Policy Brief

INFORM EMPOWER ADVANCE

PRB

DECEMBER 2014

BY SHELLEY MEGQUIER AND KATE BELOHLAV

ETHIOPIA'S KEY: YOUNG PEOPLE AND THE DEMOGRAPHIC DIVIDEND

1 IN 3 married adolescents (ages 15 to 19) in Ethiopia wish to limit or space future births but are not currently using a

modern contraceptive method.

A focus on Ethiopia's young population through sustained investments in adolescent and youthfriendly family planning, health, education, and job creation will create an environment for Ethiopia to benefit from a demographic dividend.

The average age at marriage for an Ethiopian girl with no education. Women with more than a secondary school education marry, on average, nearly 8 years later. Over the last decade, Ethiopia has experienced strong economic growth, accompanied by positive trends in poverty reduction.¹ Ethiopia has demonstrated its commitment to improving the lives of its citizens through policies and programs that have reduced child mortality, improved education, and increased access to family planning. While life is improving for many, nearly 30 percent of Ethiopia's population still live in extreme poverty (less than 60 cents per day, measured by the national poverty line).² The youth unemployment rate is around 7 percent, while 25 percent of youth ages 15 to 29 are underemployed.³ In Ethiopia's Growth and Transformation Plan, the government aspires to become a middle-income country by 2025.4 To achieve this vision, Ethiopia must accelerate economic growth and development.

One promising way to accelerate development is through a demographic dividend—the accelerated economic growth that can result from improved reproductive health, a decline in fertility, and the subsequent shift in population age structure. With fewer children born each year, the number of working-age people relative to dependent children rises, opening a window of opportunity for economic growth. By creating jobs and investing in health and education to build human capital, many countries across Asia, Latin America, and North Africa have benefited from a demographic dividend. As the population age structure changes in Ethiopia, the knowledge, skills, and capabilities of Ethiopia's future working-age population will determine the extent to which Ethiopia can realize a dividend. Ethiopia can accelerate development progress by strengthening its commitment to young people and to their health, education, and job prospects.

This policy brief explains the connection between a potential demographic dividend and investments in health, education, and job growth; highlights Ethiopia's recent successes and the need for sustained effort; and prioritizes actions and investments in young people. In addition, this brief describes the policies needed to open and take advantage of this window of opportunity. The brief will show that continued investments in Ethiopia's young people are critical to attaining a demographic dividend.

Lowering Fertility Helps Transform the Population Age Structure

Today, 45 percent of Ethiopia's population is under age 15 and 71 percent is under age 30.⁵ While young people can be a great force for economic and political change, a common misperception is that a large youth population can itself predict a coming demographic dividend. To benefit from a demographic dividend, however, countries must first achieve a demographic transition-move from high to low birth and death rates. Ethiopia's strong investments in the health sector have contributed to significant progress over the last 10 years in reducing infant and child mortality, increasing the use of contraception, and reducing fertility rates. The result is that Ethiopia's population age structure is beginning to shift (see box, page 2). However, fertility and population growth rates are still high.⁶ And as long as fertility and population growth rates remain high, the size of the population under age 15 will be larger than the working-age adult population. This young age structure will not allow for a demographic dividend, because families and the government will have to struggle to adequately invest in the health and education of young people. Continuing to lower fertility and shift the age structure of the population are critical first steps toward achieving a demographic dividend and meeting Ethiopia's development goals.

Fertility has been declining steadily in Ethiopia since 2000: Women had, on average, 5.9 children over their lifetimes compared to 4.1 children in 2014.⁷ In order to continue this decline, Ethiopia should maintain its strong commitment to family planning, particularly in rural areas, where 81

percent of the population lives.⁸ Ethiopia experiences vast differences in fertility across regions and socioeconomic levels: In urban areas, women have on average only 2.2 children over their lifetimes, whereas women in rural areas have 4.5 children.⁹ The poorest women in Ethiopia have more than twice as many children as the wealthiest: Those in the poorest quintile average 5.6 children while the wealthiest women have 2.4.¹⁰ For the demographic transition to continue, Ethiopia must sustain its fertility decline and continue to pay special attention to increasing voluntary family planning information and services in rural areas where high fertility persists.

