

Spring 2021

Africa Focus

Navigating a changing business landscape in Africa and beyond



Contents

Making the trading system work for Africa

The African Continental Free Trade Area could trigger a new era in intra-African trade

Page 2

African Development Finance Institutions

Rising to challenges, funding a recovery response and leading the way to sustainable lending

Page 16

Private equity in Africa: Trends and opportunities in 2021

Despite challenges, Africa remains an attractive PE and VC investment destination

Page 22

Ensuring sustainable exits from African mining

The development of mine decommissioning and closure laws

Page 28

European multilateral development banks in sub-Saharan Africa

Supporting post-COVID recovery and growth in key sectors

Page 36

African mining 4.0: An innovative sunrise for African miners

Transformative technologies are ushering in a new era of efficiency, safety and growth

Page 42

Navigating a changing business landscape in Africa and beyond

As our last edition of *Africa Focus* was published in September 2020 in the midst of the COVID-19 pandemic, some progress had been made on the development, trial and authorization of COVID-19 vaccines. However, there was no assurance of efficacy or effectiveness, and there was profound uncertainty in our personal and professional lives, with unprecedented upheaval in the global economy.

This spring 2021 issue comes to you in a changed environment: Multiple vaccines have been approved; millions of vaccine doses are being manufactured and administered every day; and a return to normality feels no longer like a matter of hope, but of time. Therefore, while uncertainty in our lives and disruption in the global economy continues, we can perhaps permit ourselves to review the business and legal environment in Africa with a renewed sense of cautious optimism and against the backdrop of groundbreaking changes that raise important issues for companies and financial institutions doing business in Africa.

Nearly the entire African continent is involved with the African Continental Free Trade Area (AfCFTA), a single trade and investment market with a combined GDP of close to US\$3.4 trillion. Trading under these new arrangements started on January 1, 2021. At the same time, development finance institutions have mounted a robust response to the COVID-19 pandemic by harnessing

support from international investors and aggressively funding infrastructure and development. Several sectors of Africa's economy continue to offer private equity and venture capital investment opportunities, while multilateral development banks are successfully supporting post-COVID recovery and growth in key African sectors. Meanwhile, innovative technologies and new approaches to decommissioning mining assets are transforming Africa's mining industry and enabling sustainable exits.

This sixth edition of *Africa Focus* begins with "Making the trading system work for Africa," which explains how AfCFTA's plan for virtually all African nations to open their markets to each other may have arrived at exactly the right time to spark change. "African development finance institutions" discusses how African DFIs are achieving positive impacts by funding recovery responses, leading the way with sustainable lending and attracting commercial lenders to African markets.

The article "Private equity in Africa: Trends and opportunities in 2021" highlights several industries in Africa that remain attractive private equity and venture capital destinations, particularly for those focused on long-term investments, and "Ensuring sustainable exits from African mining" discusses how mining companies can improve the ways they decommission and close their operations as well as factors that mining companies, regulators and other

stakeholders can consider when formulating rules to reflect environmental, social and governance principles.

In "European multilateral development banks in sub-Saharan Africa," we examine how multilateral development banks, including the European Investment Bank, the European Bank for Reconstruction and Development and others, are collaborating with other key stakeholders and acting as catalysts for growth.

Finally, in "African mining 4.0: An innovative sunrise for African miners," we discuss how new transformative technologies, rapidly becoming available to the mining industry, are ushering in a new era of increased productivity, efficiency, safety and growth for miners.

We welcome your suggestions for any topics to review in our upcoming issues. For now, we hope this issue of *Africa Focus* helps you navigate the rapidly changing business landscape and explore current opportunities for doing business and investing in Africa.



Mukund Dhar
Partner, White & Case LLP
Africa Interest Group Leader



We can perhaps permit ourselves to review the business and legal environment in Africa with a renewed sense of cautious optimism against the backdrop of groundbreaking changes that raise important issues for companies and financial institutions doing business in Africa.

Making the trading system work for Africa

The African Continental Free Trade Area could trigger a new era in intra-African trade

By Gregory Spak, Francisco de Rosenzweig, Earl Comstock, Charles Julien and Samuel Scoles

Competing for media attention at the beginning of 2021 was the fact that nearly the entire African continent created a free-trade zone: the African Continental Free Trade Area (AfCFTA). While much work remains to be done before the AfCFTA becomes fully operational and relevant, it does not lack for ambition. The plan is for virtually all African nations to open their markets to each other to establish a single market covering both trade and investment with a combined GDP of US\$3.4 trillion.

Economic integration is not a new idea in Africa. There are many sub-regional and other economic and trade agreements in Africa, several of which have been around for a long time. In fact, their longevity and relative lack of success in creating economic prosperity can explain some of the indifference and cynicism shown towards the AfCFTA.

But is past necessarily prologue? This newest integration effort occurs at a time when the world's trading system is undergoing significant change on many levels. The multilateral system established after World War II through the GATT and then the WTO is under strain. Economic nationalism is springing up in many countries that openly question the value of multilateralism, seemingly intent on fashioning a trading system based on strict reciprocity instead of non-discrimination. Overall, there is a growing impatience with the existing economic and trade architecture, which some argue has not delivered on its goals of raising living standards, particularly in developing countries.

Against this backdrop, the AfCFTA may have arrived at the right time, as long as this is the beginning of a process, not the end.

Trade agreements can do more than lower tariffs and make trade more efficient. They can improve transparency and create a legal framework more hospitable to trade and investment from both within and outside the region. Examples abound, including in Asia-Pacific, Europe and the Americas. Why not Africa?

We cannot answer that question in this article. Instead, this article places the recent developments in the context of previous integration efforts in Africa and discusses how other regions are interacting with Africa and have used trade agreements in their economic relations. It concludes with some key points for businesses participating in the development of Africa's trading relationships.

Trade regimes in and for Africa

Regional economic integration arrangements have existed on the African continent since the beginning of the last century, starting with the Southern African Customs Union (SACU)¹ in 1910 and the East African Community (EAC)² in 1919.

As of January 2021, ten regional economic communities in Africa aim to increase intra-regional trade, boost regional economies and reduce poverty, and many African countries have overlapping memberships in these communities. In addition to the SACU and EAC, other key regional trade arrangements on the continent include the Economic Community of West African States (ECOWAS, established in 1975)³, the Economic Community of Central African States



The plan is for virtually all African nations to open their markets to each other to establish a single market covering both trade and investment with a combined GDP of US\$3.4 trillion.



(ECCAS, established in 1983)⁴, the Southern African Development Community (SADC, established in 1992)⁵ and the Common Market for Eastern and Southern Africa (COMESA, established in 1994)⁶.

African countries also participate in trade agreements and trade programs with trade partners outside the continent, including, among others: economic partnership agreements (EPAs) with the European Union (EU); generalized system of preferences (GSP) schemes with Japan and the United States; the African Growth and Opportunity Act (AGOA) with the US; and multiple arrangements granting duty-free treatment for the least-developed countries. Meanwhile, investment protection takes place across the African continent under complex and disparate legal provisions, including investment protocols in bilateral investment treaties (BITs),⁷ national investment laws and regulations, and regional investment frameworks, including the non-binding Pan-African Investment Code (PAIC)⁸ backed by the African Union.⁹

Intra-regional trade and investment arrangements have led to a limited amount of intra-regional trade. African countries conduct much of their trade with countries outside the continent; raw material dominates trade exports, while incoming foreign direct investment tends to flow into resource extraction. According to Organization for Economic Co-operation and Development (OECD) data, the share of intra-African exports as a percentage of total African exports increased from approximately 10 percent in 1995 to just under 19 percent in 2019. While slowly rising, this amount is relatively low in comparison to the levels in Europe and Asia-Pacific, where intra-regional trade accounts for well over 50 percent of total export trade for each region.¹⁰

Enter the AfCFTA

The AfCFTA officially commenced at the beginning of 2021, as participating member states established a single market covering both trade and investment with a combined GDP of US\$3.4 trillion.¹¹

The AfCFTA aims to eliminate tariffs on 90 percent of intra-African trade in goods, reduce non-tariff barriers, liberalize trade in services, develop mutual recognition of standards, promote inclusive and sustainable development, and facilitate the movement of capital and people between countries. The agreement is structured in stages, meaning it will evolve over time (more negotiations are planned in areas such as competition policy, investment, intellectual property rights and e-commerce). The AfCFTA incorporates and builds upon WTO agreements and disciplines, which is important, because 11 African Union members are not yet WTO members.¹² Once fully implemented, the AfCFTA has the potential over time to increase intra-African trade by 52.3 percent, according to the UN Economic Commission for Africa (UNECA).¹³

Fifty-four of the 55 African Union member states have signed the AfCFTA (Eritrea is not a signatory), and 36 member states, including Africa's largest economies—Nigeria, Egypt and South Africa—have ratified it (as of February 5, 2021).

Facing challenges ahead

As is often the case, administrative obstacles have emerged for the AfCFTA. The individual tariff schedules of some member states remain incomplete, and rules-of-origin provisions have yet to be finalized in line with the AfCFTA Establishment Agreement, although the parties reportedly aim to complete these outstanding tasks by the end of June 2021.

52.3%

potential increase
in intra-African
trade

(UN Economic
Commission
for Africa)

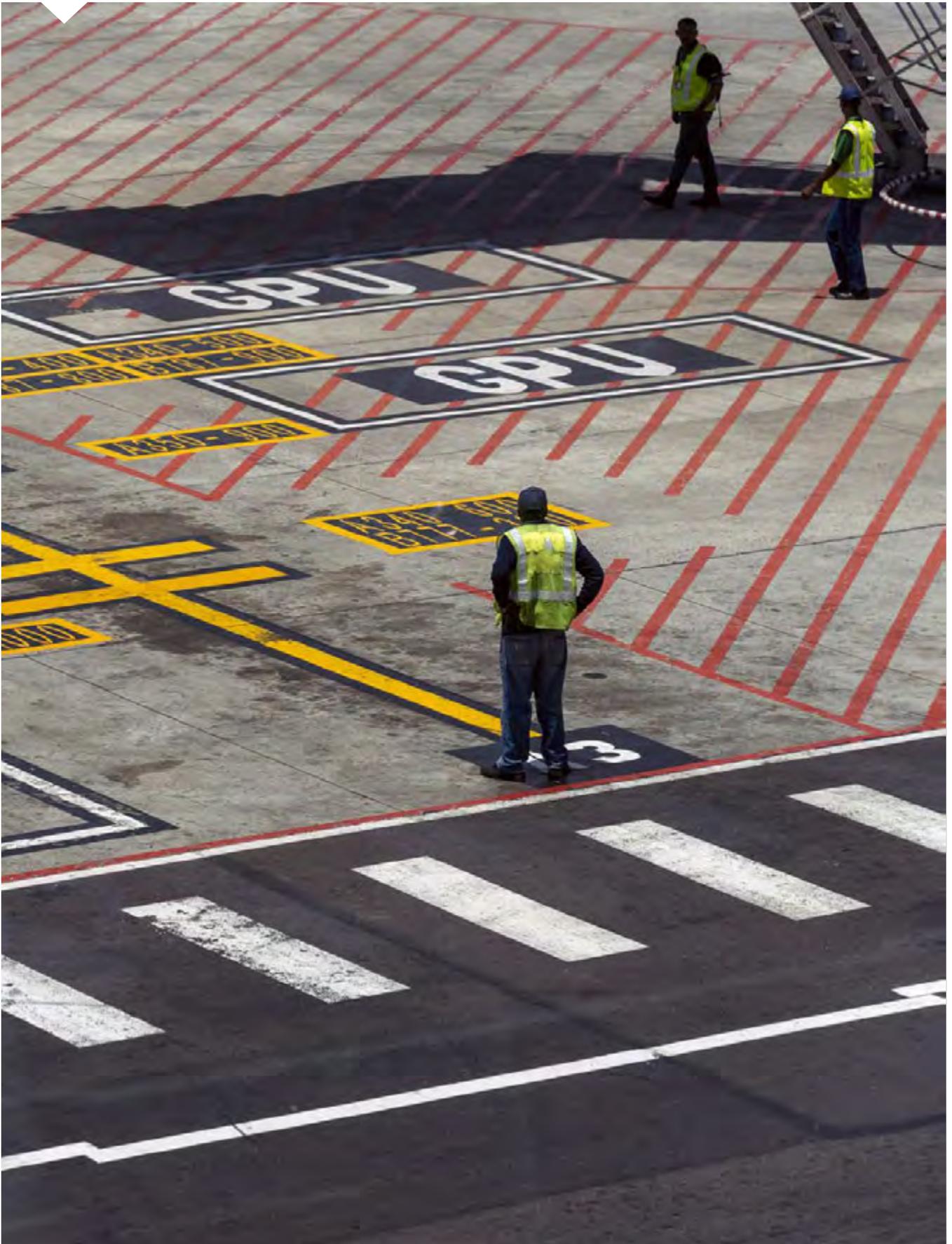
Perhaps the greatest substantive shortcoming is the fact that the AfCFTA may not address the so-called “grey economy” (informal trade, which is difficult to regulate and believed to be a key driver for many African economies, supporting the livelihood of millions of people).¹⁴

The real test of AfCFTA will be its success in creating trade and investment flows that raise living standards. For that to happen, the Agreement will require meaningful implementation and enforcement, and member states will have to overcome classic enemies of increased trade: insufficient infrastructure; excessive or ineffective bureaucracy; foreign-currency restrictions; lack of reliable power supplies; creditworthiness; and old-fashioned fear and protectionism. Time can also be an enemy. The credit rating agency Fitch Ratings downgraded the creditworthiness of many African economies in 2020, citing the economic impact of the COVID-19 pandemic. In a report issued at the start of 2021, the agency noted “the impact of trade liberalisation [from the AfCFTA] should be positive for the region’s economic potential, but the scale of the impact is likely to be small... and materialise only in the long term.”¹⁵

Africa is not alone in facing these challenges, nor does the integration process happen in a vacuum, isolated from other economic, political and social forces. Africa’s attempt to create economic progress through increased trade among its nations and with the world coincides with similar efforts in other regions and an overall weakening of the multilateral system. Other regions offer both opportunities and lessons for Africa, as briefly outlined below.



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BEFORE

A series of regional economic communities, with overlapping members, began forming throughout Africa in the 1900s.



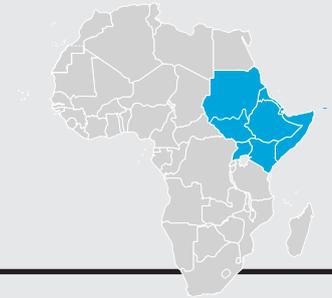
MRU
Mano River Union

4 countries



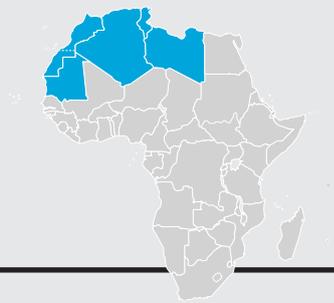
SACU
Southern African Customs Union

5 countries



IGAD
Intergovernmental Authority on Development

8 countries



AMU
Arab Maghreb Union

5 countries



EAC
East African Community

6 countries



ECOWAS
Economic Community of West African States

15 countries



SADC
Southern African Development Community

16 countries



COMESA
Common Market for Eastern & Southern Africa

21 countries



ECCAS
Economic Community of Central African States

10 countries



CEN-SAD
Community of Sahel-Saharan States

29 countries

Sources: tralac (Trade Law Centre) Status of AfCFTA Ratification (tralac.org); United Nations Economic Commission for Africa (uneca.org) and Regional Trade Agreement websites (mru.int, sacu.int, igad.int, maghrebarabe.org, eac.int, ecowas.int, sadc.int, comesa.int, ceeac-eccas.org, censad.org). Accessed on February 16, 2021.

Today, under the African Continental Free Trade Area, virtually all African nations are establishing a single market.



- Instrument of ratification deposited
- Confirmation of parliamentary approval pending
- AfcFTA agreement signed
- AfcFTA agreement not signed

*Some sources reflect that the Sahrawi Arab Democratic Republic, whose claim over the Western Saharan territory is disputed, has also presented an instrument of ratification to the African Union.

TRADE RELATIONS BETWEEN AFRICA AND ASIA-PACIFIC

Since 2000, Africa's trade flows have shifted from the US and Europe to China and Asia-Pacific more generally.

In the case of emerging Asia-Pacific markets, this shift has been largely driven by the rise of the middle classes and their growing appetite for commodities, resource-based products and raw materials, while rising economic growth in many African countries has increased demand for value-added manufactured goods from Asia-Pacific.

Trade with China

Economic links between Africa and China have increased significantly over the past 25 years in the form of trade, investment, loan financing and public infrastructure projects. For more than a decade, China has ranked as Africa's largest or second-largest trading partner, with Sino-African trade reaching US\$190 billion in 2019.¹⁶ As a country

with a population of more than 1.3 billion people, China interacts with every one of the 55 African Union member states, which cumulatively have a population of roughly the same size.

