# Economic Freedom of The World 2000 Annual Report

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# **Acknowledgments**

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James Gwartney

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#### **About the Authors**

James Gwartney is a Professor of Economics at the DeVoe L. Moore Center, Florida State University. He is currently serving a two-year term as Chief Economist with the Joint Economic Committee (JEC) of the United States Congress. He has a doctoral degree in economics from the University of Washing-ton. Along with Richard Stroup and Russell Sobel, he is the author of Economics: Private and Public ChoiceAmerican Economic Review, Journal of Political Economy, Industrial and Labor Relations Review, Cato Journal, and Southern Economic Journal.

Professor Gwartney has been involved in this project since the early 1990s. Most of his work on this publication was prior to his appointment to the JEC. The views expressed in this publication represent those of the authors. They do not necessarily represent those of the JEC, its Chairman, Vice-Chairman, or any member of the Committee.

Robert Lawson is an Associate Professor of Economics at Capital University in Columbus, Ohio; he taught previously at Shawnee State University. He earned his B.S. from the Honors Tutorial College at Ohio University in 1988 and his M.S. (1991) and Ph.D. (1992) from Florida State University. He has published articles in several journals, including Public Choice, the Journal of Labor Research, and the Journal of Public Finance and Public Choice. Professor Lawson has written extensively on public policy issues such as welfare reform, Medicaid, tax policy, and prevailing wage regulations. He also serves as the Director of Fiscal Policy Studies for the Buckeye Institute for Public Policy Solutions in Dayton, Ohio.

**Dexter Samida** is a Research Economist at The Fraser Institute. He majored in economics at the Uni-versity of Saskatchewan, from which he received his B.Comm. (high honours) with Great Distinction in 1997. He obtained his M.A. in Economics from the University of Toronto in 1998. In the summer of 1997, he worked as an intern at The Fraser Institute, where he did research on taxation in Canada. He recently published A Hand Out Instead of a Hand Up: Where Foreign Aid Fails (Public Policy Sources 30, The Fraser Institute) and was co-author of Provincial Economic Freedom in Canada 1981-1998 (Fraser Institute Critical Issues Bulletin). He has written articles on economic freedom and poverty, provincial economic freedom, foreign aid, international trade, and consumerism. Some of his work has appeared in national newspapers such as the National Post, as well as in regional papers, such as the Vancouver Province. Mr Samida is a native of rural Saskatchewan.

# **About the Participating Institutes**

#### Co-publishers of Economic Freedom of the World

#### ACER, Albania

The Albanian Center for Economic Research is a public-policy institute that focuses on research and advocacy activities. In addition to providing policy makers and academics with applied economic research, it works to build public understanding of economic development issues. (E-mail: <a href="mailto:zefi@qske.tirana.al">zefi@qske.tirana.al</a>)

#### African Research Center for Public Policy and Market Process, Kenya

The African Research Center for Public Policy and Market Process, Kenya, is the first research centre founded in Africa by the African Educational Foundation for Public Policy and Market Process, an independent educational organization registered in the United States. The primary mission of the Center and the Foundation is to promote ideas about free markets and voluntary associations in Africa. The Center seeks to conduct research on all aspects of free markets, voluntary association, and individual liberty, and to disseminate the results to as wide an audience as possible. The Center also organizes seminars and conferences to examine issues related to liberty and enterprise in Africa. (E-mail: <a href="mailto:kimenyi@kippra.or.ke">kimenyi@kippra.or.ke</a>)

#### Association for Liberal Thinking, Turkey

The Association for Liberal Thinking is a non-profit, non-governmental organization seeking to introduce the liberal democratic tradition to the Turkish public. It engages in activities that promote the understanding and acceptance of ideas like liberty, justice, peace, human rights, equality, and tolerance. It encourages development of academic writing on liberal themes that will improve the ability of the Turkish people to assess contemporary domestic and international changes and attempts to find effective solutions to Turkey's problems within liberal thought. The Association for Liberal Thinking is not involved in day-to-day politics and has no direct links to any political party or movement. Instead, as an independent intellectual group, it aims to set and influence broader political agendas so as to contribute to the liberalization of Turkey in economics and politics. (E-mail: liberal@ada.net.tr)

#### Association pour la Libert Economique et le Progres Social (ALEPS), France

The objective of ALEPS is to promote the idea of free markets generating social progress. It connects French liberal intellectuals with the world scientific community. Thanks to its permanent contacts with various prestigious foreign institutes, in 1990 ALEPS published "Manifeste de l'Europe pour les Europeens," signed by 600 faculties from 28 countries.

The economic collapse of central planning and the disappearance of totalitarian regimes in Eastern Europe has not solved all social problems. The post-socialist society remains to be set up. This requirement in Eastern Europe is also needed in Western countries, such as France, where 40 years of the welfare state have led to mass unemployment, fiscal oppression, a social security explosion, an increase in poverty and inequality, and a loss of moral virtues and spiritual values. ALEPS provides the political and intellectual push for this necessary revival.

#### Cato Institute, United States of America

Founded in 1977, the Cato Institute is a public policy research foundation dedicated to broadening the parameters of policy debate to allow consideration of more options consistent with the traditional American principles of

limited government, individual liberty, free markets, and peace. To that end, the Institute strives to achieve greater involvement by the intelligent, concerned lay public in questions of policy and the proper role of government through an extensive program of publications and seminars. (E-mail: <a href="mailto:ivasquez@cato.org">ivasquez@cato.org</a>)

#### Center for the Dissemination of Economic Knowledge (CEDICE), Venezuela

CEDICE is a non-partisan, non-profit, private association dedicated to the dissemination, research, and promotion of philosophical, economic, political, and social thinking that focuses on individual initiative and activities conducive to a better understanding of the free market system and free and responsible societies. CEDICE carries out a variety of activities and programs to meet its objectives, including operating a library and bookstore, researching and writing the Venezuela Today series and other studies, conducting economic training for journalists, and offering special events and community programs. (E-mail: <a href="mailto:hfaria@newton.iesa.edu.ve">hfaria@newton.iesa.edu.ve</a>)

#### Center for the New Europe, Belgium

The Center for the New Europe is a European research institute based in Brussels. It aims to promote the advancement of a market-oriented economy, personal liberty, and creativity and responsibility in an ordered society. CNE is founded on the belief that European integration can work only in a society led by a spirit of democratic capitalism. The Center focuses on developing policy alternatives; encouraging economic growth and deregulation; seeking new market-based solutions for social and environmental concerns; and promoting individual freedom, choice and responsibility.

#### Center for Policy Research, Sri Lanka

The Center for Policy Research (CPR) is a non-partisan advocacy and policy research institute dedicated to fostering democracy and promoting free enterprise. As part of its philosophy, CPR actively takes positions on critical policy reform issues and aggressively lobbies key decision-makers in the country. (E-mail: <a href="mailto:mmoragoda@eureka.lk">mmoragoda@eureka.lk</a>)

#### The Center for Research and Communication, Philippines

The Center for Research and Communication (CRC), which started operations in 1967, conducts research and publishes works on domestic and international economic and political issues, focusing on the Asia-Pacific region. It provides fora for discussion and debate among academicians, businessmen, civil officials, and representatives of other sectors that help shape public opinion and chart the course of policies. CRC, which is the main research arm of the University of Asia and the Pacific in Metro Manila, Philippines, also currently serves as the Secretariat of the Asia Pacific Economic Cooperation (APEC) Business Advisory Council. (E-mail: <a href="mailto:hbasilio@info.com.ph">hbasilio@info.com.ph</a>)

#### Centre for Civil Society, India

The Centre for Civil Society is an independent, non-profit, research and educational organization devoted to improving the quality of life for all citizens of India by reviving and re-invigorating civil society. The focus on civil society enables one to work from both directions; it provides a "mortar" program of building or rebuilding the institutions of civil society and a "hammer" program of readjusting the size and scope of the political society. Both programs are equally critical and must be pursued simultaneously. Weeds of the political society must be uprooted and seeds of a civil society must be sown. The Centre was inaugurated on August 15, 1997, signifying the necessity of achieving economic, social, and cultural independence from the Indian state after attaining political independence from an alien state. The Centre conducts Monthly Dialogues on topical issues to introduce classical liberal philosophy and market-based solutions into public debate. It has published Agenda for Change, a volume in 17 chapters that outlines policy reforms for the Indian government, Israel Kirzner's How Markets Work, and Self-

Regulation in the Civil Society, edited by Ashok Desai. It organizes Liberty and Society seminars for college students and journalists. (Email: <a href="mailto:parth@ccsindia.org">parth@ccsindia.org</a>; website: <a href="mailto:www.siliconindia.com/civil">www.siliconindia.com/civil</a>)

#### Centro de Investigacion y Estudios Legales (CITEL), Peru

CITEL was organized in 1989. Its principal field is the economic analysis of law. To that end, it conducts research on different legal institutions, publishes books, and organizes seminars and colloquia. (E-mail: <a href="mailto:eghersi@computextos.com.pe">eghersi@computextos.com.pe</a>)

#### Centro de Investigaciones Academicas (CIVILIZAR), Colombia

The Centro de Investigaciones Academicas is a private, non-profit economic and social research organization. Established in 1996, the Centro is affiliated with the Sergio Arboleda University of Bogata. It is dedicated to the scientific study of economic and social topics. It defends individual liberty, which it recognizes as a basic principle to guide programs of research and education. The Centro supports research and publishes studies on economic, social, and legal issues in order to promote Colombian economic growth and human development. (E-mail: usa5008@latino.net.co)

#### Centro de Investigaciones Econemicas Nacionales, Guatemala

CIEN, the Center for Research on the National Economy, was established in Guatemala in 1982. It is a private, non-partisan, not-for-profit public policy institute, funded by the sale of its books and periodical publications, income from conferences and seminars, and the support it receives from its members and the public. The Center's program is devoted to the technical study of economic and social problems that need to be resolved to promote the stable development of the nation. Its members, staff, research associates and supporters share the principles of a social order of free and responsible individuals interacting through a market economy functioning within the rule of law. (E-mail: curizarh@cien.org.gt)

#### Centro de Investigaciones sobre la Libre Empresa, A.C., Mexico

The Centro de Investigaciones Sobre la Libre Empresa (CISLE) is a non-profit, educational and public policy organization founded in 1984. Its aim is to defend and promote the ideals of free trade and free enterprise in all areas of society, and it maintains that the fundamental source of well-being and the wealth of nations is a sound institutional order that guarantees competition, private ownership, and open markets. CISLE's activities are financed by a select group of generous donors. (E-mail: <a href="mailto:Ceninves@mail.infolatina.com.mx">Ceninves@mail.infolatina.com.mx</a>)

#### Centrum im. Adama Smitha, Poland

The Centrum im. Adama Smitha, Poland (the Adam Smith Research Centre) is a private, non-partisan, non-profit public-policy institute. It was founded in 1989 and was the first such institute in Poland and in Eastern Europe The ASRC is devoted to the furtherance of a free and fair market economy, participatory democracy, and virtuous society. Its activities in research and development, education, and publishing cover almost all important issues within the areas of economy and social life. The ASRC acts as a guardian of economic freedom in Poland. More than 50 experts are associated with the ASCR. (E-mail: adam.smith@adam-smith.pl) website: www.adam-smith.pl)

#### The Edmund Burke Institute, Ireland

The Edmund Burke Institute is a non-profit and non-political organization that believes that Ireland's political, academic, and cultural leaders have failed to draw the natural conclusions from the collapse of state socialism and the growth of free-market ideas across the industrialized and developing world. It believes that these ideas are

directly relevant to Ireland, and that hostility towards free markets and individual freedom needs to be challenged by an institution that promotes debate and discussion about the role of the state in our lives. (E-mail: <a href="mailto:Paul.MacDonnell@msc.ie">Paul.MacDonnell@msc.ie</a>; internet: <a href="mailto:www.his.com/~chyden/ebi">www.his.com/~chyden/ebi</a>)

#### The Estonian Institute for Open Society Research

The Estonian Institute for Open Society Research was established in 1993 as an independent non-profit public policy research institute. EIOSR's research and public communication programs focus on the key issues of Estonian social and political development: building a free-market economy and open civil society; enhancing social stability and integration of minority groups; and promoting Estonia's integration into European and world structures. EIOSR's first effort was the Estonian translation of Milton Friedman's book, Capitalism and Freedom, in early 1994. Current EIOSR projects include promoting the idea of philanthropy to local businesses and elaborating future scenarios concerning the integration of the Russian minority into Estonian society. (E-mail: volli@lin2.tpu.ee)

#### The F.A. Hayek Foundation, Slovak Republic

The F.A. Hayek Foundation is an independent, non-profit organization that brings together social scientists, business people, and policy makers to exchange their ideas on economic, social, political, and other issues. It provides practical reform proposals for the transition of economics, health, education, social welfare, retirement and legislative systems. The F.A. Hayek Foundation established a tradition that was virtually absent in Slovakia until 1989 - the tradition of liberal thinking and its further cultivation in order to demonstrate market-economy solutions as alternatives to collectivist policies. The Foundation promotes the following liberal ideals: limited government, a free-market economy, and an open society based on the concept of individual choice and personal responsibility. (E-mail: oravec@cenezu.sk)

#### The Fraser Institute, Canada

The Fraser Institute is an independent Canadian economic and social research and educational organization. It has as its objective the redirection of public attention to the role of competitive markets in providing for the well-being of Canadians. Where markets work, the Institute's interest lies in trying to discover prospects for improvement. Where markets do not work, its interest lies in finding the reasons. Where competitive markets have been replaced by government control, the interest of the Institute lies in documenting objectively the nature of the improvement or deterioration resulting from government intervention. The work of the Institute is assisted by an Editorial Advisory Board of internationally renowned economists. The Fraser Institute is a national, federally chartered, non-profit organization financed by the sale of its publications and the tax-deductible contributions of its members. (Email: info@fraserinstitute.ca; website: www.fraserinstitute.ca)

#### The Free Enterprise Commission, Panama

The Free Enterprise Commission is a working group within the Panamanian Association of Executives (APEDE). APEDE is a non-partisan, non-profit association dedicated to the improvement of entrepreneurship, management, and the development of the individual in a free society. As such, APEDE invests a good part of its efforts in education and individual liberties. (E-mail: diabolo@pty.com)

#### The Free Market Foundation of Southern Africa

The Free Market Foundation of Southern Africa was established in 1975 to promote economic freedom. The FMF sponsors and conducts research, conferences, lectures, training programs and lobbying efforts in support of the free market. Its funding comes from membership subscriptions, project sponsorships, and income from sales and fees. (E-mail: <a href="mailto:fmf@jhb.lia.net">fmf@jhb.lia.net</a>)

#### Fundacion Economca y Desarrollo, Inc., Dominican Republic

The Fundacion Economia y Desarrollo, Inc. (FEyD) is a private non-profit organization dedicated to fostering the principles of competitive markets, private enterprise, strategies that promote economic development. To meet its objectives, FEyD has several regular publications in the most important newspapers in the country. It also produces a weekly television program called "Trilogo," a one-hour program that is broadcast three times a week, and elaborates numerous studies related to the performance of the Dominican economy and its sectors. (E-mail: feyd03@tricom.net)

#### Fundacion Libertad, Democracia y Desarrollo, Bolivia

The Fundacion Libertad, Democracia y Desarrollo (FULIDED), is a non-profit organization founded by a group of citizens interested in promoting democracy and freedom. The Foundation has the purpose of investigating, analyzing, and disseminating issues of national priority, keeping in mind that economic, political, and social topics are of great importance in strengthening the free market and private initiative, within the ideal of an open, pluralist, and honest society. Through seminars, debates, and publications, FULIDED seeks to create a climate of opinion reflecting Bolivia's participation in the global economy. (E-mail: <a href="mailto:fulided@cainco.org.bo">fulided@cainco.org.bo</a>)

#### Gruppo Giovani Imprenditori and Centro Luigi Einaudi, Italy

The Gruppo Giovani Imprenditori dell Unione Industriale di Torino was founded in 1959. It is composed of 300 entrepreneurs and managers under the age of 40. A member of the Confederation of Italian Industry, it has always been on the forefront of the liberalization of the Italian economy. Established in 1963, the Centro di Ricerca e Documentazione "Luigi Einaudi" is one of Italy's most influential independent think tanks. Its aim is to further free-market policies and personal freedom, to promote leaner government, and to enhance political pluralism. (E-mail: grusso@iol.it)

#### Hong Kong Centre for Economic Research

The Hong Kong Centre for Economic Research is an educational, charitable trust established in 1987 to promote public understanding of economic affairs and to develop alternative policy choices for government with the aim to promote the free market in Hong Kong. The Centre publishes and promotes authoritative research studies to achieve its goals. It is widely recognized as the leading free-market think-tank in Asia and has been influential in persuading public opinion and the government to liberalize telecommunications, open up air-cargo handling franchises, privatize public housing, adopt a fully funded provident scheme instead of a pay-as-you-go pension scheme, remove legally sanctioned, deposit interest-rate fixing among banks, adopt market mechanisms for protecting the environment, and other public-policy measures in Hong Kong. (E-mail: asiu@econ.hku.hk)

#### Institute for Advanced Strategic and Political Studies, Israel

The mission of the Institute for Advanced Strategic and Political Studies is the development of policies in economics, strategic studies, and politics, directed toward the understanding and realization of limited government in domestic affairs and the balance of power in strategic planning. The Institute's Division for Economic Policy Research (DEPR) produces Policy Studies in both English and Hebrew, while the Division for Research in Strategy and Politics produces one series of documents in strategic studies, and another series in politics. (E-mail: <a href="mailto:iaspsdc@aol.com">iaspsdc@aol.com</a>)

#### The Institute for Economic Freedom, Bahamas

The Institute for Economic Freedom is an independent non-political, non-profit Bahamian institute that promotes economic growth, employment and entrepreneurial activity. It believes that this can best be achieved with a free market economy and a decent society - one that embraces the rule of law, the right of private property, the free exchange of property and services, and the individual virtues of self-control, commitment, and good will. (E-mail: joanmt@bahamas.net.bs)

#### Institute for Economy and Politics (IWIP), Austria

IWIP is an affiliate institute of the Federation of Austrian Industry. Its duty is to give objective information to the general public about the economy, politics, and culture. It supports a social free market economy and protection of the environment. IWIP organizes meetings, workshops, symposiums, and lectures, and is editor of Conturen, a quarterly magazine aimed at the liberal and critical reader who is interested in diverse discussions about the economy, politics, and culture. (E-mail: e.bendl@iv-net.at)

#### Institute for Market Economics, Bulgaria

Established in 1993, IME is the first independent economic think tank in Bulgaria. It is a private, registered, non-profit corporation with a mission to elaborate and advocate market approaches to the problems Bulgaria is facing in its transition to a market economy, thus supporting market reforms. IME's objectives are to provide the following: independent assessment and analysis of the government's economic policies; a focal point for an exchange of views on market economics and relevant policy issues; and an internationally supported Bulgarian think-tank that is widely respected for its expertise. (E-mail: <a href="mailto:svetla@ime.bg">svetla@ime.bg</a>)

#### The Institute of Economic Affairs, England

The IEA's mission is to improve public understanding of the foundations of a free and harmonious society by expounding and analyzing the role of markets in solving economic and social problems, and bringing the results of that work to the attention of those who influence thinking. The IEA achieves its mission by a high quality publishing program; conferences, seminars and lectures on a range of subjects; outreach to school and college students; brokering media introductions and appearances; and other related activities. Incorporated in 1955 by the late Sir Antony Fisher, the IEA is an educational charity, limited by guarantee. It is independent of any political party or group, and is financed by sales of publications, conference fees, and voluntary donations. (E-mail: editor@iea.org.uk)

#### The Institute of Economic Affairs, Ghana

The Institute of Economic Affairs (IEA) Ghana is an independent, non-governmental institution dedicated to the establishment and strengthening of a market economy and a democratic, free, and open society. The IEA was founded in October 1989. It considers improvements in the legal, social, and political institutions as necessary conditions for sustained economic growth and human development. The IEA supports research, and promotes and publishes studies on important economic socio-political and legal issues in order to enhance understanding of public policy. (E-mail: iea@ghana.com)

#### Institute of Economic Analysis, Russia

The Institute of Economic Analysis is a macroeconomic research institute designed to: analyze the current economic situation and policies; provide expert analysis of acts, programs, and current economic policy; consult Russian government bodies, enterprises, and organizations; prepare and publish scientific, research and

methodological economic literature; and conduct seminars, conferences, and symposia on economic topics. The Institute is an independent, non-governmental, non-political, non-profit research centre that works closely with leading Russian and international research centres. Its research focuses on macroeconomic, budget, and social policy. (E-mail: ieamos@glasnet.ru)

#### Institute of Economic Studies, Iceland

The Institute of Economic Studies was founded in 1989. It operates within the Department of Economics in the Faculty of Economics and Business Administration at the University of Iceland. From the outset, the Institute has been active in carrying out applied research projects commissioned by a great variety of private and public clients ranging from small Icelandic interest groups to the Nordic Investment Bank to the governments of Iceland, Denmark, and the Faroe Islands. More recently, funded by research grants, the Institute has put greater emphasis on large-scale applied research projects with substantial analytical content and economic research. (E-mail: tthh@rhi.hi.is)

#### The Institute of Economics, Croatia

The Institute of Economics, Zagreb, established in 1939, is a major scientific and research institution devoted to the study of economic processes and the application of contemporary achievements in economics. The Institute's objective is the economic and social advance of Croatia. Research encompasses both macro-economics and micro-economics, policy issues, including more specialized areas such as business economics; current economic trends, and policies; methods of economic analysis, development of human resources; spatial and regional economics, international economics and technological development, and investment project planning. The Institute engages researchers from both inside and outside the Institute, who work together on research projects. The Institute employs 40 full-time researchers, the majority of whom have completed specialized training courses in foreign countries. Results of the Institute's research activities are published in a considerable number of books, separate reports and studies, and in scientific journals. Close ties are maintained with various specialized international organizations and professional associations and with a number of institutes and universities. (E-mail: <a href="mailto:zbaletic@eizg.hr">zbaletic@eizg.hr</a>)

#### Institute of Macroeconomic Analysis and Development, Slovenia

The Institute of Macroeconomic Analysis and Development (IMAD) is a part of the Ministry of Economic Relations and Development. It plays the key analytical role in preparation of annual memoranda on economic policy and it coordinated the preparation of the Strategy of Economic Development of Slovenia and its Strategy for Accession to the European Union. Its activities also include current analyses of macroeconomic trends and of social, regional, and institutional development; simulations and evaluations of economic and developmental measures; development of methodological tools and information systems. In order to fulfill its tasks, the Institute has around 50 employees, two-thirds of whom are specialists. Its publications, Slovenian Economic Mirror and its Spring and Autumn Reports are translated into English and distributed to a large international audience. IMAD also publishes the international Journal for Institutional Innovation, Development, and Transition (IB Review) and organizes an annual conference on the general topic of Institutions in Transition. (E-mail: rotija.kmet@gov.si)

#### Institute of Public Affairs, Australia

Established in 1943, the IPA is Australia's oldest and largest private-sector think-tank. Its aim is to advance the interests of the Australian people. Those interests include prosperity and full employment, the rule of law, democratic freedoms, security from crime and invasion, high standards in education and family life. To identify and promote the best means of securing these values, the IPA undertakes research, organizes seminars, and publishes widely. (E-mail: <a href="mailto:ipa@ipa.org.au">ipa@ipa.org.au</a>)

#### Instituto Ecuatoriano de Economia Politica, Ecuador

The Instituto Ecuatoriano de Economia Politica (IEEP) is a private, independent, non-profit institution. Its mission is to defend and promote the classical liberal ideals of individual liberty, free markets, limited government, property rights, and the rule of law. The IEEP achieves its mission through publications, seminars, and workshops that debate socio-economic and political issues. The IEEP's funding comes from voluntary donations, membership subscriptions, and income from sales of its publications. (E-mail: <a href="mailto:dampuero@ecua.net.ec">dampuero@ecua.net.ec</a>)

#### Instituto Liberal do Rio de Janiero, Brazil

Instituto Liberal is a non-profit institution supported by donations and the sponsorship of private individuals and corporations. Its by-laws provide for a Board of Trustees as its supreme body, and forbid any political or sectarian affiliations. Its principal objective is to persuade Brazilian society of the advantages of a liberal order. To attain this goal the institute publishes books, organizes seminars, and elaborates policy papers on subjects related to public policy. (E-mail: ilrj@gbl.com.br)

#### Instituto Libertad y Desarrollo, Chile

Libertad y Desarrollo is a private think-tank committed to free market ideas and devoted to research, study, and analysis of public policy issues inspired by political and economic freedom. Libertad y Desarrollo is wholly independent of any religious, political, financial, or governmental groups. (E-mail: <a href="mailto:ega@chilesat.net">ega@chilesat.net</a>),

#### Instituto para la Libertad y el Analisis de Politicas, Costa Rica

The Institute for Liberty Public Policy Analysis (INLAP) is a non-profit, non-partisan organization, created to defend and promote all aspects of individual liberty through public-policy analysis and educational activities. Its specific objectives are (1) to increase awareness of the moral foundations of liberty and to promote liberty as an individual right without which it is impossible to achieve the highest levels of economic and human development and (2) to foster changes in social organization and public policies by influencing the thinking of policy makers, community leaders and citizens at large.

