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Initiative for Risk Mitigation in Africa

# African Development Bank: Initiative for Risk Mitigation

Needs Assessment for Risk Mitigation in Africa:  
Demands and Solutions

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## Executive Summary

The objective of the study is to assess risk mitigation needs and possible solutions, advancing investment in Africa. The terms of reference (TOR) state that the study is to:

*“... generate a ‘map’ of the needs of investors into North-Africa for guarantees and other risk mitigation instruments, and more generally into the Continent as a whole, over the next three years. This includes both sovereign and non-sovereign guarantees, and covers both short term and long term tenors. The ‘map’ provided will identify gaps in the provision of guarantee and risk mitigation products for investors – and help clarify the needs of investors in the current investment climate.”*

The study results underline the significant demand for risk mitigation in African countries and the need to scale up a wide array of risk mitigation instruments, services, and processes that will serve to accelerate private sector investment throughout the continent.

The literature review and the survey input from investors, public officials, and experts result in the conclusion that ***demand for risk mitigation in Africa is high and increasing, for two principal reasons:***

- 1) Continued perceptions of unacceptable levels of risk throughout Africa; and
- 2) Increased demand for investment and access to finance from both domestic and international investors.

Therefore, the drivers for risk mitigation include not only the perception of significant risk but also the increased investment opportunities in Africa and the increasing potential for private sector growth throughout the continent. As one survey participant, the head of a leading provider of risk mitigation in Africa and worldwide, stated: *“While it may be counter-intuitive, as the risk decreases the need [for risk mitigation] still increases because the amount of investment goes up. Quantum of risk is as important as the degree of risk in driving the need for risk mitigation.”*

These two variables – the increasing importance of Africa in global investment markets and high risk perceptions – are the underlying drivers of the need for risk mitigation to mobilize investment and access financial markets throughout all African countries. Across the 112 study participants, virtually all stated that ***risk mitigation is needed to increase investment and access to finance in Africa***. While there is a significant variance between countries, ***the aggregate view of demand for risk mitigation in the four principal regions of Africa – North, West, East, and Southern Regions - is in fact quite similar***.

To gauge the type of demand by sector, the survey asked study participants for their views on demand for risk mitigation in key areas suffering from lack of investment and access to capital: infrastructure, agriculture-processing facilities, corporate finance, trade, and finance to small and medium-sized enterprises (SMEs). The survey results emphasize the ***consistently significant demand for risk mitigation across infrastructure, agriculture, trade, corporate finance and SME finance in Africa***.

The survey responses also underscore ***the need for the official sector to widen its definition of risks that need to be mitigated to increase investment in Africa and its support of commensurate risk mitigation solutions***. The survey included a wide spectrum of factors that have been cited as impeding investment in Africa:<sup>1</sup>

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<sup>1</sup> For details, see the Risk Mitigation Literature Review conducted for the study in the separate annex.

- 1) Classical risks, some of which are covered by widely available risk mitigation instruments: These risks include political violence, expropriation including ‘creeping expropriation,’ currency inconvertibility, devaluation, unfavourable regulatory changes, and commercial and operational risks.
- 2) Broader business environment risks not covered by traditional risk mitigation instruments: These risks are well documented in the literature, such as the lack of supporting infrastructure, ineffective legal systems, and interest rate increases.<sup>2</sup>
- 3) Business risks that are often cited as impediments in developing and investing in specific projects and businesses: These risks are also well documented in the literature, and include lack of funds for developing projects with uncertain returns and the ‘procurement process risks’ in public-private partnership (PPP) transactions resulting from a variety of perceived or real problems with government procurement processes.<sup>3</sup>

*Almost all the survey respondents reported significant demand for risk mitigation to address all the above types of risks.* Further, 90% of the survey respondents estimated increased risk mitigation demand for the full spectrum of these risks, with the exception of expropriation, increasing *by more than 50% over the next three years.*

*The study results therefore indicate that there is a large risk mitigation gap, and that the formulation of effective risk mitigation solutions is a pressing priority for the official sector – for both African governments and their development partners.* Solutions emerging from the study for addressing the risk mitigation gap in Africa are summarized below:

**1) Increase the effectiveness of existing public sector risk mitigation instruments**

- Increase effectiveness of marketing
- Reduce transaction time, costs and pricing
- Improve risk mitigation instruments, increasing effectiveness with private sector input
- Provide dedicated Product Specialists
- Simplify application processes (dedicated help desks, reduced complexity and required time of the application process)
- Improve inter-agency cooperation
- Expand the capacity of the official sector for providing risk mitigation solutions by increasing syndication of risk mitigation products to the private sector

**2) Enlarge the definition of risk mitigation and create a larger “Toolbox of Risk Mitigation Solutions” to include the broader set of risk issues and solutions that impede investment and access to finance**

- Support the development of new risk mitigation products, processes, and approaches that address specific gaps:
  - Sector-specific approaches (e.g., energy, agriculture, etc.)

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<sup>2</sup> For example, see Angela Hansen et al, “Assessing Credit Guarantee Schemes for SME Finance in Africa: Evidence from Ghana, Kenya, South Africa and Tanzania” (Paris: Agence Française Développement, July 2011); United Nations Environment Programme Finance Initiative, “Financing Renewable Energy in Developing Countries: Drivers and Barriers for Private Finance in Sub-Saharan Africa” (Geneva: United Nations Environment Programme Finance Initiative, February 2012); World Economic Forum, “Building on the Monterrey Consensus: The Untapped Potential of Development Finance Institutions to Catalyse Private Investment” (Geneva: World Economic Forum, 2006).

<sup>3</sup> For example, see World Economic Forum, “Building on the Monterrey Consensus;” Centennial Group Holdings, “Research on Innovative Finance to Achieve Millennium Development Goals” (prepared for the Japan Bank for International Cooperation, February 2006).

- Coverage of risk (e.g., expand to provide 100% risk coverage with wraps, convertibility, etc.)
  - Need to deepen domestic financial markets and increase market liquidity (e.g., improve ratings and transparency, targeted interventions to decrease local interest rates and extend tenors through bank on-lending programs, etc.)
  - Scale up project development support/funding and financial advisory support (develop sources of finance and financial advisory support)
  - Scale up use of project structuring approaches (e.g., Special Purpose Vehicles (SPVs), ring-fenced revenues, contracts, first loss facilities, etc.)
  - Create ways to reduce procurement risk and incentivize the private sector to develop projects
  - Improve the ability of governments to respond to investor issues and create business-enabling environments
- 3) **Improve the leadership provided by Development Finance Institutions (DFIs) and bilateral development partners by implementing internal changes to optimize their effectiveness in filling the risk mitigation gap**
- Align risk mitigation with country programming (including dedicated credit lines for guarantees, input from private sector, etc.)
  - Address Treasury and policy guidelines that hamper scaling up risk mitigation, including DFI ‘conditionalities’ associated with guarantee products
  - Launch full-scale risk mitigation training programs for internal staff
  - Institute performance benchmarks and incentives that explicitly encourage the adoption and use of risk mitigation by staff and its marketing to governments and the private sector
- 4) **Encourage other actions by DFIs, development partners and African governments to fill the risk mitigation gap**
- Expand support for new risk mitigation instruments, processes and entities (addressing the risk mitigation gaps cited below)
  - Scale up project development funds
  - Fund outsourced risk mitigation instruments and financial advisory services
  - Conduct training to enable banks, private sector companies, governments, and other stakeholders to understand the value and use of risk mitigation instruments and how to appropriately price both perceived and real risks
  - Support capacity-building in government agencies accountable for private sector and local economic development
  - Facilitate the creation of “Country-Based Risk Mitigation Centres” in African countries, where the private sector and government can convene; access information on best practices, instruments, training, etc.; conduct training and build in-country capacity; and develop tailored risk mitigation approaches that meet country needs

Given the similarity of the issues across both developing and developed countries, it is important to recognize that many of these risk mitigation solutions have a broader applicability and would benefit from cross-fertilization from other regions of the world. Therefore, the establishment of a “*Global Risk Mitigation Solution Centre*” aimed at incubating and scaling up risk mitigation solutions, centralizing risk mitigation lessons learned, best practices, and technical solutions, and enabling public-private sector meetings and collaboration would be useful for Africa as well as other regions and countries in increasing investment and access to finance.

***Finally, the differing perceptions of the need and outlook for risk mitigation among stakeholders participating in the study also point to the need for all parties to understand better the demand function and the potential opportunities to refine existing risk mitigation instruments, applications, and approaches. Extensive public-private sector consultations will be critical to meeting the challenge of improving risk mitigation solutions to advance African investment.***



The attached report details the above conclusions on risk mitigation needs and solutions to advance African investment.

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# 1 Methodology for Conducting Africa Risk Mitigation Assessment of Needs and Solutions

## 1.1 Background

*Study Terms of Reference:* The objective of the study is to assess risk mitigation needs and possible solutions, to facilitate advancing investment in Africa. The TOR state that the study is to:

“... generate a ‘map’ of the needs of investors into North-Africa for guarantees and other risk mitigation instruments, and more generally into the Continent as a whole, over the next three years. This includes both sovereign and non-sovereign guarantees, and covers both short term and long term tenors. The ‘map’ provided will identify gaps in the provision of guarantee and risk mitigation products for investors – and help clarify the needs of investors in the current investment climate.”

*How this Study Builds on Prior Risk Mitigation Reviews:* The study builds on the wide array of prior related studies on risk mitigation and methods for increasing mobilization of the private sector in advancing development. Key areas covered in the background literature review conducted for this study include:

- *Definition of risk mitigation*, including the full array of reported risk factors impeding investment and access to finance
- *Demand for risk mitigation in Africa across main investment sectors*
- *Review of existing risk mitigation instruments by type of risk*
- *Experience to date utilizing risk mitigation*, citing success stories, impediments, and reported solutions, and
- *Reported factors resulting in the underutilization of existing risk mitigation instruments*, such as lack of internal incentives, lack of training, need for marketing, transaction costs, etc.

The literature search included a systematic review of public and private sector assessments of African investment and risk mitigation, including the following:

- 1) Official studies authored by multilateral institutions, including the International Monetary Fund (IMF), World Bank Group (WBG), United Nations (UN), and the African Development Bank (AfDB);
- 2) Reports from leading global research organizations and Africa initiatives, particularly the World Economic Forum (WEF) and Africa Progress Panel; and
- 3) Private sector reports, notably those prepared by McKinsey, PricewaterhouseCoopers, Dahlberg, and Ernst & Young.

The literature review provided useful guidance in designing the risk mitigation survey methodology and report assessments, providing particularly useful insights on the substantial opportunities for increased investment in Africa and the demand for risk mitigation in Africa to unblock access to both finance and investment. The literature review also included a cross-sector analysis of the reported demand for investment over the next decade. For the complete literature review conducted to support this study, please see the separate annex and the report bibliography.

*Definition of Risk Mitigation:* As noted above, the definition of risk mitigation drew on prior risk mitigation studies and used a broad definition, due to the need to identify the full range of factors impeding deployment of private sector capital, so as to better inform and equip stakeholders to devise solutions.

The accepted definition of risk mitigation is simply “a systematic reduction in the extent of exposure

to a risk and/or the likelihood of its occurrence.”<sup>4</sup> Governments have explicitly recognized that risks in developing countries impede access to private sector finance and that confronting these risks requires increased public support of risk mitigation. In fact, in the 2002 UN Monterrey Consensus resolution, all UN Member Countries explicitly acknowledged the necessity of mobilizing private sector investment and the importance of risk mitigation in advancing poverty reduction and the achievement of the Millennium Development Goals (MDG).<sup>5</sup>

In developing countries, the public sector plays a critical role in mitigating risks that impede access to private investment and finance. Developing countries have many non-commercial and credit risks that the public sector can mitigate. Thus, the literature often defines risk mitigation in developing countries as the transfer of risk to those parties – both in private and public sectors – that have a competitive advantage in measuring and managing it.

Official agencies underscore the critical importance of increasing DFI capacity in using risk mitigation to unblock private investment and finance. For example, the WBG has highlighted the importance of the role that its member organizations can play in facilitating the flow of private capital in emerging economies.<sup>6</sup> The WBG’s “additionality” in mitigating risks is largely derived from its special relationship with governments, which enables it to absorb higher risks than private sector providers can take on.<sup>7</sup> For the same reasons, Regional Development Banks (RDB) have placed risk mitigation at the forefront of their strategies, as have bilateral donors.<sup>8</sup>

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<sup>4</sup> For business definitions, see for example: <http://www.businessdictionary.com/definition/risk-mitigation.html>

<sup>5</sup> See United Nations, “The Monterrey Consensus on Financing for Development.”

<http://www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf>

<sup>6</sup> World Bank Independent Evaluation Group, “The World Bank Group Guarantee Instruments 1990 – 2007: An Independent Evaluation” (Washington, D.C.: The World Bank, 2009).

<sup>7</sup> Ibid, xiii.

<sup>8</sup> For example, the Asian Development Bank (ADB) recently proposed a guarantee facility for credit enhancement of project bonds in India to address one of India’s key development challenges of meeting the infrastructure investment target of about \$1 trillion during the Twelfth Five-Year Plan for FY2012-FY2016. See, ADB, “Proposed Guarantee Facility: Credit Enhancement of Project Bonds (India)”. <http://www.adb.org/sites/default/files/projdocs/2012/43932-014-ind-rrp.pdf>. As the former head of the ADB Private Sector Department Robert Bestani stated: “*With regard to risk mitigation, there is a great deal of evidence demonstrating that ADB’s entrance into a transaction changes the dynamics of that transaction. For a variety of reasons, the ADB’s mere presence can go a long way towards staving off capricious government intervention. Governments in emerging markets far too often do not have a well-conceptualized or articulated set of regulatory frameworks. Thus, projects are subject to new priorities, policies and government pronouncements. The ADB’s presence can help protect projects from volatile government intervention. The ADB’s involvement in a project acts as a stamp of approval, indicating the international community’s imprimatur and support. To interfere with the project is to invite the disfavor of the 63 nations that make up the membership of the ADB.*” Robert M. Bestani, “The Multilateral Development Banks And The Capital Markets” (paper submitted to World Economic Forum Financing for Development Workshop, Hong Kong, March 15 – 16, 2005). <http://www.globalclearinghouse.org/wefhongkong/>. The EIB also has a new guarantee facility to provide credit enhancement for project bonds. <http://www.eib.org/products/project-bonds/index.htm>.

## 1.2 Methodology for Structure of Survey Questionnaire

The survey methodology's design drew upon the TOR, the literature search results and initial interviews with investors, providers of risk mitigation, and government officials. Other risk mitigation surveys were also studied for relevant questions, including a World Bank survey evaluating the effectiveness of the use of guarantee and insurance products by the WBG, including the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), and Multilateral Investment Guarantee Agency (MIGA), during the period 1990-2007.<sup>9</sup>

The survey questionnaire was structured in five sections:

- 1) Risk Mitigation Needs by Region (now and over three years): Survey participants were asked for their views as to which countries need to have risk mitigation instruments to promote investment and access to finance in the four regions of the continent (northern, western, eastern, and southern).<sup>10</sup> A second question was asked with regard to any expected change in the need for risk mitigation over the next three years.
- 2) Types of Demand for Risk Mitigation (now and over three years):
  - a. Type of Risk: Survey participants were asked for their view of the demand for different types of risk mitigation, using the risks highlighted in prior extensive risk mitigation studies.<sup>11</sup> A second question asked about the expected change in demand for each type of risk mitigation over the next three years.
  - b. By Sector: Survey participants were asked for their views on how demand for risk mitigation varies by sector. The broad sectoral categories included infrastructure, agriculture-processing facilities, trade, corporate finance, and SME finance. Respondents were also asked about any expected change in demand by sector for risk mitigation over the next three years.
- 3) Existing Knowledge and Risk Mitigation and Perceived Value: Survey participants were asked for their views on the usefulness of risk mitigation instruments.
- 4) Factors Affecting Effective Use of Risk Mitigation: Survey participants were asked what specific actions would increase the use of risk mitigation instruments, given the reported low use of them.
- 5) Risk Mitigation Gaps and Solutions: Survey participants were asked what possible steps and institutional changes they think would help the delivery of risk mitigation instruments and solutions.

The full survey questionnaire is included in Annex B.

*Summary of Assessment Methods and Participants*: The survey engaged participants in African investment and risk mitigation, ensuring a representative sample. As noted, the survey methodology

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<sup>9</sup> Please refer to Annex A for details on the survey structure and list of questions.

<sup>10</sup> Responses were on a scale of 1-5, with 5 representing the highest need, and 1 representing no need. Respondents were asked to respond only for those countries with which they were familiar.

<sup>11</sup> Cited risk factors impeding investment drawn from literature review included: “project does not receive financing, wasting money spent on development, political violence, expropriation, currency inconvertibility, devaluation, unfavorable regulatory changes, interest rate increases, commercial and operational risk, lack of supporting infrastructure, ineffective legal system and procurement process risk.”

included a robust combination of methods, relying on in-person interviews in major cities in each of the four principal regions of Africa, supplemented by in-person interviews in investment centres of global investment (London, New York), telephone interviews and on-line surveys.

As detailed in the following table, 112 people participated in the study.

**Table 1: Location of 112 Survey Participants by Type of Participation**

Type of Participation	Africa: Location (number of people interviewed)	Outside Africa: Location (number of people interviewed)	Total Number of Participants
In-Person and Telephone Interviews	North Africa: Cairo (21) West Africa: Accra (7) East Africa: Nairobi (18) Southern Africa: Johannesburg (20) Southern Africa: Pretoria (3)	UK: London (20) USA: Chicago (1) Hong Kong (1)	
<b>Total</b>	<b>69</b>	<b>22</b>	<b>91</b>
On-Line Survey	North Africa: Cairo (4) West Africa: Accra (1) West Africa: Lagos (1) East Africa: Nairobi (10) Southern Africa: Johannesburg (6) Southern Africa: Pretoria (1)	UK: London (5) USA: Chicago (1) USA: New York (3) USA: Washington (2) USA: Virginia (1) Saudi Arabia: Jeddah (1) Canada (2) Germany (2) Austria (2) Slovakia (1) Portugal (1)	
<b>Total</b>	<b>23</b>	<b>21</b>	<b>44</b>
<b>Total Number of Participants<sup>12</sup></b>	<b>75</b>	<b>37</b>	<b>112</b>

*Selective interviews with targeted participants:* The participants constituted a representative sample of decision makers and experts from the public and private sectors. The study surveyed 72 private sector participants representing the full range of critical stakeholders: companies and business associations, banks and funds, and providers of risk mitigation [insurance brokers, agents, and providers of political risk insurance (PRI)], along with one participant from the nongovernmental (NGO) sector. The 39 public sector participants included host governments, DFIs, bilateral development agencies and Export Credit Agencies (ECAs). Enhanced detail about the participants is provided in the table below:

**Table 2: Breakout by Type of Participant**

Type of Participant	Number	Examples of Participants
<b>Public Sector</b>		
1. Host Governments	14	Bank of Ghana, Banque du Caire, Common Market for Eastern and Southern Africa (COMESA) Regional Investment Agency, Kenya Investment Authority, Ministry of Finance Ghana, National Treasury PPP Unit (South Africa), Prime Minister Office Kenya, etc.

<sup>12</sup> Note the total is not additive, as some participants completed the on-line survey and also participated in face-to-face or telephone interview meetings.

Type of Participant	Number	Examples of Participants
<b>Public Sector</b>		
2. Development partners (including DFIs and regional entities with public sector investment)	21	AfDB, African Trade Insurance Agency, European Bank for Reconstruction and Development (EBRD), Gesellschaft für Internationale Zusammenarbeit (GIZ), Islamic Development Bank (IsDB), Kenya Financial Sector Deepening (FSD), PTA Bank, Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC), Overseas Private Investment Corporation (OPIC), PTA Bank, United States Agency for International Development (USAID), WBG, etc.
3. ECAs	5	Eximbanka SR (Slovakia), Export Development Canada, ICIEC, US Export-Import Bank
<b>Public Sector Total</b>	<b>40</b>	
<b>Private Sector</b>		
1. Companies and Business Associations	18	Africa Invest, American Chamber of Commerce, Berne Union, British Private Equity and Venture Capital Association, Egyptian National Competitiveness Council, GIBB Africa Ltd, JGH Marine East Africa Limited, IFOK GmbH, Price Waterhouse Coopers, Wananchi Group etc.
2. Banks and Funds	46	Arab-African International Bank, Commerzbank AG, Credit Suisse, Ecobank, Rand Merchant Bank, Standard Bank, UBS; African Fund of Funds, Climate Change Capital, Frontier Markets Fund, Harith Partners, Pinebridge Investments, Renaissance Capital, etc.
3. Insurance Brokers, Agents, and Finders, Private PRI Providers	8	AIG/Chartis, Alliant Insurance Services Ltd, Clements Worldwide, Lloyd's, Companhia de Seguro de Créditos (COSEC), Marsh USA, Regency Alliance Insurance Ltd.
<b>Private Sector Total</b>	<b>72</b>	
<b>NGOs</b>		
Service Delivery NGOs	1	Water and Sanitation for the Urban Poor
<b>TOTAL PARTICIPANTS</b>	<b>112<sup>13</sup></b>	

As detailed above, the methodology and analytics of this study leveraged the wide range of existing literature on risk mitigation needs, solutions and assessments of Africa investment prospects, as well as the systematic input from a representative sample of investors, governments, providers of risk mitigation and experts from across the public and private sectors.

<sup>13</sup> The table total is not additive, as the IsDB has been classified as both a DFI as well as an ECA, given its dual functions.

## 2 Results of Risk Mitigation Needs Assessment

### 2.1 Overall Survey Results

An analysis of the literature review and survey input from investors, public officials, and experts results in the conclusion that ***demand for risk mitigation in Africa is high and increasing***. Across the 112 study participants, virtually all stated that ***risk mitigation is needed to increase investment and access to finance in Africa***. The principal reasons are two-fold:

- 1) Continued perceptions of unacceptable levels of risk throughout Africa; and
- 2) Increased demand for investment and access to finance from both domestic and international investors.

The need for increased deployment of a wider range of risk mitigation tools and products stems from the perception of significant risk, but also from the increased investment opportunities in Africa and the potential for private sector growth. As one survey participant, the head of a leading provider of risk mitigation in Africa and worldwide, stated: *“While it may be counter-intuitive, as the risk decreases the need still increases because the amount of investment goes up. Quantum of risk is as important as the degree of risk in driving the need for risk mitigation.”*

The substantial need for risk mitigation in Africa is clearly evidenced by the survey responses. Survey respondents, on average, assessed the risk mitigation demand for the continent as significant: at a level of 3.74 on a scale of 1-5 as shown in Table 3.<sup>14</sup> The scale defined “5” as representing the highest demand, “3” as moderate demand, and “1” as no demand.

**Table 3: Summary of Study Results on Need for Risk Mitigation (all African countries)**

Country	Average Score	Country	Average Score
Zimbabwe	4.71	Benin	3.79
DR of Congo (DRC)	4.52	Uganda	3.78
Somalia	4.46	Comoros	3.78
Mali	4.43	Rwanda	3.76
Eritrea	4.36	Togo	3.75
Chad	4.33	Zambia	3.69
Niger	4.30	Algeria	3.68
South Sudan	4.30	Kenya	3.59
Sudan	4.30	Angola	3.59
Republic of Congo	4.26	The Gambia	3.58
Cote D'Ivoire	4.26	Cameroon	3.52
Guinea	4.25	Tanzania	3.50
Central African Republic	4.15	Sao Tome & Principe	3.45
Egypt	4.15	Lesotho	3.39
Libya	4.13	Mozambique	3.37
Guinea-Bissau	4.10	Tunisia	3.33

<sup>14</sup> It is important to note that most study participants could not comment on all African countries. Many participants limited their comments to a few countries.

Country	Average Score	Country	Average Score
Madagascar	4.10	Gabon	3.30
Mauritania	4.09	Swaziland	3.30
Ethiopia	4.08	Senegal	3.19
Burundi	4.05	Seychelles	3.05
Liberia	4.00	Ghana	3.00
Djibouti	3.95	South Africa	2.87
Sierra Leone	3.86	Morocco	2.87
Nigeria	3.86	Namibia	2.81
Equatorial Guinea	3.85	Cape Verde	2.79
Burkina Faso	3.84	Botswana	2.31
Malawi	3.81	Mauritius	2.29
		<b>All Country Average</b>	<b>3.74</b>

These survey responses were then assessed on two dimensions, to take into account both the demand for investment in Africa and perceptions of risk:

- 1) Emerging Global Role of Africa in Investment: The pivotal role of Africa in the global investment market has been highlighted in major recent studies from the IMF, the World Bank, and private sector firms. For example, according to the World Bank, US\$93 billion per year (15 percent of the region’s Gross Domestic Product (GDP) is needed for the period 2010 to 2020 to close the infrastructure gap with other developing countries.<sup>15</sup> However, only US\$45 billion per year is being mobilized, leaving a gap of close to US\$50 billion a year. While official development financing for Africa’s infrastructure has grown steadily, current official sources of funding will not be enough to cover this financing gap, which will need to be filled by private investment.<sup>16</sup> Further, as the global financial crisis has resulted in a paradigm shift and investors have been searching for alternative investment opportunities, interest in Africa as an investment destination has increased substantially. The economic growth rates of some African countries are far outpacing those of most developed countries and, when coupled with a growing middle class and new wealth from oil and gas discoveries, serve to elevate the attractiveness of Africa in the minds of investors.
- 2) Perceptions of High Need for Risk Mitigation, but with High Variance: It is important to note that the dominant share of study respondents perceived a high level of need for risk mitigation across African countries. However, a very small number of study participants stated that many African countries have low or no need for risk mitigation.<sup>17</sup>

As noted, these two variables—the importance of Africa in global markets and high-risk perceptions—are the underlying drivers of the need for risk mitigation for mobilizing investment and gaining access to financial markets throughout all the countries of Africa.

<sup>15</sup> Vivien Foster and Cecilia Briceño-Garmendia, eds., “Africa’s Infrastructure: A Time for Transformation” (Washington, DC: The World Bank, 2010).

<http://www.infrastructureafrica.org/system/files/Africa%27s%20Infrastructure%20A%20Time%20for%20Transformation%20FULL%20TEXT.pdf>

<sup>16</sup> For further details, please refer to pages 10-18 of the literature review (see the Separate Annex).

<sup>17</sup> For example, out of the 54 African countries, assessments by study respondents varied 100% for almost 80% of the countries (42 countries) with scores ranging from “1” to “5” on a scale of 1-5. The remaining 12 African countries (20%) have scores ranging “3” to “4” levels (i.e., a country had scores ranging 2 to 5, or 1 to 4).

## 2.2 Forecast of Need for Risk Mitigation in Africa Three Years Forward

As shown in the table below, study participants anticipate an increase in need for risk mitigation over the next three years for all African countries, with the exception of Cape Verde, Ghana, Botswana, Seychelles, and Mauritius. The anticipated increase in need for risk mitigation in three years for all African countries averaged 3.54, based on a scale of 1-5 with “5” representing significant increase, “3” no change, and “1” decreasing need.

**Table 4: Study Results on Need for Risk Mitigation over Three Years**

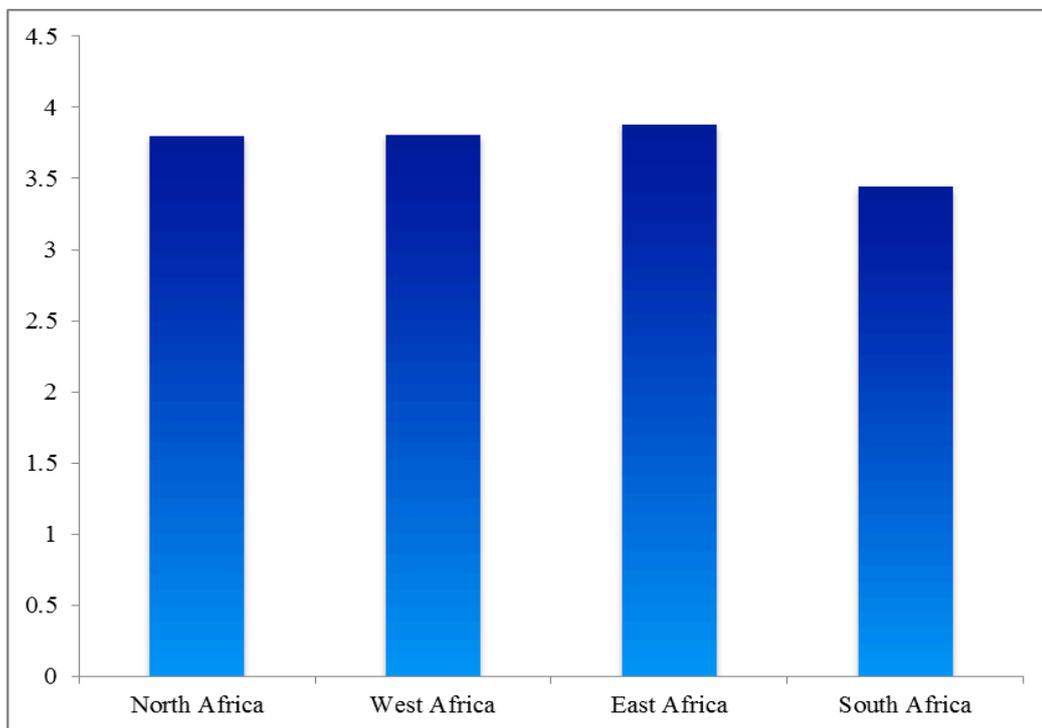
Country	Average Score	Country	Average Score
Somalia	4.42	Algeria	3.48
Zimbabwe	4.24	Lesotho	3.48
South Sudan	4.16	Benin	3.47
Sudan	4.16	Comoros	3.47
DR of Congo (DRC)	4.16	Sierra Leone	3.45
Mali	4.10	South Africa	3.45
Eritrea	3.95	Cameroon	3.45
Libya	3.87	Malawi	3.43
Republic of Congo	3.86	Gabon	3.42
Niger	3.84	Rwanda	3.41
Chad	3.80	Burkina Faso	3.39
Ethiopia	3.80	Togo	3.37
Central African Republic	3.78	Sao Tome & Principe	3.35
Mauritania	3.76	Kenya	3.34
Guinea-Bissau	3.74	Zambia	3.33
Guinea	3.72	Tanzania	3.31
Egypt	3.72	Mozambique	3.30
Nigeria	3.70	Tunisia	3.29
Equatorial Guinea	3.68	Angola	3.22
Djibouti	3.68	Namibia	3.13
Burundi	3.68	Senegal	3.10
Uganda	3.66	Morocco	3.04
Cote D'Ivoire	3.64	Botswana	2.89
Madagascar	3.60	Cape Verde	2.88
Swaziland	3.57	Ghana	2.85
The Gambia	3.56	Seychelles	2.75
Liberia	3.56	Mauritius	2.68
		<b>All Country Average</b>	<b>3.54</b>

Somalia topped the chart in terms of anticipated increased need for risk mitigation, with an average score of 4.42. The sections below provide regional overviews of the survey results.

### 2.3 Risk Mitigation Needs by Region (North, West, East, Southern)

The study TOR specified an assessment of current risk mitigation demand for the four major regions of Africa: North, West, East, and Southern. While there is great variance between countries in each of these four main regions, the aggregate view of survey participants is in fact quite similar across the four regions, averaging from a high of 3.88 for the region of East Africa (12 countries) to a low of 3.44 for the Southern African region (14 countries).<sup>18</sup>

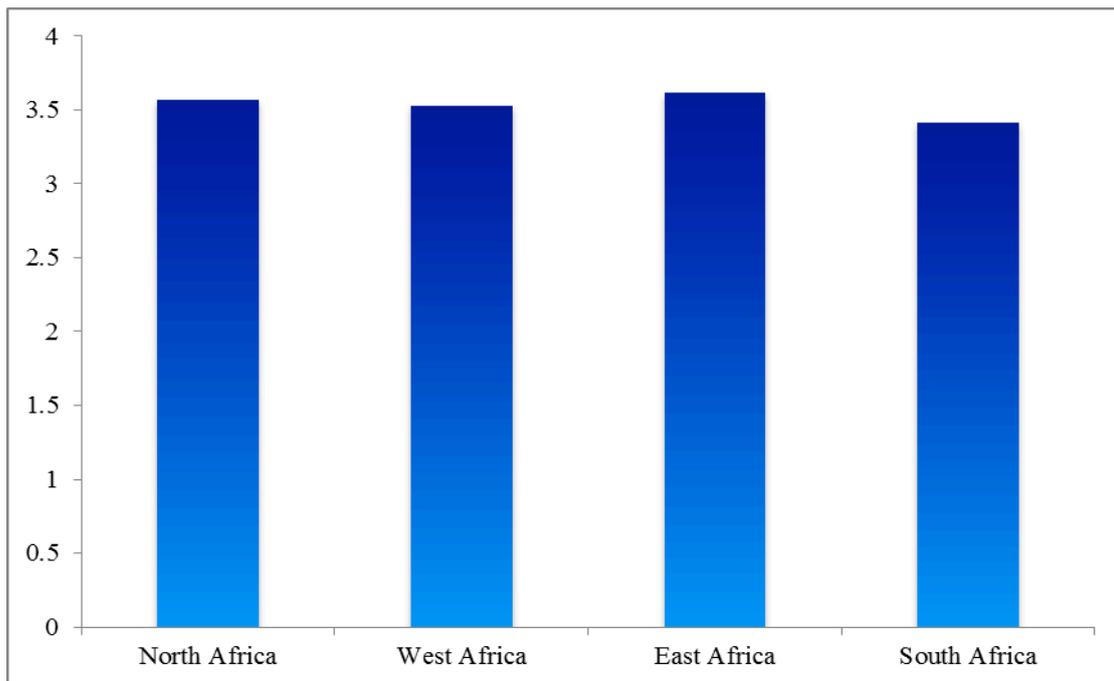
**Table 5: Average Need for Risk Mitigation in the Four Main Regions**



In terms of the need for risk mitigation over the next three years in the four regions, the same dynamics are present. The average assessment by survey respondents with respect to the change in the need for risk mitigation over the next three years ranges from a high of 3.62 for the region of East Africa to a low of 3.42 for the Southern African region.<sup>19</sup>

<sup>18</sup> Need for risk mitigation is indicated based on a scale of 1-5, with “5” representing the highest demand, and “1” representing no demand.

<sup>19</sup> Need for risk mitigation over the next three years is indicated based on a scale of 1-5, with “5” representing increasing demand, “3” representing no change, and “1” representing decreasing demand.

**Table 6: Estimated Need for Risk Mitigation in Four Regions over Three Years**

Again, the explanation for regional similarity in risk mitigation needs relates to the potential for investment as well as risk perception, as set forth by many of the study participants in the in-person meetings.

### 2.3.1 Details on North Africa Region

As noted above, the average survey response (3.80) indicates significant existing need for risk mitigation in the North Africa Region, with significant variances across the individual countries. According to the average scores provided by survey participants, the country with the greatest need is Chad (scoring an average of 4.33), followed by Egypt, Libya, Mauritania, Algeria and Tunisia. The country with the lowest regional need is Morocco (scoring an average of 2.87). Details are provided in Annex C.

It is important to note the variance between survey respondents in the perception of need for risk mitigation. Only 5% of respondents assessed no need for risk mitigation (a score of “1”), while most respondents (95%) indicated a need for risk mitigation. Of the 95%, 62% of the respondents stated high need (scores of “4” and “5”), and 33% moderate need (scores of “2” and “3”).

Furthermore the survey respondents on average estimate that all seven countries in this region will experience an increase in need for risk mitigation over the next three years. Libya is estimated to have the greatest increase in need and Morocco the least. Again, the variance in participant response is large, with a few respondents estimating decreased need in certain countries including Chad, Mauritania, and Tunisia. As would be expected, the in-person interviews revealed that the overall assessment of increased need for risk mitigation in the region has been elevated since the Arab Spring in early 2011, as illustrated in the high average score given to Egypt (3.72).

### 2.3.2 Details on West Africa Region

The average survey response (3.80) indicates high need for risk mitigation in the West Africa Region, with moderate variances across the individual countries. Mali, Niger, Republic of Congo, and Cote

d'Ivoire are seen as having the highest need for risk mitigation and Senegal, Ghana and Cape Verde as the lowest need.

However, it is again important to note the variance in scoring by survey respondents. Of the 95% that indicated a need for risk mitigation, 64% indicated high need for risk mitigation (scores of “4” and “5”) and 31% moderate need.

In terms of estimated need over three years, survey respondents on average estimated that 18 of the 20 countries in West Africa will have an increased need for risk mitigation. The exceptions in the region are Cape Verde and Ghana, for which survey respondents on average forecast no change in need from current levels over three years.

### 2.3.3 Details on East Africa Region

The average survey response (3.71) indicates high need for risk mitigation for the East Africa Region, with moderate variances across the individual countries. Somalia, Eritrea, Sudan and South Sudan are assessed as having the highest need; and Rwanda, Kenya, Tanzania and Seychelles as having the lowest need.

However, it is again important to note the variance in scoring by survey respondents. Similar to the other regions, 96% of the respondents indicated a need for risk mitigation with the majority of those respondents (65%) indicating high need for risk mitigation (scores of “4” and “5”).

With regard to the level of need for risk mitigation over the next three years, all countries in the region, with the sole exception of Seychelles, are expected to have an increased need for risk mitigation according to the majority (52%) of survey respondents. The greatest increase in need is projected for Somalia, followed by South Sudan, Sudan, Eritrea, Ethiopia, and Djibouti.

### 2.3.4 Details on Southern Africa Region

The average survey response (3.44) indicates significant need for risk mitigation for the Southern Africa Region, with large variances across the individual countries. According to survey participants, the countries with the greatest need are Zimbabwe, DRC and Madagascar (scoring on average 4.44). The countries with the lowest level of need are Namibia, Botswana and Mauritius (scoring on average below 3).

While it is again important to note the variance in scoring by survey respondents, the variance is not as significant as other regions.’ As with the other regions, the dominant number of survey respondents (91%) indicated a need for risk mitigation. A plurality of respondents (48%) indicated high need for risk mitigation (scores of “4” and “5”), with 42% indicating moderate need.

According to 38% of the survey respondents, demand for risk mitigation is likely to rise over the next three years in all countries in the Southern Africa Region, with the exception of Botswana and Mauritius. In particular, Zimbabwe, DRC, Madagascar and Swaziland are expected to have greater need for risk mitigation. As in other regions, the variance in individual participant views is large across the countries, with 38% of respondents anticipating increased need over three years, 46% anticipating no change in the need for risk mitigation, and 17% anticipating a decreasing need for risk mitigation.