Under China's Belt and Road Initiative (BRI), China frequently works with individual African governments to establish Special Economic Zones, usually termed Foreign Economic and Trade Cooperation Zones or Overseas Cooperation Zones, to promote trade and investment.

China's BRI projects and investment in Africa support port development, infrastructure and connectivity, and industrial and energy projects. In 2018, the African Union signed a memorandum of understanding on BRI cooperation with China, marking the first cooperation document signed by China and a regional international organization. The BRI is just one facet of China's engagement with Africa. On January 1, 2021,

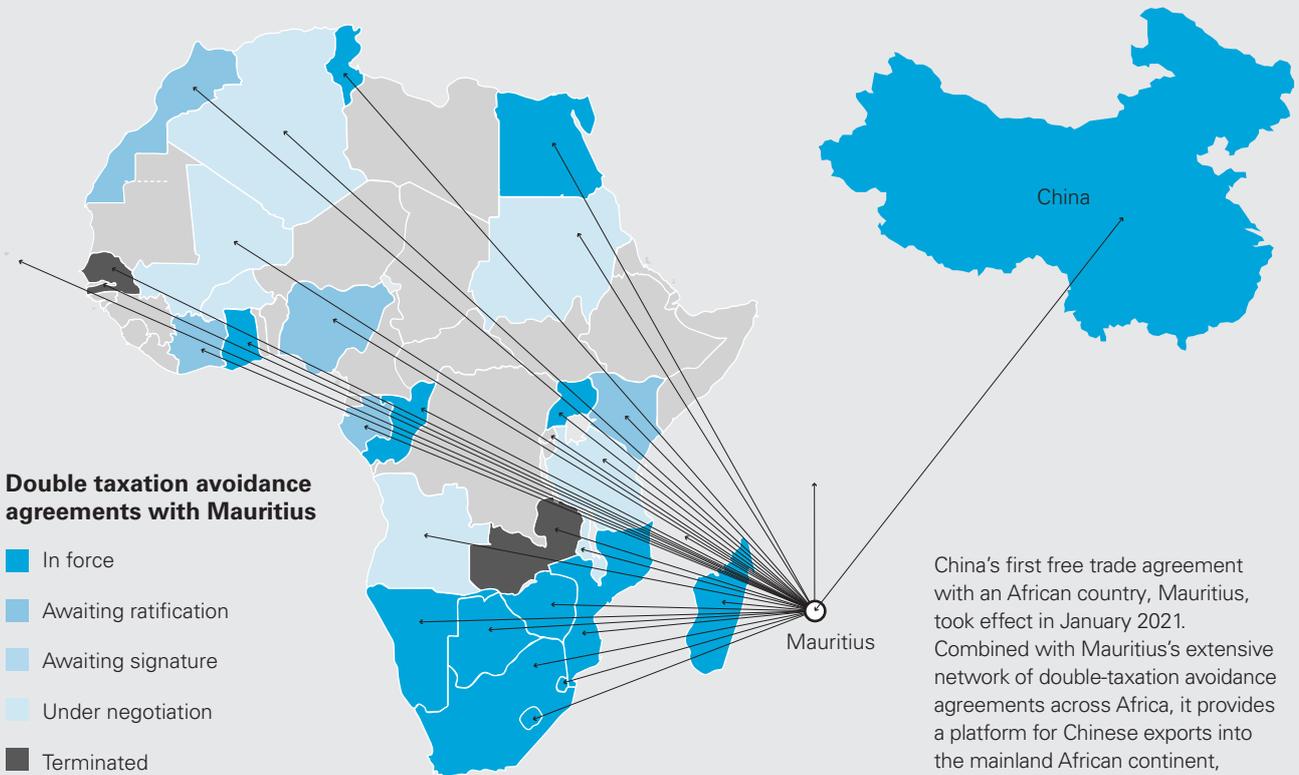
US\$190 billion

trade with China in 2019

(China-Africa Research Initiative, Johns Hopkins University School of Advanced International Studies)

the China-Mauritius Free Trade Agreement (CMFTA) entered into force. The CMFTA is China's first free-trade agreement (FTA) with an African country and a likely model for future trade agreements between China and individual African countries. China's decision to commence bilateral FTA negotiations first with Mauritius likely demonstrates its use of FTAs for geopolitical purposes. Located in the Indian Ocean, off the east coast of the African continent and to the west of India, Mauritius lies at the crossroads of maritime trade. It is also one of Africa's rising economies, with a robust manufacturing sector, an outward-oriented services sector, and a predictable regulatory regime and reputation for good governance. Mauritius has concluded nearly 50 BITs and 50 double-tax avoidance agreements, which have played an important role in developing its domestic financial sector and establishing the island country as a financial hub for the region.¹⁷

MAURITIUS AND CHINA'S FREE TRADE AGREEMENT



Source: Government of Mauritius website



Trade with Indonesia

Indonesia and the African nations have a history of trying to foster strong economic and trading relationships.

In April 1955, Indonesia hosted the Bandung Conference,¹⁸ which marked the first large-scale conference between countries in the two regions (some of which were newly independent) to promote economic and cultural cooperation and to oppose colonialism or neo-colonialism. Asian and African countries renewed their commitment for a New Asian-African Strategic Partnership during the 2015 Asian-African Summit in Jakarta.

During the 2018 Indonesia-Africa Forum held in Bali, senior Indonesian government officials and their African counterparts explored investment and trade opportunities and announced business transactions totaling more than US\$1 billion. They also agreed to expand bilateral trade relationships by establishing preferential trade agreements (PTAs), which tend to focus on tariff elimination for a targeted set of products. To date, Indonesia has signed a PTA with Mozambique, commenced PTA negotiations with Morocco and Tunisia, is in preliminary PTA discussions with the Southern African Customs Union, Djibouti, Kenya and Nigeria, and is exploring an agreement with ECOWAS.

Indonesia is also the largest economy of the Association of Southeast Asian Nations (ASEAN), which, prior to the start of the COVID-19 pandemic, had a combined GDP of approximately US\$3 trillion, according to the ASEAN Secretariat. Trade and economic development are at the core of ASEAN, and the ten member states¹⁹ are currently implementing the ASEAN Economy Community: a single market and production base covering the free movement of goods, capital, services and investment. African countries can draw lessons from the experience and practices in ASEAN, particularly as they commence implementation of the AfCFTA.

TRADE RELATIONS BETWEEN AFRICA AND THE AMERICAS

The US and Mexico offer opportunities and perhaps an example of how trade agreements can bolster both intra-regional trade and trade with others.



Trade with the US

Historically, the US has viewed its trade with the nations of Africa in terms of either economic aid or as a source of resources. Trade, as part of aid, has been a predominant US theme in recent decades.

The US extended its unilateral preference system, the Generalized System of Preferences (GSP), to most African nations, providing reduced or duty-free access for African products to the US market. This type of unilateral preference system can be helpful episodically but has limits. GSP must be authorized by the US Congress and, over the years, its reauthorization has been postponed or left uncertain. As in any unilateral preference system, sensitive products are excluded; often, these sensitive products are precisely ones that would impact GSP beneficiary countries, such as textiles, apparel and certain basic steel products. More fundamentally, unilateral preferences are tariff concessions—limited in nature and ambition—that do not seek an economic partnership and only grant a tariff break on certain products.



49
countries

in sub-Saharan Africa
can export goods to
the US

(2015 US African
Growth and
Opportunity Act)

The US took a step toward a more meaningful program with Africa through its 2015 African Growth and Opportunity Act (AGOA). While still a unilateral preference program, the AGOA provides a specific benefit program allowing the 49 countries in sub-Saharan Africa to export goods to the US. Goods that qualify under AGOA can be imported duty-free into the US until the end of 2025. In 2020, 38 African nations exported goods that qualified for this treatment.

Although AGOA enjoys bipartisan support in the US, efforts to establish more reciprocal trading arrangements with African nations have gained momentum in recent years. In 2015, the Obama Administration took the position that the US should transition away from unilateral preferences and pursue reciprocal agreements with African nations following AGOA's scheduled expiration in 2025.²⁰ This was motivated in part by concerns that emerging reciprocal trade agreements between Africa and other partners, such as the EU and China, would place US businesses at a disadvantage in the region. Other factors that played a role included the proliferation of non-tariff barriers,



such as localization requirements in several African countries, improving economic conditions in Africa and decisions by other developed economies, such as Canada and the EU, to scale back their unilateral tariff preference programs. In light of these trends, Congress mandated in the AGOA legislation that the US Trade Representative develop plans to negotiate reciprocal FTAs with African countries.

In 2018, the US took an important first step towards more reciprocal trade relations with Africa by announcing its intention to negotiate an FTA with Kenya. The Trump Administration had hoped that a US-Kenya FTA could serve as a “model agreement” for FTAs with additional African nations. In March 2020, then-US Trade Representative Robert Lighthizer sent the required notification to Congress of the US’ intent to negotiate an FTA with Kenya, potentially enabling an FTA, if reached, to be considered by Congress under a “fast track” legislative procedure that would result in an up or down vote on the negotiated agreement. However, the window for this to occur is closing quickly, since the

Trade Promotion Authority (TPA) under which the fast-track process occurs is set to expire at the end of June 2021. If the US Congress decides to extend or renew the TPA, then the likelihood increases of successfully concluding a US-Kenya FTA.

The Biden Administration has made some positive opening gestures to the African countries,²¹ but understandably has not yet defined its position on specific issues, including whether to continue FTA negotiations with Kenya. Given President Biden’s campaign pledge to temporarily refrain from entering into new trade agreements, the negotiations may be put on hold or even abandoned in favor of other initiatives. Nevertheless, the rationale that led the US to pursue a “model FTA” in Africa remains compelling, and the push for more reciprocal trade relations is likely to continue over the long term.

Although FTAs remain a long-term prospect, the US Department of Commerce International Trade Administration and its Foreign Commercial Service officers in embassies and consulates in Africa provide an excellent resource for US exporters seeking to sell goods or

services in Africa. Under the Trump Administration, the US Department of Commerce launched a Prosper Africa initiative focused on bilateral engagement with African nations to boost US trade with Africa, and that initiative or a similar one is likely to continue in some form under the Biden Administration. President Biden has indicated that his administration will focus on trade agreements that increase jobs in the US and has expressed interest in supporting multilateral approaches.

Finally, in 2020 the US Congress enacted legislation providing more tools for the US government to support American companies competing in international markets, in particular by creating the International Development Finance Corporation (IDFC). The IDFC has increased authority to provide loans and loan guarantees that support US participation in international development projects, with even greater flexibility accorded to the IDFC to provide support in cases where competing offers are being made with government or state-owned enterprise support from China.

Trade with Mexico

Trade between Mexico and Africa is currently minimal. Mexico's bilateral trade with sub-Saharan countries roughly doubled from US\$1.185 billion in 2010 to US\$2.21 billion in 2018, but this amount pales in comparison to Mexico's bilateral trade with the rest of North America, which increased from approximately US\$400 billion to US\$585 billion during the same period.²²

While Mexico may not be a significant market or source of trade or investment capital for African countries, it provides an interesting example of a country that followed a unique approach to regional integration while simultaneously remaining an active member of the multilateral system. Mexico used its regional and multilateral trade negotiations to reinforce its domestic economic policy goals of opening its economy, attracting investment and raising wages and living standards.

Mexico's experience with trade agreements is best understood as a change in policy from one dominated by import substitution for most of the mid-20th century. Following a significant economic crisis in the early 1980s, the Mexican government decided to open its economy and integrate economically. It acceded to the GATT in 1986, signed a limited FTA with Chile (largely an agreement to lower tariffs on goods) and began negotiating the comprehensive North American Free Trade Agreement (NAFTA), which the US, Canada and Mexico signed in 1992. NAFTA covered trade in goods, services, investment protection mechanisms, government procurement, dispute settlement, intellectual property and other issues. The message was clear: Mexico would use trade agreements—multilateral, bilateral and regional—to modernize its economy and integrate with the world, especially the US.

Economic progress is the result of many factors, and it is difficult to attribute progress to any one policy decision. Nonetheless, Mexico's approach to trade agreements seems to have contributed significantly to the country's economic development.

Mexico's total trade with the US and Canada increased from approximately US\$94 billion in 1993 to approximately US\$647.7 billion in 2019,²³ when it renegotiated NAFTA with the US and Canada (creating the agreement known as the TMEC in Mexico and the USMCA in the US). In recent decades, the world rewarded Mexico with investments: Direct foreign investment increased from approximately US\$14 billion in 1999 to approximately US\$608 billion in 2020, more than half of which came from the US and Canada.²⁴

Mexico went on to sign 13 other FTAs, including with Europe, Japan, the Pacific Alliance and Central America. In 2019, Mexico was the world's 12th-largest export economy, with US\$472.3 billion in exports.²⁵

Mexico has taken advantage of its geographical position and become a powerhouse exporter of manufactured and agricultural goods by developing the following trade preferences:

- To the North with the US and Canada
- To the South through bilateral FTAs with Central American countries, regional platforms such as the Pacific Alliance, Mercosur (an automotive trade agreement) and ALADI, and nine partial trade preferences agreements with the Latin American region
- To the East through an FTA with the EU and EFTA membership
- To the West through the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and an FTA with Japan

TRADE RELATIONS BETWEEN AFRICA AND EUROPE

Europe is perhaps the world's best example of the power of trade agreements. A sub-regional sectoral trade agreement formed after World War II, the European Coal and Steel Community, led to deeper economic integration through the 1957 formation of the European Economic Community and later the European Community and the European Union. Liberalized trade was a first step to economic and political cooperation, as strong ties bound European nations together and eventually created a broad

54

of the 55 African Union member states have signed the AfCFTA

economic and political union where goods, services and people travel freely across national borders.

Africa and Europe have a long trading history, beginning before Europe's own economic integration. The EU often ranks among Africa's largest trading partners: In 2019, the EU accounted for 31 percent of Africa's imports and 29 percent of its exports. African countries mostly export primary goods to the EU (66 percent of the value of total exports in 2019) and mostly import manufactured goods (70 percent of the value of total imports in 2019).

Since 1975 and the conclusion of the first Lomé Convention with African, Caribbean and Pacific (ACP) countries, the EU has granted imports from sub-Saharan Africa preferential access to its market. The different Lomé conventions also provided for aid.

After the Lomé IV Convention was found to be inconsistent with the WTO Agreements in the framework of the EC – Bananas dispute, the EU and ACP States signed the Cotonou Agreement in June 2020, which aims to reduce poverty and contribute to the gradual integration of ACP states into the world economy. The Cotonou Agreement is based on three pillars regarding development, economic and trade cooperation and political engagement, and provides for the negotiation of EPAs (development-oriented free-trade arrangements) between the EU and ACP countries. With the EPAs, the EU intended to move from providing unilateral preferences to concluding bilateral or multilateral trade agreements.

The EU has signed the following EPAs with Africa to date:

- **Cameroon** – EPA was signed in 2007 and entered into force in 2014
- **ECOWAS** and the West African Economic and Monetary Union (WAEMU) – EPAs with Ivory Coast and Ghana entered into force in 2016, and a 2014 EPA initialed with the 16 West African states of WAEMU is yet to be ratified
- **Eastern and Southern Africa** – EPA with Madagascar, Mauritius, Seychelles and Zimbabwe entered into force in 2012; Comoros signed the agreement in 2017 and started applying it in 2019

Aerial view of cargo train riding through desert, Mauritania, Nouadibou



- **EAC** – EPA with Kenya and Rwanda signed in 2016, and Kenya has ratified it. For the EPA to enter into force, the remaining EAC members must sign and ratify the agreement

- **SADC** – Botswana, Eswatini, Lesotho, Mozambique, Namibia and South Africa signed the EPA in 2016, and Angola has an option to join the agreement in the future. In 2018, this became the EU's first regional EPA with Africa. Six other SADC members (the Democratic Republic of the Congo, Madagascar, Malawi, Mauritius, Zambia and Zimbabwe) are negotiating EPAs under the Central Africa or Eastern and Southern Africa frameworks

African countries that have not signed EPAs continue to benefit from trade preferences under the EU's Generalized Scheme of

Preferences and the Everything But Arms scheme that is available to the least-developed countries and other developing countries under certain conditions.

The Cotonou Agreement was due to expire in February 2020, but was extended to allow the EU and ACP countries to conclude their negotiations on a successor agreement. On December 3, 2020, the EU and the Organization of ACP States reached a political agreement on the new Partnership Agreement, which must be signed and ratified in 2021. The new agreement (the text of which is not yet published) is reported to cover a large number of areas, ranging from sustainable development and growth, to human rights and peace and security. Meanwhile, EPA negotiations will continue with African countries.



African countries mostly export primary goods to the EU (66 percent of the value of total exports in 2019) and mostly import manufactured goods (70 percent of the value of total imports in 2019).

