# Economic Freedom of the World 2001 Annual Report

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Cover designed by Brian Creswick @ GoggleBox

#### Canadian Cataloguing in Publication Data

Gwartney, James D.

Economic freedom of the world ... report

ISSN 1482-471X

1. Economic history--1990- --Periodicals. 2. Economic indicators--Periodicals.

I. Fraser Institute (Vancouver, B.C.) II. Title

HB95G93 330.9'005 C97-302072-5

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## **ACKNOWLEDGMENTS**

As with previous editions of *Economic Freedom of the World*, we owe a debt to many people. Without the assistance and guidance of both Mike Walker and Milton Friedman, this project would never have gotten off of the ground. Mike organized the Fraser Institute/Liberty Fund conference series that provided the foundation for our measure of economic freedom. He also edited several of the conference volumes and provided both input and encouragement throughout. Milton Friedman's criticisms and suggested modifications shaped the research design of the project.

The institutes of the Economic Freedom Network again provided invaluable support for this report. They helped verify information and supplied us with missing data. Their use of the index in their respective countries has been nothing short of astounding. We have all the respect in the world for these freedom fighters operating in sometimes hostile environments.

Kathy Makinen at the DeVoe L. Moore Center of Florida State University assisted with data gathering and calculations. Fred McMahon and Chris Schlegel at The Fraser Institute did an excellent job of coordinating the data management and publication of the book. We are sorry for the loss of Dexter Samida, who has left The Fraser Institute and is currently studying in South Korea. Dexter's tireless work to convert the index to a database system paid huge dividends by saving us literally dozens of hours of labor. We wish him all the luck in his future endeavors.

James Gwartney

Robert Lawson

## ABOUT THE AUTHORS

James D. Gwartney is Professor of Economics and Policy Sciences at Florida State University. He has a doctoral degree in economics from the University of Washington. Along with Richard Stroup and Russell Sobel, James Gwartney is author of *Economics: Private and Public Choice* (Harcourt Brace). This text, now in its ninth edition, has been used by more than one million students in the last two decades. A member of the Mont Pelerin Society, during 1993/1994, Professor Gwartney taught at the Central European University in Prague, Czech Republic. He has recently concluded a two-year tenure as Chief Economist at the Joint Economic Committee of Congress. He has published in the leading journals of professional economics, including Public Choice, American Economic Review, Journal of Political Economy, Industrial and Labor Relations Review, Cato Journal and Southern Economic Journal.

**Robert A. Lawson** is Associate Professor and currently serves as the George H. Moor Chair of Business and Economics at Capital University in Columbus, Ohio. A native of Cincinnati, he earned his B.S. in economics from the Honors Tutorial College at Ohio University in 1988 and his M.S. (1991) and Ph.D. (1992) in economics from Florida State University. He is a Senior Research Advisor for the Buckeye Institute for Public Policy Solutions, Adjunct Scholar for the Mackinac Institute, and Faculty Affiliate for the DeVoe Moore Policy Sciences Center at Florida State University. He has published articles in several journals, including Public Choice, Journal of Labor Research, Asian Economic Review, Cato Journal, Journal of Institutional and Theoretical Economics, and Journal of Public Finance and Public Choice.

## ABOUT THE CONTRIBUTORS

**Charles Skipton** is a doctoral candidate in economics at Florida State University. His dissertation topic is international trade. During 1999 and 2000, he served as Staff Economist for the Joint Economic Committee of the United States Congress.

Walter Park is Associate Professor of Economics at American University in Washington, DC. He earned his B.A. at the University of Toronto, his M.Phil. at Oxford University, and his Ph.D. at Yale. He has published numerous articles on research and development, patents, and intellectual property rights in journals such as Research Policy, Economic Letters, Economic Inquiry, and Journal of Economics and Finance.

## 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: zefi@qske.tirana.al)

#### 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 conducts research on all aspects of free markets, voluntary association, and individual liberty, and publishes the results to as wide an audience as possible. The Center also organizes seminars and conferences to examine liberty and enterprise in Africa. (E-mail: kimenyi@kippra.or.ke)

#### Association for Liberal Thinking, Turkey

The Association for Liberal Thinking is a non-profit, non-governmental organization seeking to introduce the liberal democratic tradition into Turkey. The Association promotes the understanding and acceptance of ideas like liberty, justice, peace, human rights, equality, and tolerance. It also encourages academic writing on liberal themes to help the Turkish people 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 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 Liberté Economique et le Progrès Social (ALEPS), France

ALEPS promotes the idea of free markets generating social progress. It connects French liberal intellectuals with the global scientific community. Thanks to its permanent contacts with various prestigious foreign institutes, in 1990 ALEPS published "Manifeste de l'Europe pour les Européens," 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. A post-socialist society has still to be set up, both in Eastern Europe as well as in Western countries such as France, where 40 years of the welfare state have led to mass unemployment, fiscal oppression, an explosive expansion of social security, an increase in poverty and inequality, and a loss of moral virtues and spiritual values. ALEPS provides the political and intellectual push towards this necessary revival.

#### Cato Institute, United States of America

Founded in 1977, the Cato Institute is a research foundation dedicated to broadening debate about public policy to include 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: ivasquez@cato.org)

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

CEDICE is a non-partisan, non-profit, private association dedicated to the research and promotion of philosophical, economic, political, and social thinking that focuses on individual initiative and a better understanding of the free-market system and free and responsible societies. To this end, CEDICE operates a library and bookstore, publishes the series, Venezuela Today, and other studies, provides economic training for journalists, and conducts special events and community programs. (E-mail: hfaria@newton.iesa.edu.ve)

#### Center for the New Europe, Belgium

The Center for the New Europe is a European research institute, based in Brussels, that promotes a market 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 develops policy alternatives, encourages economic growth and deregulation, seeks new market-based solutions for social and environmental concerns, and promotes 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 the reform of critical policies and aggressively lobbies key decision-makers in the country. (E-mail: mmoragoda@eureka.lk)

