

Discussion Brief:

Costs of inequality and exclusion

DISCUSSION BRIEF FOR THE GRAND CHALLENGE ON INEQUALITY AND EXCLUSION
 PAUL VON CHAMIER | OCTOBER 2019



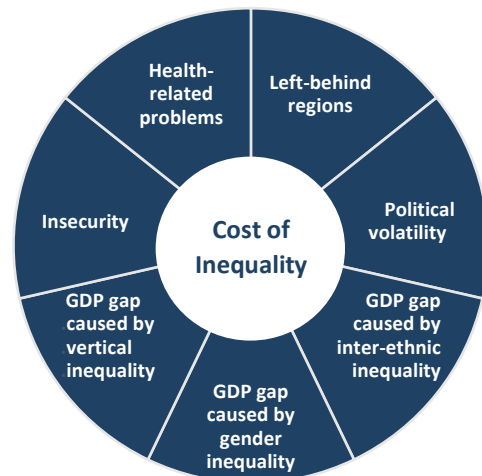
Inequality and exclusion harm society in a number of ways, ranging from fraying trust in institutions and increasing volatility in politics, to causing economic damage, physical insecurity, and higher rates of crime and suicide. Even problems such as obesity, anxiety, and teen pregnancy are found to be amplified by inequality and exclusion.

Yet the most fundamental argument against inequality and exclusion will always remain a moral one. Entrenched socio-economic division infringes upon human dignity. A fair society demands respect for human rights and the opportunity for participation and personal fulfillment. Nevertheless, this brief lays out an array of tangible costs to show that inequality is damaging not only on normative, but also social and economic grounds.

Damage done by inequality and exclusion

Inequality and exclusion are central political problems today.

- **Anger over inequality and exclusion is a formidable political force.** When economic inequality index rises by 1 percent, it correlates with a fall of state legitimacy index by 0.23 percent.¹ This means volatile politics and social unrest. Averaged across 36 developed countries, the number of government changes per decade increases by 1 for every 6-point increase in Gini coefficient.² People’s anger erupts when some situation can serve as a lightning rod for their frustration. Corruption, a significant driver of economic inequalities,³ can be such a lightning rod: all bar one of the examples in Civicus’ State of Civil Society Report 2018 of successful mass political mobilization relate to corruption. Recent country cases show a similar pattern.⁴



- **Political inclusion and trust between groups is declining.**⁵ Trust between social groups has fallen worldwide, from 45 percent to 38 percent in relation to other religious groups and 40 to 35 percent in relation to people of different national origin.⁶ The Edelman Trust Barometer shows that the trust gap between informed citizens and general population returned to record highs in 2019.⁷ Elites' perceived indifference to inequality erodes state credibility and popular mandate, feeding populism. This is by no means restricted to developed countries: in the Arab world, grievances about "hogra" (Algerian dialect meaning a sense of disdain by elites) were critical in driving protests in 2011.

Inequality has a strong territorial dimension.

- **Successful urban centers such as New York, Shanghai, or Sydney generate a powerful network effect, absorbing capital and talent.** The bulk of economic growth and productivity gain enabled by technological progress is now concentrated in a handful of cities. In his book *The Future of Capitalism*, Sir Paul Collier compellingly describes how this phenomenon creates unearned rents and distorted incentives for the lucky ones who can capture them, leading to the misallocation of resources.⁸ He applies this critique to both property owners who surf the wave of asset appreciation, as well as to high-end professionals who enjoy impressive salaries.
- **National statistics belie large gaps across sub-national regions and within cities that undercut intergenerational mobility.**⁹ Harvard research shows that the city block in which children are born in Manhattan correlates strongly with their income decades later.¹⁰ A widely discussed study on São Paulo in Brazil finds similar patterns: two neighborhoods in close proximity, Pinheiros and Parelheiros, have human development indices respectively equivalent to Switzerland and Iraq.¹¹ Entrenched zip code privilege adds to the ongoing collapse of intergenerational mobility. Global data on income and educational attainment reveal that improvements on intergenerational mobility have come to a halt since the early 1980s and even reversed in a number of countries.¹² People from underprivileged backgrounds find ever fewer opportunities for social mobility, which translates into lower productivity, growth, and investment. Research shows that this could be avoided if more children grew up in mixed-income areas where poorer families have the ability to catch up with others¹³—an ever-rarer situation in a landscape segregated by income.
- **Disparities between regions hurt the quality of public services such as education and healthcare.** Citizens perceive public services to be poor and falling across much of the world. Most regions have seen a decline in citizen trust in the civil service since the financial crisis of 2008, after a period of rising trust in the 1990s and 2000s. Decline of service quality is more pronounced in poorer regions, outside the main economic hubs. This is consistent with the fact that much of the funding for public services is sourced from local taxes. Self-segregation of high-income families creates pockets of plenty at the expense of other areas. The marginal improvements in the quality of public services in such wealthy neighborhoods is insufficient to compensate for the commensurate deterioration of services for the rest of the society.