RELEVANCE AND IMPLICATIONS FOR BUSINESSES

As is evident in the preceding discussion, sub-regional trade agreements in Africa are not new, and they have not led to either significant intra-regional trade or mutually beneficial trade and investment with countries outside of Africa. But trade agreements can have a significant impact, as the experiences of ASEAN, the EU and Mexico show. Is AfCFTA worthwhile, and what will determine its success?

In our view, AfCFTA is worthwhile. Intra-regional trade is low, and increasing trade among African countries seems achievable. The factors necessary to increase intra-regional trade—lowering barriers to goods and services, institutional reform, transparency in administration, strengthening the rule of law—are the same factors that will help attract investment capital and trade from other regions. The AfCFTA can serve a “standard-setting” function among the African nations and for Africa’s economic relations with the rest of the world. It can also facilitate the entry into the WTO of those African countries that remain outside the world’s foremost trade agreement, just at the time that the WTO membership has elected its first Director General from an African nation.²⁶

As for the factors that will determine AfCFTA’s success, we can name a few:

- 1. Forward momentum with patience** – Economic integration takes time: Investment flows require legal security, which in turn require confidence in institutions, transparency and a sense of predictability. It is unreasonable to expect this to happen upon the signing of an FTA, no matter how comprehensive. Instead, small successes creating momentum toward bigger success is the necessary approach.
- 2. Support from the business community** – Trade agreements are not much use without a willing business community. It will be important to see examples of businesses using the AfCFTA to their advantage,

and having a positive impact on the social goals implicit and explicit in the AfCFTA. Again, success can breed success.

- 3. Political leadership** – Launching the AfCFTA took leadership; making it successful will require more. African leaders will have to remain committed to its success, despite inevitable bumps in the road and domestic criticism. There will be criticism and obstacles in every country because successful trade agreements cause change. Leaders should plan for resistance and manage it.
- 4. Wise choices** – If the AfCFTA is successful, it will increase intra-regional trade and make Africa a more attractive place for business, which, one would hope, will ultimately benefit the people of the African nations. Along the way, there will be many choices to make, including:
 - How should Africa negotiate with countries from outside the region?
 - What is the right balance between unilateral trade benefits and comprehensive trade agreements?
 - How should the African nations manage their relationship with the multilateral system and the WTO while it is integrating?
 - And many more

The AfCFTA is a start. Much work remains to make it a success for African nations and the African people. These efforts are worth it, because trade agreements can have a positive impact on raising living standards and building the types of societies that African nations want.





- 1 SACU has five member states: Botswana, Eswatini (formerly Swaziland), Lesotho, Namibia and South Africa.
- 2 EAC has six member states: Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda.
- 3 ECOWAS has 15 member states: Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, the Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo.
- 4 ECCAS has 11 member states: Angola, Burundi, Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Republic of Congo, and São Tomé and Príncipe.
- 5 SADC has 16 member states: Angola, Botswana, Comoros, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia and Zimbabwe.
- 6 COMESA has 21 member states: Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Eswatini, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Somalia, Sudan, Tunisia, Uganda, Zambia and Zimbabwe.
- 7 According to UNCTAD's Investment Policy Hub, African countries have signed 879 BITs, both intra-African and with third-party states. To date, there are 521 BITs in force.
- 8 The PAIC is the first continent-wide model investment treaty that aims to provide an effective and substantive protection for investors and investments, while respecting sustainable development goals and preserving the rights of the host country. Adopted in 2015, the PAIC provides a pathway for African countries to replace intra-African BITs or regional investment instruments with the PAIC.
- 9 The African Union is an intergovernmental organization founded in 2002 as the successor to the Organization of African Unity (OAU) in place since 1963. The African Union comprises 55 member states that represent all economies of the African continent (including the Sahrawi Arab Democratic Republic, also known as Western Sahara, which is a disputed territory claimed by Morocco).
- 10 2019 Policy Note on Africa: Infrastructure and Regional Connectivity, OECD Development Centre. See here: https://www.oecd.org/dev/development-philanthropy/AfricaPolicyNote%20_2019.pdf
- 11 For an excellent discussion of the AfCFTA's development, content, and potential significance, see Katrin Kuhlmann and Akinyi Lisa Agutu, "The African Continental Free Trade Area: Toward a New Legal Model For Trade And Development," Georgetown Journal of International Law, Vol. 51, Issue 4 at 753 (2020).
- 12 As of January 2021, the following countries are WTO observers: Algeria, Comoros, Equatorial Guinea, Ethiopia, Libya, São Tomé and Príncipe, Somalia, South Sudan and Sudan—meaning that they must commence accession negotiations within five years after becoming an observer. Eritrea is not an observer, and the Sahrawi Arab Democratic Republic remains a disputed territory claimed by Morocco.
- 13 United Nations. Economic Commission for Africa (2019), African Continental Free Trade Area: Questions & Answers, Addis Ababa. © UN. ECA. See here: <https://repository.uneca.org/ds2/stream/?#documents/7743085e-72f9-5c76-b94b-400625d76350/page/1>
- 14 Economic Development in Africa Report 2019: Made in Africa – Rules of Origin for Enhanced Intra-African Trade, United Nations, 2019, pgs. 42-43. See here: https://unctad.org/system/files/official-document/edar2019_en_ch1.pdf
- 15 <https://www.fitchratings.com/research/sovereigns/african-fta-growth-impact-too-small-to-affect-ratings-07-01-2021>
- 16 Data from the China-Africa Research Initiative, Johns Hopkins University's School of Advanced International Studies (SAIS), 2020. See here: <http://www.sais-cari.org/data-china-africa-trade>
- 17 In 2020, Mauritius was ranked first among African countries and 13th out of 190 economies in the World Bank's Ease of Doing Business Report, and according to the United Nations Conference on Trade and Development (UNCTAD), Mauritius is expected to become a high-income economy by 2030.
- 18 The Bandung Conference was an important step in the formation of the Non-Aligned Movement (NAM), which was established in 1961 during the Cold War as an international platform for developing countries (125 as of 2018) to raise their concerns on issues of mutual interest.
- 19 ASEAN's ten members include Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.
- 20 "Beyond AGOA: Looking to the Future of U.S.-Africa Trade and Investment," Office of the US Trade Representative, September 2016. Available at <https://ustr.gov/sites/default/files/2016-AGO-Report.pdf>
- 21 President Biden addressed the African leaders as they began the 34th African Union Summit in February. "Biden Signals New Tone on US-Africa Relations," available at <https://www.voanews.com/africa/biden-signals-new-tone-us-africa-relations>
- 22 Data from World Bank's World Integrated Trade Solution, <https://wits.worldbank.org/CountryProfile/en/Country/MEX/Year/2010/TradeFlow/EXPIMP/Partner/SSF/Product/all-groups> (last visited February 7, 2021).
- 23 See <https://www.canadainternational.gc.ca/mexico-mexique/canmex.aspx?lang=eng> and <https://ustr.gov/countries-regions/americas/mexico>
- 24 See <https://www.gob.mx/se/acciones-y-programas/competitividad-y-normatividad-inversion-extranjera-directa?state=published> (data showing that the United States and Canada account for approximately 54% of the US\$608 billion in accumulated foreign investment in 2020 (last consulted March 9, 2021)).
- 25 <http://www.worldstopexports.com/mexicos-top-exports/>
- 26 In February 2021, WTO members agreed by consensus to select Ngozi Okonjo-Iweala of Nigeria as the WTO's seventh Director-General. Dr Okonjo-Iweala is the first woman and the first African to be chosen as Director-General. Her term extends through August 2025 and is renewable. For more information, see https://www.wto.org/english/news_e/news21_e/dgno_15feb21_e.htm

African Development Finance Institutions

Rising to challenges, funding a recovery response and leading the way to sustainable lending

By James Hardy and Juanita Derex-Briggs

African Development Finance Institutions (DFIs) have traditionally played a leading role as:

- **Lenders of last resort** – Banking the continent through crisis, commodity crashes and economic instability (such as Afreximbank's 2015 US\$3.5 billion counter-cyclical liquidity program by way of unfunded facilities such as guarantees and letters-of-credit)
- **Gateways to international capital:** From both commercial banks and non-African DFIs
- **Institutions that collaborate with commercial creditors:** To attract private sector financing to Africa

Although the nature and scale of the COVID-19 pandemic created an arguably unprecedented challenge, the response of African DFIs has been robust. For example, two of the largest, most decisive and immediate responses to the pandemic in Africa included:

1. The March 2020 commitment by African Development Bank (AfDB) to a US\$10 billion COVID-19 response facility supporting African governments and the private sector.
2. African Export-Import Bank (Afreximbank)'s announcement of a US\$3 billion pandemic trade impact mitigation facility (PATIMFA) to help African countries tackle the economic and health impacts of the pandemic.

At the same time, African DFIs are broadening the products they offer.

How have African DFIs funded these crucial initiatives at a time when there is pressure on member state shareholders to allocate

available capital to domestic recovery and pressure on DFIs to intervene across both public and private sectors? In 2020, investor confidence in these institutions remained strong, and macroeconomic policies in developed economies continue to make African DFI risk attractive for investors seeking yield. African DFIs have taken advantage of this opportunity by raising capital in both loan and debt capital markets through some innovative processes.

As a result, African DFIs have an opportunity to become arguably the most relevant financial institutions for the continent's recovery. By harnessing support from international investors and deploying lending proceeds toward sustainable development goals and other sustainability outcomes, as their roles continue to evolve, African DFIs can achieve a potentially exciting outcome.

SUSTAINABLE FINANCE

The sustainable finance market is a natural source of funding for DFIs, given their respective developmental mandates and their role in financing a sustainable recovery from the pandemic in addition to their roles in financing value-accretive supply chains on the continent, creating jobs and supporting industrialization.

African DFIs have been successful in accessing the deep liquidity in this market through proceeds-linked products for green, social and other sustainability purposes. For example: AfDB raised US\$3 billion under its Fight COVID-19 social bond, its largest US-dollar benchmark bond to date; Africa Finance Corporation (AFC) incorporated a green tranche into its US\$3 billion GMTN program and raised a CHF 150 million green



Although the nature and scale of the COVID-19 pandemic created an arguably unprecedented challenge, the response of African DFIs has been robust.

bond; and Banque Ouest-Africaine de Développement (BOAD) raised €750 million under a sustainability bond at the lowest interest rate it has ever achieved in the bond market.

BOLSTERING CAPITAL

The potential severity of the economic shock across sub-Saharan Africa led many to anticipate general credit deterioration in the assets on the balance sheets of Africa's financial institutions. An innovative example of strategic capital raising in response used the loan market, with AFC's US\$250 million subordinated Tier 2 loan from the US International Development Finance Corporation. This is consistent with similar activity in the commercial bank sector (See AfDB's Tier 2 capital investment into Nedbank below), and AFC described it as complementary to its strategy of further strengthening its investment capacity and diversifying its investor base.

DIVERSIFYING FUNDING SOURCES

A large number of DFIs exist across Africa (see the Table). However, despite innovations in credit enhancements and structuring



TABLE: ASSOCIATION OF AFRICAN DEVELOPMENT FINANCE INSTITUTIONS (AADFI)

Ordinary members

 <p>ALGERIA Banque algérienne de développement</p>	 <p>ETHIOPIA Development Bank of Ethiopia (DBE)</p>	 <p>MOROCCO Groupe Crédit Agricole du Maroc (GCAM) Tamwill El Fellah (TEF)</p>
 <p>ANGOLA Banco de Poupanca E Credito Banco de Desenvolvimento de Angola</p>	 <p>GABON Banque Gabonaise de Développement (BGD)</p>	 <p>MOZAMBIQUE GAPI SARL</p>
 <p>BOTSWANA Citizen Entrepreneurial Development Agency (CEDA)</p>	 <p>GHANA Agricultural Development Bank (ADB) National Investment Bank (NIB) Ghana Export-Import Bank</p>	 <p>NIGER Société Nigérienne de Banque (SONIBANK) Fonds De Solidarite Africain (FSA)</p>
 <p>BURUNDI Banque Nationale de Développement Economique, Burundi (BNDE)</p>	 <p>KENYA Industrial and Commercial Development Corporation (ICDC) Industrial Development Bank (IDB) Capital Ltd Tourism Finance Corporation (TFC) Agricultural Finance Corporation (AFC) Kenya Industrial Estates (KIE) Trade And Development Bank</p>	 <p>NIGERIA Bank of Industry Ltd (BOI) National Economic Reconstruction Fund New Nigeria Development Company Ltd (NNDC) Federal Mortgage Bank Of Nigeria (FMBN) Bank of Agriculture Ltd (BOA) Nigeria Export-Import Bank (NEXIM) Odu'a Investment Company Ltd Federal Mortgage Bank of Nigeria IBILE Holdings Ltd LECON Financial Services (Ltd) The Infrastructure Bank Plc The Nigeria Incentive- Based Risk Sharing System For Agricultural Lending (NIRSAL) Development Bank Of Nigeria Plc (DBN)</p>
 <p>COMORES Banque de Développement des Comores (BDC)</p>	 <p>LIBERIA Liberian Bank for Development and Investment (The) (LBDI)</p>	
 <p>COTE D'IVOIRE Banque Nationale D'Investissement (BNI)</p>	 <p>LIBYA Libyan Arab Foreign Bank</p>	
 <p>DIJBOUTI Fonds de Développement de Djibouti (FDED)</p>	 <p>MALAWI Export Development Fund (EDF) Malawi Agricultural And Industrial Investment Corporation Plc</p>	 <p>DRC Bureau Central De Coordiantion (BCECO) Société Financiere De DéveloppementSA (SOFIDE SA) Fonds De Promotion De L'industrie (FPI) Banque de Développement des Etats des Grands Lacs (BDEGL)</p>
 <p>EGYPT Industrial Development and Workers Bank of Egypt (IDWBE) Principal Bank For Development And Agricultural Credit (The) (PBDAC)</p>	 <p>MALI Banque De Développement Du Mali</p>	
 <p>ESWATINI Eswatini Development & Savings Bank (Formerly 'Swazibank') Eswatini Development Finance Corporation (FINCORP) Industrial Development Company of Eswatini (IDCE)</p>	 <p>MAURITIUS Development Bank of Mauritius Ltd (DBM)</p>	 <p>RWANDA Development Bank of Rwanda (BDR)</p>

(67)

Special Members (12)



SENEGAL

La Banque Agricole Du Senegal
Banque Nationale pour le
Développement Economique (BNDE)



SEYCHELLES

Development Bank of Seychelle (DBS)



SOUTH AFRICA

Development Bank of Southern
Africa (DBSA)
Industrial Development Corporation
(IDC) of South Africa Ltd



SUDAN

Agricultural Bank of Sudan (ABS)
Industrial Development Bank (IDB)



TANZANIA

Tib Development Bank Ltd



TUNISIA

Banque Nationale Agricole (BNA)
Société Tunisienne de Banque (STB)
Banque Maghrébine d'Investissement
et de Commerce Extérieur (BMICE)



UGANDA

Uganda Development Bank
Limited (UDBL)



ZAMBIA

Development Bank of Zambia (DBZ)



ZIMBABWE

Infrastructure Development Bank of
Zimbabwe IDBZ)



BENIN

Fonds Africain de Garantie et de
Coopération Economique (FAGACE)



CÔTE D'IVOIRE

Banque Africaine de Développement /
African Development Bank



EGYPT

African Export and Import Bank
AFREXIMBANK



ETHIOPIA

Economic Commission for Africa



KENYA

Shelter Afrique
Trade And Development Bank (TDB)



NIGER

Fonds de Solidarité Africaine (FSA)



REPUBLIC OF THE CONGO

Banque de Développement des
Etats de l'Afrique Centrale (Eng:
Development Bank of the Central
African States)



SUDAN

Arab Bank for the Economic
Development of Africa



TOGO

Banque Ouest Africaine de
Développement (BOAD)
Groupe de la BIDC/ECOWAS Bank



UGANDA

East African Development
Bank (EADB)

Honorary members (6)



INDIA

Export-Import Bank Of India
World Association of Small and
Medium Enterprises



ITALY

Giordano dell'Amore Foundation



PORTUGAL

Banco Portugues do Investimento



USA

Banque Internationale pour la Reconstruction
et le Développement (IBRC)
International Finance Corporation

Associates (2)



BOTSWANA

Southern African Development
Community-Development Finance
Resource Centre (SADC- DFRC)



NIGERIA

Association Of Nigerian Development
Finance Institutions (ANDFI)

This table shows the published member list of the Association of African Development Finance Institutions (AADFI): an umbrella organization for development finance institutions in Africa created under the auspices of the African Development Bank in 1975. According to the AADFI website, 67 African DFIs currently exist on the continent (the more than 80 total member institutions, include associates, special members and honorary members).

Source: <https://adfi-ci.org/>



(see below), in general terms access to global debt capital and loan markets in volume continues to be dominated by a small number of leading multilateral African or regional DFIs, a theme we expect to continue despite those innovations, since clients indicate that investor demand for high grade African DFI names as a basis for exposure to the continent continues to grow.