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

The Center for Research and Communication (CRC) has, since 1967, conducted research and published works on domestic and international economic and political issues that affect the Asia-Pacific region. It provides forums for discussion and debate among academicians, businessmen, civil officials, and representatives of other sectors that shape public opinion and chart the course of policies. CRC is the main research arm of the University of Asia and the Pacific in Metro Manila, Philippines, and currently serves as the Secretariat of the Asia Pacific Economic Cooperation (APEC) Business Advisory Council. (E-mail: hbasilio@info.com.ph)

#### Centre for Civil Society, India

The Centre for Civil Society is an independent, non-profit, research and educational organization inaugurated on August 15, 1997 and devoted to improving the quality of life for all citizens of India. The CCS maintains that, having earlier attained their political independence from an alien state, the Indian people must now seek economic, social, and cultural independence from the Indian state. This can work from two directions simultaneously: 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. The CCS 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. (E-mail: parth@ccsindia.org; website: www.siliconindia.com/civil)

#### 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: eghersi@computextos.com.pe)

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

The Centro de Investigaciones Académicas 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 and 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 Económicas 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 impede 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: Ceninves@mail.infolatina.com.mx)

#### Centro Einaudi, Italy

The Centro di Ricerca e Documentazione "Luigi Einaudi" was founded in 1963 in Turin, Italy, as a free association of businessmen and young intellectuals to foster individual freedom and autonomy, economic competition and the free market. The Centro is an independent, non-profit institute financed by contributions from individuals and corporations, by the sale of its publications, and by specific research commissions. The Centro carries on research activities, trains young scholars and researchers, organizes seminars, conferences and lectures, and publishes monographs, books and periodicals, including: the quarterly journal, *Biblioteca della libertà*; *Rapporto sull'economia globale e l'Italia* (Report on the global economy and Italy); *Rapporto sul risparmio e sui risparmiatori in Italia* (Report on the savings and the savers in Italy).

#### 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 promotes a free and fair market economy, participatory democracy, and a 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 ASRC. (E-mail: adam.smith@adamsmith.pl; website: http://www.adam-smith.pl)

#### 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 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 and non-partisan, non-profit organization that provides a forum for the exchange of opinions among scholars, businessmen, and policy-makers on the causes of, and solutions to, economic, social, and political problems. It proposes practical reforms of the economy, education, social security, and legislation as the Slovak Republic is transformed into an open society. Education of high-school and university students is a large part of its activities. The F.A. Hayek Foundation promotes classical liberalism, which was virtually absent until 1989: market economy, reduced role of the government, rule of law and individual choice, responsibilities and rights to life, liberty, and property. (E-mail: hayek@changenet.sk; website: www.hayek.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. (E-mail: info@fraserinstitute.ca; website: www.fraserinstitute.ca)

#### 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: fmf@jhb.lia.net)

#### Fundación Economía y Desarrollo, Inc., Dominican Republic

The Fundación Economía y Desarrollo, Inc. (FEyD) is a private non-profit organization dedicated to fostering competitive markets, private enterprise, and 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 one-hour television program called "Triálogo," which is broadcast three times a week and explains studies of the performance of the Dominican economy and its sectors. (E-mail: feyd03@tricom.net)

#### Fundación Libertad, Panama

Fundación Libertad, Panama, is a recently-formed, non-profit foundation engaged in the promotion and development of liberty, individual choice, and voluntary cooperation and in the reduction of government. Fundación Libertad was founded by members of professional and business organizations promoting free enterprise and democracy because the existing organizations could not fully address issues affecting the freedom of the common citizen, particularly the increasing discretionary power of the state and the proliferation of legislation fostering discrimination and establishing privileges, all of which are contrary to the spirit of democratic capitalism. Fundación Libertad has drawn initial support from sister organizations such as Centro de Divulgación del Conocimiento Económico (CEDICE) in Caracas, Venezuela, and the Centro de Investigación y Estudios Nacionales (CIEN) in Guatemala. (E-mail: Roberto Brenes: diablo@pty.com; Carlos E. González: cg@pananet.com.)

#### Fundación Libertad, Democracia y Desarrollo, Bolivia

The Fundación Libertad, Democracia y Desarrollo (FULIDED) is a non-profit organization founded by citizens interested in promoting democracy and freedom. The purpose of the Foundation is to investigate and analyze issues that have economic, political, or social impact on the free market and private initiative. Through seminars, debates, and publications, FULIDED seeks to reflect Bolivia's participation in the global economy. (E-mail: fulided@cainco.org.bo)

#### Hong Kong Centre for Economic Research

The Hong Kong Centre for Economic Research is an educational, charitable trust established in 1987 to promote the free market in Hong Kong by fostering public understanding of economic affairs and developing alternative policies for government. The Centre publishes authoritative research studies and is widely recognized as the leading free-market think-tank in Asia. It has been influential in persuading public opinion and the government in Hong Kong 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 the legally sanctioned fixing of deposit interest rates by banks, and adopt market mechanisms for protecting the environment. (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 to develop policies in economics, strategic studies, and politics that will bring about limited government in domestic affairs and the balance of power in strategic planning. The Institute's Division for Economic Policy Research (DEPR) publishes *Policy Studies* in both English and Hebrew, while the Division for Research in Strategy and Politics produces a series of documents in strategic studies and another in politics. (E-mail: iaspsdc@aol.com)

#### The Institute for Economic Freedom, Bahamas

The Institute for Economic Freedom is an independent, non-political, non-profit 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 Market Economics, Bulgaria

Established in 1993, IME is the first independent economic think-tank in Bulgaria. It is a private, registered, non-profit corporation that receives international support and is widely respected for its expertise. IME designs and promotes solutions to the problems that Bulgaria is facing in its transition to a market economy, provides independent assessment and analysis of the government's economic policies, and supports an exchange of views on market economics and relevant policy issues. (E-mail: svetla@ime.bg)

#### The Institute of Economic Affairs, United Kingdom

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: crobinson@iea.org.uk)