## 2.4 Demand for Risk Mitigation by Main Sectors

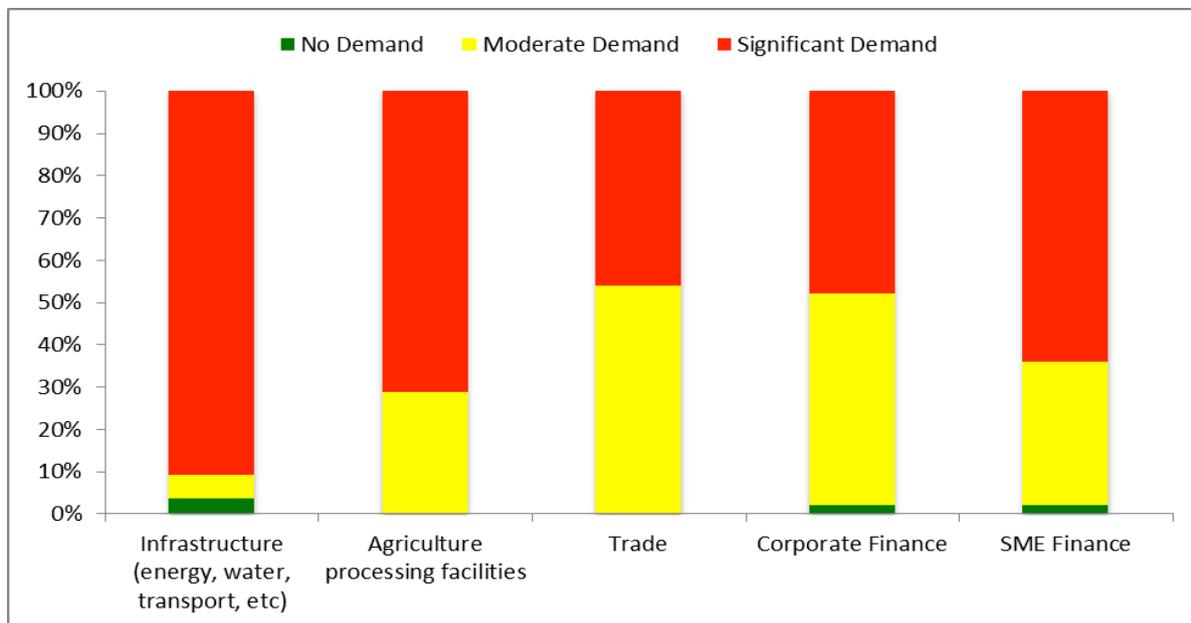
To gauge the type of demand by sector, the survey participants were asked for their views regarding the demand for risk mitigation in the key areas documented in the literature search as suffering from

lack of investment and access to capital. These areas included: infrastructure, agricultural-processing facilities to enable the strengthening of supply chains, corporate finance, trade, and provision of finance to SMEs.

The survey results underline the *consistent significant demand for risk mitigation in Africa across five main sectors: infrastructure, agriculture, corporate finance, trade, and SME finance. 98% of survey respondents across all categories anticipate moderate to significant demand for risk mitigation over the five main areas of infrastructure, agriculture, corporate finance, trade, and SMEs.*

The highest demand, based on an average of survey responses, is for infrastructure (average response of 4.52, 91% of survey respondents forecasting significant demand), followed by SME finance (average response of 3.90, 64% of survey respondents forecasting a significant demand), agricultural-processing facilities (average response of 3.83, 71% of survey respondents forecasting significant demand), trade (average response of 3.62, 46% of survey respondents forecasting significant demand), and corporate finance (average response of 3.52, 48% of survey respondents forecasting significant demand). The following bar chart represents the participant responses for each of these sectors, aggregating average demand in three categories: significant demand (scores “4” and “5”), moderate demand (scores “2” and “3”), and no demand (score “1”).<sup>20</sup>

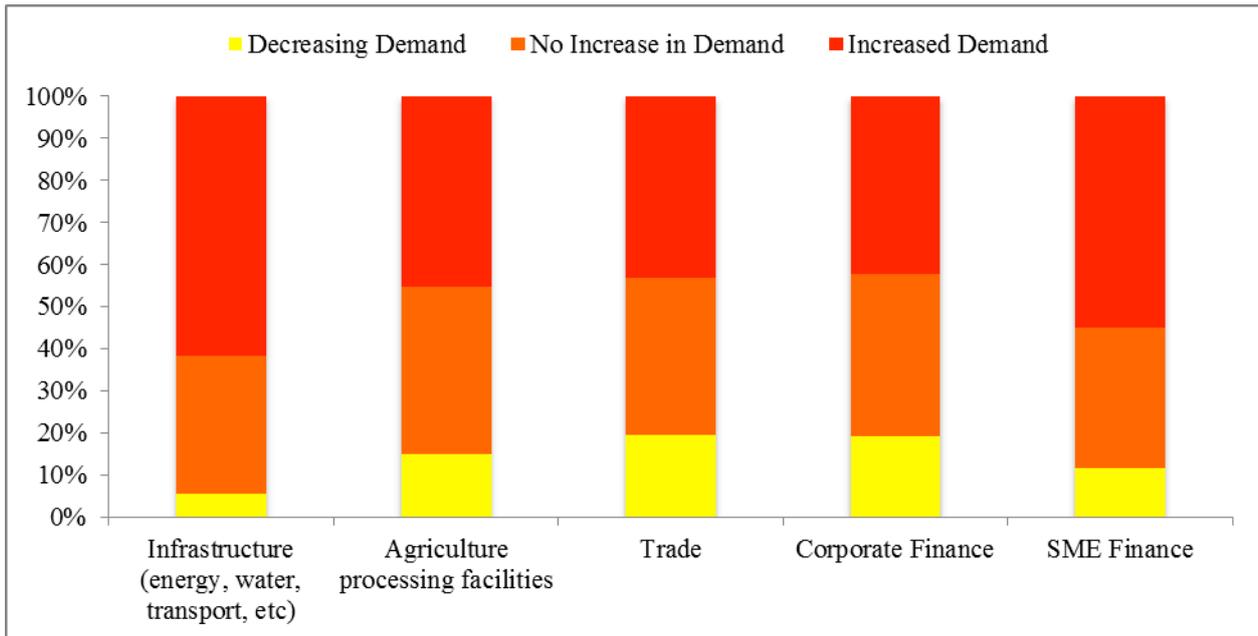
**Table 7: Overall Demand for Risk Mitigation by Sector**



Survey respondents project an increase in demand for all five sectors over the next three years. The greatest projected increase in demand is for infrastructure risk mitigation (average response 3.94), followed by SME finance (3.63), agricultural-processing facilities (3.47), trade (3.35), and corporate finance (3.35). The following bar chart displays the average responses of survey participants for each of these major sectors, aggregating average responses in three categories: increased demand (scores “4” and “5”), no change in demand (score “3”), and decreasing demand (scores “1” and “2”).

<sup>20</sup> The values shown on the chart represent the average of the individual ratings on a scale of 1-5 as provided by survey respondents.

**Table 8: Expected Change in Risk Mitigation Demand by Sector over Three Years**



*Close to 90% of survey respondents in each category anticipate the same or increased need for risk mitigation over the five main areas of infrastructure, agriculture, corporate finance, trade, and SMEs.*

Of the study respondents, 62% believed that there would be an increase in risk mitigation demand for infrastructure, 55% for SME finance, 45% for agriculture-processing facilities, 43% for trade, and 42% for corporate finance over three years.

*Views by Type of Respondent:* An assessment of the aggregate demand for each of the five individual sectors by type of respondent shows great variance amongst the different stakeholders in their views of anticipated changes of demand over three years. These views are discussed by sector, below.

#### 2.4.1 Details on Demand for Infrastructure Risk Mitigation

As noted in Table 9, the survey results confirm the priority placed on increasing risk mitigation to meet the continent’s infrastructure needs. Almost all of the survey participants (91%) rate demand for risk mitigation for infrastructure as significant (“4” or “5” on a scale of 1-5).

Moreover, 69% of survey participants put risk mitigation for infrastructure in the highest need category (rating of “5”). The following table shows the breakdown of results in aggregate and by type of survey respondent.

**Table 9: Demand for Infrastructure Risk Mitigation**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO <sup>21</sup>
Highest Demand (scores of 4, 5)	91%	100%	85%	88%	100%	92%
Moderate Demand (scores of 2,3)	6%	0%	9%	6%	0%	8%
No Demand (scores of 1)	3%	0%	8%	6%	0%	0%

It should be noted that the in-person interviews detailed the wide range of specific types of risks associated with infrastructure projects which form the basis of demand for a wide range of risk mitigation interventions, as discussed in the subsequent section on demand by type of risk (Section 2.5).

As indicated in the following table, the view of demand for infrastructure risk mitigation over the next three years varied significantly across all types of survey participants. Government officials, public officials of DFIs and ECAs, and private sector investors all anticipate that infrastructure will have increased demand for risk mitigation. Interestingly, a majority of the private sector providers of risk mitigation anticipated no change in demand over the next three years.

**Table 10: Expected Change in Demand for Infrastructure Risk Mitigation over Three Years**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Increasing Demand (scores of 4, 5)	62%	67%	75%	75%	33%	42%
No Change in Demand (score of 3)	33%	33%	8%	19%	67%	58%
Decreasing Demand (scores of 1,2)	5%	0%	17%	6%	0%	0%

As set forth in the report conclusion, this divergence in views on demand for infrastructure risk mitigation needs to be openly discussed, so that private sector providers of risk mitigation can be

<sup>21</sup> The “other” category includes companies, business associations, and one non-governmental organization.

more aware of the widespread perception of increased needs, and better assess their ability to provide specific products to meet the increased demand.

#### 2.4.2 Details on Demand for Agricultural-Processing Facility Risk Mitigation

According to the survey results, the risk mitigation demand for agricultural-processing facilities is also extremely high, with 100% of survey respondents citing demand for risk mitigation. Of the respondents, 71% believed there will be significant demand and 29% believed there will be moderate demand, as shown in the table below.

**Table 11: Demand for Agriculture-Processing Risk Mitigation**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Highest Demand (4, 5)	71%	67%	75%	73%	67%	69%
Moderate Demand (2, 3)	29%	33%	25%	27%	33%	31%
No Demand (1)	0%	0%	0%	0%	0%	0%

However, the view of future agriculture-processing demand varied more significantly than did the view of future infrastructure-related demand across all types of survey participants. Half of the respondents from host governments and private sector investors anticipate increasing risk mitigation needs for agricultural-processing facilities, while the majority of DFI/ECA officials and half of the private sector providers of risk mitigation see no change or decreasing demand.

**Table 12: Expected Change in Demand for Agriculture Processing Risk Mitigation over Three Years**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Increasing Demand (scores of 4, 5)	45%	50%	33%	50%	50%	46%
No Change in Demand (score of 3)	40%	17%	42%	44%	33%	46%
Decreasing Demand (scores of 1, 2)	15%	33%	25%	6%	17%	8%

According to study participants, this wider divergence of views may be the result of a lack of understanding of the need for risk mitigation in this sector and the ways that risk mitigation can be applied to improve investment levels and access to finance. Forums between governments and

investors with providers of risk mitigation (public and private) would be needed to clarify needs and possible risk mitigation solutions.

### 2.4.3 Details on Demand for Trade Risk Mitigation

According to the survey results, the demand for risk mitigation in trade is also high, with 100% of all survey respondents citing demand. Of all the respondents, 46% cited significant demand (responding “4” or “5” on a scale of 1-5), and 54% cited moderate demand, as shown in the table below.

**Table 13: Demand for Trade Risk Mitigation**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Highest Demand (4, 5)	46%	67%	58%	40%	50%	31%
Moderate Demand (2, 3)	54%	33%	42%	60%	50%	69%
No Demand (1)	0%	0%	0%	0%	0%	0%

As indicated above, government officials and, to a lesser degree, DFI and ECA officials, perceive higher demand for trade risk mitigation relative to the private sector and business association survey participants.

In fact, providers of private sector risk mitigation were evenly divided in their views of moderate to high demand for trade risk mitigation, with a majority of private sector investors reporting moderate demand. The in-person interviews indicate that, while there is substantial demand in this sector, there are a number of providers and products potentially available to address the demand. Thus, participants underscored the need to better employ existing risk mitigation services.

The view of future demand of risk mitigation for trade varied significantly across all types of survey participants. Government officials anticipate increased demand for trade risk mitigation, while private sector investors were divided in their views of the level of need.

**Table 14: Expected Change in Demand for Trade Risk Mitigation over next Three Years**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Increasing Demand (scores of 4, 5)	43%	60%	42%	38%	50%	42%
No Change in Demand (score of 3)	37%	20%	42%	44%	33%	33%
Decreasing Demand (scores of 1,2)	20%	20%	16%	18%	17%	25%

Again, open consultations on demand between providers of risk mitigation services and targeted users would enable a better assessment of needs, and the scaling up of appropriate risk mitigation instruments.

#### 2.4.4 Details on Demand for Corporate Finance Risk Mitigation

According to the survey results, the risk mitigation demand for corporate finance is also high, with 98% of all survey respondents citing demand. Of the survey respondents, 48% cited high demand and 50% moderate demand, as shown in the table below.

**Table 15: Demand for Corporate Finance Risk Mitigation**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Highest Demand (4, 5)	48%	67%	42%	50%	40%	46%
Moderate Demand (2, 3)	50%	33%	58%	50%	40%	54%
No Demand (1)	2%	0%	0%	0%	20%	0%

According to the table, a large majority of survey participants assessed the demand for risk mitigation for corporate finance from moderate to high (represented by scores of “2” to “5”). However, government officials perceive higher demand for corporate finance risk mitigation relative to that set forth on average by the private sector study participants.

The view of future demand over the next three years for corporate finance varied significantly across all types of survey participants. Most government officials anticipate increasing demand for corporate finance risk mitigation, while private sector investors along with public officials of DFIs and ECAs were divided in their views of the level of need.

**Table 16: Expected Change in Demand for Corporate Finance Risk Mitigation over Three Years**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Increasing Demand (scores of 4, 5)	42%	80%	42%	44%	50%	23%
No Change in Demand (score of 3)	38%	0%	33%	38%	33%	62%
Decreasing Demand (scores of 1, 2)	20%	20%	25%	18%	17%	15%

As indicated by the survey respondents, there was a divergence in the views of both absolute demand and future change in demand among types of respondent. Overall, the expectation of future increased demand for risk mitigation related to corporate finance is correlated with the expected increase in corporate finance activity. Investors are increasing their focus on opportunities in the African continent, thus increasing the need for more corporate finance products and service offerings. This increased demand will in turn promote greater depth and breadth in the scope of international and local capital markets.

#### 2.4.5 Details on Demand for SME Finance Risk Mitigation

According to the survey results, the risk mitigation demand related to SME finance is also extremely high, with 98% of survey respondents citing demand. Of all survey respondents, 64% cited high demand and 34% moderate demand, as shown in the table below.

**Table 17: Demand for SME Finance Risk Mitigation**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Highest Demand (4, 5)	64%	17%	58%	69%	83%	77%
Moderate Demand (2, 3)	34%	83%	42%	31%	0%	23%
No Demand (1)	2%	0%	0%	0%	17%	0%

As shown above, a large majority of the participants agreed that the demand for risk mitigation related to SME finance varies from moderate to high (represented by scores of “2” to “5”). However, private sector providers of risk mitigation, and to a lesser degree, private sector investors, perceive higher demand for SME finance risk mitigation, relative to that set forth on average by the official sector study participants. In fact, host government officials report on average moderate demand for SME

finance risk mitigation, with DFI and ECA officials reporting greater demand by a relatively small margin.

The view of future demand for risk mitigation related to SME finance varied significantly across most types of survey participants. Private sector investors and private sector providers of risk mitigation, along with public officials of DFIs and ECAs, expect increasing demand for risk mitigation. Government officials, however, were divided in their views of the level of increased need.

**Table 18: Expected Change in Demand for SME Finance Risk Mitigation over Three Years**

Survey Respondent Scores	Percent of Respondents	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors (Banks and Funds)	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Increasing Demand (scores of 4, 5)	55%	33%	58%	57%	67%	54%
No Change in Demand (score of 3)	33%	33%	25%	29%	33%	46%
Decreasing Demand (scores of 1, 2)	12%	34%	17%	14%	0%	0%

While the view of the need for risk mitigation for SME Finance in general diverges depending on the type of respondent, it is widely understood that the SME sector as a whole is important to economic growth and employment in the region. Private sector investors and providers of risk mitigation perceived that there would be an increased demand for risk mitigation for this sector. A number of respondents within that sector indicated that several initiatives, such as credit reporting agencies and collateral registries, will allow for greater reduction in risk and increased SME finance flows, but that those initiatives alone are not sufficient to address the broader issues and the anticipated increased demand for SME finance.

## 2.5 Demand by Type of Risk

The survey responses underscore *the need to widen the definition of risks that need to be mitigated to increase investment in Africa and the corresponding array of risk mitigation solutions.*

The survey included the spectrum of factors that have been cited as impeding investment in Africa.<sup>22</sup> The types of risks in the survey included:

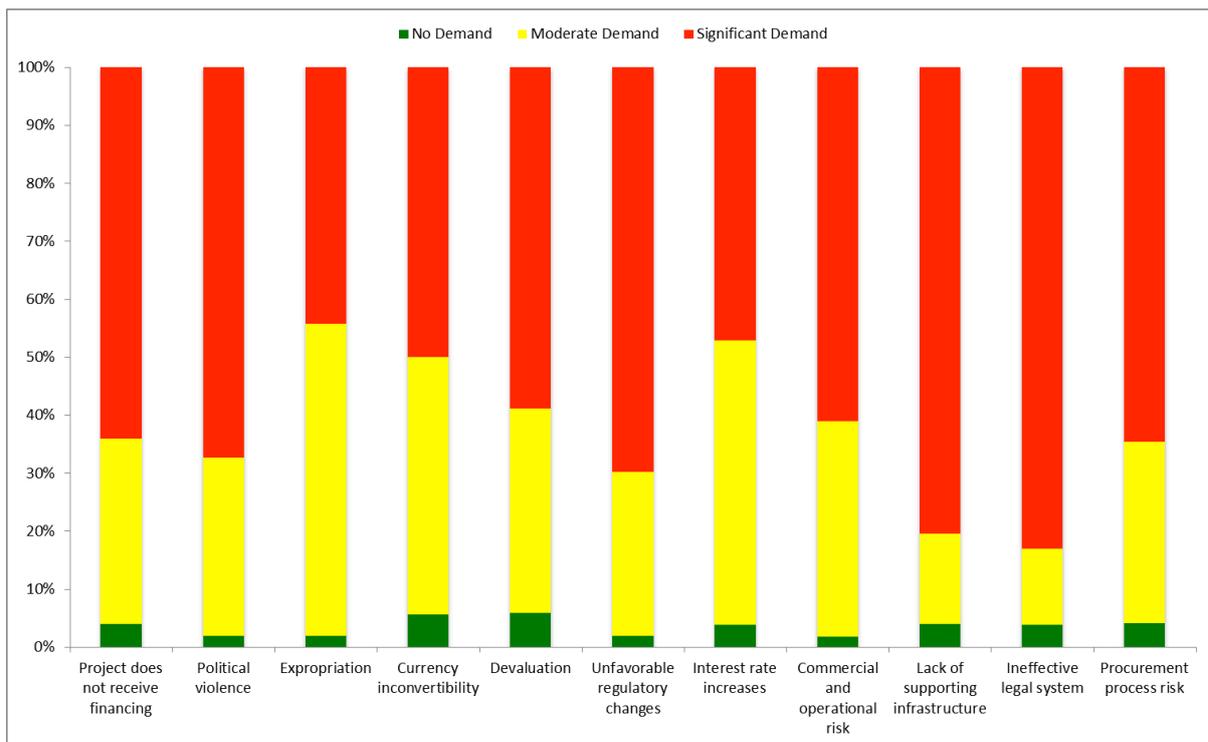
- Classical risks, some of which are covered by widely available risk mitigation instruments: These classic risks include political violence, expropriation including ‘creeping expropriation,’ currency inconvertibility, devaluation, unfavourable regulatory changes, and commercial and operational risks.
- Broader business environment risks not covered by traditional risk mitigation instruments: These broader risks are well documented in the literature, and include lack of supporting infrastructure, ineffective legal systems and interest rate increases.<sup>23</sup>

<sup>22</sup> For details, see the Risk Mitigation Literature Review conducted for the study.

- Business risks that are often cited as impediments in developing and investing in specific projects and businesses: These risks are also well documented in the literature, and include lack of funds for developing projects with uncertain returns and the ‘procurement process risks’ in PPP transactions resulting from a variety of real and perceived problems with government procurement processes.<sup>24</sup>

***Virtually all of the respondents, over 90% of the total, cited demand for mitigation of all of these types of risk.*** The bar chart below represents the average responses of survey participants for each of these major sectors, aggregating average demand in three categories: significant demand (scores “4” and “5”), moderate demand (scores “2” and “3”), and no demand (score “1”).

**Table 19: Overall Demand for Risk Mitigation by Type of Risk**



***It is important to note that the risks indicated by study respondents as having the greatest need for risk mitigation are in fact those that are not covered by widely-available risk mitigation products: ineffective legal system, lack of supporting infrastructure, procurement process risk, project development risk, devaluation and interest rate increases.***

The risks that may, in certain cases, be covered by standardized risk mitigation products are also seen by survey respondents as having significant demand: unfavourable regulatory environments, commercial and operational risks, political violence, currency inconvertibility, and expropriation.

<sup>23</sup> Theoretically, interest rate hedging arrangements utilizing interest rate swaps, interest rate caps, and other derivative instruments can be put in place to mitigate interest rate risk. However, utilization of these instruments in developing countries is often restricted due to unavailability, illiquidity and high costs. For examples of broader business environment risks, see WEF. “Building on the Monterrey Consensus: The Untapped Potential of Development Finance Institutions to Catalyse Private Investment”; Centennial Group Holdings, “Research on Innovative Finance;” and E.R. Yescombe, *Principles of Project Finance* (London: Academic Press, 2002).

<sup>24</sup> See for example WEF, “Building on the Monterrey Consensus;” Centennial Group Holdings, “Research on Innovative Finance.”

Moreover, as shown by the table below, the level of demand was rated as high for all risks by the majority of survey respondents, with the sole exception of expropriation and interest rate increases. The responses are detailed in the table below, broken out by type of survey respondent.

**Table 20: Significant Demand for Risk Mitigation by Type of Risk<sup>25</sup>**

Type of Risk (sorted by highest demand)	Demand for Risk Mitigation (Percent of Respondents responding with score of 4 or 5)	Percent by Type of Respondent (Responding with a score of 4 or 5)				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Ineffective legal system	83%	86%	92%	75%	80%	85%
Lack of supporting infrastructure	80%	86%	100%	71%	80%	69%
Unfavourable regulatory changes	70%	57%	82%	50%	100%	77%
Political violence	67%	86%	67%	50%	83%	69%
Procurement process risk	65%	83%	50%	62%	75%	69%
Project does not receive financing, wasting money spent on development	64%	67%	75%	73%	50%	46%
Commercial and operational risk	61%	71%	69%	60%	50%	54%
Devaluation	59%	60%	58%	53%	80%	58%
Currency inconvertibility	50%	60%	62%	53%	67%	23%
Interest rate increases	47%	67%	38%	47%	25%	54%
Expropriation (government takeover)	44%	33%	50%	47%	67%	31%

Survey participants indicate that there is significant risk mitigation demand for risks that are not covered by conventional risk mitigation products. **Therefore, the study indicates that there is a large gap in existing risk mitigation instruments and thus a need to focus on how to develop more effective risk mitigation solutions that can facilitate increased Africa investment.**

Private sector providers' of risk mitigation views varied considerably, for example, indicating less demand for mitigation products to cover project development-related risk (projects not receiving financing, thus wasting money spent on development), commercial and operational risk, and interest rate increases.

The demand for risk mitigation to cover project development risks was considered very significant, with DFI and ECA officials, private sector investors, and host government officials citing significant demand (75%, 73%, and 67% respectively). While the risk of project development is borne by the project sponsors and equity investors, investments in developing countries face major risks and

<sup>25</sup> Total percentage may sum to greater than 100% due to rounding.

uncertain returns, reducing the interest of investors and resulting in a chronic lack of projects in development. The resulting lack of private sector investment can be mitigated through the provision of project development funds and facilitation of expert services by host governments, donors and other interested third parties.<sup>26</sup> These risk mitigation interventions at the beginning of the project development life cycle increase the depth of project pipelines by significantly increasing private sector ability and willingness to develop and finance projects.

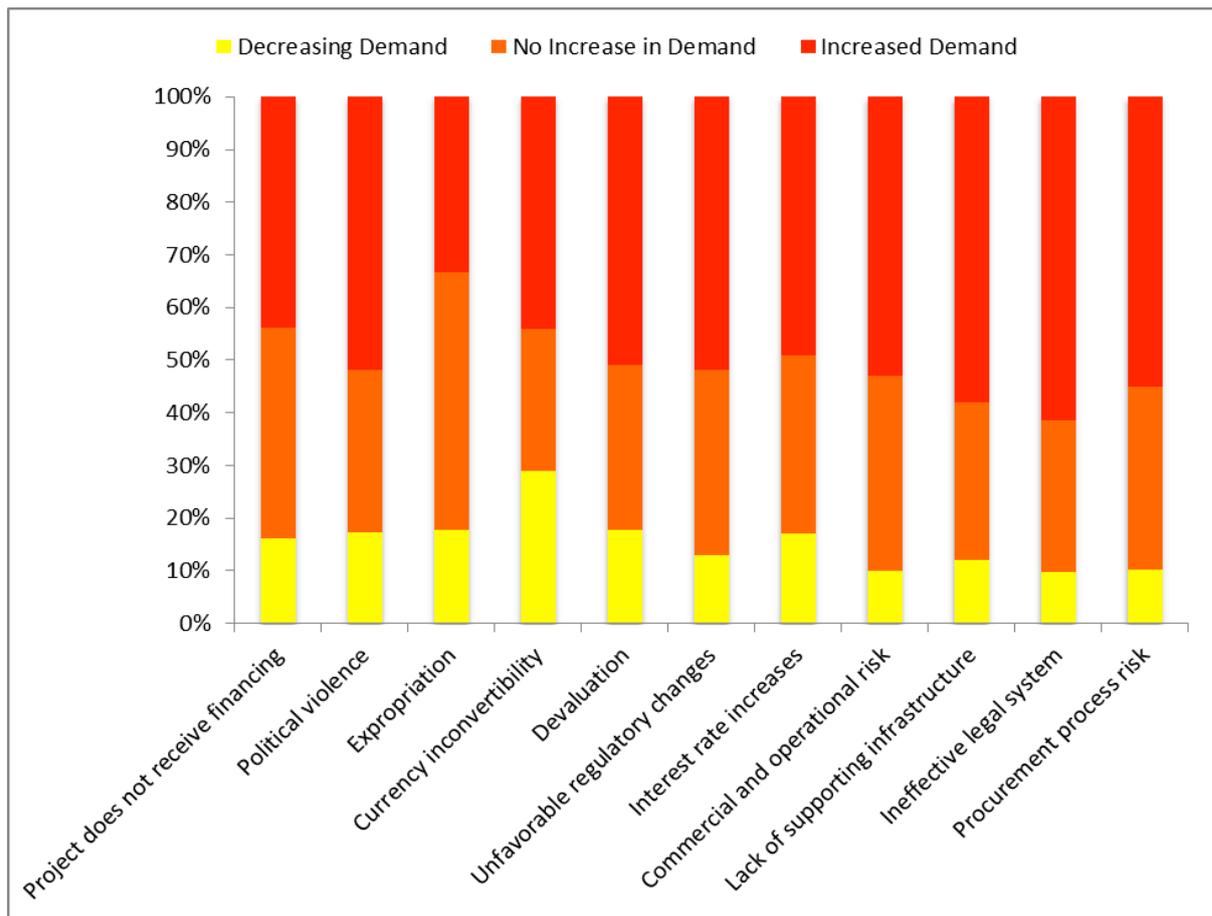
These divergent perceptions of the type of risk mitigation needed to enable investment highlight the need to revisit the type and scale of public sector interventions now being provided by the official sector in Africa.

*Demand in Three Years by Type of Risk:* A large majority of all survey respondents expect an increase in the need for risk mitigation over the next three years for all the types of risk, except expropriation. The bar chart below represents the average responses of survey participants for each of these types of risk, aggregating average responses in three categories: increased demand (scores “4” and “5”), no change in demand (score “3”), and decreasing demand (scores “1” and “2”).

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<sup>26</sup> For example, the “Overview of the Assessment of Project Preparation Facilities for Infrastructure in Africa” states: “Africa’s considerable infrastructure gap must be addressed if the continent is to sustain its high rates of economic growth. One main bottleneck for infrastructure in Africa is the availability of long-term debt finance, where the needs are substantial. But another is the lack of well-packaged bankable projects. Project preparation facilities (PPFs) for infrastructure are thus an essential part of the broader project preparation landscape.” *ICA Overview of the Assessment of Project Preparation Facilities for Infrastructure in Africa*, page iii. See: <http://www.icafrica.org/en/knowledge-publications/article/ica-assessment-of-project-preparation-facilities-for-africa-197/>

**Table 21: Expected Change in Risk Mitigation Demand by Type of Risk over Three Years**



Only 33% of respondents forecast an increase in the need for risk mitigation against expropriation over the next three years.

The remaining risks are seen as having greater demand over three years – interest rate increases, project development (i.e., projects not receiving financing), currency inconvertibility and expropriation – are expected to have increased demand at levels of 49%, 44%, 44%, and 33%, respectively.

Views by Type of Respondent: As noted in the table below, which breaks out responses by type of survey respondent, a majority of respondents anticipate increasing demand for risk mitigation of all surveyed risk types over the next three years.

**Table 22: Change in Demand for Risk Mitigation by Type of Risk over Three Years**

Type of Risk (sorted by highest increase in demand)	Increase in Demand (Percent of Respondents responding with score of 4 or 5)	Percent by Type of Respondent (Responding with a score of 4 or 5)				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Ineffective legal system	62%	57%	67%	69%	60%	50%
Lack of supporting infrastructure	58%	67%	58%	73%	50%	38%

Type of Risk <i>(sorted by highest increase in demand)</i>	Increase in Demand <i>(Percent of Respondents responding with score of 4 or 5)</i>	Percent by Type of Respondent <i>(Responding with a score of 4 or 5)</i>				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Procurement process risk	55%	43%	55%	64%	100%	38%
Commercial and operational risk	53%	71%	67%	64%	20%	31%
Political violence	52%	71%	50%	50%	67%	38%
Unfavourable regulatory changes	52%	57%	67%	50%	50%	38%
Devaluation	51%	40%	50%	59%	60%	42%
Interest rate increases	49%	67%	54%	47%	60%	33%
Project does not receive financing, wasting money spent on development	44%	50%	58%	47%	50%	23%
Currency inconvertibility	44%	40%	42%	59%	50%	25%
Expropriation (government takeover)	33%	33%	55%	40%	17%	15%

Overall, the highest percentage of respondents viewed legal risk, as a result of ineffective legal systems, and lack of supporting infrastructure as the two highest potential risks, leading to an increase in demand for risk mitigation over the next three years.

While only 33% of survey respondents expect an increase in the demand for expropriation risk mitigation, 55% of DFI and ECA survey respondents viewed demand for expropriation risk mitigation as increasing.

Again, these findings are significant as they illustrate the wide divergence in perceptions of future demand for risk mitigation in Africa and the divergence of views between the types of respondents and within groups.

### 3 Risk Mitigation Gaps and Solutions

Given the extent of the identified risk mitigation gap in Africa, and its estimated growth over the next three years, the need to identify and implement risk mitigation solutions is of obvious importance. Both the literature review and study participants contributed to the articulation of a significant number of actionable steps that can be taken today, by the public sector and by African governments with their development partners, to advance African investment.

This section is divided into four subsections as defined by the study participant responses and suggestions, with the objective of detailing actionable proposals in the following areas:

- 1) Actions to increase the effectiveness of existing public sector risk mitigation instruments
- 2) Actions to expand the definition of risk mitigation and create a larger “*Toolbox of Risk Mitigation Solutions*” that provides solutions for a broader set of risks that impede investment and access to finance
- 3) Actions that can be taken by the leadership of DFIs and bilateral development partners in implementing internal changes for optimizing their effectiveness in filling the risk mitigation gap
- 4) Other actions that can be taken by DFIs, development partners and African governments to fill the risk mitigation gap.

Critical to the scaling up of risk mitigation is the facilitation of extensive public-private sector collaboration in building the market, products, applications, financial advisory services and related processes. The actions of the official sector – African governments and their development partners – need to be coordinated with the private sector, in terms of risk mitigation needs and in leveraging the private sector’s capacity to provide risk mitigation support, allowing the most efficient utilization of the limited supply of current public sector coverage.

The focus of priority actions needs to be both in-country, as well as global:

- “Local” to ensure customization on a country, sector, and project level; and
- “Global” to ensure cross-fertilization, economies of scale and the development of global products, partnerships and markets.

Specific next steps are outlined below.

#### 3.1 Increase the Effectiveness of Existing Public Sector Risk Mitigation Instruments

The literature survey and study participants input identified specific actions that the public sector can take to increase the use and benefits obtained from currently offered risk mitigation instruments.

As noted in the WEF study on the untapped potential of DFIs to catalyse private investment, the weight of DFI activities should dramatically shift from direct lending to facilitating the mobilization of resources from the private sector in international and local debt and equity markets.<sup>27</sup>

Despite this acknowledged need by senior public officials in DFIs and governments, the World Bank documents a low utilization of risk mitigation instruments. The World Bank study reports that the use of risk mitigation instruments (guarantee products) has fallen short of reasonable expectations because

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<sup>27</sup> World Economic Forum, “Building on the Monterrey Consensus,” 9 – 22

of a variety of factors that include: (1) competition among institutions for the same clients; (2) weaknesses in the marketing of products, which limits client awareness and choice; (3) limited internal awareness, skills or incentives to use guarantee instruments in relevant situations; and (4) inconsistent pricing.<sup>28</sup>

The study participants reinforced the issues set forth in prior studies, noting particularly the gap in official sector offering of products and low product utilization. For example, the head of one investment fund stated that the problem is that there are “*too few credible institutions providing mitigation products. More multilateral and bilateral agencies need to develop mitigation and development products. The World Bank is really the only game in town.*” This statement illustrates the lack of knowledge among many investors of the current wide range of existing risk mitigation products offered by many DFIs, bilateral agencies and other public and private sector providers.

### **Identification of Specific Actions to Increase Risk Mitigation Effectiveness**

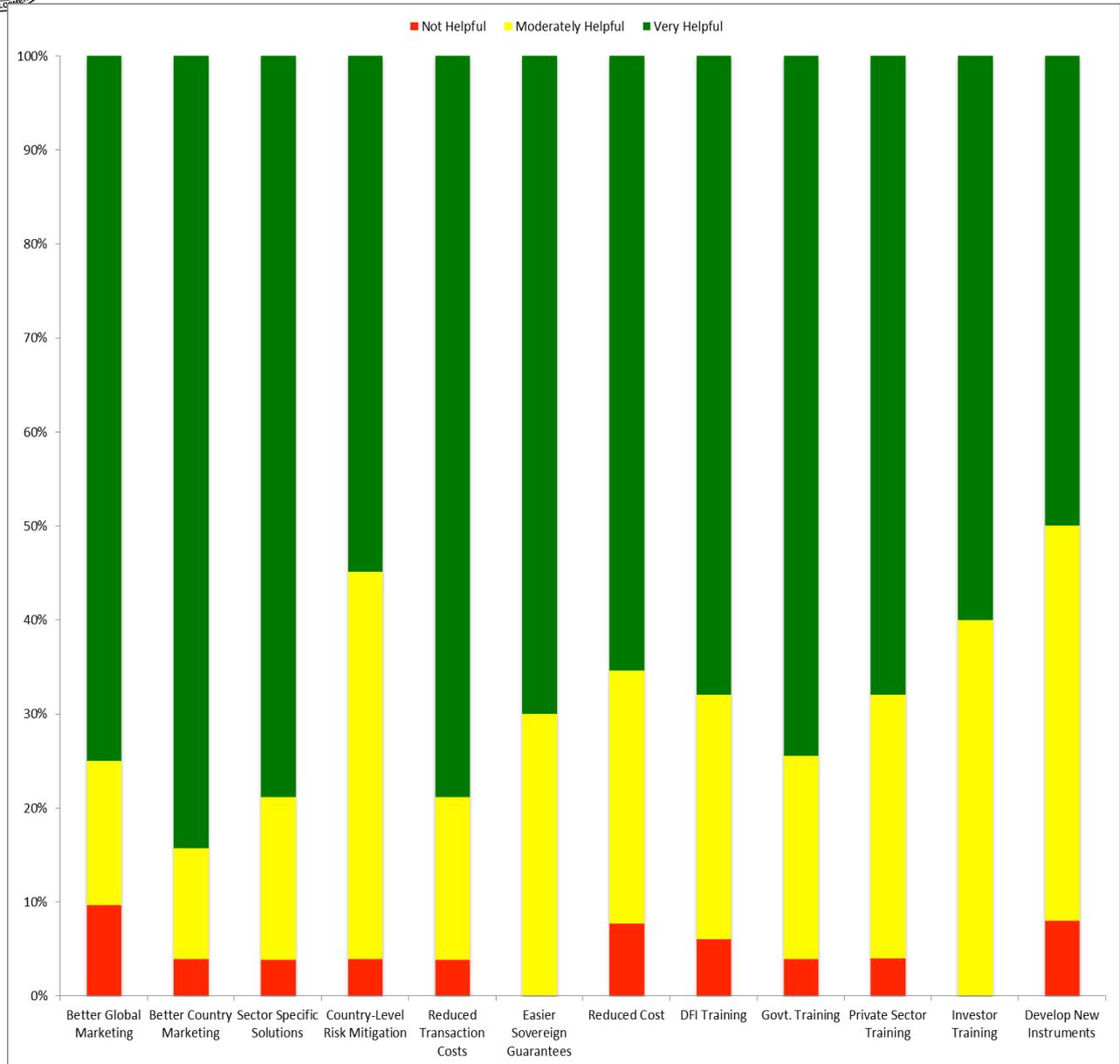
***The study underlined the pivotal importance of specific actions that need to be taken immediately to increase the effectiveness of public sector risk mitigation instruments:***

- Increase effectiveness of marketing
- Reduce transaction time, costs and pricing
- Improve instruments, utilizing private sector input
- Provide dedicated Product Specialists
- Simplify application processes
- Improve inter-agency cooperation
- Expand capacity by increasing syndication of risk products to the private sector
- Develop new internal incentives and performance metrics
- Integrate programs into country fabric
- Public benchmarking
- Increase the leverage of capital for purposes of guarantees
- Overhaul the recording of guarantees in DAC aid statistics
- Modify the treatment of foreign exchange risk in local currency guarantee schemes
- Reduce the requirement of obtaining sovereign guarantees
- Modify cross-default operating rules which prohibit new lending if a country defaults on a donor-guaranteed obligation

***Survey respondents confirmed the importance of all these specific steps. Virtually all of the respondents (over 95% of the total) were of the opinion that the steps mentioned above would prove helpful in increasing the use of risk mitigation instruments.*** The bar chart below represents the average responses of survey participants for each action, aggregating their views in three categories: very helpful (scores “4” and “5”), moderately helpful (scores “2” and “3”), and not helpful (score “1”).