INLAP produces timely analyses of proposed laws, decrees, and regulations, and its specific recommendations provide insight and guidance for elected officials who seek to achieve the goals of greater individual liberty and creativity and a more productive economy. Detailed studies of public policies that have adverse moral or economic effects are published as study materials for academics and others interested in learning the effects of well-meaning but harmful public policies. These studies and recommendations are published in books and technical journals, as position papers and bulletins, as articles in newspapers and magazines, and via the Internet. (E-mail: riggo@attglobal.net)

#### The Korea Center for Free Enterprise

The Center for Free Enterprise (CFE) is a foundation committed to advancing guiding principles such as free enterprise, limited government, freedom and individual responsibilities, the rule of law and restraint of violence. The CFE was inaugurated as a non-profit, independent foundation funded by the members of the Federation of Korean Industries (FKI) on April 1, 1997, when woes over an economic crisis began seriously to plague Korean society. The CFE has concentrated its efforts on championing the principles of a free economy through books and reports on related ideas, philosophies, public policies, statistics and analyses. By holding occasional workshops and policy forums, the CFE has striven to put forward policy alternatives to proposed solutions for pending issues facing the Korean society. (E-mail: <a href="mailto:yooys@cfe.org">yooys@cfe.org</a>)

#### **Liberales Institut, Germany**

The Liberales Institut (Liberty Institute) is the think-tank of the Friedrich-Naumann-Foundation. Based in Berlin and Königswinter, the Institute devotes itself to spreading classical liberal and free-market ideas through the publication of classical liberal literature, the analysis of current political trends, and the promotion of research. By organizing conferences and workshops, the Institute tries to stimulate an intellectual exchange among liberals around the world. (E-mail: <a href="mailto:LibInst@aol.com">LibInst@aol.com</a>)

#### **Liberales Institut, Switzerland**

The Liberales Institut provides a platform where the basic values and concepts of a free society can be discussed and questioned. The Institute's aim is the establishment of free markets, not simply for the sake of having free markets but because they are the best way towards our real goals: openness, diversity, and autonomy. The Liberales Institut is not associated with any political party. Through publications, discussion fora, and seminars, the Institute seeks to foster the development and dissemination of classical liberal ideas. (E-mail: <a href="mailto:libinst@bluewin.ch">libinst@bluewin.ch</a>)

#### Liber In Institut, Czech Republic

The Liberal Institute is an independent, non-profit organization for the development and application of liberal ideas and programs based on the principles of classical liberalism. The Liberal Institute's activities are based on the recognition of the following: each individual has inalienable rights, and the individual's life is valuable; the principle of voluntary action applies in all human activity; the institutions of private property, contract, and the rule of law are essential in the protection of human rights; self-regulating markets, free trade, and a clearly defined government sphere are crucial factors for the development of any society. The Liberal Institute is financed by funds realized from its various activities and by donations from individuals and private corporations. (E-mail: michal.uryc@libinst.cz)

#### Lithuanian Free Market Institute, Lithuania

The Lithuanian Free Market Institute (LFMI) is an independent, non-profit, organization founded in 1990 to promote the ideas of economic liberalism based on the principles of individual freedom and responsibility, free markets, and limited government. The LFMI's staff pursues this mission by exploring key issues of economic policy, developing conceptual reform packages, drafting and evaluating legislation, and submitting policy recommendations at the legislative and executive levels, and launching public educational campaigns. LFMI's activities also include sociological surveys, publications, conferences, workshops, and lectures. Since its inception, LFMI has addressed a variety of core issues confronting the economic reform process: it promoted the idea of a currency board and provided decisive input to the Law on Litas Credibility, led the creation of the legal and institutional framework for the securities market, and initiated the policy-making process on private pension insurance through pension funds. LFMI's recommendations were adopted in legislation on commercial banks, the Bank of Lithuania, privatization, credit unions, insurance, and foreign investment. LFMI influenced strongly the improvement of company and bankruptcy law. The Institute has also developed a conceptual proposal for tax and budget reform and proposals from LFMI were adopted in policy debates on income taxation, real estate tax, and inheritance and gift taxes. Recently, LFMI has initiated a business deregulation process. (E-mail: vaida@lrinka.lt)

#### Making Our Economy Right (MOER), Bangladesh

MOER champions free-market concepts and the freedom of the individual. MOER was founded in 1991, a period that saw the downfall of the communist empire across the globe as well as the fall of Bangladesh's own nine-year military dictatorship. Bangladesh is still a fully statist society where politicians promise jobs and economic development but are unaware that the function of the state and the government is merely to protect individual

freedom, liberty, life, property, and the national geographic boundary. Today, in 1998, there are no dramatic changes towards free-market individualism in Bangladesh but MOER continues its work, writing in the national newspapers and translating free-market literature into Bangla. MOER solicits international support and cooperation in its efforts to liberalize Bangladesh's economy fully and thereby to democratize Bangladesh society. The use of the Internet has been tremendously helpful in our work and we are thankful for the support of the Atlas Economic Research Foundation. (E-mail: <a href="mailto:nizam@moer.org">nizam@moer.org</a>; website: <a href="www.atlas-fdn.org/moer">www.atlas-fdn.org/moer</a>)

#### The New Zealand Business Roundtable

The New Zealand Business Roundtable is an organization of chief executives of about 60 of New Zealand's largest business organizations. Its aim is to contribute to the development of sound public policies that reflect New Zealand's overall interests. It has been a prominent supporter of the country's economic liberalization reforms. (E-mail: 100405.1547@compuserve.com)

#### Szazadveg Institute, Hungary

The Szazadveg Institute is a non-profit organization performing political and economic research, advisory and training activities. This think-tank is independent of the government or any political parties and has been operating as a foundation since its establishment in 1990. Szazadveg endeavours to publish its research results in specific professional and academic areas to the public at large as well as to render professional services in order to support the preparation of decisions by economic institutions, political and civil organizations, political parties, and the government. (E-mail: <a href="mailto:stumpf@bsp.mtapti.hu">stumpf@bsp.mtapti.hu</a>)

#### Timbro, Sweden

Timbro is a Swedish free-enterprise think-tank. Its goal is to mould public opinion favourably toward free enterprise, a free economy, and a free society. Timbro publishes books, papers, reports, and the magazine Smedjan. It also arranges seminars and builds human networks. Founded in 1978, Timbro is owned by the Swedish Free Enterprise Foundation, which has as its principals a large number of Swedish companies and organizations. (E-mail: mattiasb@timbro.se)

#### The Ukrainian Center for Independent Political Research

The Ukrainian Center for Independent Political Research was established in early 1991 as a non-profit, non-partisan, and non-governmental research institution. Its purpose is to enhance the awareness of the Ukrainian people of democracy and to further the analytic research of Ukrainian domestic and international politics and security. The UCIPR is politically independent; it does not accept any funding from either the state or any political party. The UCIPR publishes books and research papers on Ukraine's domestic and foreign policy issues, economy in transition, security doctrine, relations with neighbouring states, the Crimean dilemma, inter-ethnic relations, and media freedom, and so on. The Center has hosted a number of national and international conferences and workshops on the above issues. (E-mail: kam@political.kiev.ua)

D'Letzeburger Land, Luxembourg (letzlan@pt.lu); Fundacion del Orden Social de la Libertad, Argentina (E-mail: libertad@twoer.com.ar); The Institute for Development of Economics and Finance, Indonesia (E-mail: indef@indo.net.id); Liberty Network (LINE), Denmark (E-mail: psj@line.dk); and Bureau d'Analyse d'Ingenierie et de Logiciels (BAILO), Ivory Coast (e-mail: bailo@globeaccess.net) are also members of the Economic Freedom Network; descriptions of their activities will be included in the next issue of Economic Freedom of the World.

## **Executive Summary**

- The index presented in this report represents a continuation of our efforts to develop an objective measure of economic freedom. Ratings are presented for 57 nations in 1970, 83 in 1975, 107 in 1980, 111 in 1985, 115 in 1990, 122 in 1995, and 123 in 1997. This is the first publication to present ratings for 1970. Although more recent data are available for some components, we present 1997 data mainly because the data for that year are virtually complete.
- The summary index is based on 23 components designed to identify the consistency of institutional arrangements and policies with economic freedom in seven major areas. The seven areas covered by the index are: (I) size of government, (II) economic structure and use of markets, (III) monetary policy and price stability, (IV) freedom to use alternative currencies, (V) legal structure and security of private ownership, (VI) freedom to trade with foreigners, and (VII) freedom of exchange in capital markets. Principal component analysis was used to combine the component ratings into area ratings and the area ratings into a summary rating. See Exhibit 1 for a list of the components that make up the index. Appendix 2 contains explanatory notes and data sources for all the components used in the calculation of the index.
- In 1997, the most recent year for which we had complete data, Hong Kong and Singapore shared the top ranking with an economic freedom rating of 9.4 on a scale of 10. New Zealand, the United States, and the United Kingdom were next on the list; these were the five freest economies in the world. Other countries rank ing near the top of the list were Ireland, Canada, Australia, Netherlands, Luxembourg, and Switzerland.
- The least free economies in 1997 were (in order from the bottom of the list) Myanmar, Democratic Republic of Congo, Sierra Leone, Rwanda, Madagascar, Guinea-Bissau, Algeria, Burundi, Republic of Congo, Central African Republic, and Albania. See Exhibit 2 for the complete presentation of the summary ratings for 1997 ranked from highest to lowest. Exhibit 3 presents the summary ratings from 1970 to 1997 alphabetically. Appendix 1 reports the Area ratings for the period from 1970 to 1997.
- A number of Latin American countries have achieved dramatic improvements in both ratings and rankings during the 1990s. Peru, Nicaragua, Argentina, El Salvador, and Dominican Republic all improved their ratings by at least 2 points. The improvement in rankings was even more dramatic. For instance, Argentina went from 71 st to 12 th place.
- Among eastern European nations, Russia, Hungary and Poland have made measured improvements in economic freedom. The Czech Republic, however, has seen its rating stagnate since the mid-1990s.
- This report also presents several bar charts linking the economic freedom summary rating with various measures of economic and social welfare. For instance, Exhibit 4 shows that the nations in the top quintile of the ranking for economic freedom produce a per-capita income of over \$18,000; those in the bottom quintile produce a per-capita income under \$2000. Exhibit 7 shows a 20-year difference in life expectancy between the top and bottom quintiles. See Exhibits 4 through 8 for more details.
- Country Reports have been written for 65 countries. These reports present a bar chart with the country's summary economic-freedom rating and ranking, a bar chart with total government expenditures as a share of GDP, and a written summary of the country's economic freedom performance and prospects.
- Country Data Tables have been constructed that show, for years 1970, 1975, 1980, 1985, 1990, 1995, and 1997, the component ratings (and often also the raw data), the area ratings, and the summary ratings and rankings of all countries evaluated. These data are also available to researchers upon request or can be retrieved from the website www.freetheworld.com.
- Appendix 3 lists some of the many academic books, articles, and studies that have used the various editions of Economic Freedom of the World as source material.

#### Introduction

Economic Freedom of the World: 2000 Annual Report is our latest, most detailed attempt to construct a useful indicator of economic freedom for the nations of the world. More than a decade ago, Michael Walker, the Executive Director of The Fraser Institute of Vancouver, British Columbia, and Nobel laureate Milton Friedman organized a series of conferences with the objective of clearly defining and measuring economic freedom. They were able to attract some of the world's leading economists including Gary Becker, Douglass North, Peter Bauer, and Assar Lindbeck to participate in the series and provide input for the study. These conferences eventually led to the publication of Economic Freedom of the World: 1975-1995 (James Gwartney, Robert Lawson, and Walter Block, eds.) and the organization of the Economic Freedom Network, a collection of over 50 institutes in as many countries. Collectively these institutes assist in the production of each edition of Economic Freedom of the World and share our goal of developing the best possible measure of economic freedom. In 1997, we published Economic Freedom of the World: 1997 Annual Report, and last year Economic Freedom of the World: 1998/1999 Interim Report.1

In his foreword to *Economic Freedom of the World: 1975-1995*, Milton Friedman indicated that the indexes presented in that publication had brought the quest for an objective measure of economic freedom to a "temporary conclusion." Amplifying this statement, Professor Friedman indicated that subsequent studies would "surely make revised editions necessary, both to bring the indexes of economic freedom up-to-date and to incorporate the additional understanding that will be generated." The measures developed in this publication are indicative of this evolutionary process. They reflect improved knowledge about how to measure economic freedom and the development of a more complete data set for the achievement of that purpose. They represent movement to a new level.

The core ingredients of economic freedom are personal choice, protection of private property, and freedom of exchange. Individuals have economic freedom when: (a) their property acquired without the use of force, fraud, or theft is protected from physical invasions by others and (b) they are free to use, exchange, or give their property to another as long as their actions do not violate the identical rights of others. Like a compass, this concept of economic freedom has directed our work.

# Methodology of the Index

From the very beginning, our goal was the development of an objective measure of economic freedom rather than an index based on subjective assessments and "judgment calls." Therefore, the foundation of our index is a range of objective components that reflect the presence (or absence) of economic freedom. These components can be derived for a large number of countries from regularly published sources. This will make it possible both to calculate the index for earlier time periods and to update it regularly. We also wanted to combine the components into a summary index in a sound, objective manner. The measures presented in this report are an additional step in this direction. They are more comprehensive and based on more complete data than any prior measure of economic freedom; and they use value-free statistical procedures. Still, they are transparent. It is easy to see precisely how the various indexes are constructed, what data they reflect, and which factors produce rating differences across countries and time periods.

As Exhibit 1 illustrates, the index comprises 23 components designed to identify how consistent institutional arrangements and policies in seven major areas are with economic freedom. The seven areas covered by the index are: (I) size of government, (II) economic structure and use of markets, (III) monetary policy and price stability, (IV) freedom to use alternative currencies, (V) legal structure and security of private ownership, (VI) freedom to trade with foreigners, and (VII) freedom of exchange in capital markets.

Areas I and II are indicators of reliance on markets rather than the political process (large government expenditures, state-operated enterprises, price controls, and discriminatory taxes) to allocate resources and determine the distribution of income. Areas III and IV reflect the availability of sound money. Area V focuses on the legal security of property rights and the enforcement of contracts. Area VI indicates the consistency of policies with free trade. Area VII is a measure of the degree to which markets are used to allocate capital. Reliance on markets, sound money, legal protection of property rights, free trade, and market allocation of capital are important elements of economic freedom captured by the index. Of course, we recognize that economic freedom is heterogeneous and highly complex. No single statistic will be able to capture fully and accurately its many facets. However, the index outlined in Exhibit 1 does encompass key ingredients of the concept.

Our work on the measurement of economic freedom is an ongoing project. This publication represents an update and refinement of *Economic Freedom of the World:* 1998/1999 Interim Report, in which we altered the structure of the index and added (and in some cases deleted) components. We also changed the methodology for converting raw data to the zero-to-10 index ratings and for generating weights for the summary ratings to a more value-neutral procedure. The 1998/1999 Interim Report was the subject of the annual meeting of the Economic Freedom Network in Manila, Philippines, in November 1998. We were able to listen to, and reflect upon, many comments made by the representatives of the participating institutes of the Economic Freedom Network and, as a result, several minor changes were made to this edition of *Economic Freedom of the World*.

We had hoped - and, indeed, still hope - to add an area to this index that measures regulation of the labour market but we have not yet found satisfactory data available on a scale that is wide enough, both geographically and over time, to do so. We have, however, constructed this index back to 1970 to aid in the long-term study of economic freedom. Obviously, the data are less complete in the earlier years than the later years but, nevertheless, we believe this index can become a useful tool in analyzing the impact of economic freedom (or lack thereof) in the longer run.

There are 125 nations included in this study. However, as the result of incomplete data or other factors (e.g., the split up of Czechoslovakia), we were only able to derive summary ratings for 123 countries in 1997, 122 in 1995, 115 in 1990, 111 in 1985, 109 in 1980, 83 in 1975, and 57 in 1970. Data were assembled for each of the 23 components of the index. Since we wanted the ratings to be easily comparable across countries and time periods,

they were placed on a scale from zero to 10. Higher ratings are indicative of institutions and policies more consistent with economic freedom.

How were the ratings derived? The ratings for 11 of the 23 components in the index reflect various categorical characteristics; those for the remaining 12 are based on continuous data. Countries with categorical characteristics more consistent with economic freedom are given higher ratings. For example, countries with few government enterprises are given higher ratings than those with widespread use of such enterprises. Similarly, countries where price controls are absent (or apply in only a few markets) are given higher ratings than countries where these controls are extensively applied.

Depending upon whether higher values are indicative of more or less economic freedom, alternative formulas are used to transform the 12 continuous variables into a zero-to-10 scale. When higher values are indicative of more economic freedom, the formula used to derive the zero-to-10 ratings is:  $(V_i - V_{min}) / (V_{max} - V_{min})$  multiplied by 10.  $V_i$  is the country's actual value for the component, Vmax the maximum value for a country during the 1990 base year, and  $V_{min}$  the minimum base-year value for the component. This formula is used to derive the ratings for all years. A country's rating will be close to 10 when its value for the component is near the base-year maximum. In contrast, the rating will be near zero when the observation for a country is near the base-year minimum. As the actual values exceed the base-year minimum by larger and larger amounts, ratings will rise from zero toward 10. Whenever the actual value for the component is equal to, or greater than, the base-year maximum, a rating of 10 is assigned. When the actual value is equal to, or less than, the base-year minimum, the rating is zero.

Often times, higher actual values are indicative of less economic freedom. Inflation and size of the transfer sector provide examples. Increases in these variables reflect reductions in economic freedom. When higher values for a component are indicative of less economic freedom, the formula used to derive the zero-to-10 ratings is:  $(V_{max} - V_i) / (V_{max} - V_{min})$  multiplied by 10. This formula will assign higher ratings to countries with actual values closer to the base-year minimum. In some cases, component values of zero represent an ideal - a benchmark that should be required for a rating of 10. For example, a zero mean tariff rate and a zero rate of inflation (perfect price stability) are benchmark outcomes representing maximum economic freedom. When zero represents an ideal benchmark value, this value was included as Vmin in the formula even if no country actually achieved this ideal during the base year. In some cases where extreme component values are present (for example, a 10,000 percent rate of inflation), Vmax is constrained at a level clearly warranting a rating of zero even if this was not the maximum observed value during the base year. If this had not been done, extreme observations would have created such a large range that the ratings would have been concentrated near 10. The precise formula used to derive the zero-to-10 ratings for each component is presented in Appendix 2, Explanatory Notes and Data Sources

The procedures used to convert the continuous component values to the zero-to-10 ratings have two important characteristics. First, if all (or almost all) countries improve (or regress) with the passage of time, the ratings will reflect the change. Second, the distribution of the country ratings along the zero-to-10 scale reflects the distribution of the actual values among the countries.

Principal-component analysis was used to determine the weight given to each component in the construction of the area index. This procedure partitions the variance of a set of variables and uses it to determine the linear combination - the weights - of these variables that maximizes the variation of the newly constructed principal component. In effect, the newly constructed principal component - an area rating, for example - is the variable that most fully captures the variation of the underlying components. It is an objective method of combining a set of variables into a single variable that best reflects the original data. The procedure is particularly appropriate when several sub-components measure different elements of a principal component. This is precisely the case with our index. Economic theory is a road map indicating components that are likely to capture various elements of a broader area (a principal component). In turn, principal-component analysis indicates the permissibility of grouping components together and the weights most appropriate to combine a set of sub-components into a principal component. In Exhibit 1, the component weights derived by this procedure are shown in parentheses; e.g. (50%). The same procedure was also used to derive the weights for the area components in the construction

of what we will refer to as the summary index. In Exhibit 1, the weights for each of the seven areas are shown in bold-face type and enclosed within brackets: e.g. [11.0%].