AFC attracted a diverse investor base—from Asia-Pacific, the Middle East and Africa, the UK, Switzerland, Germany and other EU countries—in its US\$700 million Regulation S Eurobond offering maturing June 2025. The investor confidence in these institutions opens new investment opportunities. For example, Afreximbank tapped into under-utilized Japanese liquidity with a NEXI-backed US\$520 million facility, continuing the trend of international bank capital inflows to the African economy and demonstrating the power of using public resources to leverage private financing for development¹. And investors in the UK, the EU, the US, Asia-Pacific and the Middle East and North Africa over-subscribed for BOAD's sustainability bond offering.

CREDIT ENHANCEMENT

Innovative structuring, particularly the addition of credit enhancement, has also played a role. These institutions do not require credit support in order to raise capital. AfDB is AAA rated (by Moody's, Standard & Poor's, Fitch), and AFC, Afreximbank, BOAD and Eastern and Southern African Trade and Development Bank (TDB) all have investment-grade ratings².

Nonetheless, the use of credit enhancement has enabled these institutions to borrow on more favorable terms, including longer tenors and lower interest rates. Notable examples from 2020 include: TDB's MIGA-backed ten-year loan from a syndicate of international commercial banks (with the first major deployment in Africa by MIGA of a guarantee against the risk of "non-honoring of financial obligations by a regional development bank"); Afreximbank's NEXI-backed loan; and Bank of Industry (BoI)'s³ €1 billion and US\$1 billion facilities, which benefited from credit support from its main shareholder, the Central Bank

of Nigeria, in the form of a structured guarantee arrangement and a currency swap to mitigate foreign exchange risks.

ATTRACTING PRIVATE SECTOR CAPITAL

Bol is also a case study in how African DFIs can attract commercial lenders to African credit.

Afreximbank arranged Bol's original US\$750 million financing in 2018, this borrower's first international syndicated loan and a transaction which, according to Afreximbank, re-opened the syndicated loan market to Nigerian financial institutions. In 2020, as joint co-ordinator with Credit Suisse, it facilitated access for Bol to international finance by committing underwritten debt financing despite the adverse market conditions and (of particular relevance to the €1 billion transaction closed in March 2020) volatility in crude oil prices.

In the end, both facilities were upsized for over-subscription, and each was supported by more than 20 African and international lenders, both commercial and developmental.

BUILDING RESILIENCE

The growing trend of providing capital for developmental or social, not purely economic, impact is not new to African DFIs, given their existing developmental impact mandates.

At a national level, Bol aims to "catalyze domestic production and facilitate job creation on a transformational scale, enhance local industry competitiveness, attract domestic and foreign investments, integrate our local industries into domestic, regional and global value chains, grow our export earnings and positively impact the overall economic development of Nigeria."⁴ The proceeds of Bol's 2020 borrowings will be used to on-lend to eligible institutions that do not operate in "negative sectors," which include coal mining, coal-powered projects and projects that may lead to environmental degradation, while the proceeds of TDB's loan financing will apply to trade finance and COVID-related purposes.

The increase in sustainable finance as the source of funding accelerated the specific change towards financing the resilience of the African economy against the impact of climate change

as part of a drive to "build back better." Examples include AFC's use of its green bond proceeds toward renewables projects in Djibouti and Cote d'Ivoire. In addition, proceeds from AfDB's ZAR 2 billion investment in UNSDG-linked notes issued by Nedbank under its domestic MTN program, listed on the green bonds segment of the Johannesburg Stock Exchange, will be used in accordance with Nedbank's Sustainable Development Goals Framework, in alignment with AfDB's "High 5" priorities (Light Up and Power Africa, Feed Africa, Industrialize Africa, Integrate Africa and Improve the Quality of Life for the People of Africa).

LOOKING AHEAD

African DFIs are very well positioned to continue to enjoy the support of international investors at continental, regional and national levels. The ability of African DFIs to harness this support and channel the proceeds makes them arguably the most relevant financial institutions for the continent's recovery through the pandemic and future growth.

Beyond innovation in, and diversification across, the products they offer, African DFIs will likely continue to use Tier 2 and sustainable finance products in both the loan and the debt capital markets. Moreover, the requirements of development financing institutions and sustainable finance investors into African DFIs might drive one of the most exciting outcomes of these institutions' evolving role.

When deploying the proceeds of these investments, African DFIs have the opportunity to move from the traditional approach of negative sector exclusions to a more positive impact approach that links the proceeds (or the economic terms) of their lending to sustainable development goals or other sustainability outcomes.

1 Afreximbank's press release (<https://www.afreximbank.com/mufg-lead-s-on-ground-breaking-520-million-covid-19-response-facility-for-afreximbank/>).

2 AFC: A3 (Moody's); Afreximbank: Baa1 (Moody's) / BBB- (Fitch); BOAD: Baa1 (Moody's) / BBB (Fitch); TDB: Baa3 (Moody's) / BB+ (Fitch).

3 Nigeria's state-owned development bank, rated B2 (Moody's) / B (Fitch).

4 Bank of Industry press release (<https://www.boi.ng/boi-concludes-us10000000-syndicated-term-loan-in-the-international-market/>).

Private equity in Africa: Trends and opportunities in 2021

Despite challenges, Africa remains an attractive PE and VC investment destination

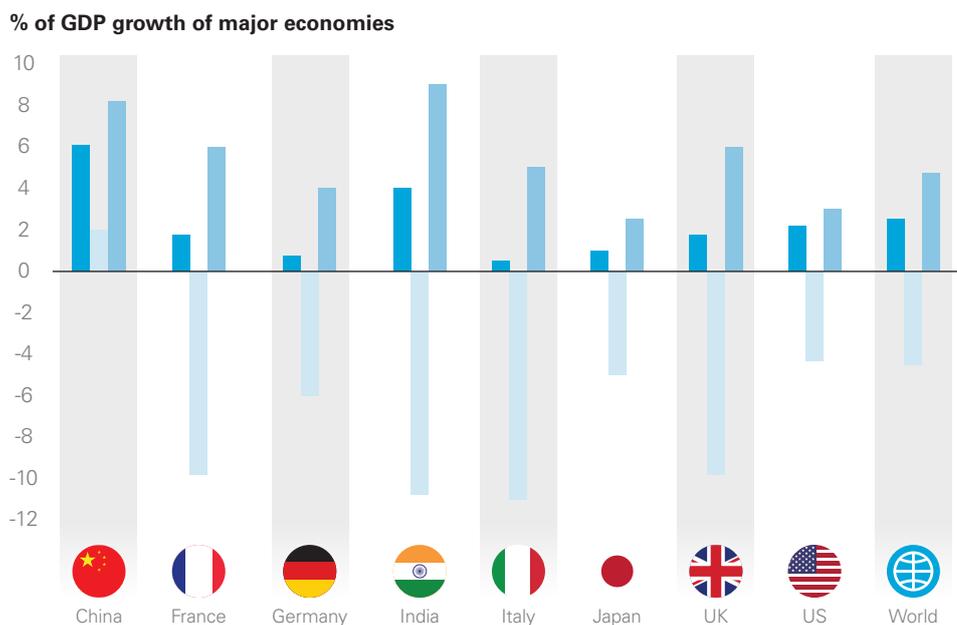
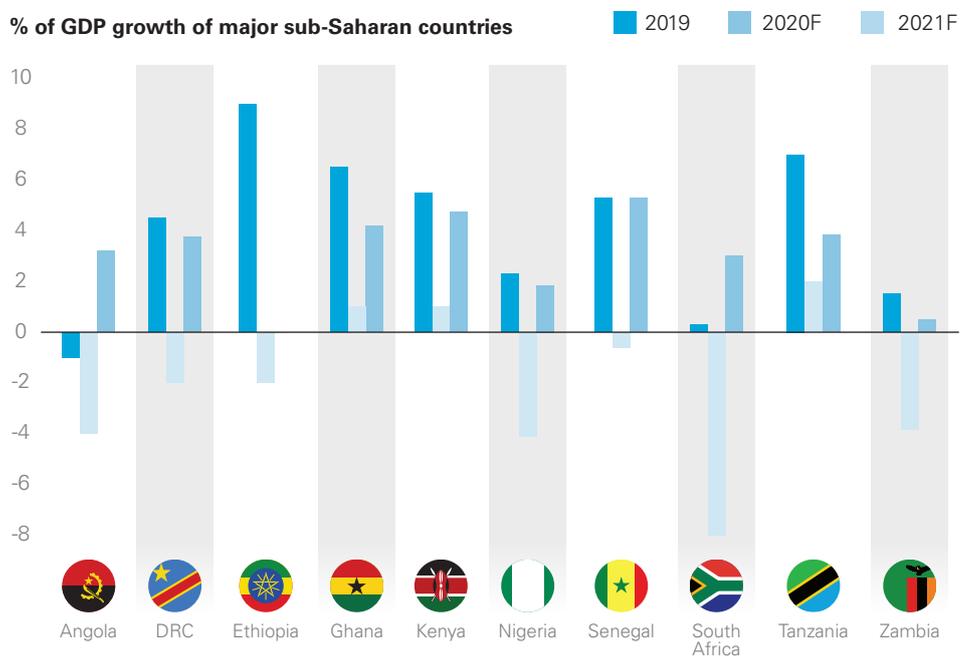
By Ken Barry, Oji Adoh and Iman Algubari

The global economic downturn following the outbreak of COVID-19 slowed private equity (PE) and venture capital (VC) activity across emerging economies. The COVID-19 crisis particularly affected the short-term and medium-term growth prospects of funds' portfolio companies, which are generally experiencing negative impacts on revenues, costs and profitability.¹ For example, a September 2020 analysis by the International Finance Corporation (IFC) highlights the impact of the economic shock caused by COVID-19 on growth PE funds (which invest in comparatively more mature businesses than VC funds).

Although the African continent was relatively less affected by the virus than other parts of the world (with the notable exception of South Africa and parts of North Africa), many trends that affected PE and VC activity throughout emerging markets impacted by the pandemic were mirrored in Africa in 2020 (see Figure 1).

One factor that has mitigated the pandemic's impact on PE and VC activity in Africa is the composition of the limited partner (LP) base of PE and VC firms operating on the continent, where development finance institutions (DFIs) continue to play a significant role.² DFIs' long-term focus and mandate for countercyclical investments often shield them from short-term shocks. While this support continues, there is an opportunity for fund managers to take advantage of the opportunities DFIs can offer, such as connecting fund managers and governments to fill funding and capacity gaps, facilitating due diligence processes and mobilizing local capital.

Figure 1: GDP Growth (constant prices)



Source: AVCA: Private Equity and Venture Capital in Africa: COVID-19 Response Report





Overall, GDP growth on the African continent, supported by factors such as the LP base of Africa-focused PE and VC firms, may be contributing to PE's continuing investment appetite. The African Private Equity and Venture Capital Association (AVCA) reports that the total value of African PE deals in H1 2020 remained constant at US\$0.7 billion³ (the same as H1 2019⁴). With H2 data soon to be released, the full impact of COVID-19 on deal-making activity will soon be seen.

AFRICAN SECTOR FOCUS IN 2021

One factor contributing to PE's resilience in Africa in 2020 is a focus on investing in businesses that provide "essential" or "emergency services," including healthcare, food production, energy and education sectors, which continued to operate during lockdowns.⁵ This trend is likely to continue in 2021.

Africa's healthcare sector experienced significant growth and will likely remain a key focus in 2021, due to a demand for investment in affordable healthcare. According to AVCA, the healthcare sector accounted for the largest share of PE deals by value in H1 2020 (24 percent).⁶ This is a marked increase from H1 2018, when just 4 percent of total deal value flowed to the

sector.⁷ Healthcare is attractive to PE investors for a number of reasons, including a high internal rate of return (IRR) and favorable exit opportunities. The IFC estimates that healthcare investments in Africa deliver a 9.6 percent investment-level gross IRR—the fourth-highest return after telecommunications, IT and consumer staples. Investments in healthcare also align with societal impact, a key PE goal in Africa.

African financial technology (fintech) is another sector that historically attracted PE investment and will likely continue in 2021. In 2019, more than 40 percent of total investments in Africa went to this sector, with financial inclusion remaining a main driver, attracting 54.5 percent of total investments.⁸ Technology deals increased notably by volume and value, rising from 8 percent and 7 percent, respectively, in H1 2019 to 17 percent and 16 percent in H1 2020.⁹ The acquisition of Paystack, a Lagos-based payments company, by the online payments provider Stripe is an example of the success of African fintech.¹⁰ Mobile services and technologies already comprise a large proportion of Africa's GDP, with an added value of US\$155 billion (9 percent of the total), and is expected to rise to US\$184 billion by 2025.¹¹

While fintech such as e-commerce is expected to attract a significant proportion of new investments, a number of other fintech-enabled verticals are poised for growth in 2021, including enterprise software and cloud computing, health, education and renewable energy technologies.

Infrastructure activity also remains strong in Africa, with a large number of deals completed in recent years in both the traditional and renewable energy sectors. Renewable energy is one of the fastest-growing segments in many African countries in terms of both demand and volume of public and private investment. Solving persistent, high demands for energy solutions—on a continent where 600 million people lack access to electricity—will continue to be a focus in 2021 and beyond.



One factor contributing to PE's resilience in Africa in 2020 is a focus on investing in businesses that provide "essential" or "emergency services."

The International Energy Agency estimates that investments must increase four-fold to US\$120 billion annually to close the energy gap by 2040. In addition, the declining costs of renewables, particularly solar energy, is driving investments with a rising proportion from PE. ARCH Emerging Markets Partners' investment into CrossBoundary Energy, which will be used to scale CrossBoundary Energy's commercial and solar services, is an example of this trend (with further investment expected into CrossBoundary Energy expected in 2021). PE's focus on impact investing and meeting the UN's social development goals aligns with continued investment into renewable energy companies.

VC INVESTING IN AFRICA

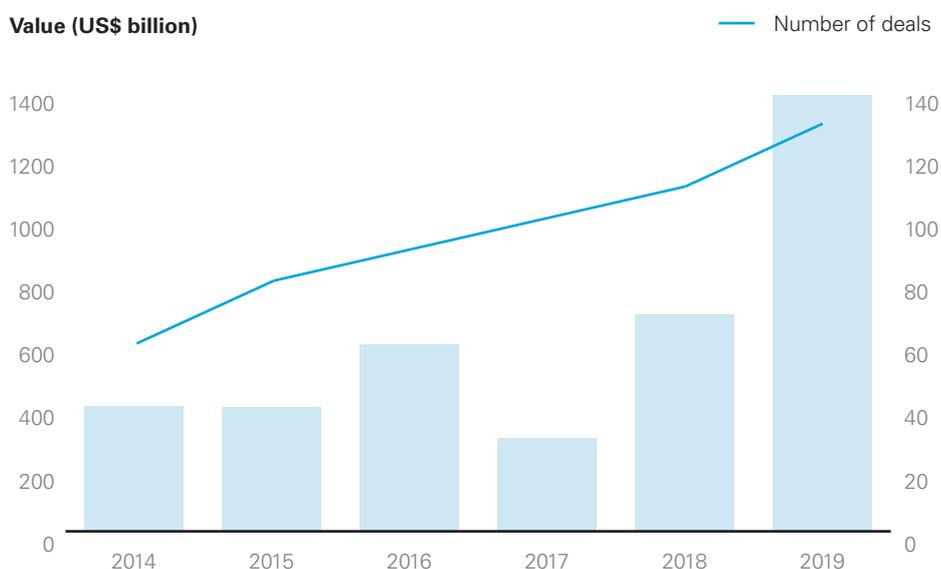
VC activity in Africa has grown significantly over the past two decades, becoming a more recognizable investment space. This trend will likely continue in 2021.

The world's second fastest-growing region, Africa experienced 4.6 percent average annual GDP growth from 2000 to 2016.¹² This robust economic backdrop has been a crucial driver of Africa's VC industry, creating a positive economic environment to catalyze innovation, entrepreneurship and investment. According to AVCA, the total number and value of VC deals reported on the continent reached a six-year record high in 2019, and the value of VC deals reported in Africa reached US\$1.4 billion in 2019, a record high.¹³ (see Figure 2).

