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Emergence of the Gulf of Guinea in the Global Economy: Prospects and Challenges

Damian Ondo Mañe

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Prepared by Damian Ondo Mañe¹

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Abstract

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The Gulf of Guinea's tremendous potential is creating investment opportunities for the region. Some of its resources, such as oil, minerals, and forests, continue to attract significant investments whereas others, like natural gas, could be exploited to their full potential if necessary investments were undertaken. Nevertheless, the Gulf of Guinea has to cope with numerous challenges, both exogenous and endogenous, before it can fully benefit from its riches. One of these problems stems from the overwhelmingly weak institutions and governance, pointed by stylized facts, which add to the risks of "natural resource curse" and can feed the theory of the "Paradox of Plenty." The case is made that regional institutional arrangements and increased involvement of the international community and the African Diaspora should complement the efforts in which countries in the region should engage to address policy and governance issues. Complementary avenues are proposed, including maintaining stability and security, making better use of the region's own assets, putting in place a favorable business environment, and augmenting exports with value addition.

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Author(s) E-Mail Address: oedaf@imf.org; dondomane@hotmail.com

¹ The author is an Executive Director of the International Monetary Fund for Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Republic of Congo, Côte d'Ivoire, Djibouti, Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Madagascar, Mali, Mauritania, Mauritius, Niger, Rwanda, São Tomé and Príncipe, Senegal, and Togo. He would like to thank Stanley Fischer, Menachem Katz, Ulrich Bartsch, Bernie Holland, Carlos Leite, Edouard Maciejewski, and the participants at the Sixth Annual Conference of the Global Development Network in Dakar, Senegal, notably, Damien King, Lino Briguglio, and Reddy Mahendra for valuable comments and suggestions. He would also like to thank Regis N'Sonde and Mohamed Sidi Bouna for helpful research assistance, and Nitza Solá-Rotger for excellent editorial assistance.

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I. INTRODUCTION: COMPARATIVE ADVANTAGE

A. Geography and Population

The Gulf of Guinea has a market size of about 300 million consumers. It encompasses a large number of countries from West and Central Africa: Angola, Benin, Cameroon, Central African Republic (CAR), Côte d'Ivoire, the Democratic Republic of Congo (DRC), Equatorial Guinea, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Nigeria, Republic of Congo, São Tomé and Príncipe, Senegal, Sierra Leone, and Togo. These countries enjoy a wide geological, geographical, and cultural diversity. They range from English-speaking countries to French-, Portuguese-, and Spanish-speaking nations. Overall, the Gulf of Guinea generates a gross domestic product (GDP) of \$112 billion, exports of about \$45.5 billion and imports of about \$31.63 billion.²

B. Coastal Region and Natural Resources

The ecosystem of the region is a source of global interest. In addition to openness to the Atlantic Ocean, countries of the Gulf of Guinea enjoy a rich bionetwork, made of diverse fauna and flora. These natural riches include, among other endowments, rain forests (accounting for much of the oxygen-generating sources of the globe) and watercourses with access to the sea such as the Congo and Niger Rivers. About 4,700 kilometer-long, the Congo River possesses the second strongest streams of the world after the Amazon River in Latin America and represents the main commercial artery of equatorial Africa. The Niger River—which is 4,200 kilometers long, takes its source in Guinea and crosses nine countries—is essential to the life of 110 million people in Western Africa.³ Both the Congo River and the Niger River and its tributaries remain preferred vectors for local trade. In addition, access to the sea and other rivers from the Niger provides the neighboring countries with a remarkable pool for fishing.

However, pollution is a concern in the region. During the past 50 years, the countries of the region have registered strong population growth as well as an acceleration of industrialization and urbanization without regulation. This has caused major degradation of natural resources and biodiversity in the region and in areas contiguous to the Basin. It jeopardizes the ecological base of the long-term development of the region. The international community as expressed its awareness of the environmental problems facing the Gulf of Guinea and its desire to help restore and preserve the region's natural environment.^{4,5}

² *The Economist: World in Figures* (2004).

³ Besides Niger, the countries crossed by the Niger River and its tributaries include Guinea, Mali, Côte d'Ivoire, Burkina Faso, Benin, Nigeria, Chad, and Cameroon.

⁴ "Congo Basin Forest Partnership: U.S. Contribution," www.state.gov/g/oes/rls/fs/2002/15617.htm.

⁵ "Gulf of Guinea: Water Pollution Control and Biodiversity Conservation," www.unido.org/en/doc/3637.

The Gulf of Guinea is endowed with abundant natural resources which, if carefully managed, can contribute to global prosperity. The region has large reserves of mineral resources such as diamond and gold. Countries from the Gulf of Guinea, including Nigeria, Angola, Equatorial Guinea, Cameroon, Republic of Congo, Gabon, and Chad are oil producers and are expected to become major suppliers of energy. São Tomé and Príncipe will soon join this group of countries.

Table 1 presents actual and projected oil production in selected countries of the region since 1990 (tables are located at the end of the text). One can distinguish three categories of oil producers. First, Nigeria and Angola, the two largest oil-producing countries in the region, are mature producers that continue to maintain or even increase their levels of production of the 1990s. The Republic of Congo can also be ranked in this category of mature producers since its oil production, which started in the late 1970s, is expected to resume its growth path in 2004, following decreases in 2001-03, and stabilize after 2006. The second group of countries includes mature producers with oil production on a declining slope since the late 1990s (Cameroon and Gabon). The third group of countries comprises Equatorial Guinea, which along with Chad, is a relatively new oil producer. However, while Chad's production is anticipated to decline after 2008 following a six-year boom, that of Equatorial Guinea is expected to pursue its exponential-like growth path beyond 2010.⁶

C. Transportation Costs and Security

The geographical position of the Gulf of Guinea represents an important comparative advantage for oil supply. Indeed, despite its relative proximity to the world's main consumers of energy, North America and Western Europe, the Gulf of Guinea benefits from the absence of narrow shipping maritime lanes known as chokepoints, between the region and those parts of the world.⁷ Major portions of world crude oil pass through these maritime transit chokepoints. All these channels are passages for important flows of oil carried out on oil tankers.⁸ However, the narrowness of the chokepoints makes them susceptible to blockades, pirate attacks, and shipping accidents. The Gulf of Guinea is free of these risks.