# **Exhibit 1: Components of Index of Economic Freedom**

I Size of Government: Consumption, Transfers, and Subsidies	[11.0%]
A General Government Consumption Expenditures as a Percent of Total Consumption	(50%)
<b>B</b> Transfers and Subsidies as a Percent of GDP	(50%)
II Structure of the Economy and Use of Markets (Production and allocation via governmental and political mandates rather than private enterprises and markets)	[14.2%]
A Government Enterprises and Investment as a Share of the Economy	(32.7%)
<b>B</b> Price Controls: Extent to which Businesses Are Free to Set Their Own Prices	(33.5%)
C Top Marginal Tax Rate (and income threshold at which it applies)	(25.0%)
<b>D</b> The Use of Conscripts to Obtain Military Personnel	(8.8%)
III Monetary Policy and Price Stability (Protection of money as a store of value and medium of exchange)	[9.2%]
<b>A</b> Average Annual Growth Rate of the Money Supply during the Last Five Years minus the Growth Rate of Real GDP during the Last Ten Years	(34.9%)
<b>B</b> Standard Deviation of the Annual Inflation Rate during the Last Five Years	(32.6%)
C Annual Inflation Rate during the Most Recent Year	(32.5%)
IV Freedom to Use Alternative Currencies (Freedom of access to alternative currencies)	[14.6%]
A Freedom of Citizens to Own Foreign Currency Bank Accounts Domestically and Abroad	(50%)
<b>B</b> Difference between the Official Exchange Rate and the Black Market Rate	(50%)
V Legal Structure and Property Rights (Security of property rights and viability of contracts)	[16.6%]
A Legal Security of Private Ownership Rights (Risk of confiscation)	(34.5%)
<b>B</b> Viability of Contracts (Risk of contract repudiation by the government)	(33.9%)
<b>C</b> Rule of Law: Legal Institutions Supportive of the Principles of Rule of Law and Access to a Nondiscriminatory Judiciary	(31.7%)

VI International Exchange: Freedom to Trade with Foreigners  A Taxes on International Trade	[17.1%]
i Revenue from Taxes on International Trade as a Percent of Exports plus Imports	(23.3%)
ii Mean Tariff Rate	(24.6%)
iii Standard Deviation of Tariff Rates	(23.6%)
<b>B</b> Non-tariff Regulatory Trade Barriers	
i Percent of International Trade Covered by Non-tariff Trade Restraints	(19.4%)
ii Actual Size of Trade Sector Compared to the Expected Size	(9.1%)
VII Freedom of Exchange in Capital and Financial Markets	[17.2%]
A Ownership of Banks: Percent of Deposits Held in Privately Owned Banks	(27.1%)
<b>B</b> Extension of Credit: Percent of Credit Extended to Private Sector	(21.2%)
C Interest Rate Controls and Regulations that Lead to Negative Interest Rates	(24.7%)
<b>D</b> Restrictions on the Freedom of Citizens to Engage in Capital Transactions with Foreigners	(27.1%)

Note: The numbers in parentheses, e.g. (27.1%), indicate the weights used to derive the area rating. The numbers in the brackets, e.g. [17.2%], indicate the percentage weight allocated to each area when the summary rating was derived. These weights are derived by principal component analysis.3

# **Economic Freedom of the World, 1970-1997 Ratings**

Exhibit 2 shows the area and summary economic freedom ratings for 1997, sorted from highest to lowest. 4 Consistently high-ranking Hong Kong shares the title of freest economy this year with Singapore. Hong Kong has been the top-ranked economy in our study for almost every measure-ment period (except 1980 when it ranked second).

The top five after Hong Kong and Singapore are New Zealand, the United States, and the United Kingdom. Other notable countries (ranks) are: Canada (7), Ireland (6), Chile (18), Japan (14), Sweden (25), South Korea (47), Czech Republic (51), Israel (66), China (75), and Russia (93). Myanmar (formerly Burma) ranks last with a rating of just 2.1

Exhibit 3 shows the summary ratings from 1970 to 1997 as well as the change in summary ratings in the 1990s where data are available. The economic freedom index suggests that economic freedom has been on the increase in almost all countries around the world in the 1990s.

For more information about specific countries please turn to the country report and country data-table sections of this volume. For selected countries, country reports have been written. These reports give a commentary on background information regarding the level of economic freedom in that country and, in some cases, prospects for future changes in economic freedom. The country data-tables contain the underlying component ratings used to calculate the summary ratings for all of the countries.

Appendix 1 shows the ratings for each of the seven areas that combine to form the overall summary ratings for the period from 1970 to 1997. Appendix 2 reports the details of each component's rating methodology and source.

Appendix 3 is a listing of selected publications that have utilized the sum-mary ratings from various editions of Economic Freedom of the World.

**Exhibit 2: Economic Freedom Ratings, 1997/1998** 

	233		03	23	23		0							
The State of Participation of the State of t	0	2	4	6	8	11		94000000	0	2	-4	6	8	10
Hong Kong							9.4	Egypt 6				- 16		6.6
Singapore						-0.0	9.4	Lithuania (						6.6
New Zealand							9,1	Turkey (						5.6
United States							9.0	Israel 6						6.5
United Kingdom						. 10	8.9	Sri Lanka 6						6.5
ireland							8.7	Ghana 6				_		6.4
Australia					_		8.6	Namibia (				- 12		5.4
Canada							8.6	Barbados						6.3
Luxembourg							8.5	Belize						6.3
Netherlands	LLIVA				-	8	8.5	Maita						6.3
Switzerland	Ø.31					1	8.5	Stovenia						5.3
Argentina 1							B.4	Tunisia	2007			.047		6.3
Denmark 1							8.4	China						6.2
Belgium 1							8.3	Guyana						6.2
El Salvador 1							8.3							6.2
Japan 1							8.3							6.1
Panama 1							8.3	Jordan						6.1
Chile 1							8.2	Slovakia						6.1
Finland 1							8.2	Uganda						6.1
Spain 1							8.2	Morocco 8						6.0
Thailand 1							8.2	Poland 8	The State of					6.0
Costa Rica 2							8.1	Venezuela 8	0.65					6.0
Germany 2							8.1	Brazil I						5.9
Norway 2							8.1	India 8	500.4					5,8
Austria 2	7.10						8.0	Cote d'Ivoire 8						5.7
Bolivia 2					100		8.0	Colombia 8						5.6
France 2							0.8	Pakistan 8 Papua New Guinea I						5.6 5.6
Icetand 2							0.8	Tanzania 8						5.6
Portugal 2							0.8	Zambia 9						5.5
Sweden 2 Bahrain 3					10		8.0	Russia 9						5.4
							7.9	Bangladesh S						5.3
Italy 3					100		7.9	Bulgaria 9						5.3
Peru 3	VC 171						7.9	Nepal 1						5.3
Philippines 3							7.7	Cameroon 9						5.1
Mexico 3 Mauritius 3							7.6	Gabon						5.1
40.000.000.000.000.000												315.1		5.0
Oman 3					-4		7.6	Zimbabwe 9						5.0
Paraguay 3 Kuwait 3	D a				-8		7.6 7.5	Benin 1						4.9
Malaysia 3	0				-8		7.5	Niger 10						4.8
Trinidad & Tob. 3					-0		7.5	Croatia 10						4.7
Greece 4					200		7.4	Mali 10						4.7
60000000000000000000000000000000000000	53.00				133		7.4	Nigeria 10						4.7
Guatemala 4 Hungary 4							7.4	Senegal 10						4.7
Jamaica 4							7.4	Matawi 10						4.6
Uruguay 4	2				100		7.4	Romania 10						4.6
South Africa 4					100		7.3	Togo 1						4.6
South Korea 4							7.3	Chad 1						4.5
Indonesia4					15		72	Ukraine 1						4.5
Unit. Arab Em. 4					200		72	Syria 1	2.000					4.4
Czech Rep. 5					38		7.1	Albania 1						4.3
Taiwan 5							7.1	C. African Rep. 1						4.3
							7.0	Burundi 1						4.2
Dominican Rep. 5 Ecuador 5							7.0	Cango, Rep. of 1						4.2
Honduras 5	(0) 7				70.00		7.0	Algeria 1						4.1
Nicaragua 5								Guinea-Bissau 1						4.0
Cyprus 5	7.				50		6.8	Madagascar 1						3.9
Estonia 5	1						6.8	Rwanda 12						3.7
Kenya 5							6.8	Sierra Leone 12						3.2
Bahamas 6							6.7	Congo, Dem. R.12						3.1
Latvia 6							6.7	Myanmar 12						2.1
Botswana 6							6.6	Somal						NR
Docswana 0	f. 5			- 2			0.0							77777

**Exhibit 3: Summary Economic Freedom Ratings, 1970 to 1997** 

	1970	1975	1980	1985	1990	1995	1997	Change during 1990s
Albania	NR	NR	NR	NR	2.9	5.0	4.3	1.3
Algeria	NR	NR	4.7	4.2	2.7	3.6	4.1	1.4
Argentina	6.6	3.2	4.8	3.8	4.9	7.9	8.4	3.5
Australia	8.1	6.9	7.4	7.8	8.1	8.6	8.6	0.5
Austria	7.2	6.2	6.8	6.9	7.6	7.8	8.0	0.3
Bahamas	NR	6.4	6.0	6.4	6.0	6.2	6.7	0.7
Bahrain	NR	NR	7.6	7.4	7.4	7.9	7.9	0.6
Bangladesh	NR	2.9	2.9	3.3	3.7	4.1	5.3	1.6
Barbados	NR	5.5	5.7	6.2	6.2	6.4	6.3	0.1
Belgium	9.3	7.8	8.0	8.1	8.1	8.2	8.3	0.3
Belize	NR	NR	5.5	5.1	5.3	6.1	6.3	1.0
Benin	NR	5.1	4.9	4.8	5.7	4.7	4.9	-0.8
Bolivia	NR	NR	4.0	4.0	6.5	7.9	8.0	1.5
Botswana	NR	3.9	4.7	5.6	6.0	6.8	6.6	0.7
Brazil	5.6	4.5	4.1	3.2	4.4	5.4	5.9	1.5
Bulgaria	NR	NR	NR	NR	3.8	5.2	5.3	1.3
Burundi	NR	3.2	3.2	4.1	3.9	3.5	4.2	0.4
Cameroon	NR	NR	5.1	5.2	5.5	5.2	5.1	-0.4
Canada	8.1	7.7	8.0	8.2	8.5	8.4	8.6	0.2
Central African Rep.	NR	NR	5.2	4.6	4.4	4.4	4.3	-0.1
Chad	NR	NR	NR	5.2	5.2	5.1	4.5	-0.6
Chile	3.7	3.7	5.9	6.0	7.4	8.2	8.2	0.8
China	NR	NR	3.5	4.4	4.2	5.6	6.2	2.0
Columbia	5.1	4.7	4.6	5.2	5.1	6.4	5.6	0.5
Congo, Dem. Rep.	4.6	3.2	2.7	3.7	3.2	3.2	3.1	-0.1
Congo, Rep. of	NR	NR	5.1	4.4	4.4	4.8	4.2	-0.2
Code d'Ivoire	NR	NR	4.9	5.4	4.9	5.2	5.7	0.8
Croatia	NR	NR	NR	NR	NR	4.3	4.7	
Cyprus	NR	6.3	5.8	5.8	5.9	6.6	6.8	0.8
Czech Rep.	NR	NR	NR	NR	3.9	6.8	7.1	3.3
Denmark	7.6	6.7	6.8	6.9	7.7	8.1	8.4	0.6
Dominican Rep.	NR	3.9	5.3	5.2	4.1	6.3	7.0	2.9
Ecuador	3.9	5.8	6.0	4.5	5.3	6.7	7.0	1.7
Egypt	NR	4.2	4.1	4.6	4.3	6.0	6.6	2.3
El Salvador	NR	NR	3.7	4.3	5.0	8.0	8.3	3.3

F-4	NID	NIC	NID	NID	ND	C 4	C C	
Estonia	NR	NR	NR	NR	NR	6.1	6.8	
Fiji	NR	5.0	5.3	5.4	5.7	6.1	6.1	0.4
Finland	8.1	6.7	7.1	7.4	7.7	8.1	8.2	0.5
France	7.3	6.3	6.3	6.4	7.8	8.1	8.0	0.2
Gabon	NR	NR	3.8	5.2	5.2	5.7	5.1	-0.1
Germand	8.2	7.7	7.8	7.9	8.3	8.2	8.1	-0.1
Ghana	3.3	2.5	2.1	2.6	4.8	6.1	6.4	1.5
Greece	6.3	5.8	5.7	5.2	6.1	6.8	7.4	1.3
Guatamala	6.4	7.3	6.5	5.6	6.5	7.7	7.4	0.9
Guinea-Bissau	NR	NR	NR	NR	3.8	4.1	4.0	0.2
Guyana	NR	NR	NR	4.1	NR	5.9	6.2	
Haiti	NR	NR	5.4	5.7	4.7	4.6	6.2	1.5
Honduras	NR	8.1	5.5	5.5	6.2	6.9	7.0	0.8
Hong Kong	9.4	9.3	9.6	9.3	9.3	9.8	9.4	0.1
Hungary	NR	NR	4.8	4.8	4.9	6.8	7.4	2.5
Iceland	6.4	4.4	5.5	5.7	7.5	8.1	8.0	0.6
India	4.0	3.6	4.3	4.1	4.1	5.0	5.8	1.8
Indonesia	4.8	5.0	5.2	5.9	6.8	7.3	7.2	0.4
Iran	6.2	6.2	3.4	3.4	4.3	3.9	5.0	0.8
Ireland	6.8	6.2	6.6	6.7	7.3	8.6	8.7	1.4
Israel	4.8	4.4	4.0	4.4	4.8	6.3	6.5	1.7
Italy	6.8	5.5	5.5	6.0	7.4	7.5	7.9	0.5
Jamaica	NR	5.0	4.1	5.1	5.7	7.3	7.4	1.7
Japan	7.3	7.0	7.4	7.7	8.3	8.2	8.3	0.0
Jordan	NR	5.6	5.6	6.1	4.9	6.1	6.1	1.2
Kenya	5.0	4.8	4.8	5.1	5.1	6.2	6.8	1.7
Kuwait	NR	NR	5.1	7.1	5.8	7.1	7.5	1.7
Latvia	NR	NR	NR	NR	NR	5.7	6.7	
Lithuania	NR	NR	NR	NR	NR	5.7	6.6	
Luxembourg	9.1	8.8	9.0	9.4	8.3	8.4	8.5	0.2
Madagascar	5.6	4.1	4.1	4.4	3.8	3.9	3.9	0.0
Malawi	NR	5.0	3.9	4.4	4.7	4.1	4.6	-0.1
Malaysia	6.5	6.4	7.1	7.3	7.7	7.6	7.5	-0.2
Mali	NR	4.8	5.3	5.3	5.0	5.1	4.7	-0.2
Malta	6.2	5.6	5.2	5.1	5.2	6.5	6.3	1.1
Mauritius	NR	4.6	4.7	6.4	6.0	7.9	7.6	1.6
Mexico	7.0	5.7	4.9	4.5	6.4	7.4	7.7	1.3
Morocco	5.5	4.9	4.0	4.8	4.6	5.9	6.0	1.4

Myanmar	NR	NR	2.4	2.1	1.3	1.6	2.1	0.9
Namibia	NR	NR	NR	NR	5.2	5.3	6.4	1.2
	NR	NR	5.4	5.4	4.9	5.2	5.3	0.4
Nepal								
Netherlands	8.6	7.4	7.8	7.8	8.1	8.4	8.5	0.5
New Zealand	7.0	6.0	6.4	6.2	8.1	9.1	9.1	1.0
Nicaragua	NR	7.6	3.7	2.0	2.9	5.7	6.9	4.1
Niger	NR	5.5	5.1	5.0	4.4	4.6	4.8	0.4
Nigeria	4.0	3.8	3.1	3.6	3.6	3.4	4.7	1.0
Norway	7.0	6.1	6.2	6.8	7.7	8.1	8.1	0.4
Oman	NR	NR	6.6	7.5	6.8	7.7	7.6	0.8
Pakistan	3.6	2.9	3.5	4.2	4.4	5.6	5.6	1.2
Panama	NR	7.7	6.7	7.0	6.9	8.1	8.3	1.5
Papua New Guinea	NR	4.6	6.9	6.3	6.0	5.9	5.6	-0.4
Paraguay	NR	NR	6.2	6.0	6.3	7.8	7.6	1.3
Peru	4.7	3.5	3.4	2.3	3.7	7.5	7.9	4.2
Philippines	5.1	4.9	5.1	4.9	5.6	7.7	7.9	2.3
Poland	NR	NR	NR	3.5	4.0	6.4	6.0	1.9
Portugal	5.6	3.4	5.6	5.7	6.4	7.8	8.0	1.7
Romania	NR	NR	NR	3.5	4.2	4.5	4.6	0.5
Russia	NR	1.8	1.8	1.8	1.7	5.0	5.4	3.7
Rwanda	NR	2.1	3.7	NR	3.9	3.9	3.7	-0.1
Senegal	NR	NR	5.0	4.9	5.0	4.2	4.7	-0.3
Sierra Leone	NR	3.9	4.1	3.0	2.9	3.7	3.2	-0.3
Singapore	7.7	7.6	8.0	8.4	9.1	9.4	9.4	0.3
Slovakia	NR	NR	NR	NR	3.9	6.2	6.1	2.2
Slovenia	NR	NR	NR	NR	NR	5.6	6.3	
Somalia	NR	NR	NR	3.3	NR	NR	NR	
South Africa	7.6	6.2	6.0	5.6	5.9	6.6	7.3	1.5
South Korea	6.3	5.6	5.7	6.0	6.6	7.7	7.3	0.7
Spain	6.5	5.9	6.2	6.3	7.0	7.9	8.2	1.3
Sri Lanka	NR	NR	4.2	4.8	4.5	6.3	6.5	2.0
Sweden	6.2	6.2	6.3	7.0	7.5	7.9	8.0	0.4
Switzerland	8.9	8.0	8.4	8.7	8.6	8.5	8.5	-0.1
Syria	4.3	5.4	3.5	2.9	2.8	3.9	4.4	1.6
Taiwan	6.6	6.1	6.8	7.1	7.6	7.8	7.1	-0.5
Tanzania	4.3	3.2	4.1	3.0	3.5	5.0	5.6	2.0
Thailand	6.4	5.6	5.8	6.1	6.8	7.6	8.2	1.4

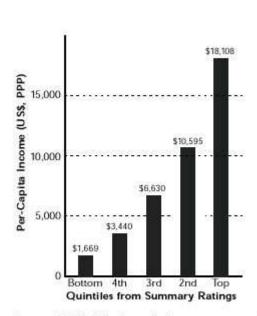
Trinidad & Tobago	NR	4.7	5.0	4.8	5.4	7.2	7.5	2.1
Tunisia	4.3	4.5	4.4	4.1	5.0	6.1	6.3	1.3
Turkey	3.0	3.3	3.3	4.5	5.1	6.3	6.6	1.3
Uganda	NR	NR	2.8	2.7	2.7	4.6	6.1	3.5
Ukraine	NR	NR	NR	NR	NR	3.1	4.5	
<b>United Arab Emriates</b>	NR	NR	6.1	6.9	7.6	NR	7.2	-0.5
United Kingdom	6.6	5.9	6.8	8.2	8.6	8.8	8.9	0.3
United States	8.0	8.1	8.5	8.6	8.8	8.9	9.0	0.1
Uruguay	NR	6.5	6.3	6.8	6.9	7.2	7.4	0.6
Venezuala	7.8	6.5	6.9	5.8	5.8	4.5	6.0	0.2
Zambia	NR	4.3	4.7	3.1	2.5	4.5	5.5	2.9
Zimbabwe	NR	NR	4.1	4.0	4.5	5.4	5.0	0.4

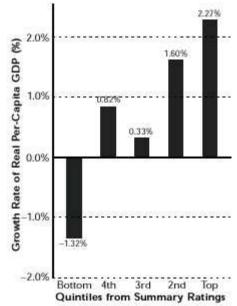
# **Economic Freedom and Economic Performance**

Although the economic freedom index has been designed as a measurement of economic freedom in its own right, we recognize the interest in how the index correlates with other measures of human well-being. Exhibit 4 shows the relationship be-tween the 1997 Summary Rating and the level of GDP per capita (measured in purchasing power parity US dollars). The countries were grouped into quintile groups for easy comparison. The re-lationship between the economic freedom rating and income is quite striking. Greater economic freedom is strongly related with higher levels of in-come. Exhibit 5 shows the same economic free-dom quintiles with the rate of economic growth in the 1990s. The general pattern repeats itself when looking at economic growth.

Exhibit 4 Economic Freedom and Income, 1995–1997

Exhibit 5 Economic Freedom and Economic Growth during the 1990s

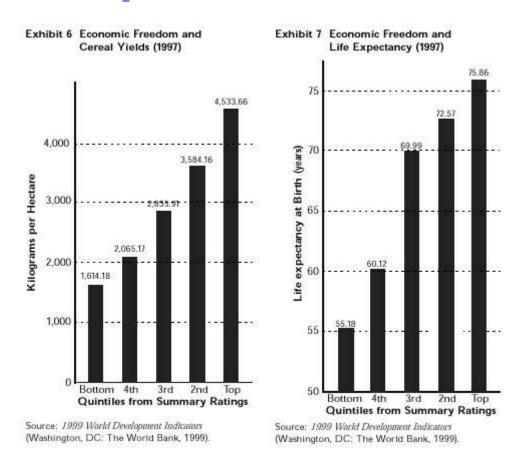




Source: 1999 World Development Indicators (Washington, DC; The World Bank, 1999). Source: 1999 World Development Indicators (Washington, DC: The World Bank, 1999).

# **Economic Freedom and Social Welfare**

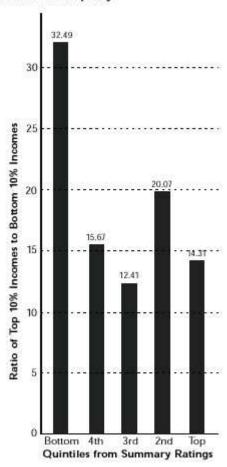
Economists have been criticized, perhaps justifiably, for considering only the material side of things. This section presents some simple charts that relate the economic freedom ratings to nonmonetary aspects of human wellbeing. Exhibit 6 shows the relationship between the five economic freedom quintiles and cereal production per hectare. Again we see a clear positive relationship. Exhibit 7 looks at life expectancy, which is, in many ways, a summary statistic of the overall well-being of a group of people. Exhibit 7 shows the strong positive correlation between economic freedom and life expectancy. People living in the top economic-freedom quintile live 20 years longer, on average, than do those living in the bottom quintile. It should also be noted that these are not the only social statistics that are positively correlated with economic freedom. Other work has looked at infant mortality, literacy, access to safe drinking water, and corruption, all of which show better outcomes with higher levels of economic freedom.5



Without question, the most persistent criticism of the market economy is its supposed failure to achieve a "fair" distribution of income. Although the question of what a "fair" distribution of income actually means is not simple to answer, many people find apparent income inequality disturbing. The empirical question, however, is this: Do market- oriented economies actually show a more unequal distribution of income than other types of economies? <a href="Exhibit 8">Exhibit 8</a> is an attempt to answer that question. This exhibit shows the economic freedom quintiles related to a measure of income inequality. The measure used is the ratio of the income of the top 10 percent (decile) of income earners to the bottom 10 percent. A ratio of 1, for instance, would indicate perfect equality, as the top and

bottom deciles would have the same amount of income. The further this ratio moves away from 1, the more unequal the distribution of income. Exhibit 8 clearly shows that the distribution of income is not closely related to economic freedom. It appears that non-market (i.e., less economically free) countries have a distribution of income just as unequal as the market-oriented nations or, in some cases, even more unequal. If anything, it seems that market-oriented economies have slightly more equal distributions of income.

Exhibit 8: Economic Freedom and Income Inequality



Source: 1999 World Development Indicators (Washington, DC: The World Bank, 1999).

# Notes

- See Michael Walker (ed.), Freedom, Democracy, and Economic Welfare (Vancouver: The Fraser Institute, 1988); Walter Block (ed.), Economic Freedom: Toward a Theory of Measurement (Vancouver: The Fraser Institute, 1991); Stephen Easton and Michael Walker (eds.), Rating Global Economic Freedom (Vancouver: The Fraser Institute, 1992); James Gwartney, Robert Lawson and Walter Block, Economic Freedom of the World: 1975-1995 (Vancouver: The Fraser Institute, 1996); James Gwartney and Robert Lawson, Economic Freedom of the World: 1997 Report (Vancouver: The Fraser Institute, 1997); and James Gwartney and Robert Lawson, Economic Freedom of the World: 1998/1999 Interim Report (Vancouver: The Fraser Institute, 1998). These publications provide the foundation for this work.
- 2. One component (freedom to convert domestic currency to foreign currencies in order to engage in current and capital account transactions) was dropped from the index because the representatives from the network expressed concern about its reliability. The black-market exchange rate variable was moved from Area VI to Area IV. Also, two variables (freedom to hold foreign currency bank accounts abroad and domestically) were combined into one component. Area V has been rescaled for all years in order to control for an upward drift in the data that did not reflect real changes in the institutional arrangements.
- 3. These weights, with the exception of those used in Area VI, have not changed from what they were in *Economic Freedom of the World: 1998/1999 Interim Report*. Weights used in Area VI had to be recalculated because the black-market exchange rate variable was moved from Area VI to Area IV. Area IV was left with two components after the currency-convertibility component was dropped, the two foreign-currency bank account components were combined, and the black-market exchange rate component was added. Principal component analysis assigns equal weights (e.g., 50%) when there are just two components.
- 4. The data for the latest year are primarily 1997. In some cases, 1998 data were used and, in a few cases, 1996 data.
- 5. For more information about these correlations, please visit our website: www.freetheworld.com.