PE and VC funding developed progressively in Africa supported by a 1.2 billion-person market, an expansive middle class consumer base and the world's largest free-trade area.¹⁴

In some regions, growth was facilitated by efforts to build a more supportive legislative framework for startups. In Francophone Africa, Tunisia and Senegal passed Startup Acts to create a better local environment for innovation and entrepreneurship.¹⁵ Although fintech dominates Africa's startup scene, entrepreneurship has also exploded within the utilities, logistics & transportation, e-commerce, healthcare and

Figure 2: VC activity in Africa, 2014 – 2019



Source: AVCA: Private Equity and Venture Capital in Africa: COVID-19 Response Report

agribusiness sectors. In 2019, Nigeria attracted a record high of US\$747 million in tech VC investment (37 percent of all funding), while Egypt reached number three both in terms of deal count (+147 percent year-over-year) and deal volume (+215 percent year-over-year). The regional landscape has now been redrawn, with 85 percent of total funding (US\$1.7 billion) flowing to Nigeria, South Africa, Egypt and Kenya.¹⁶

Despite the impact of the COVID-19 pandemic on the global economy, VC firms continued investing in Africa during 2020. Examples include pre-seed investments of US\$1 million into Okra by TLcom Capital¹⁷ and Autocheck Africa, completing a pre-seed round of US\$3.4 million co-led by TLcom Capital and 4DX Ventures.¹⁸ PE firms from the APAC region are also becoming more active on the continent, evidenced by Opay, an Africa-focused mobile payments startup owned by Chinese investors, raising US\$50 million in a Series A round from investors including Sequoia China.¹⁹ Transsion, China's dominant mobile phone device creator in Africa, partnered with Kenya's Wapi Capital to fund early-stage African fintech startups.²⁰ These early-stage investments may act as a signal to broader groups

US\$3.8 billion

PE fundraising in 2019

(AVCA: Private Equity and Venture Capital in Africa)

of global investors, attracting attention and increasing deal-making activity in 2021.

FUNDRAISING OPPORTUNITIES IN 2021

After suffering a dip in 2016 and 2017, PE fundraising started to recover in 2018, with the total value of fundraisings reaching US\$3.8 billion in 2019.²¹ However, the COVID-19 pandemic has raised challenges, including a disruption in the continent's fundraising efforts. 49 percent of GP respondents surveyed by AVCA expected the COVID-19 crisis to affect their fundraising timeline, and 29 percent expected it to impact their fundraising target.²² Any upcoming fundraisings may continue the ongoing trend of having DFIs as cornerstone LPs in the short- to medium-term. Despite these challenges, longer-term fundamentals continue to attract investors to the region, and capital raising continues, particularly where existing GP-LP relationships are in place. In July 2020, CDC Group Plc and Finnfund announced a combined commitment of US\$70 million to AfricInvest Fund IV to anchor the fund's first close at US\$202 million; and CDC committed US\$100 million to Helios Investment Partners' fourth fund.²³

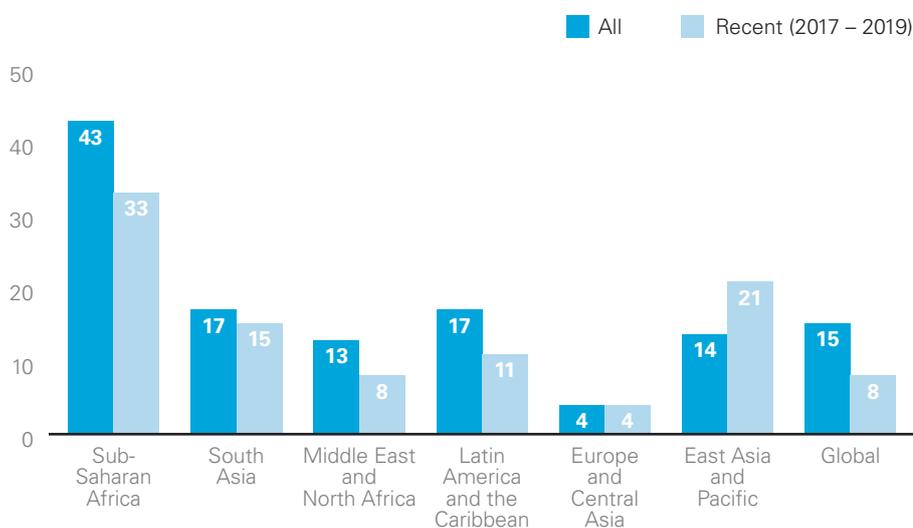
In addition to the traditional fundraising methods, PE funds and their investee companies also continue to innovate and explore different options to raise funds and finance projects.

Permanent capital vehicles (PCVs) offer advantages that attract interest from PE firms focused on investing in Africa. One attractive feature of PCVs is a longer fund life that enables PE firms to hold assets for a longer time and ride out short-term volatilities. Managers also do not have to return to the market on a regular basis to raise successor funds. In addition, PCVs align with the longer hold period for African portfolio companies. One recent example is the December 2020 combination between Helios and Fairfax Africa Holdings, which provided Helios with long-term shareholders in a PCV.²⁴

Blended finance is another fundraising avenue that rose to prominence in 2020. Blended finance is one important way that assets like sustainable infrastructure can be made “investable” by large-scale, mainstream capital in emerging markets. Investor risks can be allayed by the use of catalytic funding, such as grants from public and philanthropic sources, to mobilize additional private sector investment.

Sub-Saharan Africa has been the most targeted region for blended finance transactions to date, representing 33 percent of blended finance transactions launched in 2017 – 2019, and 43 percent of the market historically²⁵ (see Figure 3). The exit of CrossBoundary Energy I (CBE1) at a 15 percent net IRR to investors following ARCH Emerging Partners’ investment into CrossBoundary Energy is a powerful demonstration of the potential of blended finance to unlock new and impactful asset classes. CBE1 closed in 2015 as Africa’s first dedicated fund for commercial & industrial solar, and served as a prototype for a new blended finance approach to renewables in Africa. USAID’s Power Africa initiative contributed US\$1.3 million in the form of a repayable grant to attract additional private investors to the fund. At the close of the transaction, the leverage of matching private capital

Figure 3: Blended finance transactions across regions (percent)



Source: “The State of Blended Finance 2020” by Convergence

was more than 30 times.²⁶ It is clear that blended financing has become increasingly attractive to the private sector, which has been demonstrating a growing interest in responsible investment strategies and ESG investment.

Another expansion approach being explored by PE in Africa is entering into advisory contracts, pursuant to which a PE firm manages assets held by an investment manager. This provides the investment manager with PE asset management expertise, and allows PE firms to demonstrate their value creation and value realization capabilities. For example, Ethos Private Equity, a traditionally South Africa-focused firm, extended its pan-African reach through four of these initiatives, which resulted in Ethos managing assets in countries such as Egypt and Morocco.²⁷

EXIT OPPORTUNITIES IN 2021

Africa’s exit environment has been a consistent challenge for PE funds. In surveys conducted even before the onset of COVID-19, LPs identified limited exit opportunities as a key challenge, and Africa recorded a small number of exits in 2019 (only 43 exits, down from a peak of 52 in 2017).²⁸ Trade buyers account for almost half of PE exits, and the share of secondary exits was in decline. Initial public offerings (IPOs) remain rare as an exit route.



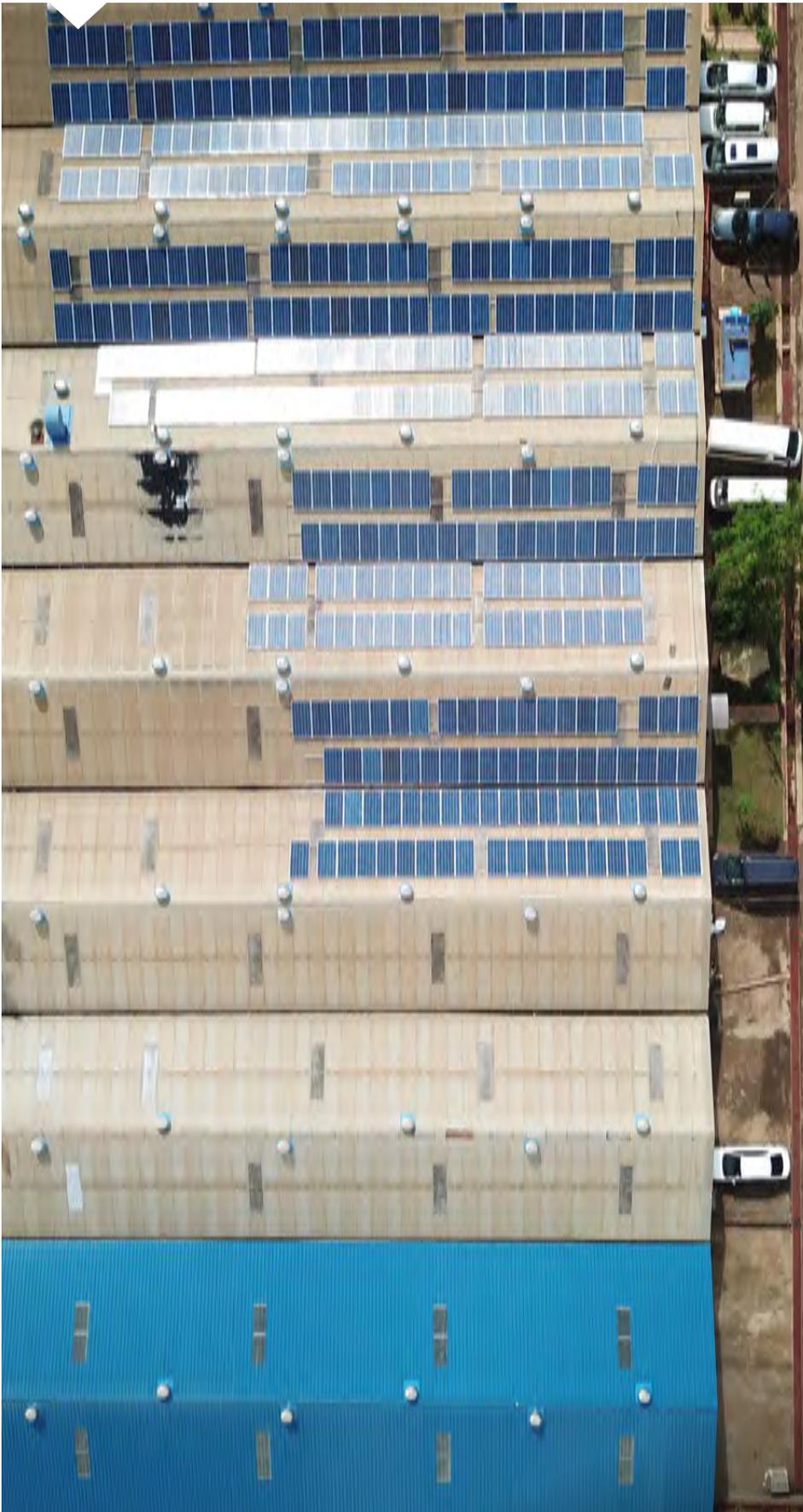
43%
of blended finance transactions in sub-Saharan Africa to date
(Convergence, “The State of Blended Finance 2020”)

Africa’s exit problems are largely due to a lack of liquidity, which leaves PE funds without consistent, reliable exit options. However, despite Africa’s historic exit issues and the further disruptive impact of COVID-19, an AVCA survey shows that LPs are optimistic about major aspects of the exit environment, with approximately 85 percent of respondents expecting exits to both trade buyers and PE or other financial buyers to increase over the following three-to-five years, while 52 percent expect the same of IPOs and capital markets.²⁹ LPs clearly see Africa as an attractive medium-to long-term opportunity, with more than 90 percent believing returns in Africa will be similar to or better than those in other emerging markets over the next decade.³⁰

Overall, Africa remains an attractive PE and VC investment destination, relative to other emerging markets, with significant growth expected.

Although the impact of the ever-evolving pandemic on investments in Africa is unclear, the long-term outlook for PE in Africa appears bright. Current economic challenges will require agility from PE and VC funds—for example, through innovative fundraising efforts. But stretched government finances and a challenging macro-environment may also represent enticing opportunities for PE investors in healthcare, fintech, renewables and other sectors in 2021.

Solar panel installation



- 1 IFC, Impacts of the COVID-19 Crisis on Private Equity Funds in Emerging Markets
- 2 AVCA: Private Equity and Venture Capital in Africa: COVID-19 Response Report
- 3 AVCA 2020 H1 African Private Equity Data Tracker report
- 4 Id.
- 5 Private Equity International – Africa Mapping out the continent’s hotspots
- 6 AVCA 2020 H1 African Private Equity Data Tracker report
- 7 Id.
- 8 2019 Africa Tech Venture Capital Report by Partech Africa Team
- 9 AVCA: Private Equity and Venture Capital in Africa: COVID-19 Response Report
- 10 <https://www.ft.com/content/beb9a517-ea27-4d52-8544-43c8fdafa2f1d>
- 11 AVCA 2020 H1 African Private Equity Data Tracker report
- 12 <https://www.odi.org/events/4592-africa-s-economic-growth-new-global-context>
- 13 AVCA Venture Capital in Africa: Mapping Africa’s Start-Up Investment Landscape
- 14 <https://www.worldbank.org/en/region/af/overview>
- 15 <https://www.privateequityinternational.com/the-rise-of-venture-capital/>
- 16 2019 Africa Tech Venture Capital Report by Partech Africa Team
- 17 <https://techpoint.africa/2020/04/27/okra-raise-s-1m-pre-seed-investment/>
- 18 <https://techpoint.africa/2020/11/18/autochek-raises-3-4m-pre-seed/>
- 19 <https://www.atlanticcouncil.org/blogs/africasource/africas-venture-space-attracts-global-interest/>
- 20 <https://techcrunch.com/2019/08/15/chinas-transsion-and-kenyas-wapi-capital-partner-on-africa-fund/>
- 21 AVCA: Private Equity and Venture Capital in Africa: COVID-19 Response Report
- 22 Id.
- 23 Private Equity International – Africa Mapping out the continent’s hotspots
- 24 <https://www.globenewswire.com/news-release/2020/07/10/2060633/0/en/Proposed-Strategic-Transaction-Between-Helios-Holdings-Limited-and-Fairfax-Africa-Holdings-Corporation.html>
- 25 The State of Blended Finance 2020 by Convergence
- 26 <https://aithority.com/technology/energy-management/crossboundary-energy-fully-exits-first-fund-at-15-net-irr-raises-40-million/>
- 27 <https://www.ethos.co.za/communications/ethos-secures-advisory-contract-for-ninety-ones-africa-private-equity-funds-bolstering-its-pan-african-platform/>
- 28 AVCA: Private Equity and Venture Capital in Africa: COVID-19 Response Report
- 29 Private Equity International – Africa Mapping out the continent’s hotspots
- 30 Id.

Ensuring sustainable exits from African mining

The development of mine decommissioning and closure laws

By Matthew Burnell

Mining is the cornerstone of many economies in Africa. It generates foreign direct investment, creates employment and drives development of supporting infrastructure. At the same time, mining can have negative impacts on health and the environment that might devastate communities if they are not correctly managed during the lifetime of a mine. This applies particularly during the decommissioning and closure phases of a mine's life cycle.

Increased focus on environmental, social and governance (ESG) issues in the mining sector¹ has led to a reassessment of sustainable mining practices. New technologies currently being researched and piloted seek to improve safety, reduce greenhouse gas emissions and use non-renewable resources more efficiently.² However, improved sustainability is not limited to the operational phases of mines. There is also room to improve how mining companies exit the jurisdictions in which they operate—by decommissioning and closure of their operations or by selling their assets.

In many African jurisdictions, the laws governing rehabilitation and closure are not well developed. While waiting for the laws to catch up, mining companies still need to implement measures based on industry best practices, their sustainable development goal commitments and investor and stakeholder expectations.

This article sets out some of the current legal issues relating to mine closures, decommissioning and sale of mining assets, and factors that mining companies, regulators and other stakeholders should consider when formulating rules to better reflect ESG principles.

A SHIFT IN THE SOCIAL LICENSE TO OPERATE: STAKEHOLDER ENGAGEMENT AND DISCLOSURE

Transparency is increasingly important for a mining company's social license to operate. The appropriateness of proposed rehabilitation measures, post-closure uses of mining land, and the risk of any latent and residual environmental and health impacts are critical considerations that communities and other stakeholders take into account when considering whether to grant—or continue to grant—a social license to operate.³

As a social license to operate is not a physical license, it might be unclear whether it is in place. It is established if a mining company has developed a trust relationship with communities, which only occurs through engagement and interaction.⁴ As a result, many mining companies are re-evaluating their participatory process to ensure that they obtain and maintain their social licenses, while ensuring that their decommissioning and closure objectives and plans meet the expectations of communities, investors and regulators.

Much of the public participation literature suggests that a successful participatory process must permit major stakeholders (communities, government institutions, environmental organizations, the mining company itself) to share their interests and objectives and, through debate and discussion, develop outcomes that are acceptable to all parties.⁵

By actively working together to reach these outcomes, participants can exercise a degree of control over the engagement process and, in doing so, feel that they are influencing the process outcome. In this way, they are more likely to accept the outcome, even if it does not align with their own interests or objectives.⁶



Increased focus on environmental, social and governance (ESG) issues in the mining sector has led to a reassessment of sustainable mining practices.



Mining companies and regulators can use several tools to improve the transparency and stakeholder acceptance of their mining operations:

– **Tool #1 – Provide opportunities for debate on competing issues.**

Following preliminary investigations and discussions, it can become apparent that opposing views exist. By providing a platform for competing issues to be discussed, participants can move “beyond their existing levels of understanding through a range of cognitive activities, such as elaborating, explaining ideas and concepts, questioning, argumentation, resolving conceptual discrepancies and metacognitive regulation of the learning process”⁷. This can help parties to reach a common interest, compromise or at least understand each other’s point of view.