#### The Institute of Economic Affairs, Ghana

The Institute of Economic Affairs (IEA), Ghana was founded in October 1989 as an independent, nongovernmental institution dedicated to the establishment and strengthening of a market economy and a democratic, free, and open society. 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 that analyzes the current economic situation and policies and provides expert analysis of acts, programs, and current economic policy. It will offer advice to Russian government bodies, enterprises, and organizations and prepares and publishes scientific, research, and methodological economic literature. It also conducts 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 policies. (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 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 taken 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 for the study of economic processes and the application of contemporary theories in economics. The Institute's objective is the economic and social advance of Croatia. Research encompasses both macroeconomics and micro-economics, policy issues (including specialized areas such as business economics), current economic trends, methods of economic analysis, development of human resources, spatial and regional economics, international economics and technological development, and investment project planning. Researchers from both inside and outside the Institute 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 books, reports and studies as well as in scientific journals. The Institute maintains close contact with international organizations, professional associations, institutes, and universities. (E-mail: zbaletic@eizg.hr)

#### 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 does the key analysis for 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 analyses of current macroeconomic trends and of social, regional, and institutional development; simulations and evaluations of economic and developmental measures; development of methodological tools and information systems. 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 holds an annual conference on 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 foster prosperity and full employment, the rule of law, democratic freedoms, security from crime and invasion, and high standards in education and family life for the Australian people. To identify and promote the best means of securing these values, the IPA undertakes research, organizes seminars, and publishes widely. (E-mail: ipa@ipa.org.au)

#### Instituto Ecuatoriano de Economia Politica, Ecuador

The Instituto Ecuatoriano de Economia Politica (IEEP) is a private, independent, non-profit institution that defends and promotes 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: dampuero@ecua.net.ec)

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

Instituto Liberal was founded to persuade Brazilians of the advantages of a liberal order. It is a non-profit institution supported by donations and the sponsorship of private individuals and corporations. Its bylaws provide for a Board of Trustees and forbid any political or sectarian affiliations. 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 wholly independent of any religious, political, financial, or governmental groups. It is committed to the free market and to political and economic freedom. It publishes studies and analyses of public-policy issues. (E-mail: ega@chilesat.net)

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

The Institute for Liberty and Public Policy Analysis (INLAP) is a non-profit, non-partisan organization, created to defend and promote individual liberty through analysis of public policy 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 necessary 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.

INLAP produces timely analyses of proposed laws, decrees, and regulations, and its recommendations provide guidance for elected officials who seek to achieve greater individual liberty and creativity and

a more productive economy. Detailed studies of well-meant public policies that ultimately have adverse effects are conducted. The Institute's studies and recommendations are published in books, journals, and newspapers, appear as position papers and bulletins, and are also available 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 promoting free enterprise, limited government, freedom and individual responsibility, the rule of law and restraint of violence. Funded by the members of the Federation of Korean Industries (FKI), The CFE was founded as a non-profit, independent foundation on April 1, 1997, at a time of economic crisis in Korean society. The CFE has concentrated on championing a free economy through books and reports on public policies, statistics, and analyses. In workshops and policy forums, the CFE has put forward alternatives to policies proposed as solutions for issues facing Korean society. (E-mail: yooys@cfe.org)

#### Liberales Institut, Germany

The Liberales Institut (Liberty Institute), based in Potsdam, is the think-tank of the Friedrich-Naumann-Foundation. It spreads free-market ideas through the publication of classical liberal literature, the analysis of current political trends, and the promotion of research. The Institute organizes conferences and workshops to stimulate an intellectual exchange among liberals around the world. (E-mail: LibInst@fnst.org)

#### Liberales Institut, Switzerland

The Liberales Institut is a forum 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 as the best way towards the goals of openness, diversity, and autonomy. The Liberales Institut is not associated with any political party. Through publications, discussion forums, and seminars, the Institute seeks to develop and disseminate classical liberal ideas. (E-mail: libinst@bluewin.ch)

#### Liberální Institut, Czech Republic

The Liberal Institute is an independent, non-profit organization for the development and application of classical liberal ideas: individual rights, private property, rule of law, self-regulating markets, and delineated government functions. It is financed by its various activities and by donations from individuals and private corporations. (E-mail: michal.uryc@libinst.cz; website: www.libinst.cz)

#### Lithuanian Free Market Institute, Lithuania

The Lithuanian Free Market Institute (LFMI) is an independent, non-profit organization founded in 1990 to promote economic liberalism based on individual freedom and responsibility, free markets, and limited government. The LFMI's staff studies economic policy, develops reform packages, drafts and evaluates legislation, submits policy recommendations to the legislative and executive levels of government, and undertakes public education. LFMI's activities also include sociological surveys, publications, conferences, workshops, and lectures. LFMI has addressed economic reform: 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 the improvement of company and bankruptcy law. The Institute has also developed a proposal for tax and budget reform and its proposals were adopted in policy debates on income taxation, real estate tax, and inheritance and gift taxes. (E-mail: vaida@lrinka.lt; website: www.FreeMa.org)

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

MOER (Making Our Economy Right), founded in 1991, is the country's lone free-market institute and continues to struggle to promote free-market capitalism despite all odds. The concept of individual freedom and free markets determining the supply of goods, services and capital is little understood in Bangladesh. For the past 50 years or so, Fabian socialism and doctrines of Karl Marx were the basis of our economy, part of the legacy remaining when Britain left India in 1947 and divided it into Pakistan and India. In 1971, Pakistan further split into two nations, Pakistan and Bangladesh. MOER contact person: Nizam Ahmad. (E-mail: nizam@bdmail.net)

#### The New Zealand Business Roundtable

The New Zealand Business Roundtable is made up of the chief executives of about 60 of New Zealand's largest businesses. 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. (E-mail: 100405.1547@compuserve.com)

