EXECUTIVE BOARD MEETING

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June 16, 2022

To: Members of the Executive Board

From: The Secretary

Subject: **Democratic Republic of the Congo—Selected Issues**

Board Action:	Provides background to EBS/22/55—Staff Report for the 2022 Article IV Consultation, Second Review Under the Extended Credit Facility Arrangement, Request for Modifications of Performance Criteria, and Financing Assurances Review
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***Unless an objection from the authorities is received prior to the conclusion of the Board's consideration, the document will be published.**

INTERNATIONAL MONETARY FUND

DEMOCRATIC REPUBLIC OF THE CONGO

SELECTED ISSUES

June 13, 2022

Approved By
The African Department

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CONTENTS

BUILDING RESILIENCE AND EXPLORING OPPORTUNITIES FROM CLIMATE CHANGE[1]

Addressing the challenges associated with climate change in the DRC requires a good understanding of its exposure to climate vulnerabilities as well as the bottlenecks in scaling up climate policies to achieve its Nationally determined contribution (NDC). At the same time, the global efforts to develop low-carbon technology and conserve carbon sinks put the DRC in a good position with substantial long-term benefit for the country. Hence, the country would benefit from focused efforts in strengthening forest and mining managements, while building resilience to climate change.

A. Context

1. The DRC faces severe challenges from climate-induced natural disasters. The DRC is prone to natural disasters (floods, landslides), which exacerbate fragility by deteriorating infrastructure and living conditions in a country already facing high poverty and significant infrastructure gaps. Natural disasters also increase risks of diseases and food insecurity. Floods are often accompanied by land and infrastructure degradation due to erosion/landslides, which reduce arable land and agriculture productivity. Over the long run, climate change is projected to increase the risk and intensity of floods in the DRC.

2. On the upside, the DRC is well-positioned to benefit from the global climate transition, easing the path in the country towards higher and more inclusive growth. The DRC is the largest cobalt producer worldwide and top copper producer in Africa, two key minerals needed for the global energy transition. In addition, the DRC's is a carbon-negative emitter and can absorb 2/3 of African's carbon emissions. It holds the second largest rainforest and tropical peatlands worldwide which provide carbon sequestration services in reducing net global carbon emissions. However, the global energy transition may trigger an increase in emissions over the medium-term that could compromise the DRC meeting its reduction targets pledged in COP26 (see below).

3. Although the DRC's minerals, rainforest, and tropical peatlands could help mobilize financing for climate mitigation and adaptation, building capacity and improving governance are needed to create opportunities for development. Given the substantial spending required for climate projects, these projects should be integrated into the core public financial management (PFM), investment, and debt management frameworks. This calls for strong policies to (i) improve governance and transparency on managing mining resources so that it generates tangible opportunities for all and promotes inclusive growth; (ii) manage forest efficiently and optimize the gains from carbon markets; (iii) promote an equitable sharing of climate resource dividend across and within generations; (iv) integrate climate risks in public finance management and debt sustainability analysis; (v) improve PFM, investment and debt management framework to unlock international climate funds; (vi) strengthening capacity in early warning, promote climate-smart

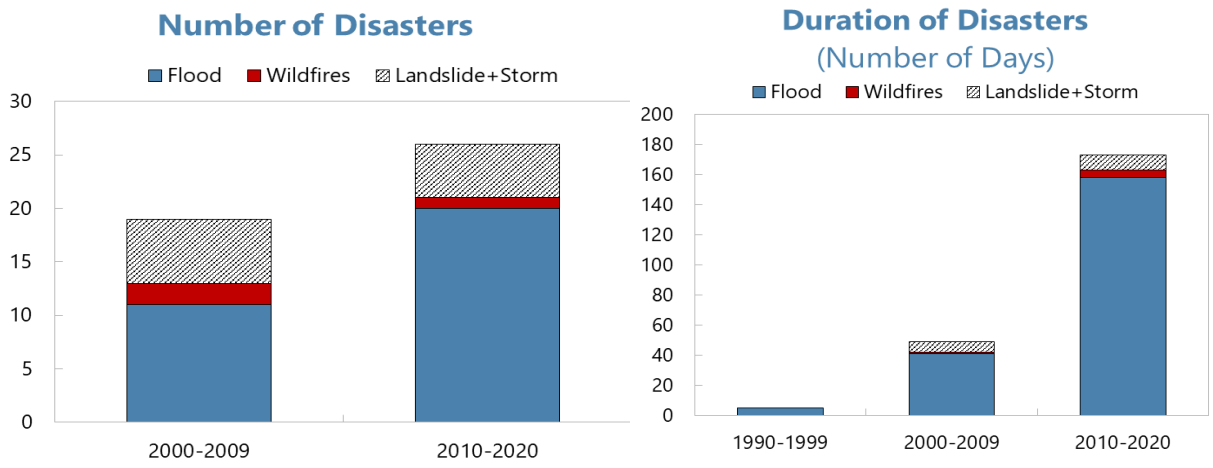
[1] Prepared by Solo Zerbo

agriculture to improve food security and develop a national disaster contingency plan; vii) enhance capacity to support forest and peatland preservation and tackle the effects of poverty on deforestation.

B. Exposure to Climate Change Vulnerabilities

4. The DRC is among the countries most vulnerable to floods, heavy rainfalls, and landslides and less ready to address disaster-related climate shocks. DRC is a flood-prone country which often leads to landslides**.** These disasters have been common in recent years. Between 2010-20, the DRC has experienced 21 episodes of severe floods, bearing on the population and the economy. Rapid and unplanned urbanization, inadequate drainage systems and poorly constructed homes on flood plains enhance the country's vulnerability to climate related shocks. According to the 2019 Notre Dame Global Adaptation Initiative (ND-GAIN index) Index, which measures both vulnerability to climate change (degree of exposure, sensitivity and adaptive capacity) and readiness (economic, institutional and social) to adapt to the effects of climate change, the DRC is the 10th least ready country to address climates shocks and the 8th most vulnerable country to climate change in the world.[2]

Figure 1. Democratic Republic of the Congo: Natural Disasters in the DRC, 2000-20



Sources: EM-DAT and IMF staff calculations

5. Climate-related shocks affect the economy through various channels. Health, physical risks (housing, property, agricultural land), food insecurity and inflation are the main channels through which natural disasters, in particular floods, affects the DRC economy. A cross-country estimate form sub-Sahara Africa confirms sizeable and persistent macroeconomic effects of floods.

[2] The ND-GAIN index is obtained by subtracting the vulnerability score from the readiness score for each country and scale the scores to give a value from 0 to 100, with 100 being the best prepared/less exposed to climate events.

6. The real GDP growth loss averages 0.4 percentage points for floods in the year of occurrence. More specifically:

- **Health:** Floods in the DRC often spread diseases by contaminating drinking water and creating breeding grounds for mosquitoes which results in epidemics outbreaks (cholera, malaria). Worsening health conditions hampers worker productivity over the medium term.

- **Infrastructure:** In 2021, more than one percent of the Congolese population was directly exposed to climate events through the destruction of their housing and properties.[3] Furthermore, about one percent of arable land under cultivation is destroyed by floods every year.[4] Poor agricultural practices and land management, and the lack of drainage system exacerbate the impact of disaster-related climate events on arable land.

- **Food insecurity:** Agriculture employs 70 percent of the population and represented 19 percent of GDP in 2020. Severe floods put households into food insecurity due to significant crops losses. In addition, growing poverty and chronic conflicts amplifies the impact of climate shocks on food security. For example, between July to December 2020, over 21 million people in DRC faced high levels of acute food insecurity driven by conflict, COVID-19 and flood. Around 500,000 people have lost almost all of their food reserves due to heavy rains which resulted in flooding.[5]

- **Inflation:** Floods damage the country's already severely limited infrastructure and also raise the cost of transportation, which represents 11 percent of CPI basket. Rainfall disrupts transportation and hampers individuals' access to their jobs. Notably, the estimated economic additional costs caused by commuter travel delays in Kinshasa is at least US$1.2 million per flood day.[6] Moreover, crops lost due to floods and landslides lead to food shortages and may trigger inflationary pressure given the large weight (54 percent) of food products in the CPI basket.

7. Over the long-run, climate change is projected to increase the risk and intensity of floods and landslides, as rainfall will increase and be more severe. The DRC is expected to experience more precipitation anomalies, but fewer temperature anomalies relative to other SSA's countries (see Figure 2).

- **Precipitation**: Under the Representative Concentration Pathways (RCP8) emissions scenario, rainfall is projected to become substantially more volatile, with a likely increase in frequency and intensity of extreme rainfall events. The frequency of extreme precipitation is likely to increase by as much as 27 percent.

[3] Global Report on Internal Displacement 2022.