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<sup>28</sup> World Bank Independent Evaluation Group, “The World Bank Group Guarantee Instruments,” 89 – 90.



Moreover, the majority of study respondents rated all these specific actions as either highly or very helpful (scores of “4” and “5”).

**Table 23: Views of Very Helpful Actions to Increase the Use of Risk Mitigation Instruments**

Type of Action to Increase the Use of Risk Mitigation Instruments <i>(sorted by highest to lowest)</i>	Rated as Very Helpful <i>(Percent responding with score of 4 or 5)</i>	Percent by Type of Respondent <i>(Responding with a score of 4 or 5)</i>				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Better marketing of risk mitigation at the country level	84%	100%	73%	87%	67%	92%
Risk mitigation instruments	79%	100%	55%	88%	67%	85%

Type of Action to Increase the Use of Risk Mitigation Instruments (sorted by highest to lowest)	Rated as Very Helpful (Percent responding with score of 4 or 5)	Percent by Type of Respondent (Responding with a score of 4 or 5)				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
designed for specific sectors						
Reduced time to approve and execute risk mitigation instruments	79%	83%	64%	94%	50%	85%
Better marketing of risk mitigation globally	75%	100%	45%	81%	67%	85%
Better training of government officials	75%	100%	64%	80%	50%	77%
Better definition of how governments can provide sovereign counter guarantees	70%	80%	55%	80%	67%	69%
Better training of in-country staff of DFIs offering risk mitigation instruments	68%	100%	73%	67%	20%	69%
Better training of staff of private sector firms that develop projects	68%	83%	55%	71%	33%	85%
Reduced cost of risk mitigation instruments	65%	100%	55%	69%	33%	69%
Better training of private sector lenders and financial investors	60%	83%	55%	57%	33%	69%
Decentralizing risk mitigation instruments at the country level	55%	100%	36%	60%	50%	46%
Development of new risk mitigation instruments	50%	80%	36%	53%	33%	54%

As shown in the table above, host governments, private sector investors (banks, funds), companies and business associations in particular, stated that these actions would facilitate the increased use of risk mitigation instruments and solutions.

These responses underline the importance of collaboration with the private sector in devising and implementing the above actions. For example, several study participants emphasized the role of the private sector in expanding public sector risk mitigation capacity. The head of an investment fund stated:

*“All multilateral and bilateral agencies are constrained by capacity, both from a human resources and balance sheet perspective. An idea would be that the likes of AfDB engage with private sector players in this space, such as AON, Marsh, Chubb, etc, and in turn offer re-insurance, or counter guarantees/indemnities to investors. The effect of this, in theory, is that it allows the private sector players to cast a net wider than the multilaterals can, and these players could then consolidate the risks into buckets suitable for the resources that multilaterals have at their disposal. In other words, let the private sector do the heavy lifting on due diligence, structuring*

*and negotiation, with the ultimate goal of distilling the main risks and terms to be taken by the multilateral and bilateral agencies.”*

The study results demonstrate conclusively that the official sector can achieve greater effectiveness by implementing the above-suggested steps, working in hand with private sector partners and targeted users of risk mitigation.

### ***Institutional changes***

***With regards to institutional changes, again a majority of survey participants agree that taking the following specified actions stated in the study will improve the delivery of risk mitigation instruments and solutions.*** The specific steps and institutional changes are detailed in the table below. The scale was from 1-5, with “5” representing total agreement, “3” representing no view, and “1” representing total disagreement.

**Table 24: Steps / Institutional Changes to Improve the Delivery of Risk Mitigation Instruments and Solutions**

Steps / Institutional changes to Improve Delivery of Risk Mitigation Instruments and Solutions <i>(sorted by highest to lowest)</i>	Agreement <i>(Percent responding with score of 4 or 5)</i>	Percent by Type of Respondent <i>(Responding with a score of 4 or 5)</i>				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Increased official focus on improving the capacity of government institutions to respond to investor issues	85%	100%	73%	75%	100%	92%
Increased official funding of project development costs, increasing the number of projects in the pipeline	70%	100%	55%	67%	83%	69%
Dedicated line for risk mitigation instruments, eliminating competition with loan products	62%	83%	55%	50%	67%	69%
DFI assumption of foreign exchange risk when providing local currency guarantees	61%	100%	27%	64%	67%	69%
Establishment of public benchmarking of risk mitigation	56%	100%	45%	36%	33%	77%
Eliminating requirement for sovereign counter guarantee	56%	80%	45%	60%	33%	62%
Increase in the leverage of capital for purpose of guarantees	54%	50%	45%	50%	67%	62%
Increasing weight of guarantees when compiling aid statistics	54%	100%	45%	53%	50%	46%

Steps / Institutional changes to Improve Delivery of Risk Mitigation Instruments and Solutions (sorted by highest to lowest)	Agreement (Percent responding with score of 4 or 5)	Percent by Type of Respondent (Responding with a score of 4 or 5)				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
New internal incentives and performance metrics	51%	100%	27%	53%	67%	38%

Host government officials were the most emphatic in their endorsement of the importance of the above actions for improving the delivery of risk mitigation instruments and solutions, followed by the private sector.

The group agreeing least with the above institutional changes were DFI and ECA officials, with respondents only agreeing highly that three of the nine specified actions would improve the delivery of risk mitigation instruments and solutions.

### 3.2 Expand the Definition of Risk Mitigation and Create a Larger “Toolbox of Risk Mitigation Solutions”

Beyond existing risk mitigation instruments, both the literature review and a preponderance of study participant responses reveal that the “real risks” impeding investment and access to finance for African countries are not adequately recognized or addressed by the conventional toolbox of risk mitigation instruments offered to investors. As evidenced in Section 2.5 above, the survey responses underscore the need to widen the definition of risks that need to be mitigated to increase investment in Africa and the corresponding array of risk mitigation solutions. In short, there is a large gap between how risk mitigation is conventionally defined and the large list of risks that are, in reality, creating significant barriers to increased investment and access to finance.

The following table highlights the survey respondents’ views regarding the usefulness of the full range of risk mitigation instruments in facilitating private investment and access to finance in Africa. As the data indicates, a significant majority of participants believe in the usefulness of the full range of risk mitigation instruments. When survey participants were asked to rate the usefulness of risk mitigation instruments, they rated the actions listed below as helpful. The possible answers were “very useful,” “unnecessary,” or “not used because of unfamiliarity.”

**Table 25: Views on the Usefulness of Risk Mitigation Instruments**

Type of Risk Mitigation Instrument (sorted by most useful)	Rated Useful or Very Useful (percent)	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
Trade support (ECAs, etc.)	96%	100%	92%	100%	100%	92%
Partial Risk Guarantees (PRG)	92%	100%	100%	88%	100%	85%
Partial Credit Guarantees (PCG)	92%	100%	91%	88%	100%	92%

Type of Risk Mitigation Instrument (sorted by most useful)	Rated Useful or Very Useful (percent)	Percent by Type of Respondent				
		Host Gov'ts	DFIs, ECAs	Private Sector Investors	Private Sector Providers of Risk Mitigation	Other Private Sector and NGO
PRI covering political violence	91%	100%	100%	88%	100%	77%
PRI covering expropriation	89%	86%	100%	88%	100%	77%
PRI covering inconvertibility	89%	100%	92%	81%	100%	85%
Full credit guarantees (“wraps”)	87%	100%	82%	94%	67%	85%
Pre-qualification of bidders, payment for preparation of preliminary proposals by interested pre-qualified bidders	87%	100%	80%	81%	83%	92%
Grants for project development	85%	100%	75%	82%	83%	92%
A/B loans from development banks	83%	67%	100%	80%	50%	92%
Currency hedges (e.g. GuarantCo, TCX)	81%	100%	64%	88%	67%	85%
First loss facilities	80%	83%	73%	94%	67%	69%
On-lending programs to lower interest rates	76%	83%	82%	80%	20%	85%
Output-Based Aid (subsidies for user payments)	74%	100%	45%	88%	40%	85%
Interest rate swaps	69%	100%	55%	75%	33%	77%
Credit default swaps	65%	100%	45%	80%	33%	67%
Weather derivatives	53%	80%	45%	44%	67%	54%

Virtually all the instruments listed above were classified by the largest percentage of survey respondents as “very useful” or “useful.” Credit default swaps (CDS) and weather derivatives were classified by the lowest percentage of respondents as “very useful” or “useful” (though this smaller percentage still represented a majority of respondents).

However, there were again great divergences in views by respondent type. For example, all host government survey respondents classified CDS and weather derivatives as “very useful” or “useful,” as compared to the overall survey average of 65%.

Therefore, as evidenced by survey responses, the official sector needs to expand its working definition of risk mitigation and develop explicit strategies to mitigate the full array of risks<sup>29</sup> developing commensurate risk mitigation solutions.<sup>30</sup> A critical missing concept in the conventional risk mitigation toolbox is the application of proven project structuring techniques, such as those used successfully in project finance to reduce risks and ensure project sustainability. As noted by study

<sup>29</sup> The type of risks included in the survey included classical risks (widely covered by available risk mitigation instruments), broader business environment risks (not covered by traditional risk mitigation instruments), and business risks often cited as impediments in developing and investing in specific projects and businesses.

<sup>30</sup> DFIs and development partners engage in significant reform and capacity-building programmes to improve the business-enabling environment, so they are well positioned to explore how to build out these programmes with new innovative risk mitigation solutions.

participants, a significant gap is the availability of project development funds and financial advisory services to help ensure the structuring of viable projects. A new programme is now developing solutions that combine project structuring methods with credit enhancement for securing infrastructure finance, “The “Local Finance Initiative,” being implemented by the United Nations Capital Development Fund (UNCDF) in Uganda and Tanzania.<sup>31</sup>

The lack of a sufficient project pipeline, which was reported widely across the public and private sectors, is the result of insufficient support for project development. While some DFIs and development partners have made important steps in this direction, the bottleneck is serious at the inception stage of project development.<sup>32</sup> Moreover, different types of projects in different sectors require different solutions. Again there has been important progress in these areas, with the development of in-country specialized applications.<sup>33</sup> The need for increasing the use of these types of risk mitigation, however, is apparent and a precondition for successful widespread Africa growth.

In short, specific actions are urgently needed to create a larger, more relevant and useful “Toolbox of Risk Mitigation Solutions.” Specific actions based on study results include the following:

1. Supporting the development of new risk mitigation products, processes and approaches that address the risk mitigation gap, including:
  - Sector-specific approaches – e.g., energy, agriculture, etc.
  - Coverage of risk – e.g., expanding to provide 100% risk coverage with wraps, convertibility, etc.
  - Deepening domestic financial markets and increasing market liquidity – e.g., greater availability of ratings and increased transparency, targeted interventions to decrease local interest rates and extend tenors through bank on-lending programs and refinancing options, etc.
2. Increasing project development support/funding and financial advisory support – develop sources of finance, financial advisory support
3. Scaling up use of project structuring approaches – e.g., use of SPVs, ring-fenced revenues, contracts, first loss facilities, etc.
4. Creating ways to reduce procurement risk and streamline the procurement process so as to facilitate both a larger supply of expert services to meet demand and the ability of countries to select the most qualified relevant experts – e.g., incentivizing interested pre-qualified bidders through the provision of public funds or payment for preparation of preliminary proposals

<sup>31</sup> See the UNCDF – Local Finance Initiative: <http://uncdf.org/en/local-finance-initiative>

<sup>32</sup> For examples of project development and financial advisory programmes, see the UNCDF – Local Finance Initiative: <http://uncdf.org/en/local-finance-initiative>; Business Uganda Development Scheme-UK Department for International Development (BUDS-DFID) and the Private Sector Foundation Uganda (PSFU): [http://www.psfuganda.org/new/index.php?option=com\\_content&view=article&id=68&Itemid=183](http://www.psfuganda.org/new/index.php?option=com_content&view=article&id=68&Itemid=183); Infraco Africa: <http://www.infracoafrica.com/activities-sectors.asp>; Africa Finance Corporation: <http://www.africafc.org/>; ORIO (Facility for Infrastructure Development) Grant Facility: <http://www.agentschapnl.nl/en/programmas-regelingen/facility-infrastructure-development-orio>.

<sup>33</sup> For examples of in-country specialized risk mitigation instruments and approaches, see, African Trade Insurance Agency (ATI): <http://www.ati-aca.org/>; African Guarantee Fund for Small and Medium Sized Enterprises: <http://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/african-guarantee-fund-for-small-and-medium-sized-enterprises/>; Uganda Energy Credit Capitalization Company <http://www.ugo.co.ug/index.php/directory/government/uganda-energy-credit-capitalisation-company>; Agence Française de Développement – ARIZ and Green Credit Lines: [http://www.afd.fr/jahia/webdav/site/afd/shared/PORTAILS/PUBLICATIONS/PLAQ\\_UETTES/AFD\\_ARIZ\\_GB.pdf](http://www.afd.fr/jahia/webdav/site/afd/shared/PORTAILS/PUBLICATIONS/PLAQ_UETTES/AFD_ARIZ_GB.pdf)

5. Improving the ability of governments to respond to investor issues and create business-enabling environments
6. Increasing the quantity and scope of risk mitigation instruments which provide coverage for equity investors

This urgent, required process of expanding the “Risk Mitigation Toolbox” needs to be pursued at both the local and global levels, providing local focus with global synergies.

### **3.3 Leadership of DFIs and Bilateral Development Partners in Implementing Internal Changes to Fill the Risk Mitigation Gap**

Both the literature review and most survey respondents also underscore the many action steps that can be taken by leaders in DFIs and development partners to increase their effectiveness in providing risk mitigation solutions to the countries to which their programmes are devoted.

As noted in both the World Bank Evaluation Report on Risk Mitigation and the WEF DFI Report, navigating the transition from direct lender of official funds to innovative enabler of private investment requires major changes in the culture, processes and rules of development institutions.<sup>34</sup> The existing capital and capacities of the donor institutions cannot be used optimally unless the senior leadership of development agencies take effective action to adapt their internal organization and processes to ensure the effectiveness of risk mitigation approaches and optimal utilization.

The specific actions for DFIs and other development partners to undertake internally to improve their capacity for risk mitigation include the following:

- Better align risk mitigation with country programming, including dedicated credit lines for guarantees, input from the private sector, etc.
- Review and, where necessary, revise Treasury and policy guidelines that hamper scaling up risk mitigation, including DFI conditionalities associated with guarantee products
- Launch and maintain internal staff risk mitigation training programs aimed at enhancing technical skills, including credit analysis and scoring of political, contractual and regulatory risks
- Institute performance benchmarks and incentives that incentivize staff to market and use risk mitigation products in both general and transaction-related engagements with governments and the private sector – e.g., incentives should be aligned with the mission of private sector engagement, prioritizing development impact over profitability and the establishment of “private sector mobilization performance metrics”
- Expand activities to include more projects managed by the private sector rather than focusing primarily on governments with which DFIs have a long working relationship, openly identify the problems impeding effective official engagement of the private sector and design remedies with commensurate training and capacity building programmes for retooling staff
- Modify risk management processes to enable targeted assumption of risks within acceptable risk guidelines
- Enhance management execution capacity with decentralized, responsive decision making
- Implement more effective multi-donor coordination initiatives – e.g., undertaking long-term commitments that pool resources at global, regional, and country levels, eliminating redundancies and reducing administrative costs for recipient countries and the private sector

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<sup>34</sup> World Economic Forum, “Building on the Monterrey Consensus,” 27 – 35.

These suggested adjustments to internal processes in DFIs and other development partners will require consultation with the private sector to ensure that they are responsive to the needs of investors and that they will be able to leverage the wider support of private sector providers of risk mitigation.

### **3.4 Other Official Sector Actions by DFIs, Development Partners and African Governments Needed to Fill the Risk Mitigation Gap**

Finally, both the literature review and the preponderance of study participant responses underscore the importance of several specific new initiatives that the official sector – African governments with their development partners – can undertake to reduce the risk mitigation gap. The specific actions include the following:

- Expand support of new risk mitigation instruments, processes and entities (addressing the risk mitigation gaps cited below)
- Provide project development funds
- Fund outsourced risk mitigation instruments and financial advisory services
- Conduct training to enable banks, private sector companies, governments and other stakeholders to understand the value and use of risk mitigation instruments and how to appropriately price perceived or real risks
- Support capacity-building in government agencies accountable for private sector and local economic development
- Facilitate the creation of “Country-Based Risk Mitigation Centres” in African countries, where the private sector and government can convene; access information on best practices, instruments, training, etc.; conduct training and build in-country capacity; and develop tailored risk mitigation approaches that meet country needs

Given the similarity of the issues across both developing and developed countries, it is important to recognize that many of these risk mitigation solutions have broad applicability and would benefit from cross-fertilization from other regions of the world. Therefore, the establishment of a “*Global Risk Mitigation Solution Centre*” aimed at incubating and scaling up risk mitigation solutions; centralizing risk mitigation lessons learned, best practices, and technical solutions; and enabling public-private sector meetings and collaboration would be useful for Africa, as well as other regions and countries, in increasing investment and access to finance.

*The potential for expanding the supply of risk mitigation to fill the gap is significant. The differing perceptions of the need and outlook for risk mitigation between the different stakeholders participating in the study demonstrate the need for all parties to better understand the demand function and the potential opportunities for refining existing risk mitigation instruments, applications and approaches.*

*Extensive public-private sector consultations will be critical to meeting the challenge of improving risk mitigation solutions to advance African investment.*

## 4 Conclusion

The promise of African investment is great, but risk mitigation must be more effectively applied to ensure increased flows across all sectors of the economy – from infrastructure to agriculture supply chains, and corporate and SME finance. The proactive action of African governments and their development partners is critical in the defining of targeted interventions that can unblock the capital needed to grow the economies of African countries.

The steps that need to be taken are wide-ranging, from training to marketing and product improvement, and require extensive public-private sector collaboration. The AfDB and other DFIs can play a leading role in meeting with investors and private sector providers of risk mitigation to promote and enable the partnerships needed for success in advancing African investment and access to finance.

The survey responses underscore *the need for the official sector to widen its definition of risks that need to be mitigated to increase investment in Africa and its support of commensurate risk mitigation solutions*. It is critical to include the broader business environment risks not covered by traditional risk mitigation instruments, such as the lack of supporting infrastructure, ineffective legal systems, and interest rate increases, as well as business risks, namely the lack of funds for developing projects with uncertain returns and the procurement process risk resulting from PPP arrangements and their government procurement processes.

*Almost all of the survey respondents reported significant demand for risk mitigation to address all of the above types of risks.* Furthermore, 90% of the survey respondents estimated that, with the exception of expropriation, risk mitigation demand for the full spectrum of these risks would increase *by over 50% over the next three years.*

*The study results therefore indicate that there is a large risk mitigation gap, and that the formulation of effective risk mitigation solutions is a pressing priority for the official sector – for both African governments and their development partners.* Solutions for addressing the risk mitigation gap in Africa that emerged from the study are restated below:

1) **Increase the effectiveness of existing public sector risk mitigation instruments**

- Increase marketing effectiveness
- Reduce transaction time, costs and pricing
- Improve risk mitigation instruments, utilizing private sector input to increase effectiveness
- Provide dedicated Product Specialists
- Simplify the application processes – e.g. dedicated help desks, reduced complexity and required application process time
- Improve inter-agency cooperation
- Expand the capacity of official sector for providing risk mitigation solutions by increasing syndication of risk mitigation products with the private sector

2) **Enlarge the definition of risk mitigation and create a larger “Toolbox of Risk Mitigation Solutions” to include the broader set of risk issues and solutions that impede investment and access to finance**

- Support the development of new risk mitigation products, processes and approaches that address specific gaps:
  - Sector-specific approaches - e.g., energy, agriculture, etc.
  - Coverage of risk - e.g., expand to provide 100% risk coverage with wraps, convertibility, etc.

- Need to deepen domestic financial markets and increase market liquidity - e.g., improve ratings and transparency, targeted interventions to decrease local interest rates and extend tenors through bank on-lending programs, etc.
  - Scale up project development support/funding and financial advisory support (develop sources of finance, financial advisory support)
  - Scale up use of project structuring approaches - e.g., SPVs, ring-fenced revenues, contracts, first loss, etc.
  - Create ways to reduce procurement risk and incentivize the private sector to develop projects
  - Improve the ability of governments to respond to investor issues and create business-enabling environments
- 3) **Improve the leadership of DFIs and bilateral development partners by implementing internal changes to optimize their effectiveness in filling the risk mitigation gap**
- Align risk mitigation with country programming (including dedicated credit lines for guarantees, input from the private sector, etc.)
  - Train product specialists with dedicated responsibility for risk mitigation instrument development and implementation
  - Address Treasury and policy guidelines that hamper scaling up risk mitigation, including DFI conditionalities associated with guarantee products
  - Launch full-scale risk mitigation training programs for internal staff
  - Institute performance benchmarks and incentives that explicitly encourage the adoption and use of risk mitigation by staff, and its marketing to governments and the private sector
- 4) **Encourage other actions by DFIs, development partners and African governments to fill the risk mitigation gap**
- Expand support for new risk mitigation instruments, processes and entities (addressing the cited risk mitigation gaps)
  - Scale up project development funds
  - Fund outsourced risk mitigation instruments and financial advisory services
  - Conduct training to enable banks, private sector companies, governments and other stakeholders to understand the value and use of risk mitigation instruments and how to appropriately price both perceived and real risks
  - Support capacity-building in government agencies accountable for private sector and local economic development
  - Facilitate the creation of “Country-Based Risk Mitigation Centres” in African countries, where the private sector and government can convene; access information on best practices, instruments, training, etc.; conduct training and build in-country capacity; and develop tailored risk mitigation approaches that meet country needs

Given the similarity of the issues across both developing and developed countries, it is important to recognize that broad applicability of many of these risk mitigation solutions allows for cross-fertilization from other regions of the world. Thus, the establishment of a “*Global Risk Mitigation Solution Centre*” would serve to increase investment and access to finance through incubating and scaling up risk mitigation solutions; centralizing risk mitigation lessons learned, best practices, and technical solutions; and enabling public-private sector meetings and collaboration .

***Finally, the differing perceptions of the need and outlook for risk mitigation between the different stakeholders participating in the study illustrate the need for all parties to better understand the demand function and potential opportunities for refining existing risk mitigation instruments, applications and approaches. Extensive public-private sector consultations will be critical to success in meeting the challenge of improving risk mitigation solutions to advance African investment.***

## Bibliography

- African Business*, “How Africa Can Rule the 21<sup>st</sup> Century.” January 2013.  
<http://issuu.com/icpubs/docs/ab0113?mode=window&viewMode=doublePage/1>
- African Development Bank. “Africa in 50 Years’ Time: The Road towards Inclusive Growth.” Tunis: African Development Bank. September 2011.  
<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Africa%20in%2050%20Years%20Time.pdf>
- African Development Bank. “Assessment of Project Preparation Facilities for Africa. Volume A: Diagnostic and Recommendations.” Prepared by the Infrastructure Consortium for Africa. November 2012.
- African Development Bank. “Assessment of Project Preparation Facilities for Africa. Volume B: Individual Assessments.” Prepared by the Infrastructure Consortium for Africa. November 2012.
- African Development Bank. “Assessment of Project Preparation Facilities for Africa: Appendixes.” Prepared by the Infrastructure Consortium for Africa. November 2012.
- African Development Bank. “Tunnels of Funds: Overview of the Assessment of Project Preparation Facilities for Infrastructure in Africa.” Prepared by the Infrastructure Consortium for Africa. November 2012.
- Africa Progress Panel. “Africa Progress Report 2012: Jobs, Justice and Equity: Seizing Opportunities in Times of Global Change.” Geneva: Africa Progress Panel. April 2012.  
<http://www.africaprogresspanel.org/en/pressroom/press-kits/annual-report-2012/africa-progress-report-2012-documents/>
- Asian Development Bank. “Strengthening Capacity of Developing Member Countries for Managing Credit Enhancement Products.” Manila: Asian Development Bank. August 2011.  
<http://www.iadb.org/intal/intalcdi/PE/2012/10481.pdf>
- Baietti, Aldo and Peter Raymond. “Financing Water Supply and Sanitation Investments: Utilizing Risk Mitigation Instruments to Bridge the Financing Gap.” Water Supply and Sanitation Sector Board Discussion Paper Series, Paper No. 4. Washington, D.C.: The World Bank. January 2005.  
[http://siteresources.worldbank.org/INTWSS/Resources/WSS\\_Investments.pdf](http://siteresources.worldbank.org/INTWSS/Resources/WSS_Investments.pdf)
- Bond, Daniel L., Daniel Platz and Magnus Magnusson. “Financing Small-Scale Infrastructure Investments in Developing Countries,” DESA Working Paper No. 114. New York: United Nations Department of Economic and Social Affairs. May 2012.  
[http://www.un.org/esa/desa/papers/2012/wp114\\_2012.pdf](http://www.un.org/esa/desa/papers/2012/wp114_2012.pdf)
- Brookings Institution. “Accelerating Growth through Improved Intra-African Trade.” Washington, DC: Brookings Institution. January 2012.  
[http://www.brookings.edu/~media/Research/Files/Reports/2012/1/intra%20african%20trade/01\\_intra\\_african\\_trade\\_full\\_report.PDF](http://www.brookings.edu/~media/Research/Files/Reports/2012/1/intra%20african%20trade/01_intra_african_trade_full_report.PDF)
- Centennial Group Holdings. “Research on Innovative Finances to Achieve Millennium Development Goals.” Prepared for the Japan Bank for International Cooperation. February 2006.
- Cochran, Thomas H. *et al.* “Infrastructure Funds and Facilities in Sub-Saharan Africa,” Washington, DC: The World Bank. May 2009.

- Cochran, Thomas H. *et al.* “Subnational Infrastructure Finance in the Emerging Markets: A Financial Guaranty Perspective,” In *The Handbook of Municipal Bonds*, edited by Sylvan Feldstein and Frank Fabozzi, 191-222. John Wiley & Sons, Inc.: Hoboken, New Jersey. 2008.
- Delmon, Jeffrey, *Private Sector Investment in Infrastructure*. 2<sup>nd</sup> ed. Alphen aan den Rijn, The Netherlands: Kluwer Law International. 2008.
- Eberhard, Anton and Katherine Nawal Gratwick. “IPPs in Sub-Saharan Africa: Determinants of Success.” Washington, D.C.: The World Bank. 2012.  
[http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/Africa\\_IPP.pdf](http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/Africa_IPP.pdf)
- Ernst & Young. “Building Bridges: Ernst and Young’s 2012 Attractiveness Survey.” 2012.  
[http://www.ey.com/Publication/vwLUAssets/EY\\_2012\\_Africa\\_attractiveness\\_survey/\\$FILE/atractiveness\\_2012\\_africa\\_v17.pdf](http://www.ey.com/Publication/vwLUAssets/EY_2012_Africa_attractiveness_survey/$FILE/atractiveness_2012_africa_v17.pdf)
- Foster, Vivien and Cecilia Briceño-Garmendia, eds. “Africa’s Infrastructure: A Time for Transformation.” Washington, DC: The World Bank. 2010.  
<http://www.infrastructureafrica.org/system/files/Africa%27s%20Infrastructure%20A%20Time%20for%20Transformation%20FULL%20TEXT.pdf>
- Gordon, Kathryn. “Investment Guarantees and Political Risk Insurance: Institutions, Incentives and Development.” Paris: Organization for Economic Co-operation and Development. 2008.  
<http://www.oecd.org/investment/investmentpolicy/44230805.pdf>
- Green, Anke. “Credit Guarantee Schemes for Small Enterprises: An Effective Instrument to Promote Private Sector-Led Growth?” Working Paper No. 10. Vienna: United Nations Industrial Development Organization. August 2003.  
[http://www.unido.org/fileadmin/user\\_media/Publications/Pub\\_free/Credit\\_guarantee\\_schemes\\_for\\_small\\_enterprises.pdf](http://www.unido.org/fileadmin/user_media/Publications/Pub_free/Credit_guarantee_schemes_for_small_enterprises.pdf)
- Hansen, Angela *et al.* “Assessing Credit Guarantee Schemes for SME Finance in Africa: Evidence from Ghana, Kenya, South Africa and Tanzania.” Paris: Agence Française Développement. July 2011.  
<http://www.afd.fr/webdav/site/afd/shared/PUBLICATIONS/RECHERCHE/Scientifiques/Documents-de-travail/123-VA-document-travail.pdf>
- International Monetary Fund. “Government Guarantees and Fiscal Risk.” Washington, DC: International Monetary Fund. April 1, 2005.  
<http://www.imf.org/external/np/pp/eng/2005/040105c.pdf>
- Irwin, Timothy C. “Government Guarantees: Allocating and Valuing Risk in Privately Financed Infrastructure Projects.” Washington, D.C.: The World Bank. 2007.  
[http://siteresources.worldbank.org/INTSDNETWORK/Resources/Government\\_Guarantees.pdf](http://siteresources.worldbank.org/INTSDNETWORK/Resources/Government_Guarantees.pdf)
- Jamison, Mark A., Lynne Holt, and Sanford V. Berg. “Measuring and Mitigating Regulatory Risk in Private Infrastructure Investment.” *The Electricity Journal* 18, No.6 (June 2005): 36-45.  
[http://warrington.ufl.edu/centers/purc/purcdocs/PAPERS/0513\\_Jamison\\_Measuring\\_and\\_Mitigating.pdf](http://warrington.ufl.edu/centers/purc/purcdocs/PAPERS/0513_Jamison_Measuring_and_Mitigating.pdf)
- Kehew, Robert, Tomoko Matsukawa, and John Petersen. “Local Financing for Sub-Sovereign Infrastructure in Developing Countries: Case Studies of Innovative Domestic Credit Enhancement Entities and Techniques.” Infrastructure, Economics and Finance Department,

Discussion Paper No. 1. Washington, D.C.: The World Bank. February 2005.

[http://siteresources.worldbank.org/INTMF/Resources/local\\_financing\\_infrastructure.pdf](http://siteresources.worldbank.org/INTMF/Resources/local_financing_infrastructure.pdf)

Lamech, Ranjit and Kazim Saeed. “What International Investors Look For When Investing in Developing Countries: Results from a Survey of International Investors in the Power Sector.” Energy and Mining Sector Board Discussion Paper No. 6. Washington, D.C.: The World Bank. May 2003. <http://globalregulatorynetwork.org/Resources/InvestorsPaperNo6.pdf>

Levitsky, Jacob. “Credit Guarantee Schemes for SMEs – An International Review.” *Small Enterprise Development*, 8 no. 2 (June 1997).

[http://siteresources.worldbank.org/EXTXPCOMNET/Resources/2463593-1213887855468/04\\_Credit\\_guarantee\\_schemes\\_for\\_SMEs.pdf](http://siteresources.worldbank.org/EXTXPCOMNET/Resources/2463593-1213887855468/04_Credit_guarantee_schemes_for_SMEs.pdf)

Marsh. “Scoping Study on Financial Risk Management Instruments for Renewable Energy Projects.” Prepared for the Sustainable Energy Finance Initiative (SEFI) of the United Nations Environment Programme.

[http://sefi.unep.org/fileadmin/media/sefi/docs/publications/RiskMgt\\_full.pdf](http://sefi.unep.org/fileadmin/media/sefi/docs/publications/RiskMgt_full.pdf)

Matsukawa, Tomoko and Odo Habeck. “Review of Risk Mitigation Instruments for Infrastructure Financing and Recent Trends and Developments.” Trends and Policy Options No. 4. Washington, D.C.: The World Bank. 2007.

<http://www.ppiaf.org/sites/ppiaf.org/files/publication/Trends%20Policy%20Options-4-Review%20of%20Risk%20Mitigation%20Instrument%20-%20TMatsukawa%20OHabeck.pdf>

Matsukawa, Tomoko, Robert Sheppard and Joseph Wright. “Foreign Exchange Risk Mitigation for Power and Water Projects in Developing Countries.” Energy and Mining Sector Board Discussion Paper No. 9. Washington, D.C.: The World Bank. December 2003.

[http://irispublic.worldbank.org/85257559006C22E9/All+Documents/85257559006C22E985256FFC00751BE0/\\$File/Energy\\_ExchangeCvr.pdf](http://irispublic.worldbank.org/85257559006C22E9/All+Documents/85257559006C22E985256FFC00751BE0/$File/Energy_ExchangeCvr.pdf)

McKinsey Global Institute. “Africa at Work: Job Creation and Inclusive Growth.” August 2012.

[http://www.mckinsey.com/insights/mgi/research/africa\\_europe\\_middle\\_east/africa\\_at\\_work](http://www.mckinsey.com/insights/mgi/research/africa_europe_middle_east/africa_at_work)

McKinsey Global Institute. “Lions on the move: The Progress and Potential of African Economies.” June 2010.

[http://www.mckinsey.com/insights/mgi/research/productivity\\_competitiveness\\_and\\_growth/lions\\_on\\_the\\_move](http://www.mckinsey.com/insights/mgi/research/productivity_competitiveness_and_growth/lions_on_the_move)

Multilateral Investment Guarantee Agency. “World Investment and Political Risk.” Washington, D.C.: Multilateral Investment Guarantee Agency. 2010.

<http://www.miga.org/documents/flagship09ebook.pdf>

Mumssen, Yogita, Lars Johannes, and Geeta Kumar. “Output Based Aid: Lessons Learned and Best Practices.” Washington, D.C.: The World Bank. 2010.

<https://openknowledge.worldbank.org/bitstream/handle/10986/2423/536440PUB0outp101Official0Use0Only1.pdf?sequence=1>

Noman, Akbar. “Innovative Financing for Infrastructure in Low Income Countries: How Might the G20 Help.” Occasional Paper 1. African Center for Economic Transformation, July 2011.

<http://acetforafrica.org/wp-content/uploads/2011/08/ACET-think-piece-noman-financing-infrastructure11.pdf>

Organization for Economic Co-operation and Development. “Mapping Support for Africa’s Infrastructure Investment.” Paris: Organization for Economic Co-operation and Development.

May 2012.

<http://www.oecd.org/daf/internationalinvestment/investmentfordevelopment/MappingReportWeb.pdf>

Organization for Economic Co-operation and Development. “Managing Risk in Agriculture: A Holistic Approach.” Paris: Organization for Economic Co-operation and Development. 2009. <http://www.oecd.org/tad/agriculturalpoliciesandsupport/45558582.pdf>

Organization for Economic Co-operation and Development. “Facilitating Access to Finance: Discussion Paper on Credit Guarantee Schemes.” Paris: Organization for Economic Cooperation and Development. 2008. <http://www.oecd.org/investment/privatesectordevelopment/45324327.pdf>

Platz, Daniel. “Infrastructure Finance in Developing Countries: The Potential of Sub-Sovereign Bonds.” DESA Working Paper No. 76. New York: United Nations Department of Economic and Social Affairs. July 2009. [http://www.un.org/esa/desa/papers/2009/wp76\\_2009.pdf](http://www.un.org/esa/desa/papers/2009/wp76_2009.pdf)

PricewaterhouseCoopers Securities LLC. “Comparative Review of IFI Risk Mitigation Instruments and Direct Sub-Sovereign Lending.” Washington, D.C.: World Bank. November 2003. [http://www.financingwaterforall.org/fileadmin/Financing\\_water\\_for\\_all/Stakeholders\\_responses/Final\\_PWC\\_Report\\_011304.pdf](http://www.financingwaterforall.org/fileadmin/Financing_water_for_all/Stakeholders_responses/Final_PWC_Report_011304.pdf)

Roland Berger, Strategy Consultants. “Misperception of Risk and Return in Low Income Countries: Innovative Finance Serving Infrastructure Development: A Win-Win Deal.” Presented at the G20 Summit Meeting in Los Cabos, Mexico. June 2012.

Sheppard, Robert. “Financing of Private Infrastructure in Sub-Saharan Africa.” Washington, DC: PPIAF. June 2006.

Sheppard, Robert. “Capital Markets Financing for Developing-Country Infrastructure Projects.” DESA Discussion Paper No. 28. New York: United Nations Department of Economic and Social Affairs. January 2003. [http://www.un.org/esa/desa/papers/2003/esadp28.pdf?utm\\_source=OldRedirect&utm\\_medium=redirect&utm\\_campaign=OldRedirect](http://www.un.org/esa/desa/papers/2003/esadp28.pdf?utm_source=OldRedirect&utm_medium=redirect&utm_campaign=OldRedirect)

Sheppard, Robert, Stephan von Klauy, and Geeta Kumar. “Financing Infrastructure in Africa: How the Region Can Attract More Project Finance.” Gridlines Note No. 13. Washington, DC: PPIAF. September 2006. <http://www.ppiaf.org/sites/ppiaf.org/files/publication/Gridlines-13-Financing%20Infrastructure%20in%20Africa%20-%20RSheppard%20SvKlaudy%20GKumar.pdf>

SOFRECO *et al.* “Africa’s Infrastructure Outlooks 2040.” Tunis: Programme for Infrastructure Development in Africa (PIDA). 2011. <http://www.pidafrica.org/Africa%20Infrastructure%20Outlook%202040.pdf>

te Velde, Dirk Willem. “The Role of Development Finance Institutions in Tackling Global Challenges.” London: Overseas Development Institute. August 2011. <http://www.odi.org.uk/resources/details.asp?id=5979&title=role-development-finance-institutions-tackling-global-challenges>

Trémolet, Sophie and Barbara Evans. “Output-Based Aid for Sustainable Sanitation.” OBA Working Paper Series Paper No. 10. Washington, D.C.: The Global Partnership on Output-Based Aid. September 2010. <http://www.gpoba.org/node/520>

United Nations Conference on Trade and Development. “Economic Development in Africa: Structural Transformation and Sustainable Development in Africa.” New York: United Nations Conference on Trade and Development. 2012.

[http://unctad.org/en/PublicationsLibrary/aldcafrica2012\\_embargo\\_en.pdf](http://unctad.org/en/PublicationsLibrary/aldcafrica2012_embargo_en.pdf)

United Nations Economic Commission for Africa. “Unleashing Africa’s Potential as a Pole of Global Growth.” Addis Ababa: United Nations Economic Commission for Africa. 2012.

<http://www.unctad2012.org/index.php?page=view&type=400&nr=350&menu=45>

United Nations Economic Commission for Africa and the Organization for Economic Co-operation and Development. “The Mutual Review of Development Effectiveness in Africa: Promise and Performance.” A joint report by the Economic Commission for Africa and the Organisation for Economic Co-operation and Development. 2012.

<http://www.oecd.org/site/africapartnershipforum/50362685.pdf>

United Nations Environment Programme Finance Initiative. “Financing Renewable Energy in Developing Countries: Drivers and Barriers for Private Finance in Sub-Saharan Africa.” Geneva: United Nations Environment Programme Finance Initiative. February 2012.

