is clearly apparent that the potential of many adolescents, especially adolescent girls, is widely compromised and that social, economic and legal interventions are needed to realize potential

The specific opportunities and constraints within each stage in life are interlinked and determine the possibility for positive or negative development in future life stages. Adolescence is a significant time of transition and potential that has the power to offset opportunities missed during childhood.²⁸ However, when looking at the situation of adolescents across the globe, it becomes apparent the potential of adolescents, especially adolescent girls, is widely compromised and that social, economic, and legal interventions and changes are needed.

²⁵ World Health Organization, 2018. *Coming of age: adolescent health*.

<https://www.who.int/health-topics/adolescents/coming-of-age-adolescent-health>

²⁶ United Nations Population Fund, 2013. *UNFPA Strategy on Adolescents and Youth*. New York: United Nations Population Fund.

²⁷ World Health Organization, 2018. *Engaging young people for health and sustainable development. Strategic opportunities for the World Health Organization and partners*. Geneva: World Health Organization.

²⁸ United Nations Convention on the Rights of the Child, 2017. *General comment No. 20 (2016) on the implementation of the rights of the child during adolescence*. New York: United Nations.

For example, in 2018 the global youth unemployment rate reached 12.8 percent²⁹ and approximately 70 million youth lived on income below the extreme poverty threshold of \$1.90 a day, partly because they often start their working lives in the informal economy.³⁰ In 2016, over 3,000 adolescents died every day, mostly from preventable or treatable causes.³¹ Globally, 84 million girls between the age of 15 and 19 have been subjected to psychological, physical, or sexual violence by their husband or partner.³² The primary cause of death for adolescent girls between the ages of 15 and 19 is complications during pregnancy and childbirth.³³

The argument for investing in adolescents is not only based on the social and economic benefit for individuals, communities, and economies that stemming from investment, but it also has to be recognised that adolescents have an intrinsic right to a safe and successful passage through adolescence into adulthood. This right has been set out in international instruments, such as the United Nations Convention on the Rights of the Child, regional instruments such as the African Charter on the Rights and Welfare of the Child, and a plethora of national legislation to give effect to their special status and need for additional provisions over and above those of other human rights instruments. The rights afforded to adolescents can only be fulfilled if families and societies make focused investments and provide opportunities to ensure that adolescents progressively develop the knowledge, skills, and resilience needed for a healthy, productive and fulfilling life.

The following chapter will discuss the key barriers that are specific to adolescent girls and what can be done to help girls overcome those barriers.

²⁹ International Labour Organization, 2019. *Youth unemployment rate estimates and projections by region 2007-2017*. https://www.ilo.org/global/about-the-ilo/multimedia/maps-and-charts/WCMS_212431/lang-en/index.htm.

³⁰ International Labour Organization, 2017. [Global Employment Trends for Youth 2017: Paths to a better working future](#). Geneva: International Labour Organization.

³¹ World Health Organization, 2018. *Adolescents: health risks and solutions*. <https://www.who.int/en/news-room/fact-sheets/detail/adolescents-health-risks-and-solutions>.

³² Ibid.

³³ Ibid.

Chapter 3: Key Barriers & Pathways in an Adolescent Girls' Life

The Lifecycle Approach to Adolescence

Introduction - Risks for Adolescent Girls

This chapter has been largely compiled by the research team at Plan International with particular thanks to Miriam Gauer

By the time many girls reach adolescence, they have already experienced exclusion and inequality because of their gender

An estimated 125 million 10-year olds are alive today, part of the largest number of young people in human history. Of these adolescents, who are the adults of tomorrow, just over 60 million are girls.³⁴ At the beginning of adolescence, boys and girls arrive at a challenging time where they must negotiate rapid changes in body and brain, and dramatic shifts in family and social expectations in order to find their place in society. Although risks and obstacles manifest for both girls and boys, gender discrimination³⁵ leaves adolescent girls more vulnerable than adolescent boys. This means that even though the obstacles faced by adolescent girls vary in type and intractability around the world, there are always gender-specific obstacles that disadvantage girls compared with boys.³⁶

By the time many girls reach adolescence, they have already experienced exclusion and inequality because of their gender. Many have been raised according to discriminatory societal expectations about how girls should behave compared to boys. The manifestations of discrimination, inequality, and stereotyping based on gender intensifies during adolescence, leading to more serious violations of a girl's rights, including child, early and forced marriage (CEFM), lack of access to education, unintended early pregnancy and motherhood, female genital mutilation, burdensome domestic chores, gender-based physical, psychological and sexual violence, abuse, exploitation, and trafficking. It is important to recognize that an adolescent girl's pathway is further compounded by other factors. Adolescent girls around the world, in countries of all income levels, experience additional disadvantages on the basis of individual characteristics and socio-economic status such as income, ethnicity, religion, sexual orientation and gender identity, disability, or migratory status, among other factors. Those girls are amongst the most vulnerable and are often denied their rights and access to services.

³⁴ United Nations Population Fund, 2016. *State of the World Population 2014. The Power of 1.8 Billion*. New York: United Nations Population Fund. Although four years old, the statistic is still the most recent specifically for 10-year-olds as most data portals provide population data by age groups.

³⁵ The United Nations Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) defines gender discrimination as "Any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on the basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field." Discrimination can stem from law (de jure) or from practice (de facto). The CEDAW Convention recognizes and addresses both forms of discrimination, whether contained in laws, policies, procedures or practice.

³⁶ United Nations Population Fund, 2016. *State of the World Population 2016. 10 – How our future depends on a girl at this decisive age*. New York: United Nations Population Fund.

One example of girls who are most vulnerable due to intersecting factors has been surfaced in Plan International's research on the situation of adolescent Rohingya girls living in refugee sites in Bangladesh. The study highlights the severity of consequences for adolescent girls who are refugees of an ethnic minority. Over 75 percent of Rohingya girls that were interviewed said that they have no ability to take decisions about their lives. The lack of freedom has far-reaching consequences: girls cannot learn, access health services, or gain new skills which might help them rebuild their lives. Instead adolescent Rohingya girls who are living in refugee sites are subjected to a disproportional burden of household duties including collecting clean water, and are more at risk of early and unwanted pregnancy and child, early and forced marriage.³⁷

"My parents will force me to get married. I have nothing to do. They could not do it in Burma but can do it here."
Rohingya girl, 18

"I want to be educated but cannot. This is the biggest interruption/barrier in my life. I have a desire to establish myself by studying"
Rohingya girl, 14

While there are a wide range of barriers for adolescent girls, we focus on some of the most widespread and critical ones, which relate to health, education, violence, and economic independence

The obstacles that adolescent girls face are made up of complex and interlinked layers of inequality across various aspects of everyday life. While it is impossible to discuss the full range of barriers for adolescent girls, this chapter and the economic analysis in Chapter 4 will focus on some of the most widespread and critical barriers, which relate to health, education, violence, and economic independence. The challenges facing adolescent girls in all four areas are often interlinked and weave through the course of their lives. In a girl's life, violence is not a separate issue but is instead embedded in all areas and acts as an amplifier for barriers and discrimination. Violence against adolescent girls manifests itself in physical, sexual, and psychological forms: 1 in 3 girls and women worldwide have experienced physical or sexual violence by an intimate partner.³⁸ Girls who are married while they are children and become pregnant at a young age are specifically at risk of being subjected to all forms of intimate partner violence.³⁹ An estimated 15 million adolescent girls worldwide have experienced rape at some point in their life.⁴⁰ Likewise, school-related gender-based violence, which is rooted in students' harmful gender norms, stops girls from fulfilling their potential in education. A study by Plan International, where 7,000 adolescent girls and boys from 11 countries were interviewed on the key issues for adolescence, showed that one-third of adolescent boys and girls agree girls never or seldom feel safe on their way to or from school.⁴¹ Therefore, in this report, violence will be discussed as a cross-cutting issue amplifying girls' barriers in the areas of health, education, and economic independence.

³⁷ Plan International, 2018. *Adolescent girls in crisis: voices of the Rohingya*. <https://plan-international.org/publications/adolescent-girls-crisis-rohingya>.

³⁸ World Health Organization, 2013. *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*. Geneva: World Health Organization.

³⁹ UNICEF, 2017. *A familiar face. Violence in the lives of children and adolescents*. New York: UNICEF.

⁴⁰ Ibid.

⁴¹ Plan International, 2014. *Hear our voices*. <https://plan-international.org/publications/hear-our-voices#download-options>.

Figure 7. Most Critical Barriers for Adolescent Girls in the World Today



Source: Plan International

When a girl succumbs to a barrier in early adolescence, she will inevitably be denied her rights and lose opportunities in the future

Overcoming these barriers will determine whether girls can embark on an upward trajectory in their pursuit of a healthy, productive, and fulfilled life. When a girl succumbs to a barrier in early adolescence, she will inexorably be denied her rights and lose opportunities in the future and is therefore more likely to succumb to further barriers in late adolescence. This will send her on a downward trajectory. Once a girl finds herself on such a downward trajectory it will be extremely burdensome and costly for her to recover her rights and opportunities.⁴² An example of a barrier that will deprive a girl of her future rights and opportunities but instead will lead to further issues is child, early and forced marriage (CEFM). CEFM⁴³ usually means an end to a girl's education, minimizes her chances of ever holding a paid job in the formal labor market, increases her risks of becoming a victim of intimate partner violence, plus early pregnancy, and raising her own children in a cycle of poverty. Equally, a girl that overcomes barriers in early adolescence will be able to seize opportunities, be able to avoid and navigate future barriers and enjoy her rights while being set on an upward trajectory into young adulthood.

Determining Factors Affecting a Girl's Trajectory

The following section will discuss the contextual and individual factors affecting whether a girl will be sent on an upward or downward trajectory. The trajectories will be explained chronologically through the lifecycle of adolescence, meaning that barriers faced in early adolescence will have a ripple effect on barriers in late adolescence.

⁴² Bruce, J., 2014. *Unmet Promises to Girls: What, Why, and How*. New York: Population Council.

⁴³ The United Nations Human Rights Office of the High Commissioner defines child, early and forced marriage (CEFM) as "any marriage where at least one of the parties is under 18 years of age. Forced marriages are marriages in which one and/or both parties have not personally expressed their full and free consent to the union. A child marriage is considered to be a form of forced marriage, given that one and/or both parties have not expressed full, free and informed consent."

Before discussing girls' barriers in early and late adolescence, it is important to understand the three main contextual factors determining an adolescent girl's ability to fulfil her potential: social norms; attitudes and behaviors; assets and resources; and laws and policies.

There are three main contextual factors that determine an adolescent girl's ability to fulfil her potential: social norms, attitudes and behaviors; assets and resources; and laws and policies

- **Social norms, attitudes and behaviors** define how a girl is valued by herself and by others, what she is deemed capable of, what she should or should not do, her status as an individual, and thereby the choices and opportunities open to her. It is worthy to note that almost six in ten adolescent girls live in countries with high levels of gender inequality according to the Gender Inequality Index (GII). The discriminatory gender norms girls are facing in those countries put them at a disadvantage compared to boys. In reality this often means these girls are less likely to stay in school, more likely to be engaged in unpaid household work, more likely to be married early, and are more likely to have children too early leading to irreversible health issues.⁴⁴
- **Assets and resources** relate to girls' level of control over their own time, money, social capital and networks, social skills, and skills related to health, including sexual and reproductive health. The existence and development of a girls' assets and resources are crucial to her academic performance, improved sexual and reproductive health, self-esteem and goal setting, as well as economic independence.⁴⁵
- **Laws and policies** govern the provision of rights, opportunities, and services available to a girl. They determine whether she has the right not to be married as a child; her equal rights as a citizen; whether she has equal access to fundamental services, like health, education, social or financial support; whether she has access to services that can protect her against violence and abuse; and equal access to justice.

Solutions that enable adolescent girls must be as multi-faceted as the complex layers of obstacles adolescent girls are subjected to throughout their life. They must take into account the social and economic context in which a girl is growing up. An example which clarifies the need for multi-faceted solutions and to consider contextual factors is the complex connection between education and economic empowerment.

While education is a necessary step towards economic empowerment, it is not sufficient in guaranteeing that an adolescent girl will be able to be economically independent. In some countries, discriminatory gender norms, policies, and laws do not allow adolescent girls and young women to fully participate in the formal labor market despite completing secondary education.

⁴⁴ United Nations Population Fund, 2016. *State of the World Population 2016. 10 – How our future depends on a girl at this decisive age*. New York: United Nations Population Fund.

⁴⁵ Plourde, K.F. et al., 2017. *Mentoring interventions and the impact of protective assets on the reproductive health of adolescent girls and young women*. *Journal of Adolescent Health*, 61(2), pp.131-139.

Plan International's Girls Plan

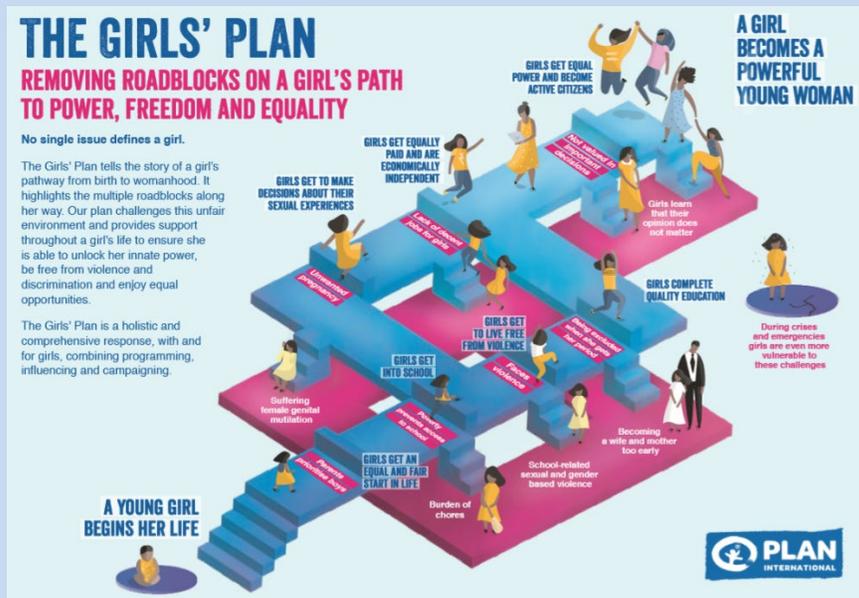
Plan International's vision is for adolescent girls everywhere to fulfill their true potential and enjoy their rights. A vision where girls have the power, freedom, and voice to overcome the roadblocks they face. Every time a girl makes a decision about her future, she becomes stronger and more confident. As she grows, believing in her own value, she takes deeply transformational steps on her journey to adulthood. She takes ownership of her future and takes her rightful place in the world.

Imagine societies where girls grow up feeling equal to their male peers, knowing they will learn and be in school right through adolescence, where they go on to pursue the careers they want and become economically independent, where they make decisions over their bodies, and choose if and when to have children. Imagine a world where girls are equally seen, heard, and valued by themselves and by all.

In order to turn this vision into reality, Plan International created the Girls' Plan which is a holistic and comprehensive approach to achieve a gender just world. It focuses on supporting girls' power, freedom and voice up to and throughout adolescence. It tackles multiple interrelated and reinforcing roadblocks that girls face throughout their young life.

Whether the roadblocks are reinforced throughout a girl's life or torn down will mean the difference between a future of dependency, powerlessness and poverty, and one of autonomy, engagement and economic strength.

Therefore Plan International focuses on six investment areas for girls that encompass girls getting an equal and fair start in life, girls getting into school and completing quality education, girls living free from violence, girls being able to decide over their own bodies and enjoying sexual and reproductive health and rights, girls getting equal pay and becoming economically independent and girls gaining political power and being able to participate in society as active citizens.



Two Paths Through Adolescence

Early Adolescence

The challenges of early adolescence

Early adolescence is broadly considered to stretch between the ages of 10 to 14 years and marks the beginning of rapid physical, psychological, and social changes in a young person's life which have implications on their future health and well-being and affects how they will think and act as adults.⁴⁶ Early adolescence should be a time when young people have a safe space to come to terms with their cognitive, emotional, sexual, and psychological transformation.⁴⁷ However, girls might become more aware of new risks and disadvantages associated with being a girl and experiences of gender discrimination may become amplified across several areas of their lives.

Age 10 is a turning point in a girl's life as she is only at the beginning of her journey through adolescence into adulthood, and into a future that has the potential to be secure and successful. However, the manifestation of harmful gender norms and stereotypes that go along with the transition from childhood to adolescence lead to increased discrimination and serious rights violations including child, early and forced marriage, female genital mutilation, and a lack of access to secondary and tertiary education.

“For many girls in the developing world, their opportunity to move freely in the community becomes limited at the onset of puberty. This may be a well-intentioned protective measure, but the effect can be to limit girls’ opportunity to form strong social networks, gain the requisite skills, and learn how to be full members of their community.”⁴⁸

The following section discusses some of the most widespread and pressing issues for adolescent girls between the ages of 10 to 14 years.

Child, Early and Forced Marriage

According to recent data from UNICEF, 12 million girls are married in early adolescence every year

In some parts of the world when a girl reaches the age of 10, she is deemed ready for marriage. Worldwide, an estimated 650 million women alive today were married before their 18th birthday⁴⁹ and according to new data from UNICEF, 12 million girls are married in early adolescence every year.⁵⁰ Over the past decade, the practice of child marriage has declined around the world due to the increasing rates of girls' education, increased government investments in adolescent girls, and strong public messaging around the illegality of child marriage and its harmful consequences.⁵¹

⁴⁶ UNICEF, 2011. *State of the World's Children 2011: Adolescence an Age of Opportunity*. New York: UNICEF.

⁴⁷ IBID.

⁴⁸ Baldwin, M., 2011. *Creating “Safe Spaces” for Adolescent Girls’, Transitions to Adulthood*.

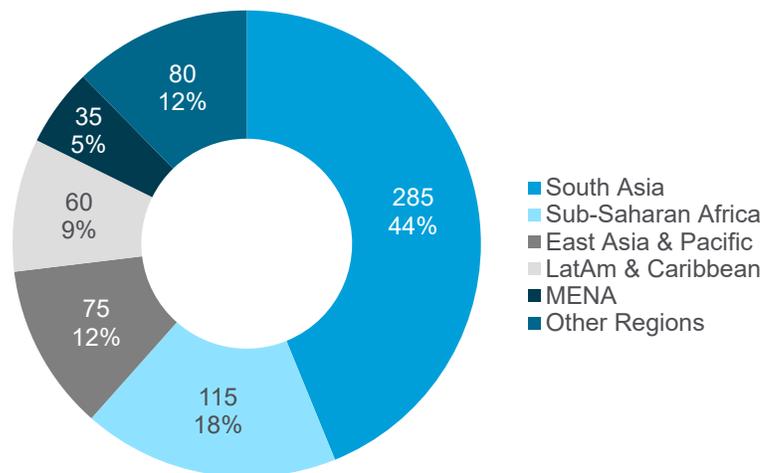
⁴⁹ United Nations Children's Fund, 2018. [Child Marriage: Latest trends and future prospects](#). UNICEF, New York.

⁵⁰ United Nations Children's Fund, 2018. [25 million child marriages prevented in last decade due to accelerated progress, according to new UNICEF estimates](#) [Accessed 6 August 2019].

⁵¹ UNICEF. 2018. [25 million child marriages prevented in last decade due to accelerated progress, according to new UNICEF estimates](#). New York: Press release.

The proportion of young women who were married as children decreased by 15 percent in the last 10 years, from one in four to approximately one in five,⁵² which translates to an estimated 25 million child marriages having been prevented.⁵³ South Asia witnessed the largest decline in child marriages worldwide in the last 10 years, as a girl's risk of marrying before her 18th birthday dropped by more than a third, from nearly 50 to 30 percent, in large part due to progress in India⁵⁴. But South Asia still remains home to the largest number of child brides accounting for 44 percent of the global burden (285 million), followed by Sub-Saharan Africa, which makes up 18 percent of the global total (115 million).⁵⁵ While the global reduction in child marriage is to be celebrated, no region is on track to eliminate child marriage by 2030 — the target set out in the SDG 5.3.⁵⁶ In fact, at the rate of progress since 1990, it would take nearly a century to eliminate child marriage worldwide.⁵⁷ To end the practice of child marriage by 2030, global progress would need to be 12 times faster than the rate observed over the past decade.⁵⁸ Without further acceleration, more than 150 million additional girls will marry before their 18th birthday by 2030.⁵⁹

Figure 8. Number of Women First Married or in Union Before Age 18 (millions)



Source: UNICEF. 2018. *Child Marriage. Latest trends and future prospects*

⁵² United Nations Children's Fund, 2018. [Child Marriage: Latest trends and future prospects](#). UNICEF, New York.

⁵³ Ibid.

⁵⁴ United Nations Children's Fund, 2018. [25 million child marriages prevented in last decade due to accelerated progress, according to new UNICEF estimates](#) [Accessed 6 August 2019].

⁵⁵ United Nations Children's Fund, 2019. [Fast Facts: 10 facts illustrating why we must #EndChildMarriage](#) [Accessed 7 August 2019]

⁵⁶ United Nations Children's Fund, 2018. [Progress for Every Child in the SDG Era](#). UNICEF, New York, 2018.

⁵⁷ Ibid.

⁵⁸ United Nations Children's Fund, 2019. [Fast Facts: 10 facts illustrating why we must #EndChildMarriage](#) [Accessed 7 August 2019].

⁵⁹ United Nations Children's Fund, 2018. [25 million child marriages prevented in last decade due to accelerated progress, according to new UNICEF estimates](#) [Accessed 6 August 2019].

Adolescent brides are at greater risk of experiencing a range of poor health outcomes due to discriminatory practices that go hand in hand with early marriage

Child, early and forced marriage (CEFM) is a human rights violation that limits girls' basic rights to health, education, equality, non-discrimination, and to live a life free of violence and exploitation.⁶⁰ Child marriage puts a girl on a downward trajectory, paved with poor health, the end to education and the beginning of a cycle of poverty, and often violence.

Adolescent brides are at greater risk of experiencing a range of poor health outcomes due to discriminatory practices that go hand-in-hand with early marriage. The most severe examples of discriminatory practices are female genital mutilation (FGM) which is often used as a rite of passage before a girl gets married; intimate partner violence as a result of harmful gender norms and the power imbalance between the girl and her husband; and expecting girls to bear children when they are not physically or mentally ready to become a mother. In fact, adolescent brides typically have children during adolescence, which is earlier than their peers, and also have more children more frequently than their peers. Given the direct relationship between child marriage and early childbearing, World Bank research estimates across 25 countries, more than 4 out of 5 early childbirths may be attributable to child marriage.⁶¹

As mentioned earlier, violence is a cross cutting issue in all of the challenges discussed in this chapter, but perhaps most particularly in relation to child, early and forced marriage. Girls who marry during early adolescence are more likely to face violence from an intimate partner. The greater the age difference with their husbands, the more likely they are to experience violence. Globally, girls who marry before the age of 15 are almost 50 percent more likely to have experienced physical or sexual violence from a partner than girls who married after age 18. The consequences of being subjected to intimate partner violence during early adolescence manifest during late adolescence. Globally, 44 percent of girls aged 15-19 think a husband or partner is justified in hitting or beating his wife or partner.⁶² In addition, adolescent brides are more likely to describe their first sexual experience as forced and due to the age difference and the power dynamics, they often struggle to assert their wishes to their husbands or negotiate safe and consensual sex.⁶³ These dynamics affect not only the girls themselves, but their children, households, communities and societies, limiting their ability to reach their full social and economic potential.⁶⁴

Economic consequences of child, early and forced marriage

If child, early and forced marriage and early childbearing had ended by 2015, the estimated global welfare benefit from reduced population growth would have been \$22 billion in the first year and could be \$566 billion by 2030, according to a study by the World Bank and the International Center for Research on Women (ICRW).⁶⁵ The same research estimated these effects would be felt by the poorest countries and households in particular. The economic gains from ending child marriage in Niger, for example, could reach \$1.7 billion annually by the year 2030, solely from the effects of reducing fertility.

⁶⁰ Wodon, Q. et al., 2017. [The Economic Impacts of Child Marriage: Key Findings](#). Washington, DC: The World Bank and International Center for Research on Women.

⁶¹ Ibid.

⁶² Girls not Brides, 2019. [Violence against girls](#) [Accessed 13 August 2019]

⁶³ Ibid.

⁶⁴ Wodon, Q. et al., 2017. [Economic Impacts of Child Marriage: Global Synthesis Brief](#). Washington, DC: The World Bank and International Center for Research on Women.

⁶⁵ Ibid.

“ One day when I was 14, a boy of 18 years promised to buy for me school materials like pens, sanitary pads, and books if I had sex with him. I didn't know that if I have sex with him I will get pregnant. I stopped going to school. I wanted to go back to school but my parents told me to marry.