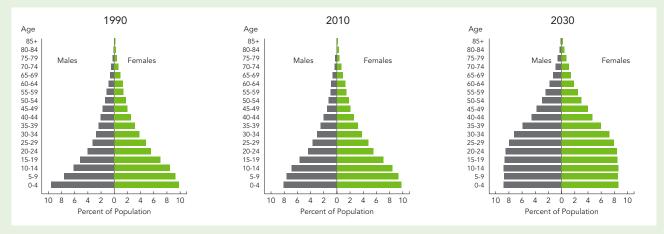
Family planning contributes to maternal and child health

and a decline in fertility. Continued allocation and expansion of resources for maternal and child health care and family planning are critical steps in the path toward a demographic dividend. Ethiopia's leaders have made robust investments in its health sector, infrastructure, and extension programs, which have been credited with increased use of contraception among women in both rural and urban areas.¹¹ In particular, the celebrated Health Extension Program that was launched in 2003 and deployed over 35,000 health extension workers to rural areas throughout the country is recognized as a major contributor to increased contraceptive prevalence and decreased infant and child mortality. Although Ethiopian women are increasingly using modern contraception, one in four women still has an unmet need for family planning, meaning they do not want to become pregnant in the next two years but are not using a modern method of contraception.¹²

Adolescents ages 15 to 19 have the highest levels of unmet need for family planning services in Ethiopia, with nearly one in three married adolescents wishing to limit or space future births but not currently using a modern contraceptive method.¹³ Family planning programs can reduce unmet need by giving couples information and services to prevent unintended pregnancies and plan healthy timing and spacing of births. Access to adolescent and youth-friendly sexual and reproductive health care will give young people the knowledge and tools to make informed decisions and live healthy lives. Increased access to family planning services for married adolescents will delay early childbearing and,

Ethiopia's Age Structure Is Beginning to Shift.

Ethiopia is on the right path to a population age structure that may enable a demographic dividend. These three population pyramids highlight the shifting age structure of the Ethiopian population as a result of Ethiopia's commitment to reducing infant and child mortality, improving reproductive health and family planning, and the subsequent fertility decline. "1990" has a broad base that represents a large number of children in relation to the working age population. "2010" shows a base that is starting to narrow, representing the beginning of a fertility decline. Indeed, between 1990 and 2011, fertility declined from 7.2 children over the course of a woman's lifetime to 4.8 children. "2030" is a projection of Ethiopia's population age structure if fertility continues to decline and Ethiopia continues to make substantial investments in health and education. This pyramid assumes that by 2030, fertility will decline to an average of 2.6 children per woman over the course of her lifetime. "2030" shows a larger working-age population, compared to the number of dependent children and elders. Given the right investments in health, education, and job growth, this working-age population will have the opportunity to fuel economic development in Ethiopia.



Source: UN Population Division, World Population Prospects: The 2012 Revision, (New York: United Nations, 2013).

for young mothers, prevent a close second pregnancy. Adolescent mothers should also have access to good nutrition and prenatal, postnatal, and antenatal care in order to improve maternal and child health and nutrition.

Family planning contributes to child health by promoting healthy timing and spacing of pregnancies. Children conceived within two years of the previous birth have a much higher risk of dying than those children conceived three or more years after the previous birth.¹⁴ Furthermore, couples will choose to have smaller families when they know that each child has a better chance of surviving; and when parents have fewer children, they are better able to invest in their children's health, education, and well-being.¹⁵ In Ethiopia, couples still desire large families, ideally with more than four children.¹⁶ Ethiopian women with higher levels of education desire fewer children, suggesting that girls' education plays a critical role in reducing fertility.¹⁷ By increasing current investments in infant and child health, girls' education, and family planning. the country can initiate the changes needed to bring about a demographic dividend.

Information and education can remove barriers to family planning use. Another key strategy to lowering fertility is to reach the public with messages about the health and economic benefits of smaller and healthier families, and to provide women and men with information on contraceptive methods. Many long-standing barriers to family planning use remain, including concern about health risks or side effects, traditional views and social norms, problems of access or cost, partner opposition, and lack of knowledge of methods.¹⁸ In Ethiopia, one of the top reasons given by women not using family planning but wishing to delay the next birth was concern about health risks or side effects.¹⁹ Improving method mix (particularly access to long-acting reversible contraceptives for young women) so that women have options and are able to receive the method of their choice is important in reducing unmet need. For family planning use in Ethiopia to increase, women should receive quality counseling on the contraceptive options available and follow-up care after initiation of contraceptive use to help manage side effects. In addition, by continuing to inform the public about the benefits of smaller families, working to overcome barriers to access, and promoting the use of modern contraception among those who need it most, demand for family planning will increase. Ethiopia's deployment of a Health Development Army will contribute to increasing demand for family planning. The Health Development Army uses social mobilization and a "model family" approach to create an environment where more families choose to access health care, including family planning services. Through a combined effort to increase demand for and access to family planning, fertility rates will continue to decline and Ethiopia can significantly change its population age structure, setting the stage for a demographic dividend.