Health-related problems are compounded by inequality and exclusion.

- **Inequality means more unplanned teenage pregnancies and a higher infant mortality rate.** A study from Brazil reveals that a 1-point increase in a national Gini coefficient results in 32 more births for every 10,000 girls between the age of 15–19.¹⁴ Similar studies done in other Latin American countries and the United States found consistent results, with both income and education inequality driving up

pregnancy rates among school-age girls.¹⁵ Teenage pregnancies are proven to both diminish the life prospects of young mothers, as well as place a burden on social protection systems. Women often end up excluded from the labor force, bequeathing poverty to the succeeding generation in a pattern that reinforces the overlap between income inequality and identity-based exclusion.¹⁶ Newborn infants are also higher risk of dying in unequal societies. A 1-point increase in the Gini coefficient is associated with a 3 percent higher rate of infant mortality due to communicable diseases.¹⁷

- **Income inequality drives up obesity rates and associated diseases.** Poverty-induced stress and the experience of childhood deprivation are imprinted in a person's eating habits.¹⁸ A study of 31 OECD countries found that around 20 percent of variation in weight in a society is driven by income inequality, with a 1-point increase in the Gini coefficient corresponding to a 1 percentage point increase in the obesity rate among women and a 0.82 percentage point increase among men.¹⁹ Analogous results were observed in Latin America.²⁰ A study in Ghana found that the correlation might reverse in the poorest countries and then alter direction as a society becomes richer.²¹ Obesity is linked to non-communicable diseases, most notably type-2 diabetes, cardiovascular disease, gallbladder disease, and cancer, which burden the healthcare system.²² Change in the Gini coefficient explains around 80 percent of change in diabetes mortality rate among developed countries of similar income.²³
- **Even wealthy people suffer from more anxiety in high-inequality countries.** Anxiety declines as incomes rise, but is higher for everyone in more unequal societies. The richest 10 percent in high-inequality countries are actually more anxious and depressed than all but the bottom 10% in low-inequality countries.²⁴
- **Anxiety contributes to a variety of mental illnesses and aggravates problems like drug abuse and suicide.**²⁵ The pattern is striking. Both depression and drug use are higher in more unequal neighborhoods of New York City, in more unequal American states, and in more unequal countries.²⁶ This is likewise the case for suicide rates. A number of studies analyzing data from more than 90 countries point to a consistent pattern: more inequality translates to more suicides.²⁷ A study from Brazil assessed that each 10-point increase in the Gini coefficient results in a 5.5 percent increase in the suicide rate.²⁸ Even if mental illness is avoided, income inequality reduces life expectancy.²⁹

Everyone is less safe in unequal societies.

- **A World Bank study of 39 countries showed a robust linkage between inequality and homicide.** In Mexico, every 1-unit increase of the Gini coefficient corresponds to 10 more homicides per 100,000 people.³⁰
- **Economic exclusion of identity groups and women leads to more conflict and violence.** The 2018 UN/World Bank Pathways to Peace report notes that “many of today's violent conflicts relate to group-based grievances arising from inequality, exclusion, and feelings of injustice.”³¹ Economic inequality between ethnic groups increases the risk of conflict—in countries with high levels of education inequality between different ethnic and religious communities, the risk of violent conflict was double that of countries where education was more equitably distributed across groups.³² Other types of exclusion raise the risk of conflict too. Exclusion of ethnic groups from power—political exclusion—is even more strongly related to conflict than socio-economic inclusion.³³ The status of women in relation to men, in particular their vulnerability to domestic violence, is also a good predictor of the country's propensity for violence and war.³⁴

Vertical income inequality stunts economic development.