#### The Open Republic, Ireland

The Open Republic proposes open markets, individual freedom, voluntary action, the rule of law and religion as the means to make Ireland and all other countries better places to live and work. It opposes state control of industry and services and believes that state direction of economies and societies is the prime cause of corruption, poverty, and tyranny in the world. The Open Republic is Ireland's only source of policy and analysis oriented towards individual rights and open-markets. It evaluates public policy and proposes open-market, open-society solutions to Ireland's economic and social problems. (E-mail: pmacdonnell@theopenrepublic.org; website: www.theopenrepublic.org)

#### 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 publishes the results of its research to the public at large and also provides professional services to economic institutions, political and civil organizations, political parties, and the government. (E-mail: stumpf@bsp.mtapti.hu)

#### TIGRA®, Austria

TIGRA® is a non-partisan, international think-tank with headquarters in Salzburg. It was founded to study and advance effective and efficient economic policies. TIGRA® organizes workshops and publishes papers and reports ("From analysis to action!"). TIGRA® is a network of experts who can provide effective market solutions to policy makers. Special emphasis is put on knowledge management, governance, monitoring the scope and quality of regulations (cutting red tape), and setting benchmarks. (E-mail: tigra@austria.vg)

#### Timbro, Sweden

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#### 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 that would increase awareness of democracy

among the Ukrainian people and analyze 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, the economy in transition, security, relations with neighboring states, the Crimean dilemma, interethnic relations, and the freedom of the news media. The Center has hosted a number of national and international conferences and workshops. (E-mail: kam@political.kiev.ua)

D'Letzeburger Land, Luxembourg (e-mail: letzlan@pt.lu); 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.

## Economic Freedom of the World 2001 Annual Report

## **EXECUTIVE SUMMARY**

- This is the fifth edition of *Economic Freedom of the* World. Chapter 1 of this report updates the data from the earlier editions and presents an economic freedom index for 123 countries for 1999. Exhibit 1-1 shows the 21 components used to construct the index.
- In 1999, Hong Kong remained in first place with a rating of 9.4 (out of 10), followed closely by Singapore at 9.3. New Zealand ranked 3, the United Kingdom 4, and the United States 5. Australia, Ireland, Switzerland, Luxembourg, and the Netherlands round out the top ten. The rankings of other large economies include Canada (13), Germany (15), Japan (20), Italy (24), France (34), Taiwan (38), Mexico (62), China (81), India (92), Brazil (96), and Russia (117). Myanmar, Algeria, the Democratic Republic of Congo, Guinea-Bissau, and Sierra Leone rated lowest among the 123 countries for which data were available. See Exhibit 1-2.
- The economic freedom index is shown to correlate positively with measures of income per capita, economic growth, the United Nations Human Development Index, and longevity. It correlates negatively with indexes of corruption and poverty. Exhibits 1-4 through 1-9 illustrate these relationships.
- Chapter 2 uses survey data to supplement the objective components of the main index and develops a more comprehensive index of economic freedom for 58 countries. This more de-

- tailed index integrates a number of factors that, until now, have either been omitted or poorly reflected in the economic freedom index. Specifically, it provides a more accurate reflection of cross-country differences in the freedom to contract and compete in business activities and labor markets. The more comprehensive index is constructed for 58 rather than 123 countries because of limitations in the data. See Exhibit 2-8 for the more comprehensive ratings. Exhibit 2-9 compares the more comprehensive index with the economic freedom index for 123 countries described in chapter 1.
- Chapter 3 constructs a Trade Openness Index for the period from 1980 to 1999 using selected components of the economic freedom index. See Exhibits 3-1 and 3-2. This chapter investigates the linkage between the openness of international trade and income levels and growth rates. See Exhibits 3-3 through 3-6.
- Chapter 4 discusses how to measure the strength of protection of property rights in ideas. Such a measure could be used for academic research, policy evaluation, or comparisons of intellectual property regimes across countries and over time. Chapter 4 focuses on quantifying the level of *patent rights* protection.
- Chapter 5 presents detailed Country Reports with component, area and overall ratings and rankings for all the countries in the data set from 1970 to 1999.

## CHAPTER 1: ECONOMIC FREEDOM OF THE WORLD

#### INTRODUCTION

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 publishing of Economic Freedom of the World: 1975-1995 (which we wrote with Walter Block) and the organizing of the Economic Freedom Network, a group of institutes, in over fifty countries, seeking to develop the best possible measure of economic freedom. Since then, we have published Economic Freedom of the World: 1997 Annual Report, Economic Freedom of the World: 1998/ 1999 Interim Report, and Economic Freedom of the World: 2000 Report. This report represents a continuation of these efforts.

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 on 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 set of data 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 the following conditions exist: (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.

No index of this sort is perfect. There are numerous trade-offs necessary along the way. For instance, the desire to cover a large number of countries means that we can include in the index only those types of infringements that occur widely and systematically across countries and only those for which the data can be relatively easily obtained. This approach means that many violations of economic freedom that occur in an idiosyncratic manner cannot be included in the index. Regulatory policy, in particular, is both complex and subtle and, therefore, difficult to measure.

For the first time, *Economic Freedom of the World* contains chapters devoted to particular topics. Chapter 2 will present a more detailed economic freedom index for a smaller set of countries. This index includes ratings for 58 nations and includes measures of economic freedom in labor markets and other areas that the main economic freedom index cannot measure effectively. Chapter 3 takes a closer look at economic freedom in the area of trade policy and presents a Trade Openness Index based on some of the components of the economic freedom index presented in this volume. Chapter 4, by Walter Park of American University, presents an index of patent rights and represents the

beginning of our investigation of intellectual property rights more generally.

The main purpose of this edition of *Economic* Freedom of the World is to present the updated economic freedom ratings through the most recent period. The focus was to get the most current data available in this report. Nevertheless, often data from 1998 or, in rare cases, from 1997 were used

when data for 1999 were not yet available. Chapter 5 presents Country Tables with the component data and ratings, area ratings, and summary economic freedom ratings.

Below is a review of the basic methodology of the economic freedom index, and a discussion of some of the changes made to the index in this edition.