# **Country Reports**

This chapter presents an overview of the level of economic freedom in some of the countries included in this study. Included for each country is a background description of the levels and changes in economic freedom and, in some cases, the future outlook for economic freedom. These reports were produced with the help of the members of the Economic Freedom Network, who contributed specific knowledge of their own country's circumstances. More countries are not included because it is difficult to have a detailed understanding about the level of economic freedom in every single country.

For each country, we present two charts (showing data from 1970, 1975, 1980, 1985, 1990, 1995, and 1997, where data are available.) The first, which appears in the upper left-hand side of the page, shows the summary economic freedom rating along with that country's overall rank. The left axis and the bars correspond to the country's summary ratings. The right axis and the line correspond to the country's overall rank. (The number of countries rated and ranked varies each year.) The chart to the right of this shows total government expenditure as a percentage of GDP over the measurement period. For years, this ratio was considered the most objective measure of the size of the government sector as compared to the market sector. While revealing, it neglects other important aspects of economic freedom that are highlighted in our index, including the structure of the economy, monetary policy, freedom to use alternative currencies, legal structure and property rights, freedom to trade with foreigners, and the freedom of exchange in capital and financial markets. Some would argue that these "other factors" should have less (or more) weight in the measurement of economic freedom. Observation of changes in both economic freedom and government expenditures will help us to interpret the trends in, and meaning of, these two different but interrelated indicators with greater understanding.

More detailed information on the 23 components that compose the economic freedom index can be found in the next section, Country Data Tables, which includes all the countries in this study.

- <u>Albania</u>
- Algeria
- Argentina
- Australia
- Austria
- Bahamas
- Barbados
- Belgium
- Belize
- <u>Benin</u>
- Bolivia
- Brazil
- Bulgaria
- Canada
- Chile
- China
- Costa Rica
- Czech Republic
- <u>Denmark</u>
- Dominican Republic
- Ecuador
- El Salvador

- Iceland
- India
- Ireland
- Israel
- Italy
- Japan
- Latvia
- Libraria
- <u>Lituania</u>Luxembourg
- <u>Mauritius</u>
- Mexico
- The Netherlands
- New Zealand
- Nicaragua
- Norway
- Panama
- Phillipines
- Poland
- Portugal
- Slovakia
- Slovenia
- South Africa

- <u>Estonia</u>
- <u>Finland</u>
- <u>France</u>
- <u>Germany</u>
- <u>Greece</u>
- <u>Guatemala</u>
- <u>Honduras</u>
- Hong Kong
- Hungary

- South Korea
- Spain
- <u>Sweden</u>
- Switzerland
- <u>Taiwan</u>
- <u>Thailand</u>
- <u>Turkey</u>
- <u>United Kingdom</u>
- United States

# **Country Data Tables**

This chapter presents detailed data on the economic freedom of the countries included in this study. For each country, we present the overall score of economic freedom and the rank of that country for the years 1970, 1975, 1980, 1985, 1990, 1995, and 1997 (where enough data exists.) Like all the scores in the index, these are values out of 10; 10 is the highest possible score and zero (0) is the lowest. To see how these scores were derived, please refer to the section, Methodology of the Index.

Under the column, Components of Economic Freedom, the titles in bold-face indicate the seven areas of economic freedom that are combined to generate an overall score. Each of the rows in bold-face gives the scores (out of 10) for that particular area for each year. Appendix 1 shows the ratings for each of the seven areas that combine to form the overall summary ratings for the period from 1990 to 1997.

Underneath each area title are the titles of the components that are combined to generate that particular area's score. Beside these titles are the scores (out of 10) for each year for which we have data. In parentheses beside some scores is the actual data used to derive that particular score.

A more complete description of each component can be found in <u>Appendix 2: Explanatory Notes and Data Sources</u>. The full data-set is available on-line at <u>/www.freetheworld.com/download.html</u>.

- Albania
- Algeria
- Argentina
- Australia
- Austria
- <u>Bahamas</u>
- Bahrain
- Bangladesh
- Barbados
- <u>Belgium</u>
- <u>Belize</u>
- <u>Benin</u>
- Bolivia
- Botswana
- Brazil
- <u>Bulgaria</u>
- <u>Burundi</u>
- <u>Cameroon</u>
- <u>Canada</u>
- Central African Rep.
- Chad
- Chile
- China
- Columbia
- Congo, Dem. Rep.
- Congo, Rep. of
- Costa Rica

- Latvia
- Lithuania
- Luxembourg
- Madagascar
- Malawi
- Malaysia
- Mali
- Malta
- Mauritius
- Mexico
- Morocco
- Myanmar
- Namibia
- Nepal
- Netherlands
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Norway
- Oman
- Pakistan
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Philippines

- Cote d'Ivoire
- Croatia
- Cyprus
- Czech Rep.
- **Denmark**
- Dominican Rep.
- **Ecuador**
- **Egypt**
- **El Salvador**
- **Estonia**
- <u>Fiji</u>
- **Finland**
- **France**
- Gabon
- Germany
- <u>Ghana</u>
- **Greece**
- Guatemala
- **Guinea-Bisseau**
- <u>Guyana</u>
- <u>Haiti</u>
- **Honduras**
- **Hong Kong**
- **Hungary**
- <u>Iceland</u>
- <u>India</u>
- <u>Indonesia</u>
- Iran
- <u>Ireland</u>
- <u>Israel</u>
- Italy
- <u>Jamaica</u>
- <u>Japan</u>
- <u>Jordan</u>
- <u>Kenya</u>
- **Kuwait**

- **Poland**
- **Portugal**
- **Romania**
- <u>Russia</u>
- <u>Rwanda</u>
- Senegal
- Sierra Leone
- <u>Singapore</u> Slovakia
- Slovenia
- <u>Somalia</u>
- South Africa
- South Korea
- <u>Spain</u>
- <u>Sri Lanka</u>
- Sweden
- **Switzerland**
- <u>Syria</u>
- **Taiwan**
- **Tanzania**
- **Thailand**
- **Togo**
- **Trinidad & Tobago**
- <u>Tunisia</u>
- **Turkey**
- **Uganda**
- <u>Ukraine</u>
- **United Arab Emriates**
- **United Kingdom**
- **United States**
- **Uruguay**
- **Venezuala**
- <u>Zambia</u>
- Zimbabwe

# **Appendix 1 Area Rating Tables, 1970-1997**

Area I: Size of Government: Consumption, Transfers, and Subsidies

	1970	1975	1980	1985	1990	1995	1997
Albania	NR	NR	8.3	8.4	5.0	8.1	9.1
Algeria	6.9	7.1	6.4	6.3	6.7	7.3	6.8
Argentina	8.4	7.8	7.6	7.7	8.5	7.9	7.8
Australia	7.3	7.2	7.0	6.7	7.0	6.6	6.6
Austria	6.5	5.7	5.2	5.0	5.1	4.6	4.7
Bahamas	9.8	8.8	8.9	8.9	8.9	8.5	NR
Bahrain	NR	NR	7.7	6.4	6.4	7.2	7.1
Bangladesh	NR	10.0	10.0	10.0	10.0	9.9	9.9
Barbados	8.6	8.7	8.6	8.2	8.2	8.3	6.3
Belgium	6.0	4.7	5.0	4.9	5.4	5.2	7.4
Belize	NR	7.8	8.4	7.9	8.4	8.7	8.0
Benin	9.0	9.1	9.3	8.0	8.7	8.5	8.7
Bolivia	9.9	8.9	8.7	9.1	8.9	8.7	8.0
Botswana	8.4	7.5	7.3	6.1	6.4	5.3	5.0
Brazil	7.1	6.5	7.7	7.9	6.8	6.4	6.7
Bulgaria	NR	NR	9.1	7.0	4.6	7.1	7.6
Burundi	9.0	8.8	9.2	9.3	9.0	8.9	8.8
Cameroon	8.2	9.1	9.3	9.3	8.6	9.3	8.9
Canada	5.8	6.6	5.9	5.6	5.7	5.5	6.0
C. African Rep.	6.8	7.8	8.3	8.0	8.1	8.3	9.0
Chad	6.5	6.9	6.1	8.9	9.4	9.5	9.5
Chile	7.0	7.4	7.4	6.9	7.8	7.9	7.8
China	8.9	8.8	6.8	7.1	7.2	7.3	7.3
Colombia	8.8	9.1	8.9	8.7	8.7	8.2	7.3
Congo, Dem. R.	8.0	9.1	9.6	9.2	9.2	9.9	9.1
Congo, Rep. Of	8.7	7.1	5.8	6.4	7.5	7.5	5.4
Costa Rica	9.0	8.3	7.7	7.6	7.7	7.4	7.9
Cote d'Ivoire	7.3	6.8	8.0	7.3	7.4	8.1	8.1
Croatia	NR	NR	NR	NR	NR	5.3	5.2
Cyprus	9.1	7.5	8.0	7.7	7.3	7.1	7.0
Czech Rep.	NR	5.9	5.8	5.3	2.7	3.9	4.2
Denmark	5.8	5.1	4.5	4.6	4.3	3.8	4.6
Dominican Rep.	9.0	9.4	9.4	9.4	9.7	9.7	9.2

Ecuador	8.5	7.5	8.0	8.6	9.1	8.8	8.1
Egypt	5.8	4.5	6.4	6.7	8.0	8.2	8.6
El Salvador	8.6	8.9	8.6	8.7	9.4	9.2	9.3
Estonia	NR	NR	NR	NR	7.1	6.0	5.9
Fiji	7.6	8.8	8.2	7.7	8.5	8.0	8.4
Finland	7.1	6.4	6.2	5.8	5.7	4.7	4.9
France	6.1	5.2	4.8	4.6	4.9	4.5	4.3
Gabon	4.4	6.9	4.7	6.6	8.4	8.0	5.9
Germany	6.4	5.7	5.7	5.5	5.7	5.2	5.2
Ghana	8.8	8.7	9.1	9.4	9.2	8.8	8.7
Greece	9.2	8.8	8.4	6.5	6.1	6.4	6.7
Guatemala	9.5	9.6	9.5	9.6	9.6	9.9	9.9
<b>Guinea</b> -Bissau	7.0	6.8	NR	8.1	8.9	9.7	9.5
Guyana	6.8	5.4	5.2	6.6	7.9	7.0	6.5
Haiti	8.9	9.1	8.8	8.4	9.4	9.6	9.6
Honduras	9.2	9.2	8.0	8.8	8.6	8.4	7.2
Hong Kong	9.0	9.4	9.5	9.4	9.3	9.2	9.2
Hungary	8.1	8.1	8.2	4.7	5.2	5.8	6.6
Iceland	7.7	7.1	7.0	6.9	6.9	6.9	7.0
India	8.9	8.9	8.7	8.3	8.2	8.3	8.0
Indonesia	9.3	9.2	8.5	8.6	9.0	9.3	9.4
Iran	9.0	6.0	6.9	8.3	8.5	8.3	8.5
Ireland	7.2	6.0	6.1	5.8	6.3	6.0	6.0
Israel	5.6	4.2	3.7	4.3	5.2	5.0	4.7
Italy	6.7	6.4	5.8	4.6	4.9	4.7	5.7
Jamaica	7.9	7.5	6.4	8.8	8.5	8.3	6.7
Japan	9.1	8.2	7.9	7.7	7.7	7.5	8.3
Jordan	NR	5.4	7.2	7.7	7.7	7.6	7.6
Kenya	8.3	8.2	7.9	7.7	8.0	8.6	7.3
Kuwait	6.1	4.6	5.9	5.0	5.4	5.1	6.0
Latvia	NR	NR	NR	NR	8.3	5.6	5.7
Lithuania	NR	NR	NR	NR	6.2	7.0	7.0
Luxembourg	6.8	7.8	7.6	7.7	5.2	5.3	5.1
Madagascar	8.6	8.8	8.6	9.0	9.5	9.7	9.6
Malawi	8.6	8.8	8.2	8.3	8.6	7.2	8.5
Malaysia	7.5	7.4	7.6	7.9	8.2	8.0	8.1
Mali	8.8	9.3	9.2	9.2	9.1	8.6	8.3
Malta	6.8	6.6	7.0	6.5	6.3	6.4	5.9

Mauritius	8.6	8.2	8.2	8.4	8.5	8.4	8.3
Mexico	9.4	8.9	8.7	8.6	9.1	8.2	8.4
Morocco	8.3	7.9	8.0	8.1	8.4	8.2	7.0
Myanmar	NR						
Namibia	NR	NR	5.6	4.3	6.8	4.2	4.1
Nepal	NR	9.3	9.5	8.8	9.1	8.9	9.0
Netherlands	6.1	5.0	4.4	4.3	4.8	4.7	5.1
New Zealand	7.7	5.9	5.4	5.8	4.8	7.0	7.1
Nicaragua	8.8	9.2	8.2	5.7	5.6	8.5	8.4
Niger	9.2	8.8	9.0	8.8	8.3	8.2	8.2
Nigeria	9.5	8.6	7.6	8.9	6.9	8.3	8.8
Norway	5.5	5.1	4.8	5.0	4.0	4.8	5.1
Oman	6.4	4.8	5.8	5.9	4.7	7.0	7.2
Pakistan	9.4	9.1	9.2	9.2	8.3	8.9	8.3
Panama	NR	7.6	7.2	7.5	7.3	7.5	7.4
Papua New Guinea	4.9	3.8	5.7	7.8	7.2	7.2	4.5
Paraguay	9.3	9.5	9.5	9.5	9.6	9.0	7.9
Peru	8.8	8.9	8.8	9.1	9.1	9.0	8.7
Philippines	9.3	9.0	9.2	9.6	9.2	9.2	8.1
Poland	NR	8.0	8.6	5.6	4.1	5.0	5.3
Portugal	7.8	7.1	6.7	6.2	6.6	6.7	6.8
Romania	NR	NR	7.8	8.8	6.4	7.0	7.4
Russia	NR	3.5	3.7	3.5	3.7	6.9	6.5
Rwanda	9.2	8.8	9.2	8.6	9.0	9.5	9.3
Senegal	8.1	8.7	8.1	7.8	7.9	8.3	8.7
Sierra Leone	NR	9.2	9.3	9.6	9.2	8.6	9.2
Singapore	8.9	8.9	8.9	8.0	8.5	8.7	8.6
Slovakia	NR	5.9	5.8	5.3	2.7	5.5	4.8
Slovenia	NR	NR	NR	NR	6.1	3.6	3.6
Somalia	8.8	6.8	8.3	8.3	NR	NR	NR
South Africa	8.6	8.2	8.1	7.6	7.5	7.5	7.5
South Korea	9.3	9.0	8.8	8.8	8.6	8.6	8.4
Spain	8.4	7.9	7.3	6.5	6.5	6.0	7.0
Sri Lanka	8.1	8.5	8.5	8.7	8.6	8.4	8.7
Sweden	5.5	4.2	3.8	3.7	3.2	2.8	3.1
Switzerland	8.1	7.7	7.1	7.1	6.5	6.1	6.3
Syria	8.5	7.5	6.7	5.9	7.7	7.9	7.5
Taiwan	NR	8.2	8.0	7.8	7.6	7.8	7.3

Tanzania	10.0	8.7	9.1	8.1	7.7	7.9	8.3
Thailand	9.1	9.2	8.9	8.7	9.0	8.9	8.9
Togo	6.9	6.0	5.5	8.9	7.8	8.3	8.7
Trinidad & Tobago	7.5	6.7	7.8	5.7	7.6	8.1	8.6
Tunisia	8.0	8.4	8.0	7.5	7.4	7.5	7.6
Turkey	8.6	8.2	8.2	8.0	8.7	8.0	7.3
Uganda	NR	NR	NR	8.0	9.5	8.9	8.9
Ukraine	NR	NR	6.4	6.2	6.7	5.7	6.0
<b>United Arab Emirates</b>	NR	4.5	3.7	3.1	7.6	7.9	6.1
United Kingdom	6.7	6.0	5.9	5.7	6.2	5.8	5.9
United States	6.7	6.9	7.1	6.8	6.8	6.8	6.9
Uruguay	7.6	7.4	8.0	7.5	7.3	6.8	6.4
Venezuela	8.7	8.4	8.6	8.5	8.6	8.8	8.4
Zambia	7.4	6.4	6.4	7.4	7.7	8.7	9.2
Zimbabwe	8.4	7.9	7.0	6.9	7.5	6.9	7.5

Area II: Structure of the Economy and Use of Markets--Production and Allocation via Political Mandates Rather Than Private Enterprises and Markets

	1970	1975	1980	1985	1990	1995	1997
Albania	NR	NR	NR	NR	0.0	2.1	3.0
Algeria	NR	NR	NR	NR	1.0	1.0	1.9
Argentina	NR	3.6	4.4	2.9	3.8	8.4	9.5
Australia	NR	5.0	5.0	5.0	5.6	6.5	6.3
Austria	NR	3.1	2.4	2.4	3.8	4.6	4.9
Bahamas	NR	8.0	7.1	6.1	5.4	6.7	6.7
Bahrain	NR	6.1	7.1	7.1	6.0	6.0	6.0
Bangladesh	NR	NR	2.7	2.7	NR	2.0	2.0
Barbados	NR	4.7	4.7	4.7	5.9	6.1	6.1
Belgium	NR	4.1	3.3	3.3	3.4	4.8	4.8
Belize	NR	NR	NR	4.8	2.5	4.8	4.7
Benin	NR	NR	NR	NR	NR	1.9	1.9
Bolivia	NR	NR	2.5	4.4	4.8	6.1	7.1
Botswana	NR	2.3	2.3	3.1	4.3	5.9	6.2
Brazil	5.0	4.2	2.9	2.7	4.5	6.2	7.2
Bulgaria	NR	NR	NR	NR	0.0	2.2	3.3
Burundi	NR	NR	NR	NR	1.2	2.1	3.0
Cameroon	NR	NR	NR	3.1	2.4	2.2	2.2
Canada	4.3	5.0	5.0	5.0	6.5	6.2	7.5
C. African Rep.	NR	NR	NR	NR	0.0	0.0	0.0

Chad	NR	NR	NR	NR	1.8	1.8	1.8
Chile	NR	2.1	3.1	2.7	5.6	7.1	6.8
China	NR	NR	NR	2.3	1.9	2.5	3.2
Colombia	NR	4.2	1.7	2.9	4.7	5.1	4.5
Congo, Dem. R.	NR	2.1	1.7	1.7	2.5	2.5	3.0
Congo, Rep. Of	NR	NR	NR	NR	1.9	1.6	1.6
Costa Rica	NR	6.2	5.2	4.4	7.4	7.4	8.1
Cote d'Ivoire	NR	NR	3.2	2.5	1.4	2.5	3.0
Croatia	NR	NR	NR	NR	NR	1.2	2.6
Cyprus	NR	NR	4.3	4.3	2.6	4.3	4.3
Czech Rep.	NR	NR	NR	NR	1.0	4.8	5.2
Denmark	NR	3.7	3.3	3.3	4.2	5.8	6.1
Dominican Rep.	NR	2.4	3.3	3.3	3.5	6.4	6.4
Ecuador	NR	3.8	3.8	2.7	2.8	5.2	5.2
Egypt	NR	NR	1.0	1.7	1.2	2.1	2.5
El Salvador	NR	NR	4.5	4.1	4.5	6.6	7.6
Estonia	NR	NR	NR	NR	NR	4.9	5.6
Fiji	NR	4.4	3.1	3.4	4.3	5.3	5.3
Finland	NR	4.6	4.2	4.2	4.2	5.7	5.4
France	NR	4.2	3.5	2.7	4.3	5.3	5.5
Gabon	NR	NR	NR	NR	2.4	3.1	2.9
Germany	5.1	5.1	4.7	4.3	5.8	6.0	5.2
Ghana	1.3	1.3	1.7	1.7	2.0	5.3	5.9
Greece	NR	3.5	2.1	1.4	1.7	4.2	4.6
Guatemala	NR	8.6	8.3	5.8	6.4	6.6	7.3
Guinea-Bissau	NR	NR	NR	NR	2.1	4.8	4.8
Guyana	NR	NR	NR	NR	NR	NR	4.0
Haiti	NR	NR	NR	NR	5.8	2.9	NR
Honduras	NR	7.7	7.3	4.8	4.6	5.9	6.2
Hong Kong	10.0	10.0	10.0	9.6	9.7	9.7	9.7
Hungary	NR	NR	NR	NR	2.8	4.9	4.9
Iceland	NR	NR	5.3	5.6	6.4	6.2	6.2
India	2.3	1.3	1.7	1.3	2.4	4.1	3.5
Indonesia	NR	3.9	2.5	3.6	5.1	4.0	4.0
Iran	NR	5.0	NR	1.0	1.3	2.3	2.3
Ireland	NR	4.3	5.1	4.8	6.7	7.6	7.9
Israel	NR	NR	1.4	2.1	1.7	3.3	3.3
Italy	NR	3.8	2.1	2.1	3.5	4.2	4.2

Jamaica	NR	3.1	2.3	3.7	5.9	6.2	6.2
Japan	NR	5.6	5.3	5.6	6.0	5.0	5.0
Jordan	NR	NR	NR	NR	2.8	2.1	2.1
Kenya	3.3	2.3	2.7	2.3	3.0	3.6	5.3
Kuwait	NR	NR	NR	NR	NR	4.4	5.8
Latvia	NR	NR	NR	NR	NR	3.8	5.8
Lithuania	NR	NR	NR	NR	NR	3.4	4.7
Luxembourg	NR	NR	NR	NR	4.4	5.9	6.6
Madagascar	NR	NR	NR	NR	0.1	0.1	0.1
Malawi	NR	2.3	2.8	2.5	1.6	4.0	3.5
Malaysia	NR	4.8	4.0	5.5	5.4	5.3	5.5
Mali	NR	NR	NR	NR	1.7	3.5	3.5
Malta	NR	NR	3.3	4.3	2.8	5.3	5.3
Mauritius	NR	NR	5.4	6.9	5.9	6.2	6.9
Mexico	NR	3.5	3.1	3.1	3.5	5.8	6.5
Morocco	NR	3.1	0.9	0.1	0.1	2.2	2.4
Myanmar	NR	NR	NR	NR	2.0	2.0	2.0
Namibia	NR	NR	NR	NR	NR	NR	5.9
Nepal	NR	NR	NR	NR	2.9	2.9	2.9
Netherlands	NR	3.8	3.6	3.1	4.4	5.1	6.0
New Zealand	NR	4.4	4.0	3.3	7.9	9.2	9.2
Nicaragua	NR	7.4	2.5	1.9	0.0	4.2	4.2
Niger	NR	NR	NR	NR	0.0	3.5	3.5
Nigeria	NR	3.3	1.3	2.5	1.4	2.6	4.5
Norway	NR	2.1	2.1	2.5	3.8	5.2	5.5
Oman	NR	6.1	6.1	6.1	5.4	5.4	5.4
Pakistan	NR	0.4	2.1	1.7	3.4	3.9	4.6
Panama	NR	4.8	4.4	4.4	4.3	6.4	6.4
Pap. New Guinea	NR						
Paraguay	NR	NR	NR	6.0	5.6	6.8	6.8
Peru	NR	3.5	2.7	2.0	3.6	6.6	7.3
Philippines	NR	4.5	3.7	5.6	5.9	6.3	6.9
Poland	NR	NR	NR	NR	0.9	4.1	3.4
Portugal	2.1	1.0	1.0	2.0	3.9	5.2	5.5
Romania	NR	NR	NR	NR	0.0	2.3	2.3
Russia	NR	0.0	0.0	0.0	0.0	2.8	3.5
Rwanda	NR	NR	NR	NR	2.9	2.9	2.0
Senegal	NR	NR	NR	2.3	3.0	2.6	3.3