Creating an Enabling Environment to Attain a Dividend

Investments in health lay the groundwork for future productivity. While fertility decline is necessary for establishing the conditions for a demographic dividend, countries must also make investments in health, education, and gender equality, particularly for young people; and promote job opportunities for young people to accelerate economic growth (see figure, page 4). These investments are critical first steps in achieving a demographic dividend.

Advancing children's health is an investment in the skills. abilities, and development of a population, leading to improved education and labor outcomes. Improved health among children not only increases their likelihood of survival and contributes to a desire for smaller families, but also benefits children, their families, and their communities. For voung people to make the most of educational opportunities. they must be healthy and attentive at school. Health programs that provide immunizations and prevent and treat many common infections will help young people excel in school. Ethiopia has made dramatic progress in improving child survival: Under-5 mortality has decreased by nearly 50 percent over the last 15 years. However, there is still work to be done, particularly among the poorest families.²⁰ In Ethiopia, 40 percent of children under age 5 are stunted (too short for their age), an indicator of chronic malnutrition.²¹ Good nutrition, supported by food security, fosters cognitive development among infants and young children and sustains child health. Improving nutrition ensures that children reach their full cognitive potential and perform their best in school.

As children grow into adolescents, they need different types of health services. They must have access to reproductive health information and services to avoid unplanned pregnancies and to prevent sexually transmitted infections, including HIV—all of which can undermine educational opportunities, especially for girls. Deterring use of cigarettes, drugs, and alcohol, and providing mental health services when needed, can assist young people to grow into healthy adults. Promoting healthy lifestyles during young adulthood ensures that young people transition into healthy adults who can contribute productively to the economy.

Educating girls is a long-term investment. In the case of girls, education—especially at the secondary level—is a critical investment because girls who are more educated tend to marry later and find new opportunities for work beyond their traditional roles in the home.²² Worldwide, more-educated women who marry later have fewer children over their lifetimes than women who marry at a young age. In Ethiopia, an analysis of the 2000 and 2011 Demographic and Health Surveys found that both increases in girls' education and urbanization had a substantial impact on

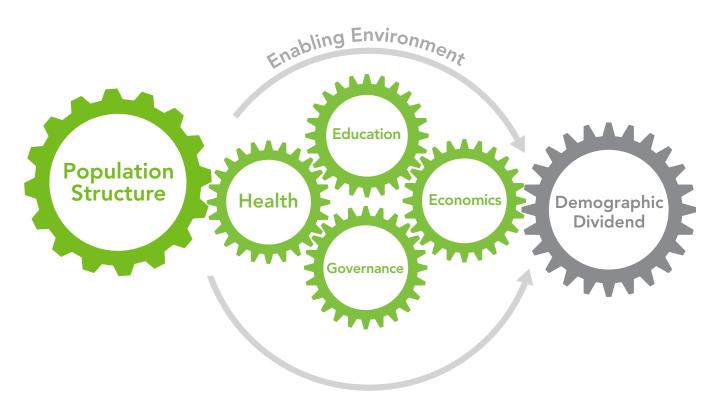
raising contraceptive use.²³ Girls in Ethiopia with more than a secondary education marry, on average, at age 24, almost eight years later than women with no education, who marry at 16 on average.²⁴ In Ethiopia, a country where one-half of women are married before age 18 and disparities between the educated and uneducated are significant, policymakers should prioritize completion of primary and secondary education among girls as well as strengthen the implementation of the law that prohibits marriage under the age of 18.²⁵

Educating girls is an important long-term economic investment for Ethiopia, because girls with more education tend to participate in the formal labor force and have higher earning potential. A single year of primary school boosts a woman's wages later in life by 10 percent to 20 percent compared to those who have no education; while secondary education results in a 15 percent to 25 percent increase in a woman's wages.²⁶ Only 15 percent of women in sub-Saharan Africa earn formal wages and salaries; far more participate in the informal sector.²⁷ The skills and experience that Ethiopian women would gain through secondary education could position them to take on higher-paying jobs in the formal sector or have better chances of securing financial support for small businesses. These increases in formal labor force participation and earnings translate into contributions to the overall economy as well as to individual households, thus fostering conditions for a demographic dividend.