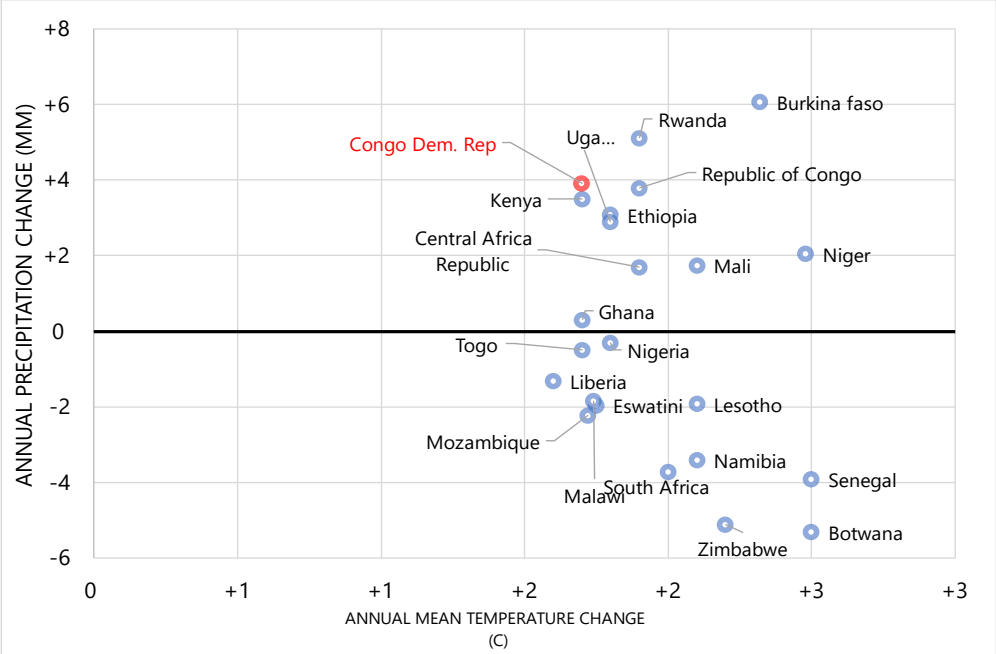
[4] The DRC has a great agriculture potential with 80 million of arable land, diverse climatic conditions, and abundant water resources. Yet, this potential has barely been taped and only 10% of its arable land is used for agriculture.

[5] Integrated Food security phase classification for July -December 2020

[6] Please see Yiyi He, Stephan Thies, Paolo Avner, and Jun Rentschler (2020) for details.

- **Temperatures:** Over most of the country, annual average temperatures range between 24–25°C. Nevertheless, across the RCP8 scenario (median) annual temperatures in DRC are projected to increase by +1.7°C by the end of the century. These changes are likely to exacerbate the negative impact on the country's water resources, agriculture, health.

Figure 2. Democratic Republic of the Congo: Projected Temperature and Precipitation Changes in SSA's Countries for 2030-50
(Reference Period 1986-2005)



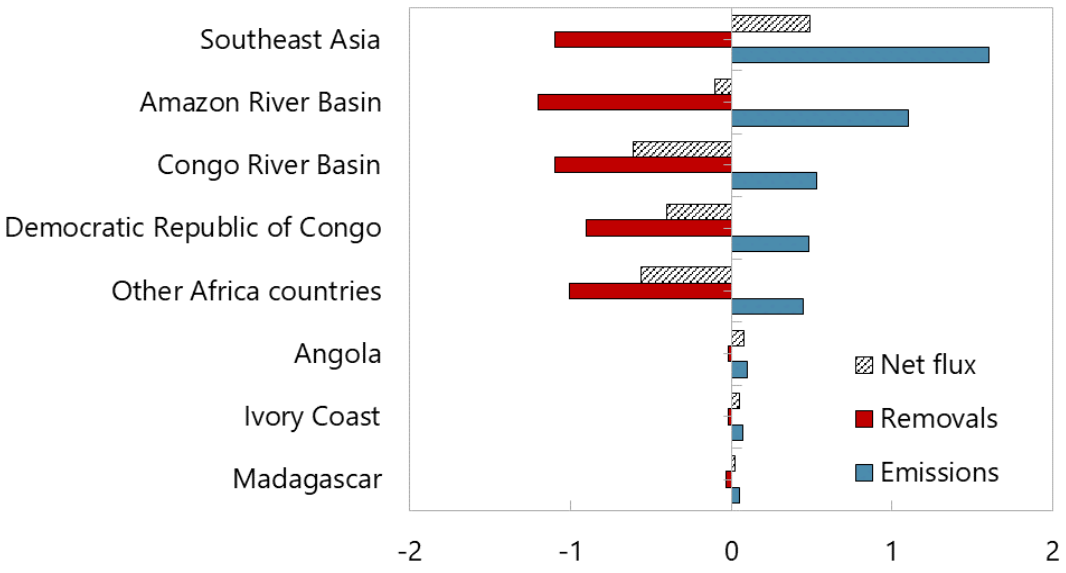
Sources: World Bank Data; IMF staff calculations. Projections are based on the Multiple CMIP5 models, RCP8 business as usual scenario.

C. DRC's Role in Global Carbon Sequestration

8. The DRC is a carbon-negative emitter, as its natural assets (rainforests and peatlands) provide carbon capture services.[7] DRC's ecosystem both absorbs and emits carbon dioxide. Gross carbon absorption from established forests exceeds gross emissions from land-use change and from burning fossils fuel and industrial processes. The balance of gross emissions and gross absorption yields a net forest carbon absorption of approximately 0.4 Giga ton of carbon dioxide equivalent (GtCO2e) per year, making the DRC as the most important carbon absorber in Africa. It can absorb up to 2/3 of African carbon emissions every year.

[7] The ecosystem service carbon sequestration is defined as the capture and storage of carbon in biomass contributing to climate regulation. Sequestration services are measured using the net ecosystem carbon balance, taking into account all changes in carbon stocks (including, changes resulting from de-forestation or forest fires, or a reduction in peatland areas).

Figure 3. Democratic Republic of the Congo: Gross and Net GHG Fluxes from Forests
(In GtCO2e per year)



Sources: WRI (2020) and IMF staff calculations. Annual average, 2001-2020.

9. The total carbon stock from peatlands and rainforest is estimated around 42 GtCO2e which is equivalent to about 120 percent of annual global CO2e in 2020.

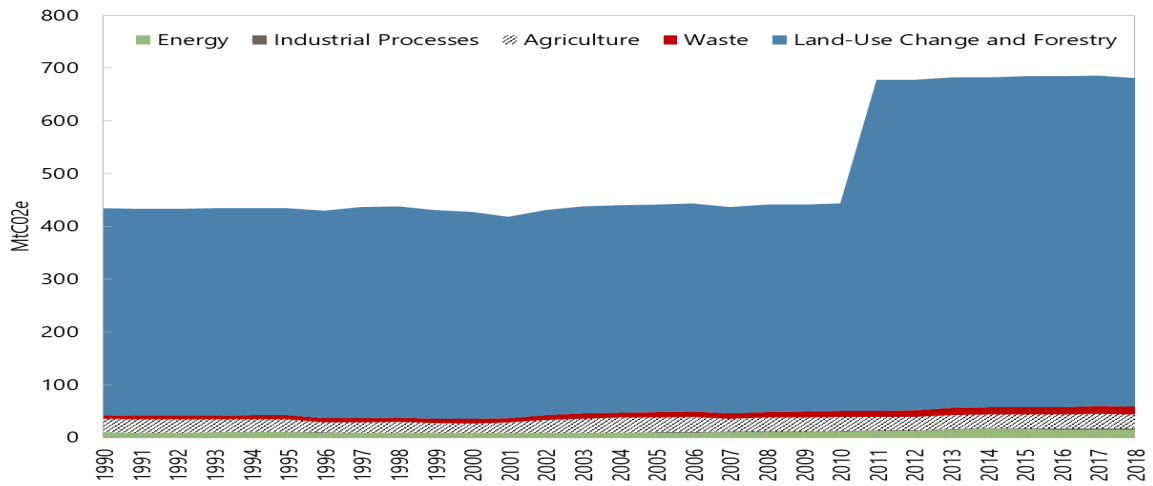
- **The DRC is home to the second largest tropical peatland in the world.** Peatlands provide long-term carbon storage outside the atmosphere and the world's largest tropical peatland is in the Congo Basin. About 30 GtC02e are stored in the Congo Basin (Dargie and al. (2017).[8] The DRC represents 60 percent of the Congo basin and the country has 90,800km2 of peat area with 19 GtC02e of peat carbon stock. These numbers place the DRC as the second most important country in the tropics for peat areas and peat carbon stocks, after Indonesia, and Brazil. DRC 's peatlands are relatively undisturbed at present. Nevertheless, they are at risk of changes in land-use and any future reduction in precipitation.

- **DRC is also home of the second largest tropical forest in the world**. DRC's forests are estimated to cover more than 130 million hectares (58 percent of land area) which represents 10 percent of the world's tropical forests or 60 percent of the Congo basin. Overall, DRC's forests contain a total of 23.3 Giga ton of carbon (GtCO2e) accumulated and stored above the ground.

[8] The Congo Basin drains an area of approximately 3.7 × 106 km^2, within which lies a central shallow depression overlaid by swamp forest, known as the Cuvette Centrale. Over this region, the Congo River drops just 115 m over 1,740 km, with year-round waterlogging and contains extensive peat deposit. The Congo basin represent 29 percent of the global tropical peat carbon sequestration.

10. Although DRC's Forest is a key carbon absorber, carbon emissions driven by land-use change and forestry (LUCF) activities have increased in recent years. LUCF activity accounts for 91 percent of total emissions in 2018. Agriculture was the second highest source of emissions at 5 percent. While the DRC's deforestation rate was relatively low until 2010 (0.2 percent per year for the 1990-2010 period) tree cover loss has increased in recent years from 0.69 percent in 2016 to 0.74 percent in 2017, according to the World Resources Institute (WRI). Tree cover loss reached a record high in 2017, driven by agriculture, artisanal logging (which is often illegal), and charcoal production, with nearly 70 percent occurring in rural and poverty-stricken areas.[9] Likewise, population growth has led to the loss of about half a million hectares of forest every year in recent years. The DRC stands to be the six countries with the highest forest cover lost in the world.[10]

Figure 4. Democratic Republic of the Congo: Historical GHG Emissions by Sector



Source: WRI (2021).

11. Current logging policies have failed to prevent deforestation in the DRC. The 2002 Forest Code is the main national-level legal framework for forest management. While it includes many best-practice elements (public competitive bidding for forest concession allocation, recognition of customary ownership and user rights), several key implementing regulations are still missing, creating loopholes and undermining the law's intent. Moreover, the logging concession moratorium signed in 2002 has failed to shore up protections for forests in the DRC according to an audit published in April 2022 by the Inspectorate General of Finance (IGF). Forest governance failure is compounded by a weak anti-corruption institutional and legal framework. As a result, illegal logging is increasing and driving deforestation in the DRC. In 2018, $US110.38 million of timber was exported by the DRC, of which only $US36.5 million went to regulated markets.[11]

[9] 2017 Was the Second-Worst Year on Record for Tropical Tree Cover Loss | World Resources Institute (wri.org). The DRC is the third most populous country in Africa with 78.7 million people, 57 percent of whom live in rural areas and 77.1 percent are below the poverty line by international standards.

