



GROUP OF TWENTY

FOSTERING INCLUSIVE GROWTH

G-20 Leaders' Summit, July 7-8, 2017
Hamburg, Germany



Prepared by Staff of the
INTERNATIONAL MONETARY FUND*

* The background note does not necessarily reflect the views of the IMF Executive Board.

CONTENTS

Glossary	4
I. INTRODUCTION	8
II. THE FACTS ON INCLUSIVE GROWTH	9
A. Why Inclusive Growth Matters	9
B. Trends	11
III. INEQUALITY IN A MACROECONOMIC CONTEXT—THE ROLE OF TECHNOLOGY, ECONOMIC INTEGRATION AND DOMESTIC POLICIES	21
IV. POLICIES TO ADDRESS INEQUALITY AND MITIGATE GROWTH-EQUALITY TRADE-OFFS	23
V. THE IMF’S SUPPORT FOR COUNTRIES IN ENHANCING INCLUSIVE GROWTH	27
References	31
BOX	
1. Operationalizing the IMF’s Work on Inclusion	29
FIGURES	
1. Growth and Inequality, 1960–2010	11
2. Global Inequality, 1988–2013	11
3. Global Growth Incidence Curve, 1988–2008	12
4. Within Country Income Inequality, Market and Net Gini, 1990–2012	13
5. Top Income Shares: G20, 1980–2010	14
6. Labor Share Evolutions and Labor Force Composition by Skill Level in G20 Countries, 1995–2009	15
7. Disconnect between Real Median Wage and Economic Growth	15
8. Labor Shares and Income Inequality, 1995–2009	16
9. Wealth and Income Inequality for G20 Countries, 2000	16
10. Income Inequality and Social Mobility	17
11. Development in World Employment, 2007–2014	17
12. Gender Gaps in Labor Force Participation Rates, 1990–2010	18
13. Inequalities in Health Outcomes	19
14. Education Gini and Outcomes by Income Decile	20
15. Financial Inclusion in Advanced and Developing Countries	20
16. Contributions to Aggregate Labor Share Change by Skill, 1995–2009	21
17. Safe Inclusion, 1980–2014	25
ANNEX	
I. Completed Pilots under the Initiatives on Inclusion	30

Glossary

AE	Advanced economy
DC	Developing country
EM	Emerging market economy
EMDE	Emerging market and developing economy
FDI	Foreign direct investment
GVC	Global value chain
ILO	International Labor Organization
LIC	Low-income country
LIDC	Low-income developing country
OECD	Organization for Economic Cooperation and Development
PPP	Public-private partnership
UN	United Nations
WB	World Bank
WTO	World Trade Organization

EXECUTIVE SUMMARY

The Context

Inclusive growth is a priority that resonates globally today. It relates to a broad sharing of the benefits of, and the opportunities for, economic growth, and reflects growth that is robust and broad-based across sectors, promotes productive employment across the labor force, embodies equal opportunities in access to markets and resources, and protects the vulnerable.

The G20 has emphasized the need for inclusive growth. In this regard, the Hangzhou G20 leaders' Summit in September 2016 renewed the emphasis on inclusive growth called for the forging of both a narrative for strong, sustainable, balanced and *inclusive* growth and for adopting a package of policies to make this possible. The communique stated that the G20 would “work to ensure that our economic growth serves the needs of everyone and benefits all countries and all people including in particular women, youth and disadvantaged groups, generating more quality jobs, addressing inequalities and eradicating poverty so that no one is left behind.” G20 Ministers returned to this in March 2017 in Baden-Baden noting that: “We reiterate our determination to use all policy tools—monetary, fiscal and structural—individually and collectively to achieve our goal of strong, sustainable, balanced and inclusive growth, while enhancing economic and financial resilience.”

Economic growth and inequality, the two sides of inclusion, have a complex nexus that can generate tradeoffs. Growth is the basis for generating inclusion. Across countries, growth has been instrumental in narrowing income gaps; within countries, growth has reduced poverty and made possible higher living standards and job opportunities. But policies driven by an exclusive growth focus can also set back inclusion in certain circumstances. While some inequality is integral to a market economy, high and persistent inequality can undermine the sustainability of growth itself.

The Facts

Across countries, inequality has declined, with the global Gini index dropping from nearly 70 in 1988 to 62.5 in 2013, driven by strong growth in many emerging and developing economies. But, the convergence process is incomplete and wide cross-country per-capita income gaps still prevail.

Within countries. Inequality has risen in most advanced economies (AEs) since the 1990s until the mid-2000s, whereas in emerging market and developing economies (EMDEs), inequality remains high even as it has declined in recent decades in many of them. The top 1 percent in AEs now accounts for around 10 percent of total income, with shares even higher for some AEs. In EMDEs, income inequality is typically higher than in AEs, reflecting in part the more supportive role of fiscal policies (through design of taxes and transfers) to cushion net income in AEs. This differential pattern is also typical to the advanced and emerging economies within the G20, although income inequality has stayed broadly flat for most G20 economies since the global financial crisis.

Lack of inclusion manifests in different forms. The share of labor income has been falling across AEs and EMDEs for over two decades, with the decline more pronounced among low- and middle-skilled workers. The cumulative effect of persistent income differences, movements in asset prices, and the lower propensity to save by middle- and lower-income workers has also led to even wider gaps in wealth inequality. The bottom 50 percent of the global population has near-zero wealth and almost half of global wealth is held by the top 1 percent. Low inclusion also reflects unequal opportunities of access to markets (labor) and services (health, education, finance) from an early childhood. Some countries are acutely afflicted with wide gender gaps in these economic and social opportunities that also determine gender gaps in income earnings.

The Factors

Technology and economic integration. Technology, trade and financial integration have brought large benefits to many economies by driving productivity and growth and lifting millions out of poverty. Moreover, trade has lowered consumer prices to benefit low-income households, which spend a higher share of their incomes on traded goods. However, technology and, to a lesser extent, participation in global value chains (GVCs) and financial integration have also led to lower labor income shares in AEs. Similarly, in EMDEs, higher participation in GVCs has induced a reallocation of resources into more capital-intensive sectors, lowering labor income.

Domestic factors. Macrostructural and economic policies can affect inequality differently depending on the design of policies and the structure of the economy. For example, policies geared at boosting productivity could widen inequality if accompanied by an attendant displacement of the poor or low-skilled labor. In contrast, reforms targeted to help raise income and productivity of the poor or of low-skilled labor, if designed well, could boost growth while reducing inequality.

The Remedies

Domestic policies are key for translating strong growth to inclusive growth. A prerequisite is to adopt policy frameworks that maintain sustainable growth with macroeconomic stability. It is also important to identify the channels through which domestic policies affect growth and distribution in different ways and the measures that can limit growth-inequality tradeoffs; but also, recognize the limitations of policy responses when underlying causes of inequality are persistent in nature.

Against this backdrop, a general takeaway is that fostering inclusive growth requires a continuous effort to boost productivity and measures to mitigate growth-inequality tradeoffs:

- *Measures that boost productivity and economic opportunities:* (i) *productive infrastructure investment* to raise demand and job creation in the short term and labor productivity in the long term; (ii) *financial inclusion* combined with financial stability that support long-term growth while helping people and firms to smooth income fluctuations and investment; (iii) *education and health opportunities* that raise human capital and offset polarization in skills and incomes; (iv) *labor market and structural policies* that improve labor market efficiency while increasing inclusion; (v) *measures that foster women's participation in labor activities;* and (vi) *measures that*

support labor market flexibility by removing rigidities in other markets, such as well-targeted housing or regional policies aimed at restoring hard-hit communities.

- *Policies that reduce growth-inequity tradeoffs:* (i) *well-designed fiscal policy* with more reliance on progressive taxes, better targeting social safety nets, and reducing tax expenditures in AEs; stronger revenue mobilization to meet development needs and targeted cash transfers in EMDEs; and (ii) *trampoline policies*, such as job counseling and retraining that help people adjust faster to economic shocks and reduce unemployment spells and skill depreciations.

With growing evidence that growth and its inclusion do not always go together and that lack of inclusion can be macroeconomically harmful, the IMF has scaled up its work in this area.

These efforts will continue, particularly in: (i) deepening its policy diagnosis to better understand the channels and mechanisms through which policies affect growth and inequality, (ii) integrating the analysis into Fund policy dialogue with member countries, and (iii) providing customized technical assistance on designing tax and expenditure policies to support inclusive growth.

I. INTRODUCTION

1. **Inclusive growth is an objective that resonates globally today:** in all economies—small or large, developing or advanced, resource-rich or diversified. In a nutshell, inclusive growth is a broad sharing of the benefits of, and the opportunities for, economic growth. Clearly, the means of achieving this imperative depend on country-specific circumstances, but overall relate to growth that is robust and broad-based across sectors, promotes productive employment across the labor force, embodies equal opportunities in terms of access to markets and resources, and protects the vulnerable segments of the population.
2. **The G20 likewise has emphasized the importance of strong, sustainable, balanced and inclusive growth.** In this regard, leaders noted in the 2016 Hangzhou communique that: “Our growth, to be strong, sustainable and balanced, must also be inclusive. We are committed to ensuring the benefits of our growth reach all people and maximize the growth potential of developing and low-income countries.” These messages were reiterated by Ministers in March 2017 in Baden-Baden who added that: “We will strive to reduce excessive global imbalances, promote greater inclusiveness and fairness and reduce inequality in our pursuit of economic growth.”
3. **Over the decades before the global financial crisis, important progress was made in achieving fast growth, lifting millions out of extreme poverty, but much remains to be done to foster inclusion.** Sustained and strong growth in many economies has helped reduce global poverty and narrow income gaps between countries. Nevertheless, inequality around the world remains high. Moreover, even within many countries, the gains from strong growth have not always been broadly shared and inequality has worsened within many countries. While some inequality is inevitable in a market-based economy, persistently high levels of inequality can pose a threat to long-term growth by hindering social cohesion and people’s ability to invest in skills and assets.
4. **The challenges of growth, job creation, and inclusion are closely inter-linked.** Strong economic growth is an essential prerequisite (but not always sufficient) for job creation and social cohesion. In turn, strong job growth and increased labor force participation, including among women, are important to foster inclusive growth and reduce income inequality; and increases in social cohesion and job creation can also support sustained growth. Conversely, policies motivated by an exclusive growth focus may not always generate inclusion, and similarly, measures to solely meet distributional objectives may not be efficient. The ability to generate both strong and inclusive growth, therefore, depends crucially on policy design customized to country-specific circumstances.
5. **There is no single definition of “inclusive growth,” but the policy dialogue on inclusion is supported by broadly similar concepts.** Some international financial institutions and development partners place greater emphasis on productive and broad-based employment, others on the availability of social protection, and still others on a wider access to socioeconomic opportunities (see Box 2 in IMF, 2013 for details). While the IMF’s work also relates to many broad

aspects of inclusion, for the purposes of this paper, the concept of inclusion is narrowly confined to areas concerning inequality in economic outcomes and opportunities.¹

6. **This paper examines trends in inclusive growth and drivers of the linkages between growth and inequality, and offers some policy lessons for greater inclusiveness.** It starts with a discussion of why inclusion is key to achieving sustainable growth and then documents trends in different aspects of inequality, including inequality of outcomes (income and wealth) and of opportunities (access to the labor market and to basic services). It ends with broad policy lessons to support inclusive growth, recognizing that solutions will need to respond to country-specific needs, could be weakened when forces inducing inequality are persistent and entrenched, and may face social or political constraints and, therefore, take time to implement.

7. **The rest of the paper is organized as follows:** Section II provides an overview of trends in inequality of outcomes and opportunities. Section III discusses how global trends and domestic policies affect inclusive growth. Section IV provides policy recommendations for more inclusive growth, and section V discusses how the IMF supports countries in achieving inclusive growth.

II. THE FACTS ON INCLUSIVE GROWTH

A. Why Inclusive Growth Matters

8. **Inclusive growth is important for sustained growth and social cohesion.** Some inequality is integral to a market economy and the incentives needed for investment and growth. But policies driven by an exclusive growth focus can result in high or pervasive levels of inequality in some circumstances, particularly if there is no attention on their distributional consequences (Fabrizio and others, 2017). And high inequality can be destructive to the level and durability of growth itself (Berg and Ostry, 2011; Ostry, Berg, and Tsangarides, 2014), weaken support for growth-enhancing reforms and spur governments to adopt populist policies, threatening economic and political stability (Rodrik, 1999).