– ANNA, 15 YEAR-OLD PARTICIPANT IN THE 18+ PROGRAMME IN UGANDA

In Ethiopia, the benefit would be \$4.8 billion, while in Nepal it would be almost \$1 billion. In Bangladesh, ending child marriage could generate close to \$4.8 billion annually in additional earnings and productivity. In Nigeria, the annual economic cost of child marriage as a result of lost earnings and productivity could be up to \$7.6 billion. In Pakistan, it could reach \$6.2 billion annually.⁶⁶ According to the previously mentioned report by World Bank and ICRW, ending child marriage would also reduce rates of under-five mortality and stunting of children of child brides. Globally, the estimated benefits of lower under-five mortality and malnutrition could reach more than \$90 billion annually by 2030.⁶⁷ The same report also estimates that ending child marriage could reduce the total fertility rate by 11 percent across 15 countries of the study, leading to substantial reductions in population growth. Decreased household sizes would lead to an increased availability of funds which then could be used to pay for food, education, health care, and other expenses for other members of the household.⁶⁸

Preventing and ending the practice of child marriage will not only alleviate the suffering of adolescent girls whose human rights are being violated, but also set these girls on an upward trajectory in life. In addition, ending child marriage would have a wide range of economic benefits at all levels from the individual to the national.

Key interventions that combat child, early and forced marriage

Key Effective Interventions to Combat Child, Early and Forced Marriage

- **Laws and policies:** Set a minimum legal age of 18 for marriage for both adolescent boys and girls, regardless of parental, judicial, or religious consent.
- **Social norms and behavior:** Work with adolescents, families, and communities to change harmful gender norms and attitudes that lead to girls being married early.
- **Assets and resources:** Run awareness raising and empowerment programs with girls who are at risk of CEFM to supply them with the tools and agency they need to determine their own future.

⁶⁶ Ibid.

⁶⁷ World Bank, 2017. *Child Marriage Will Cost Developing Countries Trillions of Dollars by 2030, Says World Bank/ICRW Report*. Press release.

⁶⁸ Wodon, Q. et al., 2017. [Economic Impacts of Child Marriage: Global Synthesis Brief](#). Washington, DC: The World Bank and International Center for Research on Women.

Plan International's Program "18+ Ending Child, Early and Forced Marriage and Teen Pregnancy in Eastern and Southern Africa"

Ending CEFM and teen pregnancy requires work across all sectors and at all levels. It requires understanding the complex drivers behind the practices in different contexts in order to adapt interventions. The 18+ program works with girls, families and communities, civil society networks, and policy makers to deliver a holistic approach to tackle root causes such as harmful norms and practices, weak legal and institutional environment, household poverty, and low levels of education. The program works across three levels of change:

(1) Mobilize girls at risk of CEFM so they can determine their own futures, especially when and who to marry and when to have children.

Example from Rwanda: Plan International Rwanda implemented an initiative to create "Girls safe schools". The schools offer a holistic package of services that build the personal, social, and material assets of girls in order to reduce barriers to accessing quality education.

(2) Build social movements to transform gender norms and practices that drive CEFM.

Example from Kenya: Some communities in Kenya practice female genital mutilation/cutting and marrying off their female children at puberty. In an attempt to shift these practices, Plan International Kenya is implementing a project called "Obligation to Protect" to develop an 'alternative' rite of passage and training several agents of change in the local community.

(3) Facilitate and enable legal and policy environments that protect girls from CEFM.

Example from Uganda: High rates of CEFM are linked to broader issues related to gender inequality and widespread poverty. These issues have been amplified by inadequate budget allocation and low commitments to enforce existing child protection laws and policies. A central element of Plan International's project has been the development of 80 rights clubs for girls where they receive mentorship to understand their rights and to develop confidence and knowledge to speak out and take action against CEFM.

The critical importance of education and its connection with child, early and forced marriage

In recent times there have been almost 100 million adolescent girls between the age of 12 and 17 out of school, although this is an improvement versus 20 years ago

Education

There is a strong inverse relationship between girls' education and child, early and forced marriage (CEFM). In many low-income countries, CEFM is one of the leading factors contributing to girls dropping out of school prematurely. Conversely, keeping girls in school, specifically secondary school, is one of the most powerful tools to reduce child marriage.⁶⁹ The longer a girl stays in school, the less likely she is to be married before the age of 18. A World Bank study found that each additional year an adolescent girl completes in secondary school reduces the likelihood of child marriage on average by 61 percentage points.⁷⁰ By contrast, adolescent brides are much more likely to drop out of school and complete fewer years of education than their peers who marry later.⁷¹ Studies suggest that in some countries, child, early and forced marriage may account for 10 to 20 percent of drop-outs among girls at the secondary level.⁷²

Early adolescence is the time during which a girl would be transitioning to secondary education. At the same time it is the time when domestic and reproductive roles too often begin to dominate their lives at the expense of learning.⁷³ Adolescent girls are often forced to abandon school to help with household chores, to prepare for marriage, or out of fear of harassment and violence at school.⁷⁴ According to the International Labour Organisation 10 percent of girls between ages 5 to 14 perform chores at least 28 hours a week. This is twice the amount of time that boys of the same age must devote to chores.⁷⁵ Regardless of the reasons why adolescent girls might miss out on schooling, they miss out on critical knowledge and opportunities that are foundational for their future.

This is why the number of girls out of school increases dramatically across the education levels as girls progress from primary to secondary school. There were 96.5 million adolescent girls between the age of 12 and 17 out of school in 2017, making up 48.7 percent of all adolescents out of school, according to the UNESCO Institute for Statistics' data. Nonetheless this is a marked decrease from 2000, when 146.2 million adolescent girls of lower and upper secondary school age were out of school globally. This downward trend is due to significant decreases in the number of out-of-school adolescent girls in Asia, specifically in South and West Asia and East Asia and the Pacific regions. Conversely, over the past 17 years the number of out-of-school adolescent girls of lower and upper secondary school age has increased in the sub-Saharan Africa region, from 27 million in 2000 to over 32 million in 2017. However, in recent years, similarly to secondary school enrollment rates, this downward trend has stalled as can be seen in Figure 9.

⁶⁹ Wodon, Q. et al., 2018. *Missed Opportunities: The High Cost of Not Educating Girls*. The Cost of Not Educating Girls Notes Series. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/29956> License: CC BY 3.0 IGO

⁷⁰ Ibid.

⁷¹ World Bank, 2017. [Educating Girls, Ending Child Marriage](#). [Accessed 12 August 2019].

⁷² World Bank, 2016. [Snapshot: Reaching Girls, Transforming Lives](#).

⁷³ Plan International UK, 2019. [Left out, left behind: Adolescent girls' secondary education in crises](#). [Accessed on 29 Aug 2019].

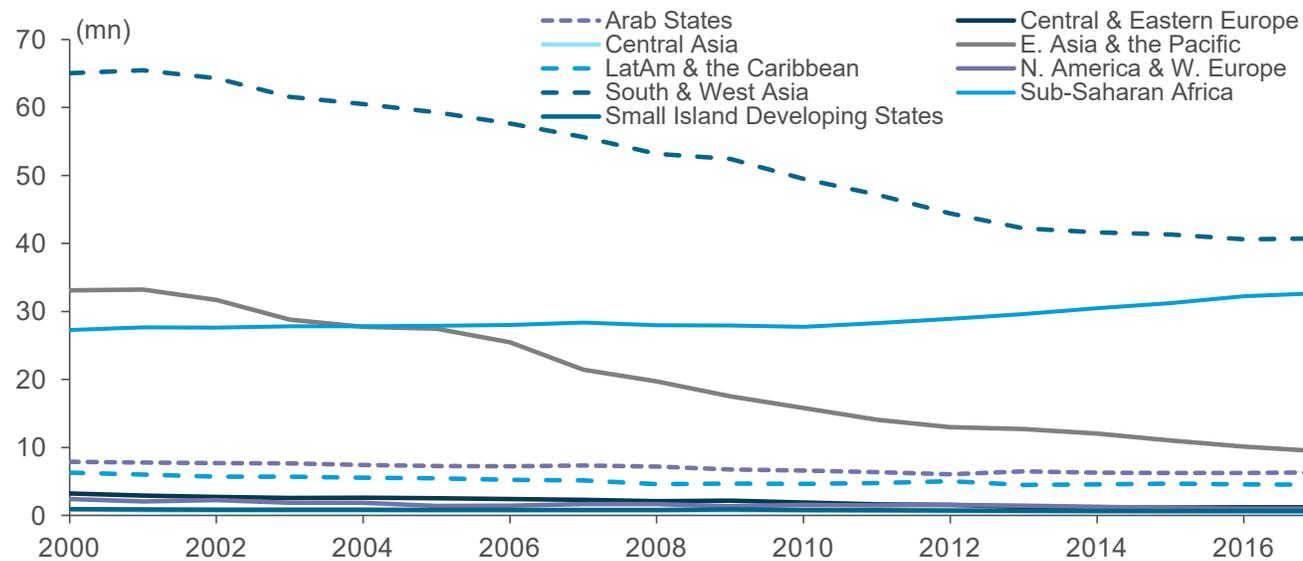
⁷⁴ UNESCO, 2020. [Left Behind: Girls' Education in Africa](#). [Accessed on 29 Aug 2019].

⁷⁵ Sperling, G. B. and Winthrop, R., 2016. *What Works in Girls' Education: Evidence for the World's Best Investment*. Washington, D.C.: Brookings Institution Press.

Quality of education is equally critical

While it is important for girls to transition through school, a further challenge is that a girl who is fortunate enough to stay in school does not always get the quality of education she would need to succeed in the labor market. According to a study by UNESCO in 2015, 107 million of all adolescent girls globally (or 59 percent) are not achieving minimum proficiency levels in reading at the end of lower secondary education. The quality of education is particularly grim in Central and Southern Asia, where 40 million or 76 percent of adolescent girls are unable to read proficiently. Similarly, in Sub-Saharan Africa, 31 million or 89 percent of adolescent girls are not able to gain minimum proficiency in reading between the ages of 12 and 14 years.⁷⁶

Figure 9. Lower and Upper Secondary Out-of-School Adolescent Girls by Region



Source: UNESCO UIS

Schools need to provide safe and nurturing environments

An additional barrier for girls to learn is the high level of violence they encounter in school and at home. Harmful social norms devaluing their education, school-related gender-based violence (GBV), and other forms of GBV in the home or the community are all major obstacles to learning.⁷⁷ Evidence suggests girls worldwide are subjected to high levels of school-related sexual harassment and gender-based violence.⁷⁸ Fear and the actual experience of violence are both linked to lower school attendance and learning outcomes, particularly for girls.⁷⁹

The obstacles girls continue to face are numerous and daunting, with multiple intersecting barriers preventing them from being educated, healthy, and safe. The lack of educational attainment and learning for girls has negative effects throughout their lifetime in terms of life-long earnings and financial security not only for themselves, but also for their children and households, their communities, and societies or countries.⁸⁰

⁷⁶ UNESCO, 2017. [More Than One-Half of Children and Adolescents Are Not Learning Worldwide.](#)

⁷⁷ Plan International UK, 2019. [Left out, left behind: Adolescent girls' secondary education in crises.](#) [Accessed on 29 Aug 2019].

⁷⁸ UNESCO, 2019. [Behind the numbers: Ending school violence and bullying.](#)

⁷⁹ Ibid.

⁸⁰ Wodon, Q. et al., 2018. [Missed Opportunities: The High Cost of Not Educating Girls. The Cost of Not Educating Girls Notes Series.](#) World Bank, Washington, DC.

The economic power of delivering effective education

A World Bank study found that women with a primary education (partial or completed) earn only 14 to 19 percent more than those with no education at all. By contrast, women with a secondary education earn almost twice as much, and women with a tertiary education earned almost three times as much as those with no education. Secondary and tertiary education are also associated with higher female labor force participation, especially in full-time work. In addition, women with secondary and tertiary educations report higher standards of living compared to those with a primary education or lower.⁸¹ If every girl worldwide received 12 years of quality education, lifetime earnings for women could increase by \$15 trillion to \$30 trillion globally.⁸²

Education is the key to unlocking girls' potential and empowering them to lead fulfilled lives. Increased educational attainment by girls is closely linked to multiple positive impacts. For instance, girls who complete secondary school are better equipped to become healthier, more prosperous adults, with smaller families and children who are less at risk of illness and death. Further, girls with a secondary education are more likely to participate in the labor force as adults and be decision makers at home and in their communities.⁸³

If obstacles are not overcome during early adolescence, girls will succumb to further barriers during their late adolescence.

Key interventions that improve girls' education outcomes

Key Effective Interventions to Improve Girls' Education Outcomes

- **Laws and policies:** Adopt approaches, laws and policies to ensure that girls who have not received a formal education or have left school early because of CEFM or early motherhood have access to free, equitable quality primary and secondary education.
- **Social norms and behavior:** Promote educational content, practices and behaviors that change attitudes and beliefs about harmful gender roles.
- **Assets and resources:** Create safe, non-violent and resilient learning environments, particularly in humanitarian disasters so that girls can learn without the fear of violence.

© World Bank. <https://openknowledge.worldbank.org/handle/10986/29956> License: CC BY 3.0 IGO

⁸¹ Ibid.

⁸² Ibid.

⁸³ Ibid.

Late Adolescence

Late adolescence brings new challenges for girls, especially around health and gender-based discrimination

Late adolescence occurs during the latter part of the teenage years, broadly from the ages of 15 to 19. During late adolescence, young people make their way into the world of work or further education, settle on their own identity and world view, and start to engage actively in shaping the world around them. Girls in late adolescence tend to be at greater risk than boys of negative health outcomes, including depression, and these risks are often magnified by gender-based discrimination and abuse.⁸⁴ Between the age of 15 and 19 the focus sharpens on a girl's right to take decisions about her own body, about whether and when to have children, and with whom. Power over this is key to a girl's ability to choose what path her life will take. However, the obstacles a girl has succumbed to during early adolescence can be detrimental to her self-determination in late adolescence. It is especially those girls who have been married during early adolescence that do not have the power to decide if or when to become pregnant. Pregnancies of adolescent girls between the age of 15 and 19 have much less to do with choices made by the girls themselves than with structural factors such as sexual violence, parental and communal pressure to marry, child, early and forced marriage, lack of education or dropping out of school, poverty, and inadequate access to services for reproductive health and rights.⁸⁵

Late adolescence is also the time of economic opportunities and financial independence. However, a young person's economic life does not begin at age 18. The foundation for an economically-empowered women must be laid early by giving adolescent girls every opportunity to fulfil their ambitions and realize their rights and potential. Girls who have for various structural and social reasons, dropped out of primary education or have not transitioned to secondary education during early adolescence, are also more likely to be unable to secure vocational training or a job in the formal labor market during their late adolescence. Just like there is a strong inverse relationship between education and child, early and forced marriage during early adolescence, there is a strong inverse relationship between economic empowerment and early and unwanted pregnancies during late adolescence.

Early and Unwanted Pregnancy

Approximately 16 million girls aged 15 to 19 years and 2.5 million girls under the age 16 give birth in developing regions each year

A major challenge to empowering adolescent girls between the age of 15 and 19 is linked to knowledge and enforcement of their sexual and reproductive health and rights. Adolescent pregnancy is a global issue occurring in high-, middle- and low-income countries, but is more pronounced and prevalent in developing countries: every year, an estimated 21 million girls aged 15 to 19 and 2 million girls under the age of 15 become pregnant in developing regions. Approximately 16 million girls aged 15 to 19 years and 2.5 million girls under the age of 16 give birth in developing regions each year.⁸⁶

In developing countries, 9 out of 10 births to adolescent girls occur within a marriage or a union.⁸⁷ In fact, adolescent brides have children earlier than their peers, and also have more children more frequently than their peers. Whether a girl is married or not, early and unwanted pregnancies can have severe consequences for a young mother's health, education and income-earning potential.

⁸⁴ UNICEF, 2011. *State of the World's Children 2011: Adolescence an Age of Opportunity*. New York: UNICEF.

⁸⁵ Ibid.

⁸⁶ World Health Organization, 2018. [Adolescent pregnancy](#) [Accessed 12 August 2019].

⁸⁷ United Nations Population Fund, 2013. [The State of World Population 2013. Motherhood in Childhood: Facing the challenge of adolescent pregnancy.](#)

Adolescent pregnancy is a major contributor to maternal and child mortality, and to intergenerational cycles of ill-health and poverty

Girls who become pregnant before the age of 18 are more likely to experience violence within marriage or a partnership

It often alters the course of her entire life, the life of her new-born child and hinders the development of her community and society as a whole.⁸⁸ This illustrates again the negative effects of barriers girls face are likely to lead to further barriers and thus further negative consequences.

Adolescent pregnancy remains a major contributor to maternal and child mortality, and to intergenerational cycles of ill-health and poverty. Pregnancy and childbirth complications are the leading cause of death among 15 to 19 year-old girls globally.⁸⁹ They claimed the lives of about 10 girls per 100,000 in that age group worldwide — and nearly 36 per 100,000 in low- and middle-income African countries, which have the world's highest maternal mortality ratio among the 15-19 age group.⁹⁰ In addition, unmarried pregnant adolescents face social costs, which may include rejection by their families, the end of their education, and the threat of violence — thus having a further compounding effect making it even more difficult for adolescent girls to fully enjoy their rights and reach their full potential.

In particular, adolescent pregnancy takes an enormous toll on a girl's education and income-earning potential. Many girls who become pregnant are pressured or forced to drop out of school and many schools forbid their return once they have had a baby.⁹¹ An estimated 5 to 33 percent of girls aged 15 to 24 who drop out of school do so because of early pregnancy or marriage.⁹² Based on their subsequent lower education attainment, they may have fewer skills and opportunities for employment, often perpetuating cycles of poverty. Nationally, this can also have an economic cost, with countries losing out on tax and income spending these young women would have earned over their lifetimes, if they wouldn't have been young mothers. Education delays childbearing, leading to healthier eventual birth outcomes.⁹³ Conversely, girls not in school are also more likely to become pregnant early.⁹⁴

Girls who become pregnant before the age of 18 are more likely to experience violence within marriage or a partnership.⁹⁵ It has been found that in three quarters of countries that hold data on gender-based violence, at least 1 in 5 adolescent girls had been the victim of intimate partner violence (emotional, physical or sexual) in the last twelve months.⁹⁶ Intimate partner violence, has devastating effects on girls' physical and mental health as they might suffer injury, depression, and increased risk of suicide. Girls also face threats of violence in public spaces, further limiting their mobility and freedom. Plan International's research on girls' safety in cities shows that adolescent girls seldom feel safe in public spaces. They may experience harassment and abuse, physical and sexual violence, and are often excluded from decision-making processes that could impact or improve on their safety.

⁸⁸ Ibid

⁸⁹ World Health Organization, 2018. [Adolescent pregnancy](#) [Accessed 12 August 2019].

⁹⁰ United Nations Children's Fund, 2018. [Progress for Every Child in the SDG Era](#). UNICEF, New York.

⁹¹ United Nations Population Fund, 2013. [The State of World Population 2013. Motherhood in Childhood: Facing the challenge of adolescent pregnancy](#).

⁹² Wodon, Q. et al., 2017. [Economic Impacts of Child Marriage: Global Synthesis Brief](#). Washington, DC: The World Bank and International Center for Research on Women.

⁹³ United Nations Population Fund, 2013. [The State of World Population 2013. Motherhood in Childhood: Facing the challenge of adolescent pregnancy](#).

⁹⁴ <https://www.unfpa.org/adolescent-pregnancy#>

⁹⁵ United Nations Population Fund, 2013. *Adolescent pregnancy: A review of the evidence*. New York: UNFPA.

⁹⁶ UNICEF, 2017. UNICEF data: Violent unions. <https://data.unicef.org/topic/child-protection/violence/violent-unions/>

Key effective interventions to combat early and unwanted pregnancy

For example, in Kampala, 45 percent of girls reported sexual harassment when using public transportation services; in Delhi, 96 percent of adolescent girls do not feel safe in the city; and in Lima, only 2.2 percent of girls reported always feeling safe when walking in public spaces.⁹⁷

Key Effective Interventions to Combat Early and Unwanted Pregnancy

- **Laws and policies:** Support adolescent mothers to understand and claim their rights to education, work, and support as stated in international instruments and national laws.
- **Social norms and behavior:** Actively engage communities, families, and children in changing harmful social norms in the area of adolescent's sexual and reproductive health and rights.
- **Assets and services:** Ensure equitable access to quality, affordable and gender sensitive sexual and reproductive health services including contraception for all adolescents, but especially for girls who are at risk of CEFM and early pregnancy.

Economic Independence

Late adolescence is the period during which girls could seize opportunities to become more economically independent and play a formal role in the public rather than the domestic sphere. But in many parts of the world it is difficult for girls to achieve economic and financial independence as girls are disproportionately impacted by issues such as unemployment, precarious work, unpaid care work, violence at the workplace, and not being allowed to manage their own income. These issues accelerate negative consequences even more for those adolescent girls who are living with a disability, living in a humanitarian setting, or come from an ethnic or religious minority.

Overcoming issues relating to economic independence is generally more difficult for adolescent girls

Overcoming issues relating to economic independence is generally more difficult for adolescent girls as gender inequality and the accompanying issues, such as unwanted and early pregnancy, child, early and forced marriage, exclusion from education and violence in education have had a negative impact on girls' opportunities and decision-making abilities during earlier years of their adolescence and childhood. If girls are unable to position themselves as economically and financially independent individuals during adolescence, the repercussions will last throughout their lifetimes and impair their economic security and ability to contribute to the well-being and poverty alleviation of those they support, including children, thus threatening the very foundations of strong, prosperous, and cohesive societies.

In fact, as recently as 2018, the International Labour Organisation has warned that "a generation of girls risks being left outside the labor force or trapped in vulnerable or low quality employment, due to a lack of skills, absence of quality jobs, and gendered expectations of their roles as caregivers."⁹⁸

⁹⁷ Plan International, 2018. *The state of the world's girls 2018. Unsafe in the city: The everyday experiences of girls and young women*. Working: Plan International.

⁹⁸ ILO and UNICEF, 2018. [GirlForce: Skills, Education and Training for Girls Now](#) Geneva and New York [Accessed on 02.09.2019].

In emerging economies four out of five young people who are not in education, employment or training are girls and young women

The global so-called Not in Education, Employment or Training (NEET) rate lies at 9.8 percent for boys and young men between the ages of 15 and 24 but at 34.4 percent for girls and young women. Three out of every four young NEETs are girls and young women, and the disparity is even larger in emerging economies where four out of five young NEETs are girls and young women.⁹⁹

According to the latest School to Work Transition Survey (SWTS) by the International Labour Organisation (ILO), the high NEET rates of girls and young women across the globe stand in direct contrast to 70 percent of girls and young women's overwhelming wish to work in the future.¹⁰⁰ From early childhood onwards, harmful gender stereotypes and norms are obstacles in a girls' ability to develop her full economic and financial potential. This is evidenced by the reasons girls drop out of the workforce, which are clearly gendered: globally the most common reason for girls to leave their work is to take on family and household responsibilities or because they are pregnant. To put this in context, according to one of the ILO studies 29.2 percent of adolescent girls in Brazil are economically inactive due to family and household duties with another 10.1 percent being inactive due to pregnancy. In comparison only 2.4 percent of adolescent boys in Brazil are economically inactive due to family and household responsibilities.¹⁰¹

Intimate partner violence is another compounding factor for girls' and young women's inability to be economically independent. Women's experiences of intimate partner violence (IPV) can have a significant impact on their economic empowerment. Women who are subjected to violence develop physical and mental health problems, including chronic pain, depression or post-traumatic stress disorder, which means victims are often unable to work regularly or to work at all, leading to loss of income, and missed opportunities.¹⁰² In Tanzania, women experiencing IPV earn 29 percent less than those who had never been abused by a partner.¹⁰³ The loss in earnings increases with the severity of the violence, as women currently experiencing severe IPV earn 43 percent less.¹⁰⁴ Violence against women also has a significant impact on economies. The World Bank estimates violence against women costs some countries up to 3.7 percent of their GDP, which is more than double of what most governments spend on education.¹⁰⁵

Three major factors which prevent girls from getting productively into the workforce

Therefore as girls get older more obstacles occur and, unless these are overcome, they will diminish the likelihood girls will ever transition from education into the workforce. The biggest obstacles for girls to get into the workforce can be distilled into three main factors. First, globally less than half of girls aged 15 to 19 are in school and where girls attend secondary school, poor quality education and the threat of violence prevents them from completing school.

⁹⁹ ILO, 2017. *Global Employment Trends for Youth 2017: Paths to a better working future*, Geneva, accessed on 02.09.2019 https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_598669.pdf

¹⁰⁰ ILO and UNICEF, 2018. *GirlForce: Skills, Education and Training for Girls Now*. (Geneva and New York: ILO and UNICEF).

¹⁰¹ ILO, 2018. *Young and female – a double strike? Gender analysis of school-to-work transition surveys in 32 developing economies*. Sara Elder and Sirani Kring, Geneva

¹⁰² Wong, J., Mellor, D., 2014. *Intimate partner violence and women's health and wellbeing: impacts, risk factors and responses*. *Contemporary Nurse*: 46(2), 170-9.