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Sierra Leone	NR	NR	NR	NR	2.1	3.9	3.9
Singapore	5.4	4.9	4.9	6.0	7.5	7.5	7.5
Slovakia	NR	NR	NR	NR	1.0	2.4	2.6
Slovenia	NR	NR	NR	NR	NR	3.0	3.0
Somalia	NR	NR	NR	NR	1.0	NR	NR
South Africa	NR	1.8	1.7	2.5	3.9	5.9	5.9
South Korea	NR	4.2	3.4	4.2	3.0	3.2	3.5
Spain	NR	4.6	2.5	2.5	4.3	3.7	4.3
Sri Lanka	NR	NR	2.3	2.3	4.7	5.3	5.3
Sweden	2.1	2.7	2.4	3.3	4.2	5.2	4.8
Switzerland	NR	7.2	7.2	7.2	7.4	7.1	7.1
Syria	NR	NR	NR	NR	0.0	0.0	0.0
Taiwan	NR	2.1	2.1	2.1	3.9	4.4	3.1
Tanzania	1.0	1.3	NR	0.0	0.8	3.3	3.7
Thailand	NR	4.1	3.1	2.7	4.6	5.4	6.6
Togo	NR	NR	NR	NR	0.0	0.9	0.9
Trinidad & Tobago	NR	NR	NR	3.8	5.3	5.4	5.9
Tunisia	NR	NR	1.1	1.1	3.0	3.9	3.9
Turkey	NR	0.4	0.0	0.8	4.4	4.7	5.4
Uganda	NR	NR	NR	2.3	2.3	4.9	5.5
Ukraine	NR	NR	NR	NR	NR	1.8	2.7
Unit. Arab Em.	NR	NR	NR	NR	NR	NR	8.0
United Kingdom	NR	2.3	3.3	5.0	7.4	7.8	8.0
United States	3.4	4.8	5.3	6.8	7.9	8.3	8.3
Uruguay	NR	6.9	8.0	8.0	6.7	7.4	7.4
Venezuela	NR	5.7	3.6	2.8	3.1	1.8	3.7
Zambia	NR	1.3	1.3	1.3	0.9	3.3	3.6
Zimbabwe	NR	NR	3.0	2.3	1.8	3.9	4.1

Area III: Monetary Policy and Price Stability--Protection of Money as a Store of Value and Medium of Exchange

	1970	1975	1980	1985	1990	1995	1997
Albania	NR	NR	NR	9.8	9.8	2.7	2.5
Algeria	8.5	6.1	6.5	8.2	6.0	5.2	7.6
Argentina	6.7	0.0	0.0	0.0	0.0	4.0	8.9
Australia	9.4	7.9	8.6	9.1	8.7	9.1	9.2
Austria	9.5	8.9	9.5	9.5	9.4	9.3	9.5
Bahamas	9.0	8.7	8.2	8.6	9.1	9.3	9.6
Bahrain	9.0	7.0	7.5	8.2	8.3	9.4	9.0
Bangladesh	8.5	2.6	6.0	8.0	9.2	8.5	9.0

Barbados	8.8	7.4	6.7	8.9	8.7	9.5	8.8
Belgium	9.5	8.3	9.4	9.4	9.5	9.6	9.7
Belize	8.7	6.6	8.3	8.8	9.1	9.5	9.6
Benin	9.0	6.9	8.4	8.1	9.0	6.9	7.9
Bolivia	9.2	5.1	3.5	0.0	3.1	6.8	7.9
Botswana	9.6	6.6	7.1	7.0	7.4	8.8	8.2
Brazil	6.2	4.8	1.7	0.0	0.0	0.0	2.8
Bulgaria	NR	NR	NR	9.7	5.9	0.0	0.0
Burundi	8.9	7.2	6.5	8.2	8.6	7.5	6.6
Cameroon	7.7	8.6	7.2	8.5	9.4	7.8	8.5
Canada	9.1	8.4	8.9	8.6	9.4	9.4	9.3
C. African Rep.	8.4	7.4	6.5	5.8	9.5	6.8	7.6
Chad	9.2	8.4	8.4	7.0	7.7	6.9	7.5
Chile	3.4	0.0	1.4	6.0	6.3	7.6	8.4
China	8.7	9.8	8.2	8.0	8.6	7.0	8.6
Colombia	8.1	6.7	6.0	7.0	5.9	6.6	7.0
Congo, Dem. R.	5.1	7.5	0.5	1.6	0.0	0.0	0.0
Congo, Rep. Of	8.7	8.8	7.1	8.1	7.8	7.7	7.5
Costa Rica	8.9	6.1	7.1	3.3	7.4	6.9	7.5
Cote d'Ivoire	9.1	7.8	6.2	8.9	9.2	6.6	6.8
Croatia	NR	NR	NR	NR	NR	2.8	3.6
Cyprus	NR	7.9	7.6	8.9	9.4	9.6	9.6
Czech Rep.	NR	NR	NR	9.4	8.8	6.3	8.1
Denmark	9.0	8.2	8.9	8.6	9.2	9.6	9.5
Dominican Rep.	9.6	7.4	8.2	3.4	2.0	5.7	8.1
Ecuador	8.3	6.4	7.2	5.2	1.7	4.7	5.8
Egypt	9.6	7.7	6.6	8.4	7.4	8.4	9.1
El Salvador	9.3	7.9	7.0	7.3	6.7	8.2	9.0
Estonia	NR	NR	NR	8.8	4.2	1.4	3.4
Fiji	8.6	6.3	8.0	8.7	8.4	9.3	9.2
Finland	9.0	7.1	8.7	8.7	9.0	7.7	9.3
France	9.4	8.2	8.4	8.8	9.5	9.8	9.7
Gabon	9.6	4.8	5.9	8.2	7.3	7.2	6.9
Germany	9.3	9.1	9.2	9.5	9.0	9.4	9.5
Ghana	8.9	5.2	1.5	2.4	5.4	3.6	5.4
Greece	9.4	7.4	7.6	7.4	7.3	8.0	8.5
Guatemala	9.4	7.4	8.1	7.4	5.5	7.2	7.8
Guinea-Bissau	NR	8.7	8.1	2.9	1.2	1.8	3.0

Guyana	9.3	5.9	7.7	6.9	2.6	4.1	8.2
Haiti	9.0	7.9	6.5	8.3	7.8	5.0	7.0
Honduras	9.3	8.4	7.9	9.4	7.7	6.1	6.4
Hong Kong	8.3	8.9	8.0	9.1	8.7	9.1	9.2
Hungary	9.2	9.1	8.6	9.1	7.5	6.4	7.4
Iceland	7.6	4.0	3.1	2.7	5.7	9.1	9.3
India	8.9	8.4	8.1	8.6	8.6	8.4	8.7
Indonesia	2.5	5.0	5.0	8.7	8.2	8.7	8.2
Iran	9.6	7.3	5.9	7.5	8.2	4.7	6.9
Ireland	8.8	7.5	7.7	8.8	9.0	9.5	9.3
Israel	8.5	5.1	0.7	0.0	2.2	8.1	8.4
Italy	8.4	7.3	7.1	8.3	8.9	9.3	9.5
Jamaica	8.7	5.8	6.9	5.3	6.1	3.5	6.9
Japan	9.1	8.0	9.2	9.7	9.6	9.5	9.5
Jordan	NR	7.5	7.4	8.8	8.2	9.5	9.5
Kenya	7.9	7.6	8.1	9.0	8.4	7.2	7.5
Kuwait	9.8	5.2	3.2	8.1	7.1	8.8	9.0
Latvia	NR	NR	NR	NR	7.1	2.3	5.3
Lithuania	NR	NR	NR	NR	NR	0.8	3.8
Luxembourg	7.5	8.5	8.5	9.4	9.1	9.4	9.4
Madagascar	8.8	8.3	7.6	7.6	7.3	3.3	6.0
Malawi	8.4	8.0	8.1	8.5	7.0	1.1	3.8
Malaysia	9.3	8.1	8.5	9.5	8.7	8.6	8.9
Mali	8.3	6.5	7.9	8.6	9.3	6.8	7.3
Malta	9.1	8.9	8.4	9.4	9.7	9.5	9.5
Mauritius	9.6	4.9	6.4	9.2	8.0	9.2	9.3
Mexico	8.8	7.4	6.5	1.0	1.5	4.4	6.3
Morocco	9.2	7.9	8.2	9.0	8.4	8.8	9.3
Myanmar	8.8	4.9	9.1	9.6	5.2	5.8	6.0
Namibia	NR	NR	NR	6.0	8.2	7.6	7.7
Nepal	8.3	5.9	7.8	8.2	8.1	8.0	8.7
Netherlands	9.2	8.7	9.2	9.3	9.4	9.6	9.4
New Zealand	8.3	7.7	8.3	8.0	6.4	9.5	9.6
Nicaragua	9.2	7.9	4.0	0.0	0.0	2.7	6.7
Niger	8.6	6.4	6.2	8.5	9.5	7.6	8.1
Nigeria	3.4	4.5	7.3	8.4	5.5	1.1	5.5
Norway	8.3	8.4	8.7	8.4	8.3	9.2	9.5
Oman	8.2	4.8	3.3	8.9	6.7	8.9	8.5

Pakistan	9.2	6.7	8.1	8.9	8.6	8.2	8.4
Panama	9.5	8.5	5.6	9.6	9.8	9.0	9.2
Pap. New Guinea	9.2	8.5	8.3	8.8	8.8	7.1	8.0
Paraguay	9.3	7.6	6.9	6.7	4.9	7.1	8.0
Peru	7.7	6.4	1.7	0.0	0.0	2.6	5.0
Philippines	9.0	7.3	7.9	6.1	5.3	8.2	8.5
Poland	NR	9.3	8.6	4.3	0.0	4.7	6.0
Portugal	9.5	7.4	7.4	7.4	7.6	8.7	9.1
Romania	NR	NR	8.8	9.3	7.8	1.0	0.0
Russia	NR	8.9	8.6	8.7	7.9	0.0	2.3
Rwanda	6.0	2.5	8.2	8.9	8.2	2.9	5.2
Senegal	9.4	7.6	8.1	8.8	9.5	7.7	8.0
Sierra Leone	9.3	7.5	7.8	0.5	0.0	2.5	6.4
Singapore	9.7	8.8	8.5	9.5	9.0	9.5	9.7
Slovakia	NR	NR	NR	9.4	8.8	7.3	8.6
Slovenia	NR	NR	NR	NR	NR	2.5	6.4
Somalia	8.6	7.3	1.7	3.9	0.0	NR	NR
South Africa	9.4	8.2	7.0	7.1	7.7	8.1	8.1
South Korea	6.6	5.9	6.7	8.6	8.6	8.7	9.6
Spain	9.1	7.3	7.8	8.7	8.2	9.4	9.5
Sri Lanka	9.0	8.3	6.8	8.3	7.2	8.7	8.9
Sweden	9.2	8.2	8.4	9.0	8.8	9.4	9.6
Switzerland	9.5	9.1	9.3	9.5	9.6	9.5	9.3
Syria	8.8	6.7	7.3	8.0	7.3	8.5	8.4
Taiwan	9.0	6.7	7.2	9.1	8.7	9.7	9.9
Tanzania	9.3	6.5	5.5	6.5	6.1	5.0	6.7
Thailand	9.1	8.3	8.2	9.3	8.7	9.1	9.3
Togo	9.1	6.8	6.7	8.7	9.4	6.7	6.7
Trinidad & Tob.	9.1	5.3	5.4	7.8	8.1	8.0	8.5
Tunisia	8.9	7.8	8.2	8.4	9.3	9.3	9.3
Turkey	5.5	6.4	0.6	3.1	1.1	0.9	1.6
Uganda	NR	4.7	1.6	0.0	0.4	5.4	7.5
Ukraine	NR	NR	NR	NR	NR	0.0	2.2
Unit. Arab Em.	NR	NR	7.2	9.0	9.4	NR	NR
United Kingdom	9.0	6.7	7.8	8.5	7.5	9.3	9.1
United States	9.4	8.9	8.9	9.1	9.4	9.6	9.8
Uruguay	3.6	0.0	1.7	1.5	1.6	0.9	5.3
Venezuela	9.6	5.9	6.4	7.7	2.6	2.2	0.8

Zambia	6.4	6.8	8.1	4.3	0.1	0.9	1.7
Zimbabwe	7.6	8.5	8.4	8.3	7.5	6.2	5.0

**Area IV: Freedom to Use Alternative Currencies** 

	1970	1975	1980	1985	1990	1995	1997
Albania	0.0	0.0	0.0	0.0	0.0	7.5	4.6
Algeria	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Argentina	10.0	5.0	9.9	6.0	10.0	10.0	10.0
Australia	10.0	9.9	9.9	10.0	10.0	10.0	10.0
Austria	7.5	7.5	7.5	7.5	10.0	10.0	10.0
Bahamas	7.2	3.6	3.0	3.9	3.7	4.8	4.6
Bahrain	NR	10.0	10.0	10.0	10.0	10.0	10.0
Bangladesh	NR	0.0	0.0	0.0	0.0	2.2	3.2
Barbados	NR	3.0	3.9	3.9	4.0	4.7	4.9
Belgium	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Belize	NR	3.6	1.6	0.0	2.5	4.7	4.6
Benin	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Bolivia	6.1	9.5	7.8	4.1	9.7	9.9	9.9
Botswana	NR	0.6	4.0	2.8	4.3	7.3	7.3
Brazil	6.1	0.1	3.2	0.1	4.0	4.7	4.9
Bulgaria	0.0	0.0	0.0	0.0	0.0	7.0	7.1
Burundi	5.4	0.4	0.5	2.5	4.4	0.6	4.3
Cameroon	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Canada	10.0	10.0	10.0	10.0	10.0	10.0	10.0
C. African Rep.	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Chad	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Chile	5.1	4.5	6.9	7.8	10.0	9.8	9.6
China	1.0	2.6	2.5	3.9	2.5	6.8	6.8
Colombia	3.9	2.1	3.4	6.6	3.3	4.3	3.6
Congo, Dem. R.	8.1	0.0	0.0	4.4	3.0	4.6	7.0
Congo, Rep. Of	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Costa Rica	10.0	9.2	5.0	7.6	10.0	10.0	10.0
Cote d'Ivoire	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Croatia	NR	NR	NR	NR	2.5	6.7	5.2
Cyprus	4.9	4.4	4.6	4.9	4.5	4.5	5.0
Czech Rep.	0.0	0.0	0.0	0.0	0.0	7.5	7.5
Denmark	5.0	4.9	4.8	5.0	10.0	10.0	10.0
Dominican Rep.	2.8	2.2	3.8	6.1	0.0	4.8	7.1
Ecuador	2.8	9.5	8.7	5.2	10.0	8.8	9.5

Egypt	0.0	4.9	9.1	5.0	5.0	7.2	7.5
El Salvador	3.2	3.0	0.0	0.0	2.6	9.9	9.7
Estonia	NR	NR	NR	NR	2.5	7.5	7.5
Fiji	4.8	3.3	3.2	4.2	4.6	4.9	4.7
Finland	7.5	7.4	7.4	7.5	10.0	10.0	10.0
France	4.8	5.0	4.7	4.6	10.0	10.0	10.0
Gabon	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Germany	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Ghana	0.0	0.0	0.0	0.0	4.3	7.3	7.4
Greece	7.3	7.2	6.8	5.0	7.2	7.5	10.0
Guatemala	4.1	6.5	9.0	5.0	10.0	10.0	9.9
Guinea-Bissau	NR	0.0	0.0	2.1	4.1	4.8	1.8
Guyana	8.2	0.0	0.0	0.0	4.1	7.1	7.0
Haiti	10.0	7.5	8.0	5.0	5.0	5.3	6.9
Honduras	7.0	10.0	8.0	5.0	10.0	9.9	9.8
Hong Kong	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Hungary	0.0	0.0	0.0	0.0	2.8	7.5	10.0
Iceland	4.5	0.0	4.1	3.4	10.0	10.0	10.0
India	0.0	4.1	4.5	3.6	4.0	4.2	7.0
Indonesia	8.3	9.3	9.8	9.3	10.0	10.0	9.9
Iran	7.0	7.3	5.0	5.0	5.0	0.0	2.5
Ireland	5.0	5.0	5.0	4.7	4.9	10.0	10.0
Israel	2.0	2.5	7.4	6.8	7.1	7.5	7.4
Italy	4.8	4.1	5.0	5.0	10.0	10.0	10.0
Jamaica	8.8	2.8	0.0	3.1	2.3	9.3	8.5
Japan	4.9	7.5	7.5	7.5	10.0	10.0	10.0
Jordan	4.4	4.9	7.5	7.2	3.9	4.9	4.9
Kenya	1.9	4.2	4.0	4.8	4.4	7.3	9.4
Kuwait	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Latvia	NR	NR	NR	NR	2.5	7.3	7.3
Lithuania	NR	NR	NR	NR	2.5	7.5	7.5
Luxembourg	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Madagascar	9.6	2.7	0.0	4.1	4.3	4.8	3.3
Malawi	3.4	2.2	0.2	2.0	3.6	4.9	3.4
Malaysia	4.9	7.5	10.0	7.5	10.0	10.0	9.7
Mali	4.7	4.3	4.5	4.9	4.6	4.9	4.8
Malta	9.4	4.5	3.8	4.3	4.8	4.6	4.7
Mauritius	0.0	0.3	1.0	4.9	4.2	10.0	9.9

Mexico	10.0	10.0	5.0	7.5	10.0	10.0	9.9
Morocco	3.9	4.7	4.9	4.3	3.7	4.9	4.8
Myanmar	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Namibia	NR	NR	NR	2.5	4.7	5.0	5.0
Nepal	0.0	1.0	5.0	3.9	3.4	3.1	2.8
Netherlands	10.0	10.0	10.0	10.0	10.0	10.0	10.0
New Zealand	3.9	4.5	5.0	4.6	10.0	10.0	10.0
Nicaragua	8.1	7.9	5.0	0.0	4.0	6.7	9.9
Niger	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Nigeria	0.0	0.7	0.0	0.0	2.7	0.0	2.5
Norway	5.0	4.9	4.7	5.0	10.0	10.0	10.0
Oman	NR	10.0	10.0	10.0	10.0	10.0	10.0
Pakistan	0.0	3.3	2.3	4.6	6.1	7.2	4.5
Panama	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Pap. New Guinea	NR	0.0	0.0	4.6	4.3	4.3	4.8
Paraguay	8.3	8.7	9.3	5.0	7.4	8.7	8.9
Peru	3.6	0.0	3.2	0.0	5.9	10.0	10.0
Philippines	0.0	3.7	4.7	4.3	4.3	10.0	9.5
Poland	2.5	2.5	2.5	2.5	9.1	10.0	7.5
Portugal	5.0	0.8	4.8	4.8	4.7	10.0	10.0
Romania	0.0	0.0	0.0	0.0	2.5	4.7	4.4
Russia	0.0	0.0	0.0	0.0	0.0	7.5	7.5
Rwanda	2.4	0.5	0.0	0.1	2.2	7.2	2.5
Senegal	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Sierra Leone	9.6	0.0	0.0	0.0	0.0	7.3	2.5
Singapore	4.9	5.0	5.0	7.5	10.0	10.0	10.0
Slovakia	0.0	0.0	0.0	0.0	0.0	7.5	6.4
Slovenia	NR	NR	NR	NR	2.5	7.5	7.5
Somalia	6.2	2.2	0.9	0.0	0.0	0.0	2.5
South Africa	4.5	4.4	4.4	2.5	4.7	5.0	6.2
South Korea	3.0	4.8	3.9	3.9	4.9	10.0	9.8
Spain	4.4	4.8	5.0	4.8	4.8	10.0	10.0
Sri Lanka	0.0	0.0	4.1	3.0	2.6	4.8	4.9
Sweden	4.5	7.4	7.0	7.4	7.5	10.0	10.0
Switzerland	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Syria	3.3	9.9	6.5	0.0	0.0	0.0	2.9
Taiwan	9.7	9.5	9.9	9.7	10.0	10.0	10.0
Tanzania	1.9	0.0	0.0	0.0	0.0	7.4	6.7

Thailand	5.0	4.8	4.5	4.7	7.5	10.0	10.0
Togo	4.8	4.8	4.8	4.9	4.6	4.9	4.8
Trinidad & Tob.	7.2	0.7	0.1	1.1	1.0	9.7	9.6
Tunisia	2.0	3.9	3.2	3.8	4.2	4.9	4.7
Turkey	0.0	3.9	3.4	4.7	9.8	9.8	9.9
Uganda	1.9	0.0	0.0	2.5	1.0	4.7	9.2
Ukraine	NR	0.0	0.0	0.0	2.5	7.2	7.2
Unit. Arab Em.	NR	10.0	10.0	10.0	10.0	10.0	10.0
United Kingdom	5.0	5.0	5.0	10.0	10.0	10.0	10.0
United States	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Uruguay	9.7	10.0	10.0	10.0	10.0	10.0	10.0
Venezuela	10.0	10.0	10.0	7.5	10.0	0.8	9.8
Zambia	0.0	0.0	0.0	1.2	0.0	4.7	6.8
Zimbabwe	3.6	0.0	0.0	0.8	3.5	4.9	6.1

Area V: Legal Structure and Property Rights--Security of Property Rights and Viability of Contracts

	1970	1975	1980	1985	1990	1995	1997
Albania	NR	NR	NR	6.3	5.9	8.0	2.5
Algeria	3.2	2.5	3.4	3.7	3.5	7.4	8.5
Argentina	4.2	1.2	4.5	3.2	5.2	8.0	8.5
Australia	9.3	7.2	8.0	8.7	8.9	10.0	10.0
Austria	NR	NR	9.3	9.1	10.0	10.0	10.0
Bahamas	NR	NR	NR	6.8	6.7	6.3	6.6
Bahrain	NR	NR	NR	5.9	5.9	8.5	8.5
Bangladesh	NR	NR	1.9	2.2	1.7	5.3	6.9
Barbados	NR	NR	NR	6.8	6.7	6.3	6.6
Belgium	9.9	8.6	8.6	9.1	10.0	9.5	9.0
Belize	NR						
Benin	NR	NR	4.2	4.1	4.3	3.6	3.6
Bolivia	NR	NR	1.7	0.5	3.4	7.2	6.9
Botswana	NR	NR	NR	6.5	6.4	8.0	7.6
Brazil	6.2	5.6	6.0	5.6	6.4	8.0	7.9
Bulgaria	NR	NR	NR	7.6	7.4	7.2	4.8
Burundi	NR	NR	4.2	4.1	4.3	3.6	3.6
Cameroon	NR	NR	5.7	6.0	6.0	5.9	5.4
Canada	9.9	8.2	8.4	9.1	9.6	9.5	9.4
C. African Rep.	NR	NR	4.2	4.1	4.3	3.6	3.6
Chad	NR	NR	4.2	4.1	4.3	3.6	3.6
Chile	0.0	2.9	6.5	4.9	7.0	8.5	8.5