[http://www.unepfi.org/fileadmin/documents/Financing\\_Renewable\\_Energy\\_in\\_subSaharan\\_Africa.pdf](http://www.unepfi.org/fileadmin/documents/Financing_Renewable_Energy_in_subSaharan_Africa.pdf)

Williams, Mark D.J., Rebecca Mayer, and Michael Minges. “Africa’s ICT Infrastructure: Building on the Mobile Revolution.” Washington, D.C.: The World Bank. 2011.

[http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/AfricasICTInfrastructure\\_Building\\_on\\_MobileRevolution\\_2011.pdf](http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/AfricasICTInfrastructure_Building_on_MobileRevolution_2011.pdf)

World Bank Independent Evaluation Group. “The World Bank Group Guarantee Instruments 1990 – 2007: An Independent Evaluation.” Washington, D.C.: The World Bank. 2009.

[http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/97714149F690485385257589006CBCB9/\\$file/guarantees\\_eval\\_full.pdf](http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/97714149F690485385257589006CBCB9/$file/guarantees_eval_full.pdf)

World Economic Forum. “Building on the Monterrey Consensus: The Untapped Potential of Development Finance Institutions to Catalyse Private Investment.” Directed by Dr. Barbara Samuels. Geneva: World Economic Forum. 2006.

<https://members.weforum.org/pdf/Financing/Monterrey.pdf>

Yescombe, E.R. *Principles of Project Finance*. London: Academic Press. 2002.

## **ONLINE SOURCES**

INFRADEV: <http://www.globalclearinghouse.org/InfraDev/index.cfm>

Harvard Business School Project Finance Portal: <http://www.people.hbs.edu/besty/projfinportal/>

MIGA: <http://www.miga.org/resources/index.cfm?stid=1870>

Berne Union: <http://www.berneunion.org/>

## Abbreviations

ADB	Asian Development Bank
ADC	Andean Development Corporation
AfDB	African Development Bank
AFREXIM	African Export and Import Bank
ATI	African Trade Insurance Agency
CDS	Credit Default Swaps
COMESA	Common Market for Eastern and Southern Africa
COSEC	Companhia de Seguro de Créditos
DCA	Development Credit Agency
DFI	Development Finance Institution
DFID	Department for International Development
DRC	Democratic Republic of the Congo
EBRD	European Bank for Reconstruction and Development
ECA	Export Credit Agency
EDC	Export Development Canada
EIB	European Investment Bank
FDI	Foreign Direct Investment
FISEA	Investment and Support Fund for Businesses in Africa
FSD	Kenya Financial Sector Deepening
GIZ	Gesellschaft für Internationale Zusammenarbeit
GDP	Gross Domestic Product
IBRD	International Bank for Reconstruction and Development
IDA	International Development Agency
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IMF	International Monetary Fund



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IsDB	Islamic Development Bank
MDB	Multilateral Development Bank
MDG	Millennium Development Goals
MFI	Microfinance Institution
MIGA	Multilateral Investment Guarantee Agency
NEF	National Empowerment Fund
NGO	Non-governmental Organization
OBA	Output-Based Aid
OECD	Organization for Economic Co-operation and Development
OeKB	Oesterreichische Kontrollbank AG
PBG	Policy Based Guarantee
PCG	Partial Credit Guarantee
PPA	Power Purchase Agreement
PPP	Public-Private Partnerships
PRG	Political Risk Guarantee / Partial Risk Guarantee
PRI	Political Risk Insurance
RDB	Regional Development Bank
SMEs	Small and Medium-Sized Enterprises
SPV	Special Purpose Vehicle
TOR	Terms of Reference
UN	United Nations
UNCDF	United Nations Capital Development Fund
WBG	World Bank Group
WEF	World Economic Forum

## Glossary of Common Terms Used in Development Finance and Risk Mitigation

**B-Loan:** A loan syndicated to private-sector lenders by a multilateral lender, such as the IFC, that provides an “A-Loan” and acts as the lender of record on behalf of the funding participants (commercial banks and other institutional investors).

**Commercial and Operational Risk:** The various risks that can affect a project or business during operations, such as counterparty risk, changes in input and output prices, fluctuations in demand, or failures in mechanical processes.

**Co-Financing:** A type of financing in which the different lenders agree to fund under the same documentation and security packages but may have different interest rates, repayment profiles, and terms.

**Credit Default Swaps (CDS):** An agreement that offers protection against the non-payment of unsecured corporate or sovereign debt. A typical CDS contract features a counterparty that agrees to “sell” protection to another. The “protected” party pays a fee each year in exchange for a guarantee that if a bond goes into default, the seller of protection will provide compensation.

**Development Finance Institution (DFI):** A generic term used to refer to a range of alternative financial institutions including the World Bank, RDBs (such as the AfDB, ADB, etc), microfinance institutions, community development financial institutions, and revolving loan funds. These institutions play a crucial role in providing credit in the form of higher risk loans, equity positions, and risk guarantee instruments to governments and the private sector in developing countries.

**Export Credit Agency (ECA):** Organizations that assist in supporting exports from their country through the use of direct loans and guarantee mechanisms provided to importers.

**Expropriation Risk:** The risk that the host government takes ownership of the project’s assets or the project company or takes control of the project company (i.e., a forced transfer of ownership, value, or control from a private owner to a government entity).

**First Loss Facility:** First loss protection (first loss facility) is a facility designed to cover the first level of losses or first level of financial support for the underlying assets in a pool, the performance of the pool, or the instruments issued to investors. Common examples of these facilities include overcollateralization, recourse provisions, senior/subordinated security structures, subordinated standby lines of credit, subordinated loans, third party equity, commitments to purchase assets in default and any arrangement that defers receipt of sales proceeds such as spread accounts. A first loss facility is often provided by the supplier of the assets but may be provided by a third party.

**Force Majeure:** A standard clause in contracts that frees parties from their obligations in the case of an extraordinary event beyond their control, such as natural disaster or war. Force majeure events may have a temporary effect on a project or make it permanently impossible to complete or operate the project.

**Foreign Exchange Risk:** The risk that a project will be unable to meet its debt service obligations or produce an adequate equity return as a result of fluctuations in the country’s exchange rate. In fixed exchange rate regimes, only decisions by the host government can alter the official value of the currency.

**Full Credit Guarantee (“wraps”):** Guarantee for all risks (e.g., political risks, commercial risks, etc) provided to a lender or investor. Highly rated “monoline” financial guarantors are the most common

source of full credit guarantees and are often used to increase the credit ratings of debt instruments sufficiently to produce interest cost savings higher than the premium or guarantee fee charged by the monoline insurance company.

**Infrastructure Risk:** The impact on project cash flows from inadequate infrastructure (i.e., electric power, water, transport, telecommunications, etc.).

**Interest Rate Risk:** The impact on project cash flow from higher than expected interest costs, typically associated with floating rate debt and refinancing of existing debt.

**Interest Rate Swaps:** An interest rate swap is a contract to exchange fixed rate payments for floating rate payments linked to a benchmark interest rate and is generally used to manage rate expectations and exposure to fluctuations in interest rates.

**Legal Risk:** The risk that a party to a contract will not be able to enforce contracts, security arrangements, foreign judgments, or choice of law and arbitration provisions.

**On-Lending Programs:** This term refers to subsidized credit programs offered by banks that have acquired low-cost funds from development partners (for example, IFC, government, etc). On-lending programs are common in countries with high interest rates for local currency loans that limit the ability of the private sector to acquire debt at affordable interest rates.

**Output-Based Aid (OBA):** OBA is an approach to increasing access to basic services – such as infrastructure, healthcare, and education – for the poor in developing countries. OBA is used in cases where poor people are being excluded from basic services because they cannot afford to pay the full cost of user fees (such as energy connection fees). OBA is also known as “performance-based aid” or “results-based financing.”

**Pari Passu:** The term is Latin and translates as “without partiality.” It describes securities or debts with equal claim on some right. A new issue of a security may be issued *pari passu*, which indicates that it carries the same rights as securities already issued. For example, common shares are all *pari passu* with respect to each other; this means that no one share has a prior claim to a dividend over any other. However, all common shares are junior to any preferred share, which is likewise *pari passu* with respect to other preferred shares.

**Partial Credit Guarantee (PCG):** These instruments cover a portion of scheduled repayments of private loans or bonds against all risks. PCGs can be utilized to support mobilization of private funds for project finance, financial intermediation and policy - based finance. They are usually issued by Multilateral DFIs (such as the World Bank and the RDBs) and often require counter sovereign guarantees.

- **Project Finance:** PCGs can be used for both public sector and private sector investment projects, especially in infrastructure. These guarantees can be used to encourage the extension of maturity and improvement in market access. The guarantee can cover interest payments (i.e., rolling guarantee), the principal for bullet maturity bonds, or later maturity principal payments of amortizing syndicated loans.
- **Financial Intermediation:** Institutions such as banks can use PCGs to support the mobilization of long-term resources from both international and domestic capital markets. For example, the ADB guarantee can be structured to cover the bullet principal repayment on a bond, or later maturities of a syndicated loan. PCGs for financial intermediaries can also be used from the financial sector development perspective to help deepen domestic money and capital markets. In this context, PCGs can also be used to guarantee short and medium-term instruments such as commercial paper issued by both private and public

institutions.

**Policy Based Guarantees (PBGs):** A type of PCG issued by the World Bank to improve governments’ access to capital markets in support of social, institutional, and structural policies and reforms, as agreed with the Bank. While they are structurally the same as PCGs, PBGs are offered for general balance of payments support.

Like PCGs, PBGs cover a portion of debt service on a borrowing (loans or bonds) by an eligible member country from private foreign creditors in support of agreed structural, institutional, and social policies and reform. While the actual structure is determined on case-by-case basis, the guarantee can be self-standing or part of a larger package of IBRD financial support.

- **Eligible country/borrowers:** Sovereign governments eligible for IBRD’s fiscal support programs termed “Development Policy Lending” (DPL). PBGs are selectively offered to countries with a strong track record of performance, a satisfactory social, structural, and macroeconomic policy framework, and a coherent strategy for gaining (or regaining) access to international financial markets.
- **Eligible debt:** PBGs can be used for any commercial debt instruments (loans, bonds) provided by any private institution. PBGs can cover foreign currency debt. Proceeds of the guaranteed debt can be used for any budgetary purposes.
- **Guarantee coverage:** PBGs, like PCGs, cover part of the scheduled repayments of commercial loans or capital market borrowings against all risks.

**Partial Risk Guarantee (PRG):** PRGs are instruments designed to cover private lenders against the risk that a government or a government-owned entity fails to perform its contractual obligations vis-à-vis a private project. They are typically provided by DFIs (such as the World Bank and RDBs) and often require sovereign counter guarantees. PRGs can be used for any commercial debt instruments (loans, bonds) provided by any private institution, including debt provided by sponsors in the form of shareholder loans. PRGs can cover both foreign currency and local currency debt. PRGs can cover a range of sovereign or parastatal risks, subject to specific obligations contractually agreed to by the government for a specific project.

The types of risks covered may vary, including but not limited to: currency inconvertibility/ non-transferability; political force majeure risks such as expropriation; war and civil disturbance; material adverse government action; government (or government entity) contractual payment obligations (e.g., periodic or termination payments; agreed subsidy payments; minimum revenue guarantees); regulatory risk; change of law, and regulations; negation or cancellation of licenses and approvals; non-allowance for an agreed tariff adjustment formula or regime; contractual performance of public counterparties (e.g., state-owned entities under an off-take agreement or an input supply agreement); frustration of arbitration; and certain uninsurable force majeure events.

**Political Violence Risk:** The risk that the assets of a project are substantially damaged or destroyed as a result of politically motivated violence.

**Power Purchase Agreement (PPA):** A contract outlining the terms under which a specific customer agrees to purchase energy from an energy producer or plant. This is usually the most important contract supporting the construction and operation of a power plant.

**Procurement Process Risk:** Risk that significant financial resources will be expended bidding in a procurement process, while the probability of winning the bidding process is uncertain.

**Project Development Risk:** The risk of spending resources in developing a project (e.g., feasibility

studies, etc.) that does not succeed in obtaining financing.

**Project Finance:** A form of financing in which a corporate sponsor invests in and owns a single-purpose industrial asset (usually with a limited life) through a legally independent entity financed with nonrecourse debt.

**Public-Private Partnerships (PPP):** Projects, typically infrastructure, which involve a “partnership” between both the public and private sectors. In a PPP, a private-sector entity performs a role that is typically performed by a governmental entity. The governmental entity partners with the private-sector entity by agreeing to provide revenues to the project, by joint ownership of the project, or by providing a framework for the project’s operation.

**Reserve Accounts:** Accounts controlled by the lenders (or their trustee or escrow agent) in which part of a Project Company’s cash flow is set aside to provide security for the debt or to cover future costs.

**Regulatory Risk:** Exposure to financial loss arising from actions taken by regulatory agencies changing the current rules (or imposing new rules) that will negatively affect investments/projects and their profitability.

**Ring – Fenced Revenues:** Isolation of a particular stream of revenues in order to protect it from outside risk factors. These risks can come in many forms, including taxes, economic changes, and possible acquisitions.

**Risk Mitigation:** A systematic reduction in the extent of exposure to a risk and/or the likelihood of its occurrence.

**Senior Lenders:** Lenders whose debt service comes before debt service on mezzanine or subordinated debt, or distributions to investors, and who are repaid first in a liquidation of the project.

**Sovereign Counter Guarantee:** A government’s guarantee to an entity (typically a DFI) that provides a guarantee to a third party which states that the obligation will be satisfied if the primary obligor defaults.

**Sovereign Risk:** Sovereign risk generally refers to any actions taken by the host government that could result in increased costs, lower returns, or loss of investment. Common sovereign risks include specific host country government actions such as defaulting on contractual undertakings with a project or with project participants, such as guarantees, indemnity agreements, or input and offtake contracts.

**Special Purpose Vehicle (SPV):** A SPV is a separate legal entity, created as a Project Company. The SPV is usually a subsidiary company with an asset/liability structure and legal status that makes its obligations secure even if the parent company goes bankrupt.

**Subordinated Debt:** Debt whose debt service comes after amounts due to senior lenders, but before distribution of dividends to investors

**Sub–Sovereign Risks:** Risks relating to a public-sector entity other than the central government (e.g., local and state governments).

**Supply Risk:** The raw materials or input to a project change in availability or cost from what was assumed or projected. For a resources production project, this is called reserves risk.

**Syndication:** The process by which the arranging banks reduce their underwriting by placing part of the loan with other banks.

**Tenor:** The number of years a loan is outstanding (i.e., the final maturity or term).

**Transfer and Convertibility Risk:** The risk that a project will be unable to convert local currency to foreign currency and transfer funds outside of the country in which it is located.

**Untied Financing:** Financing or other support by ECAs or other public sector agencies not linked to exports from the country providing the financing or support.

**Vendor Finance:** Debt provided by a supplier of equipment or services to the project company.

**Weather Derivatives:** Weather derivatives are financial instruments that can be used for risk management purposes to hedge against losses due to adverse, unpredictable weather. In contrast to other derivative products, the underlying asset – such as frost, rain, temperature and wind – has no direct value with respect to the price of the weather derivative.

**Working Capital:** Defined as current assets (i.e. cash, inventory, receivables) minus current liabilities. These are the funds needed to maintain the day-to-day operations of a business or project.

**Sources:** Providers of risk mitigation instruments (World Bank); On-line Expert Sources ([www.infradev.org](http://www.infradev.org), <http://www.people.hbs.edu/besty/projfinportal/glossary.htm>, <http://lexicon.ft.com/Term?>, <http://financial-dictionary.thefreedictionary.com>, [http://www.securitization.net/international/canada/fed\\_reg\\_fin.asp](http://www.securitization.net/international/canada/fed_reg_fin.asp))

## **Annex A: Survey Structure and Questions**

The survey questions were structured to provide quantitative answers, which could be analyzed, as well as open-ended answers. Each question also provided an option for additional comments (if any) by the individual survey respondents.

### **SECTION 1 – Risk Mitigation Needs Assessment by Region**

#### **1. NORTH AFRICA: In your view, what countries in North Africa need to have risk mitigation instruments to promote investment and access to finance?**

Please indicate need based on a scale of 1-5, with 5 representing the highest need, and 1 representing no need. Please answer only for those countries with which you are familiar.

#### **2. How do you see the need for risk mitigation in North Africa changing over the next three years?**

Please indicate need based on a scale of 1-5, with 5 representing increasing need, 3 representing no change, and 1 representing decreasing need. Please answer only for those countries with which you are familiar.

Answer Options (For questions 1 & 2):

- *Algeria*
- *Chad*
- *Egypt*
- *Libya*
- *Mauritania*
- *Morocco*
- *Tunisia*

#### **3. WEST AFRICA: In your view, what countries in West Africa need to have risk mitigation instruments to promote investment and access to finance?**

Please indicate need based on a scale of 1-5, with 5 representing the highest need, and 1 representing no need. Please answer only for those countries with which you are familiar.

#### **4. How do you see the need for risk mitigation in West Africa changing over the next three years?**

Please indicate need based on a scale of 1-5, with 5 representing increasing need, 3 representing no change, and 1 representing decreasing need. Please answer only for those countries with which you are familiar.

Answer Options (For questions 3 & 4):

- *Benin*
- *Burkina Faso*
- *Cameroon*
- *Cape Verde*
- *Central African Republic*
- *Republic of Congo*

- *Cote d'Ivoire*
- *Equatorial Guinea*
- *Gabon*
- *The Gambia*
- *Ghana*
- *Guinea*
- *Guinea-Bissau*
- *Liberia*
- *Mali*
- *Niger*
- *Nigeria*
- *Senegal*
- *Sierra Leone*
- *Togo*

**5. EAST AFRICA: In your view, what countries in East Africa need to have risk mitigation instruments to promote investment and access to finance?**

Please indicate need based on a scale of 1-5, with 5 representing the highest need, and 1 representing no need. Please answer only for those countries with which you are familiar.

**6. How do you see the need for risk mitigation in East Africa changing over the next three years?**

Please indicate need based on a scale of 1-5, with 5 representing increasing need, 3 representing no change, and 1 representing decreasing need. Please answer only for those countries with which you are familiar.

Answer Options (For questions 5 & 6):

- *Burundi*
- *Comoros*
- *Djibouti*
- *Eritrea*
- *Ethiopia*
- *Kenya*
- *Rwanda*
- *Seychelles*
- *Somalia*
- *South Sudan*
- *Tanzania*
- *Uganda*

**7. SOUTHERN AFRICA: In your view, what countries in Southern Africa need to have risk mitigation instruments to promote investment and access to finance?**

Please indicate need based on a scale of 1-5, with 5 representing the highest need, and 1 representing no need. Please answer only for those countries with which you are familiar.

**8. How do you see the need for risk mitigation in Southern Africa changing over the next three years?**

Please indicate need based on a scale of 1-5, with 5 representing increasing need, 3 representing no change, and 1 representing decreasing need. Please answer only for those countries with which you are familiar.

Answer Options (for questions 7 & 8):

- *Angola*
- *Botswana*
- *DR of Congo*
- *Lesotho*
- *Madagascar*
- *Malawi*
- *Mauritius*
- *Mozambique*
- *Namibia*
- *ST & Principe*
- *South Africa*
- *Swaziland*
- *Zambia*
- *Zimbabwe*

## **SECTION 2 – Type of Demand for Risk Mitigation**

### **9. DEMAND FOR TYPES OF RISK MITIGATION: In your view, what is the level of demand for different types of risk mitigation overall for the African continent?**

Please indicate for each type of risk your view using a scale of 1-5, with 5 representing high demand, 3 representing moderate demand, and 1 representing no demand.

### **10. How do you see the demand for each type of risk mitigation changing over the next 3 years overall for the African continent?**

Please indicate for each type of risk your view of change over the next 3 years using a scale of 1-5, with 5 representing an increasing need, 3 representing no change, and 1 representing a decreasing need.

Answer Options (For questions 9 & 10):

- *Project does not receive financing, wasting money spent on development*
- *Political violence*
- *Expropriation (government takeover)*
- *Currency inconvertibility*
- *Devaluation*
- *Unfavourable regulatory changes*
- *Interest rate increases*
- *Commercial and operational risk*
- *Lack of supporting infrastructure*
- *Ineffective legal system*
- *Procurement process risk*

### **11. DEMAND BY SECTOR: In your view, how does demand for risk mitigation instruments vary based on sector overall for the African continent?**

Please indicate for each type of risk your view of the demand for risk mitigation using a scale of 1-5, with 5 representing significant demand, 3 representing moderate demand and 1 representing no demand.

**12. In your view, how will demand for risk mitigation instruments by sector change over the next three years?**

Please indicate for each sector your view of change over the next three years using a scale of 1-5, with 5 representing an increasing need, 3 representing no change, and 1 representing a decreasing need.

Answer Options (For questions 11 & 12):

- *Infrastructure (energy, water, transport, etc.)*
- *Agriculture processing facilities*
- *Trade*
- *Corporate finance*
- *SME finance*

**SECTION 3 – Existing Knowledge of Risk Mitigation and Perceived Value**

**13. How useful do you think each of the following risk mitigation instruments is? (Very useful, useful, unnecessary, not used because of unfamiliarity)**

Answer Options:

- *Grants for project development*
- *Trade support (Export Credit Agencies, etc.)*
- *Political risk insurance covering political violence*
- *Political risk insurance covering expropriation*
- *Political risk insurance covering inconvertibility*
- *A/B loans from development banks*
- *Partial Risk Guarantees*
- *Partial Credit Guarantees*
- *On-lending programs to lower interest rates*
- *First loss facilities*
- *Full credit guarantees (“wraps”)*
- *Output-based aid (subsidies for user payments)*
- *Currency hedges (e.g. GuarantCo, TCX)*
- *Credit default swaps*
- *Interest rate swaps*
- *Weather derivatives*
- *Pre-qualification of bidders, payment for preparation of preliminary proposals by interested pre-qualified bidders*

**14. To use risk mitigation, African governments must believe that it will be effective and that its benefits are important. How would you evaluate African governments’ attitude towards using risk mitigation to achieve each of the following potential benefits?**

Please indicate your view using a scale of 1-5, with 5 representing highly beneficial, 3 representing some benefit, and 1 representing not useful.

Answer Options:

- *Increased amount of financing (leveraging limited official resources)*
- *Lower interest rates*
- *Longer term debt financing*
- *Assistance in project development*
- *Assistance in insuring technical soundness and creditworthiness*
- *Increased foreign direct investment*
- *Decreased perception of country risk*
- *Improved investment climate*
- *Poverty reduction*

**15. To use risk mitigation, private sector investors must believe that it will be effective and that its benefits are important. How would you evaluate the attitude of private sector investors toward using risk mitigation to achieve each of the following benefits?**

Please indicate your view using a scale of 1-5, with 5 representing highly beneficial, 3 representing some benefit, and 1 representing not useful.

Answer Options:

- *Greater support from government*
- *Decreased perception of country risk*
- *Reduced investment risk*
- *Assistance in project development*
- *Lower interest rates*
- *Longer term debt financing*
- *Assistance in insuring technical soundness and creditworthiness*

**SECTION 4 – Factors Affecting Effective Use of Risk Mitigation**

**16. Studies report that risk mitigation instruments are often not fully utilized. What actions would help to increase the use of risk mitigation instruments?**

Please indicate your view using a scale of 1-5, with 5 representing highly helpful, 3 representing somewhat helpful, and 1 representing no change.

Answer Options:

- *Better marketing of risk mitigation globally*
- *Better marketing of risk mitigation at the country level*
- *Risk mitigation instruments designed for specific sectors (e.g., energy, agriculture, water, SMEs, etc)*
- *Decentralizing risk mitigation instruments at the country level (i.e. provided through country-specific programs)*
- *Reduced time to approve and execute risk mitigation instruments*
- *Better definition of how governments can provide sovereign counter guarantees*
- *Reduced cost of risk mitigation instruments*
- *Better training of in-country staff of DFIs offering risk mitigation instruments*
- *Better training of government officials*
- *Better training of staff of private sector firms that develop projects*
- *Better training of private sector lenders and financial investors*
- *Development of new risk mitigation instruments*

## **SECTION 5 – Risk Mitigation Gaps and Solutions**

### **17. What possible steps / institutional changes do you believe would help improve the delivery of risk mitigation instruments and solutions?**

Please indicate your view using a scale of 1-5, with 5 representing total agreement, 3 representing no view, and 1 representing total disagreement.

Answer Options:

- *New internal incentives and performance metrics (e.g. providers of risk mitigation should offer compensation and base promotion decisions on amount of private sector investment enabled through utilization of risk mitigation instruments)*
- *Increased official funding of project development costs, increasing the number of projects in the pipeline (e.g., technical studies, advisory support, untying support from mandatory use of home-country suppliers, etc)*
- *Increased official focus on improving the capacity of government institutions to respond to investor issues (e.g., improved government investment facilitation and investor after care, dispute resolution, strengthening legal systems, etc).*
- *Establishment of public benchmarking of risk mitigation (e.g., benchmark listing of projects using risk mitigation and rating by amount of private sector capital mobilized)*
- *Dedicated line for risk mitigation instruments, eliminating competition with loan products (i.e., DFIs would have separate internal credit lines limited to use of risk mitigation products)*
- *Increase in the leverage of capital for purpose of guarantees (e.g. charging guarantees at only 25% against DFI country allocations)*
- *Increasing weight of guarantees when compiling aid statistics (This would incentivize official sources to provide more guarantees)*
- *DFI assumption of foreign exchange risk when providing local currency guarantees (demand is lowered due to denominating the amount DFIs attempt to recover from the borrower, as the result of required claim payments, in foreign currency)*
- *Eliminating requirement for sovereign counter guarantee*

### **18. What is your view of the gaps in risk mitigation affecting investment and access to finance in Africa? Please note the risks not covered.**

Answer Options: Open

### **19. What risk mitigation instruments offered by the public sector would you rate as the most effective? Please name the instrument and the institution(s) offering the instrument.**

Answer Options: Open

### **20. Any other suggestions?**

Answer Options: Open

*Questions 21 and 22 were concerned with collection of the contact information of the survey respondent and suggestions regarding other practitioners who could provide important input for the survey.*

## Annex B: Details on Regional Survey Responses

This annex provides the details on the survey responses related to views of risk mitigation needs by region:

- **Current need for risk mitigation:** *“In your view, what countries in this region need to have risk mitigation instruments to promote investment and access to finance? Please indicate need based on a scale of 1-5, with 5 representing the highest need, and 1 representing no need. Please answer only for those countries with which you are familiar.”*
- **Change in need for risk mitigation over next three years:** *“How do you see the need for risk mitigation in East Africa changing over the next three years? Please indicate need based on a scale of 1-5, with 5 representing increasing need, 3 representing no change, and 1 representing decreasing need. Please answer only for those countries with which you are familiar.”*

The survey responses are summarized below.

### Details on North Africa Region

As noted in the main report, the average survey response (3.80) indicates significant existing need for risk mitigation in the North Africa Region, but with notable variances across the individual countries. The chart below provides the details by country, sorted by highest need for risk mitigation.

**Table 26: Current Need for Risk Mitigation in North Africa Region**

Country	Average Score
Chad	4.33
Egypt	4.15
Libya	4.13
Mauritania	4.09
Algeria	3.68
Tunisia	3.33
Morocco	2.87
<b>Average for Region</b>	<b>3.80</b>

Furthermore, the survey respondents on average estimate that all seven countries in this region will experience an increase in need for risk mitigation over the next three years, as shown in the table below.

**Table 27: Estimated Need for Risk Mitigation in North Africa Region over Three Years**

Country	Average Score
Libya	3.87
Chad	3.80
Mauritania	3.76
Egypt	3.72
Algeria	3.48
Tunisia	3.29

Country	Average Score
Morocco	3.04
<b>Average for Region</b>	<b>3.57</b>

### Details on West Africa Region

The average survey response (3.80) indicates high need for risk mitigation in the West Africa Region, with moderate variances across the individual countries.

**Table 28: Current Need for Risk Mitigation in West Africa Region**

Country	Average Score
Mali	4.43
Niger	4.30
Republic of Congo	4.26
Cote d'Ivoire	4.26
Guinea	4.25
Central African Republic	4.15
Guinea-Bissau	4.10
Liberia	4.00
Sierra Leone	3.86
Nigeria	3.86
Equatorial Guinea	3.85
Burkina Faso	3.84
Benin	3.79
Togo	3.75
The Gambia	3.58
Cameroon	3.52
Gabon	3.30
Senegal	3.19
Ghana	3.00
Cape Verde	2.79
<b>Average for Region</b>	<b>3.80</b>

In terms of estimated need over three years, survey respondents on average estimated that 18 of the 20 countries in West Africa will have an increased need for risk mitigation.

**Table 29: Estimated Need for Risk Mitigation in West Africa Region over Three Years**

Country	Average Score
Mali	4.10
Republic of Congo	3.86
Niger	3.84
Central African Republic	3.78
Guinea-Bissau	3.74

Country	Average Score
Guinea	3.72
Nigeria	3.70
Equatorial Guinea	3.68
Cote d'Ivoire	3.64
The Gambia	3.56
Liberia	3.56
Benin	3.47
Sierra Leone	3.45
Cameroon	3.45
Gabon	3.42
Burkina Faso	3.39
Togo	3.37
Senegal	3.10
Cape Verde	2.88
Ghana	2.85
<b>Average for Region</b>	<b>3.53</b>

The exceptions in the region are Cape Verde and Ghana, for which survey respondents, on average, forecast no change in need over three years from current levels.

#### Details on East Africa Region

The average survey response (3.71) indicates high need for risk mitigation for the East Africa Region with moderate variances across the individual countries.

**Table 30: Current Need for Risk Mitigation in East Africa**

Country	Average Score
Somalia	4.46
Eritrea	4.36
Sudan	4.30
South Sudan	4.30
Ethiopia	4.08
Burundi	4.05
Djibouti	3.95
Uganda	3.78
Comoros	3.78
Rwanda	3.76
Kenya	3.59
Tanzania	3.50
Seychelles	3.05
<b>Average for Region</b>	<b>3.71</b>

Again, as with the other regions, 96% of the respondents indicated a need for risk mitigation. A majority of the respondents (65%) indicated high need for risk mitigation (scores of “4” and “5”).

In terms of need for risk mitigation over the next three years, according to the survey respondents, all countries in the region, with the sole exception of Seychelles, will have an increased need for risk mitigation.

**Table 31: Estimated Need for Risk Mitigation in East Africa Region over Three Years**

Country	Average Score
Somalia	4.42
South Sudan	4.16
Sudan	4.16
Eritrea	3.95
Ethiopia	3.80
Djibouti	3.68
Burundi	3.68
Uganda	3.66
Comoros	3.47
Rwanda	3.41
Kenya	3.34
Tanzania	3.31
Seychelles	2.75
<b>Average for Region</b>	<b>3.52</b>

### Details on Southern Africa Region

The average survey response (3.44) indicates significant need for risk mitigation for the Southern Africa Region, with large variances across the individual countries.

**Table 32: Current Need for Risk Mitigation in Southern Africa Region**

Country	Average Score
Zimbabwe	4.71
DR of Congo	4.52
Madagascar	4.10
Malawi	3.81
Zambia	3.69
Angola	3.59
ST & Principe	3.45
Lesotho	3.39
Mozambique	3.37
Swaziland	3.30
South Africa	2.87
Namibia	2.81
Botswana	2.31
Mauritius	2.29

Country	Average Score
<b>Average for Region</b>	<b>3.44</b>

Again, as with the other regions, 91% of the respondents indicated a need for risk mitigation. Most respondents (48%) indicated high need for risk mitigation (scores of “4” and “5”), and 42% moderate need.

In terms of the outlook for risk mitigation demand over three years, survey respondents estimate that all countries in the Southern Africa Region will have increased need for risk mitigation, with the exception of Botswana and Mauritius.

**Table 33: Estimated Need for Risk Mitigation in Southern Africa Region over Three Years**

Country	Average Score
Zimbabwe	4.24
DR of Congo	4.16
Madagascar	3.60
Swaziland	3.57
Lesotho	3.48
South Africa	3.45
Malawi	3.43
ST & Principe	3.35
Zambia	3.33
Mozambique	3.30
Angola	3.22
Namibia	3.13
Botswana	2.89
Mauritius	2.68
<b>Average for Region</b>	<b>3.42</b>

As in the prior regions, the variance in individual participant views is large for all countries, with 38% of respondents anticipating significant increased need over three years and 60% of the survey respondents anticipating moderate increased need for risk mitigation over the same time horizon.

## Annex C: Summary of Literature Research on Reported Demand and Need for Risk Mitigation in Africa

The data below summarizes the results of the literature search on the scale of investments required in Africa in infrastructure, agriculture, trade, corporate and SME finance over the 2010 – 2020 decade. This level of demand highlights the need for risk mitigation instruments and solutions to facilitate the flow and participation of private capital in meeting these investment needs.

### 1) Infrastructure

According to the World Bank, the estimated infrastructure spending need is US\$93 billion a year (15 percent of the region’s GDP) for the decade from 2010 – 2020 to close the infrastructure gap with other developing countries.<sup>35</sup> However, only US\$45 billion is being mobilized, leaving a gap of close to US\$50 billion a year.

Normalized Units	African Low-Income Countries	Other Low-Income Countries	African Middle-Income Countries	Other Middle-Income Countries
Paved Road Density	34	134	284	461
Total Road Density	150	29	381	106
Main Line Density	9	38	142	252
Mobile Density	48	55	277	557
Internet Density	2	29	8.2	235
Generation Capacity	39	326	293	648
Electricity Coverage	14	41	37	88
Improved Water	61	72	82	91
Improved Sanitation	34	53	53	82

Source: *Africa Infrastructure, A time for transformation; Africa Infrastructure Country Diagnostic*

Sector-wide projections are indicated by the table below<sup>36</sup>:

	Capital Expenditure US\$ b. p.a. 2010-20	Operating Expenditure US\$ b. p.a. 2010-20	Total US\$ b. p.a. 2010-20
ICT	7	2	9
Irrigation	2.9	0.6	3.4
Power	26.7	14.1	40.8
Transport	8.8	9.4	18.2
Water Supply and Sanitation	14.9	7	21.9
<b>Total</b>	<b>60.4</b>	<b>33</b>	<b>93.3</b>

Source: *Africa Infrastructure, A time for transformation; Africa Infrastructure Country Diagnostic*

<sup>35</sup> Vivien Foster and Cecilia Briceño-Garmendia, eds., “Africa’s Infrastructure: A Time for Transformation” (Washington, DC: The World Bank, 2010).

[http://siteresources.worldbank.org/INTAFRICA/Resources/aicd\\_overview\\_english\\_no-embargo.pdf](http://siteresources.worldbank.org/INTAFRICA/Resources/aicd_overview_english_no-embargo.pdf)

<sup>36</sup> OECD, “Mapping Support for Africa’s Infrastructure Investment” (Paris: Organization for Economic Co-operation and Development, May 2012).

<http://www.oecd.org/daf/internationalinvestment/investmentfordevelopment/MappingReportWeb.pdf>

The critical demand for infrastructure is in power, requiring over US\$40 billion in investment from 2010 to 2020.

### **Power**

The total spending needs of the power sector amount to US\$40.6 billion a year, or 6.4 percent of the region’s GDP, skewed towards capital expenditure.

Country Type	US\$ Billions Annually			Percentage of GDP		
	Capital Expenditure	Operation & Maintenance	Total Spending	Capital Expenditure	Operation & Maintenance	Total Spending
Sub-Saharan Africa	26.6	14	40.6	4.2	2.2	6.4
Middle-Income Countries	6.29	7.9	14.19	2.3	2.92	5.22
Low-Income Fragile Countries	4.5	0.7	5.2	11.7	1.8	13.5
Low-Income Nonfragile Countries	7.6	2.2	9.7	6.9	2	8.8
Resource-Rich Countries	8.4	3.35	11.77	3.79	1.5	5.29

Source: *Africa Infrastructure, A time for transformation; Africa Infrastructure Country Diagnostic*

### **Water and Sanitation**

While the amount of storage required to withstand both flood and drought risks has not been precisely modelled, estimating the cost of bringing all African countries from their current storage levels of around 200 cubic meters per capita to South Africa’s level of 750 cubic meters per capita, illustrates the hundreds of billions of dollars that could be required.

The investment required to expand irrigated areas and rehabilitate existing irrigation infrastructure would require US\$2.7 billion annually over a 10 year span, along with a further US\$0.6 billion to support maintenance of new and existing systems.

Capital investment needs to reach MDG targets for access to safe water and improved sanitation for 75 percent of the population by 2015 can be conservatively estimated at US\$15 billion annually.<sup>37</sup> These needs include both new infrastructure and rehabilitation of existing assets.

### **Transportation**

The World Bank estimates that to create a transport network that provides adequate regional, national, rural and urban road connectivity, complemented by adequate rail, port and airport infrastructure, will require spending in the amount of US\$18 billion a year, half of which is related to maintenance.<sup>38</sup>

<sup>37</sup> Foster and Briceño-Garmendia, eds., “Africa’s Infrastructure.”

<sup>38</sup> Ibid.

Sector Area	Investment			Total Investment	Total Maintenance	Overall Total
	Improve Condition	Upgrade Category	Add Capacity			
Regional Connectivity	0.5	1.1	0.2	1.8	0.9	2.7
National Connectivity	0.5	1.2	0.2	1.9	1.0	2.9
Rural Connectivity	0.8	0.4	0.1	1.3	1.2	2.5
Urban Connectivity	0.3	0.4	0.4	1.1	0.5	1.6
Railways, Ports, and Airports	0.2	0.6	1.9	2.7	5.9	8.6
<b>Total</b>	<b>2.2</b>	<b>3.7</b>	<b>2.7</b>	<b>8.6</b>	<b>9.6</b>	<b>18.2</b>

Source: *Africa Infrastructure, A time for transformation*; AICD

### **Information and Communication Technology (ICT)**

Investments in ICTs have been remarkably successful in Africa. In just ten years, dating from the end of the 1990s, mobile network coverage rose from 16 percent to 90 percent of the urban population; by 2009, rural coverage stood at just under 50 percent of the population.

However, there are indications that network coverage growth is slowing, and it is likely that some parts of the population live in areas in which mobile networks are not commercially viable. The World Bank estimates that the cost of providing coverage to these areas is just under US\$1 billion per year over nine years. The cost of universal broadband Internet coverage would require a subsidy of about US\$10 billion per year to make it commercially attractive to operators.<sup>39</sup>

### **2) Agriculture and Food Security**

Recent estimates of financing for the agriculture sector in Africa foresee the need for US\$8.1 billion or an additional US\$4.9 billion annually. The total cost of fertilizer and improved seeds required to achieve an agricultural growth rate of 7.5 percent is estimated at more than US\$9 billion a year. Given the current level and trend in fertilizer and seed use, the incremental cost of these inputs amounts to about US\$6.8 billion per year.<sup>40</sup>

Africa will also require a significant increase of public investment in agricultural research, to replenish agricultural education at all levels and upgrade aging infrastructure in irrigation, roads, energy, and logistics (especially port infrastructure), without which Africa will not be able to launch or sustain internationally competitive commercial agriculture.<sup>41</sup>

### **3) Trade**

<sup>39</sup> Ibid.