- **The GDP gap caused by vertical income inequality could be in the range of 20–35 percent.** Constrained talents and social mobility limit productivity growth.³⁵ Political volatility creates uncertainty that hurts economic investment.³⁶ A recent IMF study calculated the optimal Gini coefficient to be around 27 points.³⁷ Instead, both the mean and median national Gini is around 38 points globally,³⁸ and a 1-point increase in the Gini coefficient decreases long-run GDP by 2.5–3 percent on average³⁹ for a median-income country.⁴⁰ The resulting loss of potential GDP can be estimated to be in the range of 20–35 percent.⁴¹ A high Gini coefficient is positively correlated with GDP for the very poorest countries, but transitions to become a drag on growth after a country passes a threshold of around \$3,000 of GDP per capita PPP in 2015 terms.

Gender inequality and exclusion hurts the economy.

- **The GDP gap caused by gender discrimination is in the range of 15–26 percent.** Studies dealing with this subject suggest the figure ranges from 15 percent (OECD⁴²), through 16 percent (UN Women⁴³), all the way to 26 percent (McKinsey⁴⁴). This number certainly captures some of the GDP gap discussed in the above section, due to the overlap of vertical and horizontal forms of exclusion and inequality.

Excluding ethnic groups lowers potential GDP.

- **The GDP gap caused by ethnicity-based discrimination could be between 15 and 30 percent worldwide.** The estimate is based on a study by Harvard Professor Alberto Alesina. The study draws on data on GDP differences between regions representing various ethno-linguistic groups from 164 countries. It uses information on night sky luminosity, geographic differences, and various development indicators as controls. By taking the population-weighted global ethnic inequality score and calculating its possible GDP impact, a range of 15-30 percent of GDP emerges.⁴⁵ This estimate certainly also overlaps with the vertical inequality GDP gap, due to a strong linkage between ethnicity-based and class-based inequality and exclusion in many countries.

Endnotes

¹ New York University Center on International Cooperation, a study of correlation between a measure of “uneven economic development” and a measure of “state legitimacy” using panel data from Fragile States Index encompassing 179 countries and other territories over the years 2006-2019; The Fund for Peace, “Fragile State Index Data 2006-2018,” accessed May 1, 2019, <http://fundforpeace.org/fsi/excel/>.

² New York University Center on International Cooperation, a study on government turnover depending on the Gini coefficient. A sample of 36 Western countries between the years of 1980 and 2016 was used for the analysis. The data for the analysis came from the Comparative Political Data Set Project: <http://www.cpds-data.org/>. See also: Alberto Alesina Alberto, and Roberto Perotti, “Income distribution, political instability, and investment,” *European Economic Journal* 40:6 (1996), 1217. [https://doi.org/10.1016/0014-2921\(95\)00030-5](https://doi.org/10.1016/0014-2921(95)00030-5)

³ Finn Heinrich, “Corruption and Inequality: How Populists Mislead People,” Transparency International, January 25, 2017, accessed May 1, 2019,

<https://www.transparency.org/news/feature/corruption-and-inequality-how-populists-mislead-people>;

Open Government Partnership, “Building a Peaceful and Safer World through Collective Action in the Fight against Corruption; accessed May 1, 2019, <https://www.opengovpartnership.org/stories/building-peaceful-and-safer-world-through-collective-action-fight-against-corruption>.

⁴ Civicus, “State of Civil Society Report 2018,” accessed May 1, 2019, <https://www.civicus.org/index.php/state-of-civil-society-report-2018>; Bettina Schorr, United Nations Research Institute for Social Development, “Regulating the Regulators Tracing the Emergence of the Political Transparency Laws in Chile,” (2018) p. 4; accessed May 1, 2019, [http://www.unrisd.org/80256B42004CCC77/\(httpInfoFiles\)/9972AB476237B8F2C12583390051D0BF/\\$file/Overcoming%20Inequalities%205a_Schorr---Final.pdf](http://www.unrisd.org/80256B42004CCC77/(httpInfoFiles)/9972AB476237B8F2C12583390051D0BF/$file/Overcoming%20Inequalities%205a_Schorr---Final.pdf).