¹⁰³ World Bank, 2014. [*Voice and Agency: Empowering Women and Girls for Shared Prosperity*](#).

¹⁰⁴ Ibid.

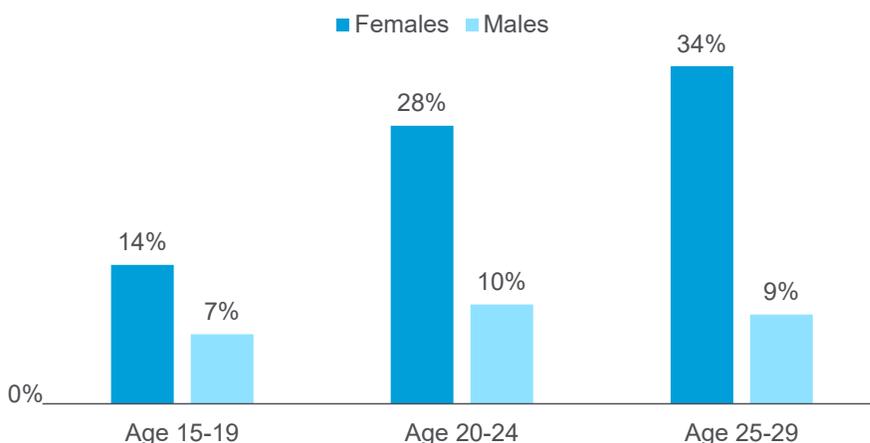
¹⁰⁵ World Bank, 2019. [*Violence against women and girls*](#)

Second, gender bias continues to restrict the subject choices of girls and they are constrained by perceptions of what is deemed “feminine” in their choices of what to study. Thus girls’ opportunities are limited in an economic landscape that increasingly values skills in science, technology, engineering or mathematics (STEM).

Finally, as alluded to previously, adolescent girls are vulnerable to early marriage and early pregnancy, which often results in interrupted or dispensed schooling. While having children pushes adolescent boys and young men into employment, the opposite is true for adolescent girls and young women. Less than one in two (46 percent) of adolescent girls who became mothers are economically active.¹⁰⁶

Girls face the added difficulty that once they are economically inactive, whether they have never transitioned from education to economic activity or whether they drop out of the labor force after a while, they are more likely to stay economically inactive throughout their life.¹⁰⁷

Figure 10. Economically Inactive Non-Student Rates, by Sex and Age Group in SWTS Countries



Source: ILO and UNICEF. *GirlForce: Skills, Education and Training for Girls Now*. Geneva and New York 2018

Too many girls end up with jobs that are precarious, informal and unprotected

Where girls and young women do work, their jobs are often precarious, informal, and unprotected. Informal work often means working for low pay or petty commerce in precarious conditions without social protection, security and representation. This form of underemployment stifles young people’s aspirations and energy to learn the skills that are needed for a secure future and instead traps them into poverty.¹⁰⁸ Adolescent girls without an education and without a job in the formal labor market are also more at risk to be affected by forced labor. Girls and women account for 28.7 million, or 71 percent, of the total of population that works in forced labor. When looking at forced labor in the commercial sex industry girls, who are sexually exploited within the industry, and women who sell or exchange sex, account for 99 percent of victims.¹⁰⁹

¹⁰⁶ ILO and UNICEF, 2018. *GirlForce: Skills, Education and Training for Girls Now*. Geneva and New York 2018 [Accessed on 02.09.2019]

¹⁰⁷ ILO, 2016. *Young and female – a double strike? Gender analysis of school-to-work transition surveys in 32 developing economies*. Sara Elder and Sirani Kring, Geneva.

¹⁰⁸ UNICEF, 2011. *State of the World’s Children 2011: Adolescence an Age of Opportunity*. New York: UNICEF.

¹⁰⁹ International Labour Organization, 2017. *Global estimates of modern slavery: forced labour and forced marriage*. Geneva: International Labour Organization.

Girls and financial inclusion — challenges of access and financial literacy

Even if girls participate in income-generating activities they are unlikely to have access to the money they earn or control their financial decisions. Many adolescent girls also lack the required identification to set up a formal bank account, the collateral to take out loans, or the financial literacy knowledge to save and control their own finances.¹¹⁰ In northern Nigeria for example, two-thirds of the 16 to 19 year old girls participate in income generating activities, but less than one-tenth had a formal bank account.¹¹¹ In India, 15-to-19-year-old-girls have reported that while they are likely to save the money they earn, they are less likely than boys to make independent decisions about how that money is spent.¹¹² This is unlikely to change over when adolescent girls become young women: many girls move straight from financial dependence in their natal home to a similar dynamic in their marital home and most likely will not have direct control over their family finances, even though it has been shown that in families where the women has control over household finances, children are healthier, and more educated because women are more likely than men to spend what money there is on food, health, and education for all family members.¹¹³

Key interventions for adolescent girls to become economically independent

Effective Interventions for Adolescent Girls to Become Economically Independent

- **Laws and policies:** Implement international labor standards and economic rights to ensure non-discrimination of girls and women in the work place and to afford equal opportunities to girls and boys, women and men on the labor market.
- **Social norms and behavior:** All actors should work in partnership with communities, families, and adolescents to challenge gender norms which normalize gender-based discrimination in the workplace.
- **Assets and resources:** Foster young women's savings groups as a cornerstone for financial inclusion, resilience-building and enterprise development and equip girls from vulnerable and excluded groups with technical, digital, entrepreneurial and life skills.

Plan International's Program "A Working Future: Partnering with the Private Sector and Using Saving Groups to Connect the Ugandan Youth to Job Opportunities"

Even though Uganda has made impressive economic progress since the 1990s there are still stark economic inequalities. For example, rural areas contribute to 96 percent of national poverty levels and youth unemployment is at a record high of 60 percent.

Since 2013 the project "A Working Future" connects young people in Uganda's rural districts with access to financial services, teaches them work and financial skills, and links them to job opportunities. The youth were linked to job opportunities in the private sector through three different employment pathways: job placements, micro-franchises, and producer groups. 93 percent of the youth selected the producer group pathway. This program was born out of the desire to identify ways to support youth economic empowerment through innovative methods of collaboration with the private sector. It shows the power of strategic partnerships between the corporate and development sectors to successfully address social issues while also generating commercial value.

¹¹⁰ UNFPA, 2016. *The State of the World Population 2016. 10- How our future depends on a girl at this decisive age*. New York: UNFPA.

¹¹¹ Mercy Corps, 2013. *Adolescent Girls in Northern Nigeria: Financial Inclusion and Opportunities Profile*. Portland, Oregon: Mercy Corps.

¹¹² Jejeebhoy, S. J. and Acharya, R., 2014. *Adolescents in Rajasthan 2012: Changing Situation and Needs*. New Delhi, India: Population Council.

¹¹³ Plan International, 2018. *The missing target*. Woking: Plan International.

The world needs to create pathways for girls that realize potential

Conclusion: Two Pathways for Girls

Whether an adolescent girl can take the path which will allow her to reach her full potential or whether she is forced to take the path that will lead her onto a downward trajectory depends on which barriers she will succumb to from childhood to young adulthood and whether she has access to the tools that allow her to seize opportunities. Harmful gender norms that assign less value to girls than boys and biased laws and policies that don't afford the same rights to girls and women put adolescent girls at a disadvantage. In many contexts girls and young women face particular legal obstacles, which restrict their lives and impact on their ability to pursue certain economic activities. Ninety percent of countries examined by the World Bank have at least one law that restricts economic equality for girls and women, who may be unable to conduct official transactions, own or use property or get a job.¹¹⁴ ¹¹⁵Adolescent girls' unequal access to rights and basic services such as quality education, sexual and reproductive health and rights, and economic and financial resources are strongly linked to differences in the social and economic outcomes of adolescent girls and boys, women and men. This has far reaching consequences for whole economies: estimates suggest that if gender gaps in the labor markets were completely closed, as much as \$28 trillion, or 26 percent, could be added to global annual GDP by 2025.¹¹⁶

Furthermore, the inequalities an adolescent girl experiences are cumulative. Every barrier that is added to the girl's path will in turn lead to more barriers and diminish her chances to take up opportunities. To demonstrate the devastating effect of the accumulation of barriers, Save the Children has created a girls' opportunity index which scores countries on the factors of child, early and forced marriage, early and unwanted pregnancy, maternal mortality, lower-secondary school completion for girls, and female representation in parliaments.¹¹⁷ Each factor is scored to reflect the severity of the issue for girls in a particular country and the scores of all factors are added up to an overall score. The higher the score, the worse are the girls' opportunities to control their own lives and fulfil their potential. The index finds that girls' opportunities are most restricted in low-income countries where girls face extreme deprivations of their rights and access to services. However, it also shows opportunities for girls are restricted in high-income countries, where especially the opportunity for political participation is limited.

A research study by Plan International discussing gender equality with adolescents in Uganda, Colombia and Spain found that adolescent girls and boys in Spain, like in Uganda and Colombia, identified traditional family roles and the gendered division of household tasks as well as the sexual objectification of girls and harmful gender stereotypes as a barrier for girls to fulfil their potential.¹¹⁸

Even though every girl in every country has unique circumstances, barriers, and opportunities, it is possible to draw up two pathways that are representative of the upward trajectory or downward trajectory that millions of adolescent girls around the globe are embarking on.

¹¹⁴ World Bank, 2013. *Gender at work: a companion to the World Development Report on jobs*.

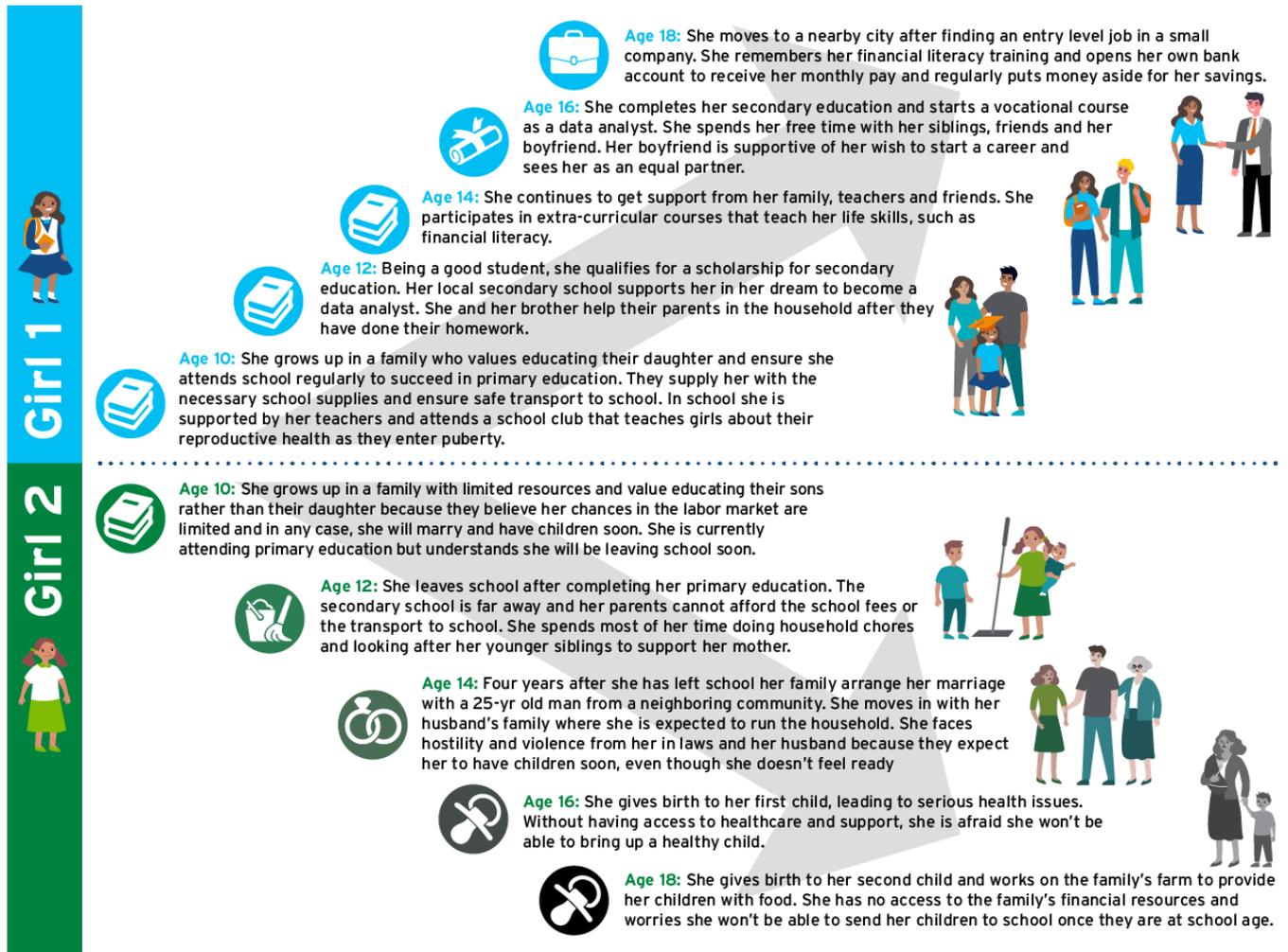
¹¹⁵ World Bank, 2015. *Women, Business and the Law 2016: Getting to Equal*. Washington DC: World Bank.

¹¹⁶ McKinsey Global Institute, 2015. *The power of parity*.

¹¹⁷ Save the Children, 2016. *Every Last Girl*. London: Save the Children.

¹¹⁸ Plan International, 2017. *Unlock the power of girls now. Why gender equality is the social and political issue of our time*. Woking: Plan International.

Figure 11. “Two Pathways”



Source: Plan International

Chapter 4: Economic & Social Benefits of Investing in Adolescent Girls

Introduction

This chapter has largely been compiled by the analytical staff at Citi Global Insights with particular thanks to Ying Qin

Adolescent girls around the world, but especially in developing countries, encounter barriers in accessing and completing quality education, becoming economically independent and participating in the labor force, and living a healthy life free from violence. As discussed in Chapter 3, the key barriers faced by adolescent girls are complex and inter-connected. The statistics and stories are truly sobering, demonstrating the harsh realities many girls face globally. There is no shortage of literature on why investing in adolescent girls is not only the right thing to do, but also the smart thing to do and an action which generates economic benefits. However, these studies have largely focused on education, and even though further research is needed to better understand the dynamics across the barriers that girls face, evidence is growing in support of multi-component interventions in delivering the best outcome for girls. For example, a review of adolescent girls programming in low- and middle-income countries found that longer program exposure and multi-component (versus single component) programs contributed to greater intended results for girls.¹¹⁹

Very few studies assess the multi-component investment case for adolescent girls — we have sought to address this knowledge gap

There are not many studies assessing the multi-component investment case for adolescent girls, and so this chapter aims to address this knowledge gap and explores the economic and social case for investing holistically in adolescent girls. We developed an analytical framework to assess the costing of interventions and potential economic benefits of eight low and lower-middle-income countries — Ghana, Uganda, Mali, India, Lao PDR, El Salvador, Bolivia, and Egypt. These countries were chosen based on income level, geographic distribution, data availability, as well as Plan International's presence for on the ground commentary. The analytical framework is introduced below followed by discussions on the key findings as well as other important drivers needed to help girls successfully transition from school to work.

It should be noted that the analysis was carried out before the COVID-19 pandemic. We recognize the current crisis will likely have long-lasting socio-economic impacts around the world, but at the time of writing, the situation is evolving rapidly and we could not find sufficient data and information to update our analysis. However, we believe investments in girls are needed now more than ever to not only ensure COVID-19 does not set them back further, but also to help stimulate growth and recovery.

¹¹⁹ Haberland, N.A. et al., 2018. *A systematic review of adolescent girl program implementation in low-and middle-income countries: Evidence gaps and insights*. *Journal of Adolescent Health*, 63(1), 18-31.

Three component analytical framework and assumptions

Analytical Framework

The analytical framework is shown below and consists of three key components: (1) a Business-as-Usual scenario; (2) an Intervention Builder; and (3) an Employment/Impact model (adapted from Sheehan et al., 2017¹²⁰). Using the projected number of female students by grade and year from UNESCO,¹²¹ the framework tracks cohorts of girls as they progress through the entire education cycle (12 years) up to 2030. The framework uses historical data to form a Business-as-Usual scenario, and the Intervention Builder and Employment model to analyze an intervention scenario across a range of economic and social indicators.

The economic impact of education is well documented in the literature, and so we have decided to focus on the association between educational outcomes and economic benefits in our impact modeling. The employment model we developed is based on Sheehan et al.¹²² and estimates the impacts of improved education outcomes as a result of an intervention package on national GDP levels. A few key assumptions are made for the Intervention scenario, relative to the base case:

1. Increased years of schooling (actual and learning adjusted) lead to higher productivity and higher earnings in employment.
2. An increase in secondary school completions leads to an increase in the relative share of formal employment and a decrease in the share of informal employment.
3. An increase in secondary completion leads to an increase in the number of women who participate in the labor force.

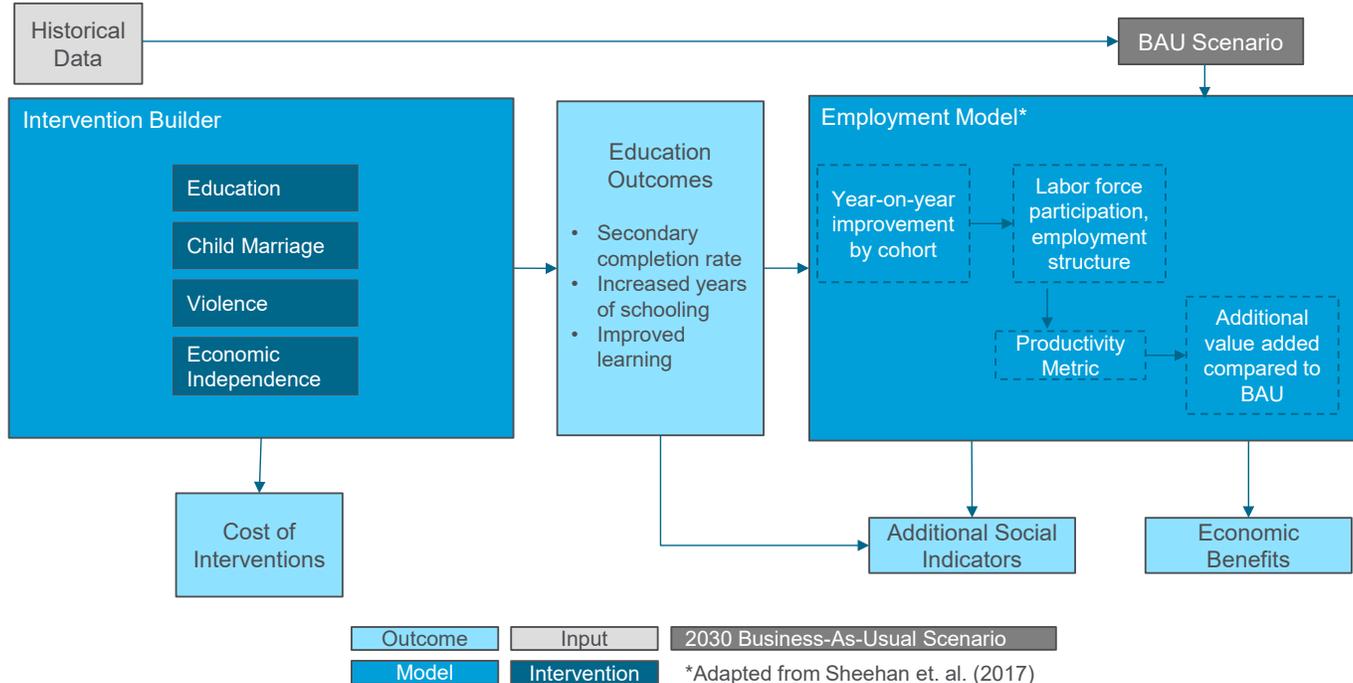
The Employment model uses the projected education outcomes (increased years of schooling, improved learning and secondary completion rates) to extrapolate improved earnings and employment. This is then used to derive the GDP contribution from the additional supply of educated female graduates as a result of the interventions. **More details of the analytical framework and data used in the analysis can be found in the Appendix.**

¹²⁰ Sheehan, P. et al., 2017. *Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents*. The Lancet, 390(10104), 1792-1806.

¹²¹ UNESCO, 2015. Education costing model.

¹²² Sheehan, P. et al., 2017. *Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents*. The Lancet, 390(10104), 1792-1806.

Figure 12. Analytical Framework



Source: Citi Global Insights

A set of economic and social indicators that reflect the key challenges facing adolescent girls identified in Chapter 3 were chosen as performance metrics in the analysis (Figure 13). They do not represent all the issues that girls face, but they capture key aspects for which there are available data. Overall, current data on education and employment are the most available and robust, whereas child, early and forced marriage and violence data are more limited. As a result of COVID-19, the Global Partnership for Education has recommended that all countries should set up systems now to track school re-enrollment and gather data. This will be vital for understanding both the short- and long-term impacts for both boys and girls, and also represents an opportunity to gather, improve, and integrate data on the other key barriers adolescent girls face.

Figure 13. Key Performance Indicators

Sector	Indicator
Education	Lower and Upper Secondary completion rate (%) Mean years of schooling (# of years)
Violence	Every partnered women affected by intimate partner violence (%)
Child, Early and Forced Marriage	Child, early and forced marriage rates (%)
Economic Independence	Percentage of females with a bank account (%)
Labor Market Participation	Female labor force participation rate (%) Informal employment, female (%)
Economy	Increase to GDP (%) Return on Investment (%)

Source: Citi Global Insights

An ambitious scenario but one goal envisioned in the 2030 UN SDG agenda

Scenarios

The analysis considers two 2030 pathways — a Business-as-Usual (BAU) scenario and an Intervention scenario. The analytical framework was used to test an intervention scenario which asked the following question:

“What if all eight countries reached 100 percent secondary completion rate for girls by 2030?”

This may seem a rather ambitious target for some countries but it reflects the education goals envisioned in the 2030 UN SDG agenda. The Intervention scenario takes the assumption that in order to deliver the best possible education outcomes, interventions are needed not only in education but also across other key barriers to girls completing education and transitioning into work and economic empowerment (child, early and forced marriage, violence prevention, and economic independence). As seen in the previous chapter, education is also often cited as a key intervention in tackling child, early and forced marriage and violence.¹²³ The Intervention scenario essentially presents a holistic approach to improving the education outcomes of adolescent girls through a set of interventions which overcome the typical barriers facing adolescent girls, and determines the expected economic and social benefits as a result of the interventions.

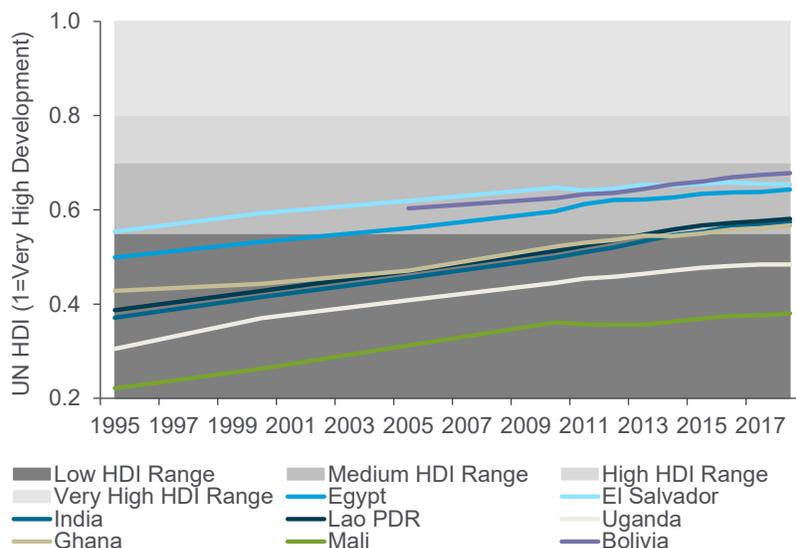
Eight country case studies

Country Case Studies

The analytical framework was applied to eight country case studies: Ghana, Mali, Uganda, Lao PDR, India, Egypt, El Salvador, and Bolivia. Mali and Uganda are considered low-income countries according to the World Bank’s national income classification, and both have lower EM2030 SDG Gender Index scores than the other six countries which are considered lower-middle income. This fits broadly within the international experience that wealthier countries are more likely to have greater gender equality. Most of the economies in our sample have experienced notable improvement in their Human Development Index (HDI), which include gauges of life expectancy, education, and per capita income (Figure 14). With the exception of Uganda and Mali, each of our sample economies transitioned from being low-HDI to medium-HDI countries.

¹²³ For example – Kalamar, A.M. et al., 2016. *Interventions to prevent child, early and forced marriage among young people in low-and middle-income countries: a systematic review of the published and gray literature*. *Journal of Adolescent Health*, 59(3), S16-S21; Asrari, L., 2015. *Preventing Child, early and forced marriage in the Commonwealth: the Role of Education* London: Plan International UK and Royal Commonwealth Society.