[10] Global Forest Watch(2022)

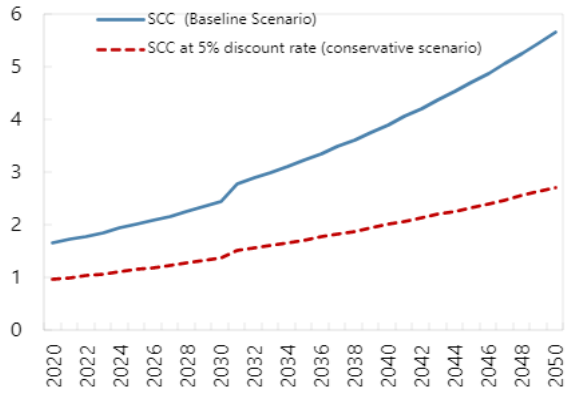
[11] Timber legality Risk Dashboard: Democratic Republic of the Congo.

12. An avoided damage approach is leveraged to estimate the social benefit of DRC's ecosystem carbon sequestration services. The value of carbon sequestration is equal to the marginal benefits associated with avoided damages from carbon emissions each year (IPCC, 2007), which is labeled as the Social Cost of Carbon (SCC).[12] Put differently, the SCC evaluates in dollars the global economic damage (GDP lost) that would result from emitting one ton of carbon dioxide into the atmosphere. For baseline and conservative scenarios, Nordhaus (2017) estimated the global SCC for a ton of carbon emitted starting at $US38.7 and US$22.6 respectively in 2020 and reaching up US$102.5 and US$49.2 in 2050.[13] For simplicity, we assume an emission path that excludes emission reduction factors (climate mitigation policies) and emission increase factors (economic development, oil block sales that overlap with tropical peatlands) in the long-term**.**

13. Over time, the benefits for the world from conserving DRC's carbon sinks in the form of avoided future damages grow larger. The estimate shows that, a one percentage point decrease in the DRC's carbon sequestration would have led to the loss of 1.4 and 2.4 percent points in World GDP in 2020 under the conservative scenario and the baseline scenario respectively. Over the long run, the damages from emitting an additional tonne of carbon, and thus the benefits of avoiding emissions increases over time. These results suggest that there would be large gains from increasing policy intervention and international partner support for DRC's Forest and peatlands management over time.

Figure 5. Democratic Republic of the Congo: Social Cost of DRC's Carbon Sinks

(In US$ trillion)



Source: IMF staff calculation. Social cost includes forest and peatlands carbon sequestration.

D. Implication of the Global Energy Transition

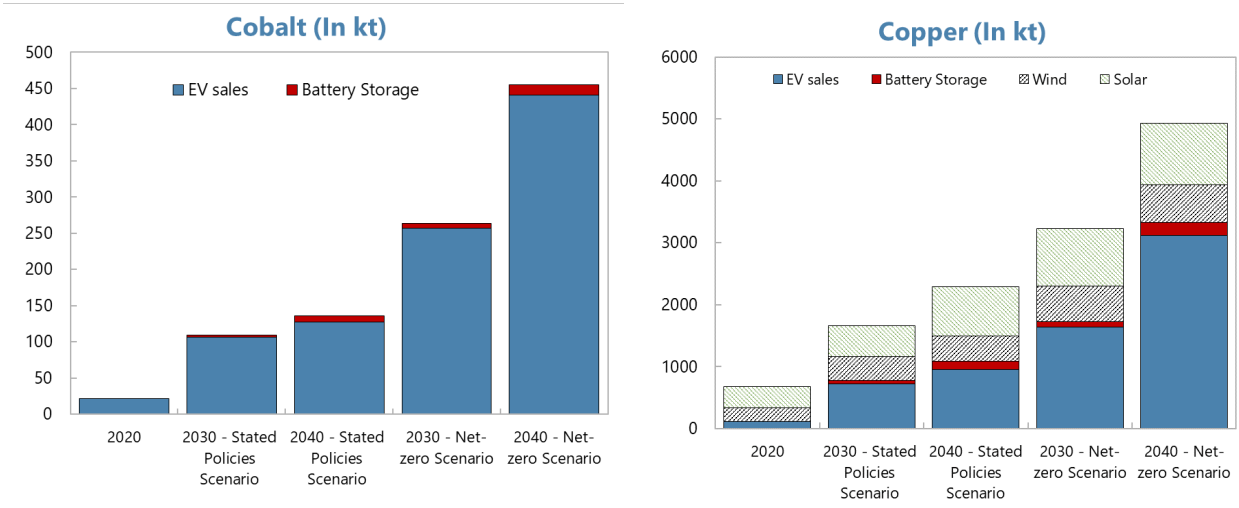
14. Thanks to its role in the global supply chain of green metals, the DRC presents itself as a solution country for the diffusion of carbon-reduction technology. In 2016, the energy sector accounted for 73 percent of the global carbon emissions. Decarbonizing this sector with green energy has been high on the agenda these past years. Two minerals (copper, cobalt) among others are critical to the green energy transition and are highly concentrated in the DRC. The latter is the

[12] According to the System of Environmental-Economic Accounting - Experimental Ecosystem Accounts (SEEA-EEA), the service of sequestering carbon is equal to the net accumulation of carbon in an ecosystem and accumulation in below-ground carbon storage.

[13] Since regional estimates are insufficiently reliable, we focus on the global carbon cost arbitrage which properly accounts for climate damage estimates in aggregate. Please see William D. Nordhaus (2017) for more details. We potentially underestimate significantly the social benefits as we take a conservative estimate of the SCC relative to other estimates.

world's leading producer of cobalt and the biggest African producer of copper. In 2020, the DRC accounted for 71 percent of global cobalt mining production and held 46 percent of the world's reserves; it also accounted for 7.8 percent of global copper mining production and held 3.5% of global reserves.[14] Under a net-zero emission scenario, global demand for copper and cobalt are projected to soar by a factor of more than five according to the IEA (2021)[15] by 2040, driven by demand for electric vehicles, wind, solar and battery storage technology.[16]

Figure 6. Democratic Republic of the Congo: Projected Global Mineral Demand (2021-2040)



Source: IAE (2021)

15. The advent of metals critical for the energy transition could strengthen the impact of global commodity cycles on external sector. Matching demand for green metals will require intensive investment and take more than a decade according to the IEA (2021). As a result, supply will react slowly to price signals. In the net zero emissions scenario, the demand boom could lead to a more than fourfold increase in the value of metals production – for a cumulative $7.2 trillion in global revenues for copper and cobalt over the next two decades (2021-40) (see figure 8). With the DRC new tax code enacted in 2018, a potential energy transition could tremendously benefit the DRC, improve its external sector balance, and provide the resources to address priority development needs. To effectively manage those resources, improved governance, and transparency particularly

[14] U.S. Geological Survey (2022). Mineral Commodity Summaries 2022. https://doi.org/10.3133/mcs2022

[15] The Net zero emissions scenario is a normative IEA scenario that shows a narrow but achievable pathway for the global energy sector to achieve net zero CO2 emissions by 2050. This is consistent with limiting the global temperature rise to 1.5 °C without a temperature overshoot. The stated policy scenario provides a more conservative benchmark for the future because it does not take it for granted that governments will reach all announced goals. These include Nationally Determined Contributions under the Paris Agreement, but much more besides (IAE scenarios, 2021).

[16] These demand scenarios are feasible under strong climate policies commitments. Risks such as policy security and geopolitical risks could undermine commitment to green transition.

in the mining sector and PFM, as well as strengthened policy frameworks and accountability would need to be in place to provide opportunities to promote inclusive growth.

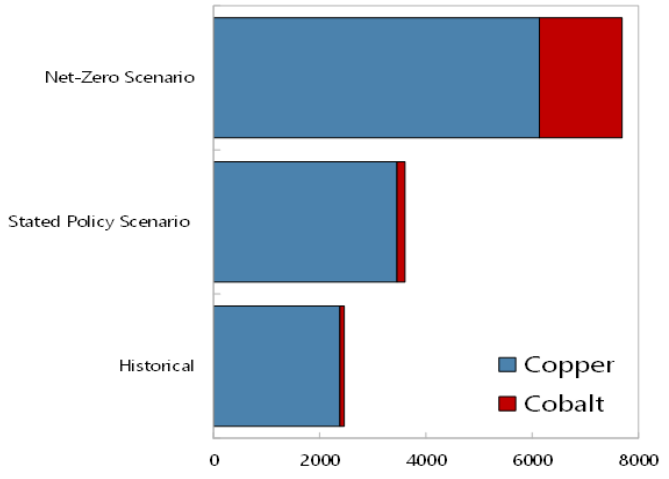
Box 1. Mining Codes

In 2018, The DRC enacted a law to revise the country's 2002 Mining Code. The Revised Code and the Revised Decree officially aim to rebalance the mining revenues in favor of the state, with the 2002 Mining Code and the 2003 Mining Decree perceived as having failed to generate substantial revenues for the country's development. The new DRC Mining Code reduces exploitation licenses from 30 to 25 years and makes them renewable only once. The State's non-dilutable equity stake increases from 5 percent to 10 percent, increasing by a further 5 percent with each renewal. Ten percent of the shares in a mining company to be held by the public administration on behalf of the citizens through a sovereign wealth fund. The 2018 code also includes: i) an increase in royalties for iron and ferrous metals from 0.5 to 1 percent; an increase in royalties for both non-ferrous and base metals from 2 to 3.5 percent; an increase in royalties for precious metals from 2.5 to 3.5 percent; and an introduction of a 10 percent royalty for strategic minerals (copper, cobalt). Finally, it introduced a special 50 percent tax on excess profits, defined as profits made when a commodity's price exceeds by 25 percent the price used in the bankable feasibility study.