In addition to education, lower fertility can be a driver of the contributions that women and girls make to the economy in Ethiopia. Research shows worldwide that with each child, a woman spends about two years out of the labor force, implying that a reduction in fertility can enhance women's productivity and contribution to economic growth.²⁸ In addition, women in sub-Saharan Africa who have children under age 2 are less likely to have wage-earning work.²⁹ Taken together, this evidence highlights the importance of girls' education and a fertility decline to promote economic development.

An educated workforce is a skilled workforce. When both boys and girls have access to high-quality education, accelerated economic growth is possible. Links between education and economic development are well-established, with numerous studies finding positive relationships between higher levels of educational attainment and development indicators such as GDP growth, productivity, and good governance.³⁰

Increasing the educational attainment of young people builds a skilled workforce. Although Ethiopia has shown improvements in educational attainment over the last 15



Strategic Investments Will Facilitate a Demographic Dividend.

years, the country should further increase the education levels of its population to hasten its socioeconomic growth and development. About one-half of Ethiopian women and one-third of Ethiopian men have no formal education; and educational attainment varies widely based on regional and socioeconomic factors.³¹ Among urban women ages 15 to 49, 45 percent have completed primary school or higher, compared to women in rural areas, where only 6 percent attain a primary school or higher level of education.³² Similar but less dramatic disparities in educational attainment exist between rural and urban males. To prepare young people for skilled jobs, the government must implement the goals clearly articulated in its Educational Sector Development Program and increase education levels and the quality of education throughout the country, with special attention to the poorest and most vulnerable populations.33

Ethiopia's current efforts to provide technical and vocational training to help develop key workforce skills are laudable.³⁴ In order for these efforts to reduce unemployment, technical and vocational training programs should operate at full capacity, be high-quality, and tailor curriculum to current opportunities in the job market. In addition, programs should support students as they transition from training into the job market and make efforts to ascertain the types of jobs they attain after receiving technical and vocational training.³⁵ Education programs will build Ethiopia's workforce by preparing its citizens to work in labor-intensive sectors outlined in its Growth and Transformation Plan, such as transportation infrastructure, agricultural production, and industry.³⁶ In addition. Ethiopia must raise the quality of education to ensure a supply of adequately skilled labor to motivate investments and fuel private-sector growth.

Strong economic policies stimulate job growth. To take advantage of a shift in the age structure, Ethiopia must make strategic investments and develop policies that create jobs, particularly for youth ages 15 to 29. Identifying sectors of the economy to expand and creating an entrepreneur-friendly environment will provide opportunity for young people entering the workforce. Ensuring that job opportunities are available for both highly educated young people and unskilled laborers is vital to reducing both unemployment and underemployment. Youth unemployment in Ethiopia is a recognized problem, particularly in urban areas. Among urban youth, unemployment is 29 percent and higher for women compared to men.³⁷ Key steps for job creation include strengthening government institutions and investing in labor-intensive sectors (particularly in urban areas).

Ethiopia's Growth and Transformation Plan includes targets for expanding micro- and small-scale enterprises and providing credit to entrepreneurs—two crucial components of reducing high rates of underemployment and unemployment. Developing incentives for entrepreneurship, such as the government subsidizing entrepreneurs to search for profitable business opportunities, may be a viable avenue for increasing the number of micro- and small-scale enterprises in Ethiopia and also improving their profits.³⁸

A disproportionate number of youth compared to adults are employed in the informal sector.³⁹ Efforts to increase young people's access to financial services can assist their ability to gain financial stability; these efforts are particularly needed for young people who are self-employed within the informal sector. Within the formal sector, investments in infrastructure and policies that encourage and stimulate economic growth will create jobs and absorb the large number of young people entering the workforce into productive employment. Rural economic development is also needed. As the Ethiopian National Youth Policy describes, creating opportunity for youth to acquire farming plots and grazing lands while also promoting off-farm work opportunities in rural areas will contribute to rural development.⁴⁰

Trade policies that create markets for domestically produced materials both internationally and within Ethiopia are also key to fostering economic growth. Policies that encourage and attract foreign investment create jobs and manufacturing infrastructure. In addition, programs that teach financial management, savings, and investment strategies to young people assist them with saving for the future and contribute to economic growth. Continuing to implement sound youthfriendly and growth-centered economic policies will help Ethiopia obtain a demographic dividend. The experience of countries that have benefited from the demographic dividend has shown that an explicit jobs strategy that encourages growth in labor-intensive sectors can have significant and positive results.

