# Trade Openness, the Rule of Law and Economic Performance: Is There a Link?

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*The African Growth and Opportunity Act (AGOA) offers incentives for Sub-Saharan African countries to continue their efforts to open their economies and build free markets. By law, AGOA beneficiary countries are required to undergo an annual review to determine whether they are making progress toward establishing a market-based economy, the rule of law and political pluralism, free trade, and economic policies that aim to reduce poverty and to protect workers rights. This article examines the literature linking trade openness, the rule of law, and economic performance, and the implications for Sub-Saharan Africa.*

## *Introduction*

On May 18, 2000, the African Growth and Opportunity Act (AGOA) was enacted, providing expanded trade benefits for 48 eligible Sub-Saharan African (SSA) countries. AGOA expands the U.S. Generalized System of Preferences (GSP) by authorizing the President to provide duty-free and quota-free treatment for certain goods produced in eligible SSA countries under certain conditions. On an annual basis, the AGOA countries must undergo a review to determine whether they are making progress toward a market-based economy, the rule of law and political pluralism, free trade, and economic policies that support economic growth, reduce poverty, and protect workers rights.[2]

On March 14, 2002, President Bush further proposed the creation of a new program--the Millennium Challenge Account (MCA). The proposed initiative represents a new approach toward the provision and delivery of U.S. development assistance by tying increased assistance to performance and creating new accountability for developing countries. The MCA proposes to increase current levels of core development assistance by 50 percent over the next 3 years, providing an annual increase of $5 billion by fiscal year 2006. These funds are to be channeled only to those developing countries that demonstrate a strong commitment to the rule of law, transparency, economic freedoms, and investment in their people.[3]

These recent developments have generated questions about the link between trade openness, the rule of law, and economic performance. This article attempts to address these questions by reviewing the literature on policies, institutions, and economic growth and development. This growing body of research covers a number of topics, including the sources of institutional differences across countries, the mechanisms through which institutions may affect economic performance, and the quantitative importance of these links. One major conclusion to emerge from this literature is that trade openness and a strong rule of law contribute to faster economic growth, higher living standards, and long-term progress toward achieving democracy and freedom, although questions remain about the various methodologies employed to determine such linkages.[4]

In developing countries such as South Korea, Taiwan, Mexico, and Chile, trade liberalization has

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[2] For more information about the African Growth and Opportunity Act, see USITC, *U.S. Trade and Investment with Sub-Saharan Africa*, Inv. No. 332-415, Publication 3552, December 2002.

[3] R. Glenn Hubbard, Chairman, Council of Economic Advisers, "The Millennium Challenge Account: Taking Governance and Growth Seriously," speech given at the conference "Making Sustainable Development Work: Governance, Finance and Public-Private Cooperation," Washington, D.C., July 12, 2002, found at Internet address *http://www.whitehouse.gov/cea/millenniumchallengeacct_july122002.pdf*, retrieved on June 10, 2003.

[4] For a review of the literature, see A. Berg and A. Krueger, "Trade, Growth and Poverty: A Selective Survey," IMF Working Paper, WP/03/30, February 2003.

supported political and economic reform. Among developed countries, a firm commitment to the rule oflaw forms the foundation of the legal systems in place. In contrast, among SSA countries, transparency, due process, and judicial review are in most cases the exception rather than the norm (figure 1).[5] The shortcomings in this area are widely regarded as an impediment to attracting foreign direct investment (FDI), which in turn, may stimulate economic growth.[6] If more FDI is desired (which could be a basis for increased trade), countries in Sub-Saharan Africa need to strengthen the core principles of their legal systems by adopting more transparent regulatory procedures (an effective antidote to government corruption), due process protections, and more meaningful judicial reviews.[7]

A recent study by the International Monetary Fund (IMF) examines the link between institutions and economic performance, and finds that raising Africa's institutions up to developing Asian countries' standards could raise SSA income per capita by 80 percent, from an average of about $800 to more than $1,400. Furthermore, raising the quality of institutions in SSA to the world average could raise future per capita income growth for the SSA region by almost 2 percent per year. The authors conclude that while institutional reform is a complex, long-term, and "difficult to implement" endeavor, the potential benefits of reforming institutions in SSA are quite substantial.[8]

For developing countries, trade reform is more effective when it is combined with sound macroeconomic policies and institutions. In addition, liberalizing countries must have appropriate infrastructure and institutions in place for generating adequate supply responses. A supportive external environment is also important, as market access constraints may prevent developing countries from reaping the full benefits of trade reform.[9] In July 2002, the African Union (formerly the Organization of African Unity) adopted a new integrated framework for African development–the New Partnership for Africa's Development or NEPAD. The following section describes this new framework, and its peer review process which is designed to make governments in Africa more accountable and transparent. Recent economic developments in the SSA region are also discussed.