Figure 14. Human Development Index (1995-2017)



Source: UN and Citi Research

Six key takeaways from our eight country sample set

The table below (Figure 15) pulls out some of the key development metrics along with indicators across education, health, violence, economic independence and employment for the eight countries, as well as how they compare with averages across different income levels. A few key takeaways include:

- Educational attainment:** There is a substantial difference in the education attainment of girls between low-income and lower-middle income countries; Mali and Uganda are also underperforming compared to the average of their region as well as income group.
- Educational completion rates:** Current upper secondary completion rates¹²⁴ are lower than lower secondary completion rates across all countries considered, and quite substantially so for Lao PDR, Ghana, Egypt, and India. Both Mali and Uganda have less than 20 percent upper secondary completion rates compared to the top performer Bolivia with 69 percent.
- Child, early and forced marriage:** More than 30 percent of girls are married before 18 in Mali, Uganda, and Lao PDR (global average is 21 percent). In addition to high child, early and forced marriage rates, Mali and Uganda also have higher adolescent fertility rates than the average of their income group.
- Violence:** All countries apart from El Salvador have higher rates of intimate partner violence (IPV) than the global average (30.5 percent), but this may not reflect the real circumstance in El Salvador which is one of the world’s most dangerous countries in which to be woman.¹²⁵
- Economic independence:** Mali, El Salvador, and Egypt all have lower shares of females with a bank account compared to the average of their income groups, but Uganda and India on the other hand are considerably outperforming the average of their income groups.

¹²⁴ The data for upper secondary education completion rates are not as robust and consistent as for lower secondary, latest available data is provided in Figure 14.

¹²⁵ Amnesty International, 2019. El Salvador overview.

6. **Employment:** The countries which currently have the lowest female labor force participation rates (Bolivia, El Salvador, Egypt, India) have the highest share of formal employment, whereas across Lao PDR, Uganda, Ghana, and Mali, on average only 5 percent of women engaged in employment are in formal work.

Figure 15. Context & Performance Indicators for Eight Country Sample Set

		Mali	Uganda	Ghana	India	Lao PDR	El Salvador	Bolivia	Egypt	Lower- Income	Lower- Middle Income	Upper- Middle Income	High- Income
General	Income level	Low	Low	Lower- Middle	Lower- Middle	Lower- Middle	Lower- Middle	Lower- Middle	Lower- Middle				
	GDP/capita (2011 PPP \$)	2,019	1,768	4,051	6,516	6,308	7,247	6,799	10,673	1,963	6,782	16,988	44,041
	HDI (score, ranking)	0.427 (182)	0.516 (162)	0.592 (140)	0.64 (130)	0.601 (139)	0.674 (121)	0.693 (118)	0.696 (115)				
Education	Primary completion rate, female (%)	47.1	52.0	95.1	96.6	101.8	90.8	91.9	95.4	64.2	91.0	95.0	98.1
	Lower secondary completion rate, female (%)	26.8	24.5	73.2	88.7	67.7	81.0	83.9	84.2	37.5	77.3	85.2	92.4
	Upper secondary completion rate, female (%)	12.5	15.8	35.2	39.6	30.2	57.3	69.4	40.9				
	Gross enrollment ratio, Upper secondary, GPI	0.69	nd	0.93	0.97	0.91	1.03	0.99	0.96	0.81	0.96	1.05	1.01
Health	Child, early and forced marriage rates (%)	50.0	34.0	20.7	25.3	33.0	25.5	20.0	17.0				
	Adolescent fertility rate (births per 1,000 women ages 15-19)	169.1	121.4	67.6	16.2	62.6	70.3	68.1	50.0	99.0	43.9	31.0	13.3
Violence	Share of women aged 15 years or older who experienced physical or sexual violence from an intimate partner in the last year (IPV)	48.1	50.5	37.3	38.7	32.4	27.3	32.5	39.5				
Economic Opportunity	Female labor force participation rate (% of female population 15-64)	63.5	68.4	65.4	25.0	80.5	45.9	58.1	24.6	66.1	37.5	61.2	66.2
	Informal employment, female (% of female employment)	95.0	95.6	94.0	90	95.5	71.3	84.2	57.3	92.1	84.5		
	Gender gap in share of employment (male minus female LFP rate)	19.2	7.2	7.5	56.5	1.4	36.8	22.8	52.3	14.0	42.3	20.1	13.8
Financial Inclusion	Bank account, female (% ages 15+)	26	53	54	77	32	24	54	27	30	53	69	93
	Bank account, young adults (% ages 15-24)	33	57	48	71	24	23	41	14	31	49	66	82

Source: World Bank Data, ILOSTAT, UNICEF Data, UNESCO UIS, World Bank Index (2017 or otherwise latest available data)

Findings: The Economic and Social Benefits of Investing Holistically in Adolescent Girls

Our findings – economic benefits

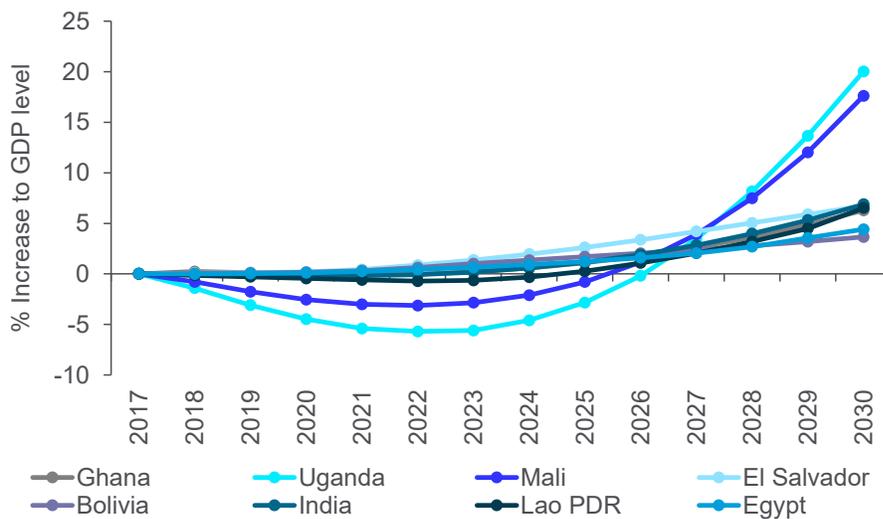
The following sections explore in detail the main findings grouped by economic benefits, cost of interventions and performance indicators.

Economic benefits

Overall, we find that investing holistically in adolescent girls to reach 100 percent upper secondary completion rates by 2030 could lift GDP in developing economies by on average 10 percent in the Intervention scenario compared to a Business-as-Usual scenario. This takes into consideration the costs of intervention across education, child, early and forced marriage, violence, and economic independence. Even greater economic returns may be observed beyond 2030, as the benefits are cumulative and build as successive cohorts of girls graduate and start working. The GDP lift by 2030 varies by country, ranging from 4 percent for Bolivia to 20 percent for Uganda, but there is also a visible difference between the low-income and lower-middle income countries.

If we consider the potential economic benefits that could be generated under the Intervention scenario without factoring the costing of interventions, we find that our estimates are roughly in line with other studies that have assessed the impact of education outcomes on GDP.¹²⁶

Figure 16. Potential Contributions to Net GDP as a Result of Reaching 100% Secondary Completion Rate for Girls by 2030 (compared to the base case)



Source: Citi Global Insights

Figure 16 shows the economic benefits for all countries build over time, but Mali and Uganda may follow a different trajectory than the lower-middle income countries. This analysis finds that Mali and Uganda might have to bear a GDP cost for around 10 years which aligns with existing literature that it can take close to a decade before the GDP impact becomes positive after interventions in education.¹²⁷ However, as the figure also shows, low-income countries like Mali and Uganda also have the most to gain in the long run, with the potential of reaching an 18-20 percent lift to GDP levels by 2030. Ghana, India, Lao PDR, Bolivia, El Salvador, and Bolivia are considered lower-middle income and show similar trajectories with potential contribution to net GDP reaching 4 to 7 percent by 2030. Out of these six countries, we also find that there may be a time lag for Ghana, India, and Lao PDR where it could take on average six years before GDP impacts become positive.

¹²⁶ Each additional year of schooling for girls boosts long-run GDP growth by 0.58 percentage points per year (Source: Patrinos and Psacharopoulos, 2013); One percentage point increase in female education raises the average level of GDP by 0.37 percentage points (Source: UNICEF/UNESCO EFA, 2011).

¹²⁷ UNICEF, 2015. *The investment case for education and equity*; Sheehan, P. et al., 2017. *Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents*. The Lancet, 390(10104), 1792-1806.

Ghana Case Study

Lower and upper secondary completion rates for Ghana are currently 73 percent and 35 percent, respectively. Under a Business-as-Usual scenario, these increase to 93 percent and 52 percent by 2030, and for this study we assess the economic impacts of reaching 100 percent for both completion rates by 2030 in the Intervention scenario. Using future projections of female students from UNESCO, the analysis calculates how many additional girls would need to be educated at each grade of the 12-year education cycle under the Intervention scenario.

The new education outcomes are used to determine the value added by additional girls completing 12 years of education for each year from 2018 to 2030. Labor force participation rate increases from 67 percent in 2030 under the BAU scenario to 69 percent in the Intervention scenario, but the impacts on employment type are even greater; share of informal employment decreases from 83 percent under the BAU scenario by 2030 to 63 percent. The annual GDP contributions from the additional supply of secondary-educated female graduates are added to give the total contribution for the time period. For Ghana, we estimate that under the Intervention scenario, an additional 1 million girls completing secondary education can lead to a total contribution of around \$16 billion by 2030.

A key assumption made in the analysis is that in order to achieve 100 percent secondary completion rate, an intervention package of education, child, early and forced marriage, violence and economic independence is required. This represents the argument in the previous chapter that there are multiple trigger points, which if addressed, can result in compounded positive impacts for adolescent girls. Based on this assumption, the analysis calculates for each year the costs of educating the girls who are not in or completing education under the Business as Usual scenario, in addition to interventions across violence, child, early and forced marriage and economic independence for all girls regardless of education status. The costs of each year are added together to give the total cost across the time period which for Ghana reaches \$7 billion by 2030. Education accounts for half of the total investment, followed by interventions in economic independence with 20 percent. The analysis also calculates the impact of a multi-component intervention on child, early and forced marriage rate which decreases from 16 percent in 2030 (BAU scenario) to 8 percent under the Intervention scenario.

Our findings – costs of interventions

Cost of Interventions

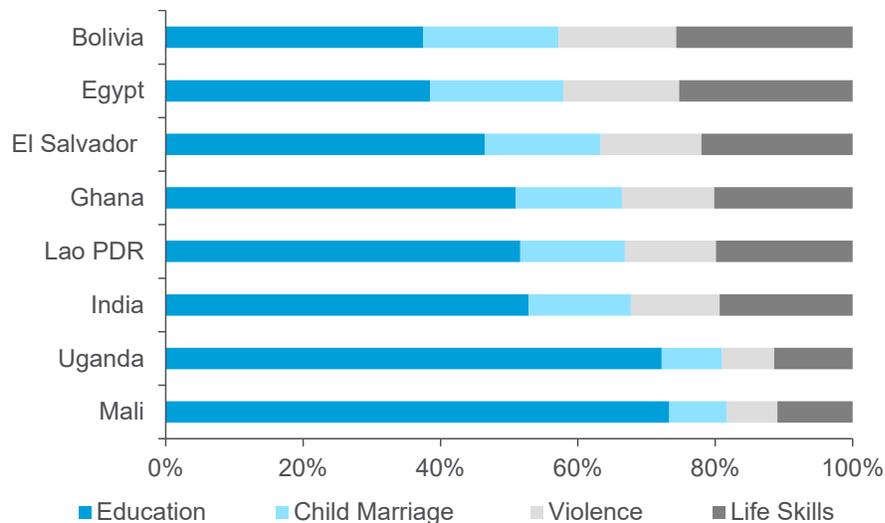
The total cost of interventions for the period 2018 to 2030 vary from \$1 billion in El Salvador to \$270 billion in India, which on average translates to \$88 million to \$21 billion per year. This is largely driven by the number of girls receiving the interventions. For example in India, the analysis estimates that an additional 45 million girls may complete 12 years of education as a result of the interventions, compared to 155,000 girls in El Salvador. If we consider a girl who starts primary school in 2017, the average cost of providing her with a full cycle of education as well as two years of interventions in violence, child, early and forced marriage and economic independence is approximately \$6,685. This translates into an average cost of \$557 per girl per year, and \$1.53 per day which is less than a daily cup of coffee. Of course, the reality is that the costs will not be spread out evenly across each year of a girl's life and higher costs are expected when she is in secondary school where education costs are greater and when other interventions are implemented.

Education is the largest single intervention by cost

Looking at the split of cumulative spend by 2030 across the interventions (Figure 17), we can see that education accounts for the largest share across all countries but the actual split varies by country. In Mali and Uganda, education costs could account for more than 70 percent, compared to 37 percent in Bolivia. The high share of education cost and relatively long time lag for GDP impact to become positive in Mali and Uganda can be largely attributed to their current low completion rates for primary and secondary education. This means interventions are needed to improve both primary and secondary outcomes, and since a girl does not complete her education in a year, the impact of the interventions will take considerable time to build up as cohorts of girls need to complete almost full cycles of education before they start working.

Governments have a central role to play in financing education but external aid can also help and perhaps alleviate some of the initial burden on GDP. There are also opportunities to mobilise non-traditional donors such as the private sector.

Figure 17. Split of Cumulative Spend on Interventions by 2030



Source: Citi Global Insights

Return On investment

Figure 18 shows the total cost of interventions from 2018 to 2030, compared to the economic returns that can be generated from the additional supply of educated girls under the Intervention scenario. Total contribution from the additional girls is divided by the total cost to deduce a Return on Investment (ROI) which gives an average of 2.8.¹²⁸ We have capped the analysis at 2030 but if the results were extended beyond 2030, the ROI would be even greater and builds over time as successive cohorts of girls leave school and enter the labor force. This key aspect is essential to keep in mind when considering the ROI by 2030 for low-income countries Uganda and Mali. It is also important to note that for this analysis, we consider not only the cost of education, but also investments needed to improve girls' well-being and economic opportunity, helping them to stay in school and enabling them to thrive.

The literature on return on investment analysis of large-scale education interventions is rather limited and methods, data, and assumptions differ across studies which make direct comparisons difficult. However, a study by the Copenhagen Consensus Centre found that ensuring secondary school completion has a ROI of 3 to 4.¹²⁹ If we compare the ROI to possible alternative investments, we find that for infrastructure projects a delivered ROI of 2 is considered very high and would warrant a trigger for investment.¹³⁰

¹²⁸ Every dollar invested could yield \$2.8 in benefits.

¹²⁹ Psacharopoulos, G., 2014. *Benefits and costs of the education targets for the Post-2015 Development Agenda: Post-2015 consensus*. Copenhagen: Copenhagen Consensus Center, 2014.

¹³⁰ Sheehan, P. et al., 2017. *Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents*. The Lancet, 390(10104), 1792-1806.

The total cost of intervention may appear immense for India, which could amount to \$269 billion by 2030, but the potential economic gains are much greater and could reach more than \$800 billion if millions more educated girls enter formal employment. The methodology and scenario parameters may differ, but a study by McKinsey found that enabling girls to study and enter the labor force in India could contribute \$770 billion to the country's GDP by 2025.¹³¹

Figure 18. Economic Benefits and Cost of Interventions for the Period 2018-2030

	Mali	Uganda	Ghana	India	Lao PDR	El Salvador	Bolivia	Egypt
Total cost of interventions from 2018 to 2030 (US\$bn, 2017)	10	25	8	269	2	1	2	16
Total GDP contribution from additional educated girls from 2018 to 2030 (US\$bn, 2017)	17	42	16	836	4	4	8	45
Calculated Return on Investment (ROI)	2	2	2	3	2	4	4	3

Note: (1) This analysis only considers the economic benefits from employment and does not include the economic benefits that arise from health and other social benefits such as reduced adult mortality, (2) ROI is rounded up to the nearest whole number

Source: Citi Global Insights

Our study takes an overall conservative approach to the modeling of intervention costing, and economic impact, and therefore we recognize the estimated return on investment could be greater. Also, we have focused on the impact of educated girls on employment and earnings, but in reality the impacts of educating girls are *far-reaching* across their families and communities which can translate into even greater economic returns.

For example, improving the education and health of girls tend to lead to decreased mortality and fertility rates, reduced health costs, healthier and more educated children, and it can also help reduce generational poverty. There is also no shortage of evidence showing families benefit when women are economically empowered — women have been found to spend 90 percent of their income on their families, compared to 30 to 40 percent spent by men.¹³² There are even studies that stress the importance of girls' education for reducing conflict¹³³ and tackling climate change.¹³⁴ So in a way, it is difficult to actually quantify a true return on investment in girls' education and well-being given its unparalleled ripple effect across society and generations. The economic and social benefits are tremendous, but as discussed in Chapter 3, it is also not just an economic and social case but also a rights-based argument — every girl has the right to a safe and successful passage to adulthood.

Our findings – performance indicators

Performance Indicators

In addition to the economic indicators, our analysis has also considered the impact of the Intervention scenario on performance indicators across education, employment and child, early and forced marriage.

¹³¹ McKinsey Global Institute, 2018. *The power of parity: advancing women's equality in Asia Pacific*.

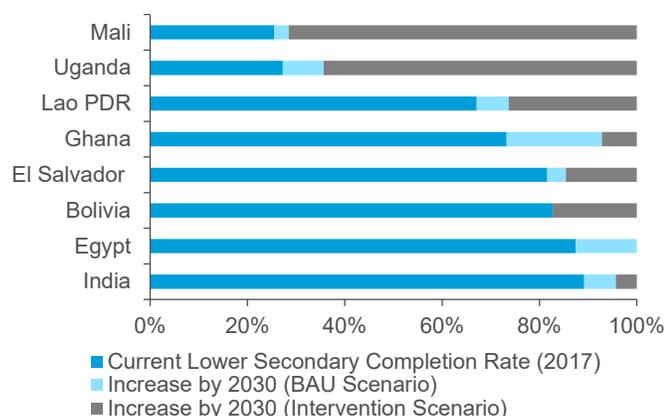
¹³² Women Deliver, 2015. *Invest in girls equality*.

¹³³ One, 2017. *Poverty is Sexist*.

¹³⁴ Kwauk and Braga (2017) found that for every additional year of schooling a girl receives on average, her country's resilience to climate disasters can be expected to improve by 3.2 points.

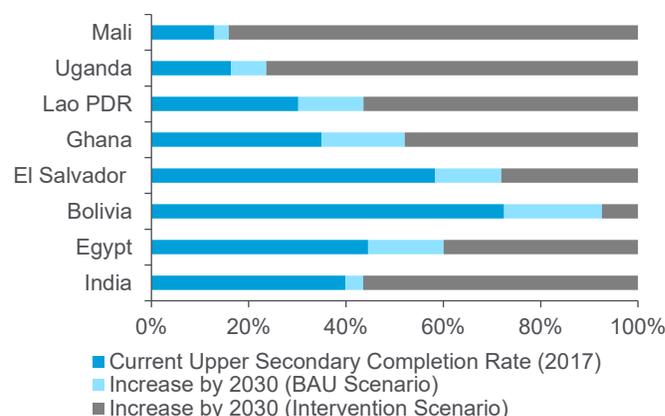
For education, a 100 percent secondary completion rate by 2030 was assessed for the Intervention scenario and we can see from Figure 19 and Figure 20 that there is still plenty of room for improvement in the educational attainment of girls across most of the countries. This is especially true for low-income countries Mali and Uganda, which have the most work to do in terms of improving access to education for girls. Based on current trends, the Business-as-Usual scenario estimates secondary completion rates for girls in both countries will likely remain below 40 percent (lower secondary) and 30 percent (upper secondary) by 2030. The top performer in education outcomes is Bolivia which, under a BAU scenario, is estimated to reach an upper secondary completion rate for girls of over 90 percent by 2030. The government has made education a priority since 2010 and education reforms in Bolivia since then seem to have been successful in increasing school enrollment, attendance, and completion, especially for girls, as well as indigenous children and children from poor households.¹³⁵

Figure 19. Female Lower Secondary Completion Rates (%)



Source: UNESCO UIS, Citi Global Insights

Figure 20. Female Upper Secondary Completion Rates (%)



Source: UNESCO UIS, Citi Global Insights

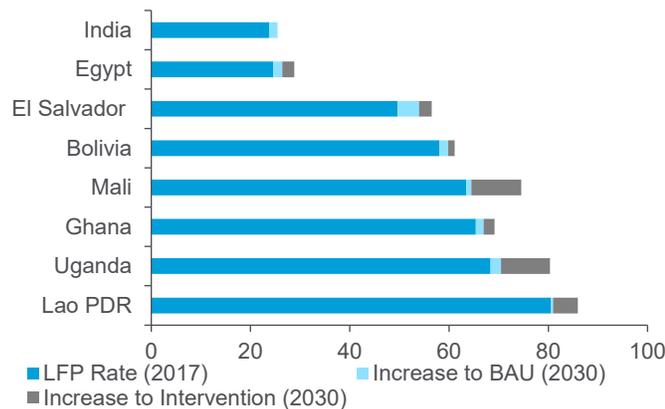
Employment indicators – India as an outlier in our study

In relation to employment indicators, Figure 21 and Figure 22 show the level of employment and share of formal employment for today and 2030 under a Business-as-Usual and Intervention scenario. Based on estimated impact from regression equations of each country, we find that improving education outcomes across all countries apart from India has the potential to increase employment for females. India is rather unique in that the country has been registering a declining female labor force participation rate in recent years. Studies have found the underlying drivers to be a combination of demand and supply factors, including increasing enrollment of women in secondary and tertiary education, increasing household income which allows some women to withdraw from the labor force, fewer opportunities for female rural workers, and difficulties for women to join the urban labor force.¹³⁶

¹³⁵ Andersen, L., 2019. *Who is being left behind by the education revolution in Bolivia?*

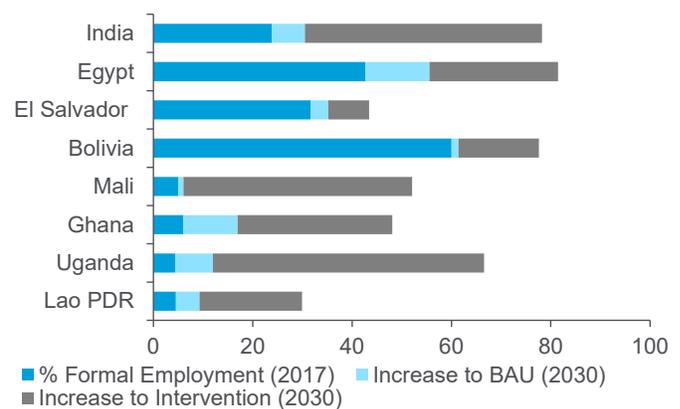
¹³⁶ Stotsky, M.J.G., 2016. *Trends in gender equality and women’s advancement*. International Monetary Fund.

Figure 21 Female Labor Force Participation Rate (%)



Source: ILOSTAT, Citi Global Insights

Figure 22. Formal Employment (% of Total Female Employment)



Source: ILOSTAT, ILO (2018) Women and men in the informal economy: a statistical picture, Citi Global Insights

The impact of education on employment type appears to be more significant than on female employment itself

The impact of education on employment type appears to be more significant than on female employment itself. Across all eight countries analyzed, improved education attainment leads to an increase in the share of formal employment, which in general is considered more productive than informal work.¹³⁷ The substantial increase in secondary completion rates in Mali and Uganda under the Intervention scenario drives large transitions from informal to formal employment, which in term translates into significant economic returns. However, we acknowledge the reality is much more complex and multi-faceted when it comes to employment, especially in low-income countries where informal work presents not only challenges but opportunities (see discussions below).

Employment Structure in Sub-Saharan Africa

The analysis assumes that better education outcomes translate into an increase in the relative share of formal employment, which is more productive than informal work and leads to greater economic gains. This aligns with the general international trend that the share of informal employment decreases as levels of development increases, but this is not always the country experience – South Africa and Honduras have observed parallel decrease in informality and increase in poverty. Formalization may be the ultimate goal as prescribed in UN SDG 8 and by the ILO,¹³⁸ but the transition to formalization is not going to happen instantly. In many developing regions such as Sub-Saharan Africa, informal work presents not only challenges but also opportunities. Productivity levels are low likely due to lower skill levels as well as a lower level of physical capital, but the informal sector also acts as a social safety net, providing jobs and income to people who might be otherwise unemployed in the formal sector.¹³⁹ The IMF's regional outlook for Sub-Saharan Africa finds that economies in the region are likely to have large informal sectors for many years to come. In reality, the process of formalization will take time and the ILO stresses that not all workers and economic units are in a position to formalize in the short/medium term, and that the first step in a gradual transition should be improvements in working and living conditions.¹⁴⁰

¹³⁷ However, it is important to note that not all informal workers are poor, but informal employment tend to lack legal and social protection, and is commonly associated with low productivity and income.