⁶ In the paper "Fiscal Surveillance in a Petro-Zone—the Case of the CEMAC" (IMF Working Paper 04/8), which develops indicators for CEMAC fiscal surveillance that take into account the fluctuations in oil prices and oil receipts as well as the scarcity of oil resources, Wiegand (2004) presents the evolution of petroleum production in Cameroon, Chad, the Republic of Congo, Equatorial Guinea, and Gabon between 1994 and 2010.

⁷ The world maritime lanes for oil transportation include the *Strait of Hormuz* leading out of the Persian Gulf through the Gulf of Oman and the Arabian Sea; the *Strait of Malacca* linking the oil supplies from the Middle East with the Asian major consuming markets by connecting the Indian Ocean to the South China Sea and the Pacific Ocean; the *Bab el-Mandab* connecting the Red Sea to the Gulf of Aden and the Arabian Sea; the *Panama Canal* linking the Pacific Ocean to the Atlantic Ocean through the Caribbean Sea; the *Suez Canal*, providing passage from the Red Sea and Gulf of Suez to the Mediterranean Sea, and the *Turkish Straits* or *Bosporus* linking the oil supplies from the Caspian Sea to the Mediterranean Sea markets through the Black Sea.

⁸ The U.S. Energy Department website provides the daily amounts of oil flowing through these chokepoints. See www.eia.doe.gov/emeu/cabs/choke.html.

Moreover, the region is relatively close to the main markets of Europe and the Americas. For instance, while it takes eight hours to fly from New York to Paris, it requires only six hours and 30 minutes to fly from New York to Dakar, Senegal. By the same token, the maritime distance between Luanda in Angola and Rio de Janeiro in Brazil is 3,489 miles. Therefore, traveling by sea at an average speed of 30 knots, it would take only slightly more than 4 days to connect both port cities. It would require the same span of time to connect Abidjan, Côte d'Ivoire, to Port of Spain, the capital city of Trinidad and Tobago in the Caribbean. Likewise, its geographical closeness to Western Europe relative to the Middle East and Asia adds to the region's comparative advantage for the movement of goods and people, through reduced costs of sea transportation.

II. GROWING INTEREST IN THE REGION

A. An Important Geopolitical Factor: Source of Oil

The global economy is experiencing tremendous changes with anticipated spillover effects on the Gulf of Guinea. Indeed, given the current political climate in the Middle East, which has disruptive effects on oil prices and causes shifts in the structure of oil demand, coupled with robust economic growth in China and India, the Gulf of Guinea is expected to occupy a more important place in U.S., European and Asian energy strategies.

The United States and the European Union are paying increasing attention to the Gulf of Guinea. For instance, it is expected that the United States will invest more than \$10 billion a year in the region over the next 10 years in oil activities; oceanic research in the deep-sea waters of Equatorial Guinea and Angola; the restoration and preservation of the forests of Gabon, Equatorial Guinea, Republic of Congo, DRC, Cameroon, and CAR; the implementation of a training framework for African peace-keeping forces; and discrete political interventions. This interest is driven by the United States' and Europe's desire to diversify their sources of energy supply so as to reduce the risks associated with high dependence on Middle Eastern oil. The production of oil and natural gas in the Gulf of Guinea has the potential to fulfill the United States' and Europe's excess demand for energy.

The Gulf of Guinea bears numerous advantages for Western countries. First, the crude oil from the region is of better quality than that from Latin America, with API gravity typically above 30° and often close to 40°, while that of Latin America rarely exceeds the 30° mark.⁹ Second, the region's oil contains little sulfur by international standards, an appreciable characteristic for U.S. oil companies.¹⁰ Third, oil in the region is mostly extracted from offshore fields, far from ground political instability and wars, and as such, can be easily protected from turmoil. Fourth, the numerous transit chokepoints facing other world oil

⁹ The API gravity is an arbitrary scale expressing the gravity or density of liquid petroleum products, devised jointly by the American Petroleum Institute and the U.S. National Bureau of Standards. The measuring scale is calibrated in terms of degrees API. Oil with the least specific gravity has the highest API gravity.

¹⁰ U.S. Department of Energy, www.energy.gov/engine/content.do.

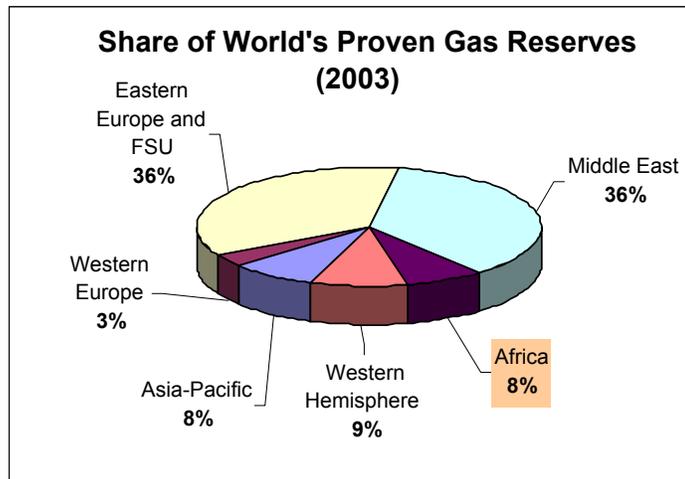
suppliers add to the comparative advantage of producers in the Gulf of Guinea, in terms of shipping ease, lower transportation costs, and less environmental hazards.

In addition to its strategic importance as an alternate supply of energy, the Gulf of Guinea also has political importance for the United States and Europe in their efforts to safeguard world security. A greater presence of the United States and Western European countries in the region bears political advantages, given terrorism concerns that have arisen in the aftermath of 9/11. The United States aims to build counterterrorism capacities in many sub-Saharan countries, particularly those with predominantly Muslim populations: Chad, Mali, Mauritania, Niger, and Nigeria.¹¹

B. The Potential from Natural Gas

Oil and natural gas exploitation go hand in hand. Africa accounts for 8 percent of the world's proven reserves of natural gas, of which one quarter is located in the Gulf of Guinea (Figure 1). Nigeria is by far the leading gas producer and holds the largest gas reserves in sub-Saharan Africa. It is also an important exporter of liquefied natural gas (LNG),¹² second only to Algeria in Africa. Other countries in the Gulf of Guinea with non negligible gas reserves include, in descending order, Cameroon, the Republic of Congo, Angola, and Equatorial Guinea.

**Figure 1. Gas Reserves in the World
(percent of world total)**



Source: *Oil & Gas Journal*, Dec. 23, 2002.