## *Economic Growth in Africa*

According to the IMF, economic growth rates for Sub-Saharan Africa averaged 2.9 and 3.5 percent for 2000 and 2001 respectively. During this period, growth in Sub-Saharan Africa was largely unaffected by the global economic slowdown, primarily because of improved security, increased macroeconomic stability and debt relief under the Highly Indebted Poor Countries (HIPC) initiative. However, growth rates for Sub-Saharan Africa declined slightly in 2002, largely due to a decline in oil production in Nigeria, adverse weather conditions resulting in significantly lower levels of agricultural production, famine in southern Africa, and political instability in Zimbabwe and Côte d'Ivoire and the effect on neighboring economies, in particular, its effect on land-locked countries dependent on port facilities in Abidjan, Côte d'Ivoire.

The IMF has predicted an improvement in economic growth for Sub-Saharan Africa in 2003. However, this prediction is dependent on two factors: an early improvement in weather conditions and a marked improvement in the security situation in the western part of Africa. Governance problems are also of some concern, and the IMF report underscores the need for stronger legal institutions, enforcement capabilities, and greater transparency in Sub-Saharan Africa to achieve higher growth rates and economic development.

The Millennium Development Goals (MDGs) were drafted in September 2000 as part of the Millennium Challenge Account initiative and endorsed by the international community in a series of United Nations summits. The MDGs call for reducing poverty and hunger in Africa to half the 1990 level by the year 2015. The goals also call for significant improvements in health, education, gender equality, and environmental protection. The IMF stresses that in order to achieve these goals, economic growth in Sub-Saharan Africa must be accelerated to levels close to those experienced in developing countries in Asia over the past two decades. This can be achieved with a substantial improvement in the investment climate in Sub-Saharan Africa.

The New Partnership for Africa's Development was launched in 2001 as a comprehensive, integrated strategic framework for African socioeconomic development, and adopted in July 2002 by the African

[5] Information on the rule of law measure presented in figure 1 is provided in box 2.

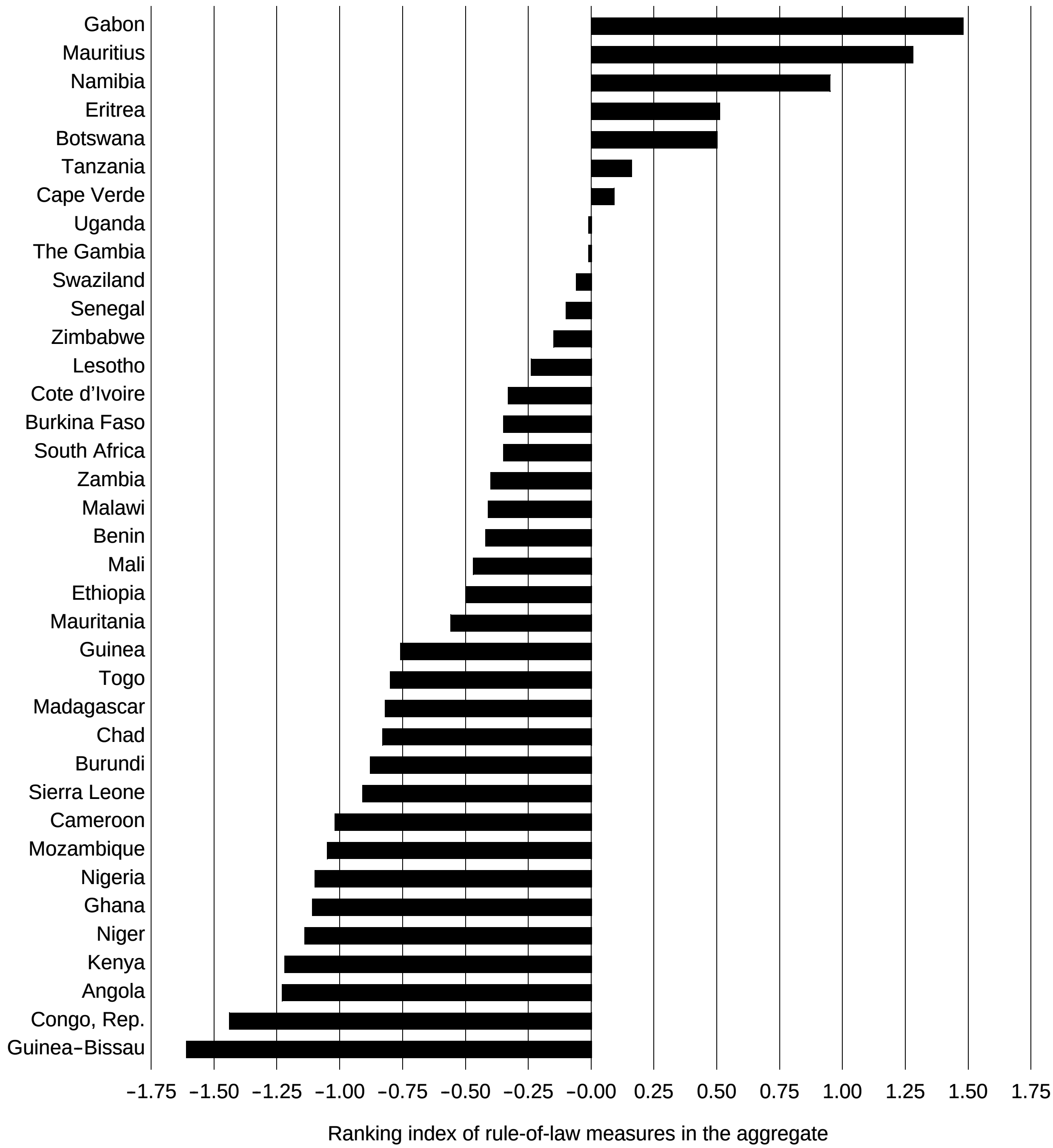
[6] Hernando de Soto, *the Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*, Basic Books, 2000.