¹³⁸ In 2015, the ILO adopted the Transition from the Informal to the Formal Economy Recommendation 2015 (no 204).

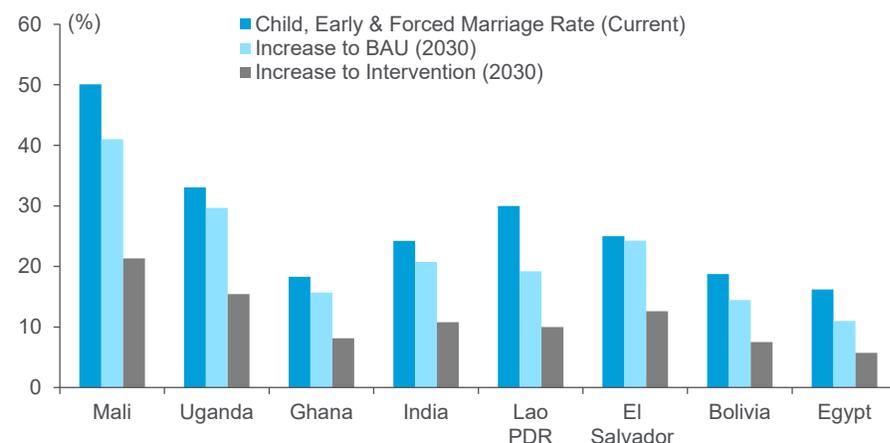
¹³⁹ IMFBlog, 2017. *Chart of the week: The potential for growth and Africa's informal economy.*

¹⁴⁰ OECD/ILO, 2019. *Tackling Vulnerability in the Informal Economy*, Development Centre Studies, OECD Publishing, Paris, <https://doi.org/10.1787/939b7bcd-en>.

Performance indicators on child, early and forced marriage paint a more complex picture

Finally, performance indicators on child, early and forced marriage paint a more complex picture. Based on available data on child, early and forced marriage intervention and impact, the analysis found a multi-component intervention could substantially reduce child, early and forced marriage rates but it does not lead to a complete elimination of them. Out of the countries considered, Mali currently has the highest rate with 50 percent of girls married before 18. Under the Intervention scenario, the child, early and forced marriage rate in Mali falls from 50 percent to 21 percent by 2030, and below 10 percent in Ghana, Lao PDR, Bolivia, and Egypt by 2030. This analysis takes a more conservative approach but recognises there are studies that report ensuring secondary education for girls could lead to a virtual elimination of child, early and forced marriage in developing countries.¹⁴¹

Figure 23. Child, Early and Forced Marriage Rates by Country



Source: Citi Global Insights

An educated and healthy society is likely to be a more productive and prosperous one

Interventions in child, early and forced marriage and education are needed to deliver the best outcomes across both dimensions which can lead to transformative social benefits where girls are empowered to make their own decisions on when, if and whom they marry. Ending child, early and forced marriage and early child births can reduce fertility and lower population growth, thereby helping alleviate pressures of overpopulation. This is particularly important for countries in Sub-Saharan Africa like Uganda, which has the world’s youngest population with almost 80 percent of its population below the age of 30. An educated and healthy society is likely to be a more productive and prosperous one, but investments in young people, especially girls, are needed now so that they, their families and their countries can thrive in the future.

“ Invest more in your people, especially adolescents, and especially in girls.

– JIM YONG KIM, PRESIDENT OF THE WORLD BANK (2012-2019)

”

¹⁴¹ Wodon, Q. et al., 2018. *Missed Opportunities: The high cost of not educating girls*. World Bank.

On the Ground Commentary: Soumya Guha, Country Director, Plan International Lao PDR

We at Plan International Laos welcome the purpose of the Citi GPS report which is to make the case for investing in adolescent girls now for sustained economic growth in the future. The report mentions that there is growing evidence for multi-sectoral investments delivering better results for girls compared to single sector investments, say in just education. It then makes the assumption that even for educational attainment to maximize and sustain, other supporting investments in preventing child, early and forced marriage, combating gender based violence, and improving financial inclusion are necessary. Let us look at this important assumption critically from a Lao PDR perspective.

We acknowledge the good progress made in the last twenty years in Lao PDR. It has been able to reduce poverty by half, reduce hunger, improve enrollment rates in primary and lower secondary education, and improve health outcomes. However, among the just over 700,000 adolescent girls in Lao PDR aged 10 to 19 today, around 42 percent are out of school, 24 percent are married, 43 percent are anemic and 42 percent are in child labor. The adolescent fertility rate is the highest in the ASEAN region at 83 per 1000. Furthermore, the numbers which are all generated from the latest National Lao Statistical survey are decreasing at a slow pace. For example, the current rate of decrease in child, early and forced marriage is 0.24 percent per year. To reach the ambitious SDG target of zero child, early and forced marriage by 2030, this rate should decrease by 1.8 percent per year which points to a 7 or 8 fold increase in effort. So business-as-usual is not an option.

Recognizing the need to center stage adolescent girls in national planning and reporting, the Government of Lao PDR jointly with UNFPA, Plan International, and other partners have created the 'Noi Framework'. The Framework centers around Noi, a persona of a 10-year-old girl, to represent all adolescent girls in Laos. The idea is to track the progress in the life of Noi through the five most relevant SDG goals and indicators. This includes girls out of school, child, early and forced marriage, teenage pregnancy, adolescent anemia, and child labor. Every year on the occasion of the International Day of the Girl relevant departments of the Government and development partners come together to take stock of the situation facing Noi i.e., the 700,000 plus adolescent girls that she represents. Together we discuss progress, good practices, challenges and the way forward. Lao PDR is perhaps one of the first countries to center stage 'Noi' in its voluntary periodic reports to the UN on SDGs.

There are significant challenges for a girl especially if she is from an ethnic group (there are 50 such groups in Lao PDR) and from the rural district to complete upper secondary schooling. Our studies around the Noi Framework in 'Bokeo' — a remote and ethnically diverse province in northern Laos — show that girls generally start school late and unprepared due to lack of early childhood care and development (ECCD) services. They hence struggle through primary education. The communities are far from each other and the distance to the secondary schools means a large number of them drop out. Child, early and forced marriage rates are as high as 40 to 50 percent among the Hmong and Khamue ethnic groups. One of the top barriers mentioned by girls, which prevents further schooling, is poverty affecting families' ability to buy school kit and uniforms. Other factors include distance from school and lack of safe boarding facilities in secondary schools. Gender norms in Laos support active leadership roles in the public domain for men and boys compared to women and girls. One of our program approaches has therefore been to support enhanced leadership role for girls in secondary schools. Around 60 percent of girls in Plan International-supported Government schools in Bokeo are Head Students or monitors compared to 25 percent or less on average in other schools. It has been clear to us that without working on improving livelihoods, economic inclusion, fostering a safe environment, and improving girl's agency and retention in schools cannot be achieved.

While Lao PDR's female labor force participation rate of 81 percent is high among comparator countries, over 95 percent of women are employed in the informal sector, especially in agriculture. For Lao PDR to *sustainably* graduate out of least developed countries (LDC) into middle-income countries (MIC) it might have to look at transforming agriculture and the rural economy. This is both a challenge and an opportunity. Upskilling of its female population so that the labor force participation rates do not drop will be critical. If this does not happen the dividend of increased spending powers in the hands of Lao women, which in-turn benefits the family, will be lost.

We shall hence need to invest adequately for girls to complete upper secondary education. However, we shall also have to critically look at aligning technical, vocational and tertiary education with the opportunities, trades and trends of an integrated regional and global economy' especially the changes brought about by the fourth industrial revolution. We will need to ensure that girls and young women do not miss out on the disruptive new technologies including artificial intelligence but in-fact help create them. The Government has rightly prioritized investing in human capital as it develops the 9th National Socio Economic Development Plan. The ask is to now collaboratively and creatively find the resources to invest in actualizing the Noi Framework.

On the Ground Commentary: Gary Lee Baldrige, Former Country Director & Lazare Charle Djibode, Country Director, Plan International Mali

Plan International recognizes that education is a crucial element to advancing gender equality, empowering girls and women, and reducing global poverty. Therefore, in the crisis-affected regions of the north of Mali, Plan International Mali contributed to improving access to quality education for 43,000 girls and boys. Support of school feeding programs, scholarships for girls, school sanitation with the separation of latrines for boys and girls, and efforts to eliminate the practice of early and forced marriage have all been key activities of Plan International Mali that have contributed to increased school attendance and completion by girls.

It is a reality that gender-based violence and harmful practices are human rights violations that occur in Mali, transcending socio-economic status, ethnicity, religion, and language. That is why Plan International Mali took the lead in the national coalition for the African Campaign against Child and Forced Marriage. When girls and women have the right to control their own bodies, sexuality, and fertility, it transforms gender relations and increases their ability to live happier, healthier, and more fulfilling lives. Therefore, through community participation we invest in gender equality and the health and rights of girls and women, including sexual and reproductive health and rights in times of humanitarian interventions.

An example of successful advocacy work with traditional and religious leaders and public campaigns for the change of social norms resulted in the declaration of the abandonment of female genital cutting in 72 villages in the Plan International Mali program areas. In the household economic security program, Plan International Mali facilitated the training, mentoring, and access to credit for approximately 70,000 women, organized in more than 2,000 village savings and loan groups, all this through solar energy, jobs creation, vocational training (skills development, entrepreneurship & decent employment) and cash for work.

Spending by Girls Also Contributes to Global Growth

Girls graduate to become important economic agents

In the analysis above, we focused on the impact of additional secondary graduates on employment and its resulting economic benefits, but it does not take into account broader impacts on the economy arising from the empowerment of girls and young women. As introduced in Chapter 2, spending is a useful proxy for growth and economic improvement, and data shows that investment in the development of young women has likely helped bolster consumer spending and GDP over the last 20 years. We explore this relationship further below through a global lens as well as via our subset of economies.

Using Marketpro data, we find that over the next 10 years, roughly 65 percent of economies may experience faster spending growth among girls ages 15-20. Most (27 percent) of these economies are anticipated to be among high GDP growth emerging markets (EMs) (i.e., economies that experienced 3 percent GDP growth or faster over the 2008 to 2018 span) in the MENA, Sub-Saharan Africa, Latin America and Caribbean, and Eastern European regions (Figure 24). This is followed by another 21 percent of economies that were low-growth EMs over the last decade in the same regions as the high-growth EMs, plus much of Asia excluding China.

Figure 24. 69% of Economies May See Faster Spending Among Girls

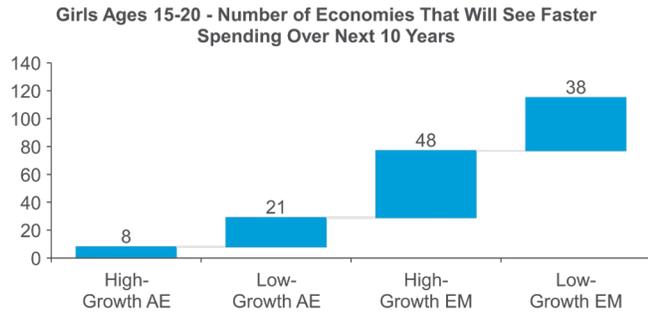
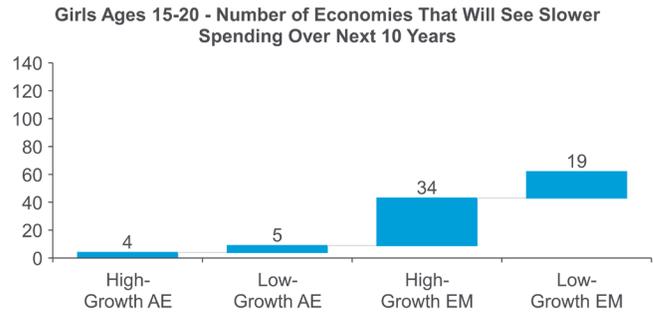


Figure 25. Others May See Slower, but Still Positive Spending Growth



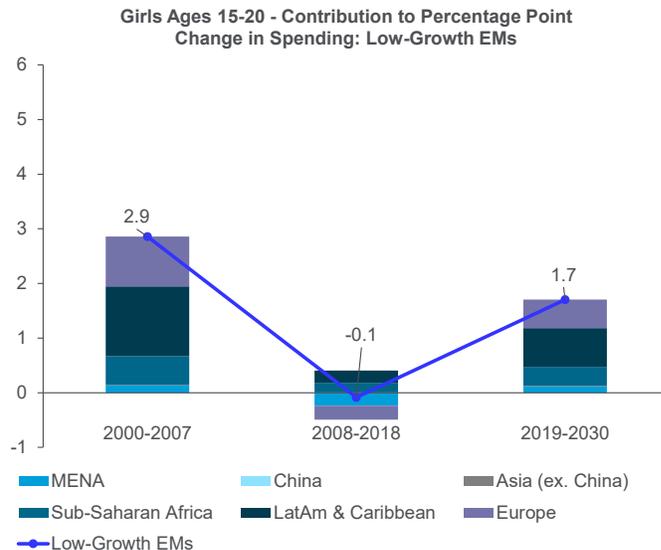
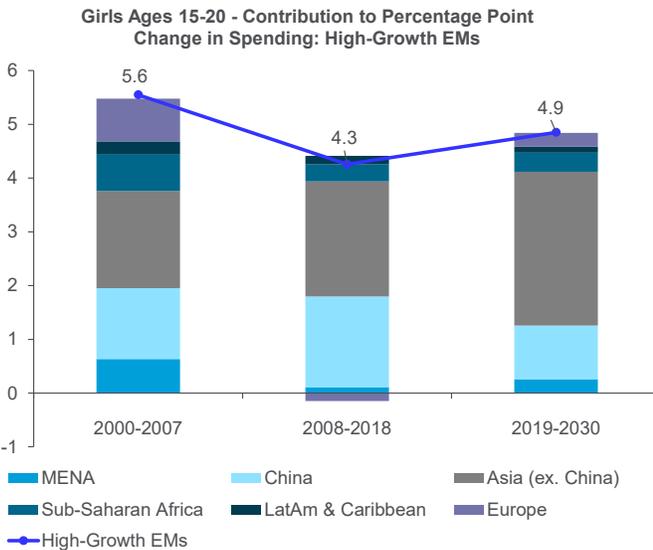
High-Growth AEs	Low-Growth AEs	High-Growth EMs	Low-Growth EMs
Estonia Ireland S. Korea Latvia Lithuania Malta Singapore Turkey	Australia Austria Belgium Croatia Cyprus Denmark Finland France Germany Greece Italy Japan Luxembourg Netherlands Norway Portugal Puerto Rico Slovenia Spain U.K.	MENA Sub-Saharan Africa LatAm & Caribbean Europe Albania Armenia Bahrain Bangladesh Bolivia Bulgaria Burkina Faso Burma Cambodia Cameroon Colombia Cote d'Ivoire Djibouti Dominican Republic Ethiopia Georgia Guatemala Guyana Iran Jordan Kazakhstan Kenya Kuwait	MENA Asia (excl. China) Sub-Saharan Africa LatAm & Caribbean Europe Argentina Azerbaijan Barbados Benin Bosnia & Herzegovina Brazil Brunei Cabo Verde Central African Rep. Chad Comoros DR Congo Czech Republic El Salvador Eritrea Fiji Gambia, The Guinea Guinea-Bissau Haiti Honduras Hungary Jamaica

Source: MarketPro and Citi Research.

High Growth AEs	Low Growth AEs	High Growth EMs	Low Growth EMs
Hong Kong Iceland Israel	Canada New Zealand Sweden Switzerland United States	Asia Ex China Afghanistan Algeria Angola Bhutan Chile China Congo, Democratic Republic of the Costa Rica Egypt Ghana India Indonesia Iraq Malawi Malaysia	Mongolia Nicaragua Nigeria Oman Pakistan Papua New Guinea Peru Poland Saudi Arabia Tajikistan Tunisia Turkmenistan Uzbekistan Zambia Belarus Belize Botswana Burundi Equatorial Guinea Gabon Kosovo Lebanon Lesotho Liberia Namibia Qatar Sierra Leone Solomon Islands Uruguay Zimbabwe

Source: MarketPro and Citi Research.

Figure 26. Both High- and Low-Growth EMs May Also Experience Faster Growth in Spending Among Late-Adolescent Girls Over the Next Decade

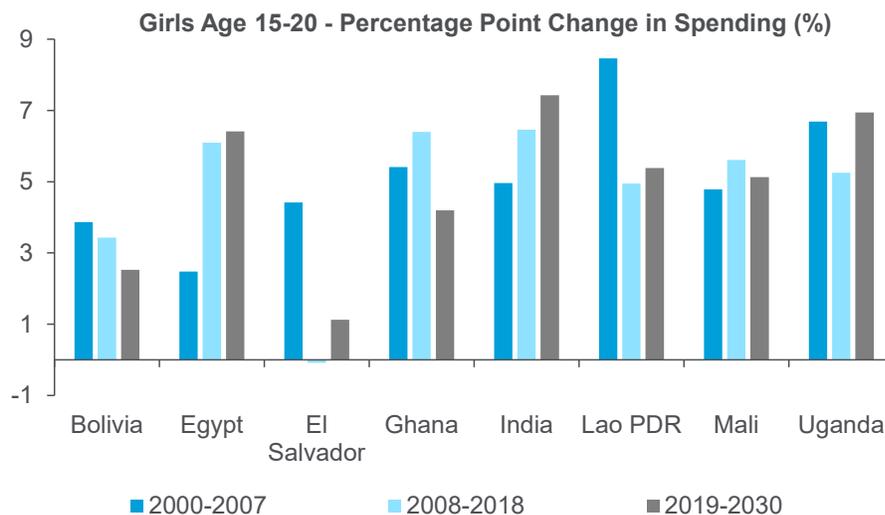


Source: MarketPro and Citi Research.

Source: MarketPro and Citi Research.

If we focus in on the eight countries in our sample, we find that growth in spending among young women is expected to expand over the next decade. Consumption, as measured by MarketPro, among girls aged 15-20 at any point over the next 10 years is expected to be on average higher relative to the prior ten years for Egypt (6.4 vs. 6.1 percent on average per year), El Salvador (1.1 vs. -0.1 percent), India (6.5 vs. 6.1 percent), Lao PDR (5.4 vs. 4.9 percent), and Uganda (6.9 vs. 5.3 percent) (Figure 27). Even for select economies with somewhat slower growth, the rates are still quite robust: Ghana at 4.2 percent on average per year, and Mali at 5.1 percent. Closing the gender gaps for girls can help accelerate GDP growth via the consumption channel.

Figure 27. Growth in Spending for the Cohort of Girls Ages 15-20 Is Largely Expected to Expand



Source: MarketPro and Citi Research.

Chapter 5: Making It Happen – Holistic Intervention to Realize Potential

Going Beyond Investments in Girls

Our analysis has found that developing economy's GDP could be boosted by 10 percent on average by 2030 taking into consideration the costs of a holistic intervention package in improving girls' lives

Based on growing evidence that a multi-component intervention delivers the best outcome for girls, our analysis found that achieving 100 percent secondary completion rates for girls by 2030 could lift a developing economy's GDP by 10 percent on average compared to a Business-as-Usual scenario, taking into consideration the costs of a holistic intervention package. The long-term economic benefits are significant and outweigh the potential costs in the short term. Results vary considerably by income level where low-income countries such as Mali and Uganda may take longer than lower-middle income countries to reap the economic benefits of improving girls' education and well-being, but they also have the most to gain in the long run (18-20 percent lift to GDP levels by 2030) as successive cohorts of girls finish full cycles of education and start working. Our analysis has focused on the impact of education on employment and its associated economic benefits, but we also highlight that investing and empowering girls can also contribute to GDP directly through increased spending. Beyond that, the immense social and community benefits that comes from educating and empowering adolescent girls will likely translate to even greater economic gains.

In the last chapter, we found that improving adolescent girls' well-being and economic opportunity doesn't just change their life trajectory, but can help developing economies pivot to stronger growth trajectories. Understandably, a country must make investments across a range of sectors in order to grow their economy and governments need to prioritise the use of finite resources. Countries have long prioritized investments in infrastructure i.e., roads, airports and so on, to drive economic growth, but the World Bank notes the world faces a "human capital gap" and calls on nations to invest more in their people. In April 2019, the World Bank launched its Africa Human Capital Plan that aims to support African countries to improve investments in people and boost survival, health, education, social protection and women's empowerment by 2023.¹⁴²

Realising the UN SDG's through investment in girls and infrastructure

The Copenhagen Consensus Center identified 19 UN SDG targets representing the best value for money in development which include increasing girls' education, as well as elimination of gender-based violence and improving gender equality in ownership, business and politics.¹⁴³ However, it is also worth noting that investments made in physical capital, such as better infrastructure, can also improve opportunities for girls through easier access to schools, and ability to spend more time at school, as well as through better water, sanitation, and hygiene facilities. An IMF study found that in emerging economies, improved access to sanitation facilities is negatively correlated with the gender gap in years of schooling.¹⁴⁴

¹⁴² World Bank, 2019. *World Bank Africa Human Capital Plan*.

¹⁴³ Copenhagen Consensus Center, 2016. *Post-2015 Consensus – Nobel Laureates guide to smarter global targets to 2030*.

¹⁴⁴ Jain-Chandra et al., 2018. *Gender Equality: Which Policies Have the Biggest Bang for the Buck?* International Monetary Fund.

The criticality of holistic interventions

We believe investing in adolescent girls is not only a social and rights-based imperative, but economically critical especially for low-income countries. This means addressing the key barriers that adolescent girls face – education, violence, child, early and forced marriage, and economic independence. However, interventions and investments in adolescent girls may be essential but it does not necessarily mean they will successfully transition from school to formal employment. Other interventions and drivers to improve the context within which girls are living are also required and are discussed below.

Beyond Investments in Adolescent Girls: Don't Stop Me Now

Women as “Global Growth Generators”

Merely getting an adolescent girl through to adulthood, educated and healthy is not enough. Women have the potential to drive faster global growth through increased labor force participation and higher productivity, and this potential was characterized as the “WG3 Effect” (Women as Global Growth Generators) in the inaugural [Women in the Economy](#) Citi GPS report back in 2015. There is no quick solution to delivering the WG3 effect, but a diverse set of interventions are needed in order to capture the gender-driven growth potential. The “basics”, which include education, health and safety, are required to set a woman on the right path to fully develop her potential, but as we can see from Figure 28, there is also a range of other drivers which are needed to deliver the W3G effect.

Figure 28. Drivers of the WG3 Effect

The Basics	Policies	Tax Policy	Discrimination	Public Attitudes	Role Models
<ul style="list-style-type: none"> • Education • Health (including reproductive health) • Safety (including in the workplace) • Political stability/security • Infrastructure (especially transportation) 	<ul style="list-style-type: none"> • Affordable childcare • Provision to support flexible work • Maternity provisions (including paid parental leave for men and women and right to return to work) 	<ul style="list-style-type: none"> • No tax disincentive for second income • Child and working tax credits 	<ul style="list-style-type: none"> • Policies to prohibit discrimination (in the workplace, in inheritance, in financial matters and in social issues) 	<ul style="list-style-type: none"> • Towards women working in the formal economy • Towards women in politics, business and executive level positions 	<ul style="list-style-type: none"> • Female role models in all sectors

Source: Citi Research

Investment made in girls education, well-being, and economic independence need to accompany supportive policies that boost women’s ability to participate in the formal economy

The ILO has found that being young and female can serve as a double strike for those looking for productive employment, especially in developing economies.¹⁴⁵ Often, women may have little choice but to take on poor quality work that allows them to attend to unpaid childcare and domestic work for which they bear disproportionate responsibility. Investments made in girls education, well-being and economic independence need to be accompanied by supportive policies that boost women’s ability to participate in the formal economy.