16. Absent proper frameworks and governance, artisanal and small-scale mining (ASM) workers could fail to benefit from the energy transition. Tailwinds from the energy transition will also increase ASM production in the DRC, which currently accounts for an estimated 15–30 percent of domestic cobalt production. ASM employs more than 2 million people (2 percent of Congolese population). However, labor conditions and wages are miserable. Minerals are extracted using basic tools without the help of machines and sold in the shadow market. The authorities have planned to make a more concerted effort to regulate ASM and ensure that benefit from price increase reaches ASM workers. This culminated in the creation of the Enterprise Générale du Cobalt (EGC) in 2019, which was set up to strengthen a responsible cobalt sourcing standard and buy ASM-produced cobalt.

Figure 7. Democratic Republic of the Congo: Projected Cumulated Real Revenue for Copper and Cobalt Producers 2021-40

(In US$ billions)



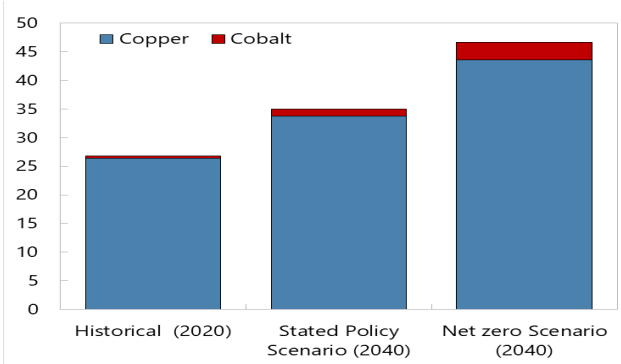
Source: Boer, Pescatori and Stuermer (2021). Estimated cumulated real revenue for the global production of selected energy transition metals, 2021-40 (billions of 2020 US$). Scenarios are based on a metal-specific demand shock.

17. Economic development driven by the energy transition could trigger more GHG emissions in the DRC. The green metal transition would increase greenhouse gas (GHG) emissions

through energy-intensive mining and processing activities, biodiversity loss and social disruption due to land use change, water

depletion and contamination, and air pollution. Under the stated policy scenario and the net zero scenario, the year-to-year GHG emissions growth induced by large scale mining activities in the DRC are projected at 1 percent and 3 percent respectively.[17] These projected emissions could be underestimate since they do not include the small-scale mining activities and the impact of mining development on land-use change and deforestation.[18] Consequently, the DRC will need to accelerate reforms for sustainable mining practices.

Figure 8. Democratic Republic of the Congo: Projected GHG Emissions from Mining and Processing Activities
(In Megatons)



Sources: IAE scenarios (2021) and IMF staff calculations. Estimates exclude land use-change and small mining scale mining operations.

E. Climate Policy Steps, Strategies and Challenges

18. DRC has made efforts to mainstream climate change into its policy framework. Since 2009, the country has been involved in the reduction of emissions from deforestation and forest degradation (REDD+) process, a framework formed under the U.N. Framework Convention on Climate Change . Alongside that process, DRC has also been involved since 2009 in CIFOR's Global Comparative Study on REDD+ (GCS-REDD+) that aims to support policy makers and practitioners with information, tools and analysis to design and implement effective, efficient, and equitable policies and REDD+ actions. GCS-REDD+ is currently in its fourth phase, which focuses on strengthening knowledge for action to protect tropical forests and increase climate finance. In 2015, the DRC became the first country worldwide to present its REDD+ Readiness-Package and release its first Nationally Determined Contribution (NDC). In its NDC, the country pledged to reduce GHG emissions by 17 percent and increased forest cover to 60 percent by 2030.

19. In addition, the DRC has taken further actions by integrating climate change in the National Strategic Development Plan (NSDP, 2019-23). Climate change considerations are included in the fifth pillar of the National Strategic Development plan. This pillar focuses on activities that guarantee the sustainability of development, in particular those that contribute to mitigating and adapting to the effects of climate changes already present (floods, erosion, landslides, heat,

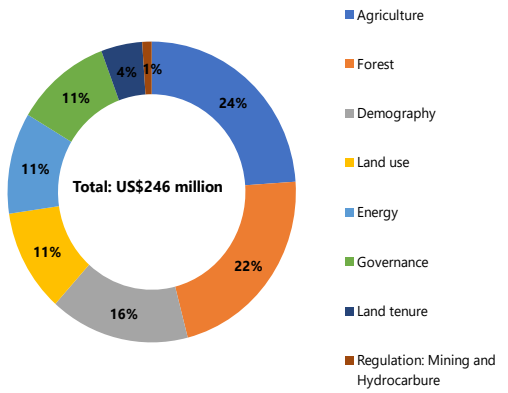
[17] According to the IAE (2021), the average GHG emissions intensities for cobalt and copper are 4.8 and 16.5 tCo2 eq per ton, respectively for large scale mining (LSM) production.

[18] Unresponsible mining practices including dumping chemical waste into rivers, heavy metal pollution, improper handling of waste, and abandonment of excavated pits by ASM operations could lead to additional environmental cost.

drought). These activities include the promotion of i) sustainable management of resources in rural areas; ii) good governance of natural resources in the face of climate change and degradation caused by human activities; iii) climate monitoring and early warning system; (iv) livelihoods resilient to climate change; iv) climate change mitigation and adaptation actions (including REDD+).

20. The DRC's climate mitigation strategy is anchored on the expansion of its carbon absorption capacity through REDD+ projects. To meet its NDC, the DRC plans to reduce its emissions from land-use change and forestry. The authorities' strategy includes improving forest management, reforesting about 3 million hectares over the next 5 years and maintaining the forest cover at 63.5 percent of the territory by 2030 while improving the socioeconomic conditions of the populations. To reach their goals, the authorities have established a national REDD+ investment plans coordinate by FONAREED with intervention in sectors like agriculture, energy, forestry, land use planning, land governance, and demography. The REDD+ investment plan strategy aims to i) reform the allocation and use of land, (ii) design policies integrating the sustainability of the use of space and resources (energy, agriculture, forest), energy efficiency and investments in agriculture, savannahs, and degraded forest areas, iii) develop a sub-national and provincial climate mitigation strategies with the help of development partners. In 2013, the integration of REDD+ reforms into the Economic Governance Matrix demonstrated a high-level commitment by the Government to engage on key reforms including the publication of i) signed forestry concession contracts, ii) forestry rights holders, iii) independent Observer of Forest Law Enforcement reports (OI-FLEG) and iv) the report of the Control Program for Production and Marketing of Wood (PCPCB).

Figure 9. Democratic Republic of the Congo: Sectoral Allocation of Climate Financing, 2021



Source: Congolese authorities.

21. The National climate adaptation plan (2022-26) includes specific targets set out at the sectoral level for adaptation and resilience to climate change. The main sectoral targets include managing forest ecosystems and biodiversity, strengthening the resilience of the agricultural sector, managing climate risks in smallholder agriculture, reducing the risks of disasters, ensuring the management of water resources and environmental sanitation, strengthening the resilience of the health sector to climate-related treats, guaranteeing people's access to energy, protecting energy production infrastructure, and improving energy efficiency.

22. New commitments at COP26 will boost the DRC's climate mitigation strategy, however the financing gap to achieve the country's NDC remains large. At COP26, the role of forests in capturing and storing carbon was high on the agenda, with $19 billion in public and private funds pledged to the cause for the world. In particular, leaders at COP26 also announced the Congo Basin

Pledge, a promise of $1.5 billion in financing between 2022-25 to support ambitious efforts and results in the region to protect and maintain the Congo Basin forests, peatlands and other critical global carbon stores. Likewise, the authorities signed a new landmark $U500 million 10-year agreement with the Central African Forest Initiative (CAFI) to protect DRC's rainforest during 2021-2030. The partnership will also regenerate 8 million hectares of degraded land and forests, and place 30 percent of national areas under a protection status. Meanwhile, the DRC released its updated NDC. The country increases its ambitions to cut its emissions from 17 percent to 21 percent by 2030. The updated NDC includes actions on both mitigation and adaptation, as well as their costs and financing gap. The financing needs to achieve this new NDC are estimated at $US48 billion (87.5 percent of GDP in 2021) between 2022 and 2030, split between mitigation ($US25 billion) and adaption ($US23 billion).

23. Achieving the new NDC will require domestic financing and a strong mobilization of external funding. In the updated NDC, 19 percent of emissions reduction is conditional on external financing and 2 percent will be financed on domestic resources. The resulting fiscal cost is estimated around 13 percent of fiscal revenue in 2021. Although, the external financing remains an elusive goal, de-risking climate adaptation projects to encourage private investment and seeking for concessional loans such as the Resilient and Sustainability Trust, grants and result-based financings will be critical to fulfil the country ambitious climate targets while maintaining debt sustainability.

24. The DRC is becoming active in international carbon markets, which will provide additional resources to meet its climate goals. As a carbon negative emitter, the DRC stands to benefit from the development of climate finance, especially the international carbon credit schemes.[19] Over the past years, the DRC has seen a surge in conservation concessions for the sale of carbon credit by non-sovereign project developers.[20] While up to 14 million tons of carbon credits were already issued through international markets as of the end of 2021, less or no fiscal revenue was collected from these transactions, since the government doesn't have any ownership right on those credits. In January 2022, the DRC met the REDD+ environmental Excellence standard (TREE) and will issue REDD+ carbon credits with government full ownership right through the Ministry of Environment and Sustainable Development. [21] The authorities are planning to issue 30 million tons of carbon credits at more than $US 10 per ton by the end of 2022.