<sup>40</sup> African Development Bank, “Agriculture Sector Strategy 2010 – 2014” (Tunis: African Development Bank, January 2010). <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Agriculture%20Sector%20Strategy%202010-14.pdf>

<sup>41</sup> World Bank, “Awakening Africa’s Sleeping Giant: Prospects for Commercial Agriculture in the Guinea Savannah Zone and Beyond” Agriculture and Rural Development Notes, Issue 48 (Washington, D.C.: The World Bank, June 2009). <http://siteresources.worldbank.org/EXTARD/Resources/336681-1231508336979/SleepingGiantFinal.pdf>

A major constraint on the growth of Africa's trade, especially intra-regional trade, is the inadequacy of financing mechanisms. The continent's financial landscape is characterized by the underdevelopment of regional institutions that can provide finance, credit and guarantee for cross-border trade. Well-developed and functioning financial systems are essential for the effective participation of African countries in global trade and for the boosting of intra-African trade.<sup>42</sup> This calls for much greater efforts in the development and strengthening of African financial institutions and mechanisms that accord high priority to the promotion of intra-African trade and investment. The African institutions whose activities need to be strengthened and replicated for the boosting of intra-African trade include the COMESA PTA Bank, ECOBANK, the East African Development Bank, the African Export and Import Bank (AFREXIM), and the African Trade Insurance Agency (ATI).<sup>43</sup>

#### **4) SME demand and exploding demographics**

The demand for SME finance is enormous, as evidenced by the literature on the lack of access to finance and exploding populations requiring job creation. SMEs form the backbone of modern economies and can be crucial engines of development through their role as seedbeds of innovation.<sup>44</sup> The importance of the SME sector is evidenced by its sheer quantitative importance in advanced economies. The Organization for Economic Co-operation and Development (OECD) reports that SMEs account for 95 percent of manufacturing enterprises and an even higher share of many services in OECD countries; in most OECD countries, SMEs generate two-thirds of private sector employment and are the principal creator of new jobs.<sup>45</sup> The SME sector in developing countries however suffers from a “missing middle.”<sup>46</sup>

The World Bank estimates that SMEs contribute an average of 51.5 percent of GDP in high-income countries, but only 15.6 percent in low-income countries.<sup>47</sup> One of the major reasons for this disparity in the SME sectors of high and low-income countries is the lack of access to finance faced by SMEs in low-income countries.<sup>48</sup> This arises due to a lack of financial and business management capacity (which precludes access to and effective usage of finance), high interest rates, reflecting issues on both the supply and demand side, and the stringency of collateral requirements which characterizes SME finance in developing / low income countries.

**For more information, please see the attached annex with the complete literature review.**

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<sup>42</sup> African Union, “Action Plan for Boosting Intra-African Trade” (Addis Ababa, African Union, October 2011. ) <http://www.au.int/en/sites/default/files/Action%20Plan%20for%20boosting%20intra-African%20trade%20F-English.pdf>

<sup>43</sup> Ibid.

<sup>44</sup> David de Ferranti and Anthony J. Ody, “Beyond Microfinance: Getting Capital to Small and Medium Enterprises to Fuel Faster Development,” Policy Brief 159 (Washington, D.C.: The Brookings Institution, March 2007).

<http://www.brookings.edu/~media/research/files/papers/2007/3/development%20de%20ferranti/pb159.pdf>

<sup>45</sup> OECD, *OECD SME and Entrepreneurship Outlook 2005* (Paris: Organization for Economic Co-operation and Development, 2005).

<sup>46</sup> Certain emerging market economies, notably East Asia, have thriving SME sectors, including significant numbers of skill-intensive subcontractors.

<sup>47</sup> de Ferranti and Ody, “Beyond Microfinance.”

<sup>48</sup> Angela Hansen *et al.* “Assessing Credit Guarantee Schemes for SME Finance in Africa: Evidence from Ghana, Kenya, South Africa and Tanzania” (Paris: Agence Française Développement, July 2011).

<http://www.afd.fr/webdav/site/afd/shared/PUBLICATIONS/RECHERCHE/Scientifiques/Documents-de-travail/123-VA-document-travail.pdf>

## Annex D: Examples of Risk Mitigation Providers

The section below provides examples of risk mitigation instruments that are available to lenders and equity investors to protect against risks including political, credit, interest rate, foreign exchange, project development, procurement process, contractual and regulatory risks, etc. Types of risk mitigation instruments are listed below:

- Grants for project development
- Trade support (Export Credit Agencies, etc.)
- Political risk insurance covering political violence
- Political risk insurance covering expropriation
- Political risk insurance covering inconvertibility
- A/B loans from development banks
- Partial risk guarantees
- Partial credit guarantees
- On-lending programs to lower interest rates
- First loss facilities
- Full credit guarantees (“wraps”)
- Output-based aid (subsidies for user payments)
- Currency hedges (e.g. GuarantCo, TCX)
- Local currency fund schemes
- Local currency credit enhancement
- Currency swaps
- Exchange rate guarantees
- Tariff indexes
- Foreign exchange index
- Liquidity facility
- Interest rate swaps, caps and collars
- Weather derivatives
- Pre-qualification of bidders, payment for preparation of preliminary proposals by interested pre-qualified bidders

Examples of risk mitigation instruments are provided in this annex, broken out by multilateral and bilateral providers, with examples of Africa-focused instruments and specific interventions focused on support of the project development life cycle.

## Major Multilateral Providers of Risk Mitigation Instruments<sup>49</sup>

Name	Coverage	Instrument Name	Instrument Type
World Bank: IBRD and International Development Agency (IDA)	Political and comprehensive risk	IBRD Partial Risk Guarantee, IDA PRG, IBRD Enclave PRG, IBRD PCG, IBRD Policy Based Guarantee (PBG)	Debt guarantee
IFC	Comprehensive risk	PCG	Debt guarantee
MIGA	Political risk	Investment guarantee	PRI
AfDB	Political and comprehensive risk	Partial risk guarantee, PCG, PBG	Debt guarantee
Asian Development Bank (ADB)	Political and comprehensive risk	Political risk guarantee, PCG	Debt guarantee
EBRD	Political and comprehensive risk	Political risk guarantee, trade finance facilitation program, SME guarantee facility, Municipal finance facility	Debt guarantee
Inter-American Development Bank (IDB)	Political and comprehensive risk	Political risk guarantee, PCG, trade finance facilitation program	Debt guarantee
European Investment Bank (EIB)	Political and comprehensive risk	Outside EU – political risk carve-out on guarantees for EIB loans, EIF credit insurance, enhancement, SME guarantee facility, Outside EU – Range of guarantee facilities	Equity / loan / microcredit guarantees, portfolio credit risk sharing etc.
Andean Development Corporation (ADC)	Comprehensive risk	PCG	
Islamic Corporation for Insurance of Investments and Export Credits (ICIEC)	Political and comprehensive risk	Equity investment insurance policy, financing facility insurance policy, loan guarantees investment insurance policy, comprehensive short term policy, supplemental medium term policy etc.	Investment and export credit insurance, reinsurance
Islamic Development	Investment and export credit	Direct investment guarantee, equity participation guarantee,	Insurance

<sup>49</sup> Tomoko Matsukawa and Odo Habeck, “Review of Risk Mitigation Instruments for Infrastructure Financing and Recent Trends and Developments” (Washington, D.C.: The World Bank, 2007).

<http://www.ppiaf.org/sites/ppiaf.org/files/publication/Trends%20Policy%20Options-4-Review%20of%20Risk%20Mitigation%20Instrument%20-%20TMatsukawa%20OHabeck.pdf>

Name	Coverage	Instrument Name	Instrument Type
Bank (ISDB)	coverage	loan guarantee, contractors equipment guarantee, specific non-commercial risks guarantee etc.	

### Examples of Major Bilateral Providers of Risk Mitigation Instruments<sup>50</sup>

Name	Coverage	Instrument Name	Instrument Type
Export Development Canada (EDC) – Canada	Investment and export credit	PRI, contract frustration insurance, accounts receivable insurance etc.	Insurance
Agence Française de Développement (AFD) – France	Political and comprehensive risk		Guarantee
Coface – France	Investment insurance and export credit guarantees		Insurance and guarantees
Deutsche Investitions und Entwicklungsgesellschaft mbH (DEG) – Germany	Comprehensive coverage	Partial and full credit guarantees	Guarantee
Foreign Trade and Investment Promotion Scheme (AGA) – Germany	Investment and export credit coverage	Investment and export credit guarantee	Guarantee
Italian Export Credit Agency (SACE) – Italy	Investment and export credit coverage	PRI, buyer credit insurance, bond insurance etc.	Insurance
Japan Bank for International Cooperation (JBIC) – Japan	Political and comprehensive risk coverage	Political risk guarantee and comprehensive risk guarantee	Debt guarantee
Nippon Export and Investment Insurance (NEXI) – Japan	Investment and Trade coverage	Overseas investment insurance, export credit insurance, buyers credit insurance etc.	Insurance
Atradius Dutch State Business NV – Netherlands	Investment and export credit coverage	Investment insurance, export credit insurance and capital goods insurance	Insurance and guarantees
The Netherlands Development Finance Company (FMO) – Netherlands	Comprehensive risk coverage	Credit and partial credit guarantees	Guarantee

<sup>50</sup> Ibid

Name	Coverage	Instrument Name	Instrument Type
Norwegian Guarantee Institute for Export Credits (GIEK) – Norway	Investment and Export credit coverage	PRI, export guarantees, buyers credit, suppliers credit etc.	Guarantee or insurance
Swedish Export Credit Guarantee Board (EKN) – Sweden	Investment coverage and export credit coverage	Investment guarantees, contract guarantee, production guarantee, credit guarantee	Guarantee
Swedish International Development Cooperation Agency (SIDA) - Sweden	Partial risk and credit coverage	Partial credit and risk guarantees	Guarantee
Swiss Investment Risk Guarantee Agency (SERV) – Switzerland	Investment coverage	Political risk guarantee	Guarantee
Swiss Export Risk Guarantee (ERG) – Switzerland	Export credit coverage	Pre-delivery (manufacturing) guarantee, Performance and bid bond guarantee	Guarantee
Export Credits Guarantee Department (ECGD) – United Kingdom	Investment and export credit coverage	Overseas investment insurance, export credit insurance, buyer credit guarantees etc	Guarantee and insurance
USAID Development Credit Authority (DCA) – United States	Comprehensive risk coverage	PCGs in the form of loan, loan portfolio, portable and bond guarantee	Debt guarantee
Export-Import Bank of the United States (EX-IM Bank) – United States	Political and comprehensive risk coverage	Political risk only coverage for project finance / structured finance transactions, export credit insurance, loan guarantee etc.	Loans, guarantees and insurance
OPIC – United States	Coverage of political risk and loan guarantees	PRI, loan guarantees	Finance guarantees and insurance products

## Examples of Africa-focused risk mitigation instruments and solutions<sup>51</sup>

Name	Support provided
AfDB Fund for African Private Sector Assistance	Untied grants for technical assistance and capacity building
AFD DBSA Project Preparation and Feasibility Study	Project definition support, pre-feasibility and feasibility studies, technical advisory services and project structuring support
African Guarantee Fund for Small and Medium-sized Enterprises	PCGs and capacity development support
NEPAD Infrastructure Project Preparation Facility (IPPF)	Provision of support for project cycle activities and activities designed to ensure the creation of a sustainable enabling environment for infrastructure development and private sector participation
African Water Facility	Financing and technical assistance for water and sanitation sector in Africa
Africa Finance Corporation	Project development support, principal investing and financial advisory
The Currency Exchange Fund	Foreign exchange risk mitigation via long term local currency hedging instruments
Africa Trade Insurance Agency	Covers political and commercial risks for a wide variety of trade and investment transactions
African Legal Support Facility	Technical assistance to enhance local legal capacity
EU – Africa Infrastructure Trust Fund	Insurance, direct grant financing, technical assistance and interest rate subsidies
InfraCo Africa	Supports early stage project development
GuarantCo	Credit enhancement for local currency debt issuance
Geothermal Risk Mitigation Facility	Project development support and capacity building
NEPAD – IPPF Special Fund	Assistance with project development
Private Sector Foundation – Uganda	Capacity building through training, provision of business development services, and grant funding for project development
Uganda Energy Credit Capitalization Company - Uganda	Technical and financial support for renewable energy infrastructure development in Uganda

<sup>51</sup> For more details refer to World Bank’s report on “Infrastructure Funds and Facilities in Sub-Saharan Africa,” Prepared by Centennial Group Holdings, May 2009.

## Examples of risk mitigation instruments and solutions for different stages of the project life cycle

Name	Support provided
Norwegian Investment Fund for Developing Countries	Grant funding to support project development and equity and debt investments in individual companies
ORIO (Facility for Infrastructure Development) Grant Facility	Provision of grants to central governments in developing countries for projects related to public infrastructure
USAID Development Ventures Innovation Fund	Grant financing to foster innovative development solutions that have a broad impact on people
Agence Française De Développement – ARIZ	Guarantee mechanism designed to give SMEs and Microfinance Institutions (MFI) better access to financing. Aims to support business start-ups and development projects by scaling up bank participation in their financing
Agence Française De Développement – Green Credit Lines	Offers appropriate funding and dedicated technical support in developing countries to finance green growth on a global scale. Aims at building capacity and overcoming the financial and technical obstacles to scaled up investment
Belgian Investment Company for Developing Countries (BIO)	Provision of risk capital and guarantees as well as funding for feasibility studies and technical assistance programs through its capacity building fund
DEG (subsidiary of KfW)	Long term finance and guidance for project design and structuring
Global Village Enterprise Partnership (GVEP)	Loan guarantees, debt and equity financing, seed capital grants, and training of financial institutions
PROPARCO	FISEA (Investment and Support Fund for Businesses in Africa) offers technical assistance in addition to its investment activity. FISEA is an investment fund which takes equity stakes in businesses, banks, microfinance institutions and investment funds in sub-Saharan Africa.
Swedish International Development Cooperation Agency (SIDA) Guarantees	Guarantees and development loans that consist of a grant and a commercial loan. The grant is provided when the commercial loan is in place
Swedfund	Risk capital (equity, loans), financial support for SMEs when setting up businesses in the emerging markets of Africa, Asia, Latin America and Eastern Europe

For more details, please see the separate annex with the full literature search.

## Annex E: List of Study Participants

Host Governments (14)						
First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Michael	Oppong-Adusah	Bank of Ghana	Collateral Registry - Registrar	In-Person Interview	Accra, Ghana	Host Government
Mohamed	Aref	COMESA, Regional Investment Agency	Research Analyst	On-Line Survey and In-Person Interview	Cairo, Egypt	Host Government
Anne-Marie	Iskander	COMESA, Regional Investment Agency	Marketing Officer	On-Line Survey and In-Person Interview	Cairo, Egypt	Host Government
Rania	Zayed	Consultant to the World Bank	Former Head of PPP Unit for Egyptian Government	In-Person Interview	Cairo, Egypt	Host Government
David	Mugambe	Kenya Investment Authority (KenInvest)	Investment Promotion	In-Person Interview	Nairobi, Kenya	Host Government
Roslyn	Ng'eno	Kenya Investment Authority (KenInvest)	Policy Advocacy	In-Person Interview	Nairobi, Kenya	Host Government
Sampson	Nortey	Ministry of Finance - Ghana	Principal Economics Officer	In-Person Interview	Accra, Ghana	Host Government
Joseph	Muriithi Njeru	Ministry of Industrialization - MSME Project	Assistant Minister	On-line Survey	Nairobi, Kenya	Host Government
Rathipe	Nthite	National Treasury	Director of Infrastructure Regulation, Budget Office	On-Line Survey and In-Person Interview	Pretoria, South Africa	Host Government
Avril	Halstead	National Treasury - Infrastructure	Chief Director	In-Person Interview	Pretoria, South Africa	Host Government
James	Aiello	National Treasury - PPP Unit	Senior Project Advisor	In-Person Interview	Pretoria, South Africa	Host Government
Mumbi	Kiereini	Prime Minister's Office of Kenya	Private Sector Specialist	On-Line Survey and In-Person Interview	Nairobi, Kenya	Host Government
Shahira	Abdel Shahid	The Egyptian Exchange	Advisor to the Chairman	In-Person Interview	Cairo, Egypt	Host Government
Hebatallah	El-Serafie	The Egyptian Exchange	Deputy Head, Listed Companies Division	In-Person Interview	Cairo, Egypt	Host Government

Development Finance Institutions (21)						
First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Tarek	Ammar	AfDB	Principal Private Sector Officer	In-Person Interview	Cairo, Egypt	DFI

## Development Finance Institutions (21)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Lydie	Ehouman	AfDB	Principal Transport Economist	In-Person Interview	Accra, Ghana	DFI
Sibry	Tapsoba	AfDB	Resident Representative	In-Person Interview	Cairo, Egypt	DFI
Humphrey	Mwangi	ATI	Senior Underwriter	On-Line Survey and In-Person Interview	Nairobi, Kenya	DFI
John	Wasielewski	Consultant	Former Head USAID DCA	On-Line Survey	Virginia, United States	DFI
Joachim	Stretz	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	National SWM Program Coordinator	In-Person Interview	Cairo, Egypt	DFI
Gad	Cohen	ELEQTRA Limited (InfraCo)	Director	Telephone Interview	London, United Kingdom	DFI
Peter	Bryde	EBRD	Deputy Director - Agribusiness	In-Person Interview	London, United Kingdom	DFI
Noel	Edison	EBRD	Director, Insurance & Financial Services Team, Financial Institutions	In-Person Interview	London, United Kingdom	DFI
Hassan	El Khatib	EBRD	Director, S&E Mediterranean Region, Industry, Commerce, Agribusiness	In-Person Interview	London, United Kingdom	DFI
Tarek	El Sherbini	EBRD	Senior Banker - Agribusiness	On-Line Survey and In-Person Interview	London, United Kingdom	DFI
Thomas	Maier	EBRD	Managing Director, Infrastructure	In-Person Interview	London, United Kingdom	DFI
Gilles	Mettetal	EBRD	Director, Agribusiness	In-Person Interview	London, United Kingdom	DFI
James	Kashangkai	Kenya Financial Sector Deepening (FSD)	Head, GrowthFin	On-Line Survey and In-Person Interview	Nairobi, Kenya	DFI
Zwelibanzi	Sapula	National Empowerment Fund (NEF)	Head Strategic Projects Fund	In-Person Interview	Johannesburg, South Africa	DFI

## Development Finance Institutions (21)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Michael	Wancata	OeEB - Official Development Bank of the Republic of Austria; wholly owned subsidiary of Oesterreichische Kontrollbank AG (OeKB)	Member of OeEB's Executive Board, Sustainability Coordinator	On-Line Survey	Vienna, Austria	DFI
Suzanne	Etcheverry	OPIC	Director, Portfolio Management	On-Line Survey	Washington DC, United States	DFI
Nelly	Defo	Shelter Afrique	Head Of Special Products	On-Line Survey	Nairobi, Kenya	DFI
Mohamud	Khalif	ICIEC / IsDB	Acting Director, Structured Finance and Investment Insurance Department	On-Line Survey	Jeddah, Saudi Arabia	DFI
Kevin	Bender	Water and Sanitation Program - World Bank	Senior Financial Consultant	On-Line Survey and In-Person Interview	Nairobi, Kenya	DFI
Dante	Mossi	World Bank	Senior Country Officer	On-Line Survey and In-Person Interview	Accra, Ghana	DFI

## ECAs (5)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Peter	Jones	Berne Union	Secretary General	In-Person Interview	London, United Kingdom	ECA
Fabrice	Morel	Berne Union	Deputy Secretary General	In-Person Interview	London, United Kingdom	ECA
Miroslav	Trebula	Eximbanka SR	Director of Strategy, International Relations and Communications	On-Line Survey	Bratislava, Slovakia	ECA
Peter	Whelan	Export Development Canada (EDC)	Country Risk Analyst	On-Line Survey	Canada	ECA

### ECAs (5)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Mohamud	Khalif	ICIEC / IsDB	Acting Director, Structured Finance and Investment Insurance Department	On-Line Survey	Jeddah, Saudi Arabia	ECA

### Companies and Business Associations (18)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Hubert	Danso	Africa Investor	Vice Chairman and Managing Director	In-Person Interview	Johannesburg, South Africa	Business Association
Mustansir	Barma	American Chamber of Commerce	Senior Economic Researcher, Research and Publications	In-Person Interview	Cairo, Egypt	Business Association
Alfred	Jasins	American Chamber of Commerce	Researcher	On-Line Survey	Cairo, Egypt	Business Association
Khaled	Sewelam	American Chamber of Commerce	Director, Research and Publications	In-Person Interview	Cairo, Egypt	Business Association
Seth	Tumh	Association of Ghana Industries	Executive Director	In-Person Interview	Accra, Ghana	Business Association
Amina	Ghanem	Egyptian National Competitiveness Council	Executive Director, Former Deputy Minister of Finance for Egypt	In-Person Interview	Cairo, Egypt	Business Association
George	Wangima	Kenya National Chamber of Commerce & Industry	Manager, Trade Development	On-Line Survey and In-Person Interview	Nairobi, Kenya	Business Association
Mark	Florman	The British Private Equity and Venture Capital Association	CEO	In-Person Interview	London, United Kingdom	Business Association
Gregory	Kibue	GIBB Africa Ltd.	Operations Manager	On-Line Survey	Nairobi, Kenya	Company
Toby	D. Couture	IFOK GmbH	Director of Renewable Energy	On-Line Survey	Germany	Company
Diana	Smallridge	International Financial Consulting	President	On-Line Survey	Canada	Company
Michael	Jordan	J & A		On-Line Survey	London, United Kingdom	Company
Malene	Kristensen	JGH Marine East Africa Limited	General Manager	In-Person Interview	Nairobi, Kenya	Company

## Companies and Business Associations (18)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Ferdinand	Schipfer	OeKB (a specialized institution owned by Austrian commercial banks)	Senior Director	On-Line Survey	Vienna, Austria	Company
Nicole	Haubold	PricewaterhouseCoopers (PwC) Germany	Senior Consultant	On-Line Survey	Germany	Company
John	Kakonge	South-South News	Special Advisor	In-Person Interview	Nairobi, Kenya	Company
Mahesh	Kotecha	Structured Credit International Corp. (SCIC)	President	On-Line Survey	New York, United States	Company
Richard	Bell	Wananchi Group	Group CEO	In-Person Interview	Nairobi, Kenya	Company

## Banks and Funds (46)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Mona	Kamal	Arab-African International Bank	Manager of Financial Institutions Department and Correspondent Banking	In-Person Interview	Cairo, Egypt	Bank
Mohsen	Rashad	Arab-African International Bank	General Manager and Head of Financial Institutions Department	In-Person Interview	Cairo, Egypt	Bank
Ashraf	Abou Alam	Banque du Caire	General Manager - Correspondent Banking and Trade Finance	In-Person Interview	Cairo, Egypt	Bank
Hussein	Abbaza	Commercial International Bank	CEO - Institutional Banking	In-Person Interview	Cairo, Egypt	Bank
Walid	Fawzy	Commercial International Bank	Head of Credit & Investment - Exposure Management	In-Person Interview	Cairo, Egypt	Bank
Mohamed	Nabeeh	Commercial International Bank	Chief of Staff - Institutional Banking	In-Person Interview	Cairo, Egypt	Bank
Yasser	Ibrahim	Commerzbank AG	Senior Representative / Director	On-Line Survey and In-Person Interview	Cairo, Egypt	Bank
Christopher	Tuffey	Credit Suisse	Managing Director - Fixed Income	In-Person Interview	London, United Kingdom	Bank
Sebastian	Ashong-Katai	Ecobank	Group Head - Financial Institutions and International Organizations	On-Line Survey and In-Person Interview	Johannesburg, South Africa	Bank
Onyango	Obiero	Gulf African Bank	Head, SME Banking	In-Person Interview	Nairobi, Kenya	Bank

## Banks and Funds (46)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Alex	Gitari	PTA Bank	Director of Finance	In-Person Interview	Nairobi, Kenya	Bank
Carl	Kachale	PTA Bank	Senior Officer	On-Line Survey	Nairobi, Kenya	Bank
George	Mudange	PTA Bank	Director of Trade Finance	In-Person Interview	Nairobi, Kenya	Bank
Francis	Namboya	PTA Bank	Principal Finance Officer	In-Person Interview	Nairobi, Kenya	Bank
Werner	van Oudenhove	RMB	Investment Banking Infrastructure Finance	In-Person Interview	Johannesburg, South Africa	Bank
Kevin	Colglazier	Standard Bank	Managing Director - Head of Investment Division	On-Line Survey and In-Person Interview	London, United Kingdom	Bank
Jeannor	Boussougouth	Standard Bank CIB	Senior Manager - Energy, Utilities, and Infrastructure	In-Person Interview	Johannesburg, South Africa	Bank
Ntlai	Mosiah	Standard Bank CIB	Head: Power & Infrastructure Advisory	In-Person Interview	Johannesburg, South Africa	Bank
Christopher	North	Standard Bank CIB	Power and Infrastructure	In-Person Interview	Johannesburg, South Africa	Bank
Vineshri	Reddy	Standard Bank CIB	Power and Infrastructure	In-Person Interview	Johannesburg, South Africa	Bank
Dimitrios	Gkiokezas	UBS AG Cairo Representative Office	Representative, Director	In-Person Interview	Cairo, Egypt	Bank
Ludwig	von Fischer	UBS AG Cairo Representative Office	Senior Representative, Executive Director	In-Person Interview	Cairo, Egypt	Bank
Anne-Marie	Chidzero	AfriCap Microfinance Investment Company	CEO	In-Person Interview	Johannesburg, South Africa	Fund
Lillian	Oyando	AfriCap Microfinance Investment Company	Analyst	In-Person Interview	Johannesburg, South Africa	Fund
Kiriga	Kunyiha	Aureos Kenya Managers Limited	Vice President	In-Person Interview	Nairobi, Kenya	Fund
Richard	Currie	Botenya Advisors	Real Estate Infrastructure Team	In-Person Interview	Johannesburg, South Africa	Fund
Khudu	Pitje	Botenya Advisors	Technology Infrastructure Team	In-Person Interview	Johannesburg, South Africa	Fund
Biniam	Yohannes	Catalyst Principal Partners	Managing Director	In-Person Interview	Nairobi, Kenya	Fund
Karim	Sadek	Citadel Capital	Managing Director	In-Person Interview	Cairo, Egypt	Fund
James	Cameron	Climate Change Capital	Chairman	In-Person Interview	London, United Kingdom	Fund
Enos	Banda	Freetal Group	Executive Chairman	In-Person Interview	Johannesburg, South Africa	Fund

## Banks and Funds (46)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Douglas	(Pug) Bennet	Frontier Markets Fund Managers	Deputy Head, GuarantCo	In-Person Interview	London, United Kingdom	Fund
Orli	Arav	Frontier Markets Fund Managers - Emerging Africa Infrastructure Fund	Head of Project Finance	In-Person Interview	London, United Kingdom	Fund
Gloria	Mamba	Global Environmental Fund - GEF Advisors Africa (PTY) Ltd.	Managing Director	On-Line Survey and In-Person Interview	Johannesburg, South Africa	Fund
Emile	du Toit	Harith Partners	Head of PAIDF 1	On-Line Survey and In-Person Interview	Johannesburg, South Africa	Fund
Lesiba	Morallane	Harith Partners	Investment Director	On-Line Survey and In-Person Interview	Johannesburg, South Africa	Fund
Ernest	Nyarko	Harith Partners	Investment Director	In-Person Interview	Accra, Ghana	Fund
Roberto	Nunes Ferreira	Harith Partners - Fund Managers of Pan African Infrastructure Development Fund	Investment Director	On-Line Survey and In-Person Interview	Johannesburg, South Africa	Fund
Barbara	James	Henshaw African Fund of Funds	Founder and CEO	On-Line Survey and In-Person Interview	Lagos, Nigeria; London, United Kingdom	Fund
Hamish	de Run	Hermes GPE	Infrastructure Partner	In-Person Interview	London, United Kingdom	Fund
Paul	Sigsworth	ICEA Asset Managers	Managing Director	In-Person Interview	Nairobi, Kenya	Fund
Justice	Kganyago	Identity Development Fund	Investments Executive	On-Line Survey and In-Person Interview	Johannesburg, South Africa	Fund
Polo	Radebe	Identity Development Fund	CEO	In-Person Interview	Johannesburg, South Africa	Fund
Renee	Blasky	Pinebridge Investments East Africa Ltd	Compliance Manager	On-Line Survey and In-Person Interview	Nairobi, Kenya	Fund
John	Charlton	Private Chinese Investment Company	Fund Manager	Telephone Interview	Hong Kong	Fund
Jonathan	Segal	Renaissance Capital	Managing Director	On-Line Survey and	London, United Kingdom	Fund

### Banks and Funds (46)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
				In-Person Interview	Kingdom	

### Insurance Agents, Brokers, and Finders, Private PRI Providers (8)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Conal	Duffy	Alliant Insurance Services	Vice President	On-Line Survey and In-Person Interview	Chicago, United States	Insurance Broker
Julie	Martin	Marsh USA	Senior Vice President, Political Risk Practice, and Managing Director	On-Line Survey	Washington DC, United States	Insurance Broker
Dan	Francis	Clements Worldwide	Director	In-Person Interview	London, United Kingdom	Insurance Broker, Agent, and Finder
Patrícia	Lavos	COSEC (Portugal)	Not Available	On-Line Survey	Lisbon, Portugal	Insurance Broker, Agent, and Finder
Amit	Khilosia	Lloyd's	Managing Director	In-Person Interview	Johannesburg, South Africa	Insurance Broker, Agent, and Finder
Nana	Asiedu Kissi	Regency Alliance Insurance Ltd	Chief Financial Officer	In-Person Interview	Accra, Ghana	Insurance Broker, Agent, and Finder
John	Hegeman	American International Group (AIG)	SVP Political Risk	On-Line Survey	New York, United States	Private PRI Provider
John	Salinger	American International Group (AIG)	Division President	On-Line Survey	New York, United States	Private PRI Provider

### Service Delivery NGOs (1)

First Name	Last Name	Organization	Position	Participation Type	Location	Respondent Type
Sam	Parker	Water & Sanitation for the Urban Poor	Chief Executive	On-Line Survey and In-Person Interview	London, United Kingdom	Service Delivery NGO



# African Development Bank: Initiative for Risk Mitigation

## *Needs Assessment for Risk Mitigation in Africa: Demands and Solutions*

### Separate Annex F: Literature Report

March 2013



# IRMA



Initiative for Risk Mitigation in Africa



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## Scope and Methodology of the Literature Review

This annex provides a summary of the literature on risk mitigation in developing countries. Key areas covered include:

- Definition of risk mitigation based on the prior extensive studies in this area from the World Bank, World Economic Forum, Africa Progress Panel, and other recognized authorities;
- Demand for risk mitigation in Africa across investment sectors, using recent studies on Africa from the IMF, World Bank, Africa Progress Panel, etc;
- Review of existing risk mitigation instruments by type of risk; and
- Experience to date in utilizing risk mitigation, citing success stories, impediments, and reported solutions.

The literature search included a systematic review of reports issued by the following sources:

- 4) Official reports by multilateral institutions, such as the IMF, World Bank, UN, and AfDB
- 5) Reports from leading global research organizations and Africa initiatives, such as the World Economic Forum and Africa Progress Panel
- 6) Private sector sources such as McKinsey, PricewaterhouseCoopers, Ernest & Young, etc.

The sources provided key inputs for the focus of the needs assessment in Africa, highlighting the huge opportunities for increased investment in Africa, and the demand for risk mitigation in Africa to unblock access to both finance and investment. The literature review includes a cross-sector analysis of the reported demand for investment as investors look to participate in the economic growth potential of Africa over the next decade.

The literature review identifies the range of risk mitigation instruments and solutions that are available to mitigate the varied risks that investors face across diverse sectors. It also investigates the cited factors resulting in the underutilization of existing risk mitigation instruments.

## 5 Definition of Risk Mitigation and Reported Africa Needs

### 5.1 Definition of Risk Mitigation

The accepted definition of risk mitigation is simply “*A systematic reduction in the extent of exposure to a risk and/or the likelihood of its occurrence.*”<sup>52</sup> Governments have explicitly recognized that risks in developing countries impede access to private sector finance and the resulting imperative of employing risk mitigation. In fact, in the 2002 UN Monterrey Consensus, all UN Member Countries explicitly acknowledged the critical need to mobilize private sector investment and the importance of risk mitigation in advancing poverty reduction and the achievement of the MDGs.<sup>53</sup>

In the context of developing countries, the public sector plays a critical role in mitigating risks that impede access to private investment and finance. Developing countries have many non-commercial and credit risks that the public sector can mitigate. The literature therefore often defines risk mitigation in developing countries as the transfer of risk to those parties – including both private and public sectors – that have a competitive advantage in measuring and managing it.

Official agencies underscore the critical importance of increasing DFI capacity in using risk mitigation to unblock private investment and finance. For example, the World Bank Group (WBG) has highlighted the importance of the role that its member organizations can play in facilitating the flow of private capital in emerging economies.<sup>54</sup> The WBG’s “additionality” in mitigating risks is largely derived from its special relationship with governments, which enables it to absorb higher risks than private sector providers can take on.<sup>55</sup>

Regional Development Banks have placed risk mitigation at the forefront of their strategies. For example, the European Bank for Reconstruction and Development (EBRD) was designed from its inception to use risk mitigation. The Inter-American Development Bank (IADB) has made great progress in scaling up the use of its guarantee program. Also, the Asian Development Bank (ADB) has placed a priority on developing its capacity to scale up its credit enhancement programs. For example, the ADB recently proposed a “Guarantee Facility Credit Enhancement of Project Bonds” in India which would support credit enhancements of project bonds to address one of India’s key development challenges, namely to meet the infrastructure investment target of about \$1 trillion during the Twelfth Five-Year Plan for FY2012-FY2016.<sup>56</sup> As the former head of the ADB Private Sector, Robert Bestani stated:

*With regard to risk mitigation, there is a great deal of evidence demonstrating that ADB’s entrance into a transaction changes the dynamics of that transaction. For a variety of reasons, the ADB’s mere presence can go a long way towards staving off capricious government intervention. Governments in emerging markets far too often do not have a well-conceptualized or articulated set of regulatory frameworks. Thus, projects are subject to new priorities, policies and government pronouncements. The ADB’s presence can help protect projects from volatile government intervention. The ADB’s involvement in a project acts as a stamp of approval, indicating the*

<sup>52</sup> See for example: <http://www.businessdictionary.com/definition/risk-mitigation.html>

<sup>53</sup> See <http://www.un.org/millenniumgoals/> and <http://www.un.org/esa/ffd/monterrey/MonterreyConsensus.pdf>

<sup>54</sup> World Bank Independent Evaluation Group, “The World Bank Group Guarantee Instruments 1990 – 2007: An Independent Evaluation” (Washington, D.C.: The World Bank, 2009). [http://lnweb90.worldbank.org/oed/oeddoctlib.nsf/DocUNIDViewForJavaSearch/97714149F690485385257589006CBCB9/\\$file/guarantees\\_eval\\_full.pdf](http://lnweb90.worldbank.org/oed/oeddoctlib.nsf/DocUNIDViewForJavaSearch/97714149F690485385257589006CBCB9/$file/guarantees_eval_full.pdf)

<sup>55</sup> Ibid.

<sup>56</sup> Asian Development Bank, Proposed Guarantee Facility: Credit Enhancement of Project Bonds (India). <http://www.adb.org/sites/default/files/projdocs/2012/43932-014-ind-rrp.pdf>

*international community’s imprimatur and support. To interfere with the project is to invite the disfavor of the 63 nations that make up the membership of the ADB.”<sup>57</sup>*

Bilateral development partners also emphasize the critical role of risk mitigation. For example, the UK’s Department for International Development (DFID) argues for the greater role that DFI’s can play in tackling global challenges, not only to address capital market failures but also market and coordination failures associated with technology adoption and the environment.<sup>58</sup> Bilateral donors have used new mechanisms such as the Private Infrastructure Development Group (PIDG) to develop innovative new approaches. Through its companies like GuarantCo and InfraCo Africa, PIDG mobilizes private sector investment to assist developing countries in providing infrastructure vital to boost their economic growth and combat poverty. GuarantCo provides guarantees to lenders to support local currency finance for infrastructure projects in low-income countries, thus promoting domestic infrastructure financing and capital market development. InfraCo Africa facilitates infrastructure development by assuming the risks and costs of early-stage project development in the lower income countries in Africa. It identifies investment opportunities and develops them to the stage where they can attract domestic and international finance.<sup>59</sup>

**Types of Risk Mitigation being developed:** Furthermore, these development institutions have created a wide range of instruments to address the diverse nature of risks.

In fact, the main studies on risk mitigation cite a wide range of risks that need to be mitigated to facilitate investment and access to finance<sup>60</sup>. The risks are described differently across the literature with varying subcategories. However, one can summarize the range of risks, as listed in the below table:<sup>61</sup>

Type of risk	Definition of risk
1. Project development risk	The risk of spending resources in developing a project (e.g., feasibility studies, etc.) that does not succeed in obtaining financing.
2. Political violence risk	The risk that the assets of a project are substantially damaged or destroyed as a result of politically motivated violence.
3. Expropriation risk	The risk that the host government takes ownership of the project’s assets or the project company or takes control of the project company (i.e. a forced transfer of ownership, value, or control from a private owner to a government entity).
4. Transfer and convertibility risk	The risk that a project will be unable to convert local currency to foreign currency and transfer funds outside of the country in which it is located.
5. Foreign exchange risk	The risk that a project will be unable to meet its debt service obligations or produce an adequate equity return as a result of fluctuations in the

<sup>57</sup> Robert M. Bestani, “The Multilateral Development Banks and The Capital Markets” (paper submitted to World Economic Forum Workshop, Hong Kong, March 15 – 16, 2005).

<http://www.globalclearinghouse.org/wefhongkong/>

<sup>58</sup> Dirk Willem te Velde, “The Role of Development Finance Institutions in Tackling Global Challenges” (London: Overseas Development Institute, August 2011).

<http://www.odi.org.uk/resources/details.asp?id=5979&title=role-development-finance-institutions-tackling-global-challenges>

<sup>59</sup> For a description of InfraCo and its activities, see Private Infrastructure Development Group.

<http://www.pidg.org/>.