¹⁴⁵ Elder, S., & Kring, S., 2016. *Young and female-a double strike? Gender analysis of school-to-work transition surveys in 32 developing countries.*

Comparisons of Botswana and Ghana

An educated, skilled, and healthy young woman cannot contribute productively to the economy if she does not have equal access to the labor market and is unable to find a job. As highlighted in earlier Citi GPS Women in the Economy reports, the potential for policies and practices, and therefore for economic opportunities for women, to improve is likely to be highest across emerging economies. This is where countries can learn from each other and adopt policies that have worked in other countries as well as remove those that are harmful. A comparison of average years of schooling for females and female labor force participation rates in Ghana and Botswana show that both countries have approximately the same years of schooling but Botswana has 3 times more women in the formal work force. This difference may be partly explained by the fact that Botswana has more progressive gender-inclusive laws and policies.¹⁴⁶ In addition to more equal legal rights, an IMF working paper also found that better infrastructure, low adolescent fertility, as well as a stronger institutional environment, are strongly associated with higher female labor force participation as well as narrower gender gaps.¹⁴⁷

The success story of Rwanda

Rwanda is a low-income country that often stands out and outperforms its peers across gender indices. It is the top ranked Sub-Saharan country in the EM2030 SDG Gender Index and outperforms many lower-middle income countries. According to the WEF 2020 Global Gender Gap Report, the country has closed 79.1 percent of its gender gap, and ranks 9th overall (out of 153 countries).¹⁴⁸ The key drivers of Rwanda's success lie in its institutional structures with top-down policies that actively enforce women's empowerment, as well as having gender rights enshrined in its constitution. Substantial investments in maternal and child health over the past two decades have likely contributed to Rwanda's recent economic success where, between 2000 and 2015, average income more than doubled, outperforming the average growth rate across Sub-Saharan Africa.¹⁴⁹

However, there are still some key challenges that remain to be addressed, many of which stem from social and cultural norms that conflict with legislative reforms. For example, gender-based violence is still a major issue across Rwanda, and female political empowerment does not necessarily mean equality in the household where gender norms are still pervasive.¹⁵⁰ In order to create a truly inclusive and gender-balanced society, supportive policies must also come hand in hand with removing cultural and social barriers to women participating in the economy. These additional measures are all drivers of the W3G effect, many of which still remain challenges across advanced economies.

¹⁴⁶ Bill and Melinda Gates Foundation, 2019. *Goalkeepers report 2019*.

¹⁴⁷ Jain-Chandra, M.S. et al., 2018. *Gender Equality: Which Policies Have the Biggest Bang for the Buck?* International Monetary Fund.

¹⁴⁸ WEF, 2020. *Global Gender Gap Report 2020*.

¹⁴⁹ Bloom, D.E. et al., 2018. *Invest in Women and Prosper*, IMF Finance & Development.

¹⁵⁰ Uvuza, J., 2014. *Hidden inequalities: Rwandan female politicians' experiences of balancing family and political responsibilities* (Doctoral dissertation, Newcastle University).

Advanced Economies Provide Insights but Still Reveal Problems

Residual challenges in developed markets

Most of the barriers that girls face in many emerging and developing countries, such as lack of education, health issues and child, early and forced marriage have largely been addressed in many advanced economies. According to the OECD, gains in educational attainment account for roughly half of all economic growth in OECD countries in the period 1960 to 2007, and most of this can be traced back to the educational attainment among girls and young women and the associated benefits that this had for employment and productivity¹⁵¹. In advanced countries, women are also beginning to outpace men in tertiary education with implications for labor force participation. However, women continue to be poorly represented in higher-income strands of the economy that typically come from studying subjects such as Science, Technology, Engineering and Mathematics (STEM).

Nordic best practice

Even though the education gap has closed in many advanced countries, there remain challenges and barriers where equal opportunities in education do not necessarily translate into equal access to economic opportunities. These include amongst others unaffordable childcare or inadequate maternal provisions, unequal pay, unequal opportunities for women to advance in senior management positions and others. The exact measures needed to reach gender parity in many countries are different and depend on a number of issues such as a country's history, culture, attitudes to family, gender norms, labor markets, the role of government and so on, but there are some advanced countries that are worth highlighting. The Nordic countries in particular have been praised for their gender friendly policies and boast some of the most gender-equal labor markets in the OECD. It is estimated that in Denmark, Iceland, Norway, and Sweden increases in women's employment accounted for 10-12 percent of GDP per capita growth over the past 40-50 years¹⁵².

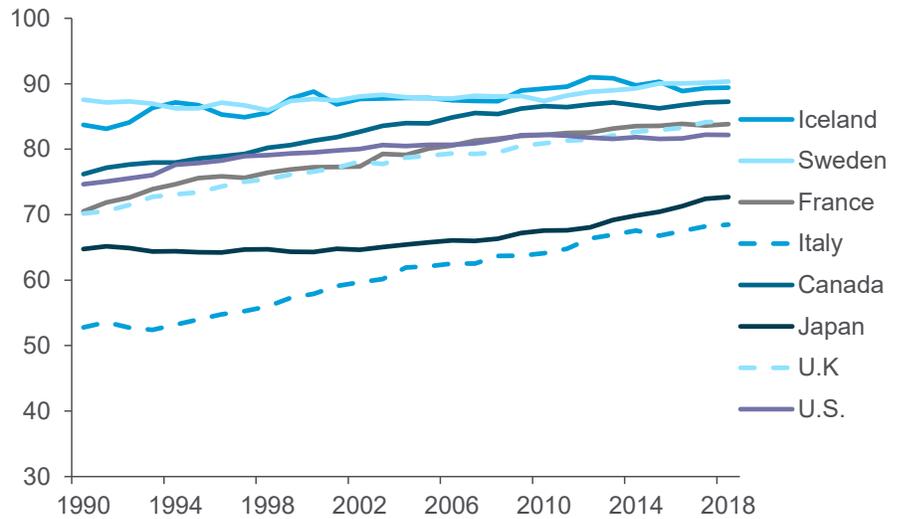
And let's take a closer examination of Iceland — it has been ranked first by the WEF Global Gender Index for the 11th year in a row, and has now closed almost 88 percent of the overall gender equality gap. There are a number of reasons why Iceland has been so successful, including a strong women's movement, the political will to make the necessary changes, good legislation, and positive public sentiment towards gender equality. Iceland and most other Nordic countries offer equal sharing of parental leave which encourages a more gender-equal participation in the labor market. In fact, as shown in Figure 29 below, we can see that Sweden and Iceland have higher ratios of female to male labor force participation compared to other advanced countries.

However, even though Iceland has closed much of its gender gap, there is still room for improvement. For example, women still earn on average 16 percent less than men. To address the gender pay gap in Iceland, parliament passed an amendment to the 2008 legislation on equal position and equal rights in 2017, making it mandatory for all firms and institutions with 25 or more employees to obtain a 'Pay Equality Certification'. Other countries such as the U.K., Sweden, and France are also working on reducing the gender pay gap.

¹⁵¹ OECD, 2018. *Is the Last Mile the Longest? Economic Gains from Gender Equality in Nordic Countries*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264300040-en>.

¹⁵² Ibid.

Figure 29. Ratio of Female to Male Labor Force Participation Rate (%)

Source: The World Bank¹⁵³

Advanced economies show us that making holistic investments in adolescent girls is not enough — policy makers must also tackle barriers that prevent women from participating in the formal economy as adults

The potential gains to be made in the productivity of women are enormous. However, it is not only about enabling more women to work, but perhaps more so it is about allowing and empowering women and girls to widen their options, improve their livelihoods and, if they chose so, to fully develop their productive potential in the formal work force. Something that we can definitely learn from advanced economies is that in order to make this happen, holistic investments in adolescent girls is a necessary requirement but not enough — policy makers must tackle barriers that prevent women from participating in the formal economy and create supportive policies that aim to speed up the WG3 effect.

¹⁵³ <https://data.worldbank.org/indicator/SL.TLF.CACT.FM.ZS>

Making it Happen: Collaborations Across Stakeholders

What we have shown in this report

This report has shown that harmful social norms, restricted assets and resources, and insufficient laws and policies represent the root causes for the major barriers that adolescent girls are facing in the areas of health, education, violence and economic independence. To varying degrees adolescent girls worldwide are losing out in leading a healthy and fulfilled life, and societies and economies are losing out in turn. Interventions and investments are needed to remove the obstacles to girls' development and, in this report, we have analyzed the potential costs of addressing these through a holistic intervention package, as well as the possible economic benefits that could be generated in so doing.

Education creates a multiplier effect but on its own is not enough to release trapped potential

While education is often understood as the key to unlocking girls' potential and has a multiplier effect across other dimensions of a girl's life, it is not enough just to keep a girl in school. The analysis in Chapter 4 has shown that if countries invest holistically to improve the education outcomes of adolescent girls, this could lead to increased employment and earnings, and help developing economies pivot to stronger growth trajectories. The economic benefits cannot be delivered with a flick of a switch but take time to build as successive cohorts of educated girls leave school and enter the labor force. This means sustained interventions and investments are needed now to set girls and economies on an upward and stronger trajectory.

Different countries will have different return trajectories for a given package of interventions

Low-income countries such as Mali and Uganda may take longer than lower-middle income countries to reap the economic benefits of improving girls' education and well-being given the current low education attainment for girls. However, they also have the most to gain in the long term as the number of educated and skilled working females increase. It is important to note that we have focused on the impact of educated girls on employment and earnings, but in reality the full impacts of empowering girls are difficult to quantify given the ripple effect of positive change across their families and communities. We also highlight that girls can accelerate growth by increased spending as they transition to adulthood. This shows that girls and young women should not be seen as only beneficiaries but also as consumers and important economic agents. We believe investing in girls should be prioritized across economies, not only because it is the right thing to do but because it also delivers unparalleled returns and impact across society and generations. When girls are educated and empowered economies grow and prosper, and girls may even hold the key to tackling other global challenges like climate change. The international community must not forget about girls in COVID-19 recovery plans, and we ultimately believe prioritising girls' education and empowerment can help communities and economies build back better and stronger.

All parts of society – governments, private sector, NGOs, donor organizations and so on – need to do work together to effectively tackle the barriers that adolescent girls face

While the report shows that holistic investment and interventions can be a solution to alleviate the barriers that girls are facing and to increase economic growth, it has also been shown that empowering girls is a complex issue that needs to be solved within a framework of limited resources. This means that all parts of society — governments, private sector, NGOs, donor organizations, civic society — need to do their part and work together to effectively tackle the barriers that adolescent girls are facing. As we have learnt from the case studies and, later in this report, the interviews, if given the opportunity girls want to learn, work and contribute to their families and communities. Now it is up to us to remove the barriers that are holding them back.

We propose that each actor has a unique role to play according to their strengths and remit and that collaboration between the actors is necessary to achieve the best outcome possible. We do not aim to capture all the roles that each sector can play but bring out the central ones and discuss them through the lens of *“How can a more nuanced and collaborative partnership advance the rights and development of adolescent girls?”*

The role of governments

Within the context of breaking down the barriers that adolescent girls are facing, the government’s power, as duty-bearer, lies predominantly in passing and implementing laws and policies that support adolescent girls’ equal opportunities and protect them from discrimination, as well as adequately resourcing the delivery of all services. However, the government should also be the facilitator of relationships between private sector actors and NGOs. Likewise governments should (and through international instruments are required) to play a specific role in improving administrative data collection on the situation of adolescent girls in their respective countries in order to understand where more work needs to be done and where progress can be best expedited. Governments are also best placed to implement good governance and economic stability which helps young people, and especially adolescent girls, to fulfil their potential within the society.

The role of the private sector

Private sector actors are well suited to provide additional capital and support for initiatives that advance girls’ empowerment, especially in the areas of education and economic independence. As we discussed earlier, girls and young women should also be viewed as important economic agents from whom businesses can benefit. Furthermore, private sector actors can implement gender equality policies and strategies in their own companies and help foster social norm change that also leads to a better balance in the allocation of unpaid responsibilities among women and men.

The role of NGOs

NGOs are well suited to work with girls, their families, and communities to change the harmful gender norms and stereotypes that are one of the root causes of the barriers that adolescent girls are facing. By having a trusted relationship with governments and communities, NGOs can implement interventions in collaboration with governments or private sector actors. Furthermore, NGOs can use their front-line expertise to inform and influence the policy and action of governments and other actors to create long-lasting and holistic change for adolescent girls.

Financial products and services

The financial community has an important role to play in advancing women and girls’ economic empowerment, and not just in terms of providing more capital, but also in innovating new forms of finance and improving access to existing funding. In the past few years, gender-lens investments have grown significantly but still remain a small portion of overall investments. From 2014 to 2018, publically available gender-lens mandated investments grew from \$100 million to \$2.4 billion in assets under management.¹⁵⁴ Gender-lens investing can target a range of outcomes from increasing women’s access to capital and advancing their education and well-being, to supporting the development of better, more accessible products and services.

¹⁵⁴ Veris (2018) *Gender Lens Investing: Bending the Arc of Finance for Women and Girls*.

Innovative Financial Instruments

Impact bonds are Results-Based Financing instruments and an innovative form of public-private partnership. Social Impact Bonds (SIBs) and Development Impact Bonds (DIBs) finance development programs with money from private investors who earn a return if the program is successful, paid by a third-party donor. In the case of SIBs, the outcome payer is the government, whereas in a DIB it could involve foundations, donor agencies, or corporations. In situations where governments may not be able to serve as the outcome payer, DIBs can offer an alternative. For example, the world's first DIB in education was launched in 2015 — the Educate Girls' DIB targeted increased enrollment of marginalized girls and improvements in education outcome in villages across Rajasthan, India. The 3-year project was intended to be a proof of concept and final results found the DIB to have surpassed both its target outcomes. However, the implementation of DIBs is not without its challenges, which include high upfront costs and length lead times (some projects up can take up to 18 months to get off the ground). Other relevant bonds include Sustainable Development Goal Bonds which align the funding of environmental and social impact projects with the UN SDGs. In 2019, the World Bank issued two Sustainable Development Bonds¹⁵⁵ to raise awareness for the importance of investing in women and girls to accelerate economic development and the UN SDG agenda.

While each actor has a unique audience, knowledge, and resources, it is the diversity of a combined skillset that makes cross-sectoral partnerships so important for improving opportunities for adolescent girls. (See, for example, the interview with Christina Lowery, CEO of Girl Rising, in the next section of this report). The table below showcases examples of where each sector can play a role as well as which combination of actors is especially effective to tackle the specific barriers that a girl encounters throughout her life, and especially throughout adolescence. The table does not present an exhaustive list for each sector/combination of actors, but it does provide examples of targeted interventions that sectors can engage in. We would love to hear about other examples and case studies from our readers so please do get in touch.

¹⁵⁵ The first was launched in March 2015 with Impax Asset Management, and the second in November with Treehouse Investments.

Figure 30. Role of Different Sector Actors in Improving Opportunities for Girls and Young Women

	Age 0-9	Age 10-12	Age 13-16	Age 16+
Goal	Girls are assigned the same value as boys and are cared for	Girls access quality education and live free from violence	Girls can decide when and who to marry and when to have children and with who	Girls can start living an economically independent life and live free from violence
Role of Government	Primary role in mobilizing and allocating resources across relevant departments Provide access to quality education Collect gender-disaggregated data on children and young people (especially on violence)			
Goal:	Implement laws and international treaties that abolish discrimination of the girl-child	Implement laws and policies on minimum years of schooling for girls	Implement laws and policies that prevent and penalize CEFM	Implement laws and policies against discrimination of girls and women in the workplace Implement social policies that foster gender equality amongst families Provide health care and support services for girls who are victims of CEFM and for young mothers
Role of Private Sector	Fund gender equality/empowerment initiatives Implement gender equality policies within the workplace to create positive gender norms at work and home			
Goal:	Support education, health and economic independence initiatives, provide access to products and services Support girls and young women in their career development – help them acquire visibility, role models and networks through placements, outreach and mentorship programs and events Develop a comprehensive strategy across the value chain – which include incentivizing frontline management, and setting inclusive procurement targets (See Women in the Economy II Citi GPS)			
Role of NGO	Early Childhood Development Interventions with parents and families to change harmful gender norms	Advocate for gender-transformative curricular in education and for comprehensive sex education for boys and girls	Implement girls' empowerment programs and provide safety trainings Facilitate the return to school of girls who got married early and young mothers	Foster young women's savings groups
Collaborations	NGO/Private Sector Implement interventions in communities where the NGO brings the access to the community and private sector companies bring expertise, products and pro-bono work. Examples include programs on infant nutrition, STEM initiatives for girls, financial literacy programs for girls, pro-bono legal support			
	Private Sector/Government Support governments in accessing capital, invest and build infrastructure i.e. schools, roads, public transport, finance education and health initiatives, improve girls' access to financial services			
	NGO/Government Implement early childhood development programs for especially vulnerable families and children	NGO/Government Implement education initiatives in communities and support the government in providing gender-sensitive teacher training	NGO/ Government NGOs support governments in implementing awareness raising initiatives about the negative consequences of CEFM and early pregnancy	Private Sector/NGO Implement initiatives that equip girls with relevant skills for job markets and provide upskilling programs for girls and young women

Source: Plan International and Citi Global Insights

Conclusions: Three Key Components of Success

Three key components in a successful framework

In conclusion, we believe the framework for effectively breaking down the complex barriers that are holding adolescent girls, societies and economies back includes three main components:

1. **Holistic approach to investment and interventions:** This report has shown it is necessary to work on breaking down all the major barriers that adolescent girls are facing, rather than just focusing on one. This means investments and interventions are needed in the areas of health, education, violence, and economic independence, all of which are inter-linked. Investment and interventions also need to take place over the course of a girls' life in order to break down the evolving barriers that she faces as she grows. While in the first years of a girl's life, early childhood development is very important, barriers to education become important once a girl gets to school age, followed by barriers of child, early and forced marriage, early pregnancy, and a lack of economic independence in her adolescent years. If actors do not take a holistic approach to investment and interventions throughout a girl's life, it is likely that girls will succumb to a barrier and be more likely to divert onto a downward trajectory over time.
2. **Collaborative approach:** For reasons outlined throughout this report, horizontal collaboration between governments, the private sector, and NGOs is paramount to effectively tackle the barriers that occur throughout a girls' life. Secondly, vertical collaboration between girls, their families, their communities, and the state need to be encouraged for an upward convergence across societies. If stakeholders operate in siloes change is still possible but might only be achieved at greater cost, with less impact and over a longer period of time.
3. **Systemic and long-lasting change:** Girls who are educated, skilled, and empowered need to live in a society where they can thrive and where their potential can translate into economic and societal activity. Systematic and long-lasting change calls for consistent improvement of laws, policies, and norms that end discrimination of girls and women and open up equal opportunities. When girls who have developed their full potential are living in societies that do not provide a supportive environment, societies and economies will not be able to reap the benefits of having invested in girls.

We believe that all three components outlined above need to be in place in order to secure the best societal and economic outcomes of any investment in adolescent girls' potential. When any components are missing from the approach, the risks of not achieving girls' full potential increases and the effectiveness of investments and interventions decreases.

All parts of society must work together to close the gender gap in all areas of young people's lives and empower girls to fully develop their potential – we shall all benefit

There is no quick solution to delivering the Women as Global Growth Generators (W3G) effect, and there is progress to be made in all countries, but the needle can be moved if holistic investment and interventions, collaboration, and systematic change is fostered by all actors. Across advanced economies where education attainment is high for both girls and boys, eliminating barriers to work is key, but in emerging and developing economies, significant productive potential remains to be achieved by improving girls' educational attainment, health, and well-being.

A multi-pronged investment approach can deliver the best outcome for girls' development, but this also needs to go hand in hand with removing legal, cultural and social barriers to women participating in the economy. This can only happen if all parts of society work together to close the gender gap in all areas of young people's lives, and empower girls to fully develop their potential. We shall all benefit.

Chapter 6 – Interviews

An Interview with Christina Lowery, CEO at Girl Rising



Christin Lowery
CEO, Girl Rising

Christina Lowery is passionate about narrative storytelling as an engine of social awareness. In 2009, she helped found Girl Rising, serving as its Managing Director, and in 2017 led its transition from a film production company to a non-profit. Christina is responsible for the strategy and execution of Girl Rising's expanding work around the globe including the production of new films and other media, implementation of GR's on the ground programs and ongoing engagement with public and private sector partners, foundations, media partners, educators, and grassroots supporters.

Christina, thank you so much for taking the time to speak to us. Can you tell us a little more about how Girl Rising started?

Girl Rising is a Non-Profit Organization working to transform the way girls everywhere are valued, supported and educated. We started almost 11 years ago and not initially with the intention of being a non-profit. I was a part of the founding team — a group of filmmakers and journalists — who were approached by a funder who wanted us to explore a project on how to end global poverty. With that question in mind, we went out and spoke to experts, practitioners, and academics across the spectrum of development and what we heard really surprised us. Every single person we spoke to, no matter what sector, all agreed on one thing — the key to improving outcomes in their sector was to get girls in school and keep them there.

There is a mountain of evidence that points to the positive benefits of educating girls — it improves health, prosperity, peace, and stability, and is in fact the single best investment that can be made to end generational cycles of poverty. Because when you educate girls you begin a ripple effect of positive change that goes across generations. We thought, if it's our job as journalists to take the truth that's held by a few and bring it to the broader world, then this is the story of a lifetime and we want to do everything we can to shout it from the rooftops. We then of course had the very daunting task of making a film about girls' education that people would want to see. We knew we wanted to make something that showed the girls not as victims, but as the powerful agents of change that we know them to be. We also knew that we wanted the film to be a tool — we set out to use it as a tool to change minds, lives and policy. I'm very pleased to say we did all of those things.

Around the time the original film came out in 2013, we got the opportunity through a major grant from USAID to create a multi-part program in three places — India, Northern Nigeria, and the Democratic Republic of Congo. We had always talked about how to use the film to ignite change in the communities like the ones featured in our film, some of the hardest places on earth to be a girl. We came up with three main pillars of our work — the first one was a mass media campaign, for example in India we remade the Girl Rising film in Hindi with Bollywood stars, partnered with the government, made public service announcements about the benefits of educating girls that were shown in movie theaters, television, and radio. Second, we turned our film into practical tools for our partners who work with girls, boys and their communities to use in their programming. For example, in Northern Nigeria we created a curriculum that was approved by the state board of education in Kano State so it could be implemented in local schools. The third pillar was influencer engagement.

It was the work that we did in these three countries, and overwhelmingly positive outcomes we saw in our monitoring and evaluation that led us to become a non-profit and set up for the long term.

What an amazing origin story, what does Girl Rising focus on now?

Today, we have focused our mission on changing the way the world values girls through storytelling and partnership. We envision and are working towards a world in which every girl is valued, supported, and educated. We do three specific things: We create, We Educate, and We Activate. We create stories of real girls who are facing real challenges in the real world. We tell these stories because the world needs to know about the full reality that girls face, and they need to know about the exponential positive benefits of ensuring that girls are supported in school and provided opportunities to reach their potential. We believe in the power of stories to engage people because stories make big issues proximate and personal. They help us see ourselves in others. They help people see the challenges girls face and the courage they summon to confront those challenges. We create these stories in the medium of film, but also we have a young adult book, we created radio programming in one country, short form videos, social media content and, critically, educational tools and curricula.

The second pillar of our work is we educate. We use our stories and curriculum to educate the broad public and we work hand in hand with local partners and teachers to educate girls — building confidence, agency and developing mindsets and skills so they can create a different future for themselves. And, again, hand in hand with local partners, we educate those around girls — boys, parents, teachers, leaders — building empathy and awareness, changing attitudes and social norms so they stand up for girls and against gender discrimination.

Through the vehicle of our deeply personal stories, we are reaching people not just in their heads, but in their hearts. Our stories help community members and teachers see and believe in a different future for girls, and see the role they can each play in taking down the barriers that hold girls back.

The third pillar is that we activate. We use these stories to catalyze action — individual action and collective action. Our tools help anyone — be they a student activist, a teacher, a corporate, or community leader — engage in this issue and to take action. Collectively, these conversations and actions help strengthen and fuel the movement for girls' equality.

Girl Rising recently partnered with Citi and IRC on a project called Brave Girl Rising — can you tell us a bit more about the collaboration?

The original film Girl Rising film tells nine different stories about nine girls in nine different countries, and explores many of the barriers that keep girls from attending school. A few years ago, we began talking about a series of new short films about issues we and others in the space believed were urgent to highlight, now five years later. While there are many stories to tell and many important issues, there were two that stood out to us in 2018: girls in refugee and displaced situations; and the link between girls' education and climate change.

We first partnered with Citi in 2017 on our educational work across the U.S. As that initial project was coming to an end, we started to talk about continuing our work together to tell some of these global stories. We were interested in both topics which are urgent and pressing, but decided together on refugee girls as the first of these new short films.

We believe the refugee crisis today is the greatest humanitarian crisis of our time and we know that it disproportionately impacts girls and women. The reason we wanted to focus on a story like this is there has been so much progress in girls' education that should really be celebrated, but there are pockets where this is not true and there are groups of girls who are left out that progress. Refugee girls are one of those groups. There are 17 million girls around the world who are displaced or refugees, out of a total 70 million people. And the truth is, the reality that girls face around the world — the lack of access to education, violence, lack of adequate health care, lack of opportunity— those things are magnified and made even more acute in a refugee setting. But the issue is so big, the numbers and frankly the despair is so huge, that we believed the only way to get people to care, to not tune out, and to see that they could do something about this issue, was to help them see and get to know a real person, a real girl. This was the story we wanted to tell.

In all of the films that we make, we work very closely with a non-profit partner who is actually serving the population of girls whose stories we want to tell. In our discussions with Citi, we found that the Citi Foundation already partnered and did important work with the IRC, so it was a very natural fit. We had and have the utmost admiration for the work that the IRC does. They are on the front lines of this issue all over the world. And we also knew we needed them, practically speaking, to help us find a girl or young woman whose story we could tell. We also wanted the film to be a tool for the IRC to use to raise awareness around the challenges facing refugee girls which they could share with their donors and their community.