25. The DRC's large carbon sinks provide opportunities to mobilize climate finance, but challenges are daunting. Existing challenges to financing adaptation and mitigations are further compounded by regulatory framework and policies supporting planning, training, and capacity

[19] A "carbon credit" is an emission offsets financial instrument representing efforts to remove GHGs from the atmosphere or reduce their emissions. REDD+ projects in the DRC, for example, can profit by selling carbon credits to companies or individuals who want to offset their emissions by financing the conservation of Congolese forests. Each credit, known as a "verified carbon unit," corresponds to one metric ton of carbon dioxide emissions.

[20] Ecosystem marketplace data. The price of a carbon credit is negotiated bilaterally and varies between $US5 and $US10.

[21] Architecture for REED+ Transactions (ART)

building that are insufficient to appropriately implement climate change efforts. The main challenges include:

- **Climate project identification and implementation**. Processes and practices that are critical for developing green and resilient investment are weak. Financing gap is compounded by capacity constraint which hinder the operationalization of climate adaptation strategies. According to the C-PIMA module, national and sectoral public investment strategies are not aligned with long-term climate goals as defined in the NDC or other overarching climate change strategy except for the forestry sector strategy. Effective implementation of climate policies and initiatives will require upgraded public investment management.

- **Forest governance and peatlands management.** Unregulated logging activities and limited oversight on conservation concessions linked to carbon credit sales pose challenges for the DRC's authorities to achieve the NDC and mobilize domestic revenue. A recently published audit by the government on the country logging industry stressed that regulatory loopholes, weak governance, and lack of transparency continue to leave a door open to potential abuses by officials and investors, including through tax evasion.[22] Improving forest management and promoting wise use of peatlands through safeguarding their environmental, social and economic functions and respecting their local, regional and global values should help to boost carbon absorption capacity. The DRC authorities and the CAFI plan to review all forest conservation concessions and logging activities by 2024.

- **Limited capacity in carbon trading and carbon regulation**. Weak capacity in climate finance makes it difficult to leverage and monetize the country's carbon sinks and emission reduction programs through international emission trading scheme. In addition, there is not yet a national REDD+ carbon registry to track payment and foster transparency in forest conservation activities that lead to carbon credit issuances in international carbon markets. Developing a domestic carbon trading system may enhance transparency and help accelerate access to international carbon markets and optimize gains from carbon credits projects.

[22] Audit on the logging industry in the DRC, April 2022.

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FINANCIAL INCLUSION IN THE DEMOCRATIC REPUBLIC OF THE CONGO: CHALLENGES TO FINANCIAL DEEPENING AND OPPORTUNITIES FOR DEVELOPMENT[1]

This paper provides an overview of the state of financial inclusion in the Democratic Republic of the Congo. Physical, social, and regulatory barriers limit access to financial services. Low credit and deposits impede access to financing for individuals and firms, posing challenges to financial deepening. Increased digitalization and positive trends in mobile money engagement—in the Democratic Republic of the Congo and across the sub-Saharan African region—offer promising opportunities for increased financial inclusion and sustainable development.

A. Introduction

1. The Democratic Republic of the Congo faces significant challenges in the context of macroeconomic fragility, which have constrained financial development. With a 2021 population estimated at 92.4 million, the proportion in extreme poverty amounts to 77 percent in the Democratic Republic of the Congo, far above the level of 47 percent for African fragile state peers and 40 percent for sub-Saharan Africa. 2021 GDP per capita in the Democratic Republic of the Congo was estimated at US$609, nearly half the per capita amount for AFR fragile states (US$1,064) and sub-Saharan Africa (US$1,742). Informality poses a continued threat to growth and development throughout the region, and it is estimated that much of the Democratic Republic of the Congo workforce participates in the informal economy. Financial inclusion is recognized as a key mechanism to reduce poverty, bolster resilience, and promote prosperity.

The Democratic Republic of the Congo trails regional peers in several aspects of financial inclusion including account ownership (bank or mobile money), access to cash points, and capacity to save or borrow funds (see Figure 1). Throughout sub-Saharan Africa, enhanced financial inclusion plays a prominent role in sustainable development. Access to financial services enables both individuals and firms to engage in day-to-day as well as long-term financial planning. In turn, increased access encourages participation in a broader range of financial activities meant to help individuals and firms manage risks and endure financial shocks.

[1] This paper was prepared by Megan Pohl.

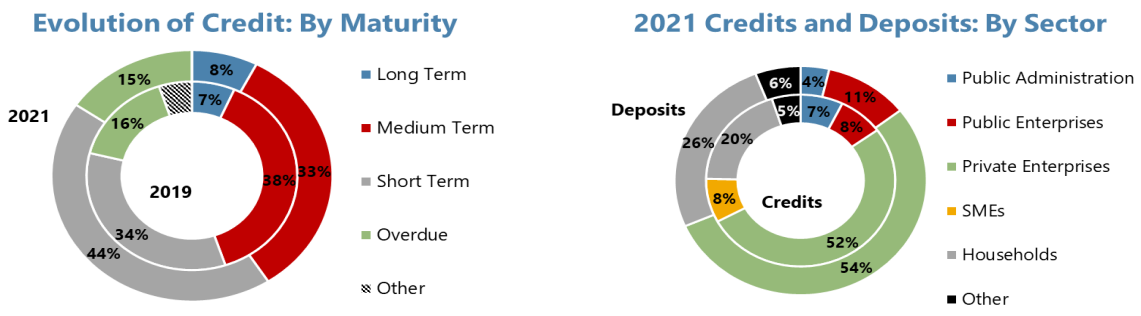
B. Financial Inclusion: Macro Indicators in the Democratic Republic of the Congo

2. As of end-2021, the credit to the private sector in the Democratic Republic of the Congo stands at 7.5 percent of GDP while the deposits in the banking system account for 19.7 percent of GDP. Credit in the Democratic Republic of the Congo rests well below that of regional peers, with 2020 estimates for domestic credit to the private sector amounting to 38 percent of GDP in sub-Saharan Africa and 14 percent among fragile state peers. In 2019, short-term credit accounted for 34 percent and medium-term credit for 38 percent. Credit shifted to the shorter-term in the wake of the COVID-19 pandemic, with 44 percent in short-term and 33 percent in medium-term credit as of end-2021 (see Text Figure 1). Both credits and deposits in the Democratic Republic of the Congo remain heavily dollarized (refer to Staff Report Annex VII on Dollarization).

	2019	2020	2021
Deposits (% of GDP)	12.2	16.4	19.7
Credit (% of GDP)	6.7	7.3	7.5
Source: Banque Centrale du Congo			

3. Private enterprises account for the largest portion of credit and deposits in the Democratic Republic of the Congo (52 percent of credit and 54 percent of deposits) followed by households (20 percent of credit and 26 percent of deposits). According to the Central Bank of Congo (BCC), credit and deposits are geographically concentrated; over 95 percent of credits have been attributed to the same six provinces and over 95 percent of deposits have been attributed to the same seven provinces since 2019.

Text Figure 1. Democratic Republic of the Congo: Credit and Deposits



Source: BCC

C. Access to Financial Services[2]

The State of Physical Infrastructure

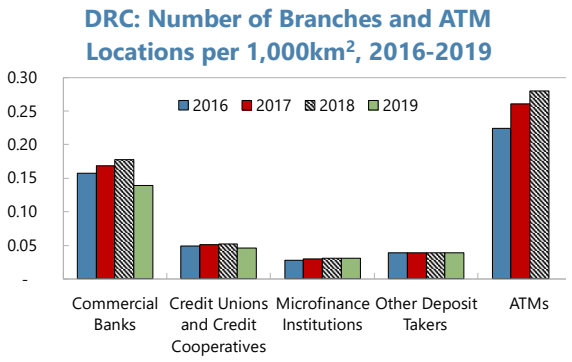
4. Physical barriers in the Democratic Republic of the Congo hinder access to financial services and institutions, contributing to low financial inclusion. At 2.3 million square

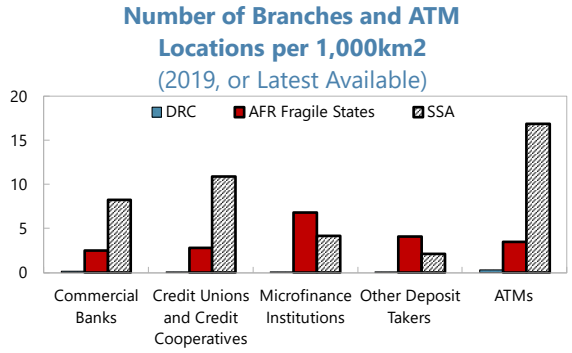
[2] Global Financial Inclusion (Global Findex) data represents the population aged 15 and older.

kilometers, the Democratic Republic of the Congo is the second largest country in Africa and the 11th-largest country in the world by area. Only 26 percent of the active population have a bank account and about 35 percent of adults without a financial institution account cite the distance to financial institutions and services as a major impediment.

5. Cash points are limited in the Democratic Republic of the Congo compared to sub-Saharan Africa and fragile state peers in the region. According to the latest Financial Access Survey, commercial bank branches in the Democratic Republic of the Congo numbered 300 while ATMs totaled 634. The number of branches of financial institutions per 1,000km^2 in the Democratic Republic of the Congo have remained below 0.2 in recent years, often more than 10 times less than the averages in other fragile state and sub-Saharan African peers (see Text Figure 2). Though the number of ATM locations per 1,000 km^2 appears to have risen incrementally, infrastructure requires further improvement.