<sup>60</sup> For example, see the guide for project sponsors of infrastructure projects in Africa commissioned by the Infrastructure Consortium for Africa at:

<http://www.ppiaf.org/sites/ppiaf.org/files/publication/ICA%20Guide%202006%20-%20Infra%20Project%20Preparation%20-%20ENG.pdf>

<sup>61</sup> The definitions of various risks have been sourced from online expert sources including: [www.infradev.org](http://www.infradev.org),

<http://www.people.hbs.edu/besty/projfinportal/glossary.htm>, <http://lexicon.ft.com/Term?>, <http://financial-dictionary.thefreedictionary.com>, [www.securitization.net](http://www.securitization.net)

Type of risk	Definition of risk
	country's exchange rate. In fixed exchange rate regimes, only decisions by the host government can alter the official value of the currency.
6. Regulatory risk	Exposure to financial loss arising from actions taken by regulatory agencies changing the current rules (or imposing new rules) that will negatively affect investments/projects and their profitability.
7. Interest rate risk	The impact on project cash flows from higher than expected interest costs, typically associated with floating rate debt and refinancing of existing debt.
8. Commercial and operational risk	The various risks that can affect a project or business during operations, such as counterparty risk, changes in input and output prices, fluctuations in demand, or failures in mechanical processes.
9. Infrastructure risk	The impact on project cash flows from inadequate infrastructure (i.e., electric power, water, transport, telecommunications, etc.).
10. Legal risk	The risk that a party to a contract will not be able to enforce contracts, security arrangements, foreign judgments, or choice of law and arbitration provisions.

The literature<sup>62</sup> also underscores the fact that the nature of risks and the degree varies by sector and type of investment activity.<sup>63</sup> To illustrate, below please find generic grouping of investment activity, with examples of the major types of risks cited in the literature:

Sector	Examples of Major Types of Risks
1. Infrastructure	<ul style="list-style-type: none"> <li>• Project development risk</li> <li>• Procurement risk</li> <li>• Off-take risk</li> <li>• Performance Risk</li> <li>• Construction Risk</li> <li>• Demand Risk</li> </ul>
2. Corporate	<ul style="list-style-type: none"> <li>• Credit risk</li> <li>• Interest rate risk</li> <li>• Foreign exchange risk</li> </ul>
3. Trade	<ul style="list-style-type: none"> <li>• Export credit risk</li> </ul>

<sup>62</sup> United Nations Environment Programme Finance Initiative, “Financing Renewable Energy in Developing Countries: Drivers and Barriers for Private Finance in Sub-Saharan Africa” (Geneva: United Nations Environment Programme Finance Initiative, February 2012).

[http://www.unepfi.org/fileadmin/documents/Financing\\_Renewable\\_Energy\\_in\\_subSaharan\\_Africa.pdf](http://www.unepfi.org/fileadmin/documents/Financing_Renewable_Energy_in_subSaharan_Africa.pdf)

<sup>63</sup> The amount of risk mitigation varies consistently across sectors. For a review by sector, see, Robert Sheppard, “Financing of Private Infrastructure in Sub-Saharan Africa” (Washington, D.C.: PPIAF, June 2006); the conclusions of this analysis are presented in abbreviated form in Robert Sheppard, Stephan von Klaudy, and Geeta Kumar, “Financing Infrastructure in Africa: How the Region Can Attract More Finance,” Gridlines Note No. 13 (Washington, D.C.: PPIAF, September 2006).

Sector	Examples of Major Types of Risks
4. Small and Medium-sized Enterprises	<ul style="list-style-type: none"> <li>• Interest rate risk</li> <li>• Credit risk</li> <li>• Foreign exchange risk</li> </ul>

In fact, the literature review highlights the fact that risks differ by each specific individual transaction. Therefore a huge challenge to effective risk mitigation is the ability to tailor the risk mitigation to the specific risks of the investment. For example, a leading UN renewable energy study<sup>64</sup> defines the specific nature of critical risks impeding investment in renewable energy technology (RET) as including the following:

Type of Risk	Details of Risk
Resource risk	Due to considerable fluctuations in supply, cost of supply, and properties depending on their origin.
Technical risk	Due to technology risks of the implemented RET including the reliability and availability of spare parts.
Operational risk	Due to post installation issues; has an effect on the complete plant operation as well as development of costs over the long run.
Regulatory risk	Due to risk of government policy changes in the energy sector particularly in RET markets supported by specific government policies aimed at encouraging deployment of renewable energy. Uncertainty prevents longer-term contracts (off-take agreements) from being secured.
Political risk	Due to limits imposed by regulatory agencies or internal bank guidelines, uncertain government policy and international events impacting profitability of project.
Small size and returns	Due to usual smaller scale of physical size and financial returns compared with conventional fossil fuel power generation plants. This usually results in an unattractive prospect for commercial lenders and insurers because administrative costs are high and returns are low.
Counterparty credit risk	Due to smaller, less established project sponsors. Even when RETs are large enough to attract the interest of banks and insurers, the actual or perceived credit risk of the host country or developer can be a barrier to the deal.
High costs	Due to high relative transaction costs because they often involve newer technologies and less experienced sponsors. Thus, they are more time-intensive and difficult to execute than conventional energy projects.
Time profile of cash flows	Due to high upfront costs relative to conventional fossil fuel projects. Revenues materialize much later than conventional energy projects.

The above example illustrates the specific nature of transactions and the need for risk mitigation instruments to be tailored to fit the needs of the project.

<sup>64</sup> Marsh, “Scoping Study on Financial Risk Management Instruments for Renewable Energy Projects” (prepared for the Sustainable Energy Finance Initiative of the United Nations Environment Programme). [http://sefi.unep.org/fileadmin/media/sefi/docs/publications/RiskMgt\\_full.pdf](http://sefi.unep.org/fileadmin/media/sefi/docs/publications/RiskMgt_full.pdf)

## 5.2 Reported Demand in Africa for Risk Mitigation

Experts agree that there is significant unmet demand for risk mitigation instruments to unlock investment and finance in Africa. Main reported factors driving demand include:

- Political risk is consistently ranked as a main constraint to the flow of FDI and domestic resource mobilization.
- Regulatory and contractual risks are reported as major reasons for the growing investment gaps in infrastructure.
- Abundant liquidity in international and domestic markets requires risk mitigation and credit enhancements that can help deepen the market, extend maturities, lower spreads, and redirect resources to underserved market segments and new investment opportunities.

Furthermore, most large private institutional investors have mandates limiting their portfolios to investment grade rated securities. Risk mitigation instruments and solutions can be utilized in the structuring of individual projects in Africa to pierce the sovereign ceiling in countries which are characterized by below investment grade ratings and thus access this large pool of global private capital.

The sections below use the literature to scope the level of demand in Africa for investment in infrastructure, agriculture, trade, SMEs, and consumer finance.

### 5.2.1 Infrastructure

Over the past decade (2001-2011), Africa has enjoyed a sustained period of economic growth, and economic output has more than tripled. According to the *Economist*, in eight out of those ten years, Africa has grown faster than East Asia.<sup>65</sup>

Moreover, looking forward, experts forecast Africa's economic growth prospects as extremely positive. According to research done by *The Economist*, six African countries have been among the ten fastest-growing economies in the world over the past decade; and seven African countries are forecast to be among the ten fastest-growing economies over the next five years. Further, *The Economist* has predicted that over the next five years, the average African economy will grow faster than its Asian counterpart.<sup>66</sup> According to Ernst & Young, a significant part of this growth is driven by rising domestic consumption. Growth is also supported by the emergence of accountable and democratic governments in the countries of Africa.<sup>67</sup> Oxford Economics predicts that Sub-Saharan Africa will average 4%-5% growth over the next decade, the second highest regional growth rate after "Emerging Asia."

However, according to the key assessments of the World Bank<sup>68</sup> and others, what will ultimately determine Africa's long-term growth potential is its investment in infrastructure. The continent's infrastructure lags behind other developing regions. According the World Bank, deficiencies in infrastructure are holding back the continent by at least 1 percentage point in per capita growth.<sup>69</sup> The infrastructure deficit that Sub-African countries suffer relative to the rest of the world is evident from the table below.

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<sup>65</sup> "The Hopeful Continent: Africa Rising," *The Economist*, December 3, 2011.

<sup>66</sup> Ibid.

<sup>67</sup> Ernst & Young, "Building Bridges: Ernst and Young's 2012 Attractiveness Survey" (2012).

[http://www.ey.com/Publication/vwLUAssets/EY\\_2012\\_Africa\\_attractiveness\\_survey/\\$FILE/attractiveness\\_2012\\_africa\\_v17.pdf](http://www.ey.com/Publication/vwLUAssets/EY_2012_Africa_attractiveness_survey/$FILE/attractiveness_2012_africa_v17.pdf)

<sup>68</sup> Vivien Foster and Cecilia Briceño-Garmendia, eds., "Africa's Infrastructure: A Time for Transformation" (Washington, DC: The World Bank, 2010).

[http://siteresources.worldbank.org/INTAFRICA/Resources/aicd\\_overview\\_english\\_no-embargo.pdf](http://siteresources.worldbank.org/INTAFRICA/Resources/aicd_overview_english_no-embargo.pdf)

<sup>69</sup> Ibid., 44.

Normalized Units	African Low-Income Countries	Other Low-Income Countries	African Middle-Income Countries	Other Middle-Income Countries
Paved Road Density	34	134	284	461
Total Road Density	150	29	381	106
Main Line Density	9	38	142	252
Mobile Density	48	55	277	557
Internet Density	2	29	8.2	235
Generation Capacity	39	326	293	648
Electricity Coverage	14	41	37	88
Improved Water	61	72	82	91
Improved Sanitation	34	53	53	82

Source: *Africa Infrastructure, A time for transformation; Africa Infrastructure Country Diagnostic*

According to the World Bank, the estimated infrastructure spending need is US\$93 billion a year (15 percent of the region's GDP) for the decade from 2010-2020 to close the infrastructure gap with other developing countries.<sup>70</sup> However, only US\$45 billion is being mobilized, leaving a gap of close to US\$50 billion a year. While official development finance for Africa's infrastructure has grown steadily, current official sources of funding will not be enough to cover this financing gap, which needs to be filled by private investment.

Sector projections are indicated table below<sup>71</sup>.

	Capital Expenditure US\$ b. p.a. 2010-20	Operating Expenditure US\$ b. p.a. 2010-20	Total US\$ b. p.a. 2010-20
ICT	7	2	9
Irrigation	2.9	0.6	3.4
Power	26.7	14.1	40.8
Transport	8.8	9.4	18.2

Source: *Africa Infrastructure, A time for transformation; Africa Infrastructure Country Diagnostic*

The critical demand for infrastructure is in power, requiring over US\$40 billion in investment from 2010 to 2020.

### Power

Addressing Africa's chronic power problem will require major investments in the refurbishment and expansion of power infrastructure. Of the 70.5 gigawatts installed generation capacity, around 44.3 gigawatts need to be refurbished, and an additional 7,000 megawatts of new generation capacity need to be built each year to meet suppressed demand, keep pace with projected economic growth, and provide additional capacity to support the rollout of electrification. This is compared with an expansion of less than 1,000 megawatts a year during the period 1990-2005. A bulk of this new capacity will be needed to meet non-residential demand. In addition, raising electrification rates will require extending distribution networks to reach an additional six million households a year.

The total spending needs of the power sector amount to US\$40.6 billion a year, or 6.4 percent of the region's GDP, skewed towards capital expenditure.

<sup>70</sup> Ibid., 58.

<sup>71</sup> OECD, "Mapping Support for Africa's Infrastructure Investment" (Paris: Organization for Economic Co-operation and Development, May 2012).

<http://www.oecd.org/daf/internationalinvestment/investmentfordevelopment/MappingReportWeb.pdf>

Country Type	US\$ Billions Annually			Percentage of GDP		
	Capital Expenditure	Operation & Maintenance	Total Spending	Capital Expenditure	Operation & Maintenance	Total Spending
Sub-Saharan Africa	26.6	14	40.6	4.2	2.2	6.4
Middle-Income Countries	6.29	7.9	14.19	2.3	2.92	5.22
Low-Income Fragile Countries	4.5	0.7	5.2	11.7	1.8	13.5
Low-Income Nonfragile Countries	7.6	2.2	9.7	6.9	2	8.8
Resource-Rich Countries	8.4	3.35	11.77	3.79	1.5	5.29

Source: *Africa Infrastructure, A time for transformation; Africa Infrastructure Country Diagnostic*

### **Water and Sanitation**

Water storage capacity is required to reach water security. Africa experiences huge swings in precipitation across areas, across seasons, and over time. Climate change will only exacerbate this variability. As a result, water security will require a significant expansion in water storage capacity from the current level of 200 cubic meters per capita. While the amount of storage required to withstand both flood and drought risks has not been precisely modeled, estimating the cost of bringing all African countries from their current storage levels of around 200 cubic meters per capita to South Africa's level of 750 cubic meters per capita, illustrates the hundreds of billions of dollars that could be required.

The investment required to expand irrigated areas and rehabilitate existing irrigation infrastructure would require US\$2.7 billion annually over a 10 year span, along with a further US\$0.6 billion to support maintenance of new and existing systems.

Capital investment needs to reach MDG targets for access to safe water and improved sanitation for 75 percent of the population by 2015 can be conservatively estimated at US\$15 billion annually.<sup>72</sup>

These needs include both new infrastructure and rehabilitation of existing assets.

### **Transportation**

Growth in Africa's population, economic output, and trade flows will combine over the future to raise demand at the regional and continental levels for freight transport, port facilities, and air passenger transport. The growth in demand is likely to outstrip development of the present African Regional Transport Infrastructure Network (ARTIN), opening up gaps between demand and supply that will retard future growth if allowed to persist. ARTIN's purpose is to link large African centres of consumption and production (large cities, mining centres, large agriculture production projects, and so on) with the rest of the world via modern and efficient regional transport infrastructure networks and gateways. The total cost of inefficiencies in ARTIN operations and lack of maintenance is estimated at close to US\$175 billion in 2009, with about half made up of increased annual costs to shippers and half in the value of suppressed demand.

The World Bank estimates that to create a transport network that provides adequate regional, national, rural and urban road connectivity complemented by adequate rail, port and airport infrastructure will require significant spending in the amount of \$18 billion a year, half of which is related to maintenance.<sup>73</sup> Investment requirements are driven by the need to upgrade the category of existing assets, improve their condition and expand their capacity. Just over half of this spending would be directed at non-road transport modes, particularly for their maintenance.

<sup>72</sup> Foster and Briceño-Garmendia, eds., "Africa's Infrastructure," 55.

<sup>73</sup> Ibid., 56.

Sector Area	Investment					
	Improve Condition	Upgrade Category	Add Capacity	Total Investment	Total Maintenance	Overall Total
Regional Connectivity	0.5	1.1	0.2	1.8	0.9	2.7
National Connectivity	0.5	1.2	0.2	1.9	1.0	2.9
Rural Connectivity	0.8	0.4	0.1	1.3	1.2	2.5
Urban Connectivity	0.3	0.4	0.4	1.1	0.5	1.6
Railways, Ports, and Airports	0.2	0.6	1.9	2.7	5.9	8.6
<b>Total</b>	<b>2.2</b>	<b>3.7</b>	<b>2.7</b>	<b>8.6</b>	<b>9.6</b>	<b>18.2</b>

Source: *Africa Infrastructure, A time for transformation*; AICD

### Information and Communication Technology (ICT)

Investment in ICTs has been remarkably successful in Africa. Across the continent, the availability and quality of service has gone up and the cost has come down. In just ten years, dating from the end of the 1990s, mobile network coverage rose from 16 percent to 90 percent of the urban population; by 2009, rural coverage stood at just under 50 percent of the population. This rapid expansion of telecommunications networks in Africa has required high levels of investment and between 1998 and 2008, an average of US\$5 billion a year was invested in Sub-Saharan Africa’s telecommunications sector (amounting to about 1 percent of total GDP).<sup>74</sup>

However, there are indications that network coverage growth is slowing, and it is likely that some parts of the population live in areas in which mobile networks are not commercially viable. The World Bank estimates that the cost of providing coverage to these areas is just under US\$1 billion per year over nine years. The cost of universal broadband Internet coverage would require a subsidy of about US\$10 billion per year to make it commercially attractive to operators.<sup>75</sup>

### 5.2.2 Agriculture and Food Security

In 2012, approximately 925 million of the world’s population remained undernourished. With the world’s population expected to grow to 9.3 billion by 2050, food production needs to grow by between 50-70%.<sup>76</sup> Africa will be central to meeting this challenge. Africa’s agriculture holds enormous potential with the continent’s being home to 60 percent of the world’s uncultivated arable land and with current low yields on its cultivated land. The barriers to agricultural production in Africa are well known and include lack of advanced seeds, inadequate infrastructure to bring crops to market, perverse trade barriers and tax incentives, lack of technical assistance and finance for farmers, and unclear land rights.<sup>77</sup>

As Africa overcomes these barriers by beginning to expand its land under cultivation, raising yields on key crops to 80 percent of the world average, and increasing revenue by shifting cultivation to higher-value crops, agricultural output could increase from US\$280 billion per year to as much as US\$880 billion in 2030. This magnitude of growth would increase demand for upstream products

<sup>74</sup> Mark D.J. Williams, Rebecca Mayer, and Michael Minges, “Africa’s ICT Infrastructure: Building on the Mobile Revolution” (Washington, DC: The World Bank, 2011). [http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/AfricasICTInfrastructure\\_Building\\_on\\_MobileRevolution\\_2011.pdf](http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/AfricasICTInfrastructure_Building_on_MobileRevolution_2011.pdf)

<sup>75</sup> Ibid.

<sup>76</sup> “2012 Progress Report of the Development Working Group,” G20 Los Cabos Summit Meeting, Los Cabos, Mexico, June 19, 2012. [http://www.mofa.go.jp/policy/economy/g20\\_summit/2012/pdfs/pr\\_dwg\\_e.pdf](http://www.mofa.go.jp/policy/economy/g20_summit/2012/pdfs/pr_dwg_e.pdf)

<sup>77</sup> Ibid.

such as fertilizers, seeds, and pesticides, which would increase from around US\$8 billion to US\$35 billion by 2030. Downstream markets, such as grain refining, biofuels, and other types of food processing activities, would also benefit, growing from a total value of about US\$40 billion to as much as US\$240 billion by 2030.<sup>78</sup>

Recent estimates of financing for the agriculture sector in Africa foresee the need for US\$ 8.1 billion or an additional US\$4.9 billion annually. The total cost of fertilizer and improved seeds required to achieve an agricultural growth rate of 7.5 percent is estimated at more than US\$9 billion a year. Given the current level and trend in fertilizer and seed use, the incremental cost of these inputs amounts to about US\$ 6.8 billion per year.<sup>79</sup>

Africa will also require a significant increase of public investment in agricultural research, to replenish agricultural education at all levels and upgrade aging infrastructure in irrigation, roads, energy, and logistics (especially port infrastructure), without which Africa will not be able to launch or sustain internationally competitive commercial agriculture.<sup>80</sup> Facilitation of the entry of private seed and processing companies is also vital given the important role they played in the development of commercial agriculture in Latin America and Asia.

### 5.2.3 Trade

Trade is increasingly an engine of growth and Africa has continued to expand strongly since the global crisis. Africa's share of global trade increased marginally to 3.2 per cent (to be seen against its 2.6 per cent of global output and 14.8 per cent of the world's population).<sup>81</sup> Africa is increasingly diversifying trading relationships towards emerging economic powers, with developed economies now accounting for less than half of Sub-Saharan Africa's trade. China and India now consume 12.5 per cent and 4 per cent of Africa's exports—representing 5 per cent and 8 per cent of these countries' imports. African exports of high-valued products to the Group of Five (Indonesia, Malaysia, Saudi Arabia, Thailand, and United Arab Emirates) have also been growing. For a breakdown of Sub-Saharan Africa's trade partners please refer to the table below.

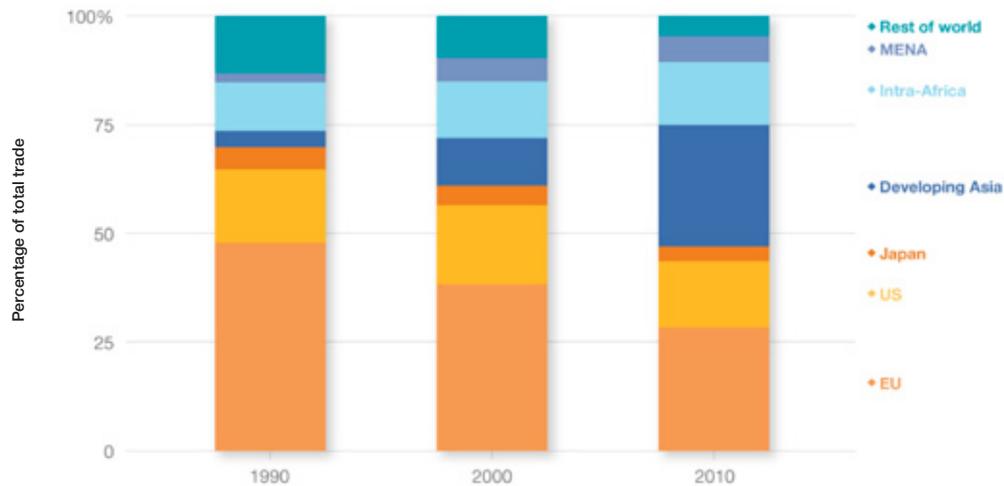
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<sup>78</sup> Ibid.

<sup>79</sup> African Development Bank, "Agriculture Sector Strategy 2010 – 2014" (Tunis: African Development Bank, January 2010). <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Agriculture%20Sector%20Strategy%202010-14.pdf>

<sup>80</sup> World Bank, "Awakening Africa's Sleeping Giant," Agriculture and Rural Development Notes, Issue 48 (Washington, D.C.: The World Bank, June 2009). <http://siteresources.worldbank.org/EXTARD/Resources/336681-1231508336979/SleepingGiantFinal.pdf>

<sup>81</sup> United Nations Economic Commission for Africa, "Unleashing Africa's Potential as a Pole of Global Growth" (Addis Ababa: United Nations Economic Commission for Africa, March 2012). <http://www.uncsd2012.org/index.php?page=view&type=400&nr=350&menu=45> – Economic Report on Africa 2012.



Source: World Economic Forum - *Shaping Africa's Transformation*

A major constraint on the growth of Africa's trade, especially intra-regional trade, is the inadequacy of financing mechanisms. The continent's financial landscape is characterized by the underdevelopment of regional institutions that can provide finance, credit and guarantees for cross-border trade. Well-developed and functioning financial systems are essential for the effective participation of African countries in global trade and for the boosting of intra-African trade.<sup>82</sup> This calls for much greater efforts in the development and strengthening of African financial institutions and mechanisms that accord high priority to the promotion of intra-African trade and investment. The African institutions whose activities need to be strengthened and replicated for the boosting of intra-African trade include the COMESA PTA Bank, ECOBANK, the East African Development Bank, the African Export and Import Bank (AFREXIM), and the African Trade Insurance Agency (ATI).<sup>83</sup>

#### 5.2.4 SME Demand and Exploding Demographics

The demand for SME finance is enormous, as evidenced by the literature on the lack of access to finance and exploding populations requiring job creation. SMEs form the backbone of modern economies and can be crucial engines of development through their role as seedbeds of innovation.<sup>84</sup> The importance of the SME sector is evidenced by its sheer quantitative importance in advanced economies. The OECD reports that SMEs account for 95 percent of manufacturing enterprises and an even higher share of many services in OECD countries; in most OECD countries, SMEs generate two-thirds of private sector employment and are the principal creator of new jobs.<sup>85</sup> The SME sector in developing countries, however, suffers from a "missing middle."<sup>86</sup> The World Bank estimates that SMEs contribute an average of 51.5 percent of GDP in high-income countries, but only 15.6 percent

<sup>82</sup> African Union, "Action Plan for Boosting Intra-African Trade" (Addis Ababa: African Union, 2012). <http://www.au.int/en/sites/default/files/Action%20Plan%20for%20boosting%20intra-African%20trade%20F-English.pdf>

<sup>83</sup> Ibid.

<sup>84</sup> David de Ferranti and Anthony J. Ody, "Beyond Microfinance: Getting Capital to Small and Medium Enterprises to Fuel Faster Development," Policy Brief 159 (Washington, D.C.: The Brookings Institution, March 2007). <http://www.brookings.edu/~media/research/files/papers/2007/3/development%20de%20ferranti/pb159.pdf>

<sup>85</sup> OECD, *OECD SME and Entrepreneurship Outlook 2005* (Paris: Organization for Economic Co-operation and Development, 2005). <http://www.camaras.org/publicado/europa/pdf/8505011E.pdf>.

<sup>86</sup> Certain emerging market economies, notably East Asia, have thriving SME sectors, including significant numbers of skill-intensive subcontractors.

in low-income countries.<sup>87</sup> One of the major reasons for this disparity in the SME sectors of high and low-income countries is the lack of access to finance faced by SMEs in low income countries face.<sup>88</sup> This arises due to a lack of financial and business management capacity (which precludes access to and effective usage of, finance), high interest rates, reflecting issues on both the supply and demand side, and the stringency of collateral requirements which characterizes SME finance in developing / low income countries.<sup>89</sup>

Unblocking finance for the SME sector in Africa will be critical because of the need for job creation, given its young and rapidly growing potential workforce and declining dependency ratio.<sup>90</sup> According to research by McKinsey Global Institute,<sup>91</sup> Africa will add 122 million people to its labour force between 2010 and 2020, and by 2040, the continent's labour force is expected to be 1.1 billion, overtaking that of both China and India. This large workforce would account for a significant share of both global consumption and production. Over the same period the number of children and retired people that each worker supports will fall from the highest level in the world today to a level on a par with the United States and Europe in 2035. The share of workers with wage-paying jobs is also predicted to rise to between 32 and 36 percent by 2020, with the number of wage-paying jobs growing faster than the number of new entrants to the labour force over the next decade in Africa's most diversified economies, such as South Africa, Egypt and Morocco.<sup>92</sup>

Africa's economic growth is creating substantial new business opportunities in a range of sectors that together could be worth US\$2.6 trillion in annual revenue by 2020.<sup>93</sup> Of these Africa's consumer sectors (consumer goods, telecom, and banking amongst others) present the largest opportunity and are already growing two to three times faster than those in the countries belonging to the OECD. The continent's households spent a combined US\$860 billion in 2008 (more than those in India and Russia) and this is projected to rise to US\$1.4 trillion by 2020 if real GDP continues to grow at its current pace.

This growth will create consumer markets large enough to be attractive to the international business community. The continent's five largest consumer markets in 2020 (Alexandria, Cairo, Cape Town, Johannesburg, and Lagos) will each have more than US\$25 billion a year in household spending and be comparable in size to Mumbai and New Delhi. More than a dozen other African cities (including Dakar, Ibadan, Kano, and Rabat) will develop consumer markets worth more than US\$10 billion. By 2030, the continent's top 18 cities could have a combined spending power of US\$1.3 billion.<sup>94</sup>

### 5.3 Types of Risks Impeding Investment and Access to Finance

The literature cites a wide range of risks in developing countries that impede access to investment and capital. As summarized in the section on the definition of risk mitigation, the risk mitigation literature covers a large range of risks, including both traditional risks as well as other risks that limit

<sup>87</sup> de Ferranti and Ody, "Beyond Microfinance."

<sup>88</sup> Hansen, Angela *et al.*, "Assessing Credit Guarantee Schemes for SME Finance in Africa: Evidence from Ghana, Kenya, South Africa and Tanzania" (Paris: Agence Française Développement. July 2011). <http://www.afd.fr/webdav/site/afd/shared/PUBLICATIONS/RECHERCHE/Scientifiques/Documents-de-travail/123-VA-document-travail.pdf>

<sup>89</sup> Ibid.

<sup>90</sup> McKinsey Global Institute, "Africa at Work: Job Creation and Inclusive Growth" (August 2012). [http://www.mckinsey.com/insights/mgi/research/africa\\_europe\\_middle\\_east/africa\\_at\\_work](http://www.mckinsey.com/insights/mgi/research/africa_europe_middle_east/africa_at_work)

<sup>91</sup> Ibid.

<sup>92</sup> Ibid.

<sup>93</sup> McKinsey Global Institute, "Lions on the Move: The Progress and Potential of African Economies" (June 2010).

[http://www.mckinsey.com/insights/mgi/research/productivity\\_competitiveness\\_and\\_growth/lions\\_on\\_the\\_move](http://www.mckinsey.com/insights/mgi/research/productivity_competitiveness_and_growth/lions_on_the_move)

<sup>94</sup> Ibid.

investment, such as the costs of project development and procurement risk. Each major category of risk is summarized below.

#### 1) *Traditional “Political” Risks*<sup>95</sup>

Political risk encompasses war and civil disturbance, expropriation and confiscation, and currency convertibility or transferability.

Risks emanating from war and civil disturbance include damage to, or the destruction or disappearance of, tangible assets caused by politically-motivated acts of war or civil disturbance in the host country, including revolution, insurrection, coups d'état, sabotage, and terrorism.

Expropriation refers to a loss in the value of an investment due to the actions of a host government that results in a reduction or elimination of ownership rights to an investment. This includes outright nationalization and confiscation, as well as “creeping” expropriation, which refers to a series of acts over time which have an expropriatory effect.

Convertibility risk arises from the possibility that the project will be prevented from exchanging local currency to foreign currency by a policy action of the government that restricts access to foreign exchange (through the rationing or administrative allocation of foreign exchange). Transferability risk refers to the limitation of transferring foreign exchange out of the country.

#### 2) *Contractual and Regulatory Risks*

Contractual and regulatory risks relate to the reliability and enforceability of contracts and other undertakings made by governments at the national and sub-sovereign level. Private sector participation in infrastructure projects in developing countries is enabled by these structured legal and financial agreements, which specify the rights and obligations of the different parties to a project, including the investors and the government. With infrastructure projects characterized by contracts that can span decades, investors face potentially significant risk from regulatory change, which can negatively impact project economics.

Contractual and regulatory risks can arise in the form of breach of contract, changes in law, license requirements, approvals and consents, obstruction in the process of arbitration, and non-payment of a termination amount.<sup>96</sup>

For instance, regulatory risk is often cited as a problem by private infrastructure companies in implementing agreed upon-tariff increases due to regulatory action or inaction.<sup>97</sup>

#### 3) *Credit Risks*

Credit risk is of particular concern to project lenders and / or bondholders. It refers to the risk that the cash flow generated by the project will be insufficient to meet its obligations as they fall due, i.e. the project will default on its debt obligations.

Infrastructure projects in developing markets often face this risk due to the underdeveloped nature of the local financial markets which limit the ability of the project to borrow for sufficiently long tenures and thus cause an asset-liability maturity mismatch when projects use short-term financing to fund long-term investments. It can also arise from insufficient financial management capacity of project sponsors in the developing countries, which leads to ineffective cash flow management, assessment of market demand and investment options.

#### 4) *Foreign Exchange Risks*

Another major risk faced by infrastructure projects in developing countries arises from the lack of availability of local currency financing. This is especially troubling as most project revenue streams in developing countries are denominated in local currency. If financing sources are foreign currency denominated, then the project is exposed to exchange rate risk due to the limited flexibility in raising

<sup>95</sup> Tomoko Matsukawa and Odo Habeck, “Review of Risk Mitigation Instruments for Infrastructure Financing and Recent Trends and Developments,” Trends and Policy Options No. 4 (Washington, D.C.: The World Bank, 2007). <http://www.ppiaf.org/sites/ppiaf.org/files/publication/Trends%20Policy%20Options-4-Review%20of%20Risk%20Mitigation%20Instrument%20-%20TMatsukawa%20OHabeck.pdf>

<sup>96</sup> PricewaterhouseCoopers Securities LLC, “Comparative Review of IFI Risk Mitigation Instruments and Direct Sub-Sovereign Lending” (Washington, D.C.: The World Bank, November 2003). [http://www.financingwaterforall.org/fileadmin/Financing\\_water\\_for\\_all/Stakeholders\\_responses/Final\\_PWC\\_Report\\_011304.pdf](http://www.financingwaterforall.org/fileadmin/Financing_water_for_all/Stakeholders_responses/Final_PWC_Report_011304.pdf)

<sup>97</sup> Matsukawa and Habeck, “Review of Risk Mitigation Instruments.”

local currency output prices (due to political and social constraints) in the event of a large local currency depreciation or devaluation, which can result in revenues which are insufficient to cover costs.<sup>98</sup>

#### 5) *Project Development Risk*

Despite many infrastructure investment opportunities in Africa and other developing countries, many projects struggle to attract capital. The problem is not just a lack of funding, but a lack of bankable projects. A project's bankability can be determined only after establishing its feasibility in terms of social, economic, financial, technical, environmental, and administrative factors. Project development normally involves prefeasibility and feasibility studies to assess these factors. These studies need to be preceded by conceptualization, consensus building around a project's purpose and initial design, and action plans. Even a simplified list of the standard steps in project preparation gives a sense of the complexity of the process.

Such preparation is expensive and risky. While private operators and commercial lenders have money to do their own due diligence on projects for which bankability has been reasonably established, they are often unwilling to bear the risk of preliminary assessment of bankability due to the costs involved.<sup>99</sup>

In order to overcome the lack of well-packaged bankable projects, Project preparation facilities (PPFs) for infrastructure are thus an essential part of the broader project preparation landscape. According to a report prepared for the Infrastructure Consortium for Africa,<sup>100</sup> of 67 identified potential PPFs, only 17 really focus on infrastructure projects in Africa, and only 12 are active. Most of the PPFs focus on later stage project cycle activities where there is good alignment with the operations and capabilities of most host institutions. By contrast, support for early stage project origination is more limited and far from systematic. Furthermore, while the funding for PPFs rose considerably from 2005 to 2010 (value of commitments from PPFs to project cycle activities in Africa grew from just over US\$10 million in 2005 to over US\$80 million in 2010, reflecting international policy focussing donor attention on African Infrastructure in the wake of the 2005 Gleneagles summit), spending appears to have peaked in 2009-2010 with a drop back in 2011 to 2008 levels. This may reflect the delayed impact of reduced donor spending commitments in the wake of the financial crisis.

The report also states that the greatest gaps in project preparation support are for private sector originated projects, for transformative regional projects, and for early stage government originated PPPs.

#### 6) *Procurement Risk*

Procurement risk results from the perception by bidders that the substantial time and financial commitment required to bid for a project are too high when measured against the small chance of eventually winning the bid. Procurement rules are often complex and not cost-effective, which impairs the ability of many qualified organizations and experts to provide project development services. In addition, there is often lack of easy access to information on available expertise and services, so the ability to select the most appropriate experts is limited. Development institutions have also often protected themselves with extensive and lengthy procurement and transaction processes (including competitive bidding for small projects and “one size fits all” payment terms) resulting in large transaction costs that deter all but the largest companies, or small, specialized businesses that survive on donor contracts.<sup>101</sup>

<sup>98</sup> Tomoko Matsukawa, Robert Sheppard and Joseph Wright, “Foreign Exchange Risk Mitigation for Power and Water Projects in Developing Countries,” Energy and Mining Sector Board Discussion Paper No. 9 (Washington, D.C.: The World Bank, December 2003).

[http://irispublic.worldbank.org/85257559006C22E9/All%2BDocuments/85257559006C22E985256FFC00751BE0/\\$File/Energy\\_ExchangeCvr.pdf](http://irispublic.worldbank.org/85257559006C22E9/All%2BDocuments/85257559006C22E985256FFC00751BE0/$File/Energy_ExchangeCvr.pdf)

<sup>99</sup> James Leigland and Andrew Roberts, “The African Project Preparation Gap,” Gridlines Note No. 18 (Washington, D.D.: PPIAF, March 2007). <https://www.ppiaf.org/sites/ppiaf.org/files/publication/Gridlines-18-The%20African%20Project%20Preparation%20Gap%20-%20JLeigland%20ARoberts.pdf>

<sup>100</sup> The Infrastructure Consortium for Africa, “Tunnels of Funds: Overview of the Assessment of Project Preparation Facilities for Infrastructure in Africa.”

<sup>101</sup> World Economic Forum, “Building on the Monterrey Consensus.”

These procurement constraints often lead to projects bearing unduly high levels of risk, which in turn makes them non-bankable and susceptible to problems of contract renegotiation, regulatory failure / capture, corruption, etc.<sup>102</sup>

On a macroeconomic level, non-transparent procurement practices can also lead to enormous contingent liabilities. Projects that were not competitively bid can lead to actual liabilities. This affects the ability of national governments to support even worthwhile projects.<sup>103</sup>

#### 7) Legal Risk

Progress in developing infrastructure projects in low-income countries is often stymied by the lack of adequate “upstream” preparation. Even if money is available for feasibility studies, the lack of a basic legal and regulatory enabling environment can stall project development.<sup>104</sup>

#### 8) Interest Rate Risk

Most projects in developing / low income countries face interest rate risk arising from the fact that bank lenders are hesitant to provide long-term loans at fixed rates because their deposit base is short-term, and fixed-rate long-term funding is either unavailable or uneconomic. This creates a mismatch for projects and exposes them to potentially higher costs if short-term interest rates rise, as well as liquidity risk if refinancing the short-term debt is not possible due to changes in the risk perception of lenders or external capital market conditions.<sup>105</sup>

#### 9) Commercial Risk

Once the project has been completed and is demonstrated to be operating to specification, a new phase of risk begins, that of long-term operation. Even if many of the risks discussed above have been hedged, a level of commercial risk is likely to remain. Commercial risk includes the long term risks arising from the use of new technology, poor management affecting general project operations, operating cost overruns due to a rise in input prices, and larger than expected maintenance costs.<sup>106</sup>

## 5.4 Sector Specific Demand for Risk Mitigation Solutions

### Renewable / Sustainable Energy

At roughly 30 gigawatts (GW), the entire generation capacity of the 47 countries of sub-Saharan Africa excluding the Republic of South Africa equals that of Argentina. As a result, sub-Saharan Africa has the world’s lowest electricity access rate, at only 24 percent, with the rural electricity access rate being only 8 percent. The electricity sector has witnessed considerable growth of 6 percent on average annually from 1998 – 2008, with the renewable energy sector growing equally strongly. Total electricity generation from renewable sources has grown from 45 to 78 terawatt hours per year, which means that 66 percent of all new electricity generate in Sub-Saharan Africa after 1998 has come from renewable sources.<sup>107</sup>

Experts estimate that unless stronger commitments and effective policy measures are taken, half the population in sub-Saharan Africa will still be without electricity by 2030, and the proportion of the population relying on traditional fuels for household energy needs will remain the highest among all world regions. To meet increasing demand and support economic growth, the power sector in Africa needs to install an estimated 7,000 megawatts (MW) of new generation capacity each year. Adequately financing the development of the energy sector in sub-Saharan Africa is expected to

<sup>102</sup> Ibid.

<sup>103</sup> Centennial Group Holdings, “Research on Innovative Finances to Achieve Millennium Development Goals” (prepared for the Japan Bank for International Cooperation, February, 2006).

<sup>104</sup> Ibid.

<sup>105</sup> E.R. Yescombe, *Principles of Project Finance* (London: Academic Press, 2002).

<sup>106</sup> Ibid.