#### 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, our index is founded upon objective components that reflect the presence (or absence) of economic freedom-components that can be derived for a large number of countries from regularly published sources. This method 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. While it is impossible to eliminate all subjectivity, our goal is to reduce, to the extent possible, judgment calls on the part of the authors.<sup>2</sup>

As Exhibit 1-1 illustrates, the index comprises 21 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 as follows: (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. We recognize that economic freedom is heterogeneous and highly complex: no single statistic will be able to capture its many facets fully and accurately. However, the index outlined in Exhibit 1-1 does encompass key ingredients of the concept.

We have been forced to make a few changes to the structure of the index in this edition and two components have been dropped. One component in Area V-Viability of Contracts-had to be dropped because the data source stopped reporting it. A second component-Percent of International Trade Covered by Non-tariff Trade Restraints (VI b i in the previous structure)-was eliminated because its data source no longer exists. The weights in Area VI were adjusted to distribute this component's weight among the remaining five components in that area.3

In total, 123 nations are 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 122 in 1995, 116 in 1990, 112 in 1985, 108 in 1980, 83 in 1975, and 57 in 1970. After the data were assembled for each of the 21 components of the index, the ratings were calculated on a 0-to-10 scale. Higher ratings are indicative of institutions and policies more consistent with economic freedom.

The ratings for many of the 21 components in the index reflect various categorical characteristics; while others 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

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

Ι	Size of Government: Consumption, Transfers, and Subsidies  a General Government Consumption Expenditures as a Percentage of Total Consumption	[11.0%] (50%)
	b Transfers and Subsidies as a Percentage of GDP	(50%)
П	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 Percentage of the Economy	(32.7%)
	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%)
	d The Use of Conscripts to Obtain Military Personnel	(8.8%)
Ш	Monetary Policy and Price Stability (Protection of money as a store of value and medium of exchange)	[9.2%]
	a Average Annual Growth Rate of the Money Supply during the Last Five Years minus the Growth Rate of Real GDP during the Last 10 Years	(34.9%)
	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 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)	(50.0%)
	b Rule of Law: Legal Institutions, Including Access to a Nondiscriminatory Judiciary, That Are Supportive of the Principles of Rule of Law	(50.0%)
VI	International Exchange: Freedom to Trade with Foreigners	[17.1%]
	a Taxes on International Trade	
	i Revenue from Taxes on International Trade as a Percent of Exports plus Imports	(28.2%)
	ii Mean Tariff Rate	(29.4%)
	iii Standard Deviation of Tariff Rates	(28.4%)
	b Actual Size of Trade Sector Compared to the Expected Size	(14.0%)
VII	Freedom of Exchange in Capital and Financial Markets	[17.2%]
	a Ownership of Banks: Percentage of Deposits Held in Privately Owned Banks	(27.1%)
	b Extension of Credit: Percentage of Credit Extended to Private Sector	(21.2%)
	c Interest Rate Controls and Regulations that Lead to Negative Interest Rates	(24.7%)
	d 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 bold 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.

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 on whether higher values are indicative of more or less economic freedom, alternative formulas are used to transform the 11 continuous variables to a 0-to-10 scale. When higher values are indicative of more economic freedom, the formula used to derive the 0-to-10 ratings is:  $(V_i - V_{min}) / (V_{max} - V_{min})$  multiplied by 10. V<sub>i</sub> is the country's actual value for the component, V<sub>max</sub> the maximum value for a country during the 1990 base year, and V<sub>min</sub> 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 0 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 0 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 0.

Higher actual values are often 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 0-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 0 represent an ideal—a benchmark that should be required for a rating of 10. For example, a 0 mean tariff rate and a 0 rate of inflation (perfect price stability) are benchmark outcomes representing maximum economic freedom. When 0 represents an ideal benchmark value, this value was included as  $V_{min}$  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% rate of inflation), V<sub>max</sub> is constrained at a level clearly warranting a rating of 0 even if this was not the maximum observed value during the base year. If this method had not been employed, 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 0-to-10 ratings for each component is presented in the section, Explanatory Notes and Data Sources, at the end of this chapter (page 14).

The procedures used to convert the continuous component values to the 0-to-10 ratings have two important characteristics. First, if all (or most) countries improve (or regress) with the passage of time, the ratings will reflect the change. Second, the distribution of the country ratings along the 0to-10 scale closely 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 captures the variation of the underlying components most fully. 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 subcomponents into a principal component. The component weights derived by this procedure are shown in parentheses in Exhibit 1-1; 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. These weights for each of the seven areas in Exhibit 1-1 are presented in bold-face type and enclosed within brackets; e.g., [11.0%]. The next section in this chapter looks at some of the basic results.

#### ECONOMIC FREEDOM OF THE WORLD IN THE 1990S

Exhibit 1-2 shows the summary economic freedom ratings for 1999, sorted from highest to lowest.<sup>4</sup> As in the past, Hong Kong topped the list, followed closely by Singapore. New Zealand ranked 3, the United Kingdom 4, and the United States 5. Australia, Ireland, Switzerland, Luxembourg, and the Netherlands round out the top ten. The rankings of other large economies include Canada (13), Germany (15), Japan (20), Italy (24), France (34), Taiwan (38), Mexico (62), China (81), India (92), Brazil (96), and Russia (117). Myanmar, Algeria, the Democratic Republic of Congo, Guinea-Bissau, and Sierra Leone rated lowest among the 123 countries for which data were available.