[7] Clayton Yeutter and Warren Maruyama, "Place the Rule of Law at the Heart of Trade," *Financial Times*, Feb. 17, 2003.

[8] International Monetary Fund, *World Economic Outlook*, April 2003 (IMF: Washington DC, 2003), pp. 43-46.

[9] Ademola Oyejide, "Trade Reform for Economic Growth and Poverty Reduction," World Bank Institute Development Outreach, World Bank, July 2003, found at *http://www1.worldbank.org/devoutreach/article.asp?id=204*, retrieved on July 15, 2003.

**Figure 1**
**Rule of Law in Sub-Saharan Africa**




Source: Aggregate rule of law measure by Kaufmann, Kraay, and Zoido-Lobatón, "Governance Matters," *World Bank Policy Research Working Paper 2196,* October 1999.

Union at its inaugural summit in Durban, South Africa. As Africa's framework for promoting economic development and strengthening partnerships with the international community, it is widely regarded in the international community as a tool for achieving political and economic progress in Sub–Saharan Africa. The partnership, which emphasizes an improved investment climate in Sub-Saharan Africa, requires action in a host of areas including restoring peace and political stability; improving infrastructure, health and education; strengthening public service delivery; liberalizing markets; improving governance; and addressing the HIV/AIDS pandemic. A common element running through these areas is a strengthening of institutions, an issue to which NEPAD gives particular attention. NEPAD seeks to promote accelerated economic growth and sustainable economic development; eradicate widespread poverty; and to stop the marginalization of Africa in the globalization process.[10] A key factor to economic growth, as envisioned in NEPAD, is the more efficient spread of wealth through the generation of resources, which can be achieved through increased trade, domestic savings, and foreign direct investment, which in turn, can be affected by trade policy changes such as the African Growth and Opportunity Act (AGOA).[11]

For many leaders in Africa, NEPAD is seen as a tool designed to "correct" for decisions made in the past which prevented African countries from taking advantage of globalization's increasingly free flow of goods, services, people, and information. These leaders view NEPAD as "Africa's practical and determined response" to past and present problems, designed to "radically change the paralysis" underlying previous development schemes. In this view, NEPAD represents "a new era in economic and social transformation" sweeping the African continent.[12] However, without strong institutions and the will to make them work, the goal of a democratic, representative government with the rule of law may remain elusive for much of the Sub-Saharan Africa continent.[13]

[10] During the past two years, AGOA, by offering favorable trade benefits to SSA countries, has stimulated the export sectors of reforming countries in Sub-Saharan Africa, increased foreign direct investment flows to Sub-Saharan Africa, and increased employment and output in certain industries. Although AGOA-related investment is primarily concentrated in southern Africa and in the textile and apparel industry, examples of AGOA-related investment has occurred across the continent in a number of other sectors. For more information, see USITC, *U.S. Trade and Investment with Sub-Saharan Africa*, Inv. No. 332-415, December 2002, chapters 2, 4 and 5.

[11] For additional information, see chapter 2, USITC, *U.S. Trade and Investment with Sub-Saharan Africa*, Inv. No. 332-415, Publication 3552, December 2002.

[12] U.S. Department of State, Bureau of International Information Programs, "NEPAD Evokes Hope, Skepticism from U.S. Officials," *The Washington File*, found at *http://www.usinfo.state.gov*, retrieved on May 23, 2003.

[13] U.S. Department of State, Bureau of International Information Programs, "Challenging African Democracy", *The Washington File*, found at http://usinfo.state.gov, retrieved on June 2, 2003.