Why do you think collaborations like this are so important?

I think they are important because the biggest, most vexing, issues that our world faces today cannot be solved in siloes. If you look at the three organizations that are part of this project, we each bring something completely different to the table that the others don't have. Citi has a massive global footprint and power, and can help expose thousands of people to the issue, both across their offices as well as externally, and have the funds to support a project like this. The IRC is of course doing the important work of serving people who are displaced every single day and know all too well the many challenges refugee girls face. At Girl Rising, we know how to lift the work that the IRC is doing, and tell a unique and captivating story that people will pay attention to. So to me, the reason we have come together is that nobody is doing it all, nobody can do it all, and to confront this or any other global issue, we have to join together.

“

It was a privilege to collaborate with these leading organizations committed to addressing two of the world's most intractable issues: the crisis of girls' lack of education in the face of an ever-growing refugee crisis. As the world's global bank, we believe Citi has a responsibility to use its footprint and voice in over 160 countries to amplify issues that affect the communities where we live and work. We also believe in the power of real, human stories to connect us, inspire us, and galvanize action. So in all these ways we felt deeply aligned with Girl Rising's mission and creative approach to change the way the world sees and values girls.

– JENI YAGHOUBI, CHIEF OF STAFF, CITI GLOBAL BRAND TEAM

”

And how do you think we can encourage more cross-sectoral partnerships and what have you learned from the Brave Girl Rising collaboration?

I think it's really important to be able to talk about lessons learned, what makes effective partnerships, and what the challenges are. Each organization or company has its own culture, and the nonprofit world works very differently than the corporate world. Often non-profits are small, and can be constrained in resources in a way that big companies from a sheer manpower and financial perspective aren't. For me, Brave Girl Rising highlights how partnerships can work in the best scenario. We spent a lot of time with Citi and IRC talking about our impact and organizational goals, what each party was trying to accomplish for their organization, and what we were trying to accomplish together. This helped us make sure that we were aligned, both in our values and thinking, but ultimately recognize that each of us had differences in our impact goals. So to be able to go through a process in which there is the time, resources and all parties can communicate well with each other, is absolutely critical.

What has been the general response to the Brave Girl Rising film?

Audiences are really moved and affected as well as troubled by what they see – the reality of this young woman who shows so much promise, who is clearly smart as a whip, top of her class, and yet is a girl in a refugee camp like so many millions of others. So I think for many people, it really was the first time they've thought about that. What does that mean? What would it mean for them to drop everything, walk hundreds of miles, have nothing and be in a camp with very little hope of ever being able to leave? The response has been just what we wanted it to be: a greater understanding of the reality for millions of human beings. We had a screening at the United Nations on International Day of the Girl, and people had a reaction that I've seen now in so many screenings, which is how can we collectively change this? How do we make sure that there are opportunities for individuals who are living in these situations? How do we address the refugee crisis? This film and our other films have been seen in over 160 countries and long after their premieres continue to be used in programming both in and out of classrooms all over the world. They are sparking important conversations, helping young people understand, discuss and wrestle with these issues, reflect on the power of education in their own lives, and helping them see their own capacity to be a change-maker. Our hope is that Brave Girl Rising and our other films continue to be tools in the hands of all kinds of people – from parents to presidents to teachers and students — to help them understand a reality that is not theirs. And instead of feeling hopeless in the face of that reality, to feel hopeful and sparked to do something about it. To not turn away, but actually lean in and be part of the solution in whatever way makes sense for that person.

An important aspect of our work I haven't touched on is that in all of the stories we have told in these major feature films, we work closely with a female writer from the country or from the population where the girl is from. In the case of Brave Girl Rising, we were so incredibly honored and lucky to work with the acclaimed poet Warsan Shire, who is herself a Somali refugee. She wrote the script and got to know Nasro, the young girl who is featured in the film. We believe it is important for the writer to have a connection to the girl whose story we're telling to help the audience see the reality without a layer that somebody from a completely different experience would bring to the construction of that narrative.

Thank you Christina, and one last question, can you share with us your call to action for women and girls' empowerment?

I think that there needs to be greater understanding, greater investment and greater focus not just to get girls in school, but to ensure that once they are there, they have what they need to succeed. Attitudes and gender norms need to be addressed. All too often, schools end up being a place where harmful gender norms are reinforced, as opposed to broken. There's a lot of interesting work going on now around gender responsive pedagogy, helping teachers understand how to support girls in the classroom better. Many studies now show that learning outcomes go up for both girls and boys when they do that. The needs of adolescent girls are not singular, so I would also say a greater understanding of what else is needed to make sure a girl can be in school, receive a quality education, be healthy, and free from violence. I think there needs to be greater awareness building around these issues, for example making sure that girls have access to sanitary products. In many places the reality is that when they don't, and it means that they don't go to school. We need a greater understanding about the 360 degrees of support girls need as well as the life skills that are critical for girls to persist in school and thrive – self-confidence, agency, self-awareness, and social awareness. We also need to include boys. We need to help boys learn empathy, build positive gender attitudes and gain awareness about why gender equality is so critical and what they can do to support girls.

There also needs to be much greater investment and awareness around how to serve girls that may already have dropped out of school. In very few places are there successful programs for girls who have dropped out for whatever reason – they were needed to work, take care of siblings or got pregnant. For these girls, there is no way to gain the skills that can give them a better life. In fact, I just heard from the head of the Population Council about a new center called the Girl Centre, which is focused on data around adolescent girls. She cited some data around girls who have been in school who are literate, but who end up dropping out, then have no access to education — and they actually lose their literacy and numeracy skills. The siloed nature of life once you leave school, particularly if you are married early or have a child, the isolation that comes from that means you actually can revert back to being illiterate. We need to pay attention and be aware of all the issues that girls face and invest in fully meeting their needs. We need to be addressing discriminatory gender norms with those who are around girls. Often girls are dreaming big for themselves and want a different future, but there are barriers around them that we all need to help tear down.

An Interview with Celina de Sola, Co-Founder and Vice President of Programs at Glasswing International



Celina de Sola
Co-Founder & VP of Programs
Glasswing International

Celina de Sola is Co-Founder and Vice President of Programs at Glasswing, which was set up in 2007 in El Salvador. The concept was simple, foster change by investing in a community's existing strengths and resources, its infrastructure and its people. Celina's work focuses on designing and implementing innovative, community-based initiatives that bring together institutions and people for joint action. She has over 20 years of experience in international development and social change, having worked as an international development consultant; a resource specialist for Latino immigrants in the US; and leading responses to complex humanitarian crises and natural disasters in over 20 countries worldwide.

Celina you must be extremely proud of the work that Glasswing does. Can you tell us the main scope of Glasswing?

Glasswing is committed to addressing the root causes and consequences of violence and poverty by building partnerships between government, private sector and civil society to develop and implement programs on education, health and community development, working with children, youth, and families. We started 13 years ago and we are now actively working in 10 countries throughout the region including Mexico, U.S., all of Central America, Dominican Republic, and Trinidad. We develop programs at the local level, targeted at the needs of that particular place where we work. We involve local communities and other local actors to make sure that the interventions that we do are more impactful and sustainable.

Do you focus a lot more on youths in the countries you operate in?

The population we focus on is primarily school aged youths up to mid to late 20's. It is important that we look across this age group if we want to keep children and young adults away from violence. Ideally what we want to do is to keep kids in school and equip them with core life skills so that they are able to thrive in society. We also work with young adults who have not had the opportunity to finish their education.

Do you have any gender specific elements in your programs or is this factored into all your programs?

Both. Given that the relationship between gender dynamics, poverty and violence is so interconnected we do apply a gender lens to all of our work. However we also have specific programs that address structural inequalities and the gender paradigms that exist in Latin America. For example we have specific programs for the most marginalized and socially excluded girls and young women in both rural and urban areas. We have programs that specifically work with girls for at least two hours a week on developing their social, financial, and entrepreneurship skills, as well as their access to health knowledge and health services. These Girls Clubs also provide a safe space for girls to meet with their peers and establish a support network in their own communities.

Glasswing has a number of different programs including education, health and community development. Do you have similar programs in all the regions that you work in or are programs specific to that region?

It is very difficult to have siloed programs. For example, it is very difficult to separate health and education and to have one without the other. Our community schools program incorporates many of our separate programs into one.

The aim is to transform public schools into centers of the community — these places are equipped with the necessary infrastructure to provide a place which is safe and a place where kids can have access to extra-curricular activities. It is also a way to activate different community actors in our programs by getting teachers, parents, and other community leaders involved. We also have a program dedicated to school-to-work transition, to ensure that the life skills that youths develop at school level are also the core social skills that the workplace is demanding. Other programs that we have include programs for young adults that are not in school or formal employment and also programs that tackle trauma and mental health, given the high levels of violence in the region. So if I had to categorize the programs that we implement, it would integrate the following into a broader category of positive child and youth development: education, community schools, mental health programming, public health systems, and the work on youth and employment.

Celina, are there any success stories that you would like to share? What has been the impact for the participants, their communities and for the wider economy?

There are a number of examples that I can give you. However, I would like to tell you the story of Karlita, a young girl who lives in a rural community in El Salvador and whom I know personally. Karlita faced a lot of challenges growing up, her family lived in extreme poverty, had barely any access to clean water and no electricity, and she was exposed to high levels of violence. There were times when she returned from school to find that her mother had no money to buy dinner for her and her siblings. Karlita was involved in one of our Girls Clubs, which included micro-entrepreneurship, teaching girls the skills needed to start a business. As part of this program she learned how to make traditional candy and make some money from this. She told me that the proudest moment of her life was when she was able to give her mother some money to buy dinner for her and her siblings. She now makes 4 times the revenue that she did then, and she is able to contribute regularly to her family's income whilst at the same time also continue with her schooling. She now has started to save money, and to plan for the future. The goal was not for her to open a candy store, but to learn the skills needed to start her own business, to change her aspirations and her belief in what her life could look like and what she can achieve.

How can governments, private sector, communities, and other groups help to tackle the barriers that girls face?

Local and national governments can help in providing basic access to quality services, providing better protection for girls and women and to ensure that law and judicial structures are in order. The private sector is an important ally in creating economic opportunities, not just by employing young people but also by helping to identify opportunities to integrate more young girls and women into society and to help them generate income whether they have children or not. From our research we clearly understand that the intersection of gender, violence, and poverty requires multiple sectors to come together and our role is to enable government, private sector and communities to come together to address and solve some of these challenges. An example of this lies in the work that we do with Citi Foundation which has helped bring the priorities and interests of different community members together.

What do you think could make the biggest impact to the girl's lives in the countries that you work in?

There is definitely a need to work on violence prevention at the macro and local level. We really also need a much better and deeper understanding of the issues and to develop policies which are girl-centered. We need to understand better what it means to be a girl or a woman in El Salvador, Guatemala, Honduras, and other places, because sometimes the nuance is lost in macro global policy. However, it is important that we understand what is happening at a local level. This will enable us to understand the context better and to call to action things that are more concrete and specific to each particular region or community. We also need to provide safe spaces for girls and provide them with the opportunities needed to develop and equip them with the skills needed to succeed in life, as well as the social scaffolding and supports they need to overcome adversity.

What are the broader social implications of investing in girls?

When girls are given the learning and economic opportunities to thrive they will not only look after themselves but will also provide for their household, for their siblings and for their broader family. When girls have access to financial resources, even if it is just 20 cents, they will think about how to invest this to further the development of their own skills and also their family. In almost every case of every girl with whom we work, there is that immediate vision of supporting a broader good usually starting with their family and then focusing on planning for the future, which is not always the case with the young men that we work with.

An Interview with Karen Kelly, Regional Partnership Manager at Laboratoria



Karen Kelly
Laboratoria

Laboratoria is a social start-up driving a more diverse, inclusive and competitive digital economy in Latin America. Their work is focused on two areas: Laboratoria for Women, where women from underserved backgrounds are trained to work in the technology sector; and Laboratoria for Business, which serves companies looking for tech talent or looking to up-skill their workforce for the digital age.

Karen Kelly is Regional Partnerships Manager at Laboratoria based in Mexico City. She holds a B.A. in Global Studies from North Park University in Chicago, USA, and completed a Fulbright Scholarship in Andorra. Previous to joining Laboratoria, Karen spent six years at the Institute of International Education (IIE) as Senior Outreach Officer for Latin America and the Caribbean. Karen is passionate about increasing access to quality education opportunities and facilitating dialogue and bridge-building across different communities and cultures.

Karen, thank you so much for taking the time to speak to us. Can you tell us a bit more about how Laboratoria started and the work that it does?

In 2014, we set up a web development agency, and as we started to grow we really needed to develop our own software development team, however we soon came to realise that finding developers for the job was proving to be extremely difficult. We also noticed that those that were applying for the jobs were all men. So it became pretty obvious to us that within the technological sector, women were practically non-existent. We also realized that the majority of people that had applied for the position had learned to code and program on their own and not in a traditional higher education system. So two major issues were at play here. First, there was a shortage of people with a technology background and knowledge and, second, there was a huge gender gap within the tech sector.

There are approximately 22 million people in Latin America who are not working or studying and the majority of these (about 72 percent) are women. So we realized that there was a huge opportunity to help increase the unmet demand for diverse tech talent and to improve the gender imbalance in the tech industry. We are also seeing how the economy is becoming increasingly digitized and that is where we are seeing the labor force heading, so it is really important that women are part of this and they help contribute to this ever increasing digital economy.

Laboratoria was set up to do just this and focuses on preparing women from economically underserved backgrounds to learn the skills needed in the tech sector. We developed a six month program which at its core includes focuses on soft-skills such as self-learning, communication, and team work as well as web development. The students that enter the program only pay for our services once they have found a job in the tech sector. So far, over 1,000 alumnae have been hired into jobs that on average have tripled their incomes, and over 4,000 corporate employees and more than 440 companies have hired talent or received training from Laboratoria.

Can you share with us some examples of how you work directly with the tech sector?

We have training centres across Latin America — in Mexico, Chile, Peru, and next year we are opening one in Colombia. Through our programs we are able to provide a strong talent pipeline for tech companies to hire our graduates, who are not only highly skilled in tech, but they also come from diverse backgrounds and have different perspectives which many companies find really enriching.

We also offer corporate training sources to senior leadership in companies, enabling them to upscale the talent that they already have. We want to help transform the tech industry into a more inclusive space and see other companies being committed to diversity and gender parity.

How do you choose your candidates?

Our students have to meet certain requirements — one of them being not having had access to quality education and employment opportunities. Most of our students will be either unemployed or working in informal jobs, or may have jobs that are not paying enough for them to live on. Within this we see a variety of different students that apply, some who have completed a higher education degree and have not been able to find any quality work, others who have completed up to a high school level of education and everything in between. Once they have passed this part, they then have to do some online tests focusing on their cognitive abilities and potential to learn. A strong component of our program is self-teaching, providing necessary materials for the students to learn, so they need to have the ability to secure certain amounts of things on their own. Following these tests we then have a self-guided online introduction to Javascript course. We do this so that even if they do not get accepted, they would leave the process with a solid introductory course to coding which might inspire them to find opportunities in the tech industry elsewhere. We then invite the finalists to spend a week at our site which allows them to see the facilities, ask questions and make a judgement as to whether this is the right opportunity for them. It also gives our team a chance to make the final selection.

Can you provide us with any success stories of your program?

There are a number of examples I can provide but I will focus on two. The first one is a student from Mexico who had a background in graphic design but who couldn't find a job and ended up working as a hotel receptionist. After our bootcamp she got hired at a bank in Mexico and now is part of a team that is responsible for user research and for testing of mobile applications. We had another woman from Venezuela who was studying for medicine but was unable to finish her studies there. She tried starting a digital marketing company but, given the political situation in Venezuela, she had to leave. She just had \$100 with her and left her family behind. She arrived in Peru and tried to find work as a graphic designer and then discovered our network. She finished our bootcamp and was hired by Scotiabank and now makes three times the amount that she earned previously and is able to support her family back home.

In your work you must collaborate with the private sector, governments, and others. Can you tell us the importance of such collaborations in particular the importance of public-private partnerships?

We work with many different groups including private companies, governments, entrepreneurship communities, and others. Our partnership with the private sector is linked with helping companies fill the digital skills gap. We currently have about 460 companies across the region who at some point have hired our students. We work with governments on a number of different levels — some have helped us with donations or fundraising, others have helped us establish a center in a certain city or region. We also work closely with them to build better education alternatives for young people. In addition, we partner with entrepreneurship communities and start-up organizations similar to ours and share our practices and curriculum with education technology companies. These partnerships are extremely important to us and to the work that we do.

We really need to collaborate to make sure that our model adapts quickly as the tech sector is always changing and to make sure we have a strong and sustainable model.

Our report is about how investing in adolescence girls has huge benefits not only for the economy but also for society in general. How do you think this can be achieved in the countries you are working in?

We see a clear link between women's development and the economy. Using female talent is something that is a really important resource for the growth of different economies. The lack of participation of girls and women in certain sectors can be explained in part to decades of stereotypes and cultural norms. We know changing this will take some time. However, we think that helping girls at early age would really help them understand that they have the ability and potential to further their career in these fields. In our program we also make the point to also focus on soft skills together with tech skills as we really want young women to understand that they are smart enough, strong enough and capable enough to carry out these types of jobs. So starting at a younger age, investing in adolescent girls can really help develop not just the technical skills but also the soft skills and confidence boosting that they might need to succeed.

Thank you Karen that really resonates with our analysis. One last question, can you share with us your call to action for women and girls' empowerment?

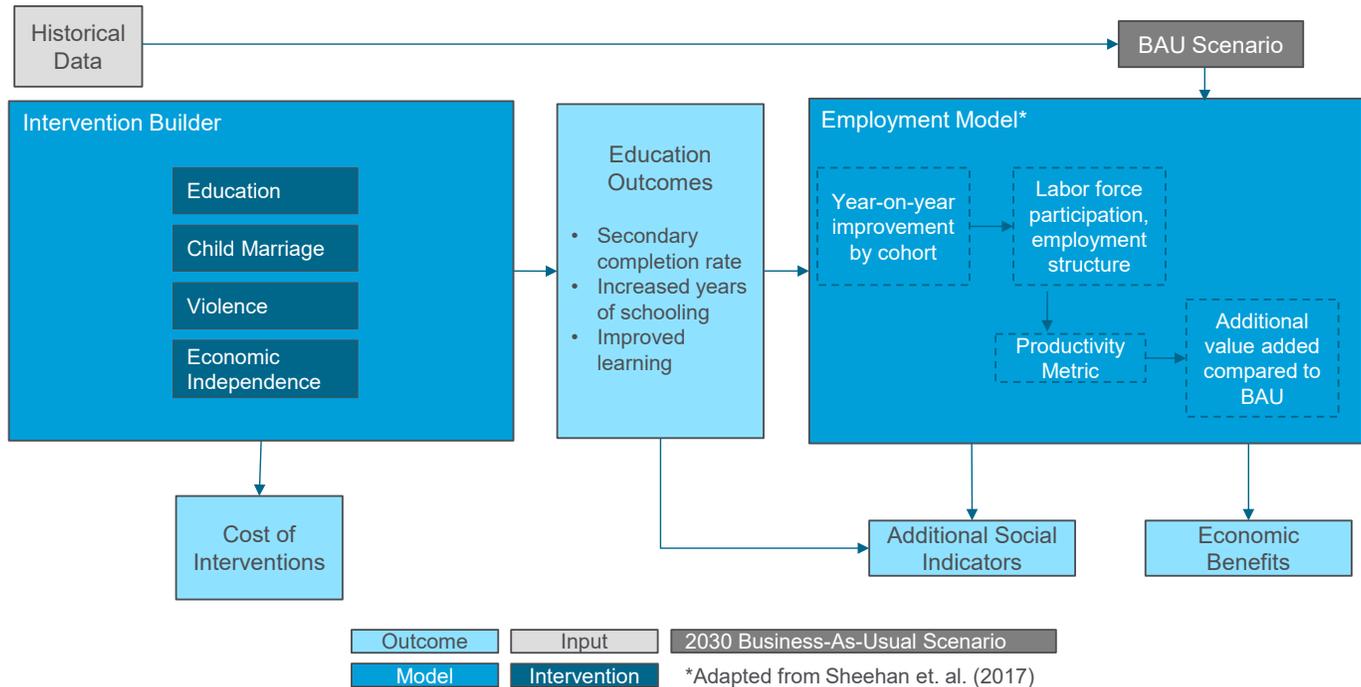
In today's world of work education increasingly needs to be about more than skills and diplomas. In a world with massive access to information and constant change, the most valuable mind-set for young people and young women is to continue believing in themselves and continue learning during their lives. We now have over 1,300 students who have gone through our program and we came to realise that having more women designing and building technology is really the best way to ensure that women are part of designing our world's future. We feel that a future that is co-designed by women and men will be a better future for humanity, so we encourage people to continue to invest in perhaps the not so traditional talent that we are used to but to be open to a shift in mind-set.

Appendix 1: Analytical Framework for Our Economic Analysis in Chapter 4

This section discusses the data and methodology used to carry out the economic analysis described in Chapter 4. Figure 31 below (also Figure 12 in the main text) shows an illustration of the analytical framework which consists of three main components: (1) the Business-as-Usual scenario; (2) the Intervention builder; and (3) the Employment model. Using projected numbers of female students by grade and year from UNESCO,¹⁵⁶ the framework tracks cohorts of girls as they progress through the entire education cycle (12 years) up to 2030. The framework was designed with key variables, such as cost and impact parameters, pulled out as user inputs so different scenarios can be tested.

The sections below discuss the data used in the analysis, followed by more detailed descriptions of the Intervention builder and the Employment model.

Figure 31. Analytical Framework



Source: Citi Global Insights

Data

Figure 32 summarizes the data used in this study. As discussed in the main text, a key area of uncertainty relates to data availability and quality which were important factors in choosing performance indicators and country case studies.

¹⁵⁶ UNESCO, 2015. Education costing model.

Figure 32. Data Used in Our Study

Variable	Description	Time period	Data Source
Female lower secondary completion rate	Gross intake ratio to the last grade of lower secondary education, calculated as the number of new entrants in the last grade of lower secondary education, regardless of age, divided by the population at the entrance age for the last grade of lower secondary education.	Annual 1970 - 2018	UNESCO Institute for Statistics
Average years of schooling	Average years of schooling at Primary and Secondary	Every five years 1950-2010	Barro and Lee v2.2 2018
Years of schooling	Expected years of schooling calculated as the sum of age-specific enrollment rates between ages 4 and 17	2018	World Bank Human Capital Index
Years of learning-adjusted schooling	Calculated using estimates of expected years of school by the ratio of most recent harmonized test scores to 625, where 625 corresponds to advanced attainment on the TIMSS test	2018	World Bank Human Capital Index
Female Upper secondary completion rate	Completion rate for upper secondary education (household survey data).	Annual 2012 – 2017	UNESCO Institute for Statistics
Intimate partner violence rate	share of women aged 15+ who experienced physical or sexual violence from an intimate partner in the last year	1990, 1995, 2000, 2005, 2010, 2016	Institute for Health Metrics and Evaluation (IHME), 2017
Child, early and forced marriage rate	Women who were first married by age 18 refers to the percentage of women ages 20-24 who were first married by age 18.	Annual 1985-2018	World Bank Data (DHS, MICS, AIS, RHS and other household surveys)
Percentage of females with a bank account	The percentage of respondents who report having an account at a bank or another type of financial or report personally using a mobile money service in the past 12 months female (% age 15+).	2011, 2014, 2017	World Bank Findex
Female labor force participation rate	Proportion of the population ages 15+ that is economically active (all people who supply labor for the production of goods and services during a specified period)	Annual 1990-2018	ILOSTAT
Female informal employment rate	Share of informal employment in total employment	Annual 2000-2018	ILOSTAT
Projected number of female students	Projected number of female students, considering completing age-female and aged female for primary, lower secondary and upper secondary	Annual up to 2030	UNESCO 2015 Education Costing model
GDP/Capita	Gross Domestic Product per capita, current prices (US dollars)	Annual up to 2024	IMF World Economic Outlook Database 2019
GDP	Gross Domestic Product, current prices (US dollars)	Annual up to 2024	IMF World Economic Outlook Database 2019
Earnings return to additional schooling	Country-specific return to secondary schooling	Annual up to 2010	Montenegro and Patrinos (2012)
Returns to increased average quality of schooling	Assumption that the common elasticity of productivity with respect to school quality of 0.2 is used		Sheehan et al. (2017)
Productivity of informal employment compared to formal	Assumption that the average productivity in informal employment is 50% of that in informal employment		Sheehan et al. (2017)
Intervention cost: Education	Education costs per child in developing countries (low and lower-middle income) considering a full cycle of education (13 years from pre-primary to secondary)	Annual up to 2030	UNESCO Global Education Monitoring Report
Intervention cost: Child, early and forced marriage, violence prevention life skills	See below		Literature/ Plan International

Source: Citi Global Insights

Intervention

The analysis takes into consideration the costing of education as well as interventions that delay child, early and forced marriage and early pregnancy, prevent violence against girls, and build economic capacity and independence. Data on costing and impact of interventions are scarce but, through reviewing the existing literature and information from Plan International, a database on interventions was created across education, child, early and forced marriage, violence, and economic independence. A wide range of unit costs for similar interventions was found but it is important to note that there are many factors that contribute to the costing of programming, which include type of intervention, number of participants, target group, length of program, administration costs, local context, and socio-economic factors. Due to a lack of country-specific data across all the interventions, this study takes the average costing of similar programs across developing countries.