9. **High and persistent inequality can have significant negative implications for both longer-term growth and macroeconomic stability.**

- *High inequality can yield a less efficient allocation of resources:* Thus, the poor may be unable to invest in human capital or engage in productive activities if financial market imperfections constrain their ability to borrow (Banerjee, 2004). Limitations to financial access and investment in turn may also slow social mobility, reduce incentives to work and, in turn, contribute to lower growth.
- *Inequality resulting from high unemployment can impose large economic costs:*
 - Long unemployment spells may cause a loss in skills, limit employability of individuals, shrink

¹ For example, inclusion also requires ensuring that wealth is not captured by a few through corruption and rent seeking, hence the importance of good governance (see IMF, 2016a), and that the benefits of growth do not unduly strain the physical environment—undermining economic prospects for future generation—hence the importance of building resilience to climate change (see IMF, 2016b).

the pool of savings available for investment and reduce potential output (Bean and Pissarides, 1993). The decline in human capital accumulation through learning-by-doing among the employed will, in turn, have adverse effects on potential growth.

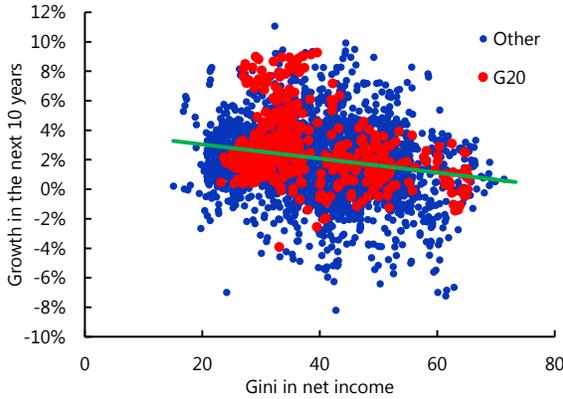
- Labor utilization influences income distribution. The longer the unemployment duration, the higher could be the income inequality (Morsy, 2012). In countries with sizable youth unemployment, inequality can be exacerbated due to scarring effects of slow growth in labor earnings or job-related dissatisfaction (Bell and Blanchflower, 2015).
- The misallocation of women’s labor because of discrimination, social norms, or inequality in opportunity can induce economic losses in AEs and developing countries (DCs) (Stotsky, 2006).
- *Inequality can also cause social conflicts*, which manifest themselves through political struggles for public resources and have adverse macroeconomic outcomes. Different interests of different social groups, and the political processes through which those interests are reconciled, can lower growth, result in unproductive government spending (Alesina and Rodrik, 1994), favor a few (Bourguignon, Ferreira, and Menéndez, 2007), or induce disruption and social conflict (World Bank, 2011).
- *Inequality and unemployment can impair individuals’ ability to cope with risk and thus increase macroeconomic instability*. In highly unequal societies, insurance mechanisms to smooth the effect of shocks on consumption are typically limited to a few, imposing large welfare costs. Also, the fragile segments of the labor market—young, low-skilled, and temporary workers—are more exposed to economic shocks, making them vulnerable to job instability. High inequality can also lead to high financial fragility and macroeconomic instability (Rajan, 2010; Reich, 2010; Kumhof and Ranciere, 2010) and amplify the effect of negative external shocks (Rodrik, 1999).

10. **Empirical evidence suggests that high inequality is, on average, negatively associated with sustained growth** (Figure 1, panel A). In addition, the duration of growth spells is negatively related to the initial level of inequality (Figure 1, Panel B; Berg and Ostry, 2011).² The relationship between growth and inequality, however, varies across countries depending on country’s specific characteristics (Grigoli, Paredes and Di Bella, 2016) and on the effect of shocks and policies on growth and inequality (Fabrizio and others, 2017).

² Berg and Ostry (2011) find that the effect of Inequality on the duration of growth spells is robust when other determinants of growth duration—external shocks, initial income, institutional quality, openness to trade, and macroeconomic stability—are taken into account.

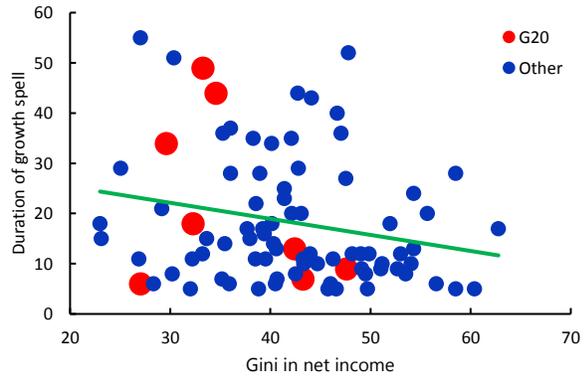
Figure 1. Growth and Inequality, 1960–2010

Panel A: Medium-term growth and inequality



Source: Ostry, Berg, and Tsangarides (2014), using data from Penn World Tables version 7.1, SWIID 3.1, and authors' calculations

Panel B: Duration of growth spells and Inequality



Source: Ostry, Berg, and Tsangarides (2014), using data from Penn World Tables version 7.1, SWIID 3.1, and authors' calculations. Note: Simple correlation between length of growth spells, and the average net income inequality and transfers during the spell. Spells that end in-sample are included; minimum spell length is 5 years.

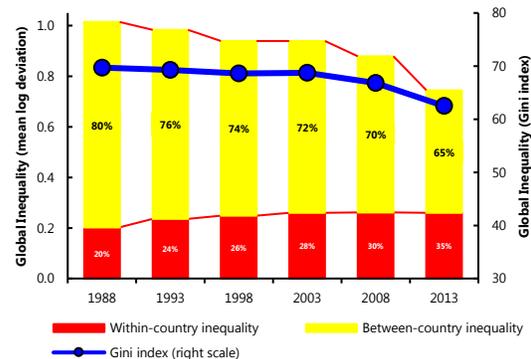
B. Trends³

11. **An important distinction when discussing distributional inequality is that between inequality of outcomes (*ex post*) and inequality of opportunity (*ex ante*).** The most widely cited measure of *inequality of outcomes* is income inequality, typically measured by the market (gross) and net (after tax and transfers from social insurance programs) Gini coefficient and by income shares of the population (by deciles or quintiles). Information on the assets held by the wealthiest offers a complementary perspective on financial inequality. *Inequality of opportunity* relates to differences in opportunities to access basic services (e.g., health, education, and infrastructure) and to financial and labor markets, which ultimately lead to inequality in outcomes as seen in differences in income and wealth and lower economic mobility across generations.

Inequality of outcomes

12. **Despite the progress in narrowing income gaps between countries, inequality between countries is still higher than inequality within countries.** Inequality among all individuals in the world has been on a declining path, with the global Gini index declining from nearly 70 in 1988 to 62.5 in 2013 (Figure 2), driven by the

Figure 2. Global Inequality, 1988–2013



Sources: Figure from World Bank (2016) using data from Lakner and Milanovic' (2016a); World Bank calculations based on PovcalNet (online analysis tool).

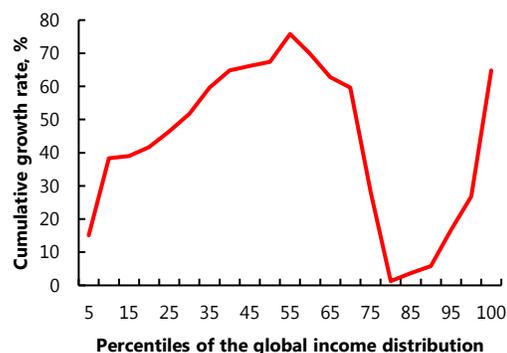
³ This section draws extensively on Dabla-Norris and others (2015), IMF (2013), and IMF (2017a).

strong pace of growth in many DCs. That said, as Figure 2 demonstrates, almost two-thirds of global inequality is still attributable to per-capita income gaps between countries.⁴

13. **Globally, the middle class and the top 1 percent have experienced the largest gains in income** (Figure 3). Examining changes in real incomes between 1988 and 2008 at various percentiles of the global income distribution, Lakner and Milanovic (2016a) show that the largest gains accrued for the global median income (50th percentile) earners and for the top 1 percent—income gains rapidly decreased for the percentiles above the 50th, were stagnant around the 80th–90th, and shot up at the top 1 percent.⁵

14. **Within-country income inequality has been on the rise until the mid-2000s, especially in advanced economies.** Measures of inequality based on Gini coefficients of market and net incomes (income net of transfers and taxes) have increased substantially since 1990 in most of the advanced G20 economies (Figure 4, panel A, left-hand-side graph). In contrast, inequality has slightly declined in a few G20 emerging markets (Figure 4, panel A, right-hand-side graph), although it has remained at a much higher level than in AEs. Fiscal redistribution, the difference between market and net inequality, played an important role in cushioning net income inequality in AEs: between 1990 and 2012, increase in market income inequality was much greater than in net inequality. Income inequality in advanced and emerging G20 economies has been broadly stable since the global financial crisis (Figure 4, Panel B),

Figure 3. Global Growth Incidence Curve, 1988–2008



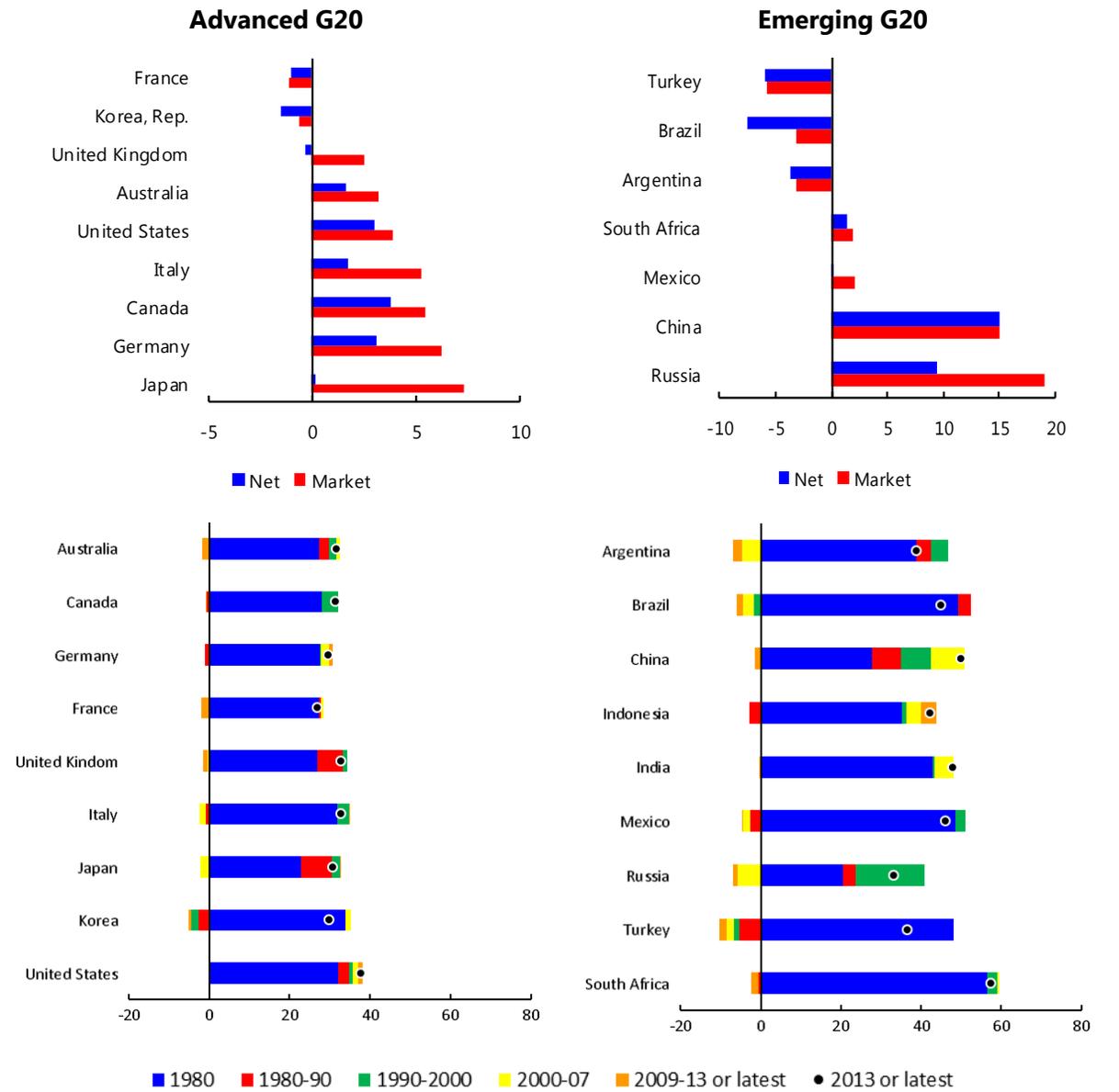
Source: Lakner and Milanovic (2016a).

Note: Y-axis displays the growth rate of the fractile average income (in 2005 PPP USD). Weighted by population. Growth incidence evaluated at ventile groups (e.g., bottom 5%); top ventile is split into top 1% and 4% between P95 and P99.