The NEPAD initiative differs from previous initiatives in that it includes a peer review process–the African Peer Review Mechanism (APRM) designed to make governments in Africa more accountable and transparent. However, a major criticism of the peer review process is that it remains voluntary. Despite this criticism, NEPAD is seen by many in the international community as an opportunity for leaders in Sub-Saharan Africa to reverse Africa's marginalization from the global economy. As of mid-July 2003, 16 SSA countries had formally committed to accede to the African Peer Review Mechanism.[14] Under the terms of a memorandum, signatories will undergo an initial review within 18 months of signing the memorandum, and further regular assessments will be conducted. Other member states of the African Union can demand additional reviews, in particular, if a country shows signs of political or economic crisis. To achieve its goals, the NEPAD initiative has to be integrated into national policies, drawing upon wider participation by civil society and clear commitments to institutional and policy reforms.[15] The following section examines the link between policies, institutions, and economic performance, and the implications for Sub-Saharan Africa.

## *The Rule of Law, Trade Openness and Economic Growth*

A resurgence of attention to the enormous disparities in income across countries has resulted in a growing body of research into the link between policies, institutions, and economic performance. In this context, differences in income growth across countries appear to be closely correlated with measures of trade openness and institutional quality.

Table 1 presents summary statistics on economic outcomes, institutions, and policies for advanced economies, developing economies, and SSA economies taken from the IMF report. Box 1 presents alternative approaches to defining the rule of law. Box 2 provides describes a widely accepted method for measuring the rule of law. The data in table 1 show that stronger economic outcomes for the advanced countries are consistently associated with higher quality of institutions and policies. The data also show

[14] The fifteen countries are Burkina Faso, Cameroon, Republic of Congo, Ethiopia, Gabon, Ghana, Kenya, Mali, Mauritius, Mozambique, Nigeria, Rwanda, Senegal, South Africa, and Uganda plus Algeria in North Africa.

[15] For further details on NEPAD, see "The New Partnership for Africa's Development" at Internet address *http://www.nepad.com*.

**Table 1**
**Selected Summary Statistics[1]**

| Variable | Advanced economies | Developing economies | Sub-Saharan Africa |
|---|---|---|---|
| **Economic outcomes** | | | |
| Real GDP per capita[2] ........ | $23,498 | $1,589 | $803 |
| Growth volatility[3] ............. | 2.63 | 5.03 | 5.80 |
| Average growth rate[4] ........ | 2.98 | 1.23 | 0.53 |
| **Institutional measures** | | | |
| Aggregate governance[5] ..... | 1.25 | –0.28 | –0.49 |
| Property rights[6] .............. | 4.64 | 3.00 | 2.68 |
| Executive constraint[7] ........ | 6.35 | 3.47 | 2.85 |
| **Policies** | | | |
| Trade openness[8] ............ | 92.31 | 25.24 | 12.59 |
| Inflation[9] ...................... | 6.88 | 19.36 | 16.24 |
| Exchange rate[10] ............. | 104.64 | 121.87 | 136.61 |

[1] Mean values.

[2] Real GDP per capita in 1995 (IMF, 2003).

[3] Average standard deviation of real GDP per capita growth over 1960–1998 (IMF, 2003).

[4] Average annual growth rate of real GDP per capita over 1960–1998 (IMF, 2003).

[5] Ranking index of institutional performance (Kaufmann, Kraay, and Zoido-Lobatón, 1999).

[6] Quality of property rights protection (Heritage Foundation, 2003).

[7] Constraints on power of the national executive (Polity IV project).

[8] Percent of years since 1960 classified as “open” (Sachs and Warner, 1995).

[9] Average inflation over 1960–1998 in natural logarithms (IMF, 2003).

[10] Real effective exchange rate overvaluation (IMF, 2003).

Source: IMF, *World Economic Outlook*, April 2003, p. 122.

SSA countries perform relatively poorly under most measures of economic outcomes, institutions, and policies.

Research indicates that growth-enhancing policies, including trade openness and human capital accumulation, are less likely to be effective in countries with weak institutions. However, a number of studies also suggest causality in the opposite direction, that is, from institutions to policies, with the effectiveness and sustainability of policies depending on the quality of the institutions in place. In practice, this two-way causality between institutions and policies makes it difficult for researchers to identify their respective contributions to economic development.[16] Thus, this remains an empirical question.

In a recent paper, Berg and Krueger (2003) review two strands of the empirical literature–one strand focusing on the relationship between trade openness and levels of income across countries, and the second strand focusing on the link between changes in openness and changes in per capita GDP through time. A major finding of this review is that cross-country variation in the level of income depends on trade openness. However, a number of questions have been raised about the methodologies employed; problems measuring the variables of interest; causality; as well as the difficulties of separating the links between trade and growth from policies, including the rule of law, that typically accompany more open trade regimes. A second finding is that trade openness is often highly correlated with institutional quality, broadly defined in terms of the importance of the rule of law and the effectiveness of government.