¹¹ Goldwyn and Morrison (2004), "Promoting Transparency in the African Oil Sector," A Report of the CSIS Task Force on Rising U.S. Energy Stakes in Africa, CSIS Africa Program (Washington: Center for Strategic International Studies).

¹² LNG is natural gas in a liquid state. Natural gas is cooled to -206° F to convert it into liquid, reducing its volume by 600 times, making it cheaper to transport. Once arrived at its destination, LNG is passed through vaporizers that warm it in order to convert it back to gas.

Besides oil, the natural gas production potential of the Gulf of Guinea is another reason for the increased interest of the world's major energy consumers. For instance, the United States faces a potential shortage of this resource since reserves have steadily decreased in the past years, reaching their lowest levels in 2003.¹³ U.S. production attained critical lows in recent years, generating risks of excess demand, especially at times of unusual cold. Nominal prices of natural gas in this country jumped by 700 percent between 2000 and 2003, inducing petrochemical and steel companies to call for government intervention in order to resolve what had become the "other energy crisis," in parallel to that of oil. It is more convenient and less costly for these companies to import foreign natural gas—that is broadly deemed cheaper and more accessible—than to pursue domestic exploration and production, which they have nearly abandoned. Another factor in favor of natural gas importation in the United States is the lack of infrastructure and pipelines to extract and channel gas in the United States.¹⁴

The United States certainly recognizes the potential of the Gulf of Guinea to meet and fill part of its excess demand for energy. The U.S. Agency for International Development (USAID) is providing assistance in the design and implementation of a regional regulatory framework aimed at controlling the exploration of natural gas as well as generation of electricity in Ghana and Nigeria. In the same vein, the U.S. Export-Import Bank has financed an off- and onshore natural gas pipeline, the West Africa Gas Pipeline (WAGP), which is 1,000 kilometers long and is intended to transport natural gas from Nigeria to Benin, Togo, and Ghana. The WAGP project, which has required an initial investment of \$500 million, will contribute to promoting regional trade of an essential and abundant commodity in the sub-region and is likely to stimulate growth of new industries in the four countries.

For its part, Equatorial Guinea benefits now from a new gas plant that will allow the country to increase gas production each year by reducing flaring through reinjection and transformation of gas into LNG. This project will cost the Equatorial Guinean government and the Texas-headquartered oil company Marathon an estimated \$1.4 billion. As for Angola, ChevronTexaco has recently awarded a contract to Paragon Engineering Services to lessen natural gas flaring at its Tukula, Wamba, Numbi, and Malongo fields. In addition, Sonangol—Angola's oil and gas company—is also developing a project in collaboration with ChevronTexaco to convert natural gas to LNG for export by using associated gas from offshore oil fields.

Investments and Gas Flaring and Venting: Opportunity Costs for the Region

One noticeable characteristic of the natural gas industry in the Gulf of Guinea is the high percentage of gas flaring and venting, which represents an invaluable opportunity cost for these countries. In general, countries that are not interested in developing their natural gas

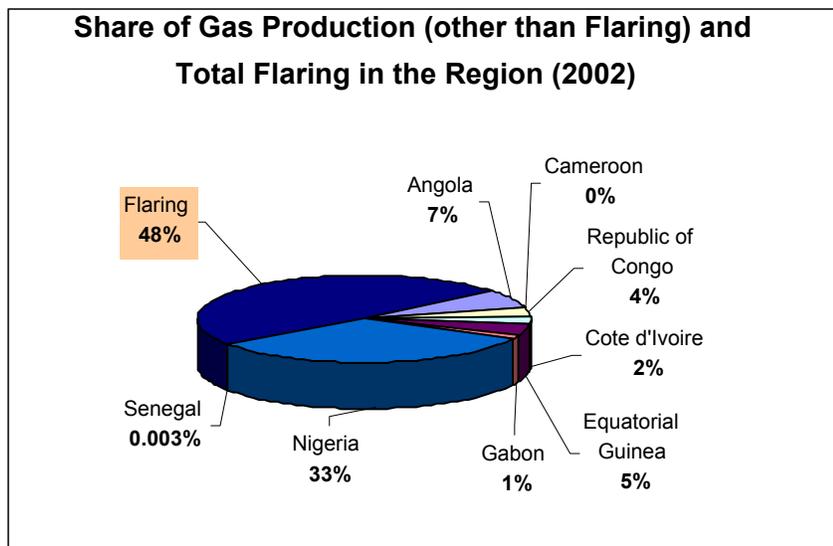
¹³ Source: *Oil & Gas Journal*, 2004, Vol. 2, Issue 7.

¹⁴ *Financial Times*, June 9, 2003.

production resort to venting and flaring of gases extracted together with oil during the production process. The percentage of gas flaring and venting in the sub-region currently amounts to 48 percent (Figure 2). The Gulf of Guinea holds the poorest record with respect to the ratio of gas flared or vented to gross gas production, although its biggest producer, Nigeria, has made the reduction of flaring and venting a high-priority sectoral goal, and succeeded in bringing down its ratio from 48 percent in 2003 to 42 percent in 2004.¹⁵

Table 2 depicts the levels of proven natural gas reserves, production and gas losses stemming from the flaring and venting due to the disinterest of oil activity operators in developing natural gas activities. As noted earlier, there have been some initiatives to invest in the gas sector. However, only six countries in the Gulf of Guinea currently market natural gas (Nigeria, Cote d'Ivoire, Angola, Gabon, Republic of Congo, and Senegal). In addition, only Nigeria, Angola, and Equatorial Guinea have made substantial efforts to date toward new investments (Table 3).

Figure 2. Gas Flaring in the Gulf of Guinea



Source: U.S. Energy Information Administration: <http://www.eia.doe.gov/emeu/international/gas.html#Vented>.

What would be the direct gains for these countries if they were to invest in natural gas production by reducing gas flaring and venting and transforming gas into LNG? In order to reach an answer, we have built three scenarios based on alternative assumptions of the ratio of gas flaring and venting: the current 48 percent ratio and two hypothetical ratios (20 percent and 10 percent) that would result from the liquefaction of natural gas. We have estimated the corresponding monetary values of gas production without flaring and venting, as well as those of production including flaring and venting, and total production, using the

¹⁵ IMF, Nigeria, *Selected Issues* (2004). Nigeria expects to reduce its ratio of flared and vented gas to 25 percent in 2005 and 15 percent in 2006, with a final goal of zero by 2008.

sales price of Nigerian gas in recent years (\$3.78 per thousand cubic feet).¹⁶ This allows one to evaluate the dollar value of a corresponding increase in gas production.