Recommended Actions

The demographic dividend provides promise for economic development in Ethiopia. To achieve a demographic dividend, the government must continue to give high priority to substantially lowering fertility and child mortality as well as increasing investments in health, education, and job creation. Once Ethiopia changes the size and young age structure of its population, the country will be positioned to accelerate economic growth. To bring about this change, leaders need to prioritize the following actions:

Sustain commitments to voluntary family planning.

Ethiopia should continue efforts to make voluntary family planning information and services available, affordable, and responsive to the needs and method choices of all women. The poor rural population continues to be a key priority as they tend to have more children but fewer resources to invest in the health and education of their children. Given the achievements of the Health Extension Program, efforts should be made to ensure sustainable funding for the program so that it is less dependent on donor support. Investments in voluntary family planning should include increasing demand for family planning in addition to continuing to reduce barriers to access.

Intensify focus on adolescent and youth sexual and reproductive health and strengthen commitment to ending child marriage. Access to adolescent and youthfriendly sexual and reproductive health care gives young people the knowledge and tools they need to make informed decisions and live healthy lives. Increased access to family planning services for married adolescents will delay early childbearing and, for young mothers, prevent a close second pregnancy. Adolescent mothers should also have access to good nutrition and prenatal, postnatal, and antenatal care in order to improve maternal and child health and nutrition. Most important, evidence-based approaches to ending child marriage must be scaled up so that young women have the opportunity to reach their full potential.

Increase national health expenditures including child health expenditures. Health expenditures in Ethiopia increased from US\$16.10 per capita in 2007/8 to US\$20.77 in 2010/11, but are still well below the World Health Organization's recommended goal for low-income countries of US\$60 per capita by 2015. The Ministry of Health found that although health spending increased during this time period, the most substantial increases in spending were made by international donors or households. Child health care, in particular, is primarily financed by out-of-pocket expenses by households.⁴¹ To realize a demographic dividend, Ethiopia should focus on simple aspects of child survival to ensure that children do not die before their fifth birthday and that poor children have equal access to health care. Child survival, nutrition, and health programs give children the opportunity to become healthy adults who are fully able to contribute to the development of Ethiopia.

Prioritize education-especially secondary education for

girls. Research shows that primary education helps young people read and write, but secondary school helps girls delay marriage and pregnancy, and gives young people the skills and confidence to be successful in the labor force. Education is fundamental for a healthier population and stronger economy.

Prepare students to join a 21st century workforce.

Continued investment in vocational training will help young people develop cutting-edge skills and will produce an innovative, technologically savvy young generation able to transform Ethiopia's market. Efforts outlined in Ethiopia's Growth and Transformation Plan to incorporate informationcommunication-technology instruction into classrooms throughout Ethiopia should be fully implemented.⁴² More labor force participation by a skilled and educated young population will allow Ethiopia to reap the economic rewards of the demographic dividend. **Build a youth-friendly job market.** Government policies that support economic growth and job creation and foster savings and investment strategies in both urban and rural areas will attract foreign investment and create an economic environment that allows young people to contribute to a potential demographic dividend.

Conclusion

The demographic dividend provides a framework for promoting economic growth at a time when fertility is declining and population age structure is beginning to change. A focus on Ethiopia's young population through sustained investments in voluntary family planning, health, education, and economic policies will guide the country toward achieving a demographic dividend. The experiences of countries in Asia and Latin America and the trends in a few countries in Africa show a path toward economic progress that Ethiopia can take with the right set of strategic investments.

Together, efforts to improve child survival and expand educational opportunities, especially for girls, contribute to lowering fertility and set countries on the course for a demographic dividend. Strong investments in children and young people's health, including sexual and reproductive health and family planning, will support young people to grow up to be healthy, productive adults ready to contribute to Ethiopia's economy. Sustained investment in Ethiopia's future labor force—primary and secondary education for girls and boys and youth-focused technical and vocational training will position the country to take advantage of economic opportunities presented by a changing age structure. Policies that promote job market growth and reductions in youth unemployment will support a prosperous, productive, and sustainable future for Ethiopia.