The second strand of the empirical literature attempts to unravel this colinearity of trade openness and institutional quality across countries. This literature avoids the difficulties associated with distinguishing the role of slowly changing institutional factors from openness by looking at differences across countries over time. The main finding is that changes in trade volumes are highly correlated with changes in growth.

[16] IMF, *World Economic Outlook*, April 2003, p.104.

## Box 1
## What exactly is "the rule of law?"

According to Matthew Stephenson–a researcher at Harvard University, Department of Government and Law School–the term "rule of law" originated in normative writings on law and government, principally by authors in the West who tailored the term to fit their personal vision of the "ideal" or "just" state.[1] As a result, a survey of how the term has been used in Germany, France, the United Kingdom, and the United States concludes that it "belongs to the category of open-ended concepts which are subject to permanent debate." Despite the multiplicity of definitions of the "rule of law," however, most can be classified according to whether they emphasize formal characteristics, substantive outcomes, or functional considerations.

Formal definitions use the presence or absence of specific, observable criteria of the legal system. Although there is not a definitive list of formal criteria, and different formal definitions may use different standards, what these definitions have in common is that the "rule of law" is measured by how well the law or legal system conforms to these explicit standards. Examples of commonly used criteria are a formal, independent and impartial judiciary; laws that are public; the absence of laws that apply only to particular individuals or classes; the absence of retroactive laws; and provisions for judicial review of government action.

An alternative approach to defining the rule of law is one that looks to substantive outcomes such as "justice" or "fairness." This approach does not place much emphasis on formal rules, except to the extent that they contribute to the achievement of a particular substantive goal of the legal system. Whereas the formal approach eschews value judgements, the substantive approach is driven by a moral vision of the good legal system, and measures the rule of law by how close the system being assessed comes to this ideal. A third approach is similar to the substantive approach, but attempts to avoid the normative issues by focusing on how well the law and legal system perform a specific function, most often the constraint of government discretion, making legal decisions predictable, or some combination of both. An example of a functional definition is the view that a society in which government officials have little or no discretion has a high level of rule of law, whereas a society in which government officials wield a large amount of discretion has little or no rule of law.[2]

Thus, the term "rule of law" is difficult to define. It transcends "laws on the books", focusing more on the application of the law and on the performance of the legal and judiciary institutions. The quality of the enforcement of the law is at least as important as the extensiveness of the law. Good laws cannot substitute for the absence of effective legal institutions. The reliability of the legal and judicial institutions affects business confidence and the preparedness of business to fulfill social and environmental responsibilities. A legal system that applies the rule of law and protects property fairly and predictably generates confidence and attracts quality investors who care about social responsibility. Laws that directly influence corporate social responsibility include contractual law, corporate law, tax laws, bankruptcy laws, fiduciary responsibilities of managers, rules governing shareholder "voices", and class-action lawsuits.[3]

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[1] Matthew Stephenson, "The Rule of Law as a Goal of Development Policy," Harvard University, Department of Government and Law School, found at *http://www1.worldbank.org/publicsector/legal/ruleoflaw2.htm*, retrieved on May 28, 2003.

[2] For further details, see Stephenson article.

[3] World Bank, "Brief description of various sessions in Corporate Social Responsibility Diamond Module", found at *http://www.worldbank.org*, retrieved May 28, 2003.

## Box 2
## How is "the rule of law" measured?

Over the past two decades, legal and judicial reform has become an issue of global importance, underscoring the need for a well-designed set of baseline data, impact indicators, project management indicators and performance indicators. Without these essential statistics, measuring the impact of these initiatives would not be possible. A number of international organizations, political and business risk rating agencies, think-tanks, nongovernmental organizations, and researchers have produced indicators that attempt to measure the degree to which a country enjoys the rule of law. The rule of law indicators are based on information obtained through surveys, and polls of country experts.

In a recent World Bank paper "Governance Matters II," Kaufmann, Kraay, and Zoido-Lobatón, construct a broad measure of the rule of law.[1] The measure is an aggregation of several indicators, ranging from ratings by country experts to survey results, which measure the extent to which agents have confidence in and abide by the rules of society. The rule-of-law measure reflects the perception of the incidence of violent and non-violent crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts. Given the subjective nature of the underlying polls and surveys, it is possible the responses to questions on institutions are influenced by the respondents' perception of the policies in place. However, this is the best set of institutional measures.

The authors report the estimates as well as the standard deviations of this conditional distribution to provide a measure of the level of confidence that can be attached to the estimates. The size of the confidence intervals differ across countries and are large relative to the unit in which the rule of law is measured. Therefore, the authors emphasize that cross-country comparisons of the quality of governance should be made with considerable caution since small differences are not likely to be statistically significant, whereas large differences are more likely to be statistically significant.[2]

[1] For a description of the methodology see Daniel Kaufmann, Aart Kraay, and Pablo Zoido–Lobatón, "Governance Matters," *World Bank Policy Research Working Paper 2196*, October 1999.