⁴ Going forward, the pace at which income gaps narrow across countries will clearly depend on their economic growth. Hellebrandt and Mauro (2016), for example, argue that rapid economic growth in emerging-market and developing economies will continue to help bring down global inequality.

⁵ Extending the curve beyond 2008 with new (2011) PPP weights, keeps the hump-shape but shortens the trunk as the growth of the global top 1 percent was slower in the aftermath of the crisis (Lakner and Milanovic, 2016b).

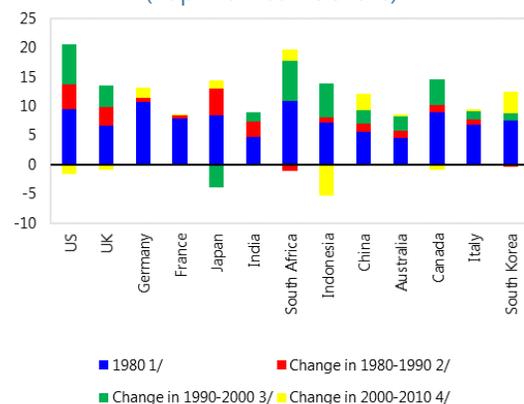
Figure 4. Within Country Income Inequality, Market and Net Gini, 1990–2012
(Change in percentage points)



Sources: Solt (2016), and IMF staff calculations.

15. **In many countries, a disproportionately large share of income has accrued to the top 1 percent of the income distribution.** The top 1 percent accounts for around 10 percent of total income in many G20 countries, with shares even higher in the United States and South Africa (Figure 5; Piketty and Saez, 2003; Alvaredo and others, 2013, Dabla-Norris and others, 2015). These gaps are wider with respect to the share of wealth (see below). Even in countries such as China and India, where strong growth lifted a large part of the population out of poverty, the top earners have benefitted much more than others.

Figure 5. Top Income Shares: G20, 1980–2010
(Top 1% income share)

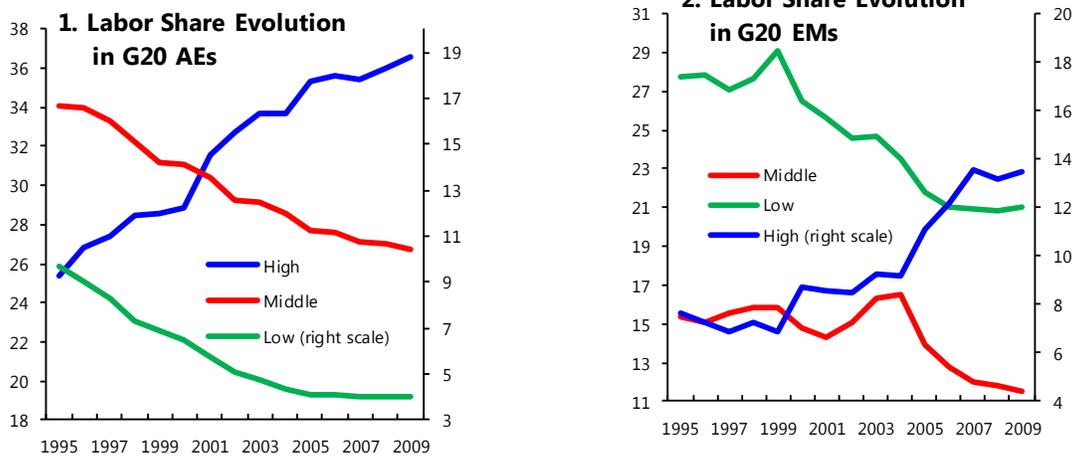


Sources: Updated figure from Dabla-Norris and others (2015) using data from World Wealth and Income Database; and IMF staff calculations.
1/ 1981 for UK and 1982 for Germany;
2/ 1989 for Germany instead of 1990;
3/ 1989–2001 for Germany, 1990–2002 for South Africa, and 1990–99 for India;
4/ 2000–2004 for Indonesia, India does not have data for this period.

16. **In contrast, the average labor share of income has declined in many countries, particularly among low- and middle-skilled** (IMF, 2017a; Figure 6). During 1995–2009, the combined labor share of low- and middle-skilled labor fell by more than 10 percentage points in G20 countries, while that for high-skilled labor increased by more than 5 percentage points in emerging G20 and 10 percentage points in advanced G20. This rise in the income share of high-skilled labor domestically coincided with the rise in the share of the global middle class income earners (see above), pointing to the fact that the latter typically represented households with better access to economic opportunities (education, health, financial services, see below) or represented the relatively higher skilled labor within their domestic economies. The decline for middle-skill labor was driven largely by a decline in their relative wage rate; while the increase for high-skilled labor was driven by the diverging trend in employment composition, reflecting rising levels of education (next section). These developments were more pronounced for AEs, consistent with evidence of wage and employment polarization in these economies. Similar patterns seen across both country groups starting in the 2000s, including a slower growth in median wages relative to GDP growth (Figure 7), suggest a strong role played by common factors (see below).

17. **The decline in the global labor share of income has generally implied higher income inequality.** (Figures 7, IMF, 2017a). Across countries, those with lower shares in labor income have tended to also experience higher inequality levels in both market income as well as disposable income (Figure 8, panel 1). Within countries, increases in labor income shares have been associated with declines in income inequality (Figure 8, panel 2).

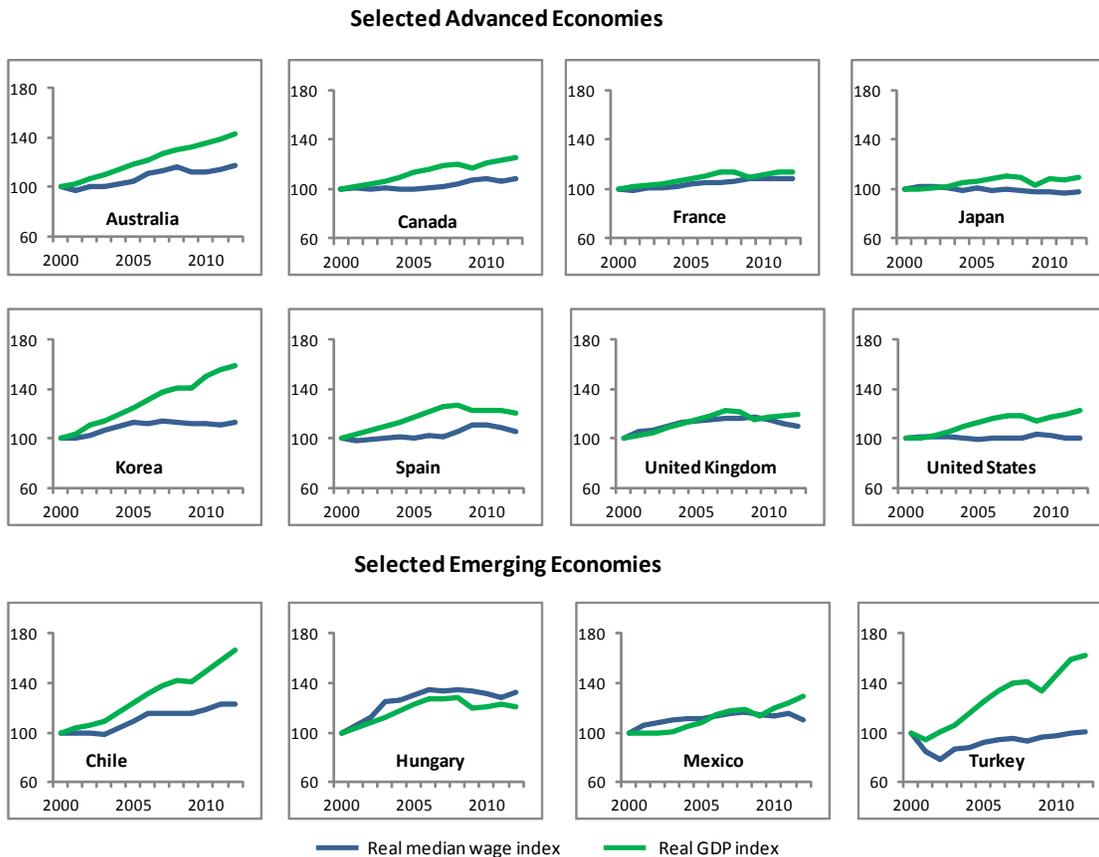
Figure 6. Labor Share Evolutions and Labor Force Composition by Skill Level in G20 Countries, 1995–2009
(In percent)



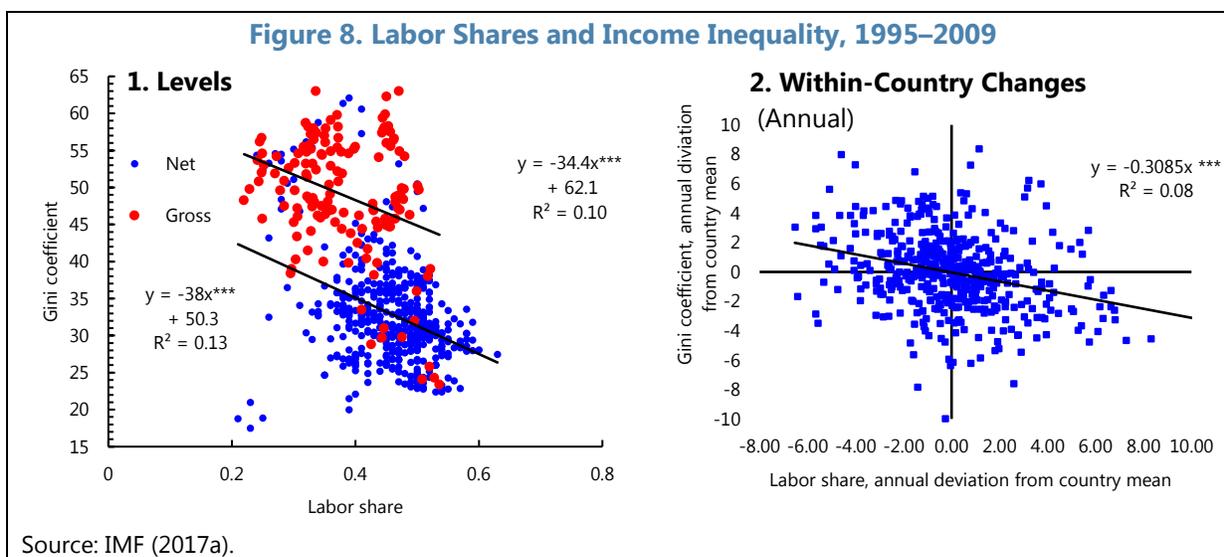
Source: IMF (2017a).

Note: Advanced G20 includes AUS, CAN, DEU, FRA, GBR, ITA, JPN, KOR, USA; Emerging G20 includes BRA, CHN, IDN, IND, MEX, RUS, and TUR.

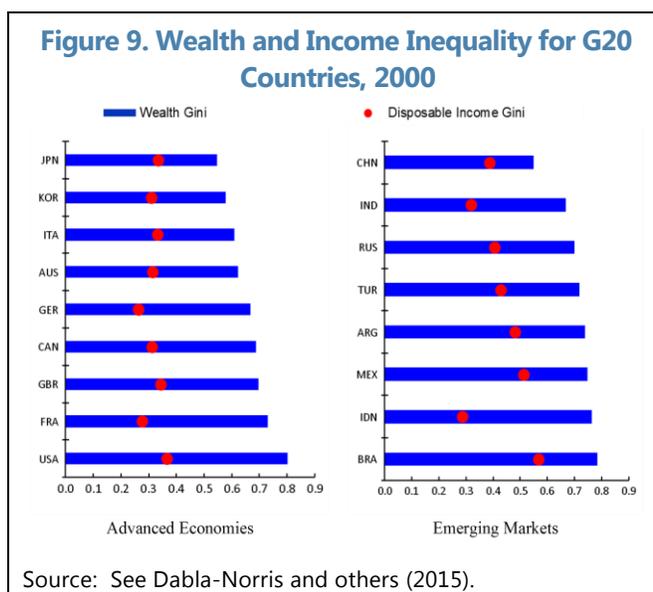
Figure 7. Disconnect between Real Median Wage and Economic Growth



Sources: Dabla-Norris and others (2015); and IMF staff calculations.



18. **Wealth is distributed more unequally than income.** In most advanced G20 countries, the average Gini coefficient of net wealth (financial assets and real estate minus debt) was twice the size of the coefficient of income in 2000 (Figure 9) reflecting, among many factors, the cumulative effect of persistent income inequality, movements in asset prices, as well as the lower propensity to save by middle- and lower-income workers, and a lower propensity to consume by the rich. The bottom 50 percent of the global population has close-to-zero wealth, and almost half of global wealth is held by the top 1 percent of the global population. In most countries, the share of the top 1 percent has risen in recent years at the expense of the bottom 90 percent (Dabla-Norris and others, 2015).