⁵ German sociologist Jurgen Habermas refers to this phenomenon as a “legitimation crisis.” Nancy Fraser has persuasively argued that it may undermine the space for and quality of public discourse, as in stratified societies it is impossible to insulate public discursive arenas from societal inequalities. See Nancy Fraser and Alex Honneth, *Redistribution or Recognition? A Political-Philosophical Exchange* (London: Verso, 2003).

⁶ World Values Survey, “Online Data Analysis 1980-2014,” accessed May 1, 2019,

<http://www.worldvaluessurvey.org/WVSONline.jsp?WAVE=3>.

⁷ Edelman, “Edelman Trust Barometer Global Report 2019,” p. 8; accessed May 1, 2019,

https://www.edelman.com/sites/g/files/aatuss191/files/2019-02/2019_Edelman_Trust_Barometer_Global_Report.pdf; Findings: Indonesia, India, Canada, South Korea, Germany and the UK have their highest level since measurement started of inequality of trust (although China, Saudi Arabia, India, Indonesia, Canada, Malaysia, Singapore, Mexico, the Netherlands and Hong Kong also have above average levels of overall trust in institutions).

⁸ Paul Collier, *The Future of Capitalism: Facing the New Anxieties* (New York: HarperCollins, 2019); Martin Wolf, “Why rigged capitalism is damaging liberal democracy,” *Financial Times*, September 18, 2019, <https://www.ft.com/content/5a8ab27e-d470-11e9-8367-807ebd53ab77>.

⁹ The Economic Commission for Latin America, OECD, and European Commission, “Latin American Economic Outlook 2019: Development in Transition,” p.28; accessed May 1, 2019, <https://www.oecd.org/publications/latin-american-economic-outlook-20725140.htm>.

¹⁰ Emily Badger and Quoc Trung Bai, “Detailed Maps Show How Neighborhoods Shape Children for Life,” *The New York Times*, October 1, 2019, <https://www.nytimes.com/2018/10/01/upshot/maps-neighborhoods-shape-child-poverty.html>

¹¹ Prefecture of São Paulo, “A dinâmica do IDH-M e suas dimensões entre 2000 e 2010 no município de São Paulo,” accessed May 1, 2019,

https://www.prefeitura.sp.gov.br/cidade/secretarias/upload/Informes_Urbanos/29_Dimensoes_IDH-M.pdf.

¹² Centre for Economic Policy Research, “Intergenerational mobility across the world: Where socioeconomic status of parents matters the most (and least),” accessed May 1, 2019, <https://voxeu.org/article/intergenerational-mobility-across-world>; World Bank, “A Lack of Mobility Undermines the Aspirations of Millions and May Threaten Stability and Growth;” accessed September 27, 2019, <https://www.worldbank.org/en/news/feature/2018/11/28/a-lack-of-mobility-undermines-the-aspirations-of-millions-and-may-threaten-stability-and-growth>.

¹³ Opportunity Insights at Harvard University, “Neighborhoods Matter—Children’s lives are shaped by the neighborhood they grow up in,” accessed September 27, 2019, <https://opportunityinsights.org/neighborhoods/>.

¹⁴ Alexandre DP Chiavegatto and Ichiro Kawachi, “Income inequality is associated with adolescent fertility in Brazil: a longitudinal multilevel analysis of 5,565 municipalities,” *BMC Public Health*, 15 (103), February 2015. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4334765/>.

¹⁵ World Bank, “LAC: Poverty, Poor Education and Lack of Opportunities Increase Risk of Teenage Pregnancy” (2013) accessed September 27, 2019, <https://www.worldbank.org/en/news/press-release/2013/12/12/lac-poverty-education-teenage-pregnancy>; Ana Penman-Aguilar, Marion Carter, and M. Christine Snead, “Socioeconomic Disadvantage as a Social Determinant of Teen Childbearing in the U.S.,” *Public Health Reports* 128(S1), (2013): 5–22; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3562742/>;

Melissa Schettini Kearney and Phillip B. Levine, “Income Inequality and Early Non-Marital Childbearing: an Economic Exploration of The “Culture Of Despair,” National Bureau Of Economic Research Working Paper 17157; accessed September 27, 2019, https://www.nber.org/papers/w17157.pdf?new_window=1;