Table 4 presents the results for the whole region of the Gulf of Guinea. The gains in gas production would amount to \$2.2 billion and \$3 billion respectively under the scenarios of 20 percent and 10 percent flaring/venting ratios, down from the actual 48 percent flaring/venting in 2002. These figures are significant because they represent about 1.6 percent and 3.3 percent respectively of these countries' GDP.¹⁷ Nevertheless, these scenarios can materialize only through investments in the gas sector.

Table 5 presents the results for six individual countries, specifically the gains in gas production (without flaring/venting) that the six countries that currently market natural gas would incur by reducing gas flaring/venting ratios from their 2002 levels to 20 percent and 10 percent respectively. Here again, the gains would be significant, ranging from \$1.5 billion and \$2 billion (3.15 percent and 4.2 percent of GDP) for Nigeria, to \$3 million and \$48 million for Equatorial Guinea (0.9 percent and 14.68 percent of GDP). The latter country only flares approximately 20 percent of its gas, which is relatively low for the region and corresponds to the level of our first hypothetical ratio.

Estimated Indirect Gains from Increased Investments in the Natural Gas Sector

Other potential gains from increased investments in the gas sector would include greater government revenues, increased employment, and cleaner environment stemming from the development and use of currently flared/vented gas. Indeed, promoting the gas sector in those countries would generate: (i) a reduction of flaring (which has both an opportunity cost and an environmental cost); (ii) industrial development, including through the reduction of electricity shortages; and (iii) the enhancement of economic growth and the improvement of the population's quality of life.

For instance, based exclusively on existing gas sector projects, Nigeria is expecting to reap important benefits from its current efforts. The WAGP is likely to stimulate growth of new industries in the region. New industrial investment is estimated at \$800 million. The IMF predicts that gas demand in Nigeria for use in new power plants, households, and industries such as cement, fertilizers, steel, and aluminum could increase from 400 million cubic feet per day (mcf/d) in 2003 to 1,700 mcf/d in 2010. The use of natural gas should also contribute to reduce electricity shortages in Nigeria.¹⁸

¹⁶ IMF, Nigeria, *Selected Issues* (2004).

¹⁷ Using GDP data from the World Bank's World Development Indicators.

¹⁸ U.S. Energy Information Administration.

According to a study commissioned by Chevron—the main foreign partner in the WAGP project—between 10,000 and 20,000 primary sector jobs could be created in the region by WAGP. New industrial investments should generate an additional 30,000-60,000 secondary jobs.¹⁹

The fiscal impact of increased investments in the gas sector in the Gulf of Guinea will also be significant. Based on the past three years, Nigeria's government revenues represent about 25 percent of natural gas production (other than flaring/venting).²⁰ The investments required to bring the flared gas ratio down to 20 percent and 10 percent respectively would boost the government's fiscal revenue by about \$543 to \$730 million relative to the current level. Similar proportions could be envisaged for the other gas-endowed countries of the Gulf of Guinea, although gas contracts and fiscal systems may differ.

According to the World Bank, the gas exported through the WAGP will replace crude oil use in power plants in Benin, Togo, and Ghana and, because crude oil is a more expensive source of energy, this would generate savings of approximately \$500 million over a 20-year period. Ghana alone should save between 15,000-20,000 barrels per day of crude oil by using gas instead of oil for its power plants.²¹

Gas production also has an impact on the balance of payments: imports of goods and services associated with the investment program in the gas sector would increase; export receipts and production would rise. There is also scope for foreign direct investments to increase rapidly through partnership in joint ventures. Finally, profit remittances from foreign operators would augment.²²

In addition, reducing flaring will also have a major positive environmental impact. Not only will it curtail energy waste but it will also lower the release of carbon dioxide into the atmosphere.

Concluding Remarks on the Region's Gas Sector

Although the Gulf of Guinea does not shelter those giant gas deposits that constitute the bulk of the proven reserves in the Middle East, North Africa and the former Soviet Union, it is endowed with non-negligible gas resources. There is also scope for reducing the large share of its flared/vented and reinjected gas and for increasing the amount of marketed gas. While

¹⁹ U.S. Energy Information Administration.

²⁰ IMF, Nigeria, *Selected Issues* (2004).

²¹ U.S. Energy Information Administration.

²² IMF, Nigeria, *Selected Issues* (2004).

Nigeria has undertaken important investments to develop its natural gas export industry and to enhance its domestic use of natural gas, gas activities in the Gulf of Guinea still remain embryonic. Expansion of this market in Equatorial Guinea is under way, with the creation in January 2005 of the Société Nationale de Gas (Songaz), a state gas company that aims to develop and service an industrial, residential, and export gas market. Yet, for the most part, natural gas remains little or not exploited at all in this country as well as in Cameroon, the Republic of Congo, and Angola, despite a tremendous potential. In addition, much of the natural gas is either flared/vented or reinjected into oil wells to maintain pressure on the oil produced.

Major investments in the sector are likely to have a significant macroeconomic impact on these countries and on the region. These countries need to create an economic and fiscal environment conducive to joint ventures in the sector, in order to reap the potential benefits of gas exploitation.

C. Mining and Other Riches

The DRC is the second largest producer of diamonds as well as columbine-tantalite, a key raw material used in cellular phones, satellites, and telecommunications equipment. The DRC is also the only country in Africa with extended reserves of cobalt, copper, gold, and uranium. Other countries such as Angola, Ghana, Sierra Leone, and Liberia are also major producers of gold and diamonds.

The Congo Basin possesses the globe's second largest reserve of rain forests and a diverse and colorful habitat. It is also home to one of the most powerful rivers in the world, the *Congo River*, whose power plant provides electricity to countries as far away as Egypt to the north and South Africa to the south.

As regards agricultural commodities, Côte d'Ivoire is the world's largest producer of cocoa and the second largest producer of coffee. When civil conflict erupted in this country in September 2002, world prices of cocoa skyrocketed to a 20-year high. In Cameroon, agriculture remains a decisive sector for the economy because it employs 80 percent of the active population and accounts for more than 40 percent of the country's export revenues.

In the tourism sector, the geographical position of most of these countries offers some of the most attractive beaches and leisure destinations. Senegal is the closest country to the western hemisphere and has become a preferred destination for tourists from Western Europe and the Americas. The eastern part of the DRC is home to some of the most revered natural parks in the world, where diverse animals still live in the wild.