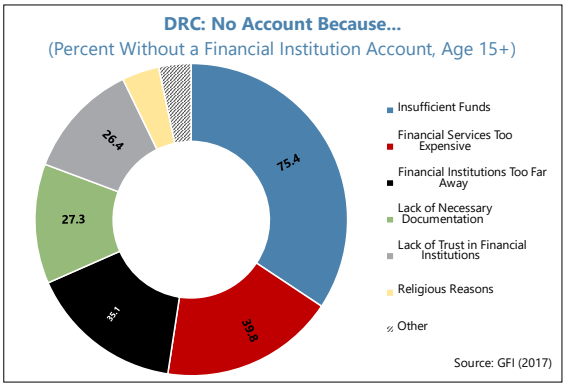
Text Figure 2. Democratic Republic of the Congo: Cash Points Compared to Regional Peers





Sources: Financial Access Survey (FAS) and IMF staff calculations.

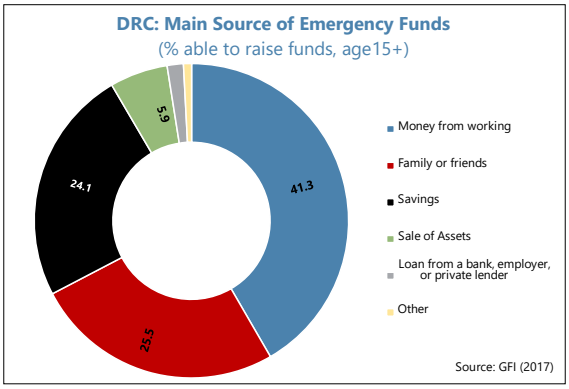
The State of Social and Regulatory Infrastructure



6. Only 26 percent of the population have an account with a financial institution. For those without a bank account (age 15+), the top five reasons cited are: 1) lack of sufficient funds; 2) cost; 3) distance; 4) lack of proper documentation; and 5) lack of trust in financial institutions. Account ownership is higher among those who have reached a secondary education compared to those with primary education or less. Similarly, account ownership tends to be greater for those in the richest 60 percent of the surveyed population and those who are actively participating in the labor force (refer to Figure 2).

7. 60 percent of wage recipients report receiving wages in cash; only 26 percent report receiving wages into a financial institution account. The economy of the Democratic Republic of the Congo functions primarily on a cash basis. The prevalence of cash transactions is above the average of sub-Saharan African Fragile State peers and the level of wage receipts into financial institution accounts falls below that of sub-Saharan African peers and the world. Gaps persist in available data for the Democratic Republic of the Congo when it comes to documenting cash receipts for public sector pensions, domestic remittances, government payments and transfers, private and public sector wages, and wages from self-employment.

8. Only 41 percent of individuals in the Democratic Republic of the Congo indicate that it is possible to raise emergency funds. For those who are able to raise funds, the top 3 sources are: 1) money from working; 2) family or friends; and 3) savings. Only 1.7 percent indicated that they raise emergency funds by taking a loan from a bank, employer, or private lender. Similarly, only 39 percent of individuals responded that they had saved any money in the past year, while 4.7 percent of individuals indicated that they had done so at a financial institution.



9. 35 percent of individuals responded that they borrowed money in the past year. Family or friends were the top source of borrowed funds followed by financial institutions or credit card use. Health or medical purposes were cited by individuals as the primary reason for borrowing, followed by education or school fees.

The Effects of Informality

10. Poverty and poor access to education are drivers of informality that may result in hampered access to formal employment, public benefits, and other financial services. The consequences of informality in developing economies include a narrower tax base (and thus, tax revenues), reduced productivity, lower access to financing, higher gender inequality, decreased access to formal social safety nets, and wider wage gaps (particularly the wage gaps between low skilled workers and genders in the informal compared to formal sector).[3]

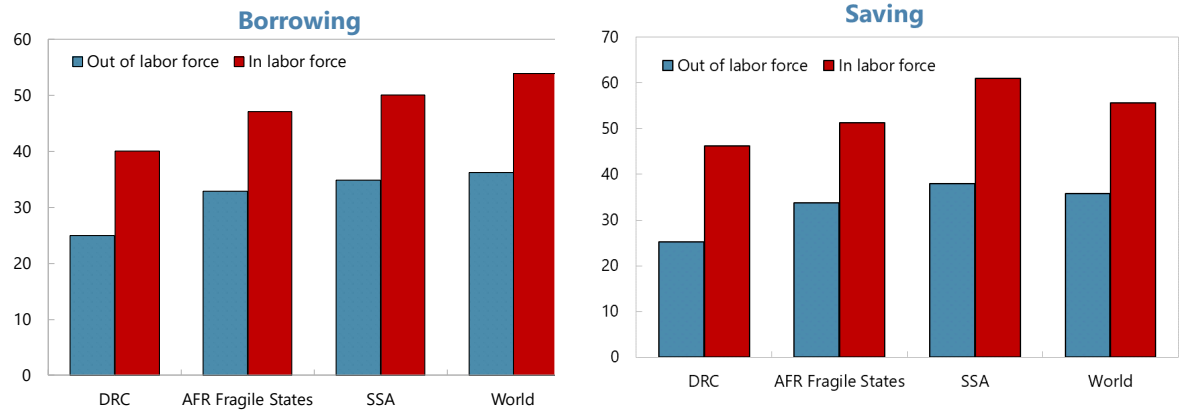
11. The estimated size of the Democratic Republic of the Congo's informal economy was 47 percent of GDP in 2015 compared to 40 percent for fragile state peers and 36 percent for sub-Saharan Africa. Congo's Trade Union Confederation estimates that 97 percent of the overall workforce may be engaged in informal sector activities.

[3] Further information on the SSA experience may be found in the Spring 2017 AFR REO, Chapter 3: The Informal Economy in Sub-Saharan Africa as well as the IMF book *The Global Informal Workforce: Priorities for Inclusive Growth*.

12. A lack of access to or unwillingness to engage in formal employment may further obstruct financial access and inclusion. 27.3 percent of those without a financial institution account in the Democratic Republic of the Congo cited the absence of necessary documentation—such as proof of residence, proof of income, and ID or ID equivalents—as a major impediment to account ownership and access to financial resources (see Section D, paragraph 7). For example, those out of the labor force borrow and save much less than those in the labor force. Account ownership is much lower for those out of the labor force for both financial institution and mobile money accounts (see Figures 2 and 3).

Text Figure 3. Democratic Republic of the Congo: Borrowing and Saving of the Labor Force

(Percent of Population Age 15+)



Source: GFI (2017)

13. More women than men are engaged in the informal sector, particularly in low-income developing countries.[4] Gender inequality is also more pronounced in the informal as opposed to the formal sectors. While women tend to be disproportionately affected by informality, measuring the effect on women in the Democratic Republic of the Congo is limited by data availability. The January 2022 Financial Sector Sustainability Review has called on the Congolese authorities for enhanced collection of gender-disaggregated data (GDD) as part of an ongoing effort to better analyze and understand the reality of gender inequality in the country (refer to Staff Report Annex II on findings from the FSSR).

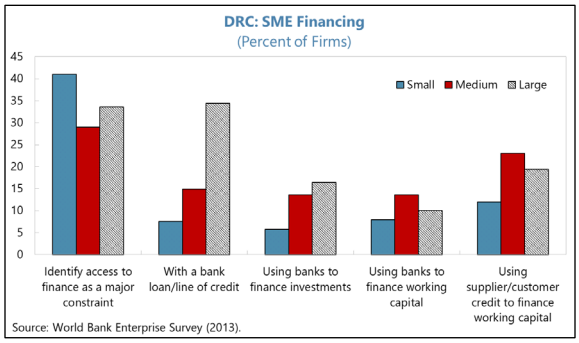
Financing for SMEs

14. The available data suggests that access to financing for SMEs in the Democratic Republic of the Congo is inferior to that of households. SMEs accounted for approximately 8 percent of the credit base and 5 percent of the deposit base in 2021, the fourth largest sector

[4] For more information on trends in financial inclusion, refer to: Delechat, Corinne, and Leandro Medina, eds. 2021. *The Global Informal Workforce: Priorities for Inclusive Growth*. Washington, D.C.: International Monetary Fund.

behind private enterprises, households, and public enterprises, respectively. Microfinance institutions provide an opportunity to fill gaps in financing access for SMEs. The BCC has worked to improve the regulatory framework for microfinance institutions in recent years, and work is ongoing to strengthen the legislative framework regarding the supervision of microfinance institutions.[5]

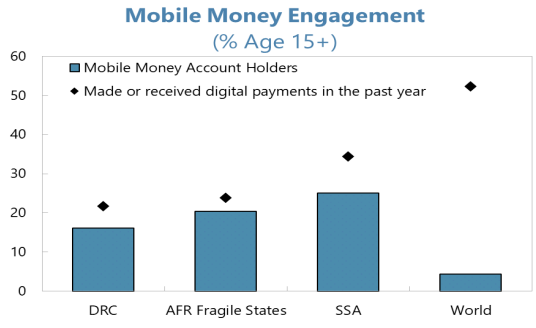
15. 39.1 percent of firms in the Democratic Republic of the Congo cited access to finance as a major constraint to conducting business. Difficulties in accessing finance are especially borne by smaller firms in the Democratic Republic of the Congo (41 percent). Congolese firms report that approximately 92 percent of investment is financed internally compared to 75 percent of sub-Saharan African firms (see Table 1 for breakdown by size and comparison to peers).