Some have charged that Hong Kong's economy is dominated by a small number of rich and powerful families that are able to manipulate economic affairs for personal benefit. Like other countries, Hong Kong undoubtedly has powerful elites. However, its openness to business and trade make it difficult to stifle the competitive process. Along with Singapore, Hong Kong is one of the world's most open economies. Competition is intense and the latest innovative products and technologies are available at economical prices. During the 1960s and 1970s, growth of the manufacturing sector transformed Hong Kong from a poor, less-developed, country into a highincome industrial power. The dynamic process continued during the 1980s and 1990s, as Hong Kong moved from a manufacturing-based economy to one based on high technology, finance, service, and trade. Hong Kong's economy is characterized by business entrepreneurship, a high level of employment, income mobility, and a relatively modest degree of income inequality. These are attributes of a free and dynamic economy. Of course, economic freedom should not be taken for granted. This is certainly true for an economy politically tied to a mother nation that is much less free. Hong Kong faces an uncertain future but, at least for now, it continues to be the freest economy in the world.

Exhibit 1-3 shows the summary ratings for 1990. In 1990 the top rated countries were Hong Kong (1), Singapore (2), the United States (3), Switzerland, the United Kingdom and Canada (tied for 4). Myanmar and Russia were at the bottom of the list.

There were many interesting changes during the 1990s. Several countries improved both their ratings and rankings substantially. For example, Ireland's rating rose from 7.3 in 1990 to 8.5 in 1999. During the same period, its ranking jumped from 22 to 6. Many Latin American countries, including Argentina, Bolivia, El Salvador, Nicaragua, and Peru were also among those registering substantial improvement.

As the economic freedom of some improved, the rankings of others declined. Canada dropped from 4 in 1990 to 13 in 1999. Venezuela and Mexico both fell considerably, and Indonesia tumbled from 33 to 72 during the decade.

#### ECONOMIC FREEDOM AND MEASURES OF SOCIAL PROGRESS

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 1-4 shows the relationship between the 1999 Economic Freedom Index (EFI) and the level of GDP per capita (measured in 1998 purchasing power parity US dollars). The countries were grouped into quintiles for easy comparison. The relationship between the economic freedom rating and income is quite striking. More economic

freedom is strongly related with higher levels of income. Exhibit 1-5 shows the same economic freedom quintiles with the rate of economic growth since 1990. The general pattern repeats itself.<sup>5</sup>

The economic freedom index has been useful in many other contexts besides examinations of income and economic growth. The next set of exhibits examines the simple relationships between the economic freedom index and other measures of social progress. Exhibit 1-6 shows the economic freedom quintiles with the Corruption

Exhibit 1-2: Summary Ratings for 1999

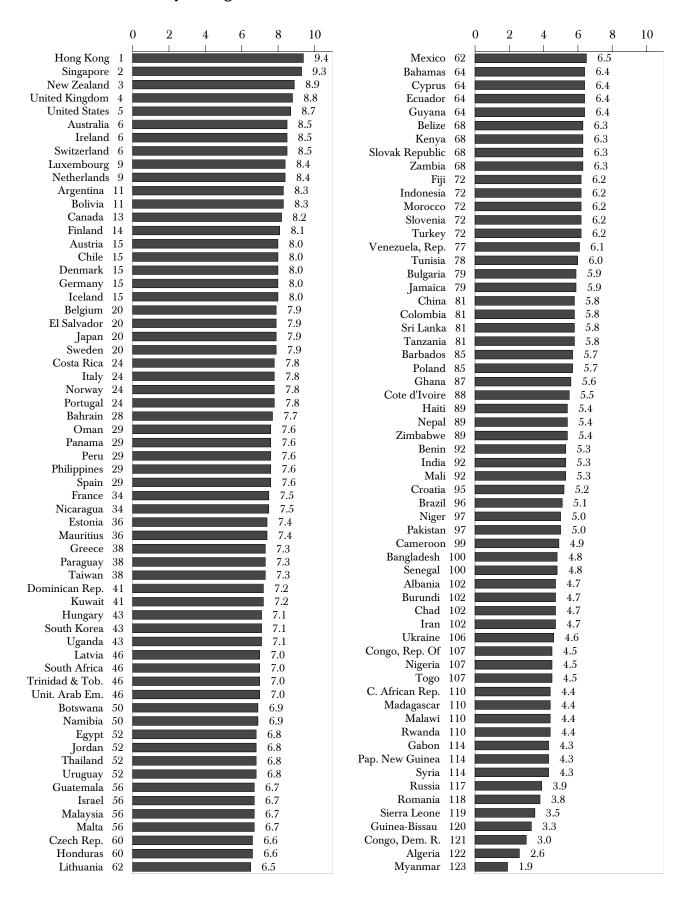


Exhibit 1-3: Summary Ratings for 1990

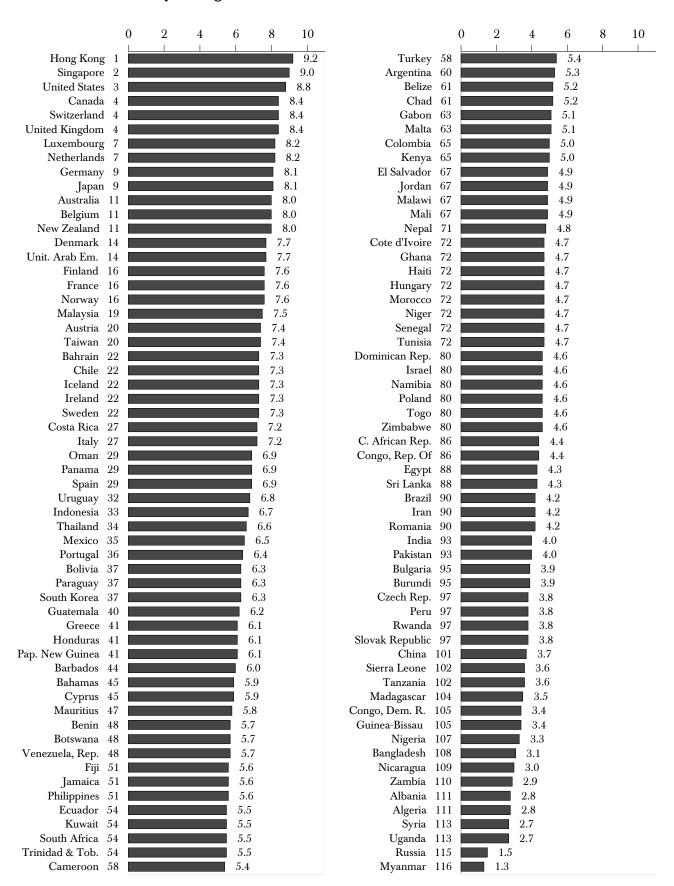
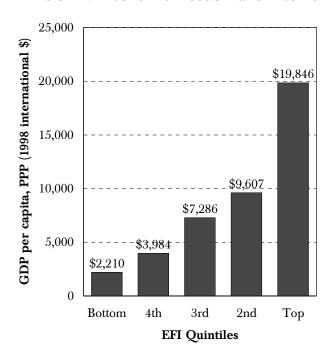