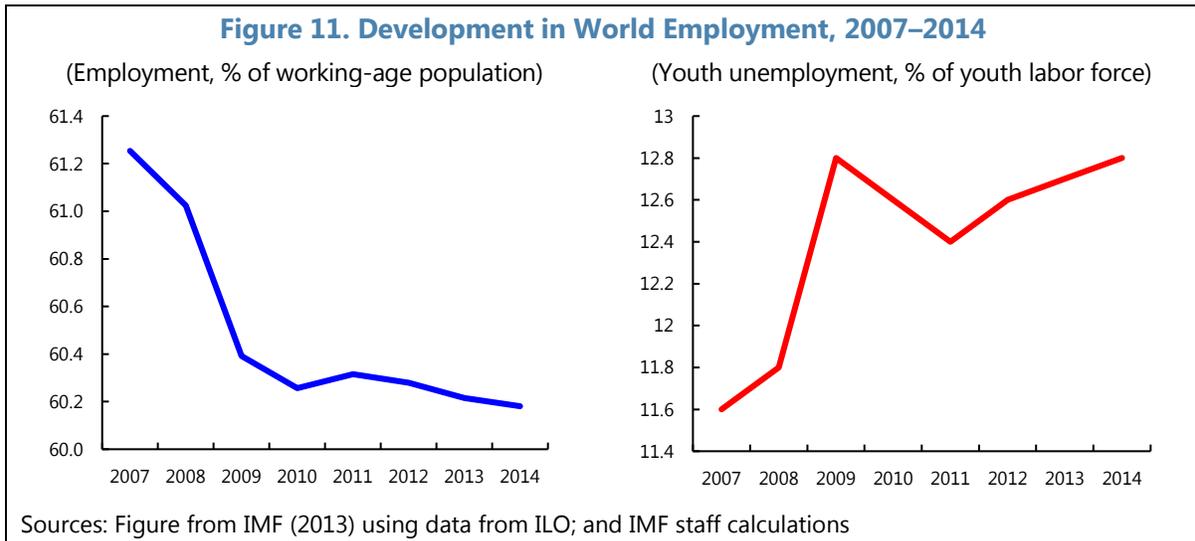
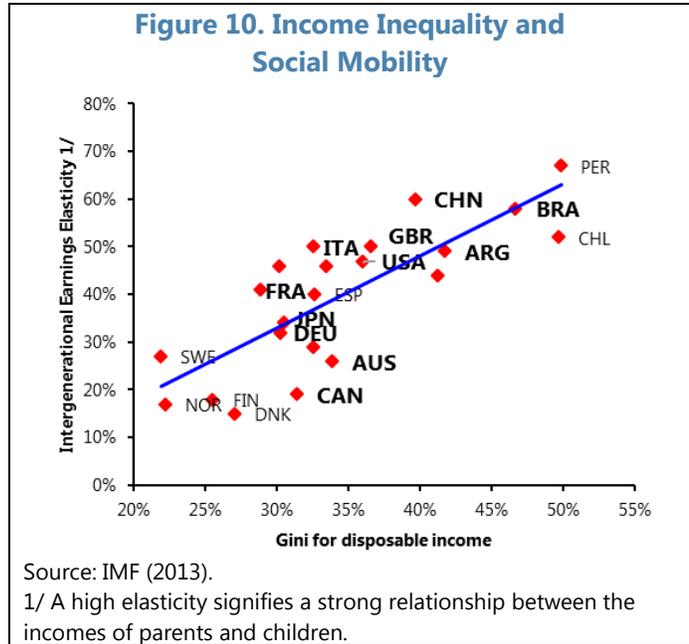
Inequality of opportunities

19. **Higher income inequality is associated with greater inequality of opportunity and lower economic mobility across generations** (Figure 10).⁶ This relationship is circular: high inequality lowers mobility by affecting the policies, institutions and behaviors that shape

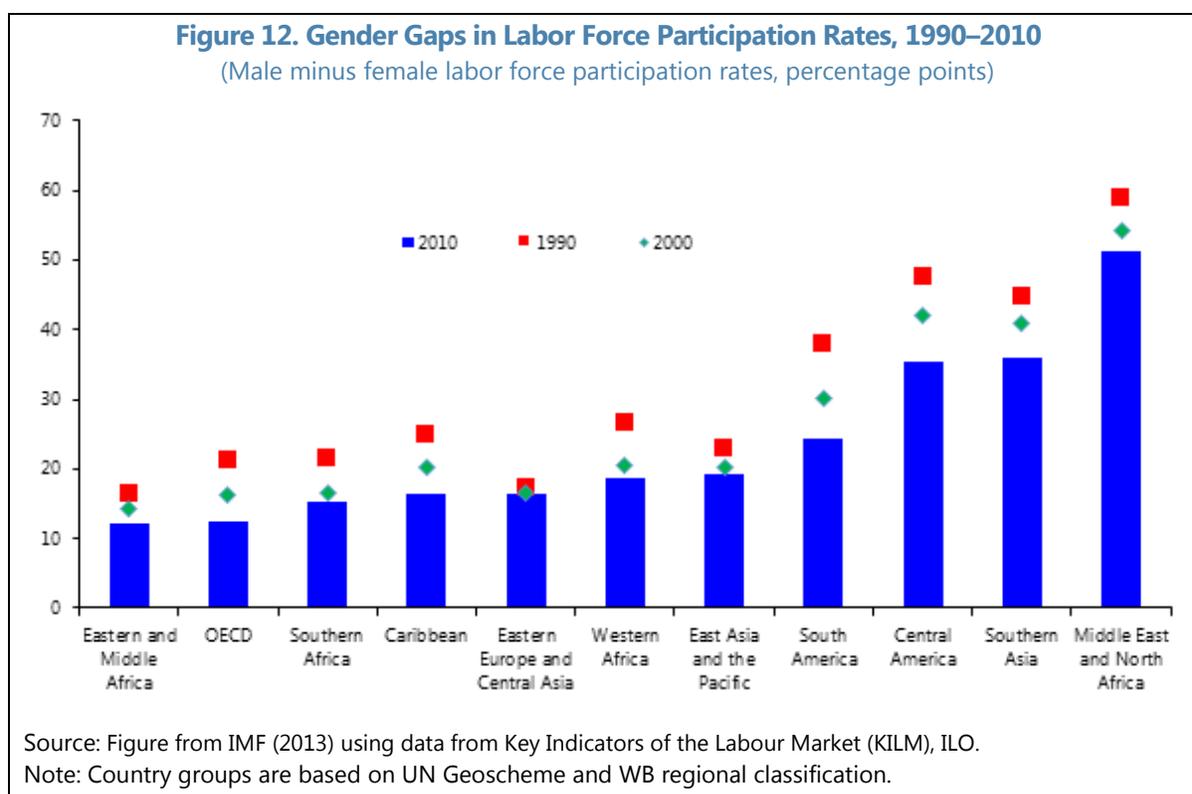
⁶ This is the well-known Great Gatsby curve, a label first used by Krueger (2012). Different varieties of the curve have been drawn by various authors (see Corak, 2013; and Brunori, Ferreira, and Peragine, 2013).

opportunity, and unequal opportunities in turn lead to more income inequality, creating inequality traps over generations.⁷

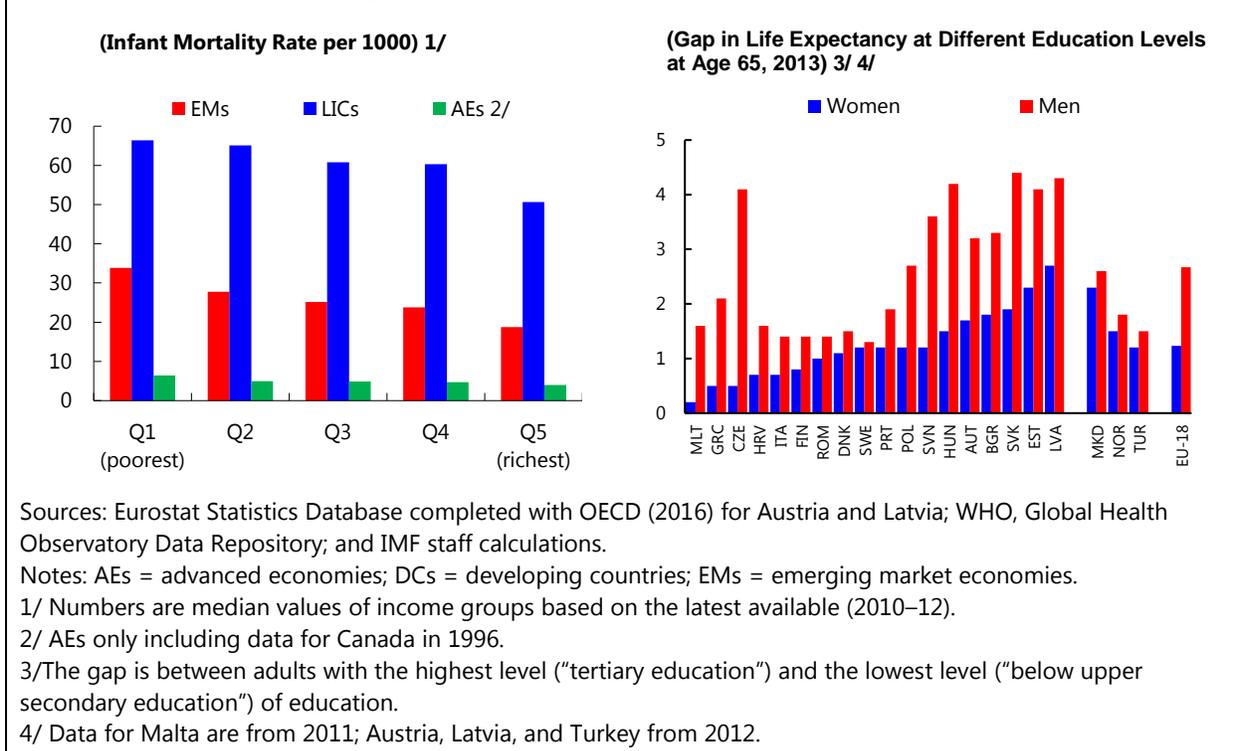
20. **Inequality is observed in many forms beyond income differences, including exclusion from job opportunities.** Over 200 million people around the world are unemployed, with youth and long-term unemployment at alarming levels in many countries (Figure 11). Income inequality is also strongly associated with gender-based inequality on multiple dimensions—for example, gender gaps in economic participation (Figure 12), as well as gender gaps in education, health and financial access, specifically in EMDEs (see below).



⁷ See Corak (2013), World Bank (2005), and Bourguignon, Ferreira, and Menéndez (2007).

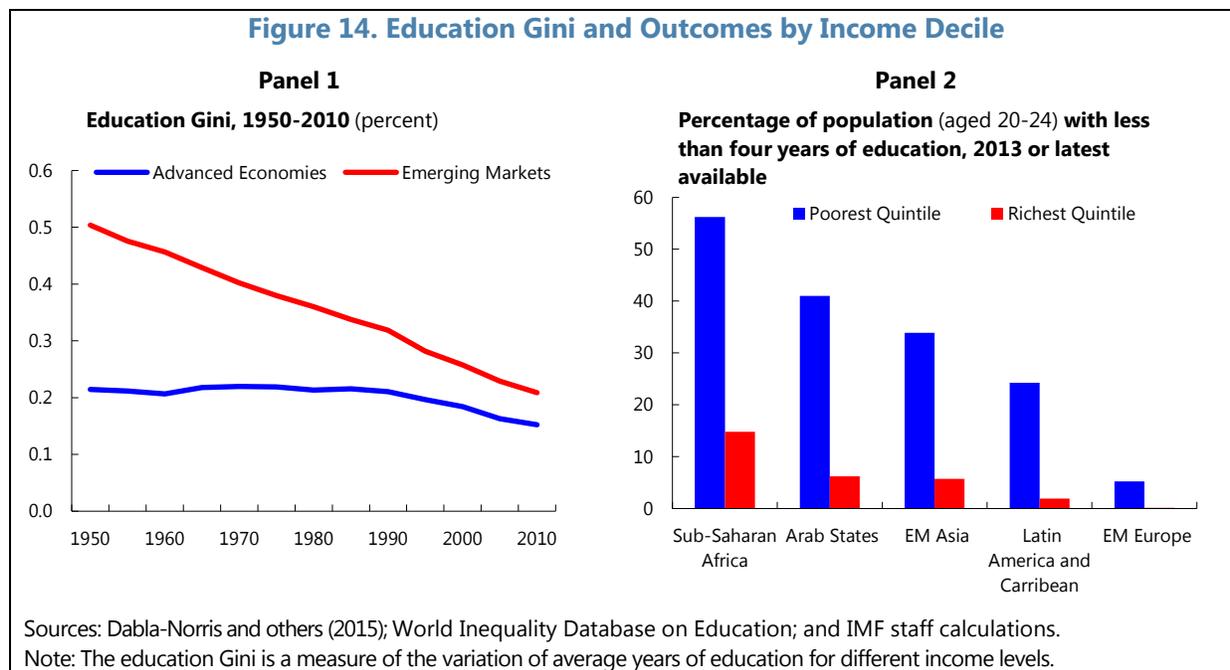


21. **Inequality in health outcomes remains high, particularly in developing economies.** The infant mortality rate is twice as high in poor than in the rich households in emerging market economies (EMs) (Figure 13, panel 1). Similarly, female mortality rates tend to be disproportionately higher for lower income groups. Even in EU countries, the average difference in life expectancy between higher and lower educated males is about three years (Figure 13, panel 2). In the United States, mortality for non-Hispanic white men and women is falling for those with college degree and rising for those without a college degree (Case and Deaton, 2017). These differences in health outcomes are typically driven by cumulative disadvantage over life, in the labor market, in marriage and child outcomes, and in access to health care services.