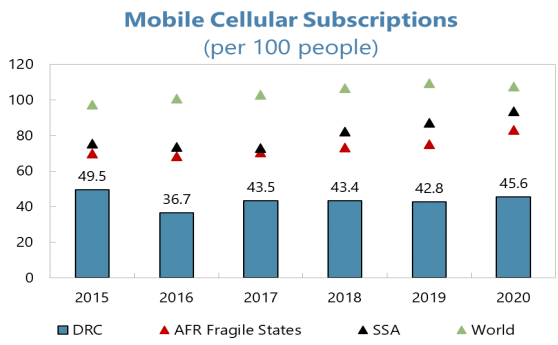
D. Digitalization and Mobile Money

16. The Democratic Republic of the Congo is lagging peers in mobile money. Latest estimates of mobile cellular subscriptions per 100 people amount to 49.5 in the Democratic Republic of the Congo compared to an average of 69.9 in fragile state peer countries, and 75.5 in sub-Saharan Africa. Approximately 16 percent of adults in the Democratic Republic of the Congo possess mobile money accounts compared to approximately 23 percent for sub-Saharan African fragile state peers. Additionally, 22 percent of Congolese individuals indicated that they had made or received digital payments in the past year—nearly on par with 24 percent for fragile state peers in the region. 17 percent of Congolese individuals used a mobile phone or the internet to access an account (see Text Figure 4). Of individuals with an account, 67 percent used a mobile phone or the internet to access an account. Improvement in the numbers of mobile cellular subscriptions—as well as upgraded telecommunications infrastructure to support advancements in wireless mobile technology—could lead to greater opportunities for digital engagement (see Figure 3).

Text Figure 4. Democratic Republic of the Congo: Mobile Access



Source: GFI (2017)

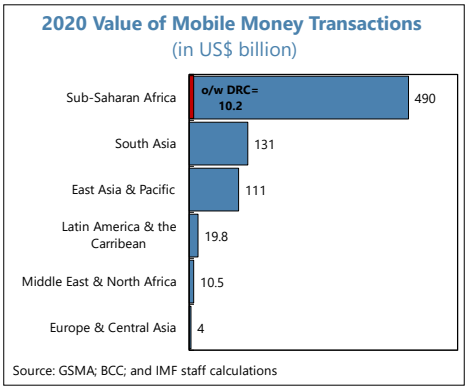


Source: WDI and IMF staff calculations.

[5] Further information may be found in the 2014 IMF Country Report No. 14/315 and 2015 IMF Country Report No. 15/281.

Box 1. Mobile Money and the SSA Experience[1]

The growing presence of BigTech[2] in emerging and developing economies offers potential opportunities for increased financial inclusion but could exacerbate existing weaknesses in financial regulation and supervision. While BigTech tends to be more retail-focused, activity in emerging markets focuses more broadly on financial services such as banking and investment. In under- and/or un-banked areas of sub-Saharan Africa, such mobile money platforms provide users with vital access to financial services.

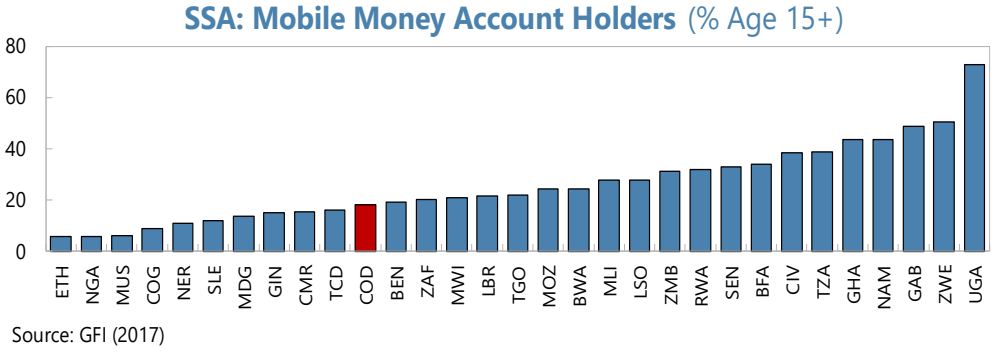


According to the 2021 GSMA State of the Industry Report, sub-Saharan Africa is a key player in the mobile money industry and accounted for 43 percent of new mobile money accounts in 2020. Mobile money transactions in sub-Saharan Africa amounted to US$490 billion out of the global total of US$767 billion. Despite this success, mobile money access remains uneven across sub-Saharan Africa.

In 2015, Multipay Congo, a new startup, emerged in the Democratic Republic of the Congo with the mission to "facilitate interoperability and shared payment services between financial institutions in order to promote financial inclusion in the Congolese market."[3] This platform, a collaborative effort between the Banque Commerciale du Congo (BCDC), FBNBank, Equity Bank, and RawBank, provides seamless connectivity between various transaction points. The goal is to enhance interbank operations so that consumers may have a wider network of financial resources at

their disposal. The access capabilities provided by Multipay Congo constitute an important step toward interconnectivity that cuts through the persistent physical barriers to access in the Democratic Republic of the Congo.

The entrance of BigTech firms as key financial service providers in underserved economies may heighten the risks of corruption (fraud, theft, money-laundering, etc.) in economies where financial regulatory frameworks are unstable or incomplete. These risks are also amplified in economies that are largely cash-based and informal. This is especially relevant for an economy like the Democratic Republic of the Congo where a lack of trust in financial institutions and high levels of informality prove to be a hindrance to financial inclusion and access (see Section D, paragraph 7).



[1] Further background information on the SSA experience may be found in the Spring 2016 AFR REO, Chapter 3: Financial Development and Sustainable Growth.

[2] BigTech is defined as a "platform-based business model focused on maximizing interactions between a large number of mainly retail users. [They] are usually large technology conglomerates with extensive customer networks and core businesses across markets, for example, in social media, internet search, and e-commerce." (Bains, P. et al., 2022).

[3] This is the mission statement of the company Multipay Congo as displayed on their official webpage: https://www.multipay.cd/en/apropos-2/.

E. Policy Recommendations

17. The Democratic Republic of the Congo faces many hurdles to achieving financial inclusion levels on par with fragile state and sub-Saharan African peers. Physical, social, and regulatory barriers pose significant challenges to financial access and more private sector credit is needed to generate growth opportunities. To capture the existing potential for financial deepening, the following recommendations could be considered.

18. In a country facing significant constraints to physical access to financial services, mobile money provides a promising opportunity for greater engagement between financial institutions and the population. Despite lower penetration of mobile phones, trends in mobile money engagement in the Democratic Republic of the Congo suggest that increased mobile access would promote financial deepening. The ongoing strengthening of the payment system and supervision of payment institutions should remain in line with the Payment Systems Law passed in 2018. Additionally, the Democratic Republic of the Congo should continue to move away from a cash-based economy. Progress has been made in this regard through the policy of "bancarisation" first implemented in 2011, which required civil servants' wages and salaries be paid via bank accounts.[6]

19. To realize potential gains more fully, deepening of financial access must be accompanied by measures to strengthen financial literacy. Addressing gaps in financial knowledge—such as basic financial concepts or awareness of available financial tools and services—is critical to ensure that previously excluded societal segments are able to engage in healthy and responsible financial behavior. Enhanced financial education will help to mitigate certain consequences of exposure to risk that may be due to financial illiteracy. Equipping individuals and households with the proper tools for financial success will encourage financial resilience and greater overall financial inclusivity.

20. Bolstering financial reporting and transparency, in line with international standards, will reinforce trust in financial institutions. Limited transparency combined with subpar financial account reporting quality impedes progress toward inclusive financial access and undermines confidence in regulatory institutions. The adoption and implementation of international best practices and accounting standards, as identified in the 2022 FSSR, will shed greater light on the situation of borrowers and risks posed to the financial system.

21. The continued advancement of structural and legal reforms will aid in improving the business climate and protecting financial market integrity. For example, the 2022 FSSR has identified key areas for improvement with regard to insolvency management, including an update to the emergency liquidity assistance (ELA), recovery planning, and a resolution funding mechanism. The expected Banking Law will further the adoption and implementation of a framework for risk and

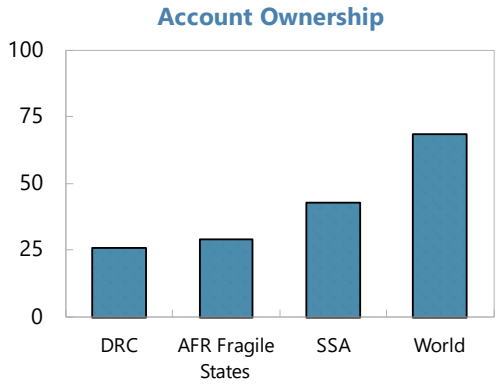
[6] This was also reported in the 2015 IMF Country Report No. 15/281.

banking crisis management. Strong legal and judicial frameworks as well as accounting and reporting systems will facilitate the advancement of reforms which will further financial deepening.

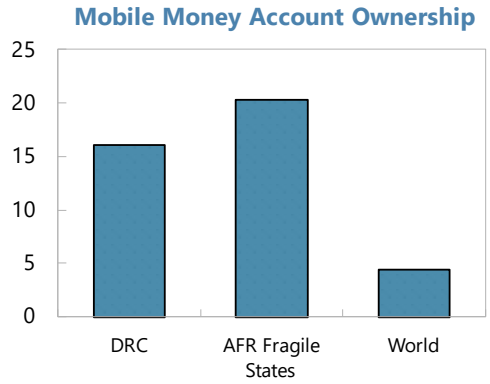
Figure 1. Democratic Republic of the Congo: Financial Inclusion Indicators Compared to Peers

(Percent of Population Age 15+)

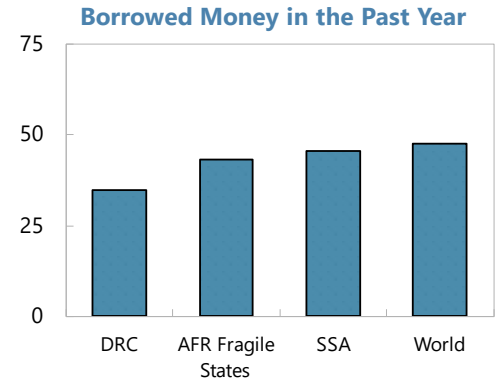
The Democratic Republic of the Congo is lagging peers in financial account ownership.