Melissa Schettini Kearney and Phillip B. Levine, “Why Is The Teen Birth Rate In The United States So High And Why Does It Matter?,” National Bureau Of Economic Research Working Paper 17965, accessed September 27, 2019, <https://www.nber.org/papers/w17965.pdf>;

Monica Taylor, “A Review of the Social Determinants of Health—Income Inequality and Education Inequality: Why Place Matters in U.S. Teenage Pregnancy Rates,” *Health Systems and Policy Research* 4(2): 52 (2017),

<http://www.hsprj.com/health-maintenance/income-inequality-and-education-inequality--a-review-of-the-social-determinants-of-health-why-place-matters-in-us-teenage-pregnanc.pdf>.

¹⁶ Center for Disease Control and Prevention, “Social Determinants and Eliminating Disparities in Teen Pregnancy,” accessed September 27, 2019, <https://www.cdc.gov/teenpregnancy/about/social-determinants-disparities-teen-pregnancy.htm>.

¹⁷ Joseph L Ward and Russell M Viner, “The impact of income inequality and national wealth on child and adolescent mortality in low and middle-income countries,” *BMC Public Health* 17(429) (2017),

<https://bmcpubhealth.biomedcentral.com/articles/10.1186/s12889-017-4310-z>. See also: Alice Chen, Emily Oster, and Heidi Williams, “Why is Infant Mortality Higher in the US than in Europe?” National Bureau Of Economic Research Working Paper 20525, p. 16; accessed May 1, 2019, <https://www.nber.org/papers/w20525>; Eduardo Porter, “Income Inequality Is Costing the U.S. on Social Issues,” *The New York Times*, April 28, 2015, accessed May 1, 2019, <https://www.nytimes.com/2015/04/29/business/economy/income-inequality-is-costing-the-us-on-social-issues.html>;

Daiane B Machado, Davide Rasella, and Darci Neves dos Santos, “Impact of Income Inequality and Other Social Determinants on Suicide Rate in Brazil,” *PLoS One* 10(4) (2015), accessed May 1, 2019, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4416030/>. See also: Global Health Watch, *Global Health Watch 3: An Alternative World Health Report*, section B9, “Mental Health and Inequality,” p. 154; accessed May 1, 2019, <https://www.ghwatch.org/sites/www.ghwatch.org/files/B9.pdf>.

¹⁸ Sarah E. Hill et al, “Low Childhood Socioeconomic Status Promotes Eating in the Absence of Energy Need,” *Psychological Science* 27(3), (2016), 354–364, <https://journals.sagepub.com/doi/full/10.1177/0956797615621901>; Tom Jacobs, “How Inequality Leads To Obesity,” *Pacific Standard*, June 14, 2017, <https://psmag.com/economics/how-inequality-creates-obesity>.

¹⁹ Dejun Su et al, “Income inequality and obesity prevalence among OECD countries,” *Journal of Biosocial Science* 44(4), (2012): 417–32; accessed September 27, 2019, https://www.researchgate.net/publication/51980897_Income_inequality_and_obesity_prevalence_among_OECD_countries;

Marion Devaux and Franco Sassi, “Social inequalities in obesity and overweight in 11 OECD countries,” *European Journal of Public Health*, 23(3), (2013): 464–469; <https://academic.oup.com/eurpub/article/23/3/464/536242>; World Health Organization, “Obesity and inequities—Guidance for addressing inequities in overweight and obesity,” accessed September 27, 2019, http://www.euro.who.int/_data/assets/pdf_file/0003/247638/obesity-090514.pdf;

Marcel Bilger, Eliza J. Kruger, and Eric A. Finkelstein, “Measuring Socioeconomic Inequality in Obesity: Looking Beyond the Obesity Threshold,” *Health Economics*, 26(8), (2016): 1052–1066, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5516143/>;

Alison Hayes et al, “Socioeconomic inequalities in obesity: modelling future trends in Australia,” *BMJ Open* 9:e026525 (2019), <https://bmjopen.bmj.com/content/9/3/e026525>.

²⁰ “Inequality in access to care undermines cancer-control efforts in Latin America,” *The Economist*, August 8, 2017, <https://eiuPerspectives.economist.com/healthcare/inequality-access-care-undermines-cancer-control-efforts-latin-america>.