China	NR	NR	NR	6.5	5.6	8.5	8.5
Colombia	2.5	3.2	4.5	4.3	3.9	5.8	3.5
Congo, Dem. R.	NR	NR	1.9	2.2	2.1	0.0	0.0
Congo, Rep. Of	NR	NR	4.2	2.9	2.6	4.8	4.8
Costa Rica	NR	NR	4.5	5.1	5.3	6.3	6.0
Cote d'Ivoire	NR	NR	NR	6.4	5.1	4.5	3.8
Croatia	NR	NR	NR	NR	NR	NR	NR
Cyprus	NR	NR	NR	4.4	7.3	8.5	9.0
Czech Rep.	NR	NR	NR	7.3	7.8	9.5	10.0
Denmark	9.7	8.2	8.4	9.1	9.6	10.0	10.0
Dominican Rep.	NR	NR	5.4	3.9	4.5	5.2	4.8
Ecuador	2.5	3.8	6.4	3.9	5.1	5.5	5.1
Egypt	0.3	3.4	2.5	5.2	3.5	7.6	7.6
El Salvador	NR	NR	1.9	1.7	1.7	7.2	6.9
Estonia	NR	NR	NR	NR	NR	NR	7.2
Fiji	NR	NR	NR	NR	NR	NR	NR
Finland	9.1	7.5	8.1	9.1	9.6	10.0	10.0
France	8.5	5.9	6.7	8.3	9.1	10.0	9.0
Gabon	NR	NR	3.6	4.8	5.7	7.2	6.9
Germany	9.9	8.5	8.6	8.8	10.0	10.0	10.0
Ghana	NR	NR	3.0	2.4	6.0	6.6	6.9
Greece	5.7	5.6	5.5	5.6	7.7	7.6	7.5
Guatemala	NR	NR	2.1	2.1	2.5	5.3	4.8
Guinea-Bissau	NR	NR	NR	1.7	2.6	0.2	0.0
Guyana	NR	NR	1.9	2.2	3.5	6.3	7.0
Haiti	NR	NR	1.9	2.8	0.8	2.7	4.2
Honduras	NR	NR	2.5	3.1	3.5	5.3	4.8
Hong Kong	8.5	7.4	9.6	7.3	7.4	10.0	7.9
Hungary	NR	NR	NR	7.2	7.8	9.5	10.0
Iceland	9.1	7.5	8.1	8.7	10.0	10.0	10.0
India	3.2	2.5	5.9	5.3	4.0	7.1	7.6
Indonesia	3.8	3.4	3.1	4.2	5.5	7.6	7.6
Iran	4.6	3.7	0.5	1.5	2.3	5.9	7.5
Ireland	9.3	7.7	7.8	7.7	9.1	10.0	10.0
Israel	7.8	8.0	5.3	7.3	5.2	8.5	8.5
Italy	6.6	3.7	5.4	8.1	9.5	8.5	9.4
Jamaica	NR	NR	3.2	3.9	4.6	8.0	8.5
Japan	9.1	7.1	8.3	8.6	9.5	10.0	10.0

Jordan	NR	NR	1.9	3.1	3.2	7.2	7.0
Kenya	4.0	3.6	4.7	5.5	5.1	5.7	5.4
Kuwait	NR	NR	1.1	5.6	2.6	8.5	8.8
Latvia	NR	NR	NR	NR	NR	NR	7.2
Lithuania	NR	NR	NR	NR	NR	NR	7.2
Luxembourg	9.9	8.4	8.6	10.0	10.0	10.0	10.0
Madagascar	NR	NR	NR	3.4	2.5	2.5	2.2
Malawi	NR	NR	3.6	4.0	4.6	4.4	6.0
Malaysia	6.2	5.3	7.3	6.7	7.7	7.2	7.5
Mali	NR	NR	3.2	2.3	2.4	2.2	2.2
Malta	NR	NR	NR	3.5	4.8	9.5	10.0
Mauritius	NR	NR	NR	6.5	6.4	8.0	7.6
Mexico	5.2	4.7	6.4	4.8	7.3	7.2	8.5
Morocco	3.2	2.5	1.8	3.6	4.0	8.1	8.5
Myanmar	NR	NR	5.0	4.0	2.2	3.5	6.3
Namibia	NR	NR	NR	NR	2.2	5.5	8.8
Nepal	NR	NR	NR	NR	NR	NR	NR
Netherlands	10.0	8.1	9.0	9.6	9.6	10.0	10.0
New Zealand	9.3	7.2	9.1	8.7	9.6	10.0	10.0
Nicaragua	NR	NR	1.9	2.2	3.2	5.0	5.4
Niger	NR	NR	4.2	4.6	4.9	0.7	2.6
Nigeria	3.5	3.5	2.8	1.5	3.0	4.5	5.4
Norway	9.5	7.6	8.3	9.5	9.8	10.0	10.0
Oman	NR	NR	NR	6.0	5.3	7.7	7.5
Pakistan	1.9	0.8	2.3	3.5	2.4	6.6	7.0
Panama	NR	NR	2.7	3.5	3.3	6.6	6.9
Pap. New Guinea	NR	NR	NR	6.8	6.2	5.9	7.3
Paraguay	NR	NR	4.3	4.8	5.3	6.0	5.6
Peru	1.7	1.4	3.9	1.2	2.6	8.0	7.9
Philippines	4.4	4.4	3.0	1.7	2.5	6.3	7.6
Poland	NR	NR	NR	4.0	6.0	9.5	9.0
Portugal	6.3	0.9	9.2	7.1	9.1	9.5	9.0
Romania	NR	NR	NR	3.4	6.0	6.6	8.5
Russia	NR	NR	NR	NR	NR	NR	5.4
Rwanda	NR	NR	NR	NR	NR	NR	NR
Senegal	NR	NR	3.6	4.0	4.0	1.0	2.7
Sierra Leone	NR	NR	NR	5.1	4.7	0.0	2.2
Singapore	8.5	7.4	8.9	8.2	8.8	10.0	10.0

Slovakia	NR	NR	NR	7.3	7.8	7.6	6.3
Slovenia	NR	NR	NR	NR	NR	8.5	8.2
Somalia	NR	NR	NR	3.9	1.4	0.0	0.0
South Africa	8.9	6.5	6.6	5.2	3.8	6.8	8.5
South Korea	6.0	4.7	6.8	5.0	7.2	9.0	8.1
Spain	7.0	5.0	6.8	7.0	8.5	9.5	10.0
Sri Lanka	NR	NR	3.9	3.5	2.1	6.6	7.6
Sweden	8.6	7.2	7.8	8.7	10.0	9.5	10.0
Switzerland	10.0	9.3	9.4	10.0	10.0	10.0	9.4
Syria	NR	NR	0.7	2.7	2.6	6.3	6.9
Taiwan	7.5	6.2	8.9	8.2	9.0	9.0	8.1
Tanzania	NR	NR	6.2	6.0	5.5	5.7	6.3
Thailand	6.2	5.3	7.0	6.0	7.8	7.2	8.5
Togo	NR	NR	3.0	4.2	4.4	4.8	4.2
Trinidad & Tob.	NR	NR	6.2	5.1	6.6	5.7	5.4
Tunisia	3.2	2.5	4.6	3.1	3.3	6.3	8.5
Turkey	3.8	3.1	5.2	5.6	4.4	6.3	6.0
Uganda	NR	NR	2.5	2.6	2.1	1.5	4.5
Ukraine	NR	NR	NR	NR	NR	NR	5.1
Unit. Arab Em.	NR	NR	1.9	4.8	5.4	6.3	6.0
United Kingdom	9.8	7.0	8.2	8.5	9.5	9.5	10.0
United States	10.0	9.2	9.4	9.6	9.6	9.5	10.0
Uruguay	NR	NR	5.7	6.0	6.8	7.7	7.5
Venezuela	5.1	1.7	6.1	5.1	6.1	5.7	5.4
Zambia	NR	NR	6.0	4.0	2.5	4.1	4.3
Zimbabwe	NR	NR	2.9	3.1	4.0	3.9	3.9

Area VI: International Exchange: Freedom to Trade with Foreigners

	1970	1975	1980	1985	1990	1995	1997
Albania	NR	NR	NR	NR	NR	4.2	5.8
Algeria	NR	NR	7.8	4.7	3.6	5.0	4.7
Argentina	NR	0.6	3.4	3.7	3.9	7.3	6.6
Australia	7.0	6.6	7.1	7.3	6.9	8.0	8.4
Austria	7.8	7.6	8.3	8.5	8.2	8.7	8.5
Bahamas	NR	4.6	4.4	5.3	3.4	3.0	NR
Bahrain	NR	NR	NR	8.6	8.4	8.0	8.0
Bangladesh	NR	3.4	0.8	1.6	1.5	0.7	NR
Barbados	5.8	5.6	6.3	6.3	5.5	5.8	NR
Belgium	9.5	9.0	9.0	9.1	8.7	8.8	8.6

Belize	NR	NR	4.2	4.5	3.1	2.6	4.7
Benin	NR	4.0	2.2	2.1	NR	NR	NR
Bolivia	3.6	4.9	3.3	5.8	7.8	8.6	8.3
Botswana	NR	4.3	3.2	6.8	7.6	6.9	5.6
Brazil	4.7	5.6	3.5	3.4	5.2	7.4	6.2
Bulgaria	NR	NR	NR	6.6	7.9	6.5	7.7
Burundi	NR	1.3	0.4	1.0	1.1	3.9	2.9
Cameroon	NR	2.2	4.0	5.6	6.4	6.1	NR
Canada	8.2	7.6	8.2	8.6	8.2	8.7	8.5
C. African Rep.	NR	NR	3.8	3.9	3.0	5.8	NR
Chad	NR	4.7	NR	NR	7.1	8.2	NR
Chile	4.1	4.7	8.5	7.0	8.2	8.3	8.0
China	NR	NR	3.2	4.8	4.4	5.4	7.2
Colombia	4.5	4.7	4.0	3.5	4.6	7.6	7.0
Congo, Dem. R.	1.4	0.9	3.2	4.0	4.0	4.0	NR
Congo, Rep. Of	NR	6.7	7.8	4.3	5.1	7.0	NR
Costa Rica	6.4	5.6	4.9	3.5	6.4	7.6	7.9
Cote d'Ivoire	NR	NR	4.3	4.8	4.1	6.3	8.8
Croatia	NR	NR	NR	NR	NR	6.7	7.0
Cyprus	5.5	6.6	6.5	6.3	5.3	6.9	NR
Czech Rep.	NR	NR	NR	NR	NR	8.6	8.7
Denmark	7.6	8.1	8.5	8.6	8.1	8.3	8.3
Dominican Rep.	0.7	1.2	3.3	5.1	4.6	5.6	6.6
Ecuador	1.0	4.5	5.1	4.1	3.5	6.6	7.1
Egypt	NR	2.5	2.3	3.6	3.9	3.8	NR
El Salvador	3.5	5.5	3.3	4.4	5.7	7.2	7.0
Estonia	NR	NR	NR	NR	NR	9.5	9.2
Fiji	NR	5.4	5.9	4.7	5.9	6.2	6.4
Finland	7.9	7.6	8.5	8.6	7.7	8.4	8.4
France	8.3	8.3	8.5	8.5	8.3	8.4	8.5
Gabon	4.3	4.9	3.6	6.1	6.0	7.1	NR
Germany	8.5	8.4	8.7	8.8	8.4	8.4	8.5
Ghana	1.3	1.0	0.0	2.6	5.7	6.7	NR
Greece	4.9	7.1	7.5	8.0	8.0	8.2	8.1
Guatemala	4.9	5.5	3.3	3.9	5.1	7.3	6.0
Guinea-Bissau	NR						
Guyana	NR	NR	NR	6.5	NR	NR	NR
Haiti	NR	3.0	3.8	5.8	4.3	NR	NR

Honduras	5.5	6.2	4.0	NR	5.8	7.4	NR
Hong Kong	9.9	9.6	9.7	9.8	9.9	9.9	10.0
Hungary	NR	NR	7.1	7.6	6.0	7.0	6.4
Iceland	3.8	4.4	6.3	7.2	7.6	8.2	7.6
India	NR	0.9	0.7	0.9	1.1	1.7	4.1
Indonesia	5.5	5.4	6.7	5.8	6.7	7.1	6.9
Iran	3.5	8.3	3.2	2.7	5.6	5.1	4.8
Ireland	5.6	7.3	8.2	8.4	8.0	8.4	8.8
Israel	4.3	4.8	6.4	7.3	7.8	7.4	8.2
Italy	8.5	8.3	8.4	8.5	8.2	8.5	8.4
Jamaica	NR	6.5	7.6	7.5	6.2	6.9	6.7
Japan	7.0	7.9	8.0	8.1	7.9	7.6	7.9
Jordan	NR	6.0	6.1	6.7	5.9	7.4	6.7
Kenya	6.6	6.7	4.2	3.8	3.7	6.0	6.4
Kuwait	NR	NR	NR	8.0	8.0	8.0	7.7
Latvia	NR	NR	NR	NR	NR	8.2	7.8
Lithuania	NR	NR	NR	NR	NR	8.2	8.1
Luxembourg	9.1	7.9	8.7	8.8	8.4	8.5	8.5
Madagascar	1.5	1.9	4.2	2.5	4.2	5.8	3.7
Malawi	6.3	7.2	3.4	4.0	4.9	3.9	4.8
Malaysia	5.9	7.0	7.0	7.9	7.6	7.8	6.9
Mali	NR	1.9	5.0	4.9	5.4	7.0	NR
Malta	4.7	6.5	6.3	6.2	6.1	6.4	5.1
Mauritius	5.3	5.3	3.6	3.9	4.0	5.7	3.8
Mexico	3.6	3.4	1.6	4.4	7.7	8.3	7.9
Morocco	5.4	5.4	2.7	6.0	5.0	5.3	NR
Myanmar	1.7	0.0	0.8	0.0	0.0	0.0	0.0
Namibia	NR	NR	NR	NR	5.7	4.2	6.9
Nepal	0.4	3.1	4.6	5.8	4.4	6.5	6.6
Netherlands	8.8	8.6	8.7	8.8	8.5	8.6	8.6
New Zealand	7.3	7.0	7.0	7.2	6.8	7.9	8.3
Nicaragua	6.2	6.2	2.5	3.4	5.8	5.6	NR
Niger	NR	5.6	5.1	3.0	2.6	5.3	NR
Nigeria	4.6	5.8	4.4	5.4	5.2	3.9	NR
Norway	8.4	8.6	8.8	8.8	8.4	8.0	7.7
Oman	8.5	NR	NR	8.6	8.1	7.8	8.0
Pakistan	1.1	1.5	0.9	1.1	1.9	3.3	5.0
Panama	6.5	7.5	8.5	7.4	6.0	7.7	8.8

Pap. New Guinea	NR	7.6	7.8	7.3	6.9	6.6	4.6
Paraguay	2.9	3.5	3.1	5.4	6.5	7.9	7.0
Peru	4.1	3.7	2.0	2.6	3.3	7.1	7.0
Philippines	5.5	2.2	4.6	4.5	6.5	7.1	7.4
Poland	NR	NR	NR	5.5	6.6	6.2	5.0
Portugal	7.0	6.2	7.7	8.3	8.0	8.4	8.4
Romania	NR	NR	NR	NR	8.1	7.7	7.0
Russia	NR	NR	NR	NR	NR	6.9	7.1
Rwanda	NR	0.0	1.3	NR	0.6	1.0	NR
Senegal	NR	4.9	3.4	4.5	4.3	4.4	4.3
Sierra Leone	NR	3.4	3.4	2.9	3.0	3.0	0.0
Singapore	9.5	9.7	9.8	9.5	9.8	9.7	9.9
Slovakia	NR	NR	NR	NR	NR	8.7	8.8
Slovenia	NR	NR	NR	NR	NR	NR	8.2
Somalia	NR	1.5	3.1	1.9	NR	NR	NR
South Africa	8.1	8.5	8.6	7.6	7.2	6.1	7.7
South Korea	7.3	7.8	6.9	6.7	7.5	7.7	5.8
	5.0	6.6	7.6	7.8	8.0	8.4	8.5
Spain Sri Lanka	1.9	3.5	2.9	5.1	4.3	5.9	5.8
	8.2	8.4	8.5	9.0	8.7	8.6	8.6
Sweden Switzerland	7.1	7.8	8.3	8.4	7.8	7.8	8.5
		4.6		3.7			
Syria	3.7	7.0	3.0 8.0	8.1	4.5 8.1	8.4	6.9 NR
Taiwan Tanzania	5.7						
1 4 1 1 1 1	6.0	5.4	4.8	3.0	4.0	4.8	6.3
Thailand	4.5	4.2		5.9	4.9	6.0	7.0
Togo	NR	5.6	3.2	6.1	5.6	NR	NR
Trinidad & Tob.	NR	7.0	6.7	5.4	5.5	6.8	NR
Tunisia	3.7	3.6	4.8	3.3	3.3	5.2	4.6
Turkey	0.0	0.3	2.9	4.6	3.6	6.5	8.3
Uganda 	NR	0.0	7.2	2.3	2.3	5.9	NR
Ukraine	NR	NR	NR	NR	NR	NR	7.3
Unit. Arab Em.	NR	NR	NR	8.9	8.9	NR	NR
United Kingdom	3.4	8.6	8.6	8.7	8.3	8.5	8.5
United States	6.5	7.7	8.4	8.0	7.9	8.0	7.8
Uruguay	5.0	6.0	3.1	5.6	6.1	7.5	7.1
Venezuela	7.1	7.1	7.4	4.2	5.3	7.9	7.4
Zambia	NR	8.8	8.8	3.7	4.5	6.8	6.9
Zimbabwe	NR	8.1	6.1	4.9	4.8	7.4	3.7

Area VII: Freedom of Exchange in Capital and Financial Markets

Area vii. Freedoii	1970	1975		1985	1990	1995	1997
Albania	NR	NR	NR	NR	0.0	2.6	3.1
Algeria	NR	NR	NR	NR	0.3	0.7	0.7
Argentina	5.0	4.7	3.1	2.9	2.6	8.1	8.1
Australia	6.3	5.0	6.6	7.6	9.2	9.3	9.3
Austria	5.6	5.0	5.5	6.0	6.7	7.0	7.6
Bahamas	6.2	6.3	6.3	6.9	6.8	6.9	6.9
Bahrain	NR	6.4	6.2	6.0	6.7	6.5	7.0
Bangladesh	NR	0.6	2.3	2.8	3.9	3.5	3.5
Barbados	NR	5.1	5.2	6.1	6.0	6.0	5.9
Belgium	10.0	8.7	10.0	10.0	8.7	8.6	8.7
Belize	NR	NR	6.9	6.7	8.2	8.3	7.9
Benin	2.7	2.8	3.6	4.0	4.3	4.5	4.6
Bolivia	NR	NR	2.0	NR	7.3	7.5	8.3
Botswana	NR	NR	5.8	6.9	5.5	6.0	6.6
Brazil	4.6	4.6	3.7	2.4	2.7	3.1	4.5
Bulgaria	NR	NR	NR	NR	1.0	4.3	4.8
Burundi	1.8	1.7	1.9	2.7	2.1	1.3	2.9
Cameroon	NR	NR	1.9	1.9	3.5	2.7	3.2
Canada	8.8	8.1	9.3	9.3	9.3	9.1	9.2
C. African Rep.	NR	NR	NR	2.5	4.4	3.3	3.4
Chad	NR	NR	NR	3.2	3.2	2.2	2.5
Chile	NR	3.5	5.9	6.5	6.6	8.1	8.0
China	NR	NR	0.0	0.7	1.7	3.0	3.0
Colombia	NR	NR	5.3	5.3	5.9	7.2	7.1
Congo, Dem. R.	2.6	2.8	3.1	3.4	2.3	2.5	0.7
Congo, Rep. Of	NR	NR	1.9	2.5	3.7	1.8	2.9
Costa Rica	8.0	6.7	6.0	7.3	7.6	8.7	9.1
Cote d'Ivoire	NR	NR	4.6	5.0	4.4	4.6	5.1
Croatia	NR	NR	NR	NR	NR	2.7	4.0
Cyprus	5.3	6.1	5.1	6.0	6.4	6.5	6.4
Czech Rep.	NR	NR	NR	NR	NR	5.5	5.4
Denmark	8.0	8.0	8.2	7.9	8.0	8.5	9.0
Dominican Rep.	NR	NR	5.6	5.4	4.9	7.1	7.8
Ecuador	NR	NR	4.4	3.1	4.7	7.0	8.1
Egypt	NR	NR	2.8	3.7	3.6	6.0	5.7
El Salvador	NR	NR	NR	6.1	6.1	8.0	9.2

Estonia	NR	NR	NR	NR	NR	5.1	6.8
Fiji	NR	3.3	4.8	5.4	4.3	4.8	4.7
Finland	NR	6.4	6.8	7.3	7.3	8.7	8.7
France	6.7	7.2	7.0	7.0	7.9	8.3	8.2
Gabon	NR	NR	1.9	2.5	3.8	3.3	4.0
Germany	7.7	7.1	7.6	8.1	8.2	8.1	8.1
Ghana	NR	1.8	1.1	1.6	2.6	4.2	4.4
Greece	3.9	2.9	3.4	3.4	4.6	5.6	6.4
Guatemala	6.3	6.9	7.5	7.5	7.5	8.2	7.6
Guinea-Bissau	NR	NR	NR	NR	4.0	4.4	6.1
Guyana	NR	NR	NR	NR	NR	4.8	5.2
Haiti	NR	NR	NR	NR	2.9	3.6	5.0
Honduras	NR	NR	3.7	4.8	4.8	5.7	7.4
Hong Kong	NR	10.0	10.0	10.0	10.0	9.9	9.9
Hungary	NR	NR	2.3	1.3	3.0	5.8	6.2
Iceland	NR	3.6	4.1	4.1	4.9	6.3	6.4
India	3.6	2.6	3.5	3.6	3.5	3.9	3.8
Indonesia	0.6	0.6	2.0	3.1	4.9	5.8	5.8
Iran	NR	NR	1.7	1.5	1.8	2.0	4.0
Ireland	6.0	5.8	6.3	7.1	7.3	8.2	8.3
Israel	2.3	2.2	1.5	1.1	3.1	4.2	4.9
Italy	6.3	5.5	4.9	5.3	6.3	7.3	7.8
Jamaica	NR	NR	3.7	4.1	6.9	7.8	7.7
Japan	5.7	5.6	6.1	7.0	7.8	7.8	7.9
Jordan	NR	4.8	5.0	4.8	4.6	5.3	6.4
Kenya	4.9	3.1	4.3	4.7	5.2	6.0	7.0
Kuwait	NR	5.3	5.3	6.0	2.5	4.8	5.2
Latvia	NR	NR	NR	NR	NR	5.1	7.0
Lithuania	NR	NR	NR	NR	NR	5.2	6.8
Luxembourg	10.0	10.0	10.0	10.0	10.0	9.1	9.2
Madagascar	2.7	2.4	2.6	2.7	1.9	2.4	4.3
Malawi	NR	3.2	3.7	4.2	4.2	3.1	2.8
Malaysia	6.4	5.9	5.8	6.8	6.9	7.0	6.9
Mali	NR	4.2	4.2	4.6	5.1	4.4	4.5
Malta	3.1	3.2	4.0	3.9	3.8	4.8	4.7
Mauritius	NR	5.1	5.3	6.7	6.5	8.7	8.8
Mexico	NR	4.1	4.6	2.0	4.5	7.2	6.2
Morocco	NR	NR	4.2	4.5	4.9	5.1	5.1