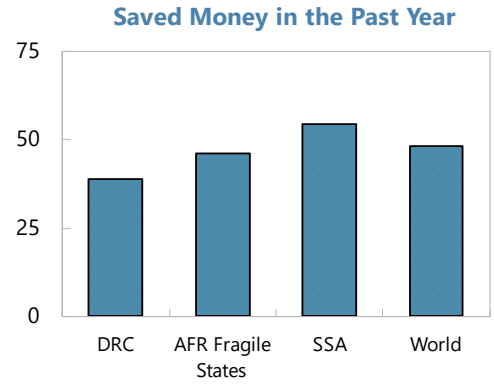
Mobile money account levels in the Democratic Republic of the Congo and fragile state peers are favorable compared to the World.



The Democratic Republic of the Congo falls behind peers in terms of borrowing…

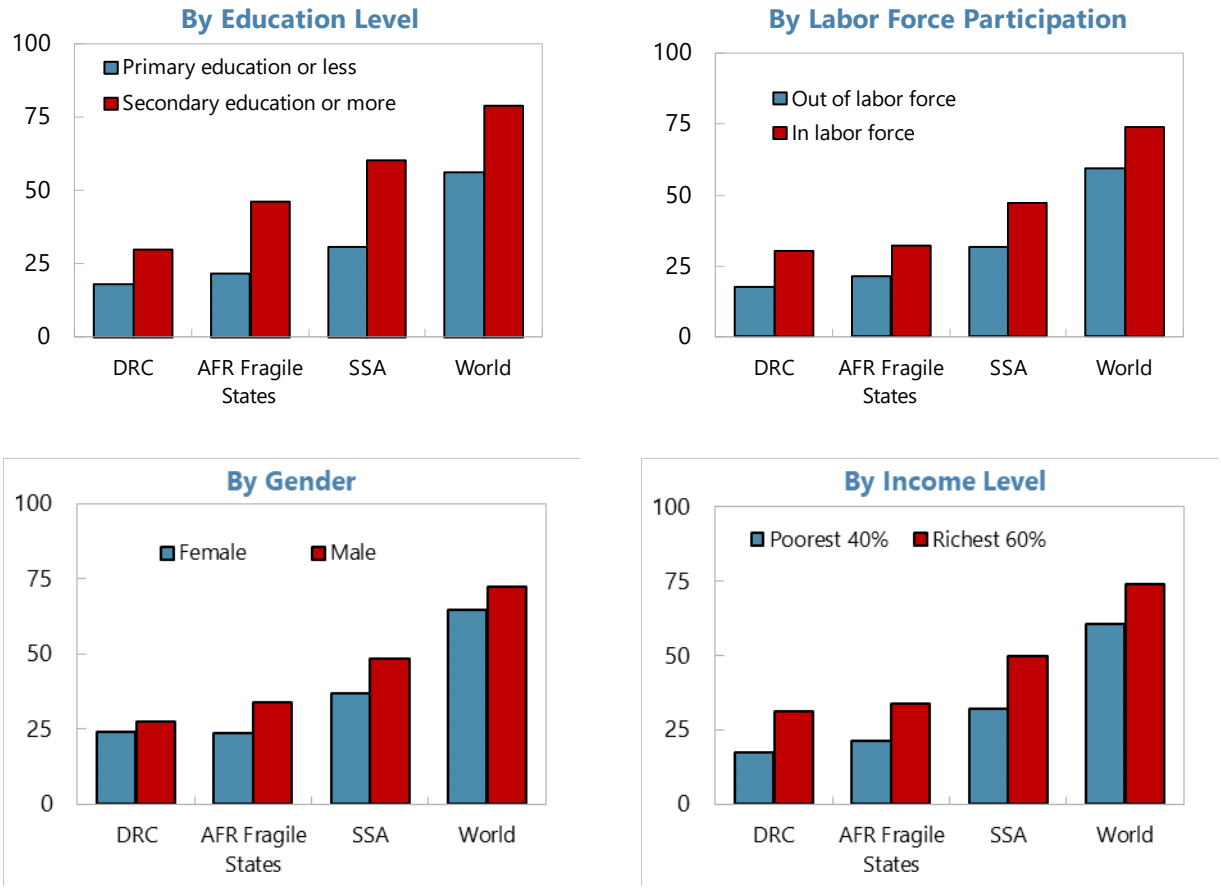


…and saving in the Democratic Republic of the Congo also remains low.



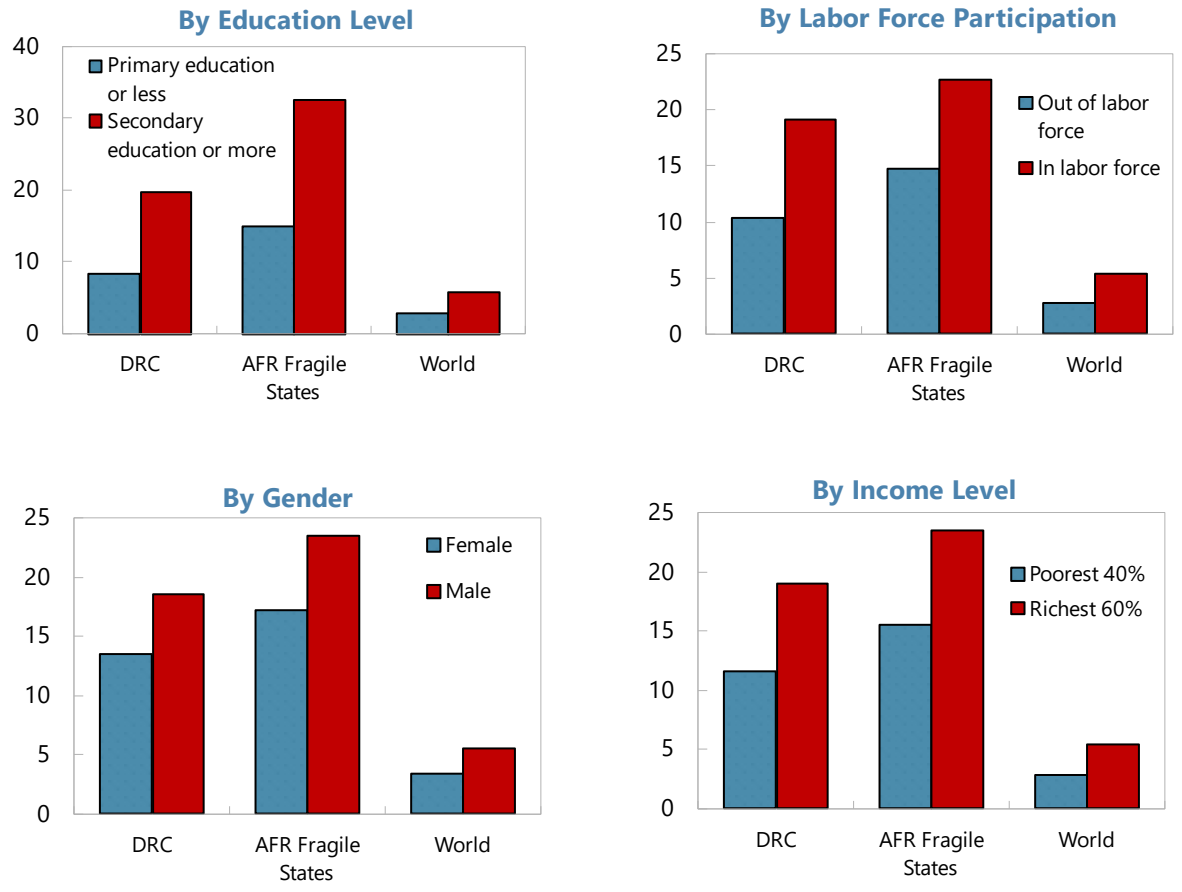
Source: Global Financial Inclusion Database, World Bank (2017).

Figure 2. Democratic Republic of the Congo: Account Ownership
(Percent of Population Age 15+)



Source: Global Financial Inclusion Database, World Bank (2017).

Figure 3. Democratic Republic of the Congo: Mobile Money Account
(Percent of Population Age 15+)



Source: Global Financial Inclusion Database, World Bank (2017).
Note: SSA aggregate unavailable for this indicator.

Table 1. Democratic Republic of the Congo: SME Financing

	DRC	SSA	All Countries
Percent of firms identifying access to finance as a major constraint	**39.1**	**38.2**	**23.2**
Small	41	40.6	24.3
Med	29	33.7	21.6
Large	33.6	27.4	18.3
Percent of firms with a checking or savings	**56.6**	**86.2**	**87.1**
Small	52.7	83.4	84.9
Med	74.1	91.8	91.7
Large	87.6	96.1	94.3
Percent of firms using banks to finance	**7.1**	**18.8**	**25.4**
Small	5.8	15.1	22.2
Med	13.6	22.1	28.7
Large	16.4	28	33.8
Proportion of investment financed internally	**92.2**	**75.2**	**72.7**
Small	92.9	77.2	74.4
Med	87.6	73	70.2
Large	91.7	74	70.4
Proportion of investment financed by banks	**0.9**	**8.9**	**14.2**
Small	0.6	6.8	12.3
Med	2.8	10.4	16.3
Large	2.6	14.5	18.9
Percent of firms using banks to finance	**8.7**	**21.8**	**28.6**
Small	7.9	17.1	24.3
Med	13.6	28.4	35.7
Large	10	37.4	42.4
Percent of firms using supplier/customer credit to finance working capital	**13.8**	**24.1**	**25.2**
Small	12	23	24.1
Med	23	26.5	27.4
Large	19.4	26.8	27.9
Proportion of working capital financed by	**1.9**	**8**	**11**
Small	1.7	5.9	9.4
Med	3.3	11	13.6
Large	1.8	14.4	16.5
Percent of firms with a bank loan/line of	**9.4**	**19.9**	**32.5**
Small	7.6	15.3	27.4
Med	14.9	25	40.3
Large	34.4	39.4	49.6

Source: World Bank Enterprise Survey (2013)

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