– **Tool #2 – Understand stakeholders and package information in an appropriate manner.**

In South Africa, information relating to an application to mine or apply for closure is traditionally made available to stakeholders for review and comment. This may be coupled with a public meeting in which stakeholders are informed about the project details and provided with an opportunity to ask questions. These processes often do not take into consideration the level of education or access to resources of the stakeholders. Identifying the various categories of stakeholders may allow mining companies to package relevant information in a way that makes it easier for all stakeholder groups to engage.⁸

– **Tool #3 – Agree on rules of engagement.**

Agreeing on how parties will engage with each other allows stakeholders and mining companies to understand the best and most efficient way to communicate information. These rules of engagement should be regularly reviewed to ensure that they are still relevant and effective.⁹



Investors are another category of stakeholder who need to be consulted and engaged in a very different manner from communities. Mining companies communicate with investors primarily through their annual reports and sustainability reports. According to the United Nations Environmental Program, the “current state of reporting of the mining sector has however been largely inadequate to meet the various stakeholders’ information needs”¹⁰. An important challenge to achieving a higher level of mining sector environmental and social performance is the lack of a global common vision for the sector in terms of what constitutes sustainable operations for mining, including key performance indicators at the mine-site level. A clearer framework for the sustainability of the sector could help standardize and improve sustainability reporting for mining companies and inform relevant government policies or reporting and related initiatives.”¹¹

This form of voluntary disclosure followed the collapse of the Brumadinho tailings dam, which led to numerous deaths and had a significant environmental impact, when The Church of England Pension Board asked mining companies to disclose information relating to the tailings dams under their control, and the safety and risk of failure of these dams.¹² Although participation in the

Church of England Pension Board’s program was voluntary, it highlighted some of the mining operational risks to investors and raised questions about mining companies that elected not to participate. As ESG principles filter further into the mining sector, there may be an increasing focus on disclosure of environmental liabilities and the financial capacity of the mining companies to remedy harms they cause, in accordance with the “polluter pays” principle.

ENVIRONMENTAL CLOSURE AND REHABILITATION FUNDING AND LIABILITY

The purpose of providing financial provision or a rehabilitation bond is to ensure that a polluter is held to account for the impacts of mining and that a government is not left with the rehabilitation obligations.¹³ Mine closure is a material component of sustainable mining.¹⁴ One of its key components concerns the manner in which environmental rehabilitation will be implemented and funded during the life of the mine and after the mine ceases operation.

Mining companies have been criticized for not being transparent about mine closure planning and financial provisioning.¹⁵ Furthermore, no standard approach exists to calculate a financial provision, which makes it difficult to understand whether the financial provision quantum is adequate to cover the

actual costs of the environmental liability. In addition, jurisdictions vary considerably regarding calculations and use of financial provisions. Here are some factors that should be considered:

Using funds for progressive rehabilitation

In some jurisdictions, it is unclear if a mining company can be reimbursed from the financial provision it holds in circumstances where it has implemented progressive rehabilitation, reducing the overall environmental liability. In circumstances where the financial provision can be reduced over time as progressive rehabilitation is implemented, there is often a dispute regarding the quantum by which the financial provision can be reduced. In other words, an amount spent on implementing rehabilitation measures does not necessarily translate into an equal reduction in the overall environmental liability at a mine. It is possible that US\$1 spent could result only in a US\$0.5 reduction in overall environmental liability. Allowing a mining company to draw down the financial provision by US\$1 seems inappropriate, as it exposes the government to liability if the mining company is unable to fulfill its obligation.

The converse is also controversial. Is a company entitled to draw down more of the financial provision if its overall environmental liability is reduced by a greater amount than what the mining company spent to effect the remediation? In some jurisdictions, these concerns are avoided by restricting mining companies from drawing down the financial provision in reimbursement for progressive rehabilitation, indicating that any excess funds will be offset against future environmental liabilities.¹⁶

This approach may be reasonable in circumstances where the financial provision and the estimated environmental liability are similar in value. However, in circumstances where the financial provision significantly exceeds the environmental liability, mining companies could be discouraged from contributing funds to the financial provision if they cannot draw down on these funds for progressive rehabilitation. From a cash flow

perspective, there may be benefits to incurring closure costs when cash flow is positive,¹⁷ as opposed to implementing final closure after production is completed and cash flows are negative.¹⁸ Of course, there is no restriction on mining companies setting aside funds for rehabilitation purposes in a manner that falls outside of the regulatory process, though these funds would not be ring-fenced for environmental rehabilitation in the event that the company is placed into liquidation (see Figure 1).

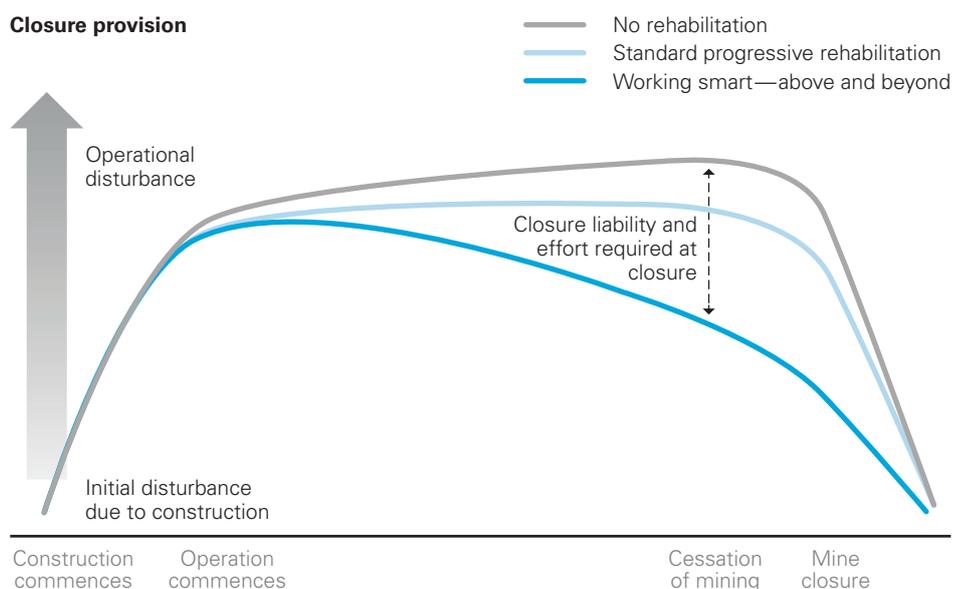
Post-closure liability

Regulators may be reluctant to allow drawing down a financial provision amount, particularly if future residual and/or latent environmental impacts might require funding. In some jurisdictions, the regulator may retain a portion of the financial provision of the funds after a mine closes to cover the costs of latent or residual environmental liabilities. Residual environmental liabilities are known environmental liabilities that exist at the end of the mining operations (such as pumping groundwater to prevent other mines from flooding). Mining companies will be required to continue to fund these costs until they are either transferred

to a third party or until the residual liabilities no longer exist. At that point, the financial provision held by the regulator should be returned to the mining company. To the extent a mining company fails to continue with pumping costs, the regulator can use the financial provision.

Latent environmental liabilities are different. These are unknown environmental liabilities that might occur in the future (such as pollution that could have a future environmental impact). In some jurisdictions, such as South Africa, the relevant authority is permitted to retain funds for latent environmental liabilities.¹⁹ However, there is no time period attached to how long the authorities may continue to hold these funds and when they would be returned to the mining company. A risk assessment of potential future liabilities should be conducted at the end of a mine's life to assess potential future environmental liabilities, with time periods attached to this residual liability. That is, if the residual liability does not arise within a particular period of time (say, ten years based on the risk assessment), the funds should be released to the mining company. In some jurisdictions, these funds seem to be held by the regulators indefinitely without mechanisms for their release.

Figure 1: Progressive closure—opportunity for liability reduction



Source: ICMM, Good Practice Guide, 2nd Edition

Financial provision and emergency incidents

Regulators may use a financial provision if a mining rights holder fails to fulfill its legal obligation under the relevant environmental management plan and environmental laws, or if the mining company has failed to act. However, these funds cannot be used in circumstances where the environmental harm arose from an emergency incident, such as a tailings dam failure. In these circumstances, the mining company must fund rehabilitation from an alternative resource. Companies should hold appropriate insurance, over and above any financial provision requirements, to cover environmental and social liabilities arising from emergency incidents. This is particularly relevant as extreme weather events arising from climate change test the limits of infrastructure.

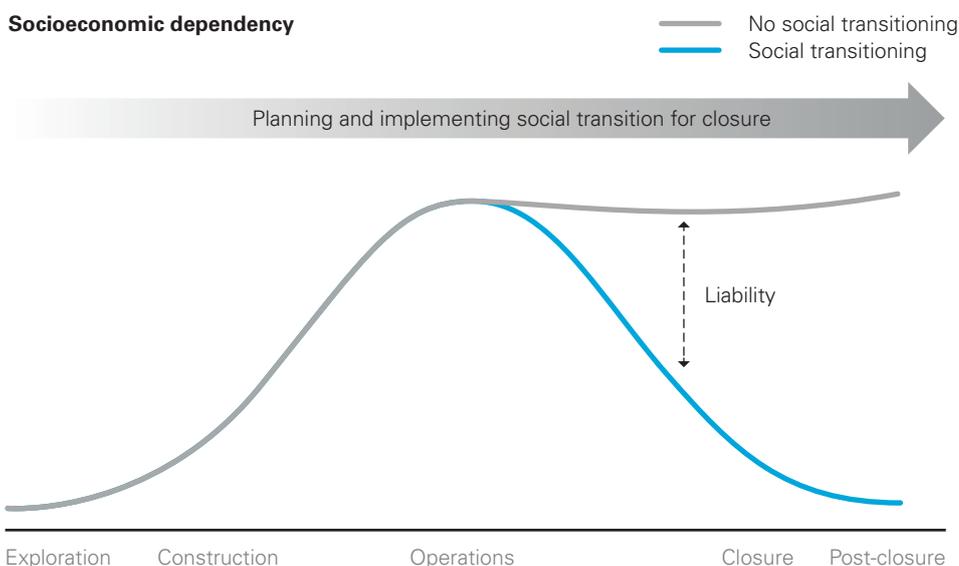
SOCIAL REHABILITATION

Environmental rehabilitation is only one component of the sustainable decommissioning and closure of mines. Aside from the long-term environmental impacts that may need to be monitored and, if necessary, remedied after mining operations have ceased, there are various social considerations to consider.

Communities develop around mining operations. These typically comprise mine employees and their families, persons looking for employment at the mine and entrepreneurs supporting the community. In addition, mining operations situated in rural areas or municipalities with limited economies often fulfill the roles and responsibilities of municipalities by providing services such as potable water, sewage services and electricity. As a result, when a mine closes, these communities may suffer extreme hardship unless steps are taken during the life of the mine to decrease the community's dependency on the mine and to create other economic opportunities.²⁰

The ICMM Good Practice Guide highlights the potential long-term liabilities of mining companies in circumstances where social transition planning is not incorporated into the closure planning strategy²¹ (see Figure 2).

Figure 2: Social transition through the LoA (illustrative example)



Source: ICMM, Good Practice Guide, 2nd Edition

Closure planning is an iterative process that involves: understanding social closure requirements; engaging with relevant stakeholders in accordance with relevant regulatory requirements; developing and implementing plans to reduce the dependency of stakeholders on the mine; assessing the effectiveness of the implementation plans; and, to the extent necessary, revising plans to accommodate new events or unsuccessful plans.

There are a number of ways to adapt existing large-scale mining operations to provide alternative or supplementary social economies. Mine infrastructure has been converted into tourist attractions in locations such as the Big Hole in Kimberley, South Africa; the Bonne Terre Mine in the United States; Slate Caverns in Wales; and Kolmanskop in Namibia.²²

In some instances, opportunities might exist to assist local governments with regulating artisanal mining operations.²³ Mining waste deposits can leave significant impacts on the soil, ground and surface water, particularly where the deposits were not suitably lined and/or maintained and rehabilitated. This is particularly true of historical mining waste deposits. Technology now makes it feasible, in certain circumstances, to extract minerals from these

waste deposits (and in doing so, remove a point source of pollution) and deposit any resulting waste materials in a more environmentally appropriate waste disposal facility. Opportunities might exist to utilize new technologies and historic mine waste deposits to formalize artisanal or small-scale mining operations and, in doing so, develop a secondary mining and rehabilitation economy.

Social transition in these cases needs to begin well before mining operations cease. While some of the examples above cannot formally commence until mining operations are completed, a number of steps should be considered and implemented well before the anticipated closure of a mine. For example, developing a formalized artisanal mining program might require legislation governing how such programs will run, transferring environmental liabilities from the mining companies to the state or the artisanal mining program, and obtaining and maintaining a financial provision for rehabilitation.

Unlike environmental rehabilitation, no obligation exists to hold a financial provision for purposes of social transitioning at the end of the life of a mine. In part, this is because social transition costs may not be quantifiable in the same way as environmental costs.²⁴

The "Big Hole", an open-pit and underground diamond mine, Kimberley, South Africa.



Room of abandoned house in ghost town Kolmanskop in Namib Desert, Luderitz, Namibia, Africa.



Yet as a mine approaches closure, these costs become more evident and can be better determined through engagement with communities and other stakeholders.

SUSTAINABLY EXITING MINING OPERATIONS BEFORE CLOSURE

Mining companies may decide to dispose of mining assets for political, legal, economic or strategic reasons. Whatever the reason, companies (and possibly even shareholders in some instances) run the risk of future liability under the “polluter pays” principle. It is common for purchasers in sub-Saharan Africa to assume all environmental liabilities and indemnify sellers against any future claims. Generally, environmental liabilities are incorporated into the determination of a purchase price agreed between the parties.

While commercial arrangements can reduce a seller’s liability risk, they do not eliminate it. Legislation based on the polluter pays principle exists in many sub-Saharan countries and authorizes the relevant authority to seek the rehabilitation costs from previous mine owners and operators.²⁵ In these circumstances, depending on the wording of the sale agreement, a seller may have a claim against the purchaser for any costs it incurs arising from a claim by the authorities, though the value of such a claim depends on whether the purchaser has the funds and ability to make good on the claim.

In practice, regulators are most likely to target the current mine owner and operator for remediation efforts and (where possible) look to previous owners and operators if there is any shortfall. In these circumstances, an indemnity under a sale agreement would have no value. Avoiding liability might be possible if the seller is able to demonstrate that, at the time that it owned/operated the mine, it took all reasonable and lawful measures to mitigate environmental liabilities and to prevent pollution or environmental degradation from occurring, continuing or recurring.

As part of a sale process, both sellers and buyers should follow measures so assets are sustainably maintained and, at the relevant time, decommissioned and closed:

– **Due diligence:** To reduce the risk of future liabilities, both sellers and buyers should consider:

– Whether the seller conducted ongoing rehabilitation during the life of the mine. Rehabilitation costs increase exponentially towards the end of the life of a mine. (Without contemporaneous rehabilitation, any environmental liabilities caused at the beginning of a mine will continue for the life of the mine, allowing pollution plumes to spread.)

– The buyer’s and the seller’s track records regarding rehabilitation and compliance with environmental laws

– How rehabilitation will be funded. Currently, financial provisions must be ring-fenced for environmental liabilities. (Will financial provisions be transferred to the buyer, as is often the case with rehabilitation trust funds, or will they be terminated, with the buyer expected to obtain its own rehabilitation funding in the form of guarantees or insurance policies?)

– If the mining company is required to rehabilitate historic environmental contamination onsite that it did not cause. In these cases, the purchaser must carefully consider whether these additional environmental liabilities have been included in the rehabilitation costs

– **Obligations to third parties:**

If a mining company assumed local authority responsibilities, it might be expected to donate infrastructure to the municipality upon ceasing mining activities, so the municipality can continue operating and maintaining it. In reality, local authorities are frequently unable to assume these obligations during the decommissioning process. This can make it difficult for mining companies to easily step away when mines are decommissioned. Purchasers should consider whether steps have been taken to transition these services from the mine to the local municipality as part of the social rehabilitation contemplated above

– **Obligations to employees:** Many communities surrounding a mine are directly or indirectly supported by the mine. At the end of the mine’s life, employees may be unemployed or have to relocate to find alternative employment, unless they are re-skilled for other jobs within the local economy

CONCLUSION

An increasing focus on ESG principles is revising all aspects of the mining industry. In particular, steps must be taken to ensure that the long-term environmental and social impacts of mining are sustainably rehabilitated. Significant legal considerations, some new and relatively untested, will need to be incorporated into legal frameworks going forward to ensure that communities are properly consulted in developing the post-mining land uses, that land is effectively rehabilitated and that communities are not left stranded when mining operations end.