<sup>107</sup> United Nations Environment Program Finance Initiative, “Financing Renewable Energy in Developing Countries.”

require the mobilization of funds in the order of US\$41 billion per year, which represents 6.4 percent of the region's GDP. Therefore, the mobilization of private investment and finance is crucial.<sup>108</sup>

Going forward, a greater proportion of renewable energy in the regional electricity mix could offer clear benefits to communities and economic development in the region for the following reasons:

- Renewable energy projects are deployable in a decentralized and modular manner. This makes them a particularly suitable energy source for small grids or off-grid solutions, which in turn bear great potential in many rural regions.
- Most countries in the region have renewable energy potential many times the current demand, which can be exploited by proven technologies.
- Renewable energy is a domestic resource and offers alternatives to uncertain and increasingly expensive imports of fossil fuels that expose countries to foreign and volatile supply chains.
- Renewable energy technologies open new export opportunities and revenue streams by being eligible for carbon credits that may be sold on international carbon markets
- Renewable energy technologies are approaching cost parity with traditional technologies in certain circumstances.

The main risks preventing private sector mobilization for the deployment of renewable energy technologies in developing countries and especially in Sub-Saharan Africa are reported as follows:<sup>109</sup>

- Many factors in developing countries, ranging from the capital-intensity of renewable energy technologies to the continued provision of subsidies to fossil fuels, make renewable energy generation in the short term, more costly or more difficult to implement than conventional fossil fuel-based technologies. A level playing field is required between renewable and conventional energy technologies through public intervention, e.g. in the form of an introduction of feed-in tariffs or national renewable energy targets.
- The legal and regulatory regime of the electricity sector makes deployment of renewable energy difficult. Electricity systems are frequently characterized by the domination of a state-owned national power utility, which lacks the incentives and flexibility to provide easy grid and market access on fair terms to private sector independent power producers. This type of structure also renders energy provision susceptible to political interference by keeping energy prices low.
- Even without the above-mentioned risks, the set of investment risks encountered remains a persistent challenge with renewable energy projects being particularly exposed to political and regulatory risk. This is the result of several factors: (1) renewable energy technologies must rely on public incentive mechanisms until they are fully competitive with conventional energy solutions, (2) renewable energy technologies are more capital intensive than conventional technologies, and (3) renewable energy projects are exposed to higher degree of technological risk because developing countries have limited experience with them.

The example of renewable energy risks illustrates the needs that risk mitigation instruments must address if they are to be utilized successfully.

## 6 Overview of Existing Risk Mitigation Instruments and Solutions

There is a wide range of existing risk mitigation instruments covering these reported risks, because the importance of private investment and finance in promoting economic growth and poverty reduction is well understood by policy makers. However, the utilization of these instruments is reported as lagging. This section summarizes the literature on the wide range of risk mitigation instruments currently available.

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<sup>108</sup> Ibid.

<sup>109</sup> Ibid.

## 6.1 Types of Risk Mitigation Instruments and Solutions

The discussion below summarizes the risk mitigation instruments that are available to lenders and equity investors.

### 1) Political Risk Mitigation Instruments

These instruments cover losses caused by specified political risk events as discussed in section 2.3 above.<sup>110</sup>

- Political Risk Guarantees typically cover the full amount of debt owed to commercial lenders in private projects if the debt default is caused by political risks specified under the guarantee. Political risk guarantees are offered by multilateral development banks and some bilateral agencies.
- Political Risk Insurance (PRI) or investment insurance can insure equity investors or lenders. Coverage is generally limited to less than 100 percent of the investment, but may cover 100% of a loan. Providers of PRI include export credit agencies, investment insurers, private political risk insurers, and multilateral insurers.

### 2) Contractual and Regulatory Risk Mitigation Instruments

Contractual and regulatory risk coverage is more complex to write compared to traditional political risk cover, as it relies on the legal documentation underlying the specific transaction and the regulatory undertakings the government has given. Events that trigger a call of the guarantee have to be clearly defined, and typically the remedies specified in the contractual or regulatory documents have to be exhausted prior to receipt of payment from the guarantor. (In response to market concerns, a number of instruments provide payment against a guarantee at the time of proof of legitimate claim, thereby enabling debt service to continue while the dispute is going through the resolution process.)<sup>111</sup> Until recently, because of the specialized nature of these coverages, they were written to address specific project requirements. However, as familiarity with these instruments has increased, many of the risks are being covered under a breach of contract policy. The Multilateral Investment Guarantee Agency's (MIGA) relatively recent Breach of Contract guarantee defines the product as

*“...protect[ing] against losses arising from the host government's breach or repudiation of a contract with the investor. In the event of an alleged breach or repudiation, the investor must be able to invoke a dispute resolution mechanism (e.g., an arbitration) in the underlying contract and obtain an award for damages. If, after a specified period of time, the investor has not received payment or if the dispute resolution mechanism fails to function because of actions taken by the host government, MIGA will pay compensation. MIGA may make a provisional payment pending the outcome of the dispute resolution mechanism.”<sup>112</sup>*

In the context of regulatory risk, a Partial Risk Guarantee could backstop a government commitment that the regulatory framework defined previously is adhered to and not changed unilaterally. A PRG for regulatory risk mitigation therefore addresses a specific gap in risk coverage that investors seek in countries where the sector is in the early stages of reform.<sup>113</sup> For example, when the government of Romania privatized its power distribution companies, it provided a guarantee to the investors against a change or repeal by the government or the regulatory agency of, or non-compliance by the regulatory agency with, the key provisions of the regulatory framework. The World Bank could then provide a PRG to backstop the government's obligation to compensate for loss of regulated revenues resulting from such defined regulatory risk.<sup>114</sup>

<sup>110</sup> Matsukawa and Habeck, “Review of Risk Mitigation Instruments.”

<sup>111</sup> PricewaterhouseCoopers, “Comparative Review of IFI Risk Mitigation Instruments.”

<sup>112</sup> Ibid

<sup>113</sup> Pankaj Gupta *et al.*, “Mitigating Regulatory Risk for Distribution Privatization: The World Bank Partial Risk Guarantee,” Energy and Mining Board Discussion Paper No. 5 (Washington, D.C.: The World Bank, 2002). <http://siteresources.worldbank.org/EXTENERGY2/Resources/4114199-1243609360430/pgupta.pdf>

<sup>114</sup> Matsukawa and Habeck, “Review of Risk Mitigation Instruments.”

The International Bank for Reconstruction and Development's (IBRD) Partial Risk Guarantee “ensures payment in the case of debt service default resulting from the non-performance of contractual obligations undertaken by governments or their agencies in private sector projects.”<sup>115</sup>

### 3) Credit Risk Mitigation Instruments<sup>116</sup>

Credit guarantees cover losses in the event of a debt service default with no differentiation of the source of the risks that caused the default.

- Partial Credit Guarantees (PCGs) cover part of the debt service of a debt instrument regardless of the cause of default. A PCG helps improve the borrower's market access and terms of its commercial debt. They typically have provided coverage for later maturity payments. The guaranteed coverage level may be structured so as to achieve a particular bond rating or to enable commercial bank lenders to participate in a project financing.
- Full Credit Guarantees or Wrap Guarantees cover the entire amount of the debt service in the event of a default. In some developing countries, private monoline insurers have been active in issuing wrap guarantees for bond issued by infrastructure project companies.
- Export Credit Guarantees or Insurance cover losses for exporters or lenders financing projects tied to the export of goods and services. They are usually “tied” to the nationality of exporters or suppliers and sometimes to the project sponsors or lenders.

### 4) Foreign Exchange Risk Mitigation Instruments and Solutions<sup>117</sup>

Efforts to minimize foreign exchange risk can be classified broadly within the areas of expanding options for local currency financing and approaches that attempt to deal directly with foreign exchange risks.

Most International Financial Institutions seek to limit foreign exchange risk by facilitating local capital and bank market development thus improving access to local currency financing and eliminating the potential currency mismatch between a project's revenue and its debt service. However, this is a long and gradual process. When there is a market for local currency debt but the available debt is of insufficient maturity in the absence of protection from other risks, the public sector / donor agencies can intervene to assist infrastructure projects in mobilizing local currency debt through the following schemes:

- Local currency fund schemes – facilitate local currency financing by providing additional security to lenders, diversifying project risks and reducing transaction costs. Typically such a fund uses its initial capitalization as a reserve fund and then issues bonds, using the proceeds to lend to infrastructure projects. It thus acts as an intermediary, facilitating supply of domestic capital market funds to infrastructure.
- Local currency credit enhancement – These include partial credit guarantees which mitigate specific credit risks. They help to extend the tenor of available local currency financing for the borrower by covering later maturity payments or a certain amount of debt service payments over the life of the credit or by using put options or a call of take-out financing.
- Multilateral Agencies' Local Currency Instruments – MLA's also lend in local currency to infrastructure projects, although loans are most likely to be available in currencies where cross-currency swaps are available to hedge the MLA's exposure. Some MLA's like the IFC also intermediate currency swaps to convert foreign currency loans to local currency.

In the absence of currency hedging instruments like forwards and options, foreign exchange risk can also be passed on to the host government in the following ways:

- Fixed Exchange Rates – in theory such an exchange rate regime would remove foreign exchange risk from an infrastructure project's owner.
- Public sector lending in local currency – in the absence of local long-term debt markets, local currency funding may be provided by the government through state-owned financial

<sup>115</sup> PricewaterhouseCoopers, “Comparative Review of IFI Risk Mitigation Instruments.”

<sup>116</sup> Matsukawa and Habeck, “Review of Risk Mitigation Instruments.”

<sup>117</sup> Matsukawa, Sheppard, and Wright, “Foreign Exchange Risk Mitigation.”

institutions. This form of public sector funding may also be used to leverage private financing when the loan from the government is subordinated and under some output-based scheme.

- Exchange Rate Guarantees – An alternative is for the government to guarantee the exchange rate for a specific project. This, however, is not a sustainable option as the government will not be able to hedge its exposure and in the event of devaluation, the guarantee will be one of multiple calls on the government’s foreign exchange reserves.
- Tariff Indexes – Agreements may be undertaken where the tariffs are adjusted by a single index, e.g. the foreign exchange rate or the local inflation rate. This helps to protect investors from cost changes as they are reflected in the output prices received via tariff adjustments.
- Foreign Exchange Index – Commonly developing country infrastructure projects that are financed with foreign currency debt feature a license or contract that adjusts tariffs by a foreign exchange index. Such agreements shift the risk of devaluation from the project to its customers.

A liquidity facility could provide standby financing to enable a project to continue to meet its current debt service obligations while spreading the tariff impact of exchange rate changes over longer periods. Funding from the facility would be made available to the project when a devaluation (beyond a certain amount) is not immediately compensated by the agreed tariff adjustment formula and this negatively affects the project’s ability to service debt. The facility will be repaid over a number of years through phased tariff adjustments to return revenues to a cost-recovery level or by a special levy on consumers. Responsibility for the repayment would rest with the project sponsor or with the municipality, state or government.

While a liquidity facility can smooth the impact of devaluation on project cash flows, the retail tariff should ultimately reflect the full cost of infrastructure service provision, including foreign currency financing costs.

#### 5) *Project Development Risk Mitigation Instruments*

As discussed above, the literature<sup>118</sup> reports that the most critical issue blocking investment is the lack of a pipeline of projects. The key cited issue is that many projects are not sufficiently developed due to the unacceptable risk of losing the significant level of development funds required to develop the project. In short, private project sponsors and investors are unwilling or unable to finance the project’s development costs and assume the risk of failure.

To overcome these hurdles, international development organizations have established dozens of initiatives to assist with infrastructure project preparation.<sup>119</sup> Bilateral donor agencies have designed special programs to provide such support, as have European development finance institutions. Donors have also supported the creation of multilateral trust funds managed by the World Bank to focus on specific sectors or type of projects. The World Bank has also created several facilities that deal with different aspects of project preparation and finance.<sup>120</sup> Examples of facilities that support project sponsors in preparing infrastructure projects include InfraCo Africa, DEVCO, World Bank’s Global Environmental Facility, African Capacity Building Foundation, etc.

In Uganda, the Private Sector Foundation Uganda (PSFU) implements the Business Uganda Development Scheme (BUDS-DFID) project on behalf of the Office of the Prime Minister. BUDS-DFID is a cost sharing project funded by DFID. Its aim is to promote private sector growth, investment and employment opportunities by providing financial support for business development services (BDS), skills development including capacity building and capital investment related activities in the form of grants.<sup>121</sup>

<sup>118</sup> World Economic Forum, “Building on the Monterrey Consensus.”

<sup>119</sup> Leigland and Roberts, “The African Project Preparation Gap.”

<sup>120</sup> For information on such programs, see the guide for project sponsors of infrastructure projects in Africa at: <http://www.ppiaf.org/sites/ppiaf.org/files/publication/ICA%20Guide%202006%20-%20Infra%20Project%20Preparation%20-%20ENG.pdf>

<sup>121</sup> BUDS – DFID, Private Sector Foundation Uganda,

[http://www.psfuganda.org/new/index.php?option=com\\_content&view=article&id=68&Itemid=183](http://www.psfuganda.org/new/index.php?option=com_content&view=article&id=68&Itemid=183)

### 6) Trade and Commercial Risk Mitigation Instruments

Export credit guarantees or insurance cover losses for exporters or lenders financing projects tied to the export of goods or services.<sup>122</sup> Export credit guarantees or insurance cover some percentages of both political risk and commercial risk. Export credit agencies (ECAs) define commercial risks for export transactions to include bankruptcy or insolvency of the borrower or buyer, failure of the buyer to effect payment, failure or refusal of the buyer to accept goods, and termination of purchase contract.<sup>123</sup>

ECAs provide insurance and guarantees for exports and investments abroad by home companies. They are either owned by the government, such as the Norwegian Guarantee Institute for Export Credits (GIEK), or are administered by an independent entity (e.g. Germany's Foreign Trade and Investment Promotion Scheme (AGA), which is administered by a consortium of two private companies). Most agencies provide risk coverage for both commercial risks, such as insolvency or bankruptcy on the part of the buyer and termination or non-renewal of contracts and import licenses, and non-commercial risks, such as currency inconvertibility, expropriation, political violence, natural disasters, and force majeure.

In Africa, ONDD, the Belgium ECA, provided a US\$50 million guarantee of the bond issue that helped to finance the Safaricom telecommunications venture. Project sponsors benefit from export credits because they widen debt financing choices available to a project. However, export credits are typically only one of several tranches involved in financing a project – they do not cover equity, for instance. Similarly, export credits do not usually support the entire project, therefore obliging project sponsors to pursue other instruments.<sup>124</sup>

### 7) Interest Rate Risk Mitigation Instruments

A central problem faced by African countries (and developing countries in general) is lack of access to affordable, long-term funding, especially local currency financing for infrastructure projects. As a result, most African countries suffer from very high local interest rates, with the result that the debt service costs are too high for most projects. Local currency financing is vital, as it protects borrowers against the devaluation risk associated with borrowing in foreign currencies.<sup>125</sup>

On-lending facilities play an important role in overcoming this impediment and reducing the cost of local currency financing for borrowers and project sponsors. By providing concessional financing at subsidized rates to local banks, the bank's cost of capital is reduced. This lower cost local currency capital can thus be on-lent to local borrowers at rates lower than what was previously possible. For example, the ADB used local currency for on-lending to Philippine commercial banks at fixed rates, which thus had additional liquidity for lending, enabling them to make long-term loans with no currency or maturity mismatches.<sup>126</sup> Other examples of on-lending facilities include the World Bank's Tanzania Energy Development Assistance Program (WB TEDAP), the IFC's On-Lending facilities,

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<sup>122</sup> Loans may be made by the lender to the exporter so that the exporter can allow deferred payments by the importer in a developing country ("supplier's credit"), or loans are made directly by the financial institution to the importer, normally through a bank in the developing country ("buyer's credit").

<sup>123</sup> Matsukawa and Habeck, "Review of Risk Mitigation Instruments."

<sup>124</sup> OECD, "Mapping Support for Africa's Infrastructure Investment."

<sup>125</sup> World Economic Forum, "Building on the Monterrey Consensus."

<sup>126</sup> Robert Bestani and Ajay Sagar, "The Local Currency Financing Revolution," *Asia Pacific Review*, a special issue of *Project Finance International* (May 8, 2004), 12-15.

[http://www2.adb.org/documents/others/local\\_currency\\_financing.pdf](http://www2.adb.org/documents/others/local_currency_financing.pdf) See also, Bob Bestani, "The Road Less Travelled: A Private Sector Framework for the Multilateral Development Banks" (presentation at the World Economic Forum Financing for Development Workshop, Hong Kong, March 15 – 16, 2005).

and the Government of Uganda’s Agricultural Credit Facility,<sup>127</sup> which is intended to provide medium to long-term loans to projects engaged in agriculture and agricultural-processing on more favourable terms than are usually available from the participating financial institutions.

The commonest type of interest rate hedging used is interest rate swaps, and to a lesser extent interest rate caps, collars, and other instruments are used.<sup>128</sup> However, these instruments are generally not available in Africa.

#### 8) *Decentralized Risk Mitigation Instruments*

Examples of decentralized risk mitigation solutions include the Uganda Energy Credit Capitalization Company, AFD’s ARIZ scheme, AFD’s Green Credit Lines (GCL), etc. UECCC’s main focus is to enhance the flow of private sector finance and investments to small scale, renewable energy generation and distribution projects and/or rural electrification projects in Uganda.<sup>129</sup> AFD’s ARIZ scheme is a guarantee mechanism designed to give SME’s and MFI’s better access to financing and aims to support business start-ups and development projects. It provides financial actors from South countries (mainly in Africa) with tools that are flexible, easy to mobilize, in local currency or euros, and tailored to risk securitization needs, including political risks or climate hazards. AFD’s GCL partners with banks in developing and emerging markets to finance green growth by offering appropriate funding and dedicated technical support. It works with the banks to identify investment potential, select sectors with the highest potential, and define an action plan that aims to reduce obstacles to investment in the country.<sup>130</sup>

The Global Energy Transfer Feed-in-Tariff (GET FiT) concept is further illustration of bottom-up support for renewable energy in developing countries. It provides a private sector perspective on renewable energy financial and development risks, by exploring the barriers to program implementation in detail, and by highlighting the instruments, which would help mobilize private capital. The GET FiT concept is intended as a template, which would be flexibly adapted to specific national contexts.<sup>131</sup>

Another example of the trend towards decentralization of risk mitigation is the innovative “Local Finance Initiative” (LFI) being implemented by the United Nations Capital Development Fund in Tanzania and Uganda. The LFI seeks to catalyse domestic finance for strategic investments that enable private sector growth at the local level. It aims to apply risk mitigation tools to small-scale strategic infrastructure investments and build required capacity at the local level in both the public and private sectors. LFI will develop analytical approaches and scalable tools in the areas of project development, project finance, capacity building, and performance metrics.<sup>132</sup>

For more examples of decentralized risk mitigation solutions, please refer to the section below entitled, “*African and Decentralized Risk Mitigation Solutions.*”

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<sup>127</sup> Bank of Uganda, Agricultural Credit Facility.

[http://www.bou.or.ug/bou/media/from\\_the\\_bank/Agricultural\\_Credit\\_facility.html](http://www.bou.or.ug/bou/media/from_the_bank/Agricultural_Credit_facility.html)

<sup>128</sup> Yescombe, *Principles of Project Finance*.

<sup>129</sup> Meeting with the staff of UECCC, Kampala, Uganda.

<sup>130</sup> Agence Française Développement. “ARIZ: A Dedicated Risk-Sharing Tool Facilitating Access to Bank Credit.”

[http://www.afd.fr/jahia/webdav/site/afd/shared/PORTAILS/PUBLICATIONS/PLAQUETTES/AFD\\_ARIZ\\_GB.pdf](http://www.afd.fr/jahia/webdav/site/afd/shared/PORTAILS/PUBLICATIONS/PLAQUETTES/AFD_ARIZ_GB.pdf)

<sup>131</sup> Rickerson *et al*, “Implementing a Global Fund for Feed-in Tariffs in Developing Countries: A Case Study of Tanzania.”

<sup>132</sup> United Nations Capital Development Fund – Local Finance Initiative, <http://uncdf.org/en/local-finance-initiative>

## 9) A/B Loan Structures

Many multilateral banks, through their private sector departments or organizations, offer an “A/B” loan structure, where the multilateral lends a portion of the total amount required (the “A” loan) and syndicates the remainder of the loan to commercial lenders (the “B” loan). The multilateral acts as the lender of record for the full loan and the private sector lenders receive the benefit of being under the umbrella of the multilateral. B loan participants therefore benefit from the multilateral’s preferred creditor status and thereby the A/B loan structure implicitly mitigates currency transfer risk for lenders.<sup>133</sup>

## 6.2 Sources of Risk Mitigation Instruments

Risk mitigation providers include multilateral development banks and agencies, bilateral or national agencies, and private financial entities.<sup>134</sup>

### *Multilateral Agencies (MLAs)*

MLAs that offer risk mitigation instruments are multilateral development banks (MDBs) and guarantee or insurance agencies affiliated with development banks. Many of the MDBs offer similar instruments like PCGs and PRGs, with their use being conditional on meeting development objectives. MLA operations are typically more focused on lending than on providing guarantees (with the exception of insurance agencies) and they aim at risk sharing with private lenders by offering partial guarantees

Regional development banks operate both public sector and private sector divisions under the same institutional umbrella. (The World Bank Group is the only exception.) The demarcation between the public and private divisions is decreasing because infrastructure project opportunities in developing countries requiring multilateral support are in increasingly difficult countries or sectors where certain government undertakings are required to make projects bankable and make multilaterals’ guarantees operative. In addition, support for sub-sovereign governments and entities are often undertaken on a joint basis between public and private sector divisions. The requirement of a sovereign indemnity is dependent on the agency providing the guarantee.

### *Bilateral Agencies*

Bilateral or national agencies offering risk mitigation instruments can generally be classified into bilateral development agencies or export credit agencies (ECAs). Bilateral development agencies have development objectives similar to MLAs, but ECAs do not. Although their actions may further development, they exist to promote exports. ECAs have diverse organizational structures, with some being part of their respective governments (UK), while others are structured as government agencies or as government programs administered by private entities (France & Germany). ECAs’ programs are usually tied to the nationality of exporters or suppliers and sometimes to that of the project developers or lenders, as their institutional objectives are primarily to serve their countries’ national interests.

### *Private Financial Entities*

There are number of risk mitigation instruments such as the monoline insurers that offer wrap guarantees to structured debt transactions, including asset backed securities and project finance debt. Private sector political risk insurers and reinsurers provide PRI in a manner similar to multilateral and bilateral insurers. While private insurers tend to be highly sophisticated in risk assessment, they have relatively less leverage with host governments compared to public insurers.

### 6.2.1 Global Risk Mitigation Providers

Major Multilateral Providers of Risk Mitigation Instruments:<sup>135</sup>

Name	Coverage	Instrument Name	Instrument Type
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<sup>133</sup> Matsukawa and Habeck, “Review of Risk Mitigation Instruments.”

<sup>134</sup> Ibid.

<sup>135</sup> Matsukawa and Habeck, “Review of Risk Mitigation Instruments.”

Name	Coverage	Instrument Name	Instrument Type
World Bank: IBRD and International Development Association (IDA)	Political and comprehensive risk	IBRD Partial Risk Guarantee, IDA PRG, IBRD Enclave PRG, IBRD Partial Credit Guarantee, IBRD Policy-Based Guarantee	Debt guarantee
International Finance Corporation (IFC)	Comprehensive risk	Partial credit guarantee	Debt guarantee
MIGA	Political risk	Investment guarantee	Political risk insurance
African Development Bank (AfDB)	Political and comprehensive risk	Partial risk guarantee, partial credit guarantee, policy based guarantee	Debt guarantee
ADB	Political and comprehensive risk	Political risk guarantee, partial credit guarantee	Debt guarantee
EBRD	Political and comprehensive risk	Political risk guarantee, trade finance facilitation program, SME guarantee facility, Municipal finance facility	Debt guarantee
Inter-American Development Bank (IDB)	Political and comprehensive risk	Political risk guarantee, partial credit guarantee, trade finance facilitation program	Debt guarantee
European Investment Bank (EIB)	Political and comprehensive risk	Outside EU – political risk carve-out on guarantees for EIB loans, EIF credit insurance, enhancement, SME guarantee facility, Outside EU – Range of guarantee facilities	Equity / loan / microcredit guarantees, portfolio credit risk sharing etc.
Andean Development Corporation (usually known by its Spanish acronym “CAF”)	Comprehensive risk	Partial credit guarantee	
Islamic Corporation for Insurance of Investments and Export Credits (ICIEC)	Political and comprehensive risk	Equity investment insurance policy, financing facility insurance policy, loan guarantees investment insurance policy, comprehensive short term policy, supplemental medium term policy etc.	Investment and export credit insurance, reinsurance
Islamic Development Bank	Investment and export credit	Direct investment guarantee, equity	Insurance

Name	Coverage	Instrument Name	Instrument Type
(ISDB)	coverage	participation guarantee, loan guarantee, contractors equipment guarantee, specific non-commercial risks guarantee etc.	

Examples of Major Bilateral Providers of Risk Mitigation Instruments:<sup>136</sup>

Name	Coverage	Instrument Name	Instrument Type
Export Development Canada (EDC) – Canada	Investment and export credit	Political risk insurance, contract frustration insurance, accounts receivable insurance etc.	Insurance
Agence Française de Développement (AFD) – France	Political and comprehensive risk		Guarantee
Coface – France	Investment insurance and export credit guarantees		Insurance and guarantees
Deutsche Investitions und Entwicklungsgesellschaft mbH (DEG) – Germany	Comprehensive coverage	Partial and full credit guarantees	Guarantee
Foreign Trade and Investment Promotion Scheme (AGA) – Germany	Investment and export credit coverage	Investment and export credit guarantee	Guarantee
Italian Export Credit Agency (SACE) – Italy	Investment and export credit coverage	Political risk insurance, buyer credit insurance, bond insurance etc.	Insurance
Japan Bank for International Cooperation (JBIC) – Japan	Political and comprehensive risk coverage	Political risk guarantee and comprehensive risk guarantee	Debt guarantee
Nippon Export and Investment Insurance (NEXI) – Japan	Investment and Trade coverage	Overseas investment insurance, export credit insurance, buyers credit insurance etc.	Insurance
Atradius Dutch State Business NV – Netherlands	Investment and export credit coverage	Investment insurance, export credit insurance and capital goods insurance	Insurance and guarantees
The Netherlands Development Finance Company (FMO) – Netherlands	Comprehensive risk coverage	Credit and partial credit guarantees	Guarantee

<sup>136</sup> Ibid.

Name	Coverage	Instrument Name	Instrument Type
Norwegian Guarantee Institute for Export Credits (GIEK) – Norway	Investment and Export credit coverage	Political risk insurance, export guarantees, buyers credit, suppliers credit etc.	Guarantee or insurance
Swedish Export Credit Guarantee Board (EKN) – Sweden	Investment coverage and export credit coverage	Investment guarantees, contract guarantee, production guarantee, credit guarantee	Guarantee
Swedish International Development Cooperation Agency (SIDA) - Sweden	Coverage of credit and partial risks	Partial risk and credit guarantees	Guarantee
Swiss Investment Risk Guarantee Agency (SERV) – Switzerland	Investment coverage	Political risk guarantee	Guarantee
Swiss Export Risk Guarantee (ERG) – Switzerland	Export credit coverage	Pre-delivery (manufacturing) guarantee, Performance and bid bond guarantee	Guarantee
Export Credits Guarantee Department (ECGD) – United Kingdom	Investment and export credit coverage	Overseas investment insurance, export credit insurance, buyer credit guarantees etc	Guarantee and insurance
United States Agency for International Development (USAID) Development Credit Authority (DCA) – United States	Comprehensive risk coverage	Partial credit guarantees in the form of loan, loan portfolio, portable and bond guarantee	Debt guarantee
Export-Import Bank of the United States (EX-IM Bank) – United States	Political and comprehensive risk coverage	Political risk only coverage for project finance / structured finance transactions, export credit insurance, loan guarantee etc.	Loans, guarantees and insurance
Overseas Private Investment Corporation (OPIC) – United States		Political risk insurance, loan guarantees	Finance guarantees and insurance products

### Major Private Sector Providers of Risk Mitigation Instruments

#### *Monoline Insurance Companies*

Monoline bond insurers provide financial guaranty insurance and related products only. Monoline insurers provide guarantees against default on U.S. municipal bonds and asset backed securities, and they were previously involved in insuring international securities in both the asset backed and infrastructure finance markets. Prior to the financial crisis that began in 2007, these firms insured a

wide range of new issue and secondary market transactions, including infrastructure and project financings, local government issues, asset securitizations, structured finance transactions, and sovereign and quasi-sovereign debt.<sup>137</sup> Today, their activities in project finance and international transactions in developing countries have been largely curtailed. Major monoline insurers include:

- Ambac Assurance Corporation
- American Overseas Reinsurance Company Limited
- Assured Guaranty Corp. (ACG)
- Assured Guaranty Municipal (AGM)
- CIFG
- Financial Guaranty Insurance Company
- MBIA Insurance Corp.
- National Public Finance Guarantee Corp.
- Radian Asset Assurance Inc.
- Syncora Guarantee

#### *Political Risk Insurance Providers*

The private sector also provides political risk insurance against losses arising from a variety of sources including regulatory risk, breach of contract, expropriation, currency inconvertibility, and war and civil disturbance. Examples of major private sector providers of political risk insurance include:<sup>138</sup>

- Chubb Commercial Insurance
- Sovereign Risk Insurance Limited
- Zurich Emerging Market Solutions
- Lloyds Political Risk Insurance

### **6.2.2 African Risk Mitigation Providers**

The following section provides a sample of Africa focused risk mitigation instruments / solutions:<sup>139</sup>

Name	Support provided
African Guarantee Fund for Small and Medium-sized Enterprises	Partial credit guarantees and capacity development support
The Currency Exchange Fund	Foreign exchange risk mitigation via long term local currency hedging instruments
Africa Finance Corporation	Project development support, principal investing and financial advisory
Africa Trade Insurance Agency	Covers political and commercial risks for a wide variety of trade and investment transactions
African Legal Support Facility	Technical assistance to enhance local legal capacity
InfraCo Africa	Supports early stage project development
GuarantCo	Credit enhancement for local currency debt issuance
Geothermal Risk Mitigation Facility	Project development support and capacity building

<sup>137</sup> See Association of Financial Guaranty Insurers. <http://www.afgi.org/index.html>

<sup>138</sup> See, <http://www.globalclearinghouse.org/infradev/rmlist.cfm>

<sup>139</sup> For further information, see, Thomas H. Cochran *et al.* “Infrastructure Funds and Facilities in Sub-Saharan Africa” (Washington, DC: The World Bank, May 2009).

NEPAD – IPPF Special Fund	Assistance with project development
PROPARCO	Guarantees, including local currency financing
Private Sector Foundation – Uganda	Capacity building through training and provision of business development services
Uganda Energy Credit Capitalization Company - Uganda	Technical and financial support for renewable energy infrastructure development in Uganda

## 7 Utilization of Risk Mitigation Solutions & Impediments to Effective Use

As discussed above, a wide range of risk mitigation instruments are offered by private, multilateral and bilateral agencies, and there is a large demand for such facilities. This section examines the literature on the reported low utilization of risk mitigation instruments, the reported factors, and suggested solutions.

### 7.1 Low Reported Use of Risk Mitigation Instruments

Despite the considerable innovation that has gone into developing the risk mitigation products discussed above, their market acceptance and aggregate value has remained relatively modest compared with either official loans or overall private flows. An independent evaluation reviewing the World Bank’s experience with guarantee instruments during 1990-2007 concluded that the use of these products has fallen short of reasonable expectations. Since 1990, MIGA has issued 897 guarantees for a total of US\$16.7 billion, the World Bank has issued 25 guarantees for US\$3 billion, and the IFC has approved 196 guarantee operations for US\$2.8 billion.<sup>140</sup> This is in contrast to private capital flows to developing countries, which increased from US\$165 billion in 2001 to US\$647 billion in 2006.<sup>141</sup>

The World Bank study and other studies document the low utilization of risk mitigation instruments, despite the high demand across sectors documented earlier in areas such as infrastructure, agriculture, trade, SME, and consumers. The World Bank study reports that the use of risk mitigation instruments (guarantee products) has fallen short of reasonable expectations because of factors including (1) competition among institutions for the same clients; (2) weaknesses in the marketing of products that limit client awareness and choice; (3) limited internal awareness, skills or incentives to use guarantee instruments in relevant situations; and (4) inconsistent pricing.<sup>142</sup>

Evidence of relatively low utilization of guarantees by DFIs is provided in the table below from a study conducted by the Overseas Development Institute,<sup>143</sup> which shows the percentage exposure of DFIs by instruments in 2009.

Share of Portfolio (%)			
	Equity	Loans	Guarantees
BIO	38	62	0
CDC	96	4	0
COFIDES	94	6	0
DEG	42	57	2
Finnfund	45	53	2
FMO	45	51	3
IFU	53	44	3
Norfund	85	15	0
OeEB	47	42	11

<sup>140</sup> World Bank Independent Evaluation Group, “The World Bank Group Guarantee Instruments 1990-2007.”

<sup>141</sup> However, these flows were concentrated in a few large middle-income countries.

<sup>142</sup> World Bank Independent Evaluation Group, “The World Bank Group Guarantee Instruments 1990-2007.”

<sup>143</sup> te Velde, “The Role of Development Finance Institutions.”

Share of Portfolio (%)			
	Equity	Loans	Guarantees
PROPARCO	14	84	2
SBI	57	43	0
SIFEM	88	12	0
SIMEST	100	0	0
SOFID	0	83	17
Swedfund	64	36	0
EBRD	15	85	0
IFC	18	55	27

There remains a critical role for MDBs to make direct loans and grants and provide policy advice. But given the potential availability of private capital in most developing countries, as well as the sheer scale of investment needed to fulfill the MDG targets and infrastructure requirements in them, experts are increasingly of the view that the weight of DFI activities should dramatically shift from direct lending to facilitating the mobilization of resources from the world's largest private savings pools (international and domestic) for development-oriented investments.<sup>144</sup> This can be achieved in part through the wider use of risk mitigation instruments to alleviate part of the risks faced by investors.

## 7.2 Factors Impeding Effective Use of Risk Mitigation Instruments

The reported factors impeding the use of risk mitigation instruments include the lack of bankable projects, the difficulty of securing government approvals, and internal DFI implementation issues amongst others.

### 7.2.1 Constraints related to the market environment

#### *Lack of Bankable Projects*

While risk mitigation instruments facilitate the mobilization of private debt and equity capital, the borrower or project must be sufficiently “bankable” to enable the providers of such instruments properly to assess risks, identify recourse measures as needed, and offer defined risk coverage. Furthermore, preparing infrastructure projects for private financing is a costly exercise for developing countries, which may not have adequate financial and technical expertise.<sup>145</sup> This is especially true at the sub-sovereign level where local officials are more sensitive to the cost of feasibility studies (essential for project development) and have less knowledge about market expectations for design and feasibility analysis. There is also far less grant funding available at the local level for feasibility studies.<sup>146</sup> The demand for risk mitigation instruments is therefore constrained by the limited availability of bankable projects. This is as much an upstream problem in terms of adequately prepared projects, as it is one of investor demand.

#### *Lack of suitability of the debt/capital market environment*

Use of risk mitigation instruments is affected by the absence of certain fundamentals that drive investment. These include the legal, institutional, and regulatory framework, a solvent banking system, honest administration, a stable macroeconomic situation, market size, the presence of bankable projects and good sponsors, sound banks, sound sub-sovereign entities, transparent accounting and budgeting, the presence of local savings seeking safe outlets, transparency in financial dealings, and the presence of credit ratings agencies.<sup>147</sup>

To achieve domestic financing for projects which are credit enhanced by IFI partial credit guarantee products, it is essential that the IFI be comfortable with the credit appraisal and financial administrative capacity of local financial institutions extending loans that are guaranteed. This lack of financial capacity limits the use of these instruments in poorer countries.

<sup>144</sup> World Economic Forum, “Building on the Monterrey Consensus.”

<sup>145</sup> Matsukawa and Habeck, “Review of Risk Mitigation Instruments.”

<sup>146</sup> Centennial Group Holdings, “Research on Innovative Finances.”

<sup>147</sup> Ibid.

### *Host country government understanding of risk mitigation benefits*

While most governments are supportive of instruments that facilitate investment, they would typically prefer a loan rather than a guarantee facility, even when the guarantees are scored preferentially to loans (i.e., allowing them to access more support from the DFI). The process is more complex and may require a sovereign counter guarantee. Therefore, lack of host country government understanding of the benefits of guarantee products as well as other risk mitigation instruments is a constraint to scaling up the use of such products.

## **7.2.2 Constraints related to DFI internal processes / management of risk mitigation instruments**

### *Design of products and country limits*

A central issue here is concerned with how risk management processes are designed and implemented in IFFs. Often the private sector operations in IFFs have to manage to “zero loss” guidelines, meaning that the expectation for each transaction booked is that there will not be any losses. In addition, official sector managers are often pressured to have high rates of return, reportedly as high as 23% on average. These policies and guidelines have the convoluted effect of pushing donors to compete against the private sector and each other for the least risky and most profitable deals, instead of implementing those transactions that the private sector cannot finance due to unacceptable risk or low profitability.<sup>148</sup>

Furthermore, country limits and budget performance reports do not differentiate according to the risk reduction produced by risk mitigation products or the benefits of leveraging official sector commitments by using guarantees to attract additional private sector capital. For example, in donor institutions a guarantee may count the same as a direct loan against a country limit (and against capital), even though loss experience with guarantees may be significantly less than with a loan. As country limits are a scarce commodity and need to be allocated between competing projects, this accounting treatment creates a very strong internal bias to allocate the country limit to direct loans, as direct loans produce more revenues than guarantees.

However, while guarantees produce less revenue, they may result in the country having access to more capital. This is a critical point, as developing countries benefit from private sector financing based on guarantees that leverage official sector capital, permitting the completion of large infrastructure projects that provide critical services such as electricity, roads, and water, with private sector capital.

### *Requirement of obtaining sovereign guarantees*

The public sector windows of most DFIs do require sovereign guarantees for issuing their instruments. Securing such guarantees is time consuming and usually must be done in the context of the DFIs larger lending and assistance program. The preparation and administration of such guarantees can require the same upfront effort as a loan product, with lower direct tangible benefits to the government. Sovereign guarantees on private infrastructure projects can also meet resistance from governments because it adds to their contingent liability exposure and affects overall debt ceilings.<sup>149</sup> In the case of certain sectors (e.g., the water and sanitation sector) guarantees must support undertakings by sub-sovereign entities. Many sub-sovereign governments lack the experience and ability to be able to negotiate the terms and conditions of these risk mitigation instruments. Also, some governments are unable to exert effective influence over issues such as national regulatory reform or changes in license conditions. For these reasons, a number of investors have indicated that they prefer to see this coverage backed by a counter guarantee from the central government.<sup>150</sup>

### *Credit Scoring*

<sup>148</sup> World Economic Forum, “Building on the Monterrey Consensus.”

<sup>149</sup> PricewaterhouseCoopers, “Comparative Review of IFI Risk Mitigation Instruments.”

<sup>150</sup> While understandable, involving the central government can add delays to the documentation and closing of the deal and not be politically possible.