[2] For more information, see Daniel Kaufmann, Aart Kraay, and Pablo Zoido–Lobatón, "Governance Matters II: Updated Indicators for 2000/01," *World Bank Policy Research Working Paper 2772*, February 2002.

Berg and Krueger (2003) note that trade is one aspect of the development process, and that a strong institutional environment with respect for the rule of law is central. However, they argue, openness is a contributor to a strong institutional environment. Trade raises the visibility of failure in other areas, and raises the marginal product of other reforms. For example, improvements in infrastructure, telephones, roads, and ports may translate into better performance of the export sector, which in turn, may raise productivity for domestic goods. Trade openness may also change the political reform dynamic by creating constituencies for further reforms.

A recent study by the IMF examines the link between the rule of law and economic performance.[17] The authors conduct an empirical analysis and find a strong positive correlation between the rule of law and economic performance, providing support for the argument that well-functioning legal institutions and a government bound by the rule of law are fundamental factors for economic and social development, because people are reluctant to invest in nations where they will receive little protection under the law.[18] The correct legal code is critical for efficient financial markets, which in turn are critical for economic development.

The IMF study uses a simple econometric framework to examine the impact of institutions and policies on economic performance in 94 countries.[19] The empirical analysis focuses on the impact of institutions and policies on three measures of economic performance--economic development, measured as the logarithm of real per capita GDP in 1995; growth, measured as the average growth rate of per capita GDP over the 1960-1998 period; and volatility of growth, measured as the standard deviation of the growth rate of per capita GDP over the 1960-1998 period. The Sachs and Warner (1995) measure of trade openness and the Kaufmann, Kraay, and Zoido-Lobatón (1999) measure of the rule of law are included in this regression.[20]

Consistent with the literature,[21] the results show that the rule of law has a statistically significant impact on all three measures of economic performance. However, the trade openness variable was not statistically significant when controlling for quality of institutions. The authors caution that the modeling strategy employed and close correlation between policy variables and institution measures make it difficult to make any strong conclusions about the separate contributions of the rule of law and trade openness on economic performance.

This issue is illustrated for a group of Sub-Saharan Africa countries in figures 2, 3, and 4. Figures 2 and 3 show simple correlations between economic growth and trade openness; and economic growth and the rule of law, respectively, for 36 countries in Sub-Saharan Africa. In each case, there is a positive association. However, as illustrated in figure 4, there is also a positive relationship between trade openness and the rule of law. As previously noted, this close association hampers the ability of researchers to draw concrete inferences about individual contributions of policies and institutions to economic growth.[22] The evidence suggests a two-way causality link between trade openness and the rule of law. The implications for SSA countries are that sound policies must be supported and sustained by strong institutions. However, weak institutions may reduce the chance of good policies being adopted or may undermine their effectiveness.

[17] The IMF report examines the link between a number of institutional quality indicators and economic performance. For further details, see IMF, *World Economic Outlook*, April 2003.

[18] In some specific contexts, external incentives may also assist the drive for stronger domestic institutions. For example, for countries in Sub-Saharan Africa, external incentives–such as AGOA, MCA, and NEPAD–may help in promoting stronger institutions and faster economic growth.