Myanmar	1.2	0.5	0.1	0.0	0.0	0.0	0.0
Namibia	NR	NR	NR	NR	5.5	6.1	6.0
Nepal	NR	NR	2.7	2.5	3.8	3.7	3.8
Netherlands	7.1	7.1	9.1	8.4	8.9	9.6	9.6
New Zealand	5.8	5.6	5.7	6.1	9.7	9.9	9.4
Nicaragua	NR	NR	NR	1.1	0.8	6.8	7.3
Niger	NR	3.2	2.9	3.0	4.2	4.4	4.2
Nigeria	NR	1.3	1.3	1.9	2.3	3.2	3.0
Norway	5.4	5.9	5.8	7.8	8.3	8.5	8.5
Oman	NR	NR	6.3	7.1	7.1	7.1	7.1
Pakistan	4.1	2.0	3.4	4.1	3.5	3.3	3.2
Panama	NR	8.1	8.2	8.1	8.8	9.4	9.4
Pap. New Guinea	NR	4.2	3.9	4.2	4.3	5.1	5.0
Paraguay	NR	NR	NR	NR	5.4	9.2	9.2
Peru	NR	NR	2.3	2.2	1.8	7.7	8.3
Philippines	NR	5.5	5.2	4.4	6.1	7.5	7.6
Poland	NR	NR	0.0	0.0	0.1	4.0	5.1
Portugal	3.4	2.7	2.9	4.2	5.0	6.3	7.5
Romania	0.0	0.0	0.0	0.0	0.0	1.1	1.4
Russia	NR	0.0	0.0	0.0	0.0	4.0	4.5
Rwanda	1.4	1.3	3.4	3.6	3.8	1.8	1.9
Senegal	NR	NR	4.5	4.0	4.5	3.3	3.7
Sierra Leone	NR	2.5	3.2	0.9	1.9	2.2	2.0
Singapore	NR	8.9	9.2	9.8	9.7	9.7	9.7
Slovakia	NR	NR	NR	NR	NR	4.3	5.3
Slovenia	NR	NR	NR	NR	NR	6.0	6.0
Somalia	NR						
South Africa	6.6	6.7	6.0	7.2	7.2	7.7	7.7
South Korea	NR	3.9	4.3	6.3	7.2	7.2	7.2
Spain	NR	6.0	6.7	7.4	8.2	8.1	8.2
Sri Lanka	NR	NR	3.6	5.0	4.7	6.1	6.0
Sweden	5.5	5.1	6.0	7.2	8.8	8.5	8.5
Switzerland	NR	5.2	7.4	8.5	8.5	8.5	8.5
Syria	0.9	0.1	0.2	0.4	0.3	0.4	0.2
Taiwan	2.7	4.2	4.1	5.2	6.2	6.1	5.5
Tanzania	1.0	0.1	1.0	0.0	2.4	1.9	2.2
Thailand	NR	5.6	5.3	6.8	6.5	7.9	7.9
Togo	NR	NR	4.5	4.6	4.6	4.4	3.9

Trinidad & Tob.	NR	4.1	4.2	5.8	5.2	7.4	7.7
Tunisia	3.2	3.3	3.3	3.8	6.5	6.7	6.7
Turkey	NR	3.8	2.9	4.8	3.9	6.2	6.0
Uganda	NR	2.2	1.7	1.7	2.1	2.9	3.1
Ukraine	NR	NR	NR	NR	NR	0.7	0.9
Unit. Arab Em.	NR	7.9	7.8	5.6	5.8	5.7	5.8
United Kingdom	6.5	5.7	8.0	9.8	10.0	9.9	10.0
United States	9.5	9.1	9.7	9.6	9.7	9.7	9.7
Uruguay	NR	NR	7.0	7.7	7.7	7.4	7.4
Venezuela	NR	7.4	6.5	6.3	4.6	3.9	5.0
Zambia	NR	3.5	3.3	1.6	2.1	2.8	5.4
Zimbabwe	NR	NR	3.6	3.8	4.4	5.2	5.4

## **Appendix 2. Explanatory Notes and Data Sources**

## Component

The rating for this component is equal to: (Vmax - Vi) / (Vmax - Vmin) multiplied by 10. The Vi is the country's actual government consumption as a proportion of total consumption, while the Vmax and Vmin represent the maximum and minimum values for this component during the 1990 base year for the countries included in our analysis. Countries with a larger proportion of government expenditures received lower ratings. If the ratio of a country's government consumption to total consumption is close to the minimum value of this ratio during the 1990 base year, the country's rating will be close to 10. In contrast, if this ratio is close to the highest value during the base year, the rating will be close to zero.

Sources World Bank, 1997 World Development Indicators CD-Rom and International Monetary Fund, International Financial Statistics (various issues). The 1997 figures were primarily from the latter publication.

I-B The rating for this component is equal to: (Vmax - Vi) / (Vmax - Vmin) multiplied by 10. The Vi is the country's ratio of transfers and subsidies to GDP, while the Vmax and Vmin represent the maximum and minimum values of this component during the 1990 base year. The formula will generate lower ratings for countries with larger transfer sectors. When the size of a country's transfer sector approaches that of the country with the largest transfer sector during the base year, the rating of the country will approach zero.

Sources World Bank, 1997 World Development Indicators CD-Rom; International Monetary Fund, International Financial Statistics (various issues); International Monetary Fund, Government Finance Statistics Yearbook (various years); and Inter-American Development Bank, Economic and Social Progress in Latin America, 1994.

II-A Data on the number, composition, and share of output supplied by State-Operated Enterprises (SOEs) and government investment as a share of total investment were used to construct the zero-to-10 ratings. Countries with more government enterprise and government investment received lower ratings. When there were few SOEs and government investment was generally less than 15 percent of total investment, countries were given a rating of 10. When there were few SOEs other than those involved in industries where economies of scale reduce the effectiveness of competition (e.g., power generation) and government investment was between 15 and 20 percent of the total, countries received a rating of 8. When there were, again, few SOEs other than those involved in energy and other such industries and government investment was between about 20 and 25 percent of the total, countries were rated at 7. When SOEs were present in the energy, transportation, and communication sectors of the economy and government investment was between about 25 and 30 percent of the total, countries were assigned a rating of 6. When a substantial number of SOEs operated in many sectors, including manufacturing, and government investment was generally between 30 and 40 percent of the total, countries received a rating of 4. When numerous SOEs operated in many sectors,

including retail sales, and government investment was between about 40 and 50 percent of the total, countries were rated at 2. A rating of zero was assigned when the economy was dominated by SOEs and government investment exceeded 50 percent of the total.

Sources

World Bank Policy Research Report, Bureaucrats in Business (1995); Rexford A. Ahene and Bernard S. Katz, eds., Privatization and Investment in Sub-Saharan Africa (1992); Manuel Sanchez and Rossana Corona, eds., Privatization in Latin America (1993); Iliya Harik and Denis J. Sullivan, eds., Privatization and Liberalization in the Middle East (1992); OECD, Economic Surveys (various issues); and L. Bouten and M. Sumlinski, Trends in Private Investment in Developing Countries: Statistics for 1970-1995.

II-B The more widespread the use of price controls, the lower the rating. The survey data of the International Institute for Management Development (IMD), World Competitiveness Report, 1990 and 1997, were used to rate the 46 countries (mostly developed economies) covered by this report. For other countries, the Price Waterhouse series, Doing Business in . . . and other sources were used to categorize countries. Countries were given a rating of 10 if no price controls or marketing boards were present. When price controls were limited to industries where economies of scale may reduce the effectiveness of competition (e.g., power generation), a country was given a rating of 8. When price controls were applied in only a few other industries, such as agriculture, a country was given a rating of 6. When price controls were levied on energy, agriculture, and many other stable products that are widely purchased by households, a rating of 4 was given. When price controls applied to a significant number of products in both agriculture and manufacturing, the rating was 2. A rating of zero was given when there was widespread use of price controls throughout various sectors of the economy.

Sources

IMD, World Competitiveness Report (various issues); Price Waterhouse, Doing Business in . . . publication series; World Bank, Adjustment in Africa: Reforms, Results, and the Road Ahead (1994); and US State Department, Country Reports on Economic Policy and Trade Practices (various years).

II-C Data on the top marginal tax rates and the income thresholds at which they take effect were used to construct a rating grid. Countries with higher marginal tax rates that take effect at lower income thresholds received lower ratings. The income threshold data were converted from local currency to 1982/1984 US dollars (using beginning-of-year exchange rates and the US Consumer Price Index). See Economic Freedom of the World: 1997 Annual Report, page 265, for the precise relationship between a country's rating and its top marginal tax and income threshold.

Source Price Waterhouse, Individual Taxes: A Worldwide Summary (various issues).

II-D Data on the use and duration of military conscription were used to construct rating intervals. Countries with longer conscription periods received lower ratings. A rating of 10 was assigned to countries without military conscription. When length of conscription was six months or less, countries were given a rating of 5. When length of conscription was more than six months but not more than 12 months, countries were rated at 3. When length of conscription was more than 12 months but not more than 18 months, countries were assigned a rating of 1. When conscription periods exceeded 18 months, countries were rated zero.

Source International Institute for Strategic Studies, The Military Balance (various issues).

III-A The M1 money supply figures were used to measure the growth rate of the money supply. The rating is equal to: (Vmax - Vi) / (Vmax - Vmin) multiplied by 10. Vi represents the average annual growth rate of the money supply during the last five years adjusted for the growth of real GDP during the previous 10 years. The values for Vmin and Vmax were set at zero and 50 percent, respectively. Therefore, if the adjusted growth rate of the money supply during the last five years was zero, indicating that money growth was equal to the long-term growth of real output, the formula generates a rating of 10. Ratings decline as the adjusted money supply growth differs from zero. When the adjusted annual money growth is equal to (or greater than) 50 percent, a rating of zero results.

Sources World Bank, 1997 World Development Indicators CD-Rom, with updates from International Monetary Fund, International Financial Statistics (various issues).

III-B The GDP deflator was used as the measure of inflation. When these data were unavailable, the Consumer Price Index was used. The following formula was used to determine the zero-to-10 scale rating for each country: (Vmax - Vi) / (Vmax - Vmin) multiplied by 10. Vi represents the country's standard deviation of the annual rate of inflation during the last five years. The values for Vmin and Vmax were set at zero and 25 percent, respectively. This procedure will allocate the highest ratings to the countries with least variation in the annual rate of inflation. A perfect 10 results when there is no variation in the rate of inflation over the five-year period. Ratings will decline toward zero as the standard deviation of the inflation rate approaches 25 percent annually.

Sources World Bank, 1997 World Development Indicators CD-Rom, with updates from International Monetary Fund, International Financial Statistics (various issues).

III-C The zero-to-10 country ratings were derived by the following formula: (Vmax - Vi) / (Vmax - Vmin) multiplied by 10. Vi represents the rate of inflation during the most recent year. The values for Vmin and Vmax were set at zero and 50 percent, respectively. The lower the rate of inflation, the higher the rating. Countries that achieve perfect price stability earn a rating of 10. As the inflation rate moves toward a 50 percent annual rate, the rating for this component moves toward zero. A zero rating is assigned to all countries with an inflation rate of 50 percent or more.

Source World Bank, 1997 World Development Indicators CD-Rom, with updates from International Monetary Fund, International Financial Statistics (various issues).

IV-A When foreign currency bank accounts were permissible without restrictions both domestically and abroad, the rating was 10; when these accounts were restricted, the rating was zero. If foreign currency bank accounts were permissible domestically but not abroad (or vice versa), the rating was 5.

Sources Currency Data and Intelligence, Inc., World Currency Yearbook (various issues) and International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions (various issues).

IV-B The formula used to calculate the zero-to-10 ratings for this component was: (Vmax - Vi) / (Vmax - Vmin) multiplied by 10. Vi is the country's black-market exchange rate premium. The values for Vmin and Vmax were set at zero and 50 percent, respectively. This formula will allocate a rating of 10 to countries without a black-market exchange rate; i.e., those with a domestic currency that is fully

convertible without restrictions. When exchange rate controls are present and a black market exists, the ratings will decline toward zero as the black market premium increases toward 50 percent. A zero rating is given when the black market premium is equal to, or greater than, 50 percent.

Sources

Currency Data and Intelligence, Inc., World Currency Yearbook (various issues of the yearbook and the monthly report supplement) and International Monetary Fund, International Financial Statistics (various issues).

V-A Countries with less risk of confiscation received higher ratings. The data from 1980 to 1997 on the risk of expropriation are from PRS Group, International Country Risk Guide (various issues). The 1980 data are actually for 1982, the initial year of the International Country Risk Guide (ICRG) data source. The 1970 and 1975 data are from Business Environment Risk Intelligence (BERI). The ICRG did not provide ratings for Barbados, Benin, Burundi, Central African Republic, Chad, Estonia, Latvia, Lithuania, Mauritius, Slovenia and Ukraine. We rated these countries based on the ratings for similar countries (in parentheses): for Barbados (Bahamas), Mauritius (Botwsana), Estonia, Latvia, and Lithuania (Poland and Russia), Slovenia (Czech Republic and Slovakia), Ukraine (Bulgaria and Russia), Benin, Burundi, Central African Republic, and Chad (Cameroon, Republic of Congo, Gabon, Mali, and Niger).

While the original rating scale for the ICRG data was zero-to-10, BERI data were on a one-to-four scale. We used regression analysis from the two sources during the initial overlapping year 1982 to merge the two data sets and place the 1970 and 1975 ratings on a scale comparable to that used for the other years. The following regression equation was used to convert the 1970 and 1975 BERI ratings to a scale comparable with that of ICRG: 1982 ICRG Rating = a + b (1982 BERI Rating). The coefficient values for a and b were 0.086 and 2.9, respectively. The t-ratio for the estimated value of b was 4.70 and the R2 for the equation was 0.43.

Because the ICRG ratings inexplicably increase from the mid-1990s to the late 1990s, all ratings were adjusted using the maximum and minimum procedure used in other components in order to make the component consistent over time. The following formula was used to place the figures on a zero-to-10 scale: (Vi - Vmin)/(Vmax - Vmin) multiplied by 10. Vi is the country's actual value for the component. Vmax and Vmin were set at 10 and 2 standard deviations below the average, respectively.

Source PRS Group, International Country Risk Guide (various issues).

V-B

Countries where there is less risk that the government will unilaterally cancel contracts received higher ratings. The data from 1980 to 1997 on the risk of contract repudiation are from PRS Group, International Country Risk Guide (various issues). The 1980 data are actually for 1982, the initial year of the International Country Risk Guide (ICRG) data source. The 1970 and 1975 data are from Business Environment Risk Intelligence (BERI). The ICRG did not provide ratings for Barbados, Benin, Burundi, Central African Republic, Chad, Estonia, Latvia, Lithuania, Mauritius, Slovenia and Ukraine. We rated these countries based on the ratings for similar countries (in parentheses): for Barbados (Bahamas), Mauritius (Botwsana), Estonia, Latvia, and Lithuania (Poland and Russia), Slovenia (Czech Republic and Slovakia), Ukraine (Bulgaria and Russia), Benin, Burundi, Central African Republic, and Chad (Cameroon, Republic of Congo, Gabon, Mali, and Niger).

While the original rating scale for the ICRG data was zero-to-10, BERI data were on a one-to-four scale. We used regression analysis from the two sources during the initial overlapping year 1982 to merge the two data sets and place the 1970 and 1975 ratings on a scale comparable to that for the other years. The following regression was used to convert the 1970 and 1975 BERI ratings to a scale comparable with that of ICRG: 1982 ICRG Rating = a + b (1982 BERI Rating). The coefficient values for a and b were -0.164 and 2.96, respectively. The t-ratio for the estimated value of b was 6.73 and the R2 for the equation was 0.62.

Because the ICRG ratings inexplicably increase from the mid-1990s to late 1990s, all ratings were adjusted using the maximum and minimum procedure used in other components in order to make the component consistent over time. The following formula was used to place the figures on a zero-to-10 scale: (Vi - Vmin)/(Vmax - Vmin) multiplied by 10. Vi is the country's actual value for the component. Vmax and Vmin were set at 10 and 2 standard deviations below the average, respectively.

Source PRS Group, International Country Risk Guide (various issues).

V-C Countries with legal institutions that were more supportive of rule of law received higher ratings. The data from 1980 to 1997 on the rule of law are from PRS Group, International Country Risk Guide (various issues). The 1980 data are actually for 1982, the initial year of the International Country Risk Guide (ICRG) data source. The ICRG did not provide ratings for Barbados, Benin, Burundi, Central African Republic, Chad, Estonia, Latvia, Lithuania, Mauritius, Slovenia and Ukraine. We rated these countries based on the ratings for similar countries (in parentheses): for Barbados (Bahamas), Mauritius (Botwsana), Estonia, Latvia, and Lithuania (Poland and Russia), Slovenia (Czech Republic and Slovakia), Ukraine (Bulgaria and Russia), Benin, Burundi, Central African Republic, and Chad (Cameroon, Republic of Congo, Gabon, Mali, and Niger).

Because the ICRG ratings inexplicably increase from the mid-1990s to late 1990s, all ratings were adjusted using the maximum and minimum procedure used in other components in order to make the component consistent over time. The following formula was used to place the figures on a zero-to-10 scale: (Vi - Vmin)/(Vmax - Vmin) multiplied by 10. Vi is the country's actual value for the component. Vmax and Vmin were set at 10 and 2 standard deviations below the average, respectively.

Source PRS Group, International Country Risk Guide (various issues).

VI-A (i) The formula used to calculate the ratings for this component was: (Vmax - Vi) / (Vmax - Vmin) multiplied by 10. Vi represents the revenue derived from taxes on international trade as a share of the trade sector. The values for Vmin and Vmax were set at zero and 15 percent, respectively. This formula leads to lower ratings as the average tax rate on international trade increases. Countries with no specific taxes on international trade earn a perfect 10. As the revenues from these taxes rise toward 15 percent of international trade, ratings decline toward zero. (Note that except for two or three extreme observations, the revenues from taxes on international trade as a share of the trade sector are within the zero to 15 percent range.)

Sources International Monetary Fund, Government Finance Statistics Yearbook (various issues) and International Monetary Fund, International Statistics (various issues).

- VI-A (ii) The formula used to calculate the zero-to-10 rating for each country was: (Vmax Vi) / (Vmax Vmin) multiplied by 10. Vi represents the country's mean tariff rate. The values for Vmin and Vmax were set at zero and 50 percent, respectively. This formula will allocate a rating of 10 to countries that do not impose tariffs. As the mean tariff rate increases, countries are assigned lower ratings. The rating will decline toward zero as the mean tariff rate approaches 50 percent. (Note that except for two or three extreme observations, all countries have mean tariff rates within this zero to 50 percent range.)
- Sources OECD, Indicators of Tariff and Non-tariff Trade Barriers (1996); World Bank, 1997 World Development Indicators CD-Rom; J. Michael Finger, Merlinda D. Ingco, and Ulrich Reincke, Statistics on Tariff Concessions Given and Received (1996); Judith M. Dean, Seema Desai, and James Riedel, Trade Policy Reform in Developing Countries since 1985: A Review of the Evidence (1994); GATT, The Tokyo Round of Multilateral Trade Negotiations, Vol. II: Supplementary Report (1979); UNCTAD, Revitalizing Development, Growth and International Trade: Assessment and Policy Options (1987); R. Erzan and K. Kuwahara, The Profile of Protection in Developing Countries, UNCTAD Review 1 (1) (1989): 29-49; and Inter-American Development Bank (data supplied to the authors).
- VI-A (iii) Compared to a uniform tariff, wide variation in tariff rates exerts a more restrictive impact on trade, and therefore on economic freedom. Thus, countries with greater variation in their tariff rates should be given lower ratings. The formula used to calculate the zero-to-10 ratings for this component was:

  (Vmax Vi) / (Vmax Vmin) multiplied by 10. Vi represents the standard deviation of the country's tariff rates. The values for Vmin and Vmax were set at zero and 25 percent, respectively. This formula will allocate a rating of 10 to countries that impose a uniform tariff. As the standard deviation of tariff rates increases toward 25 percent, ratings decline toward zero. (Note that except a few very extreme observations, the standard deviations of the tariff rates for the countries in our study fall within this zero to 25 percent range.)
- Sources OECD, Indicators of Tariff and Non-tariff Trade Barriers (1996); World Bank, 1997 World Development Indicators CD-Rom; Jang-Wha Lee and Phillip Swagel, Trade Barriers and Trade Flows across Countries and Industries, NBER Working Paper Series No. 4799 (1994); and Inter-American Development Bank (data supplied to the authors).
- VI-B (i) The formula used to calculate the ratings for this component was: (Vmax Vi) / (Vmax Vmin) multiplied by 10. Vi indicates the share of the trade sector covered by non-tariff restrictions. During the 1990 base year, this figure ranged from a low of zero to a high of 100 percent. Thus, the values for Vmin and Vmax were set at zero and 100 percent, respectively. This formula will allocate a rating of 10 to countries that do not impose non-tariff trade barriers. Ratings will decline toward zero as the share of the trade sector covered by restrictions increases toward 100 percent. Thus, countries with larger percentages of trade subject to non-tariff restraints receive lower ratings.
- Sources UNCTAD, Directory of Import Regimes: Part 1 (1994); World Bank, 1997 World Development Indicators CD-Rom; Sam Laird and Alexander Yeats, Quantitative Methods for Trade Barrier Analysis (1990); OECD, Indicators of Tariff and Non-tariff Trade Barriers (1996); and World Bank, Adjustment in Africa: Reforms, Results, and the Road Ahead (1994).
- VI-B (ii) Regression analysis was used to derive an expected size of the trade sector based on the country's population, geographic size, and locational characteristics. The actual size of the trade sector was then

compared with the expected size for the country. If the actual size of the trade sector is greater than expected, this figure will be positive. If it is less than expected, the number will be negative. The percent change of the negative numbers was adjusted to make it symmetrical with the percent change of the positive numbers. The following formula was used to place the figures on a zero-to-10 scale: (Vi - Vmin) / (Vmax - Vmin) multiplied by 10. Vi is the country's actual value for the component. Vmax and Vmin were set at 100 percent and minus 50 percent, respectively. (Note that minus 50 percent is symmetrical with positive 100 percent.) This procedure allocates higher ratings to countries with large trade sectors compared to what would be expected, given their population, geographic size, and location. On the other hand, countries with small trade sectors relative to the expected size receive lower ratings.

Sources

World Bank, 1997 World Development Indicators CD-Rom; International Monetary Fund, International Financial Statistics (various issues); and Central Intelligence Agency, 1997 World Factbook.