As noted above, when guarantees are scored by DFIs at parity with loans in an environment where lending is prioritized, guarantees are unlikely to be promoted or championed within the institution.

#### *Treatment of foreign exchange risk in local currency guarantee schemes*

DFIs have different policies for dealing with the contingent foreign exchange risks that may occur from providing local currency guarantees. Some DFIs require that in the event of a default and claim payment, the currency of the credit converts to hard currency based on the exchange rate in effect on the date that the transaction closed. The guarantor will then proceed to recover foreign exchange from the borrower in satisfaction of outstanding obligations. Others, for example the US Export-Import Bank, convert the claim amount to US dollars based on the spot rate in effect on the claim payment date.

Many believe that the demand for local currency guarantees by DFIs is reduced significantly by denominating the amount that they are attempting to recover from the borrower (as the result of paying a claim) in hard currency.<sup>151</sup>

#### *Capital allocation for credit guarantee obligations and concern regarding triple-A ratings of DFIs*

With the exception of the World Bank treatment of Low-Income Countries, DFIs often allocate capital on a 1:1 basis against the par value of their credit guarantee obligations as soon as those obligations are agreed and the underlying transaction has closed. This stands in sharp contrast to commercial providers of these instruments such as monoline financial guarantee insurers, which are incentivized by the profit motive to use the least amount of capital possible to back each application of their guarantee. Following the same policy on leverage for their guarantee operations as required for loans, results in an economically inefficient use of DFI capital.

Managements of DFIs are also concerned about the preservation of their triple-A credit ratings, which enable them to access cheap capital from the capital markets. Although experts and credit analysts have disputed the validity of this concern, its prevalence amongst internal risk management units within DFIs hinders the launch of new risk mitigation programs.

#### *High transaction costs*

Development institutions have protected themselves with extensive and lengthy procurement and transaction processes resulting in large transaction costs that deter all but the largest companies or small, specialized businesses that survive on donor contracts. Legal costs are also reported as extremely high, given the propensity of in-house legal staff to complicate each transaction, combined with inattention to streamlining documentation processes.<sup>152</sup>

#### *Recording of Guarantees in DAC Aid Statistics*

DAC's convention is to allow donors to report contributions to creating local guarantee funds as ODA, as well as payments out under guarantee schemes as they arise. The fact that a guarantee issued by an official provider would count very little as ODA may be a disincentive for official sources to provide guarantees.<sup>153</sup>

#### *Lack of internal incentives*

In an environment where the staff believes that lending is prioritized, guarantees are unlikely to be championed within the institution. The “lending culture” of development institutions first attracted wider attention through the so-called Wapenhans report in 1992 which crystallized the critique that the World Bank's management information systems and incentives attached special importance to meeting quantitative lending targets and that other considerations, such as the quality of the projects, received less management attention or recognition via the internal career path. Such a culture continues to exist and could be part of the explanation for the failure of development institutions aggressively to develop alternatives to direct lending, such as guarantees.<sup>154</sup>

Furthermore most DFIs have broad mandates with an emphasis on development lending or private sector financing and, thus, risk mitigation instruments represent only a small proportion of a wide array of products and services on offer. Therefore, they have to compete for management attention and wider acceptance within the DFI country assistance strategy process.

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<sup>151</sup> Centennial Group Holdings, “Research on Innovative Finances.”

<sup>152</sup> World Economic Forum, “Building on the Monterrey Consensus.”

<sup>153</sup> Centennial Group Holdings, “Research on Innovative Finances.”

<sup>154</sup> World Economic Forum, “Building on the Monterrey Consensus.”

### *Lack of technical skills within DFIs*

The due diligence undertaken for deciding upon the use of risk mitigation instruments requires the application of technical skills in credit analysis, often including credit analysis of sub-sovereign entities, and the scoring of political, contractual, and regulatory risks. Some DFIs are reported as better equipped to undertake such analysis than others.<sup>155</sup>

### *Lack of equity coverage*

There are limited risk mitigation instruments that provide coverage for equity holders. Thus, companies (especially local companies) investing equity into projects can sometimes only ensure their debt, leaving the general interests of their shareholders unprotected against non-commercial and political risk. However, the World Bank's PCG can be structured to offer protection to the interests of equity investors by providing downside protection.

### *Retrenchment of Private Sector*

Expansion of risk mitigation activity by DFIs requires private sector engagement. Financial crises and failed privatizations have soured the enthusiasm of many private sector companies and finance institutions.

### *Bailout Concern*

The long history of “bailouts” has made policy makers wary of any type of guarantee arrangement that might encourage reckless private sector risk-taking at taxpayer expense.

### *Cross-Default Concerns & Government Focus (rather than private sector)*

If a country defaults on a donor-guaranteed obligation, the donor institution may be required by its operating rules of cross-default to shut down its entire program for that country, prohibiting any new lending and further disbursements under approved loans. Expanding risk mitigation programs would also mean increasing exposure to projects managed by the private sector, rather than working with governments with which DFIs have a long working relationship.<sup>156</sup>

## **7.2.3 Lack of Product Awareness**

Certain instruments have not reached the same level of market understanding and acceptance as the more commonly used ones, such as traditional political risk instruments. In the case of certain contractual and regulatory risk products, the trigger events for payment and the claims process are not yet standardized or well understood by investors or lenders. By nature, these types of instruments are unlikely to achieve the same level of standardization as traditional political risk instruments have. Their greater complexity results in a much greater time to negotiate the terms and conditions of the coverage.

A number of market participants have also indicated a limited awareness of these instruments and understanding of how they work. This results in an uncertainty over the ability of these types of complex instruments to lower the cost of debt.<sup>157</sup> For risk mitigation products to be valued accurately by the capital markets and contribute to reducing the cost of financing, the contract documentation, dispute resolution, and claims processing procedures must be well defined.

## **7.3 Reported Solutions**

The major challenge for the world's DFIs and their shareholder governments is to move towards a model that places private investment mobilization as central to the success of their development mission. For this shift to take place, the literature reviewed offers the following solutions.<sup>158</sup>

### *Decentralization of Risk Mitigation*

Developing countries in general suffer common barriers to sources of long-term finance denominated in local currency. Some of these barriers include a small number of potential lenders or investors in

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<sup>155</sup> PricewaterhouseCoopers, “Comparative Review of IFI Risk Mitigation Instruments.”

<sup>156</sup> World Economic Forum, “Building on the Monterrey Consensus.”

<sup>157</sup> Aldo Baietti and Peter Raymond, “Financing Water Supply and Sanitation Investments: Utilizing Risk Mitigation Instruments to Bridge the Financing Gap” (Washington, D.C.: The World Bank, January 2005). [http://siteresources.worldbank.org/INTWSS/Resources/WSS\\_Investments.pdf](http://siteresources.worldbank.org/INTWSS/Resources/WSS_Investments.pdf)

<sup>158</sup> World Economic Forum, “Building on the Monterrey Consensus.”

securities, rudimentary credit evaluation skills, underdeveloped credit rating agencies, a lack of rational credit spreads, and a general reluctance by lenders and investors to provide medium to long tenors needed by project sponsors to match the expected economic lives of most public infrastructure assets.<sup>159</sup> However, each individual developing country faces acute and specialized versions of these general credit market development barriers, and thus a standardized approach to overcoming these barriers across countries will not be effective. Overcoming these unique and local barriers to finance requires the decentralization of risk mitigation and development of specialized solutions and instruments.

Decentralization and specialization in risk mitigation is made more necessary by the “devolution revolution” which is pushing responsibility for infrastructure finance from central governments to lower levels of government in many countries of Latin America, Central and Eastern Europe, Africa and Asia.<sup>160</sup> States, provinces and municipalities are increasingly responsible for identifying, developing, managing and maintaining infrastructure projects that provide basic services to the citizens of the developing country. Given this increasing trend of decentralization, in which sub-sovereign governments accept increasing responsibility for delivering services to citizens, the MDGs cannot be reached unless the unique challenges faced by individual sub-sovereign entities are met.

#### *Reorientation away from the lending culture*

Institutions that have traditionally been lenders must transform themselves also into catalysts, mediators, and facilitators, at the sovereign, sub-sovereign and regional levels. They must see themselves fundamentally as providing bridges to private sector financing, and this should become their primary approach in all but the lowest income countries.

Navigating this transition from direct lender of official funds to innovative enabler of private investment will require a minor revolution in the culture and processes of development institutions, which have historically focused on transactions with government entities. Success will increasingly need to be measured by the extent to which private investors, both international and domestic, perceive their services and transaction costs as competitive and attractive.

#### *New internal incentives and performance metrics*

New internal incentives and performance metrics should be established that align staff activity, training, and promotion prospects with the mission of private sector engagement and prioritization of development impact over profitability. Current performance indicators do not sufficiently take into account or reward the amount of private sector investment enabled through official sector programmes. Indeed, ODA statistics reported to the Development Assistance Committee (DAC) do not include guarantees as counting towards the fulfillment of ODA targets.

Examples of approaches that management teams should consider are Official Sector Leverage Indicators (measuring the amount of private sector capital mobilized by each donor’s risk mitigation programmes, total cost and loss); Transaction Effectiveness Indicators (such as the number of transactions completed, transaction costs, time periods for approval, development impact and client evaluations); Business Engagement Performance Indicators (number and types of activities with business organizations and firms, anonymous evaluations, etc.); and Capacity-Building Indicators (such as extent and diversity of private sector involvement, types of information resources and toolkits, extent of in-country linkages, client evaluations, etc.). These new incentives need to drive compensation and promotion decisions as well as reformulation of organization structures and reporting requirements.

In 2010, the top 10 institutions by IDFI effectiveness were<sup>161</sup>:

- 1) GIEK (US\$360m, 2.65)

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<sup>159</sup> Ibid.

<sup>160</sup> Thomas H. Cochran *et al.*, “Subnational Infrastructure Finance in the Emerging Markets: A Financial Guaranty Perspective,” in *The Handbook of Municipal Bonds*, ed. Sylvan Feldstein and Frank Fabozzi (Hoboken, New Jersey: John Wiley & Sons, Inc., 2009), 191-222.

<sup>161</sup> Bob Sheppard, “The Effectiveness of Multilaterals,” *Project Finance International*, March 9, 2011, 47 – 48. <http://www.globalclearinghouse.org/infradev/assets/10/documents/Issue%20452%20p47-48.pdf>

- 2) Islamic Development Bank (US\$120m, 1.63)
- 3) Nordic Investment Bank (US\$44m, 1.50)
- 4) CAF (US\$165m, 1.29)
- 5) CESCE (US\$1,176m, 1.17)
- 6) Eurasian Development Bank (US\$475m, 1.11)
- 7) KEIC/KEXIM (US\$2,577m, 0.81)
- 8) IFC/MIGA/World Bank (US\$617m, 0.80)
- 9) Coface (US\$814m, 0.68)
- 10) CABI (US\$264m, 0.66)

The first number in parenthesis is the total exposure (financial commitment) of each institution. The second number in parenthesis is the ratio of private sector financing attracted to transaction in which the IDFI participated, divided by the institution's total exposure.

*Establish investment climate capacity building as a central priority*

The long-term solution to overcoming insufficient access to finance is to improve the business environment, especially regulatory and legal frameworks, as well as the overall skill set and governance of actors across both the private and public sectors.

Critical skill sets include accounting, auditing, business planning, project development and management, credit analysis, dispute resolution, and the legal expertise to strengthen legal systems and the rule of law. The needs have compounded, as many countries have decentralized infrastructure development to state and municipal levels at the same time that they have increased emphasis on small and medium size enterprise development. While there has been significant activity by DFIs in the area of capacity building programs, more work needs to be done in this area. Only a fraction of the aid is reported as being spent on truly local capacity building, with most spent on hardware and foreign consultants.<sup>162</sup> Expert suggestions in this area include linking country eligibility for risk mitigation instruments to a commitment to enter into a concerted program of public and private institution building supported by the international community through DFIs. The key to the success of this scenario is a big increase in the donor community's commitment to conducting needs assessments and funding and improving the efficiency of such capacity building.

*Integration of programs into country fabric*

Capacity building programs need to be integrated into the country fabric with explicit processes for customizing technical assistance programmes around country priorities. This would enable demand driven programmes at both sovereign and sub-sovereign levels. Training programmes need to be developed with local institutions (such as development banks, business organizations, universities, think tanks and consulting firms) and be focused on the full range of relevant government officials (e.g., ministry staff, regulators, judges, sub-sovereign officials, etc.) as well as private sector people (e.g., bankers, fund managers, consultants, etc.). Defined assistance programmes also need to improve the sub-national governance framework providing targeted assistance to enable legal, regulatory, policy, institutional and overall project management improvements.

*Strengthen investment project pipelines through project development support*

As discussed above, a critical bottleneck impeding development finance and the expansion in the use of risk mitigation products is the shortage of good projects. Official sector entities often depend on companies to identify infrastructure projects, but firms often lack the incentive to do so owing to the perception of unacceptable risk and uncertain profit. Official sector institutions should assist in strengthening the abilities of the stakeholders to configure the technical, financial and risk allocation structures of projects. Lack of such assistance often leads to projects bearing unduly high levels of inappropriately allocated risks. This, in turn, makes the projects non-bankable and susceptible to problems of contract renegotiation, regulatory failure/capture, corruption, etc.

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<sup>162</sup> One development expert estimates that only US\$6 billion of the total US\$18 billion reportedly spent on capacity-building programmes is spent on in country goods and services. For the official statistics, see the information collected by the Development Assistance Committee:

[http://www.oecd.org/document/3/0,2340,en\\_2649\\_33721\\_34700611\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/3/0,2340,en_2649_33721_34700611_1_1_1_1,00.html)

[http://www.oecd.org/document/9/0,2340,en\\_2649\\_33721\\_1893129\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/9/0,2340,en_2649_33721_1893129_1_1_1_1,00.html)

Government-backed risk mitigation instruments have limited usefulness if not backed by substantially enhanced project development capacities. Ill-prepared governments are likely to take on excessive levels of risk, followed by a rapidly depleting ability to deliver when the guarantees are called. As evidenced by many failed infrastructure projects, the resulting severe problems and political backlash can become counterproductive, undermining the perceived and actual usefulness of private sector investment. Lack of project development funds is therefore a key bottleneck, cutting off at the very inception of an investment opportunity any promise of private sector investment. Existing funds are often tied to donor's home-country suppliers, thus eliminating project sponsors and other suppliers from participation.

Thus the scope of project development funding needs to be increased and committed on a long-term basis. Multi-donor funding is critical at different levels using technical assistance grants or revolving funds to finance the development costs of a pipeline of infrastructure projects. Streamlined processes are required to facilitate a larger supply of expert services to meet demand, as well as the ability of countries to select the most qualified relevant experts. Project development funds also need to be available for the most appropriate uses and not limited to using the services of the donor country.<sup>163</sup>

#### *Simplifying Access and Reducing Transaction Costs Associated with Procurement*

Procurement rules can prove counter-productive, hurting the ability of many qualified organizations and experts to provide project development services. Hence, the procurement process needs to be streamlined to facilitate both a larger supply of expert services to meet demand and the ability of countries to select the most qualified relevant experts.<sup>164</sup>

Project development funds need to be available for the most appropriate uses and not limited to using services of the donor country. In addition, there is a need for project development by experienced private sector and research entities that can collaborate with central and local governments in identifying projects and then manage the procurement process for contractors, equipment suppliers, project operators, and service providers.<sup>165</sup>

Short-listing or prequalification requirements help to reduce the procurement risk faced by bidders because it restricts bids on projects to those parties that have demonstrated their abilities via the provision of extensive information on expertise and prior performance.<sup>166</sup> Furthermore, provision of public funds or payment for the preparation of preliminary proposals by interested pre-qualified bidders will lower the risk that qualified participants will not bid due to the perception that the chance of winning the bid is small.

#### *Public Benchmarking*

The US Export-Import Bank provides lower pricing for countries that have signed the Cape Town Treaty, thereby agreeing to comply with uniform legal frameworks that minimize risk in the financing of high value mobile equipment. Similarly, a number of benchmarking tools have been developed and could possibly be refined and tied to financial indices and investments, providing concrete benefits for countries that undertake improvements in their business environments.<sup>167</sup>

Development agencies could work with fund managers, pension funds, social responsibility investment organizations, rating agencies, and direct investors to refine existing procedures and

<sup>163</sup> The problems associated with tied aid are explained in Michael Klein and Tim Hartford, *The Market for Aid* (Washington, D.C.: IFC, 2005).

<sup>164</sup> World Economic Forum, "Building on the Monterrey Consensus."

<sup>165</sup> Ibid.

<sup>166</sup> Ibid.

<sup>167</sup> A growing amount of openly disclosed business survey and governance-related reports are now available as information sources for both policymakers and investors. Examples include Investment Climate Surveys (covering more than 26,000 firms in 53 developing countries, [econ.worldbank.org/wdr/wdr2005](http://econ.worldbank.org/wdr/wdr2005)); the Doing Business Project (which benchmarks regulatory regimes in 130 countries, [rruworldbank.org/ics](http://rruworldbank.org/ics)); and Global Integrity Reports (which covers overall governance), <http://www.publicintegrity.org/ga/scores.aspx?cc=ar&act=s> cores). Also see Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi, "Governance Matters IV: Indicators for 1996-2004," World Bank Policy Research Working Paper Series No. 3630 (Washington, D.C.: The World Bank, May 2005).

develop more specific instruments that can directly reward developing countries for improved investment climates. Finally, another way to develop powerful incentives is the development of more venues for countries to share experiences, best practices and new instruments with their peers.

*Increase in the leverage of capital for purpose of guarantees*

As discussed previously, adopting the same leverage policies for credit guarantee operations as required for loans, results in an economically inefficient use of DFI capital and hinders the expansion in the use of risk mitigation instruments. The World Bank has for instance begun to recognize that guarantee operations can be leveraged prudently at a higher rate. In particular, it reduces its lending limit for a developing country by only 25% of the amount of a guarantee provided to that country versus a reduction of the country's lending limit equal to 100% of the amount of a direct loan. So if a country has an IDA or World Bank lending limit of \$100 million, and the country uses an IDA or World Bank partial guarantee of \$100 million, the country allocation would only be reduced by \$25 million (25% of the guarantee amount), leaving the country headroom of \$75 million.<sup>168</sup>

## 8 Conclusion

This annex provides a review of the existing literature on risk mitigation instruments and solutions for developing countries, with a special focus on the African continent.

It highlights the large scale of investment that is required over the next decade across sectors to ensure that Africa maintains its recent rapid pace of economic growth and overcomes the infrastructure deficit it faces relative to the other developing economies of the world. The scale of investment required cannot be achieved by the traditional methods of development assistance and public finance. The participation of private capital is vital to ensuring that Africa's investment needs are met.

Towards this end, the above review provides significant coverage of the risks that hinder the participation of private capital and offers suggestions regarding the structural changes that will be required on the part of the DFIs to facilitate the flow of private capital through expanded use of risk mitigation instruments and solutions. Importantly it points to the increasing trend towards decentralization of risk mitigation and the importance of local solutions to local problems.

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<sup>168</sup> Mahesh Kotecha, "Draft Paper on MDB Leverage for Guarantees" (prepared for the World Economic Forum, Financing for Development Workshop, Hong Kong, March 15 – 16, 2005).  
[www.globalclearinghouse.org/wefnewyork](http://www.globalclearinghouse.org/wefnewyork)

## Bibliography

- African Business*, “How Africa Can Rule the 21<sup>st</sup> Century.” January 2013.  
<http://issuu.com/icpubs/docs/ab0113?mode=window&viewMode=doublePage/1>
- African Development Bank. “Africa in 50 Years’ Time – The Road Towards Inclusive Growth.” Tunis: African Development Bank. September 2011.  
<http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Africa%20in%2050%20Years%20Time.pdf>
- African Development Bank. “Assessment of Project Preparation Facilities for Africa. Volume A: Diagnostic and Recommendations.” Prepared by the Infrastructure Consortium for Africa. November 2012.
- African Development Bank. “Assessment of Project Preparation Facilities for Africa. Volume B: Individual Assessments.” Prepared by the Infrastructure Consortium for Africa. November 2012.
- African Development Bank. “Assessment of Project Preparation Facilities for Africa: Appendixes.” Prepared by the Infrastructure Consortium for Africa. November 2012.
- African Development Bank. “Tunnels of Funds: Overview of the Assessment of Project Preparation Facilities for Infrastructure in Africa.” Prepared by the Infrastructure Consortium for Africa. November 2012.
- Africa Progress Panel. “Africa Progress Report 2012: Jobs, Justice and Equity – Seizing Opportunities in Times of Global Change.” Geneva: Africa Progress Panel. April 2012.  
<http://www.africaprogresspanel.org/en/pressroom/press-kits/annual-report-2012/africa-progress-report-2012-documents/>
- Asian Development Bank. “Strengthening Capacity of Developing Member Countries for Managing Credit Enhancement Products.” Manila: Asian Development Bank. August 2011.  
<http://www.iadb.org/intal/intalcdi/PE/2012/10481.pdf>
- Baietti, Aldo and Peter Raymond. “Financing Water Supply and Sanitation Investments: Utilizing Risk Mitigation Instruments to Bridge the Financing Gap.” Water Supply and Sanitation Sector Board Discussion Paper Series, Paper No. 4. Washington, D.C.: The World Bank. January 2005.  
[http://siteresources.worldbank.org/INTWSS/Resources/WSS\\_Investments.pdf](http://siteresources.worldbank.org/INTWSS/Resources/WSS_Investments.pdf)
- Bond, Daniel L., Daniel Platz and Magnus Magnusson. “Financing Small-Scale Infrastructure Investments in Developing Countries,” DESA Working Paper No. 114. New York: United Nations Department of Economic and Social Affairs. May 2012.  
[http://www.un.org/esa/desa/papers/2012/wp114\\_2012.pdf](http://www.un.org/esa/desa/papers/2012/wp114_2012.pdf)
- Brookings Institution. “Accelerating Growth Through Improved Intra-African Trade.” Washington, DC: Brookings Institution. January 2012.  
[http://www.brookings.edu/~media/Research/Files/Reports/2012/1/intra%20african%20trade/01\\_intra\\_african\\_trade\\_full\\_report.PDF](http://www.brookings.edu/~media/Research/Files/Reports/2012/1/intra%20african%20trade/01_intra_african_trade_full_report.PDF)
- Centennial Group Holdings. “Research on Innovative Finances to Achieve Millennium Development Goals.” Prepared for the Japan Bank for International Cooperation (JBIC). February 2006.
- Cochran, Thomas H. *et al.* “Infrastructure Funds and Facilities in Sub-Saharan Africa,” Washington, DC: The World Bank. May 2009.
- Cochran, Thomas H. *et al.* “Subnational Infrastructure Finance in the Emerging Markets: A Financial Guaranty Perspective,” In *The Handbook of Municipal Bonds*, edited by Sylvan Feldstein and Frank Fabozzi, 191-222. John Wiley & Sons, Inc.: Hoboken, New Jersey. 2008.
- Delmon, Jeffrey, *Private Sector Investment in Infrastructure*. 2<sup>nd</sup> ed. Alphen aan den Rijn, The Netherlands: Kluwer Law International. 2008.
- Eberhard, Anton and Katherine Nawal Gratwick. “IPPs in Sub-Saharan Africa: Determinants of Success.” Washington, D.C.: The World Bank. 2012.  
[http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/Africa\\_IPP.pdf](http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/Africa_IPP.pdf)

- Ernst & Young. “Building Bridges: Ernst and Young’s 2012 Attractiveness Survey.” 2012.  
[http://www.ey.com/Publication/vwLUAssets/EY\\_2012\\_Africa\\_attractiveness\\_survey/\\$FILE/attractiveness\\_2012\\_africa\\_v17.pdf](http://www.ey.com/Publication/vwLUAssets/EY_2012_Africa_attractiveness_survey/$FILE/attractiveness_2012_africa_v17.pdf)
- Foster, Vivien and Cecilia Briceño-Garmendia, eds. “Africa’s Infrastructure: A Time for Transformation.” Washington, DC: The World Bank. 2010. See,  
<http://www.infrastructureafrica.org/system/files/Africa%27s%20Infrastructure%20A%20Time%20for%20Transformation%20FULL%20TEXT.pdf>
- Gordon, Kathryn. “Investment Guarantees and Political Risk Insurance: Institutions, Incentives and Development.” Paris: Organization for Economic Co-operation and Development. 2008.  
<http://www.oecd.org/investment/investmentpolicy/44230805.pdf>
- Green, Anke. “Credit Guarantee Schemes for Small Enterprises: An Effective Instrument to Promote Private Sector-Led Growth?” Working Paper No. 10. Vienna: United Nations Industrial Development Organization. August 2003.  
[http://www.unido.org/fileadmin/user\\_media/Publications/Pub\\_free/Credit\\_guarantee\\_schemes\\_for\\_small\\_enterprises.pdf](http://www.unido.org/fileadmin/user_media/Publications/Pub_free/Credit_guarantee_schemes_for_small_enterprises.pdf)
- Hansen, Angela *et al.* “Assessing Credit Guarantee Schemes for SME Finance in Africa: Evidence from Ghana, Kenya, South Africa and Tanzania.” Paris: Agence Française Développement. July 2011.  
<http://www.afd.fr/webdav/site/afd/shared/PUBLICATIONS/RECHERCHE/Scientifiques/Documents-de-travail/123-VA-document-travail.pdf>
- International Monetary Fund. “Government Guarantees and Fiscal Risk.” Washington, DC: International Monetary Fund. April 1, 2005.  
<http://www.imf.org/external/np/pp/eng/2005/040105c.pdf>
- Irwin, Timothy C. “Government Guarantees: Allocating and Valuing Risk in Privately Financed Infrastructure Projects.” Washington, D.C.: The World Bank. 2007.  
[http://siteresources.worldbank.org/INTSDNETWORK/Resources/Government\\_Guarantees.pdf](http://siteresources.worldbank.org/INTSDNETWORK/Resources/Government_Guarantees.pdf)
- Jamison, Mark A., Lynne Holt, and Sanford V. Berg. “Measuring and Mitigating Regulatory Risk in Private Infrastructure Investment.” *The Electricity Journal* 18, No.6 (June 2005): 36-45.  
[http://warrington.ufl.edu/centers/purc/purcdocs/PAPERS/0513\\_Jamison\\_Measuring\\_and\\_Mitigating.pdf](http://warrington.ufl.edu/centers/purc/purcdocs/PAPERS/0513_Jamison_Measuring_and_Mitigating.pdf)
- Kehew, Robert, Tomoko Matsukawa, and John Petersen. “Local Financing for Sub-Sovereign Infrastructure in Developing Countries: Case Studies of Innovative Domestic Credit Enhancement Entities and Techniques.” Infrastructure, Economics and Finance Department, Discussion Paper No. 1. Washington, D.C.: The World Bank. Feb. 2005.  
[http://siteresources.worldbank.org/INTMF/Resources/local\\_financing\\_infrastructure.pdf](http://siteresources.worldbank.org/INTMF/Resources/local_financing_infrastructure.pdf)
- Lamech, Ranjit and Kazim Saeed. “What International Investors Look For When Investing in Developing Countries: Results from a Survey of International Investors in the Power Sector.” Energy and Mining Sector Board Discussion Paper No. 6. Washington, D.C.: The World Bank. May 2003. <http://globalregulatorynetwork.org/Resources/InvestorsPaperNo6.pdf>
- Levitsky, Jacob. “Credit Guarantee Schemes for SMEs – An International Review.” *Small Enterprise Development*, 8 no. 2 (June 1997).  
[http://siteresources.worldbank.org/EXTEXPCOMNET/Resources/2463593-1213887855468/04\\_Credit\\_guarantee\\_schemes\\_for\\_SMEs.pdf](http://siteresources.worldbank.org/EXTEXPCOMNET/Resources/2463593-1213887855468/04_Credit_guarantee_schemes_for_SMEs.pdf)
- Marsh. “Scoping Study on Financial Risk Management Instruments for Renewable Energy Projects.” Prepared for the Sustainable Energy Finance Initiative (SEFI) of the United Nations Environment Programme.  
[http://sefi.unep.org/fileadmin/media/sefi/docs/publications/RiskMgt\\_full.pdf](http://sefi.unep.org/fileadmin/media/sefi/docs/publications/RiskMgt_full.pdf)
- Matsukawa, Tomoko and Odo Habeck. “Review of Risk Mitigation Instruments for Infrastructure Financing and Recent Trends and Developments.” Trends and Policy Options No. 4. Washington, D.C.: The World Bank. 2007.  
<http://www.ppiaf.org/sites/ppiaf.org/files/publication/Trends%20Policy%20Options-4-Review%20of%20Risk%20Mitigation%20Instrument%20-%20Matsukawa%20Habeck.pdf>
- Matsukawa, Tomoko, Robert Sheppard and Joseph Wright. “Foreign Exchange Risk Mitigation for Power and Water Projects in Developing Countries.” Energy and Mining Sector Board

- Discussion Paper No. 9. Washington, D.C.: The World Bank. December 2003.  
[http://irispublic.worldbank.org/85257559006C22E9/All+Documents/85257559006C22E985256FFC00751BE0/\\$File/Energy\\_ExchangeCvr.pdf](http://irispublic.worldbank.org/85257559006C22E9/All+Documents/85257559006C22E985256FFC00751BE0/$File/Energy_ExchangeCvr.pdf)
- McKinsey Global Institute. “Africa at Work: Job Creation and Inclusive Growth.” Aug. 2012.  
[http://www.mckinsey.com/insights/mgi/research/africa\\_europe\\_middle\\_east/africa\\_at\\_work](http://www.mckinsey.com/insights/mgi/research/africa_europe_middle_east/africa_at_work)
- McKinsey Global Institute. “Lions on the Move: The Progress and Potential of African Economies.” June 2010.  
[http://www.mckinsey.com/insights/mgi/research/productivity\\_competitiveness\\_and\\_growth/lions\\_on\\_the\\_move](http://www.mckinsey.com/insights/mgi/research/productivity_competitiveness_and_growth/lions_on_the_move)
- Multilateral Investment Guarantee Agency. “World Investment and Political Risk.” Washington, D.C.: Multilateral Investment Guarantee Agency. 2010.  
<http://www.miga.org/documents/flagship09ebook.pdf>
- Mumssen, Yogita, Lars Johannes, and Geeta Kumar. “Output-Based Aid: Lessons Learned and Best Practices.” Washington, D.C.: The World Bank. 2010.  
<https://openknowledge.worldbank.org/bitstream/handle/10986/2423/536440PUB0outp101Official0Use0Only1.pdf?sequence=1>
- Noman, Akbar. “Innovative Financing for Infrastructure in Low Income Countries – How Might the G20 Help.” Occasional Paper 1. African Center for Economic Transformation, July 2011.  
<http://acetforafrica.org/wp-content/uploads/2011/08/ACET-think-piece-noman-financing-infrastructure11.pdf>
- Organization for Economic Co-operation and Development. “Mapping Support for Africa’s Infrastructure Investment.” Paris: Organization for Economic Co-operation and Development. May 2012.  
<http://www.oecd.org/daf/internationalinvestment/investmentfordevelopment/MappingReportWeb.pdf>
- Organization for Economic Co-operation and Development. “Managing Risk in Agriculture: A Holistic Approach.” Paris: Organization for Economic Co-operation and Development. 2009.  
<http://www.oecd.org/tad/agriculturalpoliciesandsupport/45558582.pdf>
- Organization for Economic Co-operation and Development. “Facilitating Access to Finance – Discussion Paper on Credit Guarantee Schemes.” Paris: Organization for Economic Cooperation and Development. 2008.  
<http://www.oecd.org/investment/privatesectordevelopment/45324327.pdf>
- Platz, Daniel. “Infrastructure Finance in Developing Countries – the Potential of Sub-Sovereign Bonds.” DESA Working Paper No. 76. New York: United Nations Department of Economic and Social Affairs. July 2009. [http://www.un.org/esa/desa/papers/2009/wp76\\_2009.pdf](http://www.un.org/esa/desa/papers/2009/wp76_2009.pdf)
- PricewaterhouseCoopers Securities LLC. “Comparative Review of IFI Risk Mitigation Instruments and Direct Sub-Sovereign Lending.” Washington, D.C.: The World Bank. November 2003.  
[http://www.financingwaterforall.org/fileadmin/Financing\\_water\\_for\\_all/Stakeholders\\_response/Final\\_PWC\\_Report\\_011304.pdf](http://www.financingwaterforall.org/fileadmin/Financing_water_for_all/Stakeholders_response/Final_PWC_Report_011304.pdf)
- Rickerson, Wilson *et al.* “Implementing a Global Fund for Feed-in Tariffs in Developing Countries: A Case Study of Tanzania.” Presented at the World Renewable Energy Congress XI in Abu Dhabi, UAE. September 2010. <http://www.palangthai.org/docs/Rickerson%20et%20al%20-%20Implementing%20a%20global%20fund%20for%20FiTs.pdf>
- Roland Berger Strategy Consultants. “Misperception of Risk and Return in Low Income Countries – Innovative Finance Serving Infrastructure Development: A Win-Win Deal.” Presented at the G20 Summit Meeting in Los Cabos, Mexico. June 2012.
- Sheppard, Robert. “Financing of Private Infrastructure in Sub-Saharan Africa.” Washington, DC: PPIAF. June 2006.
- Sheppard, Robert. “Capital Markets Financing for Developing-Country Infrastructure Projects.” DESA Discussion Paper No. 28. New York: United Nations Department of Economic and Social Affairs. January 2003.  
[http://www.un.org/esa/desa/papers/2003/esadp28.pdf?utm\\_source=OldRedirect&utm\\_medium=redirect&utm\\_campaign=OldRedirect](http://www.un.org/esa/desa/papers/2003/esadp28.pdf?utm_source=OldRedirect&utm_medium=redirect&utm_campaign=OldRedirect)

- Sheppard, Robert, Stephan von Klaudy, and Geeta Kumar. “Financing Infrastructure in Africa: How the Region Can Attract More Project Finance.” Gridlines Note No. 13. Washington, DC: PPIAF. September 2006. <http://www.ppiaf.org/sites/ppiaf.org/files/publication/Gridlines-13-Financing%20Infrastructure%20in%20Africa%20-%20RSheppard%20SvKlaudy%20GKumar.pdf>
- SOFRECO *et al.* “Africa’s Infrastructure Outlooks 2040.” Tunis: Programme for Infrastructure Development in Africa (PIDA). 2011. <http://www.pidafrica.org/Africa%20Infrastructure%20Outlook%202040.pdf>
- te Velde, Dirk Willem. “The Role of Development Finance Institutions in Tackling Global Challenges.” London: Overseas Development Institute. August 2011. <http://www.odi.org.uk/resources/details.asp?id=5979&title=role-development-finance-institutions-tackling-global-challenges>
- Trémolet, Sophie and Barbara Evans. “Output-Based Aid for Sustainable Sanitation.” OBA Working Paper Series Paper No. 10. Washington, D.C.: The Global Partnership on Output-Based Aid. September 2010. <http://www.gpoba.org/node/520>
- United Nations Conference on Trade and Development. “Economic Development in Africa – Structural Transformation and Sustainable Development in Africa.” New York: United Nations Conference on Trade and Development. 2012. [http://unctad.org/en/PublicationsLibrary/aldcafrica2012\\_embargo\\_en.pdf](http://unctad.org/en/PublicationsLibrary/aldcafrica2012_embargo_en.pdf)
- United Nations Economic Commission for Africa. “Unleashing Africa’s Potential as a Pole of Global Growth.” Addis Ababa: United Nations Economic Commission for Africa. March 2012. <http://www.unctad2012.org/index.php?page=view&type=400&nr=350&menu=45>
- United Nations Economic Commission for Africa and the Organization for Economic Co-operation and Development. “The Mutual Review of Development Effectiveness in Africa: Promise and Performance.” A joint report by the Economic Commission for Africa and the Organisation for Economic Co-operation and Development. 2012. <http://www.oecd.org/site/africapartnershipforum/50362685.pdf>
- United Nations Environment Programme Finance Initiative. “Financing Renewable Energy in Developing Countries: Drivers and Barriers for Private Finance in Sub-Saharan Africa.” Geneva: United Nations Environment Programme Finance Initiative. February 2012. [http://www.unepfi.org/fileadmin/documents/Financing\\_Renewable\\_Energy\\_in\\_subSaharan\\_Africa.pdf](http://www.unepfi.org/fileadmin/documents/Financing_Renewable_Energy_in_subSaharan_Africa.pdf)
- Williams, Mark D.J., Rebecca Mayer, and Michael Minges. “Africa’s ICT Infrastructure: Building on the Mobile Revolution.” Washington, D.C.: The World Bank. 2011. [http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/AfricasICTInfrastructure\\_Building\\_on\\_MobileRevolution\\_2011.pdf](http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/AfricasICTInfrastructure_Building_on_MobileRevolution_2011.pdf)
- World Bank Independent Evaluation Group. “The World Bank Group Guarantee Instruments 1990 – 2007: An Independent Evaluation.” Washington, D.C.: The World Bank. 2009. [http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/97714149F690485385257589006CBCB9/\\$file/guarantees\\_eval\\_full.pdf](http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/97714149F690485385257589006CBCB9/$file/guarantees_eval_full.pdf)
- World Economic Forum. “Building on the Monterrey Consensus: The Untapped Potential of Development Finance Institutions to Catalyse Private Investment.” Geneva: World Economic Forum. 2006. <https://members.weforum.org/pdf/Financing/Monterrey.pdf>
- Yescombe, E.R. *Principles of Project Finance*. London: Academic Press. 2002.

## ONLINE SOURCES

INFRADEV: <http://www.globalclearinghouse.org/InfraDev/index.cfm>

Harvard Business School Project Finance Portal: <http://www.people.hbs.edu/besty/projfinportal/>

MIGA: <http://www.miga.org/resources/index.cfm?stid=1870>

## Abbreviations

ADB	Asian Development Bank
AfDB	African Development Bank
AFREXIM	African Export and Import Bank
ARTIN	Africa Regional Transport Infrastructure Network
ATI	African Trade Insurance Agency
CDS	Credit Default Swaps
DFI	Development Finance Institution
DFID	Department for International Development
EBRD	European Bank for Reconstruction and Development
ECA	Export Credit Agency
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IADB	Inter-American Development Bank
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
IMF	International Monetary Fund
MDB	Multilateral Development Bank
MDG	Millennium Development Goals
MFI	Microfinance Institution
MIGA	Multilateral Investment Guarantee Agency
MLA	Multilateral Agency
OBA	Output-Based Aid
OECD	Organization for Economic Co-operation and Development
PBG	Policy Based Guarantee
PCG	Partial Credit Guarantee
PFI	Participating Financial Institution
PIDG	Private Infrastructure Development Group
PPA	Power Purchase Agreement
PPP	Public Private Partnerships
PRG	Political Risk Guarantee / Partial Risk Guarantee
PRI	Political Risk Insurance
SME	Small and Medium Enterprise
SPV	Special Purpose Vehicle
TEDAP	Tanzania Energy Development Assistance Program
UECCC	Uganda Energy Credit Capitalization Company
WBG	World Bank Group