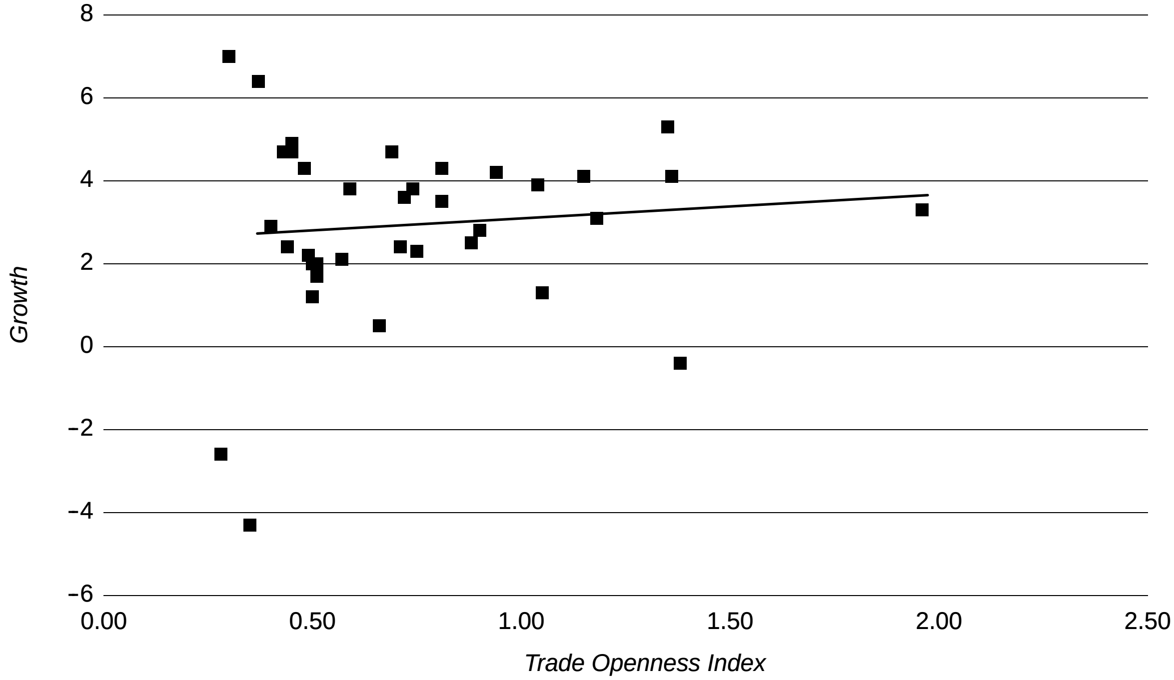
[19] The sample includes 25 advanced economies and 69 developing economies, including 30 SSA countries.

[20] The Sachs and Warner (1995) index of trade openness indicates the degree of integration of the goods market. The index is measured as the fraction of years from 1960 to 1998 that the economy has been open, on a (0,1) scale. A country is defined to be open if it satisfies all the following criteria: (1) nontariff barriers cover less than 40 percent of trade; (2) average tariffs are less than 40 percent; (3) the black market premium was less than 20 percent during the 1970s and the 1980s; (4) the economy is not socialist; and (5) the government does not control major exports through marketing boards. The Kaufmann, Kraay, and Zoido-Lobatón (1999) rule of law measure indicates the level of protection for persons and property against violence or theft; independence and effectiveness of the judiciary; and enforcement of contracts. This measure is based on a model that aggregates ratings by country experts and survey information.

[21] See Rodrik, Subramanian, and Trebbi (2002), Easterly and Levine (2003), and Berg and Krueger (2003).

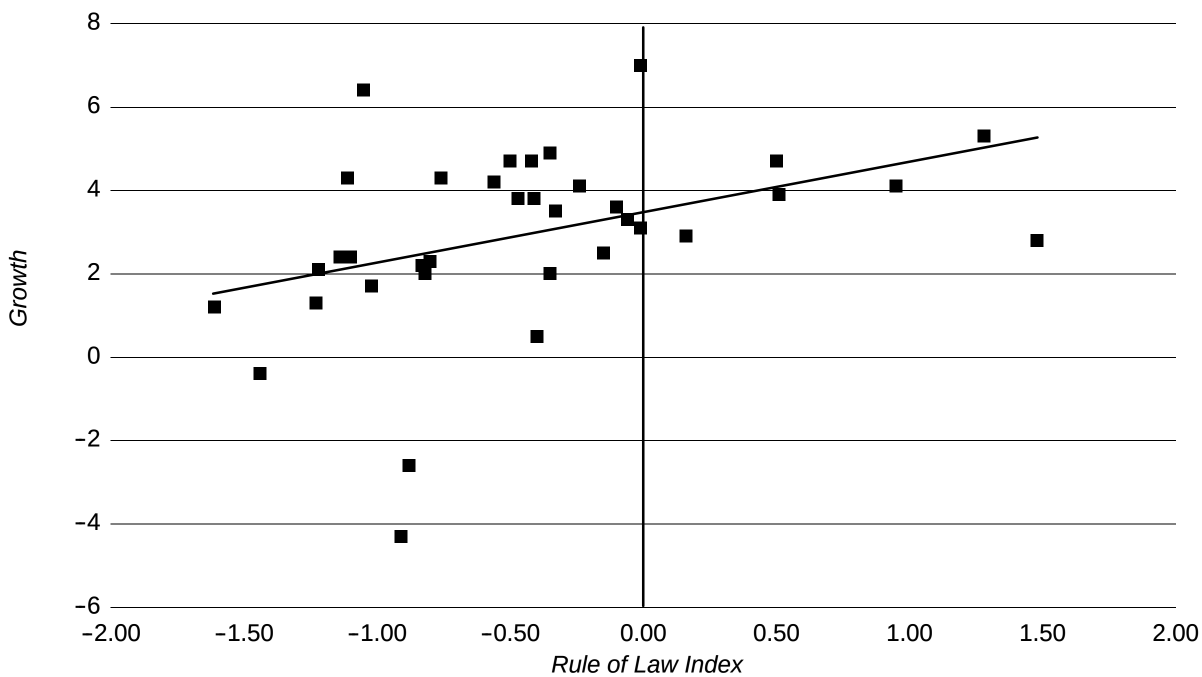
[22] Hall and Jones (1999) aggregate indicators of openness and institutional quality into a measure of “social infrastructure” and find this measure to be strongly related to cross-country differences in the level of income per capita.