III. COPING WITH THE OBSTACLES TO THE REGION'S DEVELOPMENT

Despite numerous resources, the countries of the Gulf of Guinea continue to face low growth and poverty. Some of the obstacles to development include demographic changes and the

weak quality of human capital; inconsistent fiscal policies in the presence of abundant natural resources; and weak institutions and governance. Unstable commodity prices, lack of economic diversification, and insufficient security and stability at the national and regional levels are a few other factors hindering the region's growth.

A. Demographic Changes and the Quality of Human Capital

In the midst of the world's major demographic transition, notably slowing population growth, there are cross-regional variations. While life expectancy continues to increase and population is aging in advanced countries, Africa is experiencing a decline in life expectancy, partly as a result of the HIV/AIDS pandemic and malaria. Africa is also seeing the share of its young in the total population grow. The dynamics of these demographic changes are expected to have an important impact on African countries by 2050.²³

The countries of the Gulf of Guinea in particular need to adopt labor market policies aimed at absorbing the growing young population into the workforce. This requires reforms to improve the flexibility of labor markets, as well as better education and training to provide the skills necessary for employment. Higher saving, especially from governments that need to run fiscal surpluses and reduce debt levels, would allow these countries to equip their workforce with a larger and more labor-efficient capital stock. This, together with highly needed institutional reforms (see section III.C, below), are important elements of an environment conducive to domestic saving, capital inflows, and capital accumulation. The risks of not integrating the increasing young population into the labor force include political unrest and social instability.

B. Avoiding Inconsistent Fiscal Policies in Presence of Abundant Oil Resources

The second challenge confronting the Gulf of Guinea is how to improve the quality of policy management stemming from the abundance of oil resources. Many natural resource-endowed countries have mismanaged their riches, often by overspending. Fiscal policy, which has frequently proven unreasonable in many of those countries, usually turns into low growth rates.²⁴ The abundance of the natural resource itself has often induced authorities to design and implement development strategies and shorter-term expenditure frameworks based on overoptimistic assumptions, resulting in overspending, procyclical expenditures, and inefficiencies.

²³ IMF, *World Economic Outlook* (September 2004).

²⁴ Empirical literature shows that oil-endowed countries in Africa have experienced lower growth rates and weaker development indicators than other African countries. What is called the "Paradox of Plenty" (Karl, 1999, "The Perils of the Petro-State: Reflections on the Paradox of Plenty," *Journal of International Affairs*, Volume 53, pp. 31-48) has been evidenced, for example, by Sachs and Warner (1995), "Natural Resource Abundance and Economic Growth" (Harvard Institute of Economic Research Discussion paper No. 517), Sala-i-Martin and Subramanian (2003), "Addressing the Natural Resource Curse: An Illustration from Nigeria" (IMF Working Paper 03/139), and many others.

We have looked at the fiscal trends in three countries of the Gulf of Guinea—Nigeria, Equatorial Guinea, and Gabon—and more specifically the respective patterns of public expenditures in correlation with oil prices and oil revenues. While the analysis for Equatorial Guinea is inconclusive given the short time span since this country started to produce oil in the mid-1990s, the cases of Nigeria and Gabon indicate that oil-driven fiscal policy is a feature of some countries, at least in the Gulf of Guinea. These boom-bust fiscal policies, when they occur, disrupt the fulfillment of core government obligations and hinder steady growth in non-oil sectors. Further, policy reactions to neutralize the subsequent economic imbalances can worsen the situation. Indeed, the contraction of non-oil sectors can induce the authorities to adopt protectionist policies and capital controls, resulting in even more narrowing in non-oil sectors, as was the case in Nigeria in the 1980s and 1990s. Nevertheless, experience shows that there is no fatality of boom-bust policies in oil-producing countries. Indonesia, among others, is an example.²⁵

C. Institutional Quality and Governance

The third challenge facing the Gulf of Guinea is the so-called “oil curse,” which stems from weak institutions. The abundance of oil resources can favor rent-seeking behavior, especially in an environment of weak property rights and loose law enforcement, which in turn weaken other items of institutional quality. According to six indicators of governance produced by the World Bank for 2002 (voice and accountability, political stability and lack of violence, government effectiveness, regulatory quality, rule of law, and control of corruption), all seven main oil-producing countries in the Gulf of Guinea far underperform the world median, indicating poor institutions, with the exception of political stability and absence of perceptible political violence in Equatorial Guinea and Gabon (Table 6). Moreover, the rule of law and the fight against corruption are the areas where oil producers of the region perform the worse. Finally, comparisons with other countries in 2002 show that the Gulf of Guinea’s oil producers trail their counterparts not only from the Gulf of Guinea but also from the rest of sub-Saharan Africa, in all of the six indicators.²⁶

This outlook highlights the lack of committed efforts to improve institutional quality related to governance, and underpins the argument that the exploitation of natural resources often promotes corruption and causes further economic imbalances. This somewhat bleak picture on the quality of institutions and governance in the Gulf of Guinea oil-producing countries, as well as on their overall policy management and exposure to external shocks, is worrisome because it lays the ground for poor, long-run economic performance. Prompt and decisive actions are needed if one wants to avoid a natural resource curse in the region.

²⁵ Apart from Nigeria, Baunsgaard (2003) shows the patterns of oil-driven fiscal policy in Venezuela. However, he also, describes the case of Indonesia where there has been success in insulating the economy against oil-related volatility, primarily by achieving a broader diversification of the economy. Baunsgaard (2003), “Fiscal Policy in Nigeria: Any Role for Rules?” IMF Working Paper 03/155.

²⁶ This compilation of institutional quality measures is owed to Kaufman, Kraay and Mastruzzi (2004), “Governance Matters III: Governance Indicators for 1996-2002,” (World Bank Policy Research Working Paper 3106).

D. Tackling the Impediments Related to the Oil Sector: Price and Exchange Volatility and the Lack of Diversification

Another major challenge facing the Gulf of Guinea oil-producing countries is one that all oil producers have to confront: coping with the volatility of oil prices, often coupled with that of the U.S. dollar, which can prove detrimental to these economies. When prices unexpectedly hit lows, government oil receipts decline abruptly below their anticipated levels, affecting budget expenditures or any spending for which these revenues are earmarked.