- ²¹ Wisdom Dogbe, “Effects of Economic Inequality on Obesity,” Social Science Research Network (March 6, 2019), accessed September 27, 2019. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3398529.
- ²² Kate Pickett et al, “Wider income gaps, wider waistbands? An ecological study of obesity and income inequality,” *Journal of Epidemiologic Community Health* 59 (2005) 670–674, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1733121/pdf/v059p00670.pdf>.
- ²³ Ibid.
- ²⁴ “Does inequality cause suicide, drug abuse and mental illness?,” *The Economist*, June 14th 2018, <https://www.economist.com/books-and-arts/2018/06/14/does-inequality-cause-suicide-drug-abuse-and-mental-illness>; Richard G. Wilkinson and Kate Pickett, *The Spirit Level: Why Greater Equality Makes Societies Stronger* (London: Bloomsbury Press, 2011); Vikram Patel et al, “Income inequality and depression: a systematic review and meta-analysis of the association and a scoping review of mechanisms,” *World Psychiatry* 17(1) (2018): 76–89; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5775138/>.
- ²⁵ Joe Herbert, “The Scandal of Inequality and Its Effect on Mental Health,” *Psychology Today*, November 17, 2018, <https://www.psychologytoday.com/us/blog/hormones-and-the-brain/201811/the-scandal-inequality-and-its-effect-mental-health>; Reuters, “Income inequality linked to depression,” October 3, 2013, accessed September 27, 2019, <https://www.reuters.com/article/us-income-inequality/income-inequality-linked-to-depression-idUSBRE99814R20131009>
- ²⁶ “Does inequality cause suicide, drug abuse and mental illness?” *The Economist*, June 14th 2018.
- ²⁷ Salman Khazaei et al, “Suicide rate in relation to the Human Development Index and other health related factors: A global ecological study from 91 countries,” *Journal of Epidemiology and Global Health* 7(2), (2017): 131-134, <https://www.sciencedirect.com/science/article/pii/S2210600616300430>; Machado et al (2015); Ayako Hiyoshi et al, “Increasing income-based inequality in suicide mortality among working-age women and men, Sweden, 1990–2007: is there a point of trend change?,” *Journal of Epidemiological and Community Health*, 72(11), (2018): 1009-105, <https://jech.bmj.com/content/72/11/1009>; Kazuyuki Inagaki, “Income inequality and the suicide rate in Japan: Evidence from cointegration and LA-VAR,” *Journal of Applied Economics* 13(1), (2010) 113-133; <https://www.sciencedirect.com/science/article/pii/S1514032610600062>; Daniel Kim, “The associations between US state and local social spending, income inequality, and individual all-cause and cause-specific mortality: The National Longitudinal Mortality Study,” *Preventive Medicine* 84 (2016): 62-68, <https://www.sciencedirect.com/science/article/pii/S0091743515003400?via%3Dihub>.
- ²⁸ Machado et al (2015).
- ²⁹ Wilkinson and Pickett, *The Spirit Level*.
- ³⁰ World Bank, *Inequality and Violent Crime 2002*, Table 1. Pairwise Correlations between the Gini Index and Homicide and Robbery Rates, page 10; accessed September 21, 2018. <https://siteresources.worldbank.org/DEC/Resources/Crime%26Inequality.pdf>; World Bank, *Income Inequality and Violent Crime - Evidence from Mexico's Drug War 2014*, accessed September 21, 2018. <https://elibrary.worldbank.org/doi/pdf/10.1596/1813---9450---6935>.
- ³¹ United Nations and World Bank, *Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict 2018* p.109; accessed September 21, 2018. <https://openknowledge.worldbank.org/handle/10986/28337>.
- ³² UNICEF, *Does Education Inequality Lead to Violent Conflict?*, p. 1; accessed September 21, 2018. <https://www.fhi360.org/sites/default/files/media/documents/epdc---inequality---conflict.pdf>; UNESCO, *Education and Civil Conflict: A Review of the Quantitative, Empirical Literature 2011*, p. 26; accessed September 21, 2018. <http://unesdoc.unesco.org/images/0019/001907/190777e.pdf>; UNICEF, *Education Inequality and Violent Conflict: Evidence and Policy Considerations 2016*, p.3; accessed September 21 2018. <https://www.fhi360.org/sites/default/files/media/documents/resource---epdc---brief---edu---inequality---violent---conflict.pdf>.
- ³³ World Bank, *Pathways for Peace*, p. 112.
- ³⁴ Ibid, p. 96.
- ³⁵ OECD, “Does income inequality hurt economic growth,” December 2014, <http://www.oecd.org/els/soc/Focus-Inequality-and-Growth-2014.pdf>; Federico Cingano, Trends in Income Inequality and its Impact on Economic Growth,” OECD Working Papers 163, (2014), https://www.oecd-ilibrary.org/social-issues-migration-health/trends-in-income-inequality-and-its-impact-on-economic-growth_5jxrjncwxv6j-en
- ³⁶ Alesina and Perotti (1996).