Figure 13. Inequalities in Health Outcomes

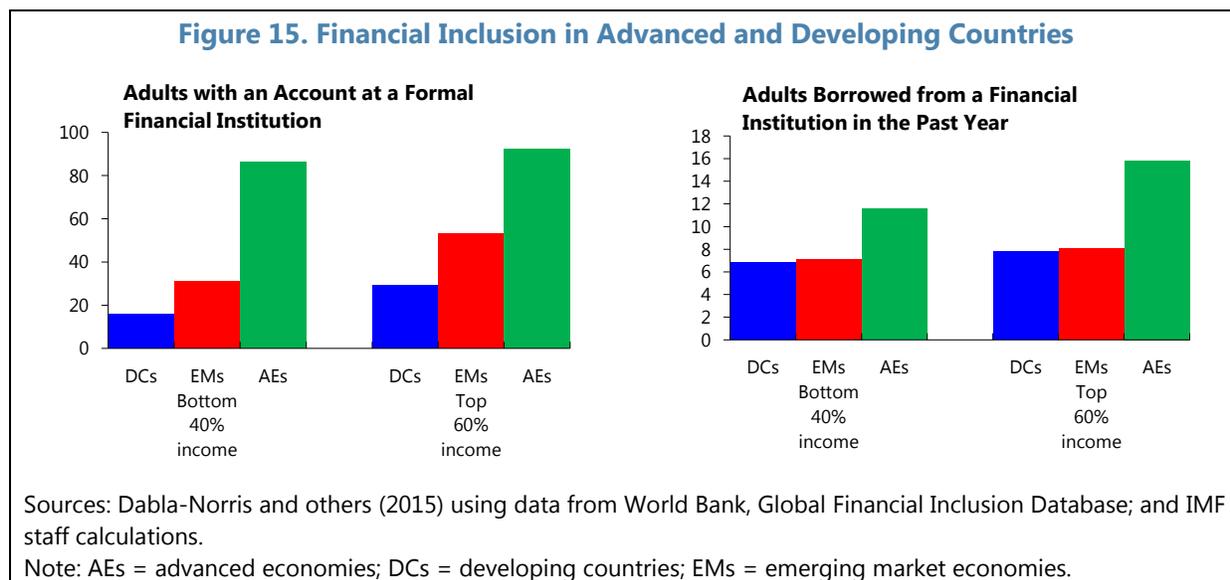
22. **Despite the progress in narrowing inequality in education, gaps on this front are still wide across EMDEs, and there are significant differences in experience across regions.** The Gini coefficient of education attainments has declined significantly in EMDEs, over the last 60 years (Figure 14, Panel 1). This is largely driven by increased access to education at the lower-end of the income distribution (Castello-Climent and Domenech, 2014). Despite this improvement, education outcomes remain much worse for disadvantaged groups with almost 60 percent of the poorest youth population (aged 20–24 years) in sub-Saharan Africa having less than four years of schooling compared to 15 percent in the richest quintile (Figure 14, Panel 2). Moreover, gender gaps in education are found to be strongly correlated with gender gaps in income inequality (Gonzales and others, 2015).

Figure 14. Education Gini and Outcomes by Income Decile



23. **Finally, differences in access to financial services go hand in hand with income inequality.** There are large disparities in the use of financial services between AEs and EMDEs and across income levels (Figure 15). Twenty percent of adults in AEs remain excluded from formal access to finance. The situation in EMDEs is more challenging with only one-half the level of access to finance for adults compared with AEs. Within EMDEs, the share of adults with an account or a loan at a formal financial institution is largely skewed toward the top income earners. The others rely on their own savings, limiting their ability to invest in their skills and assets. In addition, gender gaps in access to financial services are persistently high in many DCs (Sahay and others, 2015). For example, an estimated 70 percent of women-owned small and medium-size enterprises (SMEs) in developing economies are unserved or under-served by financial institutions.

Figure 15. Financial Inclusion in Advanced and Developing Countries



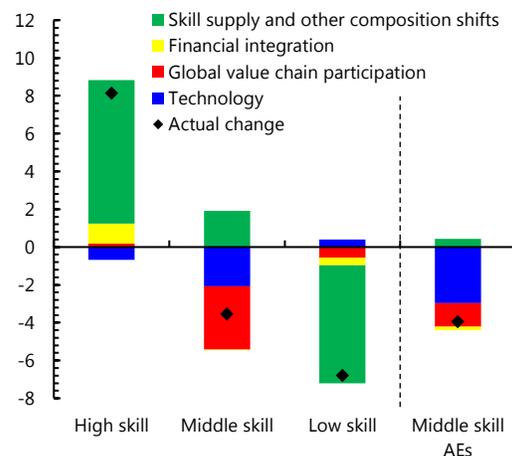
III. INEQUALITY IN A MACROECONOMIC CONTEXT— THE ROLE OF TECHNOLOGY, ECONOMIC INTEGRATION AND DOMESTIC POLICIES

24. **The relationship between growth and inequality is complex, and depends on a host of underlying factors and their interlinkages that are sometimes difficult to disentangle.** Some inequality is expected in a market-based economy. However, structural factors that tend to be associated with the level of economic development also play an important role in explaining the underlying variation in inequality across countries.⁸ These include: the value-added shares of agriculture, industry and services, the urban share of population, education levels, and demographic patterns determined by fertility and mortality rates. Among other factors, technological growth can generate significant payoffs to productivity but also induce higher income inequality if, for example, improvements in technology drive up the skill premium (see below). Trends in global forces, which go beyond country’s structural characteristics, have also mattered. Finally, the role of domestic policies is crucially important: depending on policy design, domestic policies can aggravate or alleviate the effects of other factors and ultimately determine whether growth is inclusive.

Technological change

25. **Technological advancement—within an economy or through global spillovers—has generated large economic benefits to many economies, but the gains have not always been shared broadly.** Over the past several decades, technology has reduced the costs of transportation, improved communication dramatically, and raised productivity and well-being. However, technology has also played a central role in driving up the skill premium, resulting in increased labor income inequality. This is due to the potential disproportionate increase in the demand for capital and skilled labor that can be induced by technological (Card and Dinardo, 2002; Acemoglu, 1998). Indeed, technological advances have been found to have contributed the most to rising income inequality and declining labor shares in AEs (Jaumotte, Lall, and Papageorgiou, 2013), especially those exposed

Figure 16. Contributions to Aggregate Labor Share Change by Skill, 1995–2009



Source: IMF (2017a).

Note: Decompositions are derived from aggregate labor share regressions by skill group. Middle skill AEs refers to the decomposition of the aggregate medium-skill labor share, using only AE subsample in the regression. “Skill supply and other composition shifts” refers to the impact of relative skill supply measured by the share of low, middle, and high educational attainment in the total population and the contribution of the regression constant.

⁸ Empirical work on the macroeconomic determinants of inequality has built on the seminal work by Kuznets (1955) who suggested that in the process of economic development, inequality would first increase and then decrease.

to a high degree of routinization in jobs, particularly middle-skilled workers (OECD, 2011; IMF, 2017a; Figure 16).⁹ Technology has also played a role in lowering labor income shares in some EMs (Dabla-Norris and others, 2015; IMF, 2017a), but overall to a lesser extent than in AEs, reflecting a smaller decline in the relative price of investment goods than in AEs, as well as a lower exposure to routinization, which has limited labor displacement arising from routine-biased technology (see IMF, 2017a).

Economic Integration

26. **The growth opportunities from global economic integration are well established, but integration has also negatively impacted some groups of workers or communities.** More specifically:

- **Trade integration.** By promoting competitiveness and enhancing efficiency, trade has been a central engine of growth and poverty alleviation for many countries (IMF-WB-WTO, 2017) and has contributed to reduce gender wage gaps (Black and Brainerd, 2004; Council of Economic Advisers, 2015). Fajjgelbaum and Khandelwal (2016) estimate a pro-poor bias of trade through lowering prices of tradable goods such as food and beverages. Helpman (2016) finds that while trade has not contributed substantially to within-country inequality, it has resulted in job losses and displacements in AEs. IMF (2017a) finds for AEs, overall trade in goods and services has not significantly affected labor shares, but participation in GVCs has. The ability of firms to adopt labor-saving technologies and outsourcing—by moving low-skill-intensive activities abroad—may have also played a role (Feenstra and Hanson, 1996, 1999, 2003; Elsby, Hobijn, and Sahin, 2013). Similarly, for EMDEs, increased trade flows helped increase demand and wages for the lower-skilled workers with which they are abundantly endowed. At the same time, higher participation in GVCs induced a reallocation of resources into more capital-intensive sectors within EMDEs, lowering the labor share of income (Dabla-Norris and others, 2015; IMF, 2017a).
- **Financial integration.** International financial integration can facilitate efficient international allocation of capital and promote risk sharing, but increased capital mobility—combined with weak macroeconomic institutions and financial supervision—can also raise vulnerability to financial crises (Ghosh, Ostry, and Qureshi, 2016), which tend to hurt the poor disproportionately (de Haan and Sturm, 2016). More generally, financial globalization has been found to increase inequality in many AEs and EMDEs, particularly where financial institutions are weak and access to credit is not inclusive (Furceri and Loungani, 2015), or where financial openness has seen an attendant increase in the profit-wage ratio (Harrison, 2002; Furceri and Loungani, 2015; Ostry, Berg, and Kothari, 2016; Jaumotte, Lall, and Papageorgiou, 2013). That said, financial integration has also led to higher labor income shares in emerging markets, conceivably helped by lowering

⁹ Relative skill supply is measured by the share of low, middle, and high educational attainment in the total population. The “skill supply and other composition shifts” category given by the gray bars—is the combined effect of the impact of relative skill supply and the constant term—and therefore cannot fully identify all the idiosyncratic factors behind trends in each group’s labor share (see IMF, 2017a for details).

the cost of capital in the context of limited substitutability between labor and capital in these economies (IMF, 2017a).

Domestic policies

27. **The relationship between domestic policies and inclusive growth depends on several factors, such as countries' structural characteristics, exposure to global markets, and policy design.** Thus, for example, sound and strong domestic institutions that support the rule of law, reduce policy uncertainty and create an enabling environment for businesses can raise productivity and the means to inclusive growth. Similarly, policies that increase competitiveness and economies' access to global markets raise growth prospects and the basis for higher living standards. However, inequality can still increase if growth-inducing policies do not support broad-based employment or they displace the vulnerable. The impact is stronger for an economy with a larger share of low-income households or with a large share of a low-productivity sector, such as agriculture.

28. **Thus, carefully designed domestic policies can benefit growth and inclusion, or otherwise generate tradeoffs.** For example, generalized price controls or fuel subsidies to protect the poor are costly and untargeted, and less conducive to efficiency and growth. On the contrary, reforms that eliminate generalized price support boost efficiency and growth but can raise poverty and inequality if the original measures shielded the poor to some extent. Combining the removal of fuel subsidies with well-targeted measures to protect the poor (cash transfers, specific measures to improve the productivity of the disadvantaged sector) can help generate more fiscal resources and reduce inequality (Fabrizio and others, 2017). Similarly, monetary policy frameworks that support low and stable inflation, are clearly supportive of inclusive growth because high inflation tends to hurt the poor more (Albanesi, 2007). In addition, monetary policy that responds to economic cycles can also have implications for income and wealth inequality depending on the quantitative importance of different transmission channels and the structural characteristics of the economy (Coibion and others 2012; Furceri, Loungani, and Zdzienicka, 2016). Other considerations of domestic policy measures to foster inclusive growth are discussed in the next section.