Even on the high end, the levels of oil prices should not always be regarded as favorable to oil producers, since they can also adversely impact government budgets, albeit not immediately. Indeed, rises in prices well above their historical trends (e.g., current oil prices) can restrict economic growth in net importing countries, which happen to be the main engines of the world economy (United States, European Union, China). When coupled with the diminished value of the dollar and fiscal imbalances that lead to higher interest rates, this can lead to the contraction or growth containment of the world economy and adversely affect oil producers themselves.

In light of the high volatility in oil prices and dollar fluctuations, countries that rely heavily on oil exports are highly vulnerable to exogenous events that disrupt oil markets. This is the case of oil producing countries in the Gulf of Guinea, where ratios of oil exports to total exports have consistently been above 80 percent since the mid-1980s, with the noticeable exception of Cameroon. This precarious situation is a strong argument for these countries to cushion against external disturbances by diversifying their export base.

When shocks nevertheless occur, the countries should be able to react to these disturbances by accessing funds to mitigate their impact. In this view, constituting stabilization funds and setting provisions at times of prosperity is desirable. The international community, through the IMF, the World Bank, the African Development Bank, and other multilateral financial institutions, should also help—especially countries that cannot afford such stabilization funds.

Lasting global prosperity requires stable oil markets and prices. To this end, it is desirable that the two sets of market actors play fully their role: on the one hand, oil-producing countries must continue to expand production and adopt measures to increase capacity; on the other hand, oil-consuming countries should take measures to promote energy sustainability and efficiency. In so doing, the two sides must maintain a constant dialogue and further improve oil market information and transparency, which will curb speculative movements.

E. Security and Stability

Natural resource-rich countries in the Gulf of Guinea have been the landscape of continuous instability, in the form of internal turmoil, cross-border conflicts, or both. One can mention the internal instability in Nigeria, the 25-year-long civil war in Angola, the turmoil in the

DRC since the mid-1990s, the repeated internal conflicts in the Republic of Congo since 1994 and in the CAR, as well as failed coup attempts in Equatorial Guinea recently. While the conflicts have involved local regimes, opposition forces, and rebels, they have been complicated and exacerbated by external influences driven by geopolitical and economic interests. All these conflicts have had—and continue to have—humanitarian spillover effects. Natural resources have also been the center of cross-border tensions between producing countries in the Gulf of Guinea. An example is the long-lasting dispute between Cameroon and Nigeria over the oil-rich Bakassi peninsula. More recently, Gabon has claimed ownership over the small Mbanié Island, which sits on important oil reserves. The island has been regarded as territory of Equatorial Guinea, according to the borders drawn under agreements between the two colonial powers, Spain and France.²⁷

While conflicts in Africa are not peculiar to countries in the Gulf of Guinea, the latter seem to have been more exposed to instability. The conflicts mentioned above can be compared with the more peaceful experiences in Gulf of Guinea countries that have not enjoyed (yet) natural resource booms, including Ghana, Togo, Benin, and São Tomé and Príncipe. Evidently, natural riches in the region attract covetousness and generate predatory-like behavior by countries within or outside the region. Given the growing importance of the Gulf of Guinea in the global economy, it is to the utmost interest of both the region and the international community to ensure stability in the Gulf. Indeed, if this region remains stable, natural resource-endowed countries will grow as reliable suppliers. Conversely, if the region faces unrest, it will create shocks to the global economy in addition to becoming a vector for violence, a potential haven for terror, and a place where democratic norms, human rights, and environmental standards are blatantly disregarded.

IV. A FEW IDEAS FOR THE DEVELOPMENT OF THE REGION

The prospects of the Gulf of Guinea are bright notwithstanding the numerous challenges. Today, outside the Persian Gulf region, one in four barrels of oil produced worldwide comes from the Gulf of Guinea. In the near future, the latter will supply one-fifth of U.S. imported oil. In a longer-term perspective, the region's oil revenues will expand exponentially, although it is anticipated that production will decline in some countries, based on the capacity of currently available oil fields. Indeed, the seven largest oil-producing nations of the Gulf of Guinea are expected to generate more than \$350 billion from this natural resource over the 2002-19 period, which is more than the current annual GDP of Russia (\$310 billion in 2003) and close to the current GDP of all sub-Saharan African countries combined.^{28,29}

²⁷ Gabon and Equatorial Guinea are working together to resolve the dispute.

²⁸ Goldwyn and Morrison (2004).

²⁹ *Economist Intelligence Unit*, www.eiu.com.

For the 200 million Africans living in the oil-rich area, these prospects bring enormous hopes. It is important that the leadership of the region takes advantage of this potential and draws lessons not only from the past but also from the current experience of other countries and regions of the world. These anticipated revenues should be used as the basis for the creation of economic activities. The international community should help put in place, develop, and benefit from such economic opportunities.

The following paragraphs present a few ideas to contribute to the ongoing debate on how to develop the Gulf of Guinea, in making good utilization of its oil resources to ensure the longevity of the wealth generated from this potential. They include: (i) using the oil revenues as insurance in attracting foreign direct investment; (ii) departing from an approach based mainly on exporting the narrow spectrum of raw materials to an approach with value addition and greater market access; and (iii) creating a virtuous circle of wealth sustainability and job creation.

A. Oil Revenue as Collateral for Foreign Investment

The expected oil revenue of the Gulf of Guinea in the period ahead should be used as guarantee for foreign investors to develop activities in the region. This would in no circumstances be a pawn on future oil receipts by governments against budget support, an approach that has been misused in some of the oil-producing countries of the region. Rather, it would induce *private* investors to commit and deliver funds for infrastructure and business investment.

The legal arrangements would be worked out between the national government and foreign investors, and the implementation of the contract—including the effective delivery of the infrastructure and businesses—would be monitored by an independent body comprising the representatives of civil society, the local business community, and international nongovernmental organizations (NGOs).

B. Value Addition, Integration, and Market Access

Relying on exporting a restricted field of raw materials with no value addition, while exporting both money and jobs to the outside world, has been detrimental to the development of Africa. The Gulf of Guinea countries should focus on establishing transformation industries because it is important to add value to raw materials and intermediate products in order to expand the production and export bases, and improve the return on exports.

Intra- and inter-regional movements of capital and goods through increased integration and larger market access will also contribute to the region's economic development. In particular, advanced countries must eliminate all impediments to fair trade by ending subsidies and allowing a greater market access to products from developing countries.