Exhibit 1-4: Economic Freedom and Income



Perceptions Index (CPI) published annually by Transparency International.<sup>6</sup> Higher values for the CPI reflect less bribery and corruption. Exhibit 1-6 indicates that more economic freedom correlates with less corruption.

Exhibit 1-7 charts the economic freedom index against the United Nations Human Develop-

Exhibit 1-6: Economic Freedom and Corruption

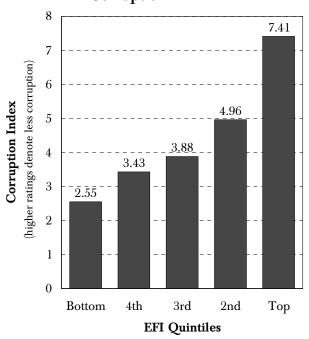
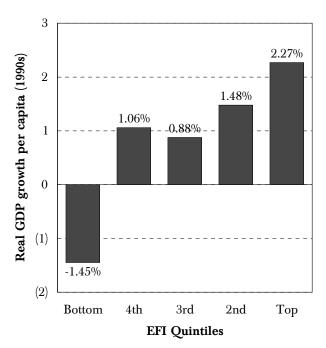
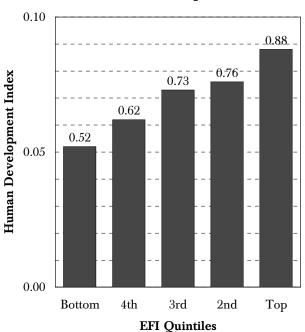


Exhibit 1-5: Economic Freedom and Growth



ment Index. The Human Development Index (HDI) "measures a country's achievements in three aspects of human development: longevity, knowledge, and a decent standard of living." Exhibit 1-7 shows that countries with higher levels of economic freedom also score well on the United Nations Human Development Index.

Exhibit 1-7: Economic Freedom and Human Development



The United Nations also computes a Human Poverty Index for both developed (HPI-2) and developing countries (HPI-1). The two indexes are not comparable, however. Exhibit 1-8 looks at the relationship among the developing nations using HPI-1. According to the United Nations, the Human Poverty Index for developing nations (HPI-1) is similar to the HDI but "includes ... social exclusion." The HPI-1 is measured on a scale such that increasing values indicate more poverty. Economic freedom therefore is negatively correlated with poverty: more freedom, less poverty.

Exhibit 1-8: Economic Freedom and Human Poverty

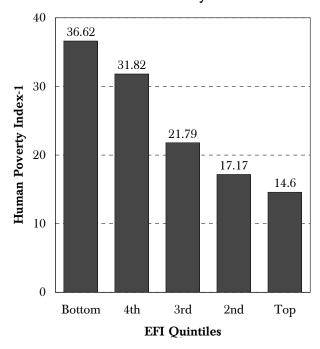
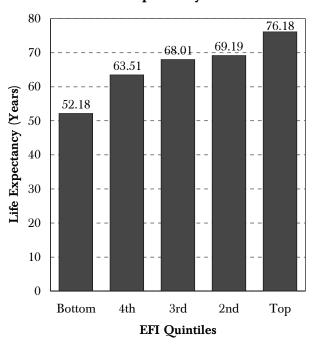


Exhibit 1-9 shows the relationship between the economic freedom quintiles and life expectancy. Not surprisingly, economic freedom corresponds with greater longevity.<sup>9</sup>

Exhibit 1-9: Economic Freedom and Life Expectancy



#### **NOTES**

- (1) See Michael Walker, ed., Freedom, Democracy, and Economic Welfare (Vancouver: Fraser Institute, 1988); Walter Block, ed., Economic Freedom: Toward a Theory of Measurement (Vancouver: Fraser Institute, 1991); Stephen Easton and Michael Walker, eds., Rating Global Economic Freedom (Vancouver: Fraser Institute, 1992); James Gwartney, Robert Lawson and Walter Block, Economic Freedom of the World: 1975-1995 (Vancouver: Fraser Institute, 1996); James Gwartney and Robert Lawson, Economic Freedom of the World: 1997 Report (Vancouver: Fraser Institute, 1997); James Gwartney and Robert Lawson, Economic Freedom of the World: 1998/99 Interim Report (Vancouver: Fraser Institute, 1998); James Gwartney and Robert Lawson with Dexter Samida, Economic Freedom of the World: 2000 Report (Vancouver, Fraser Institute, 1999).
- (2)One of the important trade-offs associated with our decision to rely almost exclusively on regularly published international data is that we cannot rate more than about 120 to 125 countries. Many countries such as Cuba and North Korea that have poor records of maintaining economic freedom do not have the requisite data available and, hence, are not rated in our index.
- Component (V b), Viability of Contracts, was dropped. Consequently, Component (V c), Rule of Law, was designated (V b) in the new edition. Likewise, with the elimination of Component (VI bi), the previous Component (VI bii), Actual Size of the Trade Sector Compared to the Expected Size, is now denoted (VI b).
- (4)We have endeavored to use the most recent data available. In cases where data for 1999 were not available, data for 1998 or 1997 were used instead.
- Data on income and economic growth were obtained from the World Bank, World Development *Indicators 2000* (CD). For a more rigorous examination of the relationship between the economic freedom index and economic growth see, James Gwartney, Randall Holcombe and Robert Lawson, Economic Freedom and the Environment for Economic Growth, Journal of Institutional and Theoretical Economics, 155, 4 (December 1999): 1–21.
- (6)Transparency International, 2000 Corruption Perceptions Index, http://transparency.de/documents/ cpi/2000/cpi2000.html (accessed 21 September 2000).
- United Nations Development Project, Human Development Report 2000, http://www.undp.org/ (7)hdr2000/ (accessed 26 November 2000).
- (8)United Nations Development Project, Human Development Report 2000, http://www.undp.org/ hdr2000/, HPI-1: deprivations in longevity are measured by the percentage of newborns not expected to survive to age 40. Deprivations in knowledge are measured by percentage of adults who are illiterate. Deprivations in a decent standard of living are measured by three variables: the percentage of people without access to safe water, the percentage of people without access to health services, and the percentage of moderately and severely underweight children below the age of five.
- Life expectancy data were obtained from the United Nations Development Project, Human Development Report 2000, http://www.undp.org/hdr2000/ (accessed 26 November 2000).