IV. POLICIES TO ADDRESS INEQUALITY AND MITIGATE GROWTH-EQUALITY TRADE-OFFS

29. **Sustained growth is a precondition to support higher living standards and job creation, but policies should also allow for the broad sharing of growth without affecting economic efficiency.** Macroeconomic policy frameworks that support strong growth and macroeconomic stability are prerequisites for inclusive growth and should remain a key policy priority. In this context, some tradeoffs in the growth-distribution nexus may be the consequence of an efficiently functioning market economy. Indeed, some reforms may boost growth and welfare for all with distributional consequences that may not be undesirable from an economic and/or social point of view, while others may only benefit some and hurt others (Ostry, Berg, and Kothari, 2016; Fabrizio and others, 2017). While the acceptable level of inequality in a country depends on such social preferences and structural characteristics, governments concerned about the distributional

impact of reforms can adjust specific features of reform design and/or introduce targeted accompanying measures to make pro-growth reforms more inclusive, without generating inefficiencies that endanger growth itself.

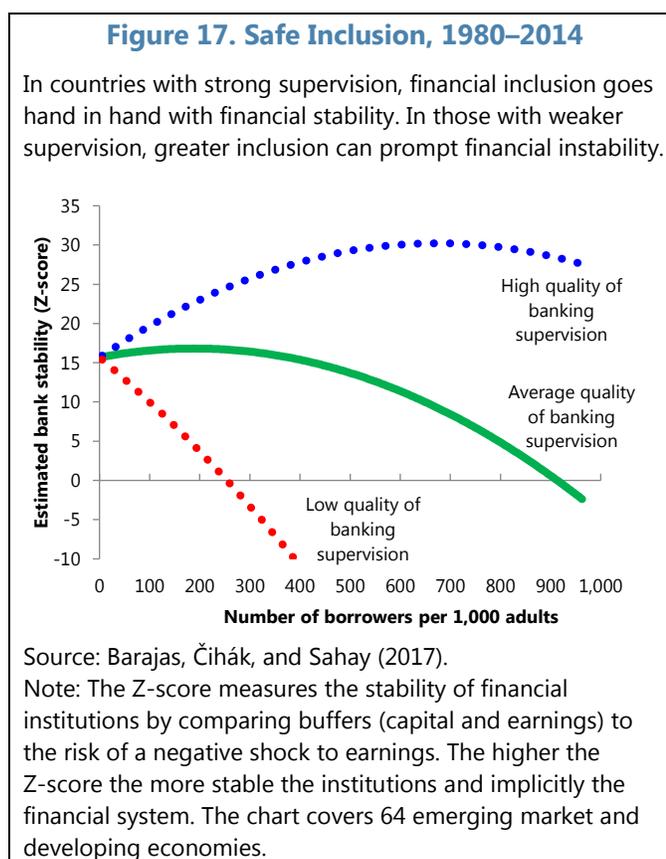
30. **That said, it is important to recognize the limitations of policy response.** One obvious constraint reflects the availability of resources or fiscal space for adequate policy response. Alternatively, policy design may be unable to address all forms of inequality, especially when they are triggered by persistent shocks that are concentrated in specific regions, sectors, or skills. When distributional effects are persistent, direct fiscal policy measures may well be needed to support the displaced to the extent possible (unemployment benefits and other basic income support). While there is clearly no “one-size-fits-all” solution, two broad policy lessons can be offered.

31. **First, implementing policies to improve economic opportunity could boost both productivity and competitiveness, and support a broader sharing of the benefits of growth.** But it is important to recognize that payoffs from such policies will depend on not just on access but also on the quality of underlying services (for example, health and education access or wage subsidies to the low-income workers), and how they affect incentives, and therefore may not always pay for themselves. Some priorities include:

- **Education.** Reforms that promote broad-based access to education can raise productivity at all levels and thereby occupational opportunities, access to jobs, and the level of pay (Mincer, 1958; Becker and Chiswick, 1966). The observed polarization of jobs away from middle-skilled workers underscores the critical role of long-term investment in education and upgrading of workers’ skills throughout their careers (IMF, 2017a). Eliminating financial barriers to higher education, but also supporting retraining programs that allow reallocation of workers displaced by routinization or automation of tasks are key priorities, which can also improve the income prospects of future generations. In AEs, this implies measures to improve the quality of upper secondary or tertiary education, and in many DCs, to promote affordable access to basic education, but also improve the quality of education.
- **Health.** Expanding access to health opportunities for disadvantaged groups and low-income households allow individuals to raise their productivity, contribute to higher economic growth, and reduced inequality (de Mello and Tiongson, 2006). Improved health care can also relieve worker’s anxiety and improve labor market flexibility and economic efficiency (Curie 1999).
- **Infrastructure investment.** Productive infrastructure investment boosts demand and job creation in the short term and capital and labor productivity in the longer term. Specifically, investment that is well targeted to support the disadvantaged (for example, specific investments that improve the productivity of the agricultural sector in developing countries, or those that improve the prospects for higher labor force participation of women) also helps ensure that the benefits are more broadly shared. In this context, empirical evidence suggests that an increase in public investment of 1 percent of GDP leads to a medium-term increase in output of about 1½ percent in AEs and ½ percent in EMDEs, and to a reduction in income inequality—measured by the Gini coefficient—of 2½ percentage points in EMDEs (Furceri and Li, forthcoming). Investment efficiency also matters—public investment may not help reduce income inequality

where public investment efficiency is weak (see Fabrizio and others, 2017 for LIDCs).

- Fostering financial inclusion safely.** Measures to improve financial inclusion can help boost growth and reduce income inequality in the short run, but induce financial stability risks when access to credit increases without adequate financial regulation, thereby ultimately undermining inclusive growth (Sahay and others, 2015). At the same time, financial deepening in a context of low financial inclusion can also undermine inequality if those with higher incomes and assets have a disproportionate access to finance, thereby using this access to increase their own skill premium and income levels. In this context, financial inclusion coupled with financial stability can increase long-term growth and make it more sustainable as firms and households gain wider access to banking and other services (Sahay and others, 2015; Fabrizio and others, 2017, Figure 17). Governments have a central role to play in alleviating impediments to financial inclusion by creating the associated legal and regulatory framework (e.g., protecting creditor rights, regulating business conduct, and overseeing recourse mechanisms to protect consumers), supporting the information environment (e.g., setting standards for disclosure and transparency and promoting credit information-sharing systems, collateral registries, and digital platforms and new technologies), and educating and protecting consumers and strengthening risk-based supervision.¹⁰ Successful financial inclusion can also encourage low-income households to save more and help move towards reducing wealth inequality.



- Well-designed labor market and structural policies.** In AEs, policies that reduce labor market dualism, such as gaps in employment protection between permanent and temporary workers can reduce inequality while fostering greater market efficiency. Active labor market policies that provide incentives for job search, training programs, and assistance to facilitate the job matching process also increase broad-based employability. Labor market policies may also be need to be complemented with additional measures to address rigidities in related markets—for example, housing market policies that ensure well-functioning mortgage markets can improve

¹⁰ IMF's Financial Access Survey database can help policymakers identify opportunities to foster financial inclusion. <https://www.imf.org/en/News/Articles/2016/10/03/PR16441-IMF-Releases-the-2016-Financial-Access-Survey>

geographical mobility; similarly, well-targeted regional policies can cushion specific regions that are adversely hit by changes in the economy (see IMF-WB-WTO, 2017). Hiring and wage subsidies can also be effective in boosting employment, particularly when targeted to low-wage workers or to youth (IMF, 2012). However, these and other measures such as unemployment benefits and income support need to be carefully designed to limit moral hazard and induce lifelong learning. Indeed, the evidence on the effectiveness of wage subsidies in improving labor market outcomes is mixed and points to the risks of such programs becoming net costs (IMF-WB-WTO, 2017). In many DCs, policies that lower informality are key. Measures to improve legal and property rights that give more security to households and individuals encourage labor mobility, reduce informality and support inclusive growth (Fabrizio and others, 2017).

- **Fostering women’s participation in economic activities.** Inequality in opportunities also has a gender dimension, and solutions therefore require addressing these gender gaps. Depending on countries’ development levels, policy measures include: (i) removing tax provisions that discriminate against secondary earners, a regular feature in many AEs; (ii) increasing access to flexible work arrangements, and facilitating transition from part-time work to full-time work; (iii) fostering gender parity in access to health services, school education, vocational training, as well as finance including digital financial inclusion (Aslan and others, forthcoming); (iv) better child care; and (v) promoting equal rights for women to participate in property ownership and entrepreneurship, possibly through changes in family law and inheritance legislation.

32. **Second, when there are implicit tradeoffs in efficiency-increasing economic reforms, the focus needs to be on identifying the tradeoffs and bolstering reforms with accompanying measures that improve the inclusiveness of the overall policy package.** In this context, the design of fiscal policy is crucial. All outlays to improve access to economic opportunities (education, health), and direct support to those displaced (for example, wage subsidies) have a direct short-term fiscal cost, which can be partly offset by higher revenue through higher potential growth when policies also help boost productivity or improve economic efficiency, but may not always pay for themselves. Similarly, policy packages that improve the efficiency of public spending while protecting the low-productivity sector (for example tax reform to raise domestic revenues combined with infrastructure spending in the agricultural sector to raise agricultural productivity) can also have upfront costs and need to be recognized in the budgetary process. Fiscal policy also plays a role through other well designed safety net programs or specific measures to address demographic challenges including aging (Clements and others, 2015; Ostry, Berg, and Tsangarides, 2014; Obstfeld, 2016; IMF, 2017c). Similarly, *trampoline policies*, such as job counseling and retraining can help people adjust faster to structural transformation of the economy and reduce unemployment spells and skill depreciations.

33. **Fiscal policy design can be further strengthened to improve the growth-inclusion relationship and mitigate tradeoffs.** In many AEs, the already strong role of fiscal policy can be reinforced by greater reliance on wealth and property taxes, more progressive income taxation, and better targeting of social benefits (Bastagli, Coady, and Gupta, 2012; Clements and others, 2015). In addition, reducing tax expenditures that benefit high-income groups would reduce inequality and free budget resources for productive spending or cuts in marginal labor income taxes (OECD, 2015).

For EMDEs, improved revenue mobilization is a key priority for financing pro-growth reforms and development spending (Bastagli, Coady, and Gupta, 2012; Fabrizio and others, 2017).

V. THE IMF'S SUPPORT FOR COUNTRIES IN ENHANCING INCLUSIVE GROWTH

34. **A key objective under the Fund's mandate is to promote sustainable growth, which can be achieved by fostering inclusiveness.** The IMF supports a cooperative and mutually reinforcing multilateral framework that helps ensure that countries operate in a level playing field and policy actions support a balanced and robust growth in global trade. Working within the multilateral framework, countries should strive for strong and more balanced growth and to provide economic opportunities for all (see IMF, 2017d). To this end, countries need to anticipate the effects of economic reforms, technological progress and economic integration, equip their populations with tools to reap the benefits, and put in place domestic policies to share them more broadly. The Fund will continue to assist members through carefully tailored policy advice, lending to smooth adjustment, and capacity development that supports economic growth and poverty reduction with economic and financial stability such that growth is sustained for present and future generations.

35. **In this context, understanding the drivers of inequality and how they relate to sustained and inclusive growth, has been an important focus of the IMF's work.** Poverty reduction and inclusive growth are key foci of the Fund's engagement with all its country members. The attention to inclusive growth has been enforced by the evidence of feedback from income inequality to the strength and sustainability of growth. The IMF's work on inclusion involves not only deeper analysis on inclusive growth issues, but also efforts to bring the analysis closer to Fund surveillance and operational work.

36. **The Fund's analytical work has examined the causes and consequences of inequality, as well better approaches to designing policies, including redistributive fiscal policies, to limit inferior tradeoffs between growth and income distribution.**¹¹ Recent work focuses on the factors underlying the declining trends in labor income shares, and policies to enable the gains from trade integration to be more broadly shared (IMF, 2017a, 2017b). Several country-specific or cross-country and regional studies also focus on structural reforms and options for strengthening inclusive growth (Aiyar and others, 2013, Aoyagi and Ganelli, 2015, and Aoyagi, Ganelli, and Murayama, 2015). Policy analysis has also been deepened on other aspects of inclusive growth such as gender and financial inclusion, given their strong links with income inequality. Ongoing Fund work examining the effects of financial technology and trends and implications of correspondent banking relationships (see IMF, forthcoming (a), and IMF, 2017e) aims to better understand how member countries can best

¹¹ The Fund's interest in understanding inequality is long-standing (IMF, 2007). Some studies have examined the adverse consequences of high inequality on the pace and sustainability of growth and macroeconomic stability (Ostry, Berg, and Tsangarides, 2014; Dabla-Norris and others, 2015), and the importance of redistributive fiscal policies to address growth-inequality tradeoffs (Clements and others, 2015). Fabrizio and others (2017) highlight the channels through which pro-growth policies can give rise to higher inequality and the design of reform packages to reduce growth-equality trade-offs in developing countries.

take advantage of correspondent banking relationships, and promote greater resilience to their withdrawal (where this is an issue) through legal and supervisory measures that can ensure both financial stability and inclusion.