**Figure 2**
**Trade Openness vs Growth for SSA countries**



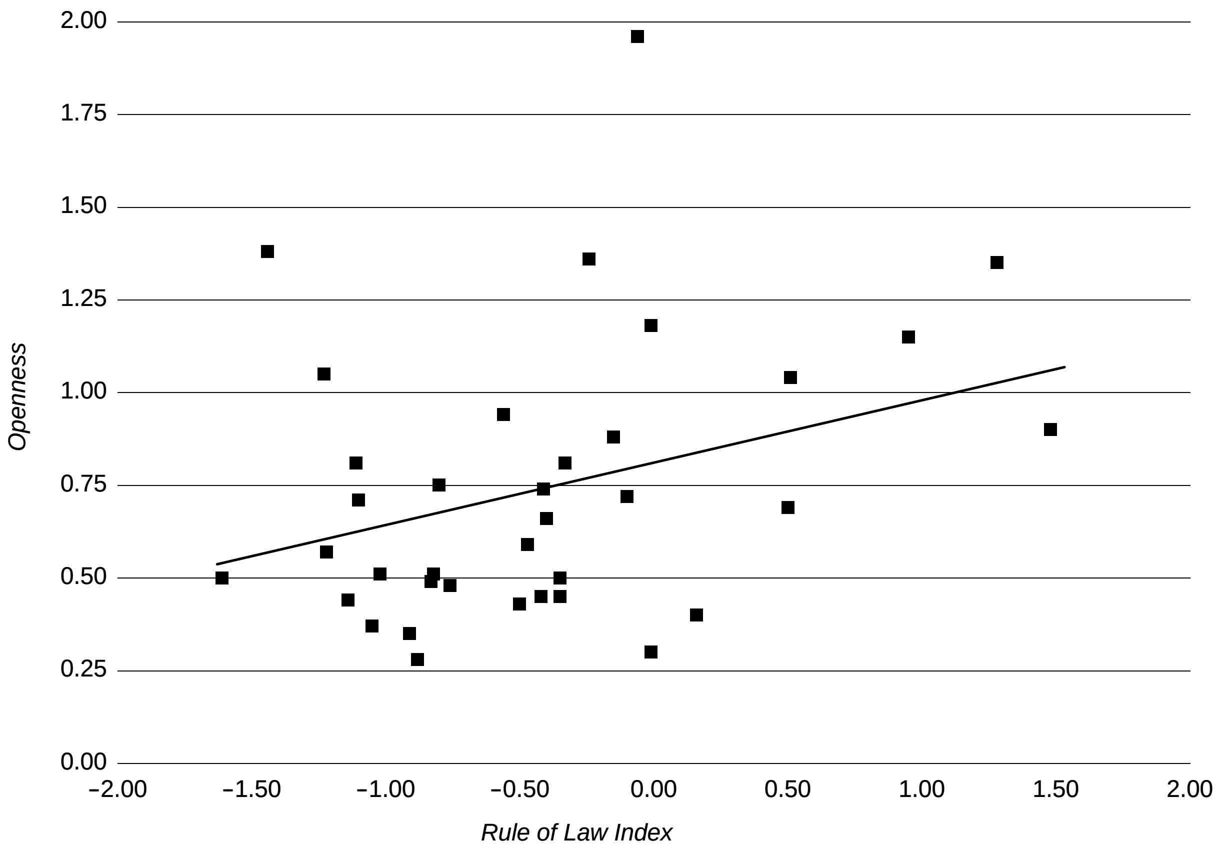

Source: IMF staff calculations of trade openness measured as a share of total trade to GDP, based on World Bank data; and average annual growth rates 1990-2000, based on World Bank, World Development Indicators database.

**Figure 3**
**Rule of Law vs Growth for Sub-Saharan African countries**




Source: Aggregate rule of law measure by Kaufmann, Kraay, and Zoido-Lobatón, "Governance Matters," *World Bank Policy Research Working Paper 2196,* October 1999; and average annual growth rates 1990-2000, based on World Bank, World Development Indicators database.

**Figure 4**
**Rule of Law vs Trade Openness for Sub-Saharan African countries**




Source: Aggregate rule of law measure by Kaufmann, Kraay, and Zoido-Lobatón, "Governance Matters," *World Bank Policy Research Working Paper 2196,* October 1999; and IMF staff calculations of trade openness measured as share of total trade to GDP, based on World Bank data.