The analysis makes a key assumption that in order to achieve 100 percent secondary completion rates by 2030, an intervention package is required in education, child, early and forced marriage, violence prevention, and economic independence. We acknowledge that, in reality, the specific programming for each intervention and its costing will differ by country. For education, the study uses the cost of education per child by grade provided by the Global Partnership for Education which estimates an average cost of \$1.25 a child per day in developing countries (low and lower-middle income) to provide a full cycle of education.¹⁵⁷ They consider a full cycle of education from pre-primary through to secondary education (13 years), but for this analysis, we consider 12 years from primary (6 years), to lower secondary (3 years) and upper secondary (3 years). Figure 33 shows the cost of education per child, per grade and per year up to 2030.

Figure 33. Cost of Education in Developing Countries

Imputed annual expenditure values (constant 2012 US\$)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Pre-primary	258	276	295	315	337	360	385	411	439	469	502	536	573	612	655	700	748	799	854
Primary 1	195	203	211	220	229	239	248	259	269	280	292	304	316	329	343	357	372	387	403
Primary 2	195	203	211	220	229	239	248	259	269	280	292	304	316	329	343	357	372	387	403
Primary 3	195	203	211	220	229	239	248	259	269	280	292	304	316	329	343	357	372	387	403
Primary 4	195	203	211	220	229	239	248	259	269	280	292	304	316	329	343	357	372	387	403
Primary 5	195	203	211	220	229	239	248	259	269	280	292	304	316	329	343	357	372	387	403
Primary 6	195	203	211	220	229	239	248	259	269	280	292	304	316	329	343	357	372	387	403
Lower Secondary 1	301	311	321	331	342	353	365	377	389	402	415	428	442	457	471	487	503	519	536
Lower Secondary 2	301	311	321	331	342	353	365	377	389	402	415	428	442	457	471	487	503	519	536
Lower Secondary 3	301	311	321	331	342	353	365	377	389	402	415	428	442	457	471	487	503	519	536
Upper Secondary 1	751	747	742	738	733	729	725	720	716	712	708	704	699	695	691	687	683	679	675
Upper Secondary 2	751	747	742	738	733	729	725	720	716	712	708	704	699	695	691	687	683	679	675
Upper Secondary 3	751	747	742	738	733	729	725	720	716	712	708	704	699	695	691	687	683	679	675

Source: Education for All Global Monitoring Report

For interventions across the non-education sectors, we turned to Plan International Girls' Plan as well as the literature. A wide range of costing was found for similar programming across child, early and forced marriage, violence prevention, and economic independence. For the intervention costing of child, early and forced marriage, the analysis used data from Rasmussen et al. (2019)¹⁵⁸ which provided both cost of intervention as well as impact on the child, early and forced marriage rate. For the costing of violence prevention and economic capacity building, we used the average cost per girl from similar programs in the literature as well as expertise from Plan International. We acknowledge that a large area of uncertainty in the analysis is in the costing of intervention but we have tried to use the best data available along with expert opinion. The following table shows costing extracted from the literature as well as the costing of interventions used in this study. Overall, the aim of the interventions focused on: (1) increasing secondary education completion rates; (2) increasing quality of learning; (3) reducing child, early and forced marriage rates; (4) reducing intimate partner violence; and 5) building economic independence.

¹⁵⁷ <https://www.globalpartnership.org/funding/education-costs-per-child>

¹⁵⁸ Rasmussen, B. et al., 2019. *Evaluating the employment benefits of education and targeted interventions to reduce child marriage*. Journal of Adolescent Health, 65(1), S16-S24.

Figure 34. Intervention Costing for Child, Early and Forced Marriage, Violence, and Economic Independence

Average Cost (US\$ per girl per year)	Child, Early and Forced Marriage	Violence Prevention	Economic Independence
Girls' Plan	64 - 1561	7 - 1947	15 - 383
AGI (2018) multi-component intervention in Kenya ¹⁵⁹	174	75	77
Rasmussen et al. (2019) ¹⁶⁰	115		
Chao and Ngo (2017) ¹⁶¹	159		
Sheehan et al. (2017) ¹⁶²		10 - 73	
Population Council (2018) ¹⁶³			170
Sewall-Menon et al. (2012) ¹⁶⁴			53 -704
This study	115	100	150

Source: Citi Global Insights

With regards to who receives the non-education interventions and for how long, the analysis makes the assumption that all secondary-aged females (regardless of education status) will receive two years of intervention in child, early and forced marriage, violence prevention, and economic independence. This aligns roughly with the length of Plan International's programming, as well as with the multi-component programming that was carried out in Kenya as part of the Adolescent Girls Initiative.¹⁶⁵ However, this does not reflect the differential spend needed for non-education interventions but is the total spend which does not capture investments planned by governments. As it is difficult to deduce how many girls will be covered by investment commitments across all non-education barriers, the analysis takes a conservative approach and applies the child, early and forced marriage, violence, and economic independence interventions to all secondary-aged females. This approach also aims to help girls who are already in school under the Business-As-Usual scenario to stay in school, as well as target girls who are not in school and are often under-served and marginalized (see interview with Christina Lowery, Girl Rising).

¹⁵⁹ Austrian, K. et al., 2018. *Adolescent Girls Initiative-Kenya: Midline Results Report*. Nairobi: Population Council.

¹⁶⁰ Rasmussen, B. et al., 2019. *Evaluating the employment benefits of education and targeted interventions to reduce child marriage*. *Journal of Adolescent Health*, 65(1), S16-S24.

¹⁶¹ Chao and Ngo, 2017. *The Global State of Evidence on Interventions to Prevent Child Marriage*. GIRL Center Research Brief No. 1. New York: Population Council.

¹⁶² Sheehan, P. et al., 2017. *Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents*. *The Lancet*, 390(10104), 1792-1806.

¹⁶³ Population Council, 2018. *Delivering impact for adolescent girls: emerging findings from population council research*.

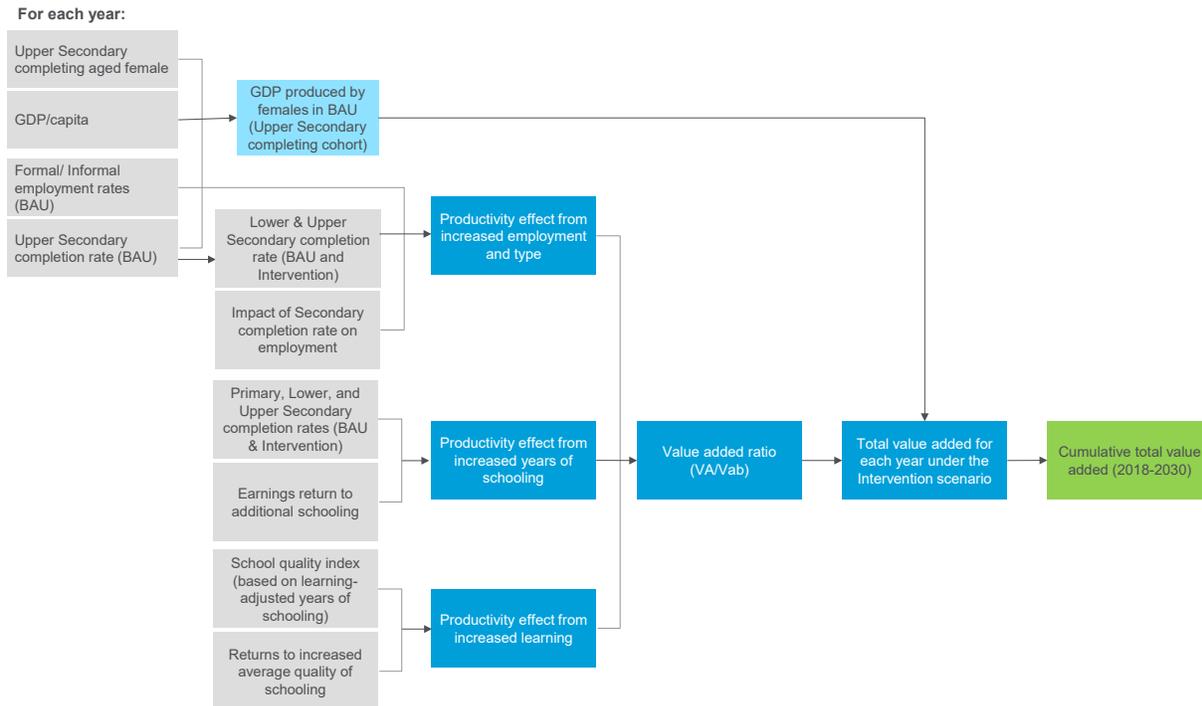
¹⁶⁴ Sewall-Menon and Bruce. 2012. *The cost of reaching the most disadvantaged girls: programmatic evidence from Egypt, Ethiopia, Guatemala, Kenya, South Africa and Uganda*. New York: Population Council

¹⁶⁵ <https://www.popcouncil.org/research/adolescent-girls-initiative-action-research-program>

Impact Modeling

The employment model was adapted from Sheehan et al. (2017), and used to estimate the economic impact of improved education outcomes under the Intervention scenario. Figure 35 shows the input parameters used in the model as well as the methodology workflow.

Figure 35. Impact Modeling Workflow



Source: Citi Global Insights

The association of education outcomes and economic benefits is well documented in the literature. In general, studies have found that girls who stay longer in school are more likely to get a job in the formal workforce.¹⁶⁶ This analysis uses these key findings as the basis of the impact modeling and makes a few key assumptions for the intervention scenario, relative to the base case:¹⁶⁷

1. Increased years of schooling (actual and learning adjusted) lead to higher productivity and higher earnings in employment.
2. An increase in secondary school completions leads to an increase in the relative share of formal employment and a decrease in the share of informal employment.
3. An increase in secondary completion leads to an increase in the number of women who participate in the labor force.

¹⁶⁶ For example, an ILO gender analysis of school-to-work transition surveys in 32 developing countries found that young women with higher levels of education are more likely to get stable employment and have higher wages than those without education.

¹⁶⁷ These assumptions are similar to those adopted in Sheehan et al. (2017) but a key difference is that we assume improved education outcomes lead to an increase in female labor force participation rate which Sheehan et al. (2017) does not.

The impact of education outcomes on employment for each country were estimated using regression equations of secondary completion rates against labor force participation rate and informal employment. We acknowledge that other non-education interventions also have complex relationships with not just education but also employment, and that other factors including tertiary education, labor demand, and government policies will influence the transition from education to labor market outcomes. However, for this analysis we focus on the supply of educated secondary female graduates on employment and its associated economic outcomes.

This analysis focuses on a few key inter-dependencies, and in addition to the impact of education on employment and economic outcomes, we also consider the impact of a multi-component intervention on child, early and forced marriage. Rasmussen et al. (2019)¹⁶⁸ found that a combination of education and child, early and forced marriage interventions can lead to a greater reduction in the child, early and forced marriage rate than the child, early and forced marriage intervention alone. Various other studies have assessed the impact 12 years of education has on child, early and forced marriage which range from a decrease in child, early and forced marriage rates of 64 percent¹⁶⁹ to a virtual elimination of child, early and forced marriage in developing countries¹⁷⁰. This study uses the more conservative estimates but recognizes the impacts on child, early and forced marriage could be even greater. Due to a lack of data and research, the study does not quantify the impact of a multi-component intervention on violence prevention and economic independence.

Limitations

The analysis carried out here has several limitations and areas of uncertainty. The main area is data which were often incomplete, especially for the costing and effectiveness of interventions. Very few studies provide the complete picture of intervention, cost and impact, and this led to the use of different sources of data in the analysis. Due to a lack of country-specific data, the costing of interventions were kept the same across all country case studies which in reality will depend strongly on country context. Due to the complex dynamics across the interventions and outcomes, as well as the lack of data and evidence, it is very difficult to capture all the linkages and feedbacks across them. For example, Wodon et al. (2018) highlight the technical difficulties in assessing the impact of child, early and forced marriage on education as the causality goes both ways. For this study, we prioritize the correlation between education and employment, and look to the case studies to help illustrate the complex inter-dependencies across sectors. The analysis focuses on the impact of educated female graduates on employment and its resulting economic benefits, but it does not take into account broader impacts on the economy arising from an increased number of educated females. Another limitation is the lack of inter-generational considerations and, therefore, impact on population changes.

Due to limited data on interventions in violence prevention, and its connections with education and child, early and forced marriage, this study does not quantify the impact of a multi-component intervention on the chosen violence indicator — Intimate Partner Violence (IPV) rate.

¹⁶⁸ Rasmussen, B. et al., 2019. *Evaluating the employment benefits of education and targeted interventions to reduce child marriage*. *Journal of Adolescent Health*, 65(1), S16-S24.

¹⁶⁹ UNESCO, 2013. *Education transforms lives*.

<https://unesdoc.unesco.org/ark:/48223/pf0000223115>

¹⁷⁰ Wodon, Q. et al., 2018. *Missed Opportunities: The high cost of not educating girls*.

However, we refer to case studies reported in the literature to illustrate the potential. Interventions in improving education outcomes and delaying child, early and forced marriage can both help to reduce intimate partner violence, but specific violence prevention interventions are also needed. Community programs have been found to have a significant impact on IPV, where randomised control trials across Uganda found interventions leading to reductions in IPV of 20-52 percent.¹⁷¹ Another program in Uganda implemented by the NGO BRAC took a holistic approach to empowering adolescent girls and, while its focus was not purely on preventing sexual violence, its layering of interventions tackled violence with positive results.¹⁷² Overall, there appears to be an urgent need for greater understanding on what works and doesn't work in the prevention of violence against women, as well as the cost and effectiveness of interventions. More specifically for girls, a 2017 global review of research on school-related gender-based violence found that we know little about how to reduce the gender-based violence that drives many girls out of school.¹⁷³

¹⁷¹ Abramsky, T. et al., 2016. *The impact of SASA! a community mobilisation intervention, on women's experiences of intimate partner violence: secondary findings from a cluster randomized trial in Kampala, Uganda*. J Epidemiol Commun; Wagman, J.A. et al., 2015. *Effectiveness of an integrated intimate partner violence and HIV prevention intervention in Rakai, Uganda: analysis of an intervention in an existing cluster randomized cohort, Uganda*. Lancet: Glob Health; 3: e23–e33.

¹⁷² Perezniето, P., et al., 2014. *The costs and economic impact of violence against children*. Richmond, VA: ChildFund.

¹⁷³ Parkes, J. et al., 2017. *A rigorous review of global research evidence on policy and practice on school-related gender-based violence*. New York: UNICEF.

Appendix 2 – About Plan International

Plan International is an independent development and humanitarian organisation that advances children's rights and equality for girls. We strive for a just world, working together with children, young people, supporters and partners. Using our reach, experience and knowledge, Plan International drives changes in practice and policy at local, national and global levels. We are independent of governments, religions and political parties. For over 80 years we have been building powerful partnerships for children and we are active in more than 75 countries.

Our work is grounded in our Global Strategy 2017-2022 which sets the direction for the organisation to work with vulnerable children and especially girls so that they can learn, lead, decide and thrive. Within the strategy we have an ambition to transform the lives of 100 million girls. Over the 5-year period of the strategy we are focusing on specific areas where we can achieve the greatest transformation. We therefore:

- respond to local contexts and global trends
- work where violations of children's rights and inequality for girls are the greatest
- are accountable to those we work with and transparent in how we operate
- develop innovative new ways of seeking & directing funds that will have the greatest impact

Recognising that there are many barriers to girls and young women being able to lead change, we believe that working in partnerships and alliances can lead to making sure that girls have space, are safe, and are listened to. Therefore, in October 2018 Plan International established Girls Get Equal (Niñas Con Igualdad, Aux filles l'égalité) which is a global youth-led social change campaign. Girls Get Equal's vision is a world where girls and young women, in all their diversity, are equally able to make decisions about their own lives and shape the world around them.

Citi Global Perspectives & Solutions (Citi GPS) is designed to help our clients navigate the global economy's most demanding challenges, identify future themes and trends, and help our clients profit in a fast-changing and interconnected world. Citi GPS accesses the best elements of our global conversation and harvests the thought leadership of a wide range of senior professionals across the firm.



All Citi GPS reports are available on our website www.citi.com/citigps



Closing the Racial Inequality Gaps

Economic Cost of Racial Inequality in the U.S.

September 2020



ePrivacy & Data Protection

Data Privacy & its Influence on AI Ethics, Competition & Tech Evolution

July 2020



5G and Mobile Operators

Is Virtual Becoming Real?

April 2020



Disruptive Innovations VII

Ten More Things to Stop and Think About

February 2020



Banking the Next Billion

Digital Financial Inclusion in Action

January 2020



Investment Themes in 2020

January 2020



Car of the Future v4.0 – 2020 Update

The Race for the Future of Networked Mobility

January 2020



Education: Power to the People

Exploring Opportunities for Private Capital in Education

November 2019



Negative Interest Rates

Where Is the Real Limit to Cheap Money?

July 2020



Technology at Work v5.0

The New Normal of Remote Work

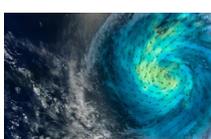
June 2020



Closing the Loop on Global Recycling

Finding a Global Solution to the Patchwork of Recycling

February 2020



Building a TCFD With Teeth

What the Markets Need to Price Climate Risk

February 2020



Experiential Commerce

A Brave New World

January 2020



Corporate Finance Priorities 2020

January 2020



The Global Art Market

Drivers of Evolution

December 2019



Digitizing Governments

The Journey to Enacting a Digital Agenda

October 2019



Electric Aircraft
Flightpath of the Future of Air Travel
 September 2019



Energy Darwinism III
The Electrifying Path to Net Zero Carbon
 September 2019



For Better Or Worse, Has Globalization Peaked?
Understanding Global Integration
 August 2019



Factory of the Future
Flexible, Digitized, and Sustainable
 July 2019



Technology at Work v4.0
Navigating the Future of Work
 June 2019



Video Games: Cloud Invaders
Bracing for the Netflix-ization of Gaming
 June 2019



Managing Cyber Risk with Human Intelligence
A Practical Approach
 May 2019



Bank X
The New New Banks
 March 2019



2019 Corporate Finance Priorities
 January 2019



Investment Themes in 2019
 January 2019



Car of the Future 4.0
The Race for the Future of Networked Mobility
 January 2019



China's Belt and Road Initiative
A Progress Report
 December 2018



Feeding the Future
How Innovation and Shifting Consumer Preferences Can Help Feed a Growing Planet
 November 2018



Migration and the Economy
Economic Realities, Social Impact, & Political Choices
 September 2018



Rethinking Single-Use Plastics
Responding to a Sea Change in Consumer Behavior
 August 2018



Disruptive Innovations VI
Ten More Things to Stop and Think About
 August 2018



Putting the Band Back Together
Remastering the World of Music
 August 2018



UN Sustainable Development Goals
A Systematic Framework for Aligning Investment
 June 2018

IMPORTANT DISCLOSURES

This communication has been prepared by Citigroup Global Markets Inc. and is distributed by or through its locally authorised affiliates (collectively, the "Firm") [E6GYB6412478]. This communication is not intended to constitute "research" as that term is defined by applicable regulations. Unless otherwise indicated, any reference to a research report or research recommendation is not intended to represent the whole report and is not in itself considered a recommendation or research report. The views expressed by each author herein are his/ her personal views and do not necessarily reflect the views of his/ her employer or any affiliated entity or the other authors, may differ from the views of other personnel at such entities, and may change without notice.

You should assume the following: The Firm may be the issuer of, or may trade as principal in, the financial instruments referred to in this communication or other related financial instruments. The author of this communication may have discussed the information contained herein with others within the Firm and the author and such other Firm personnel may have already acted on the basis of this information (including by trading for the Firm's proprietary accounts or communicating the information contained herein to other customers of the Firm). The Firm performs or seeks to perform investment banking and other services for the issuer of any such financial instruments. The Firm, the Firm's personnel (including those with whom the author may have consulted in the preparation of this communication), and other customers of the Firm may be long or short the financial instruments referred to herein, may have acquired such positions at prices and market conditions that are no longer available, and may have interests different or adverse to your interests.

This communication is provided for information and discussion purposes only. It does not constitute an offer or solicitation to purchase or sell any financial instruments. The information contained in this communication is based on generally available information and, although obtained from sources believed by the Firm to be reliable, its accuracy and completeness is not guaranteed. Certain personnel or business areas of the Firm may have access to or have acquired material non-public information that may have an impact (positive or negative) on the information contained herein, but that is not available to or known by the author of this communication.

The Firm shall have no liability to the user or to third parties, for the quality, accuracy, timeliness, continued availability or completeness of the data nor for any special, direct, indirect, incidental or consequential loss or damage which may be sustained because of the use of the information in this communication or otherwise arising in connection with this communication, provided that this exclusion of liability shall not exclude or limit any liability under any law or regulation applicable to the Firm that may not be excluded or restricted.

The provision of information is not based on your individual circumstances and should not be relied upon as an assessment of suitability for you of a particular product or transaction. Even if we possess information as to your objectives in relation to any transaction, series of transactions or trading strategy, this will not be deemed sufficient for any assessment of suitability for you of any transaction, series of transactions or trading strategy.

The Firm is not acting as your advisor, fiduciary or agent and is not managing your account. The information herein does not constitute investment advice and the Firm makes no recommendation as to the suitability of any of the products or transactions mentioned. Any trading or investment decisions you take are in reliance on your own analysis and judgment and/or that of your advisors and not in reliance on us. Therefore, prior to entering into any transaction, you should determine, without reliance on the Firm, the economic risks or merits, as well as the legal, tax and accounting characteristics and consequences of the transaction and that you are able to assume these risks.

Financial instruments denominated in a foreign currency are subject to exchange rate fluctuations, which may have an adverse effect on the price or value of an investment in such products. Investments in financial instruments carry significant risk, including the possible loss of the principal amount invested. Investors should obtain advice from their own tax, financial, legal and other advisors, and only make investment decisions on the basis of the investor's own objectives, experience and resources.

This communication is not intended to forecast or predict future events. Past performance is not a guarantee or indication of future results. Any prices provided herein (other than those that are identified as being historical) are indicative only and do not represent firm quotes as to either price or size. You should contact your local representative directly if you are interested in buying or selling any financial instrument, or pursuing any trading strategy, mentioned herein. No liability is accepted by the Firm for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained herein or derived herefrom.

Although the Firm is affiliated with Citibank, N.A. (together with its subsidiaries and branches worldwide, "Citibank"), you should be aware that none of the other financial instruments mentioned in this communication (unless expressly stated otherwise) are (i) insured by the Federal Deposit Insurance Corporation or any other governmental authority, or (ii) deposits or other obligations of, or guaranteed by, Citibank or any other insured depository institution. This communication contains data compilations, writings and information that are proprietary to the Firm and protected under copyright and other intellectual property laws, and may not be redistributed or otherwise transmitted by you to any other person for any purpose.

IRS Circular 230 Disclosure: Citi and its employees are not in the business of providing, and do not provide, tax or legal advice to any taxpayer outside of Citi. Any statements in this Communication to tax matters were not intended or written to be used, and cannot be used or relied upon, by any taxpayer for the purpose of avoiding tax penalties. Any such taxpayer should seek advice based on the taxpayer's particular circumstances from an independent tax advisor.

© 2020 Citigroup Global Markets Inc. Member SIPC. All rights reserved. Citi and Citi and Arc Design are trademarks and service marks of Citigroup Inc. or its affiliates and are used and registered throughout the world.

NOW / NEXT

Key Insights regarding the future of Girls



EDUCATION

More than 130 million girls are out of school and 15 million girls or primary-school age will never enter a classroom. Post the COVID-19 crisis, 11 million girls may not go back to school. / **Achieving 100 percent upper secondary completion rates for girls by 2030 could lift national GDP levels in developing economies by 10% on average on a full-costed basis.**



SOCIAL CONSTRUCTS

Worldwide, an estimated 650 million women alive today were married before their 18th birthday and according to UNICEF, 12 million girls are married in early adolescence every year. / **Child marriage has declined around the world due to the increasing rates of girls' education, increased government investments in adolescent girls, and strong public messaging around the illegality of child marriage and its harmful consequences.**



POLICY

Ninety percent of countries have at least one law restricting economic equality for girls and women on their books. / **Governments have the power in passing and implementing laws and policies that support adolescent girls' equal opportunities and protect them from discrimination as well as adequately resource the delivery of all service.**