³⁷ Francesco Grigoli and Adrian Robles, “Inequality Overhang,” IMF Working Papers (March 2017); accessed September 27, 2019, <https://www.imf.org/en/Publications/WP/Issues/2017/03/28/Inequality-Overhang-44774>;

Francesco Grigoli, Evelio Paredes and Adrian Robles, “Inequality and Growth : A Heterogeneous Approach,” (IMF Working Papers December 2016); accessed September 27, 2019, <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Inequality-and-Growth-A-Heterogeneous-Approach-44464>;

Francesco Grigoli, “A New Twist in the Link Between Inequality and Economic Development,” IMF Blog, May 11, 2017; accessed September 27, 2019, <https://blogs.imf.org/2017/05/11/a-new-twist-in-the-link-between-inequality-and-economic-development/>

³⁸ World Bank, “Gini Index Data,” (World Bank Open Data); accessed September 27, 2019., <https://data.worldbank.org/indicator/si.pov.gini>.

³⁹ World Bank, “Inequality and GDP Per Capita: The Role of Initial Income,” World Bank-University of Malaya Joint Seminar, September 2019; accessed September 27, 2019, <https://www.worldbank.org/en/events/2017/09/14/inequality-and-gdp-per-capita-the-role-of-initial-income>.

⁴⁰ Current global population-weighted median of median income per country is around \$4,500. See here for details: <https://www.givingwhatwecan.org/post/2016/05/giving-and-global-inequality/>

⁴¹ New York University Center on International Cooperation, a study of impact of reducing the Gini Coefficient on potential GDP. The lower bound of 20 percent is the result of closing the 11-percentage point Gini gap assuming the average long-run GDP gain to be 2.5 percentage points per 1-point Gini reduction while taking into account diminishing marginal GDP returns on reducing the Gini Coefficient. The upper bound of around 35 percent is the result of closing the 11-percentage-point Gini gap assuming the average long-run GDP gain to be 3 percentage points per 1-point Gini reduction.

⁴² Gaelle Ferrant and Alexandre Kolev, “Does gender discrimination in social institutions matter for long-term growth?” OECD Development Centre Working Papers,330, (3 March 2016), accessed October 24, 2019, https://www.oecd-ilibrary.org/development/does-gender-discrimination-in-social-institutions-matter-for-long-term-growth_5jm2hz8dgl6-en; PricewaterhouseCoopers, “PwC Women in Work Index: closing the gender gap,” (February 2017), accessed October 24, 2019, <https://www.pwc.com.au/people-business/assets/pwc-2017-women-in-work-feb17.pdf>

⁴³ UN Women, “Facts and Figures: Economic Empowerment,” accessed October 24, 2019, <https://www.unwomen.org/en/what-we-do/economic-empowerment/facts-and-figures>; David Cuberes and Mark Teignier, “Aggregate Effects of Gender Gaps in the Labor Market: A Qualitative Estimate” *Journal of Human Capital* 10 (1), (Spring 2016): 1-32 <https://www.journals.uchicago.edu/doi/abs/10.1086/683847>

⁴⁴ McKinsey Global Institute, “The Power of Parity: How Advancing Women’s Equality Can Add \$12 Trillion To Global Growth” (2015), p. 11; accessed October 21, 2019, <https://www.mckinsey.com/featured-insights/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth>

⁴⁵ <https://www.journals.uchicago.edu/doi/10.1086/685300>;