C. Wealth Sustainability through Distribution and Employment

As highlighted above, macroeconomic stability is a fundamental pillar of the development of the Gulf of Guinea. Many countries in the region have achieved this intermediate objective, with IMF support. Countries like Nigeria have begun to build up homegrown economic strategies with strong ownership involving all parties (authorities, business community, civil society, donors, NGOs). Stakeholders have begun to see the importance of creating more jobs for the stability of the region and call for the same analysis for the rest of the Gulf of Guinea.

Macroeconomic stability is the prerequisite on which policies can be developed to distribute to the populations, in a stable, sustainable, and equitable manner, the natural riches and the wealth created through transformation and value addition. Such growth will generate jobs, which in turn will maintain growth and prosperity. It is important to put in place this virtuous circle that will ensure the sustainability of the region's prosperity.

Countries in the region should adopt a sectoral approach to job creation. For instance, more than 100,000 jobs in the United States depend on energy-related services delivered to the Gulf of Guinea.³⁰ A key question for the countries in the Gulf is how to take advantage of these 100,000 jobs to create concurrently at least the same number of local jobs in the region. With comparative advantage from lower labor costs, the Gulf of Guinea countries should be able to create the needed jobs for the populations.

V. CONCLUSIONS AND RECOMMENDATIONS

The Gulf of Guinea is undoubtedly emerging as an important element of the global economy. Equatorial Guinea is a rising economic force in the region. Other countries, such as São Tomé and Príncipe, are expected to evolve in the future. Natural resources and changes in geopolitical parameters remain the main advantages of the region. However, its enormous potential can be challenged by ongoing demographic changes, unreasonable policy choices, weak institutions, as well as persistent exposure to adverse factors (wars, natural disasters, commodity price and exchange rate volatility, etc.). The region's policymakers should start preparing these countries' economies to face the challenges ahead so as to exploit their economic potential to the fullest. The international community can also help prevent adverse risks. Finally, the African diaspora has an important role to play to this end, through greater involvement in business activities in the continent.

The large African diaspora now residing in North America, Latin America, the Caribbean, and Europe should participate in the development of the Gulf of Guinea, whose potential, if properly exploited, would spill over and benefit the whole African continent. The actions of the diaspora should take multiple forms, including political and economic lobbying to induce direct investment in the region, especially in mining, manufacturing, tourism, and urban development; the diaspora's participation in joint-venture businesses; increased remittances

³⁰ Goldwyn and Morrison (2004).

(transfers of unofficial funds to families and communities in the region) that have proven to be a stable source of capital flows to Africa; and well-informed aid and business decisions through trips to the motherland. The diaspora can use its experience and know-how to develop service industries, especially financial services, which are presently lacking from the continent in general and the Gulf of Guinea in particular.

In order to become a development zone, the Gulf of Guinea must be a haven of stability. It should be regarded as a global common good. To this end, countries in the region need to establish increased regional arrangements to safeguard peace, and internal and cross-border conflicts should be promptly resolved in line with what is being instituted at the African Union level. A credible and sustainable development of the region will also entail transparency, accountability, and reform ownership. As regards the natural riches of the region, it is critical to prevent the symptoms of “natural resource curse,” while taking into account other regions’ experience in dealing with natural resource booms, so as to ensure that the benefits from these riches are maintained over the very long term. In particular, the expected \$350 billion in oil revenues over the period 2002-19 should be properly used, and we suggest using much of it as guarantee for foreign direct investment. The gains that the Gulf of Guinea would draw from country-wise efforts complemented by coordinated regional and international actions will spill over the rest of the African continent and would—in a non-zero sum game—that is, would benefit the rest of the world, particularly major consuming economies that are anticipated to increasingly rely on the riches of the region.

Good governance and transparency in managing resources will carry weight. Indeed, countries should improve governance, so as to make the public administration a supportive, credible and reliable institution for the development of the private sector. The IMF and the World Bank are helping in this direction, and we are starting to see positive results in some of the countries. As regards the domestic oil sector, the main actors should be committed to transparency in the management and sharing of oil resources. The Extractive Industries Transparency Initiative (EITI), which requires oil and mining companies in participating countries to disclose their payments from those nations, is in the right direction. All countries of the Gulf of Guinea should be encouraged to participate in the Initiative.

Finally, an important part of the solution to the development concerns facing developing countries, including those endowed with natural resources, is *what the international community can do to help them cope with these challenges and take full advantage of their potential*. Hopefully, the international community will continue to support their efforts both at the multilateral and bilateral levels. As regards the IMF, the ultimate goal for the countries in the Gulf of Guinea is to go beyond IMF-supported programs and have access to international private investment flows. In this context, multilateral institutions can and must play facilitating roles. These should include being partners for reforms; playing a catalytic role for financing and debt relief, and allowing increased voice and representation for African countries.

There has been much criticism of the actions of the Bretton Woods Institutions, particularly their recommendations on fiscal policy stance. It is believed by critics that the IMF programs

have had a predilection toward too tight fiscal policies, which have constrained the role of the public sector and reduced the populations' incomes in many developing countries. The lack of attention given by the IMF to appropriate ways of coping with the absence of reliable sources of growth—ones that would ensure long-term fiscal sustainability—has also been noted by critics. Finally, it is important for the IMF to respond to the concerns related to the social impact of recommended structural reforms—for instance, privatization programs.

The perception, whether justified or not, that the actions of those institutions have contributed to the dismal outlook of developing countries has unfortunately triggered some of the resistance against the principle of macroeconomic stability in support of sustainable development. As members of the IMF, African countries have to press this institution to emphasize the creation of an economic and social environment conducive to free enterprise, business expansion, and employment, which can secure the long-term fiscal sustainability of poor country governments in meeting their obligations. These countries should make their voice heard with greater participation in—not withdrawal from—the Bretton Woods Institutions. This leads to the last point.

On the issue of voice and representation, international organizations play an important role in the emerging global economy because they set the rules and standards that shape the life of many nations. These rules affect poor nations more forcefully, as is the case with global trade issues. For instance, this paper made a reference to global trade matters. To strengthen international dialogue and address the development needs and concerns of those nations more effectively, one should stress the need to broaden and strengthen their participation in international economic decision-making and norm-setting.