- 1 White & Case, “Mining & Metals 2021: ESG momentum reaching a crescendo in a resilient market,” <https://www.whitecase.com/publications/insight/mining-metal-s-2021-esg-momentum-reaching-crescendo-resilient-market>
- 2 Donna Schmidt ‘Technology of mining in the future’ Mining Magazine; Felipe Sanchez and Philipp Hartlieb ‘Innovation in the Mining Industry: Technological Trends and a Case Study of the Challenges of Disruptive Innovation’ Mining, Metallurgy and Exploration 37 1385 – 1399 (2020).
- 3 International Council on Mining and Metals, Integrated Mine Closure Good Practice Guide, 2nd Edition, at 40.
- 4 Robert Bouttier and Ian Thomson ‘Modelling and Measuring the Social Licence to Operate: Fruits of a Dialogue between Theory and Practice’ (2011) Social Licence at 2.
- 5 Amy Gutmann and Dennis Thompson, Democracy & Disagreement (1998), at 1.
- 6 Matthew Burnell, “Developing and applying a constitutional framework for public participation in South Africa,” at 16.
- 7 Jie Lu and Daniel Churchill ‘Using social networking environments to support collaborative learning in Chinese university class: Interaction pattern and influencing factors’ (2014) 30(4), Australian Journal of Educational Technology at 473.
- 8 Cynthia Farina, Mary J Newhart, Josiah Heidt and Jackeline Solivan “Balancing Inclusion and “Enlightened Understanding” in Designing Online Civic Participation Systems: Experiences from Regulation Room’ (2013), Cornell e-Rulemaking Initiative Publications, Paper 14 at 184.
- 9 Matthew Burnell, “Developing and applying a constitutional framework for public participation in South Africa,” at 177.
- 10 UNEP, Sustainability Reporting in the Mining Sector Current Status and Future Trends at 11.
- 11 Id.

- 12 Investor Mining and Tailings Safety Initiative <https://www.churchofengland.org/about/leadership-and-governance/church-england-pensions-board/old-pension-s-board-investments-0>
- 13 Cornelissen, H, “An analysis of actual cost data for surface mine rehabilitation projects in south Africa and comparison with guideline values published by the Department of Mineral Resources” at 16.
- 14 A Carneiro and A Fourie, “Assessing the impacts of uncertain future closure costs when evaluating strategies for tailings management,” Journal of Cleaner Production (2019).
- 15 Centre for Environmental Rights ‘Full Disclosure: the truth about mining rehabilitation in South Africa <https://fulldisclosure.cer.org.za/2018>
- 16 Proposed Regulations Pertaining to Financial Provisioning for the Rehabilitation and Remediation of Environmental Damage caused by Reconnaissance, Prospecting, Exploration, Mining or Production Operations GNT 667 in Government Gazette 42464 dated 17 May 2019.
- 17 International Council on Mining and Metals, Integrated Mine Closure Good Practice Guide, 2nd Edition, at 40.
- 18 Ibid.
- 19 S24R of the South African National Environmental Management Act 107 of 1998.
- 20 ICMM, Integrated Mine Closure Good Practice Guide, 2nd Edition, at 43.
- 21 Id.
- 22 Skye Sherman ‘7 abandoned mines that are new awesome tourist attractions’ < <https://matadornetwork.com/read/abandoned-mines-now-visit/>>
- 23 Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development, “Global Trends in Artisanal and Small-Scale Mining (ASM): A Review of Key Number and Issues.”
- 24 ICMM at 45.
- 25 S28 of the South African National Environmental Management Act 107 of 1998; the Zimbabwe Environmental Management Act of 2002; Botswana Strategy for Waste Management; Mozambique: Mpaputo City Waste Management Strategy, 2006.

European multilateral development banks in sub-Saharan Africa

Supporting post-COVID recovery and growth in key sectors

By Kamran Ahmad and Marianna Naicker

A range of multilateral development banks (MDBs) have been active in Africa for several decades.

This article considers recent developments concerning the European MDBs, the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) in sub-Saharan Africa.

THE EUROPEAN INVESTMENT BANK

The EIB is a publicly owned international financial institution, whose shareholders are member states of the European Union. It was established in 1958 under the Treaty of Rome. As a “policy bank,” the EIB uses its financing operations to further EU policy goals.

Although the EIB has been active in Africa for many years, it has significantly increased its engagement in recent years, providing €4 billion to support public and private investments across the continent in 2020 alone, a 25 percent increase from 2019.

The EIB has offices in nine African countries (see Figure 1), where it works to accelerate and expand investments that deliver on the United Nations’ Sustainable Development Goals (SDGs), with a particular focus on tackling climate change and creating employment opportunities. According to Werner Hoyer, President of the EIB, “Africa is a key priority for the European Union and the European Investment Bank,” and the EIB’s global technical, sectoral and financial experience enhances the impact its engagement can have in Africa.¹

In addition to its direct lending, the EIB has provided more than €12 billion of new financing in Africa in recent years in cooperation with other European and international development finance institutions, including the African Development Bank (AfDB), the World Bank, the EBRD, and development finance agencies of the Netherlands, France and Germany.

Boost Africa is a joint initiative of the AfDB and the EIB, with financial support provided by the European Commission and the Organisation of African, Caribbean and Pacific States Secretariat (OACPS). Boost Africa seeks to enable African companies to become globally competitive. It focuses on sectors—such as information communications technology, agribusiness, financial services and financial inclusion, health, education and renewable energy—where innovations, especially in the digital sphere, can improve the quality of people’s lives.

THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT

In contrast to the EIB, the EBRD is a relative newcomer to Africa, especially to sub-Saharan Africa.

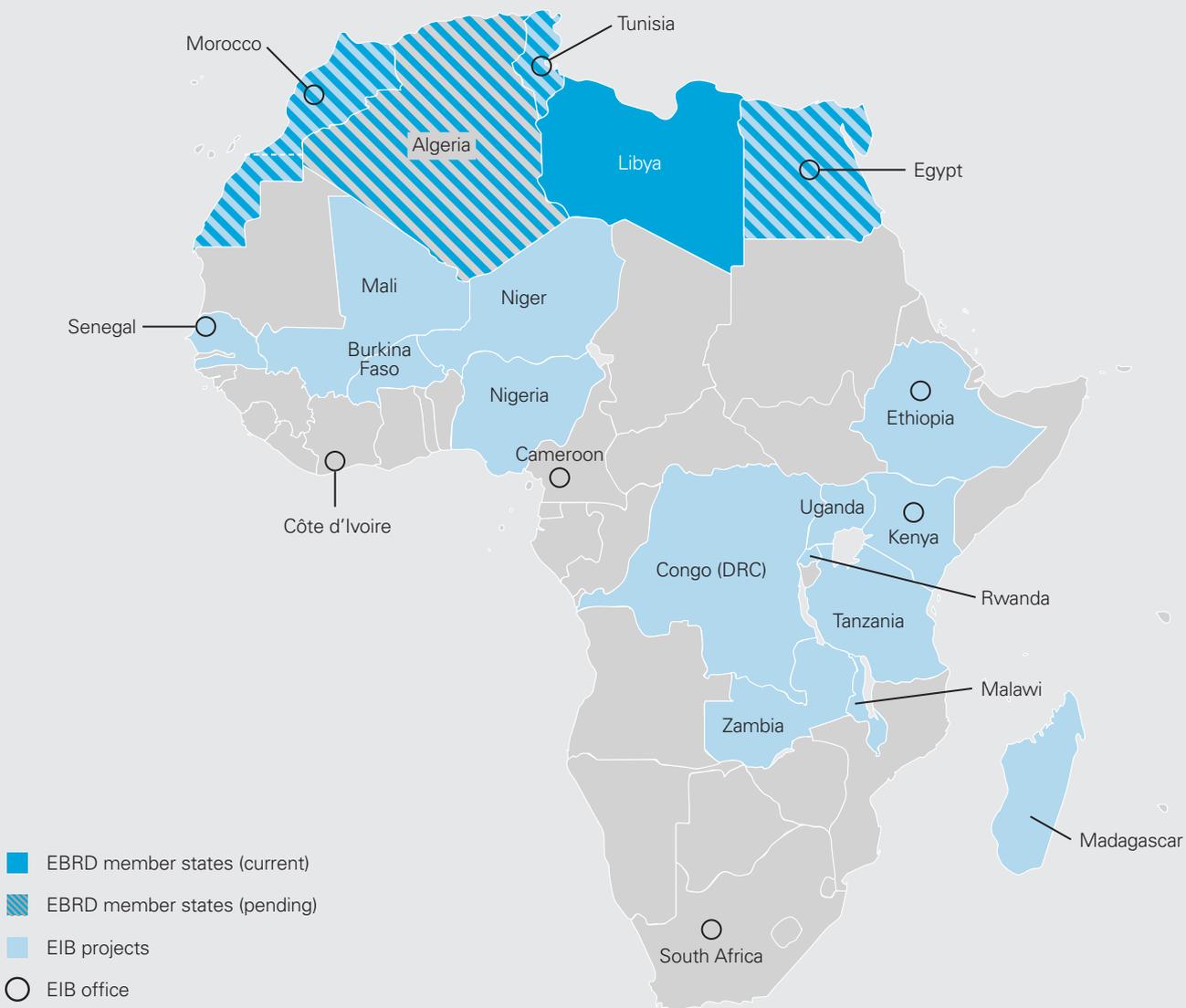
Established in 1991, the EBRD was founded to help former communist countries of Central and Eastern Europe transition to market economies following the end of the Cold War. Unique among MDBs, the EBRD’s mandate, codified in Article 1 of the Agreement Establishing the EBRD, includes assistance only to countries that are “committed to and applying the principles of multi-party democracy [and] pluralism.”



The EIB significantly increased its engagement in Africa, providing €4 billion to support public and private investments across the continent in 2020.



Figure 1: African countries where the EIB and the EBRD are active



Significant overlap exists between the industry sectors in which the EBRD and EIB invest

EBRD

- 🌾 Agriculture
- ⚡ Energy
- 🚆 Transport
- 🏭 Manufacturing and services
- 📡 Technology, Media and Telecommunications
- ⚖️ Legal reform
- 🏠 Financial institutions
- 👤 Equity funds
- 🏛️ Municipal infrastructure
- 🛣️ Infrastructure
- 🌿 Natural resources
- 🏠 Property and tourism
- ☢️ Nuclear safety

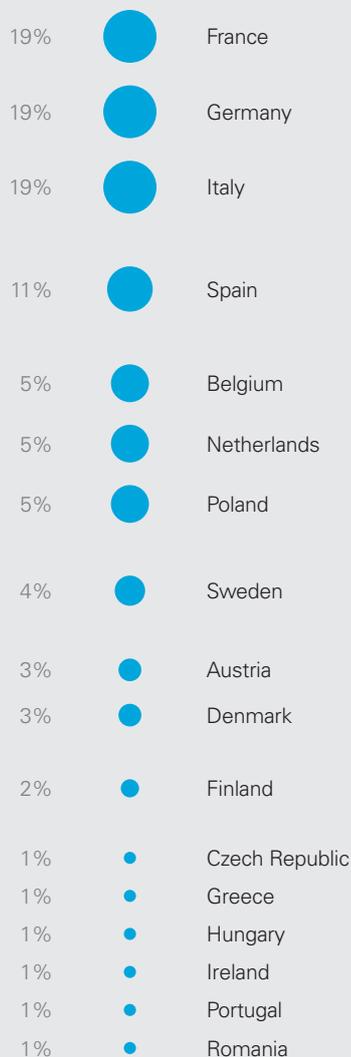
EIB

- 🌾 Agriculture
- ⚡ Energy
- 🚆 Transport
- 🏙️ Urban development
- 💰 Digital economy
- 🌐 Regional development and cohesion
- 👨‍⚕️ Health and life science
- 🎓 Education and training
- ♻️ Solid waste management
- 💧 Water and wastewater management
- 🌲 Forestry

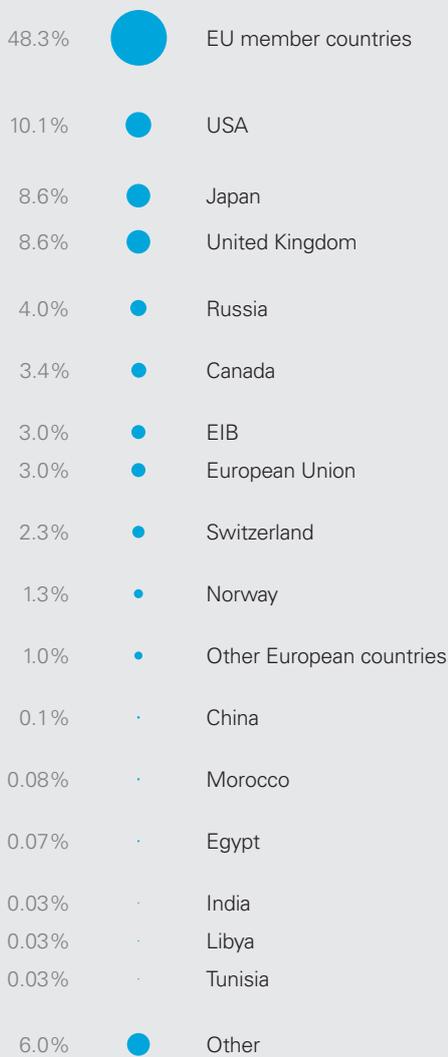
Source: www.eib.org and www.ebrd.org

Figure 2: Percentage of total capital subscription

Ownership of EIB



Ownership of EBRD



EBRD timeline of top subscribers



EBRD shareholders approved an application by Algeria in mid-2020 to become a member of the multilateral financial institution. This will be fully ratified once a number of pre-membership requirements are met.

Source: www.eib.org and www.ebrd.org

Houses and wind turbines near the Moroccan coast in Tanger Med



This distinct contribution is grounded in a focus on fostering private sector development, combining investment, policy and technical assistance in a single management and incentive structure, with the ability to make selective interventions in the public sector.

In addition to ensuring that these principles are applied in the countries where it operates, the EBRD's current strategic focus is on supporting the private sector in the "green" low-carbon economy, promoting equality of opportunity and accelerating digital transition.² In October 2020, the EBRD's Board of Governors elected Odile Renaud-Basso as the seventh president of the EBRD. The EBRD's new five-year strategy looks beyond the pandemic to what needs to be achieved in order to sustain member countries' progress in achieving the SDGs. Some ideas being discussed include challenging itself to do more with impact investors, as well as implementing new instruments (such as thematic funds) and new uses of old instruments (such as guarantees).³

The EIB is a shareholder of the EBRD⁴. Initially focused tightly on Central and Eastern Europe, the EBRD has expanded its scope in recent years to 38 countries, many of which fall in the EBRD's southern and eastern Mediterranean region.⁵

One of only two major MDBs currently expanding its shareholder base, the ERBD is owned by 69 countries, including four from North Africa: Egypt, Libya, Morocco and Tunisia.⁶ Algeria's membership was approved in 2020.⁷ The EBRD also intends to further expand its activities in sub-Saharan Africa.⁸

MDB COLLABORATIONS

The EBRD and EIB are two of 12 MDBs, with the International Monetary Fund (IMF), that are collaborating to help finance the SDGs. The twelve institutions launched their first-ever joint report in December 2020, noting that they had funded a global response package of US\$230 billion during 2020-2021 to reduce the impact of the COVID-19 pandemic, of which US\$75 billion will be directed to the world's poorest countries in 2021.

Expanding the scope of the EBRD's activities in Africa, particularly in sub-Saharan Africa, was a priority of the previous president, Suma Chakrabarti, who stated in 2020: "We think there is a case for limited and incremental expansion into sub-Saharan Africa, and we will be putting that case to our shareholders."⁹ The EBRD is also looking to partner with development finance institutions (DFIs) and other active participants in sub-Saharan Africa, and intends to focus on

46%

of the funds the EBRD disbursed in 2019 were invested in projects related to the "green economy."

(EBRD Annual Review 2019)

countries closely integrated with those where it currently operates.¹⁰

Several leading MDBs have overt sustainability objectives and are expected to play a crucial role in the energy transition. In 2019, 46 percent (approximately €4.6 billion) of the funds the EBRD disbursed were invested in projects related to the "green economy."¹¹ By 2025, the EBRD intends that the majority of its business volume will be "green," with a particular focus on climate finance.¹² An example of this focus is the EBRD's innovative Sustainable Energy Financing Facilities (SEFFs), which the EBRD uses to extend credit lines to local financial institutions that seek to develop sustainable energy financing products.

Financing for sustainable energy projects is provided in two key areas: energy efficiency and small-scale renewable energy. Local financial institutions on-lend the funds they receive from the EBRD to their clients, which include small- and medium-sized businesses, corporate and residential borrowers, and renewable energy project developers.¹³ Given Africa's significant power generation shortfall, SEFFs seem to be an approach that aligns very well with the continent's development priorities and in support of the energy transition.

SECTORS TARGETED BY MDBS FOR GROWTH AND INVESTMENT

MDBs have placed particular focus on the following sectors:

ENERGY TRANSITION



Gas

MDBs play a key role in supporting the transition towards greener energy sources and reducing gas flaring in Africa (which results in significant negative health and climactic externalities) by financing gas processing plants and gas-to-power projects.