37. **The analysis on inclusive growth issues is also informing the Fund's policy dialogue with member countries** where they are of macroeconomic relevance. In a pilot initiative that started in 2015, inequality issues were addressed as one element of the Fund's operational policy advice for several countries; a second wave of pilots is now underway (Box 1; Annex I). For many of these countries, the focus is on better designing macroeconomic, macro-financial and macrostructural reform packages that can be attractive from both growth and distribution perspectives. The IMF is also reviewing the experience with social safeguards to support the poor and vulnerable under PRGT and PSI-supported Fund programs with low income countries with a view to drawing lessons on best practices (IMF, forthcoming (b)). The IMF's guiding framework for identifying and prioritizing structural reforms (IMF, 2016c, 2017f) is now being applied to 33 case studies where macrostructural issues will be fully operationalized in surveillance. The IMF has also been active in operationalizing its work on financial inclusion into surveillance and policy work.

38. **The IMF's capacity building and technical assistance work to achieve more inclusive growth has also expanded.** In collaboration with member countries to foster correspondent banking relationships the Fund is working to promote financial access along with efforts to improve financial risk mitigation and strengthen financial stability (IMF, 2017e). A key component of the Fund's technical assistance on fiscal policy is on the design of expenditure policies that support inclusive growth. More recently the Fund staff has proposed a framework—drawing on several preexisting and new technical tools—that can better inform assessments of fiscal space in member countries (IMF, 2017g), and therefore shed light on the ability of countries to mobilize the resources needed to catalyze more inclusive growth. The IMF has also strengthened surveillance on issues related to financial inclusion. The IMF Financial Access Survey, launched in 2009, is a key source of data on access to and use of financial services around the world, providing insights on the availability and use of financial products such as deposit accounts, loans, and insurance policies by individuals and firms across the globe.

39. **Going forward, the Fund will deepen these efforts.** With growing evidence underscoring that inclusion and growth do not always automatically go together, the IMF will seek to strengthen its understanding of the channels through which policies impact growth and its inclusiveness, whether the growth-inclusion trade-off becomes less favorable under specific conditions, and how to better design policy packages that can catalyze strong and sustained growth while mitigating adjustment costs as much as possible.

Box 1. Operationalizing the IMF's Work on Inclusion

To support surveillance and program discussions, the IMF has stepped up efforts to operationalize its work on inclusive growth. As part of a pilot initiative on inequality and gender that started in 2015, inequality and gender inclusion issues have been systematically included in policy discussions in countries where these issues are seen to be macroeconomically relevant. Following the completion of a first wave of pilots with 22 countries, a second wave of 31 pilots is now underway.

On income inequality, the pilot studies focus on issues such as the growth-inequality tradeoffs in reform packages and options to increase the traction of reforms from both growth and distributional perspectives; regional income inequality; and comparative analysis of inequality and poverty outcomes. Some country examples include:

- **United States (2016 Article IV consultation).** The decline in the labor share of income, which began to accelerate in 2000, coupled with skill-biased technological progress in both services and manufacturing, has contributed to a shrinking of the share of the population in middle-income jobs and a broader polarization of the income distribution. In parallel, there has been a steady increase in poverty in the United States. Thus, staff recommended raising productivity and bridging the skill divide, including through prioritizing spending for vocational and early childhood education.
- **Poland (2016 Article IV consultation).** The analysis showed that despite strong growth and steady income convergence with the EU in the last two decades, income disparities persist at the regional level, which could be reduced by boosting economic performance in lagging regions. Policy advice focused on measures that supported structural transformation in the east, facilitated labor mobility, and attracted foreign direct investment (FDI) to less productive regions.
- **Ethiopia (2015 Article IV consultation).** Using a model-based framework, staff analysis showed that fiscal and financial sector reforms for increasing private sector participation and developing the manufacturing sector could have regressive outcomes from a distributional standpoint even as growth would strengthen. Thus, staff recommended adjusting the design of reform package to increase financial service access and complementing it with measures to increase labor mobility and advance economic transformation. An expansion of the cash transfers was recommended for immediate support to the most vulnerable.

For many of the inequality pilots, staff has developed a micro-founded analytical framework, customized to countries' key macroeconomic features and micro characteristics to better understand the economic and distributional impacts of reform packages and the transmission channels. The framework has been applied to inform policy discussions in many low-income countries (LICs) (Malawi, Myanmar, Uganda), and is being customized for other types of economies (e.g., Brazil, United States).

On gender, analyses have examined potential barriers to female labor force participation in countries at different levels of development and the impact of specific reforms and policies on gender inequality. Examples include:

- **Austria (2016 Article IV consultation).** Staff analysis suggest that increasing female labor force participation could help cushion the impact of demographic change. It showed that a decline in female part-time work to a level in line with other OECD advanced economies (with male part-time work unchanged) and a corresponding increase in full-time employment would raise full-time equivalent employment in Austria by almost 3 percent, ceteris paribus. Staff recommended increasing child care and elder care availability.
- **India (2017 Article IV consultation).** Staff analysis suggested that improving access to sanitation is essential for raising gender equality and economic growth. Key recommendations to increase female labor force participation and employment in the formal sector included investing in infrastructure and gender-targeted skills training, strengthening various gender-specific labor laws, and enhancing the implementation and awareness of females' land inheritance rights and financial literacy programs.
- **Mali (2016 Article IV consultation).** Staff highlighted gaps in education and changing demographics as the main constraints to female labor force participation. Recommendation included expanding education spending and training programs for girls and women, as well as closing the gap between the demand for and the provision of contraception.

To help enhance the role of fiscal policy in addressing gender inequality, the IMF has recently completed a study on gender budgeting efforts in 23 countries with significant initiatives. It identified several countries with legally mandated gender budgeting efforts (e.g. Austria, Iceland, India, Korea, and Mexico). Main lessons suggest that, to boost female labor force participation, advanced countries could use individual taxation, increased parental leave and child care, and, in public employment, encourage equal employment opportunities/wages and possibly introduce quotas. Concerning LIDCs, gender budgeting efforts should focus on education, health, and infrastructure spending to reduce gender inequality. Details of this work are provided in a series of working papers and a publicly available [toolkit](#).

Annex I. Completed Pilots under the Initiatives on Inclusion

	Country		References and links
Inequality	Bolivia	2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr15334.pdf
		2015 Working Paper	https://www.imf.org/external/pubs/ft/wp/2015/wp15265.pdf
	Colombia	2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16387.pdf
		2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr15142.pdf
	Denmark	2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2015/cr15143.pdf
		2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16184.pdf
	Djibouti	2016 Article IV Consultation	http://www.imf.org/~media/Files/Publications/CR/2017/cr1787.ashx
	Ethiopia	2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr15300.pdf
	Guatemala	2016 Article IV Consultation	http://www.imf.org/external/pubs/ft/scr/2016/cr16281.pdf
		2016 Selected Issues Paper	http://www.imf.org/external/pubs/ft/scr/2016/cr16282.pdf
	Honduras	2016 Article IV Consultation	http://www.imf.org/external/pubs/ft/scr/2016/cr16362.pdf
	Israel	2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr15261.pdf
		2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2015/cr15262.pdf
	Korea	2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr15130.pdf
	Kyrgyz Republic	2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2016/cr1656.pdf
	Lithuania	2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16125.pdf
		2016 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2016/cr16126.pdf
	Malawi	2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2015/cr15346.pdf
	Myanmar	2016 Selected Issues Paper	https://www.imf.org/~media/Files/Publications/CR/2017/cr1731.ashx
		2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16210.pdf
	Poland	2016 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2016/cr16211.pdf
		2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr15263.pdf
	Republic of Congo	2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2015/cr15264.pdf
		2017 Article IV Consultation	https://www.imf.org/~media/Files/Publications/CR/2017/cr1771.ashx
	Slovakia	2017 Selected Issues Paper	http://www.imf.org/~media/Files/Publications/CR/2017/cr1772.ashx
		2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16324.pdf
Sudan	2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16226.pdf	
United States	2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16226.pdf	
	2016 Working Paper	https://www.imf.org/external/pubs/ft/wp/2016/wp16121.pdf	
Gender	Austria	2016 Article IV Consultation	https://www.imf.org/~media/Files/Publications/CR/2017/cr1726.ashx
	Cabo Verde	2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16366.pdf
		2016 Working Paper	https://www.imf.org/external/pubs/ft/wp/2016/wp16169.pdf
	Chile	2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr15227.pdf
	Costa Rica	2016 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2016/cr16132.pdf
	Egypt	2016 EFF Staff Report	https://www.imf.org/~media/Files/Publications/CR/2017/cr1717.ashx
	Guatemala	2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16281.pdf
		2016 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2016/cr16282.pdf
	Germany	2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr15187.pdf
		2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2015/cr15188.pdf
	Hungary	2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr1592.pdf
		2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2015/cr1593.pdf
	India	2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2015/cr1562.pdf
		2017 Article IV Consultation	https://www.imf.org/~media/Files/Publications/CR/2017/cr1754.ashx
	Iran	2017 Selected Issues Paper	https://www.imf.org/~media/Files/Publications/CR/2017/cr1755.ashx
		2016 Article IV Consultation	https://www.imf.org/~media/Files/Publications/CR/2017/cr1762.ashx
	Italy	2016 Selected Issues Paper	https://www.imf.org/~media/Files/Publications/CR/2017/cr1763.ashx
		2016 Article IV Consultation	http://www.imf.org/external/pubs/ft/scr/2016/cr16222.pdf
	Jordan	2016 Selected Issues Paper	http://www.imf.org/external/pubs/ft/scr/2016/cr16223.pdf
		2014 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2014/cr14153.pdf
	Mali	2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2015/cr15340.pdf
	Mauritius	2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr1689.pdf
	Morocco	2016 Selected Issues Paper	http://www.imf.org/~media/Files/Publications/CR/2017/cr1765.ashx
	Niger	2016 Article IV Consultation	http://www.imf.org/~media/Files/Publications/CR/2017/cr1759.ashx
		2016 Selected Issues Paper	http://www.imf.org/~media/Files/Publications/CR/2017/cr1760.ashx
	Nigeria	2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16101.pdf
	Pakistan	2015 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2016/cr1602.pdf
	Poland	2016 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2016/cr16210.pdf
		2016 Selected Issues Paper	https://www.imf.org/external/pubs/ft/scr/2016/cr16211.pdf
	Sweden	2015 Article IV Consultation	https://www.imf.org/external/pubs/ft/scr/2015/cr15329.pdf

References

- Acemoglu, D., 1998, "Why Do New Technologies Complement Skills? Directed Technical Change and Wage Inequality," *Quarterly Journal of Economics*, Vol. 113, No. 4, pp. 1055–89, doi:10.1162/003355398555838.
- Aiyar, S., R. Duval, D. Puy, Y. Wu, and L. Zhang, 2013, "Growth Slowdowns and the Middle-Income Trap," IMF Working Paper 13/71 (Washington: International Monetary Fund).
- Albanesi, S., 2007, "Inflation and Inequality," *Journal of Monetary Economics*, Vol. 54, No. 4, pp. 1088-1114.
- Alesina, A., and D. Rodrik, 1994, "Distributive Politics and Economic Growth," *Quarterly Journal of Economics*, Vol. 109, No. 2, pp. 465–90, doi:10.2307/2118470.
- Alvaredo, F., A. B. Atkinson, T. Piketty, and E. Saez, 2013, "The Top 1 Percent in International and Historical Perspective," *Journal of Economic Perspectives*, Vol. 27, No. 3, pp. 3-20, doi:10.1257/jep.27.3.3.
- Aslan G., C. Delechat, M. Newiak, and F. Yang, forthcoming, "Inequality in Financial Inclusion, Gender Gaps, and Income Inequality," IMF Working Paper (Washington: International Monetary Fund).
- Aoyagi, C., G. Ganelli, 2015, "Asia's Quest for Inclusive Growth Revisited," IMF Working Paper. No. 15/42, also published in *Journal of Asian Economics*, October 2015, Vol. 40(C), pp. 29-46.
- , C., G. Ganelli, and K. Murayama, 2015, "How Inclusive is Abenomics," IMF Working Paper. No. 15/54, also published in *Journal of International Commerce, Economics and Policy*, Vol. 07, Issue 01, February (2016)).
- Banerjee, A., 2004, "Inequality and Investment." Available on the internet at economics.mit.edu/files/514 (Cambridge: MIT Press).
- Barajas, A., M. Čihák, and R. Sahay, 2017, "A Broader Reach," *IMF Finance and Development*, Vol. 54, No. 1.
- Bastagli, F., D. Coady, and S. Gupta., 2012, "Income Inequality and Fiscal Policy," IMF Staff Discussion Note 12/08 (Washington: International Monetary Fund).
- Bean, C, and C. Pissarides, 1993, "Unemployment, Consumption and Growth," *European Economic Review*, Vol. 37, No. 4, 837-854, doi:10.1016/0014-2921(93)90093-p.
- Becker, G. S., and B. R. Chiswick, 1966, "Education and the Distribution of Earnings," *American Economic Review*, 56 (1/2): 358–69.
- Bell, D., and D. Blanchflower, 2015, "Youth Unemployment in Greece: Measuring the Challenge," *IZA Journal of European Labor Studies*, Vol. 4, No. 1, pp. 1–25, doi:10.1186/2193-9012-4-1.
- Berg, A., and J. Ostry, 2011, "Inequality and Unsustainable Growth: Two Sides of the Same Coin?"