Acknowledgments

This brief was written by Shelley Megquier, policy analyst at the Population Reference Bureau (PRB); and Kate Belohlav, research associate at PRB. The authors are appreciative of the late Charles Teller of George Washington University; Negash Teklu of the Population, Health, and Environment Ethiopia Consortium; John May, visiting scholar at PRB; Packard Foundation staff; and the Youth Conference Planning Committee for their expert guidance. Many thanks as well to Jason Bremner, Kate Gilles, Heidi Worley, and Carolyn Lamere of PRB who provided thoughtful input. This publication is made possible through the generous support of the David and Lucile Packard Foundation.

© 2014 Population Reference Bureau. All rights reserved.

References

- 1 World Bank, "Ethiopia Overview," accessed at www.worldbank.org/en/country/ ethiopia/overview, on July 17, 2014.
- 2 World Bank, "Ethiopia Overview."
- 3 Nizinga H. Broussar and Tsegay Gebredkidan Teskleselassie, "Youth Unemployment: Ethiopia Country Study," International Growth Centre Working Paper 12/0592 (London: London School of Economics and Political Science, 2012).
- 4 Ethiopia Ministry of Finance and Economic Development, Growth and Transformation Plan 2010/11-2014/15 (Addis Ababa, Ethiopia: Ministry of Finance and Economic Development, 2010).
- 5 Ethiopia Central Statistical Agency, *Ethiopia Mini Demographic and Health Survey* 2014 (Addis Ababa, Ethiopia: Central Statistical Agency, 2014).
- 6 Ethiopia Central Statistical Agency, Ethiopia Mini Demographic and Health Survey 2014.
- 7 Ethiopia Central Statistical Agency, Ethiopia Mini Demographic and Health Survey 2014.
- 8 United Nations, Department of Economic and Social Affairs, Population Division, World Urbanization Prospects: The 2014 Revision, Highlights (New York: United Nations, 2014).
- 9 Ethiopia Central Statistical Agency, Ethiopia Mini Demographic and Health Survey 2014.
- 10 Ethiopia Central Statistical Agency, Ethiopia Mini Demographic and Health Survey 2014.
- 11 United States Agency for International Development (USAID), Three Successful Sub-Saharan Africa Family Planning Programs: Lessons for Meeting the MDGs (Washington, DC: USAID, 2012), accessed at www.fhi360.org/sites/default/files/ media/documents/3-successful-family-planing-programs-africa.pdf, on July 23, 2014.
- 12 Ethiopia Central Statistical Agency and ICF International, *Ethiopia Demographic and Health Survey 2011* (Addis Ababa, Ethiopia, and Calverton, MD: Central Statistical Agency and ICF International, 2012).
- 13 Ethiopia Central Statistical Agency and ICF International, *Ethiopia Demographic and* Health Survey 2011.
- 14 Shea O. Rutstein, Further Evidence of the Effects of Preceding Birth Intervals on Neonatal, Infant, and Under-5 Mortality and Nutritional Status in Developing Countries: Evidence From the Demographic and Health Surveys (Calverton, MD: Macro International, 2008).
- 15 Shareen Joshi, Reproductive Health and Economic Development: What Connections Should We Focus On? (Washington, DC: Population Reference Bureau, 2012), accessed at www.prb.org/pdf12/poppov-economicdevelopment-reproductivehealthwomen.pdf, on July 30, 2014.
- 16 Ethiopia Central Statistical Agency and ICF International, Ethiopia Demographic and Health Survey 2011.
- 17 Ethiopia Central Statistical Agency and ICF International, Ethiopia Demographic and Health Survey 2011.
- 18 Jacqueline Darroch, Gilda Sedgh, and Haley Ball, Contraceptive Technologies: Responding to Women's Needs (New York: Guttmacher Institute, 2011).
- 19 Solomon Shiferaw and Assefa Seme, PMA2014/ETHIOPIA. Performance, Monitoring & Accountability 2020 (Baltimore, MD: The Bill and Melinda Gates Institute for Population and Reproductive Health, 2014).
- 20 Ethiopia Central Statistical Agency, Ethiopia Mini Demographic and Health Survey 2014.
- 21 Ethiopia Central Statistical Agency, Ethiopia Mini Demographic and Health Survey 2014.
- 22 Ruth Levine et al., *Girls Count: A Global Investment and Action Agenda* (Washington, DC: Center for Global Development, 2009).
- 23 UNFPA and Yared Mekkonen, A Decade of Change in Contraceptive Use in Ethiopia: In-depth Analysis of the EDHS 2000-2011 (Addis Ababa, Ethiopia: UNFPA, 2012).
- 24 Ethiopia Central Statistical Agency and ICF International, *Ethiopia Demographic and* Health Survey 2011.
- 25 Ethiopia Central Statistical Agency and ICF International, *Ethiopia Demographic and* Health Survey 2011.
- 26 George Psacharopoulos and Harry Anthony Patrinos, "Returns to Investment in Education: A Further Update," Policy Research Working Paper 2881 (Washington, DC: The World Bank, 2002).
- 27 Jorge Saba Arbache, Alexandre Kolev, and Ewa Filipiak, Gender Disparities in Africa's Labor Market (Washington, DC: World Bank, 2010).
- 28 David E. Bloom et al., "Fertility, Female Labor Force Participation, and the Demographic Dividend," *Journal of Economic Growth* 14, no. 2 (2009): 79-101
- 29 David Canning et al., "Demographic Dividend Macroeconomic Simulation Model," presentation at World Bank, July 2013, accessed at www.jhsph.edu, on Aug. 30, 2013.
- 30 David E. Bloom, David Canning, and Kevin Chan, *Higher Education and Economic Development in Africa* (Washington, DC: World Bank, 2006).
- 31 Ethiopia Central Statistical Agency and ICF International, *Ethiopia Demographic and Health Survey 2011.*