Given the increased interest in gas development brought about by these initiatives, appetite for gas commercialization projects is increasing among industry players and commercial banks. In particular, indigenous companies are seeking to expand their focus on gas commercialization activities in order to maximize their earnings from the gas value chain.

Even in countries whose revenues largely depend on crude oil exports, there is a growing recognition of the importance of diversifying away from traditional fossil fuels.



Renewables

Activity in Africa's renewable energy sector continues to grow. One landmark transaction announced at the start of 2021 was Qatar Investment Authority's acquisition of a 50 percent stake in Enel Green Power's stake in approximately 800 MWs worth of projects in operation and under construction in South Africa and Zambia. As the cost of constructing solar PV units continues to fall worldwide, and as African nations prioritize fiscal and legal incentives tied to these projects, DFIs, developers and investors in Africa expect activity in the renewables sector to grow.



Captive power

Heightened activity in the captive power sector is tied to increasing investment in the renewables sector. There is a growing recognition that captive power projects can be constructed and mobilized quickly and at reasonable cost.

DIGITAL INFRASTRUCTURE



Few sectors in Africa have attracted the volume of foreign direct investment that digital infrastructure has in recent years. For example, Teraco Data Environments (Pty) Ltd., Africa's largest interconnection hub and vendor-neutral data center provider, is currently constructing a 38 MW powered data center in Johannesburg that is expected to become the largest data center in Africa. Africa's internet usage is growing at an exponential rate. According to the GSMA, average African mobile data traffic will more than quadruple to just over seven gigabytes per month per subscriber. This rapid growth offers opportunities for investors and financiers. South Africa is currently conducting an auction process for transmission signal rights necessary for full 5G rollout. Ethiopia is similarly planning to open its market. In addition to signaling rights, there is growing focus on investments in connection with mobile masts and "last-mile" connectivity in Africa.¹⁵

CONCLUSION

The EIB has had a presence in several African countries for many decades, and the EIB is clearly committed to accelerating these activities. The EBRD's expansion into sub-Saharan Africa is a noteworthy development. We understand the EBRD intends to discuss this initiative further at its 30th Annual Meeting in June 2021.¹⁴

We anticipate further collaboration between MDBs and other key stakeholders in sub-Saharan African countries and, as a result, expect to see increased focus on private sector participation across key sectors that will act as a catalyst for growth.

- <https://www.eib.org/en/press/all/2020-06-6-eib-confirms-eur-3-billion-of-new-investment-across-africa-in-2019>
- <https://www.ebrd.com/what-we-do/strategy-capital-framework>
- <https://www.ebrd.com/news/speeches/putting-climate-and-the-environment-at-the-core-of-ebrd-activity.html>
- <https://www.eib.org/en/about/governance-and-structure/shareholders/index.htm>
- <https://www.ebrd.com/about-the-semed-region.html>
- <https://www.ebrd.com/shareholders-and-board-of-governors.html>
- <https://www.reuters.com/article/ebrd-algeria-idAFL5N2EL2BE>
- <https://www.ebrd.com/news/2016/creating-green-financial-markets-in-africa.html>
- <https://www.reuters.com/article/ebrd-growth/ebrd-shareholders-set-for-vote-on-africa-expansion-in-may-president-idUSLBN2AL4MY>
- <https://www.ebrd.com/what-we-do/strategy-capital-framework>
- <https://2019.ar-ebrd.com>
- <https://www.ebrd.com/what-we-do/get.html>
- <https://www.ebrd.com/what-we-do/sectors-and-topics/sustainable-resources/seffs.html>
- EBRD Strategic and capital framework, 2020-2025
- <https://projects.worldbank.org/en/projects-operations/project-detail/P167183>

African mining 4.0: An innovative sunrise for African miners

Transformative technologies are ushering in a new era of efficiency, safety and growth

By Rebecca Campbell, Andrzej Omiotanski, Matthew Burnell and Gary Felthun¹

With the increasing pace of innovation, accelerated by COVID-19, new transformative mining technologies are rapidly becoming available to the mining industry, ushering in a new era of increased productivity, efficiency, safety and growth for miners.

African miners stand to gain as the world embraces a new digital revolution. New transformative mining technologies allow miners to mine resources that were previously unaffordable and impossible to access.

Transformative technologies will not only increase the bottom line for African mining companies. Importantly, adoption of new technologies will also facilitate better environment, social and governance (ESG) performance.

In this article, we survey the state of play in technology and equipment innovation in Africa and discuss the challenges and opportunities facing African mining companies as they embrace new innovative technologies.

MINING TECHNOLOGIES

African mining companies are rapidly adopting the latest technologies to modernize their operations, yet significant opportunities remain. Figure 1 shows some examples of existing and future mining technologies and their application in the African mining industry.

MINING TECHNOLOGIES DRIVING ESG COMPLIANCE

Widespread adoption of the existing and emerging technologies shown in Figure 1 will allow African mining companies to not only take a huge leap forward technologically but

also address critical ESG matters by adhering to newly formed industry standards.

ESG has been a focal point for the mining industry. The International Council of Mining and Metals (ICMM) recently launched a set of Mining Principles intended to drive responsible production. The Mining Principles define best practices in ESG requirements for the industry through a comprehensive set of performance expectations.² The requirements include, among other things, a focus on health and safety and environmental performance. New technologies can help address both, but come with their own new challenges.

Health and safety

In December 2020, Ivanhoe Mines and Zijin announced the closing of an equipment financing facility for their Kamo-a-Kakula Copper Project in the Democratic Republic of Congo. The project's goal is to produce the world's "greenest copper," and use proceeds from the facility to purchase automated underground mobile mining equipment and services.³

Automated mobile mining equipment is the first step towards autonomous machinery that is operated remotely or semi-remotely, which in turn reduces the risks of injury to employees as they will not be directly at the mine face, thereby reducing human exposure to risks like rock-falls, earth tremors and other dangerous situations. Africa's newest mines, like the Kamo-a-Kakula Copper Project, are being designed for continuous progression towards autonomous mining over time,



African miners stand to gain as the world embraces a new digital revolution.



Figure 1: Technology and applications in the African mining industry

Existing tech	Technology	Application in the African mining industry
	 Autonomous systems	<ul style="list-style-type: none"> □ <i>Example:</i> Resolute Mining’s Syama mine in the Republic of Mali is progressing to be the world’s first fully autonomous underground gold mine using, for example,¹ autonomous (i) haulage and loaders (which are used to move/load ore and waste to the surface) and (ii) drilling. □ <i>Benefits:</i> Autonomous systems increases worker safety, allow continuous and efficient mine operation 24/7 and up-skill workers to manage autonomous machinery.
	 Drones	<ul style="list-style-type: none"> □ <i>Example:</i> Kumba Iron Ore, a leading South African supplier of seaborne iron ore, uses drone technology, reducing the need for employees to do physical blast clearances; drones are also used to conduct survey technology and general observations. □ <i>Benefits:</i> Drones outfitted with cameras and scanners can provide data on operations and current conditions in the mine, increasing worker safety, efficiency and up-skilling workers who manage the drone fleet.
	 Internet of Things (IoT)	<ul style="list-style-type: none"> □ <i>Example:</i> De Beers Marine South Africa (together with Orange Business Services, network-native digital services subsidiary of telecoms giant Orange Group) built an Internet of Things (IoT) platform on board the MV Mafuta, currently the world’s largest offshore diamond mining vessel, to make sure crew maintain a safe distance from heavy machinery.² □ <i>Benefits:</i> A combination of sensors and machinery allows miners to monitor and track operations in real time, increasing safety and efficiency.
	 AI Machine Learning	<ul style="list-style-type: none"> □ <i>Example:</i> Exxaro Resources Limited, one of South Africa’s largest coal and heavy mineral companies, is deploying artificial intelligence (AI), including a first-of-its-kind AI tool for international coal trading. □ <i>Benefits:</i> AI Machine learning software will enable miners to quickly analyze data and respond to possible business disruptions, as well as rapidly identify and address any safety concerns in real time.
	 Blockchain	<ul style="list-style-type: none"> □ <i>Example:</i> Circular announced the first mine-to-manufacturer traceability system of Rwandan tantalum powered by blockchain. □ <i>Benefits:</i> Provides traceability and transparency across the supply chain where it is really needed—conflict minerals, rare earth minerals, toxic and polluting waste, child labor-based production, etc.
	 Hydrogen/ Clean Hydrogen/ Clean Steel	<ul style="list-style-type: none"> □ Hydrogen is currently produced using natural gas and coal. The recent surge in renewables (solar PV and wind generation) and the resulting decrease in renewables production costs opens the door to producing hydrogen-using renewables. □ Hydrogen can replace coking coal in ore-based steel. □ Africa’s solar PV comparative advantage over the rest of the world stands African miners in good stead to benefit from the use of clean hydrogen in the mining industry, especially in decarbonizing steel making. In particular, South Africa is well poised to take advantage of hydrogen’s potential; “with the world increasingly turning towards countries that have optimal renewable energy resources to provide the clean energy of the future, South Africa is in an extraordinary position to revolutionize its own economy and supply green hydrogen to the world.”³
Future tech		

1 <https://www.miningmagazine.com/technology-innovation/news/1387604/syama%E2%80%99s-automation-surge>

2 http://www.connectingafrica.com/document.asp?doc_id=763671

3 <https://www.pwc.co.za/en/publications/unlocking-south-africas-hydrogen-potential.html>

Source: African Mining

starting with automated equipment. Newer mining methodologies can also open new opportunities by making previously uneconomic deposits viable while vastly improving safety, as witnessed at another of Ivanhoe Mines' projects, the Platreef platinum mine, which relies on massive mining methods, in contrast to the narrow vein mining methods used by most other PGM miners in Africa.

However, some argue that the usage of automated and autonomous machinery may have collateral implications on jobs and surrounding communities around mine sites, which rely on the mines for employment. The mining industry, particularly in Africa, is traditionally very labor-intensive. Automated and autonomous mining methods require more highly skilled employees and ultimately fewer, people at the mine face, but this does not necessarily lead to overall less employment in the vicinity of the mine after secondary employment is taken into account. The resultant transition of the labor force needs to be carefully managed with communities, governments, labor unions and employee representatives before new technologies are implemented. Where possible, employers need to investigate re-skilling and retraining their employees to meet the changing skill sets required by these new technologies. Even

though certain new jobs will be created (autonomous/remote-vehicle managers, etc.), if there isn't a managed process of transition in place, these changes may not be accepted by affected communities and host governments, and miners will struggle to maintain their social license to operate.

Environmental efficiencies

Investors, customers, and host communities are increasingly scrutinizing the environmental and social impacts of mining operations. New technologies enable miners to reduce their carbon footprint, improve the efficiency in which they use non-renewable or scarce resources and minimize the amount and hazardousness of waste generated by such operations. From an energy perspective, mines are looking to implement renewable forms of energy generation to reduce greenhouse gases that are otherwise emitted from burning fossil fuels. These renewable energy sources become more attractive with significant advancements in battery storage technology providing power when the sun is not shining or the wind is not blowing.

The effects of climate change are predicted to cause droughts in many areas where mining activities are conducted. In these areas, technologies that allow mines to use water resources more sparingly

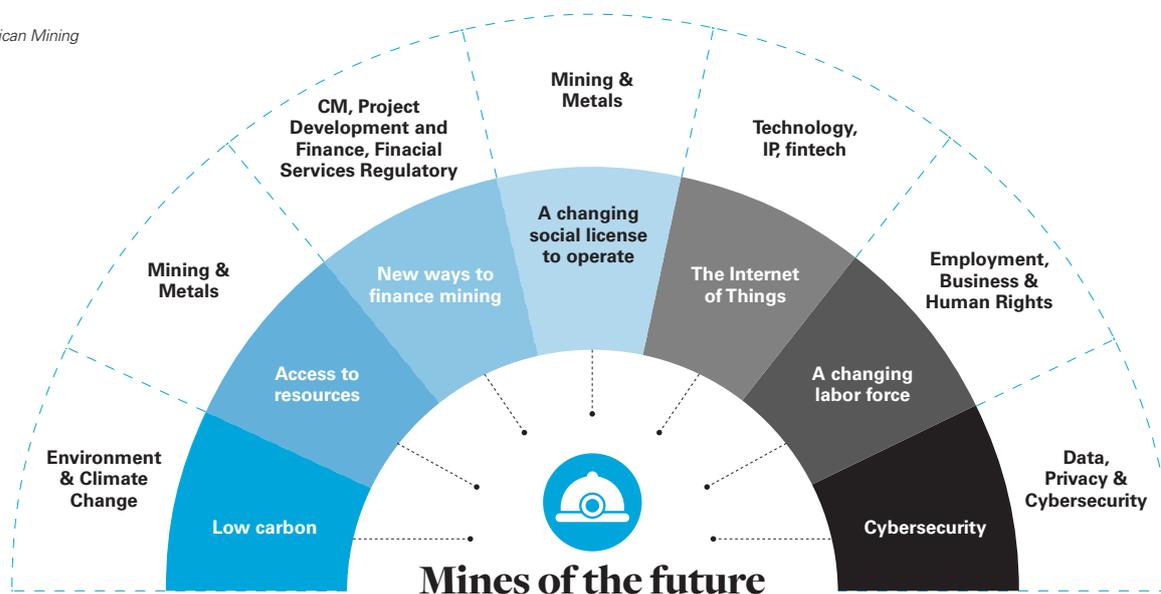
and, where possible, re-use or recycle water will become essential for promoting the longevity and sustainability of the mining industry while building resilience against the effects of climate change.

With investors, funds and commercial banks all more aware of ESG-related risks and impacts, it may become increasingly difficult to finance mining operations and related expansions and extensions because of internal policies and international regulations and policies such as the Equator Principles, IFC Standards and World Bank Guidelines. The mines of the future, which incorporate cleaner and/or more efficient technologies, will ultimately find it easier to secure funding. But there is a transition ongoing for funders as well: The "mines of the future" necessarily require funding of sometimes unproven technologies, which may in turn face challenges getting approved by investment and/or credit committees, especially among more "traditional" funders in the sector.

Innovation, including through improvement of safety and environmental efficiencies (in line with ICMM's Mining Principles) will allow African miners to build mines of the future that are not only sustainable but also better capable of securing funding for expansions and additional innovative technologies (see Figure 2).

Figure 2: Mines of the future

Source: African Mining



LEGAL CONSIDERATIONS

Despite still lagging behind technological advancements, mining laws across Africa continue to evolve, and so the miners that embrace and lead change will reap the early-bird rewards. The mine of the future requires “leadership that embraces a culture of data-led decision-making and a new way of thinking and operating.”⁴ While miners will encounter countless legal considerations, we set out a couple of key ones.

Permitting

Implementing new technologies has the opportunity for significant environmental and social improvements to mine efficiency and waste and emissions reductions. However, the implementation of new technologies at mines is often delayed due to lengthy administrative procedures. From a timing perspective, companies need to account for these significant delays in their construction and operational timelines. Given the significant positive impacts that may arise for the mines, the environment and the surrounding communities, governments may wish to reconsider their regulatory processes to allow for streamlined permitting and amendment processes for “sustainable technology” options.

Carbon credit regulations

As miners improve their environmental efficiencies, they may be able to take advantage of carbon credit programs. To the extent that alterations to existing projects or new projects meet the “additionality” requirements contemplated under the carbon credit programs, it may be possible for mining companies to generate carbon credits to offset any excesses of their carbon budgets or carbon taxes.

Data privacy and intellectual property

New technologies rely on data transfers, sometimes including personal data, from one party to another, and at times via a service provider’s network. Miners will need to ensure any new technologies are implemented in accordance with applicable data protection laws to protect personal data to avoid hefty fines. In addition to the potential

disclosures of protected and personal information if databases are breached, if third parties gain operational control of technology and machinery at mines, they could cause significant damage to the environment, health and safety, and mining operations.

Also, as miners incorporate third-party technological advancements into their systems, they may find themselves innovating independently of third-party technology and should have in place robust intellectual property management processes to protect their innovations and protect against any inadvertent breaches of third-party intellectual property rights.

FINAL THOUGHTS

Embracing available and future technologies is significant for the resilience and sustainability of the African mining industry, enabling African miners to jump from Industry 2.0 to 4.0.

While the initial set-up costs will be significant, the return on investment over time should create profitability and jobs⁵ and—importantly—drive ESG performance.

An innovative sunrise for African miners is just around the corner. It looks green as well.

¹ This article was previously published in *African Mining*.

² <https://www.icmm.com/mining-principles>.

³ <https://www.ivanhoemines.com/news/2020/kamoa-kakula-copper-project-secures-us-420-million-in-project-level-credit-facilities-including-a-eur-176-million-us-211/>.

⁴ Deloitte, *The Future of Mining in Africa* 2018.

⁵ <https://www.miningreview.com/energy/africa-transformative-mining-technology/>.



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