- IMF Staff Discussion Note 11/08 (Washington: International Monetary Fund).
- Black, S. E., and Brainerd, E., 2004, "Importing Equality? The Impact of Globalization on Gender Discrimination," *Industrial and Labor Review*, Vol. 57.
- Bourguignon, F., F. Ferreira, and M. Menéndez, 2007, "Inequality of Opportunity in Brazil," *Review of Income and Wealth*, Vol. 53, pp. 585–618.
- Brunori, P., F. Ferreira, and V. Peragine, 2013, "Inequality of Opportunity, Income Inequality, and Economic Mobility" Some International Comparisons," Institute of the Study of Labor (IZA) Discussion Paper No. 7155 (Bonn, Germany).
- Card, D., and J. E. DiNardo, 2002, "Skill Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles," NBER Working Paper No. 8769 (Cambridge, Massachusetts: National Bureau of Economic Research).
- Case, A., and A. Deaton, 2017, "Mortality and Morbidity in the 21st Century," Paper presented at the Brookings Papers on Economic Activity Conference, March 23-24, 2017.
- Castello-Climent, A. and R. Domenech, 2014, "Capital and Income Inequality: Some Facts and Some Puzzles," update of WP 12/28 published in October 2012, BBVA Bank Working Paper 1228. (Madrid, Spain: BBVA Bank).
- Clements, B., R. de Mooij, S. Gupta, and M. Keen, 2015, *Inequality and Fiscal Policy* (Washington: International Monetary Fund).
- Coibion, O., Y. Gorodnichenko, L. Kueng and J. Silvia, 2012, "Innocent Bystanders? Monetary Policy and Inequality in the U.S.," NBER Working Paper 18170 (Cambridge, Massachusetts: National Bureau of Economic Research).
- Council of Economic Advisers (CEA), 2015, Economic Report of the President, 2015. United States.
- Corak, M., 2013, "Income Inequality, Equality of Opportunity, and Intergenerational Mobility," *Journal of Economic Perspectives*, Vol. 27, No. 3, pp. 79–102.
- Curie, J., 1999, "Health, Health Insurance and the Labor Market" Chapter 50, in *Handbook of Labor Economics* (Elsevier).
- Dabla-Norris, E., K. Kochhar, N. Suphaphiphat, F. Ricka, and E. Tsounta, 2015, "Causes and Consequences of Income Inequality: A Global Perspective," IMF Staff Discussion Note 15/13 (Washington: International Monetary Fund).
- de Haan, J., and J. Sturm, 2016, "Finance and Income Inequality: A Review and New Evidence," CESifo Working Paper Series No. 6079.
- de Mello, L., and E. R. Tiongson, 2006, "Income Inequality and Redistributive Government Spending,"

Public Finance Review, Vol. 34, No. 3, pp. 282–305.

Elsby, M., B. Hobijn, and A. Sahin, 2013, “The Decline of the U.S. Labor Share,” Working Paper Series 2013-27 (San Francisco: Federal Reserve Bank of San Francisco).

Fabrizio, S., D. Furceri, R. Garcia-Verdu, B. Li, S. V. Lizarazo, M. Mendes Tavares, F. Narita, and A. Peralta-Alva, 2017, “Macro-Structural Policies and Income Inequality in Low-Income Developing Countries,” IMF Staff Discussion Note 17/01 (Washington: International Monetary Fund).

Fajjelbaum, P. and A. Khandelwal, 2016. “Measuring the Unequal Gains from Trade,” *Quarterly Journal of Economics*, Vol. 131.

Feenstra, R. C., and G. H. Hanson, 1996, “Foreign Investment, Outsourcing and Relative Wages,” in *The Political Economy of Trade Policy: Papers in Honor of Jagdish Bhagwati*, ed. by R.C. Feenstra, G.M. Grossman, and D.A. Irwin, pp. 89-127 (Cambridge: MIT Press).

—————, 1999, “Productivity Measurement and the Impact of Trade and Technology on Wages: Estimates for the U.S., 1972-1990,” *Quarterly Journal of Economics*, Vol. 114, No. 3, pp. 907-940.

—————, 2003, “Global Production Sharing and Rising Inequality: A Survey of Trade and Wages,” in *Handbook of International Trade*, ed. by K. Choi and J. Harrigan (Oxford: Blackwell Publishing).

Furceri, D., and P. Loungani, 2015, “Capital Account Liberalization and Inequality,” IMF Working Paper 15/243 (Washington: International Monetary Fund).

—————, P. Loungani and A. Zdzienicka, 2016, “The Effects of Monetary Policy Shocks on Inequality,” IMF Working Paper 16/245 (Washington: International Monetary Fund).

—————, and G. Li., forthcoming, “The Macroeconomic (and Distributional) Effects of Public Investment in Developing Economies,” IMF Working Paper (Washington: International Monetary Fund).

Ghosh, A. R., J. Ostry, and M. S. Qureshi, 2016, “When Do Capital Inflow Surges End in Tears?” *American Economic Review*, Vol. 106, No. 5, pp. 581–85. doi:10.1257/aer.p20161015.

Gonzales, C., S. Jain-Chandra, K. Kochhar, and M. Newiak, 2015, “Fair Play: More Equal Laws Boost Female Labor Force Participation,” Staff Discussion Note 15/02, (Washington: International Monetary Fund).

Grigoli, F., E. Paredes, and G. Di Bella, 2016, “Inequality and Growth: A Heterogeneous Approach,” IMF Working Paper 16/244 (Washington: International Monetary Fund).

Harrison, A. E., 2002, "Has Globalization Eroded Labour's Share," mimeo (Berkeley: University of California).

Hellebrandt, T., and P. Mauro, 2016, *World on the Move: Consumption Patterns in a More Equal Global Economy* (Washington: Peterson Institute of International Economics).

Helpman, E., 2016, "Globalization and Wage Inequality," NBER Working Paper No. 22944 (Cambridge, Massachusetts: National Bureau of Economic Research).

International Monetary Fund, 2007, "Globalization and Inequality," *World Economic Outlook*, October. (Washington)

_____, 2012, "Fiscal Policy and Employment in Advanced and Emerging Economies," Fiscal Affairs Department Policy Paper (Washington).

_____, 2013, "Jobs and Growth: Analytical and Operational Considerations for the Fund," IMF Policy Paper, March (Washington).

_____, 2016a, "Corruption: Costs and Mitigating Strategies," IMF Staff Discussion Note 16/05 (Washington).

_____, 2016b, "Small States' Resilience to Natural Disasters and Climate Change—Role for the IMF," IMF Policy Paper, December (Washington).

_____, 2016c, "Priorities for Structural Reforms in G-20 Countries," Staff Background Paper for G-20 Surveillance Note, July (Washington).

_____, 2017a, "Understanding the Downward Trend in Labor Income Shares," *World Economic Outlook: Chapter 3* (Washington).

_____, 2017b, "Getting Global Economic Integration Right," unpublished paper (Washington).

_____, 2017c, *Asia and Pacific: Regional Economic Outlook*, October (Washington).

_____, 2017d, "The Managing Director's Global Policy Agenda: A More Inclusive and Resilient Global Economy," April (Washington)

_____, 2017e, "Recent Trends in Correspondent Banking Relationships—Further Considerations" (Washington).

_____, 2017f, "Enhancing the Focus on Macrostructural Issues in Surveillance, February (Washington).

_____, 2017g, "Assessing Fiscal Space—An Initial Consistent Set of Considerations" (Washington).

_____, forthcoming (a), "Fintech and the Organization of Financial Services: Initial

Considerations for Cross-Border Payments," IMF Staff Discussion Note (Washington).

—————, forthcoming (b), "Social Safeguards and Program Design in PRGT and PSI-Supported Programs"

IMF-WB-WTO, 2017, "Making Trade an Engine of Growth for All: The Case for Trade and Policies to Facilitate Adjustment," IMF Policy Paper, April (Washington).

Jaumotte, F., S. Lall, and C. Papageorgiou, 2013, "Rising Income Inequality: Technology, or Trade and Financial Globalization?" *IMF Economic Review*, Vol. 61, No. 2, pp. 271–309.

Krueger, A.B., 2012, "The Rise and Consequences of Inequality," Presentation at the Center for American Progress (Washington: Center for American Progress).

Kumhof, M., and R. Rancière, 2010, "Inequality, Leverage, and Crises," IMF Working Paper 10/268 (Washington: International Monetary Fund).

Kuznets, S., 1955, "Economic Growth and Income Inequality," *The American Economic Review*, Vol. XLV, No. 1, pp. 1–28.

Lakner, C. and B. Milanovic, 2016a, "Global Income Distribution: From the Fall of the Berlin Wall to the Great Recession," *World Bank Economic Review*, Vol. 30, No. 2, pp. 203–232.

—————, 2016b, "Response to Adam Corlett's *Examining the Elephant: Globalization and the Middle Class of the Rich World*," Mimeo (New York: City University of New York).

Mincer, J., 1958, "Investment in Human Capital and Personal Income Distribution," *Journal of Political Economy*, Vol. 66, Vol. 2, pp. 281–302.

Morsy, H., 2012, "Scarred Generation," *Finance & Development*, Vol. 49, No. 1, pp. 15–17.

Obstfeld, M., 2016, "Get on Track with Trade," *Finance & Development*, Vol. 53, No. 4, pp. 12–16.

Organization for Economic Co-operation and Development, 2011, "Divided We Stand: Why Inequality Keeps Rising," (Paris: OECD Publishing).

—————, 2015, "The Effect of Pro-Growth Structural Reforms on Income Inequality," *Economic Policy Reform 'Going for Growth,'* (Paris: OECD Publishing).

—————, 2016, "Health at a Glance: Europe 2016; State of Health in the EU Cycle," (Paris: OECD Publishing).

Ostry, J., A. Berg, and C. Tsangarides, 2014, "Redistribution, Inequality, and Growth," Staff Discussion Notes 14/02 (Washington: International Monetary Fund).

—————, and S. Kothari, 2016, "Growth-Equity Trade-offs in Structural Reforms," unpublished paper.

- Piketty, T., and E. Saez, 2003, "Income Inequality in the United States, 1913–1998" *Quarterly Journal of Economics*, Vol. 118, No. 1, pp. 1–39.
- Rajan, R., 2010, *Fault Lines: How Hidden Fractures Still Threaten the World Economy* (Princeton: Princeton University Press).
- Reich, R., 2010, *Aftershock: The Next Economy and America's Future* (New York: Random House).
- Rodrik, D., 1999, "Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses," *Journal of Economic Growth*, Vol. 4, No. 4, pp. 385–412.
- Sahay, R., M. Čihák, P. N'Diaye, A. Barajas, S. Mitra, A. Kyobe, Y. N. Mooi, and S. R. Yousefi, 2015, "Financial Inclusion: Can It Meet Multiple Macroeconomic Goals?" IMF Staff Discussion Note 15/27 (Washington: International Monetary Fund).
- Solt, F., 2016, "The Standardized World Income Inequality Database," *Social Science Quarterly*, Vol. 97, No. 5, pp. 1267–81.
- Stotsky, J., 2006, "Gender and Its Relevance to Macroeconomic Policy: A Survey," IMF Working Paper 06/233 (Washington: International Monetary Fund).
- World Bank, 2005, *World Development Report 2006: Equity and Development* (Washington).
- , 2011, *World Development Report 2012: Gender Equality and Development* (Washington).
- , 2016, *Poverty and Shared Prosperity Report: Taking on Inequality* (Washington).