- 32 Ethiopia Central Statistical Agency and ICF International, Ethiopia Demographic and Health Survey 2011.
- 33 Ethiopia Ministry of Education, Education Sector Development Program IV (Addis Ababa, Ethiopia: Ministry of Education, 2010).
- 34 Ethiopia Ministry of Education, National Technical and Vocational Education and Training Strategy (Addis Ababa, Ethiopia: Ministry of Education, 2008).
- 35 Eng. Fekadu Asrat, Ethiopia's Country Report for the 2014 Ministerial Conference on Youth Employment: Country Report on Policies and Mechanisms for Labor Market Oriented Technical and Vocational Education & Training (TVET) Provision and Employment Creation (Addis Ababa, Ethiopia: Ministry of Education, 2014).
- 36 World Bank, "Ethiopia Overview."
- Martha Kibru, "Employment Challenges in Ethiopia," Addis Ababa University, 2012, accessed at www.fes-kenya.org/media/publications/Employment%20Challenges%20 -%20Ethiopia.pdf, on July 17, 2014; and National Employment Policy and Strategy of Ethiopia (Addis Ababa, Ethiopia: Ministry of Labor and Social Affairs, 2009), accessed at www.molsa.gov.et/English/EPro/Documents/National%20Employment%20 Policy%20and%20Strategy%20Of%20Ethiopia.pdf, on July 17, 2014.
- 38 Brixiova Zuzana and Asaminew Emerta, Unlocking Productive Entrepreneurship in Ethiopia: Which Incentives Matter? working papers series no. 116 (Tunis, Tunisia: African Development Bank, 2010).
- 39 Nizinga H. Broussar and Tsegay Gebredkidan Teskleselassie, "Youth Unemployment: Ethiopia Country Study," *International Growth Centre Working Paper* 12/0592 (London: London School of Economics and Political Science, 2012).
- 40 Ethiopia Ministry of Youth, Sports, and Cultures, "National Youth Policy" (Addis Ababa, Ethiopia: Ministry of Youth, Sports, and Cultures, 2004).
- 41 Ethiopia Ministry of Health, *Ethiopia's Fifth National Health Accounts 2010/2011* (Addis Ababa, Ethiopia: Ministry of Health, 2014).
- 42 Ethiopia Ministry of Finance and Economic Development, Growth and Transformation Plan 2010/11-2014/15 (Addis Ababa, Ethiopia: Ministry of Finance and Economic Development, 2010).

PRB INFORM EMPOWER ADVANCE

POPULATION REFERENCE BUREAU

The Population Reference Bureau **INFORMS** people around the world about population, health, and the environment, and **EMPOWERS** them to use that information to **ADVANCE** the well-being of current and future generations.

www.prb.org

POPULATION REFERENCE BUREAU

1875 Connecticut Ave., NW Suite 520 Washington, DC 20009 USA 202 483 1100 рноме 202 328 3937 ғах popref@prb.org е-маіL