VII-A

Data on the percentage of bank deposits held in privately owned banks were used to construct rating intervals. Countries with larger shares of privately held deposits received higher ratings. When privately held deposits totaled between 95 and 100 percent, countries were given a rating of 10. When private deposits constituted between 75 and 95 percent of the total, a rating of 8 was assigned. When private deposits were between 40 and 75 percent of the total, the rating was 5. When private deposits totaled between 10 and 40 percent, countries received a rating of 2. A zero rating was assigned when private deposits were 10 percent or less of the total.

Sources

Euromoney Publications, The Telrate Bank Register (various editions); World Bank, Adjustment in Africa: Reforms, Results, and the Road Ahead (1994); Price Waterhouse, Doing Business in . . . publication series; H.T. Patrick and Y.C. Park, eds., The Financial Development of Japan, Korea, and Taiwan: Growth, Repression, and Liberalization (1994); D.C. Cole and B.F. Slade, Building a Modern Financial System: The Indonesian Experience (1996); and information supplied by member institutes of the Economic Freedom Network.

VII-B

For this component, higher values are indicative of greater economic freedom. Thus, the formula used to derive the country ratings for this component was (Vi - Vmin) / (Vmax - Vmin) multiplied by 10. Vi is the share of the country's total domestic credit allocated to the private sector. Vmax is the maximum value and Vmin the minimum value for the figure during the 1990 base year. Respectively, these figures were 99.9 percent and 10.0 percent. The formula allocates higher ratings as the share of credit extended to the private sector increases. A country's rating will be close to 10 when the private sector's share of domestic credit is near the base-year maximum (99.9 percent). A rating near zero results when the private sector's share of credit is close to the base-year minimum (10.0 percent).

Sources

International Monetary Fund, International Financial Statistics (the 1997 yearbook and June 1998 monthly supplement) and Statistical Yearbook of the Republic of China (1996).

VII-C

Data on credit-market controls and regulations were used to construct rating intervals. Countries with interest rates determined by the market, stable monetary policy, and positive real deposit and lending rates received higher ratings. When interest rates were determined primarily by market forces and the real rates were positive, countries were given a rating of 10. When interest rates were primarily market-determined but the real rates were sometimes slightly negative (less than 5%) or the

differential between the deposit and lending rates was large (8% or more), countries received a rating of 8. When the real deposit or lending rate was persistently negative by a single-digit amount or the differential between them was regulated by the government, countries were rated at 6. When the deposit and lending rates were fixed by the government and the real rates were often negative by single-digit amounts, countries were assigned a rating of 4. When the real deposit or lending rate was persistently negative by a double-digit amount, countries received a rating of 2. A zero rating was assigned when the deposit and lending rates were fixed by the government and real rates were persistently negative by double-digit amounts or hyperinflation had virtually eliminated the credit market.

Source

International Monetary Fund, International Financial Statistics Yearbook (various issues, as well as the monthly supplements).

VII-D

Descriptive data on capital-market arrangements were used to place countries into rating categories. Countries with more restrictions on foreign capital transactions received lower ratings. When domestic investments by foreigners and foreign investments by citizens were unrestricted, countries were given a rating of 10. When these investments were restricted only in a few industries (e.g., banking, defence, and telecommunications), countries were assigned a rating of 8. When these investments were permitted but regulatory restrictions slowed the mobility of capital, countries were rated at 5. When either domestic investments by foreigners or foreign investments by citizens required approval from government authorities, countries received a rating of 2. A zero rating was assigned when both domestic investments by foreigners and foreign investments by citizens required government approval.

Sources

International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions (various issues) and Price Waterhouse, Doing Business in . . . publication series.

## Appendix 3. Selected Publications Using Ratings from Economic Freedom of the World

The following are some of the articles that have used the economic freedom ratings from Economic Freedom of the World. In some cases, a brief abstract of the article is provided. Those interested in doing further research using the Economic Freedom index are invited to retrieve the dataset from the website of the Economic Freedom Network, www.freetheworld.com. The most up-to-date information on articles using the index of Economic Freedom can be found at www.freetheworld.com/papers.html.

Ali, Abdiweli M. (1997). Economic Freedom, Democracy and Growth. Journal of Private Enterprise 13 (Fall): 1-20.

"This paper takes advantage of newly constructed measures of economic freedom to show the importance of economic freedom on growth. I find that economic freedom is a more robust determinant of growth than political freedom and civil liberty."

Uses summary ratings from *Economic Freedom of the World:* 1975-1995 as one variable in a comparison of a number of institutional variables.

Ali, Abdiweli M., and W. Mark Crain (1999). Institutional Distortions, Economic Freedom, and Growth. Draft manuscript (April). James M. Buchanan Center for Political Economy.

This paper examines the robustness of economic freedom as a predictor of growth and investment compared to political rights and civil liberties. It also examines the relation between economic freedom and input price distortions and institutional quality.

Uses summary ratings from *Economic Freedom of the World: 1975-1995* as one of a number of institutional variables.

Ayal, Eliezer B., and Karras Georgios (1998). Components of Economic Freedom and Growth: An Empirical Study. *Journal of Developing Areas* 32 (Spring): 327-38.

The paper uses regression analysis to examine the effect of the components of economic freedom on growth, output and investment and finds that "economic freedom enhances growth both via increasing total factor productivity and via enhancing capital accumulation." It also identifies components that have the highest

statistical effects on these variables, with the aim of informing policy makers.

Uses component ratings from *Economic Freedom of the World:* 1975-1995 as the main data source for institutional variables.

Berggren, Niclas (1999). Economic Freedom and Equality: Friends or Foes? *Public Choice* 100, 3/4 (September): 203-23.

This paper describes a theoretical model of the relationship between economic freedom and income distribution, and investigates empirical results. The results indicate that "sustained and gradual increases in economic freedom influence equality measures positively . . . [but] the absolute level of economic freedom appears to be negatively related to equality in some cases."

Uses summary ratings from *Economic Freedom of the World: 1975-1995* as the main data source for institutional variables.

Boettke, Peter J. (1999). Why Culture Matters: Economics, Politics and the Imprint of History. Working paper, New York University. Digital document: www.econ.nyu.edu/user/boettke/culture.htm.

This paper, which cites conclusions from *Economic Freedom of the World: 1975-1995*, discusses how culture and history determine whether liberal economic policies will remain in a given country.

Chafuen, Alejandro (1998). Estado y Corrupcion. In Alejandro Chafuen and Eugenio Guzmán, *Corrupción y Gobierno* (Santiago, Chile: Fundación Libertad y Desarrollo): 45-98.

Finds that corruption is negatively related to economic freedom.

*Economic Freedom of the World: 1975-1995* and *Transparency International* are the main data-source for institutional variables.

Dawson, John W. (1998). Institutions, Investment, and Growth: New Cross-Country and Panel Data Evidence.

Economic Inquiry 36 (October): 603-19.

"This paper outlines the alternative channels through which institutions affect growth, and studies the empirical relationship between institutions, investment, and growth. The empirical results indicate that (i) free-market institutions have a positive effect on growth; (ii) economic freedom affects growth through both a direct effect on total factor productivity and an indirect effect on investment; (iii) political and civil liberties may stimulate investment; (iv) an important interaction exists between freedom and human capital investment; (v) Milton Friedman's conjectures on the relation between political and economic freedom are correct; (vi) promoting economic freedom is an effective policy toward facilitating growth and other types of freedom."

Uses Economic Freedom of the World: 1975-1995 as the main data source for institutional variables.

De Haan, Jakob, and Clemens L.J. Sierman (1998). Further Evidence on the Relationship between Economic Freedom and Economic Growth. *Public Choice* 95: 363-80.

Primarily investigates the robustness of the index of economic freedom devised by Gerald Scully and D.J. Slottje and determines that the robustness of results depends heavily on how freedom is measured. Finds that some specifications are robust predictors of the growth rate of real per-capita GDP (1980-1992) but few are robust for investment share of GDP.

Empirical analysis on *Economic Freedom of the World:* 1975-1995 is limited to correlation with the Scully and Slotjie's index. Suggests further empirical work be done on *Economic Freedom of the World*.

Easton, Steven T., and Michael A. Walker (1997). Income, Growth, and Economic Freedom. *American Economic Review* 87 (2) (May): 328-32.

Finds that economic freedom is an important explanatory variable for steady-state levels of income. The addition of a variable for economic freedom is also shown to increase the explanatory power of a neo-classical growth model.

Economic Freedom of the World: 1975-1995 is the main data source for institutional variables.

Farr, W. Ken, Richard A. Lord, and J. Larry Wolfenbarger (1998). Economic Freedom, Political Freedom and Economic Well-Being: A Causality Analysis. *Cato Journal* 18 (2) (Fall): 247-62.

The paper uses Granger causality analysis to demonstrate that economic freedom "causes" economic well-being and economic well-being "causes" economic freedom. Additionally, the authors argue that economic well-being causes political freedom but that there is no causation flowing from political freedom to economic well-being. The paper also finds no evidence of a casual relationship in either direction between economic freedom and political freedom. Indirectly economic freedom causes political freedom through its effect on economic well-being.

*Economic Freedom of the World:* 1975-1995 and the Freedom House index of political rights and civil liberties are the main data sources for institutional variables.

Ford, John B., Kiran W. Karande, and Bruce M. Seifert (1998). The Role of Economic Freedom in Explaining the Penetration of Consumer Durables. *Journal of World Business* 33 (1): 69-86.

"The study examines the link between economic freedom (a measure of government intervention) and the penetration of three durable goods (televisions, radios and automobiles) across countries."

Cites conclusions of *Economic Freedom of the World: 1975-1995*; uses other indexes of economic freedom for empirical work.

Goldsmith, Arthur A. (1997). Economic Rights and Government in Developing Countries: Cross-National Evidence on Growth and Development. *Studies in Comparative International Development* 32 (2) (summer): 29-44.

The paper "finds that developing countries that score better in protecting economic rights also tend to grow faster and to score higher in human development. In addition [the paper finds that] economic rights are associated with democratic government and with higher levels of average national income."

Uses summary ratings from *Economic Freedom of the World: 1975-1995* as one of a number of institutional variables.

Grubel, Herbert G. (1998). Economic Freedom and Human Welfare: Some Empirical Findings. *Cato Journal* 18 (2) (Fall): 287-304.

The paper compares economic freedom to income, growth, unemployment in the OECD, the UN Human Development Index, life expectancy, literacy, poverty, and income distribution. It finds that "economic freedom does not have a cost in terms of income levels, income growth, unemployment rates, and human

development."

Economic Freedom of the World: 1997 Annual Report is the main data source for institutional variables.

Gwartney, James, Randall Holcombe, and Robert Lawson (1998). The Scope of Government and the Wealth of Nations. *Cato Journal* 18 (2) (Fall): 163-90.

The paper examines the effect of the size of government in OECD countries upon economic growth. This paper draws on the authors' Joint Economic Committee Study, *The Size and Functions of Government and Economic Growth*.

Makes reference to the general conclusions regarding economic freedom and income and growth as published in *Economic Freedom of the World: 1975-1995* and Economic Freedom of the World: 1997 Annual Report.

Gwartney, James, Robert Lawson and Randall Holcombe (1999). Economic Freedom and the Environment for Economic Growth. *Journal of Institutional and Theoretical Economics* 155 (4): 1-21.

This study examines the relationship between economic freedom and economic growth. The authors find that economic freedom is a "significant determinant of economic growth, even when human and physical capital, and demographics are taken into account." The authors also test for causality. They find that increases in economic freedom lead to higher economic growth but not that higher economic growth leads to higher economic freedom.

Uses summary ratings from Economic Freedom of the World: 1997 Annual Report as one of a number of institutional variables.

Hanke, Steve H., and Stephen J.K. Walters (1997). Economic Freedom, Prosperity, and Equality: A Survey. *Cato Journal* 17 (2) (Fall): 117-46.

The article compares several institutional indexes for content and explanatory power: Gerald Scully's studies, The Fraser Institute's Economic Freedom of the World, Freedom House's Economic Freedom Indicators, The Heritage Foundation's Indices of Economic Freedom, The International Institute for Management Development's World Competitiveness Yearbook 1996, The World Forum's Global Competitiveness Report 1996. Compares liberty and prosperity, equality and foreign policy implications. They find that economic

greedom is positively correlated with per-capita GNP.

*Economic Freedom of the World:* 1975-1995 is used as one variable in a comparison of a number of institutional variables.

Henderson, David (1998). The Changing Fortunes of Economic Liberalism. London: Institute of Economic Affairs.

A comprehensive review of the trends in economic liberalism in the last century. The book covers economic liberalism in thought and practice as well as discussing how the climate of political and popular opinion has both helped and constrained the development of liberal policy. One section uses the Economic Freedom of the World to discuss the progress made by countries engaging in economic reform and the appendix discusses the derivation, benefits, and limitations of the Economic Freedom of the World.

Economic Freedom of the World: 1975-1995 is the only quantitative source for institutional variables.

Islam, Sadequil (1996). Economic Freedom, per Capita Income and Economic Growth. *Applied Economics Letters* 3: 595-97.

Examines the effect of economic freedom on income and growth in high-, middle-, and low-income country sets and finds that economic freedom is significant for a sample of all countries but only in some subsets.

Uses the precursor to *Economic Freedom of the World, Measuring Economic Freedom*, by James Gwartney, Walter Block and Robert Lawson, a chapter in Stephen Easton and Michael Walker (eds.), *Rating Global Economic Freedom* (Vancouver: The Fraser Institute, 1992). *Measuring Economic Freedom* is the main data source for institutional variables.

Johnson, James P., and Tomasz Lenartowicz (1998). Culture, Freedom and Economic Growth: Do Cultural Values Explain Economic Growth? *Journal of World Business* 33 (4): 332-56.

The paper discusses which cultural values are associated with economic freedom, drawing on two international quantitative cultural indexes.

Uses the summary ratings from *Economic Freedom of the World:* 1975-1995 as one of a number of institutional variables.

Johnson, Simon, Daniel Kaufmann, and Pablo Zoido-Lobaton (1998). Government in Transition: Regulatory Discretion and the Unofficial Economy. *American Economic Review, Papers and Proceedings* (May): 159-239.

Empirically studies the effect of institutional quality on the share of the unofficial economy in GDP.

Uses the component, Equality of Citizens under the Law and Access of Citizens to a Non-Discriminatory Judiciary, of Economic Freedom of the World: 1997 Annual Report as one of a number of institutional variables.

Jordan, Jerry L. (1997). Jobs Creation and Government Policy. Cato Journal 16 (3) (Winter): 287-94.

Argues that employment-creating initiatives or job-creation policies hinder the creation of new technology and the process of "creative destruction." Also argues that the role of government monetary intervention in the economy should be limited to creating stable monetary policy.

Makes reference to the general conclusions of *Economic Freedom of the World: 1975-1995* regarding economic freedom and income and growth.

La Porta, R., L. Lopez-de-Silanes, A. Shleifer, and R. Vishny (1998). The Quality of Government. NBER Working paper no. 6727. Digital document: www.nber.org/papers/w6727.

The paper uses quantitative measures of government performance to determine if countries with different institutional structures have better or worse governments. Historical factors such as legal structures, religion, and ethnolinguistics are used to evaluate economic, political, and cultural theories of institutions and their impact on government intervention, public-sector efficiency, provision of public goods, size of government, and political freedom.

Components of *Economic Freedom of the World: 1975-1995* are used as government performance measures, with several other variables.

Lim, Linda Y.C. (1998). Whose "Model" Failed? Implications of the Asian Economic Crisis. *Washington Quarterly* 21 (3): 25-36.

The paper examines the conflicting interpretations of the role of governments and economic freedom in the success and subsequent crises in Asia.

Cites conclusions of *Economic Freedom of the World: 1975-1995*.

Mbaku, John Mukum, (1998). Constitutional Engineering and the Transition to Democracy in Post-Cold War Africa. *The Independent Review* 2 (4) (Spring): 501-17.

Discusses the constitutional guarantees necessary to secure economic freedom and why such guarantees are important. Focuses specifically on Africa.

Makes reference to the general conclusions of *Economic Freedom of the World: 1975-1995* regarding economic freedom and income and growth.

Mbaku, John Mukum, ed. (1999). *Preparing Africa for the Twenty-First Century: Strategies for Peaceful Coexistence and Sustainable Development*. Aldershot, UK and Brookfield, VT: Ashgage.

Chapter 6, A Balance Sheet of Structural Adjustment in Africa: Towards a Sustainable Development Agenda ( John Mukum Mbaku) and chapter 12, Making the State Relevant to African Societies (John Mukum Mbaku) emphasize the constitutional guarantee of economic freedoms as the single most important way both to generate the wealth that Africans need to meet the challenges of the new century and to deal more effectively with the continent's colossal debt.

Makes reference to the general conclusions of *Economic Freedom of the World: 1975-1995* regarding economic freedom and income and growth.

Milhaupt, Curtis (1998). Property Rights in Firms. Virginia Law Review 84: 1145-94.

Discusses how differences in property rights and corporate governance systems arise within differing institutional frameworks.

Uses the Property Rights component of *Economic Freedom of the World:* 1975-1995 as one of a number of institutional variables in case-study analysis.

Nelson, Michael A., and Ram D. Singh, (1998). Democracy, Economic Freedom, Fiscal Policy and Growth in LDCs: A Fresh Look. *Economic Development and Cultural Change* 46 (4) (July): 677-96.

The study examines the effect of democracy on economic growth after controlling for a number of variables for the size of government and institutions. The study finds that it is not the redistributive policies of democratic governments that hinder development in developing countries but the lack of economic freedom.

Uses the precusor to *Economic Freedom of the World, Measuring Economic Freedom*, by James Gwartney, Walter Block and Robert Lawson, a chapter in Stephen Easton and Michael Walker (eds.), *Rating Global Economic Freedom* (Vancouver: The Fraser Institute, 1992). The summary ratings of Measuring Economic Freedom are used as one variable in a comparison of a number of variables for institutions and the size of government.

Norton, Seth W. (1998). Poverty, Property Rights, and Human Well-being: A Cross-national Study. *Cato Journal* 18 (2) (Fall): 233-45.

The paper compares property rights to indicators of development and determines that the "well-being of the world's poorest inhabitants [is] sensitive to the cross-national specification of property rights." The paper shows that well-specified property rights enhance the well-being of the world's most impoverished.

Economic Freedom of the World: 1997 Annual Report and the Heritage Foundation's *Indices of Economic Freedom* are the main data source for institutional variables.

Norton, Seth W. (1998). Property Rights, the Environment, and Economic Well-Being. In Peter J. Hill and Roger E. Meiners (eds.), *Who Owns the Environment* (Rowman & Littlefield): 37-54.

Investigates whether countries with better property rights have better performance on environmental measures.

Uses the summary ratings of *Economic Freedom of the World:* 1975-1995 as one of four measures used as proxies for property rights.

Oi, Walter (1999). The Hearty and Cheery State. Contemporary Economic Policy 17 (1) (January): 138-46.

Argues that human capital is a consequence of growth, not a cause, and that economic freedom allows the best chance for economic progress.

Makes reference to the general conclusions of *Economic Freedom of the World: 1975-1995* regarding economic freedom and income and growth.

Park, Walter G., and Juan Carlos Ginarte (1997). Intellectual Property Rights and Economic Growth. *Contemporary Economic Policy* 15 (July): 51-61.

The authors have compiled an index of intellectual property rights, and examine its effects on growth and the factors of production (investment, schooling, and R&D). "The paper finds that IPRs affect economic growth indirectly by stimulating the accumulation of factor inputs like R&D and physical capital."

Uses summary ratings of *Economic Freedom of the World: 1975-1995* as a control variable for market institutions in the analysis.

Rose, Andrew (2000). One Money, One Market: Estimating the Effect of Common Currencies on Trade. *Economic Policy* (forthcoming). Digital document: http://haas.berkeley.edu/~arose/Grav.pdf (December 1999).

Investigates the effects of exchange-rate volatility and currency unions on international trade. the author uses the summary ratings to test the sensitivity of his model of trade between nations. Finds a statistically significant relationship between trade among nations and economic freedom.

Uses the summary ratings from *Economic Freedom of the World: 1997 Annual Report* as one of a number of variables.

Vamvakidis, Athanasios (1998). *Explaining Investment in the WAEMU [West African Economic and Monetary Union]*. International Monetary Fund, working paper WP/98/99.

Relates differences in investment as a share of GDP within the West African Economic and Monetary Union to differences in economic freedom using fixed and random-effects models across time.

Economic Freedom of the World: 1975-1995 is the main data source for institutional variables.

Vásquez, Ian (1998). Official Assistance, Economic Freedom, and Policy Change: Is Foreign Aid Like Champagne? *Cato Journal* 18 (2) (Fall): 275-86.

Makes reference to the general conclusions of *Economic Freedom of the World:* 1997 Annual Report regarding economic freedom and income and growth and argues that foreign aid is propping up countries that are not economically free. Mr Vásquez also tests the notion that aid agencies target pro-growth policies. He finds that for the countries where economic freedom declines or does not improve, foreign aid actually increases (19 of 20 cases). As well, in over one-half of these countries GDP per capita declines.

Makes reference to the general conclusions of Economic Freedom of the *World: 1997 Annual Report* regarding economic freedom and income and growth.

Voigt, Stefan (1997). Positive Constitutional Economics: A Survey. Public Choice 90: 11-53.

Distinguishes between normative and positive constitutional economics, and between various concepts of the constitution.

Reference to Economic Freedom of the World: 1975-1995 in a footnote.

Voigt, Stefan (1998). Making Constitutions Work: Conditions for Maintaining the Rule of Law. *Cato Journal* 18 (2) (Fall): 191-208.

Makes reference to the general conclusions of *Economic Freedom of the World: 1975-1995* regarding economic freedom and income and growth and discusses conditions under which the rule of law can be maintained.

Wu, Wenbo, and Otto A. Davis (Forthcoming). Two Freedoms, Economic Growth and Development: An Empirical Study. *Public Choice*.

"The main results are: given economic freedom, the rate of economic growth is independent of political freedom and the level of income; given the level of income, political freedom is independent of economic freedom and the growth rate. The analysis suggests the fundamental effects of economic freedom in fostering economic growth and a high level of income as the condition of a high degree of political freedom." The article

also uses principle component analysis to weight the results published in Economic Freedom of the World.

*Economic Freedom of the World: 1975-1995* and *Freedom House's Economic Freedom Indicators* on political right and civil liberties are the main data sources for institutional variables.

Wu, Wenbo, and Otto A. Davis (1999). The Two Freedoms in a Growth Model. *Journal of Private Enterprise* 14 (2): 115-43.

The paper develops a theoretical model describing how economic and political freedoms might impact economic growth, then estimates the relative impact of the two on growth in the world as a whole, and for subsets of developing and developed nations.

Summary ratings from Economic Freedom of the World: 1975-1995 provide a key institutional variable.

Yago Glenn, L. Ramesh, D. Brumbaugh, and J. Barth (1999). *Capital Access Index: Deconstructing Global Financial Architecture: Global Capital Access and Policy Backlash*. Santa Monica, CA: Milken Institute.

The paper focuses on the institutional structures that are involved in capital flows, globalization, and financial crisis. *The Global Capital Access Index* is presented as a means of comparing the financial markets of different countries.

Components of Economic Freedom of the World: 1975-1995 used in compiling the Global Capital Index.