Table 1. Selected Gulf of Guinea Countries: Oil Production and Projections, 1990-2033
(In thousands of barrels per day)

	Angola	Cameroon	Congo, Rep.	Equat. Guinea	Gabon	Nigeria
1990	473	145.8 (†)	165.7	0	270.0	1,812
1991	497	136.7 (†)	160.8	0	296.0	1,894
1992	549	129.9 (†)	172.8	3.1	294.0	1,959
1993	504	113.7 (†)	189.8	4.5	312.0	2,038
1994	550	107.9 (†)	180.8	4.9	356.0	1,897
1995	617	101.1 (†)	180.0	6.2	368.0	1,990
1996	679	107.7 (†)	196.0	16.9	364.0	2,179
1997	698	114.8 (†)	238.0	56.6	368.0	2,271
1998	739	119.5 (†)	252.8	82.9	378.3	2,231
1999	746	113.4 (†)	259.4	103.1	313.0	2,110
2000	748	114.2 (†)	253.0	117.9	272.3	2,261
2001	741	103.3 (†)	234.0	208.3	260.0	2,238
2002	894	102.5	230.1	248.1	251.2	1,960
2003*	875	97.3	215.0	282.2	270.1	2,450
Projections :						
2004	996	90.1	228.2	383.2	272.6	2,460
2005	1,172	85.8	268.2	397.2	268.8	2,710
2006	1,606	81.4	278.0	409.3	243.0	2,700
2007	2,056	n/a	282.0	441.5	219.7	2,750
2008	2,142	n/a	278.2	494.5	192.1	2,810
2009	2,209	n/a	n/a	460.5	170.7	2,880
2010	n/a	n/a	n/a	427.0	162.7	2,700
2015	n/a	n/a	n/a	283.5	112.0	3,000
2020	n/a	n/a	n/a	n/a	82.0	3,400
2025	n/a	n/a	n/a	n/a	60.0	3,800
2030	n/a	n/a	n/a	n/a	44.0	n/a
2033	n/a	n/a	n/a	n/a	36.0	n/a
Note:	(*) Estimations. (†) Production corresponds to the fiscal year beginning in the year specified, e.g., 1990 stands for fiscal year 1990/91.					

Sources: Energy Information Administration, U.S. Department of Energy; IMF Country Reports, and author's computations.

Table 2. Various Uses of Gas Production by Country (2002)

Country	Gas Reserves (Bcf)	Gas Production (Bcf)	Gas Rejected (Bcf)	Gas Flared or Vented (Bcf)	Marketed Production (Bcf)
Nigeria	176,000	1,346	117	667	562
Cameroon	3,900	57	0	57	0
Rep. of Congo	3,200	118	71	44	4
Angola	1,600	297	117	153	28
Equatorial Guinea	1,300	120	36	25	59
Gabon	1,200	81	19	55	7
Cote d'Ivoire	1,050	47	0	0	47
Senegal	106	2	0	0	2

Source: U.S. Energy Information Administration.

Table 3. Selected Investments in the Gas Sector

Country	Investments Projects in the Gas Sector	Estimated Amounts of Investments (\$billion)
Nigeria	<ul style="list-style-type: none"> - NLNG (1999, 2002, 2006) - Escravos (1997, 2000, 2005) - WAGP (2005) 	\$11
Angola	<ul style="list-style-type: none"> - LNG Facility (2001) 	\$2
Equatorial Guinea	<ul style="list-style-type: none"> - LNG Facility (2007) 	\$1.4

Sources: IMF, Nigeria, *Selected Issues* (2004); U.S. Energy Information Administration.

Table 4. Gain for the Region from Reduction in Flaring (2002)

Gas Flared	Gas Production, other than flaring (\$million)	Flaring (\$million)	Total Production (\$million)	Gain in Gas Production, other than flaring (\$million)
Gas Flared=48%	\$4,035	\$3,786	\$7,821	-
Gas Flared=20%	\$6,294	\$1,527	\$7,821	\$2,259 (Flaring down from 48% to 20%)
Gas Flared=10%	\$7,057	\$764	\$7,821	\$3,022 (Flaring down from 48% to 10%)

Sources: U.S. Energy Information Administration; IMF, Nigeria, *Selected Issues* (2004), and author's computations.

Table 5. Gain for Individual Countries from Reduction in Flaring (2002)

	Gas Production, other than flaring (Smillion)	Gain in Gas Production, other than flaring (Smillion)	Gain in Gas Production, other than flaring (Smillion)
	Flaring at Current Levels	20% Flaring	10% Flaring
Nigeria	\$2,564	\$1,507	\$2,015
Cameroon	\$0	\$173	\$195
Rep. of Congo	\$280	\$77	\$122
Angola	\$545	\$353	\$465
Equatorial Guinea	\$361	\$3	\$48
Gabon	\$99	\$147	\$178

Sources: U.S. Energy Information Administration; IMF, Nigeria, *Selected Issues* (2004), and author's computations.

Table 6. Indicators of Governance (2002)

	Voice and Accountability	Political Stability	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Angola	-1.39	-1.60	-1.16	-1.33	-1.56	-1.12
Cameroon	-1.10	-0.50	-0.62	-0.88	-1.28	-1.10
Chad	-0.95	-1.78	-0.75	-1.11	-0.93	-1.02
Congo, Republic of	-1.10	-1.64	-1.25	-1.00	-1.22	-0.94
Equatorial Guinea	-1.44	0.31	-1.37	-1.45	-1.19	-1.89
Gabon	-0.42	0.20	-0.45	-0.19	-0.27	-0.55
Nigeria	-0.70	-1.49	-1.12	-1.18	-1.35	-1.35
Average for Oil-						
GG Countries (1),(2)	-1.01	-0.93	-0.96	-1.02	-1.11	-1.14
Average for Non-Oil						
GG Countries (1),(2)	-0.66	-0.75	-0.91	-0.67	-0.80	-0.75
Average for Other Selected						
SSA Countries (1),(3)	-0.39	-0.39	-0.55	-0.50	-0.48	-0.34
(1) Arithmetic average for the given set of countries.						
(2) GG stands for Gulf of Guinea. The non-oil GG countries include Benin, Central African Republic, the Democratic Republic of Congo, Cote d'Ivoire, Ghana, São Tomé and Príncipe, and Togo.						
(3) SSA stands for Sub-Saharan Africa. The selected SSA countries include Burkina Faso, Cape Verde, Comoros, Djibouti, Ethiopia, Guinea, Guinea Bissau, Kenya, Madagascar, Mali, Mauritania, Mauritius, Niger, Rwanda, Senegal, South Africa, and Zimbabwe.						
Note: A zero figure represents the value of the given indicator for the <i>median</i> country worldwide. The higher the value of the indicator, the stronger the institutional quality.						

Sources: Kaufmann, Kraay, and Mastruzzi (2004), and author's computations.

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