#### EXPLANATORY NOTES AND DATA SOURCES

#### Component

- I a The rating for this component is equal to:  $(V_{max} V_i) / (V_{max} V_{min})$  multiplied by 10. The  $V_i$  is the country's actual government consumption as a proportion of total consumption, while the  $V_{max}$  and  $V_{min}$  were set at 40 and 6 respectively. 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 0.
- Sources World Bank, World Development Indicators CD-ROM (various editions) 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:  $(V_{max} V_i) / (V_{max} V_{min})$  multiplied by 10. The  $V_i$  is the country's ratio of transfers and subsidies to GDP, while the  $V_{max}$  and  $V_{min}$  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 0.
- Sources World Bank, World Development Indicators CD-ROM (various editions); 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 0-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% 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% 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% 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% 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% 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%of the total, countries were rated at 2. A rating of 0 was assigned when the economy was dominated by SOEs and government investment exceeded 50% 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 (1997).

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, various editions, 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 staple 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 0 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).

Пc 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 0.

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:  $(V_{max} - V_i) / (V_{max} - V_{min})$  multiplied by 10.  $V_i$  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  $V_{min}$  and  $V_{max}$  were set at 0% and 50%, respectively. Therefore, if the adjusted growth rate of the money supply during the last five years was 0, 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 0. When the adjusted annual money growth is equal to (or greater than) 50%, a rating of 0 results.

Sources World Bank, *World Development Indicators CD-ROM* (various editions), 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 0-to-10 scale rating for each country:  $(V_{max} - V_i) / (V_{max} - V_{min})$  multiplied by 10.  $V_i$  represents the country's standard deviation of the annual rate of inflation during the last five years. The values for  $V_{min}$  and  $V_{max}$  were set at 0% and 25%, 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 0 as the standard deviation of the inflation rate approaches 25% annually.

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

III c The 0-to-10 country ratings were derived by the following formula:  $(V_{max} - V_i) / (V_{max} - V_{min})$  multiplied by 10.  $V_i$  represents the rate of inflation during the most recent year. The values for  $V_{min}$  and  $V_{max}$  were set at 0% and 50%, 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% annual rate, the rating for this component moves toward 0. A 0 rating is assigned to all countries with an inflation rate of 50% or more.

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

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 0. 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).

The formula used to calculate the 0-to-10 ratings for this component was the following:  $(V_{max} - V_i) / (V_{max} - V_{min})$  multiplied by 10.  $V_i$  is the country's black-market exchange rate premium. The values for  $V_{min}$  and  $V_{max}$  were set at 0% and 50%, 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 0 as the black market premium increases toward 50%. A 0 rating is given when the black market premium is equal to, or greater than, 50%.

Sources

World Bank, World Development Report 2000, 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 more secure property rights received higher ratings. The data for 1999 are from the IMD, World Competitiveness Report, 2000. No reliable data were available for 1995. The data from 1980 to 1990 are from PRS Group, International Country Risk Guide (various issues). 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 0-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. Likewise, regression analysis between the 1999 IMD data and the 1990 ICRG data was used to splice in the new data set.

Because of inconsistencies in the ICRG ratings over time, 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 0-to-10 scale:  $(V_i - V_{min})/(V_{max} - V_{min})$  multiplied by 10.  $V_i$  is the country's actual value for the component.  $V_{max}$  and  $V_{min}$  were set at 10 and 2 standard deviations below the average, respectively.

Sources

IMD, World Competitiveness Report, 2000, PRS Group, International Country Risk Guide (various issues), and Business Environment Risk Intelligence.

V b Countries with legal institutions that were more supportive of rule of law received higher ratings. The data from 1980 to 1999 on the rule of law are from PRS Group, *International Country Risk Guide* (various issues). In certain years, the ICRG did not provide ratings for Barbados, Benin, Burundi, Central African Republic, Chad, Estonia, Latvia, Lithuania, Mauritius, Slovenia and Ukraine. In those cases, we rated these countries based on the ratings for similar countries (in parentheses): 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 of inconsistencies in the ICRG ratings over time, all ratings were adjusted each year using the maximum and minimum procedure used in other components in order to make the component more consistent over time. The following formula was used to place the figures on a 0-to-10 scale:  $(V_i - V_{\text{min}})/(V_{\text{max}} - V_{\text{min}})$  multiplied by 10.  $V_i$  is the country's actual value for the component.  $V_{\text{max}}$  and  $V_{\text{min}}$  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:  $(V_{max} - V_i) / (V_{max} - V_{min})$  multiplied by 10.  $V_i$  represents the revenue derived from taxes on international trade as a

Sources International Monetary Fund, Government Finance Statistics Yearbook (various issues), International Monetary Fund, International Financial Statistics (various issues), and Office of the United States Trade Representative, Annual Report.

VI a ii The formula used to calculate the 0-to-10 rating for each country was:  $(V_{max} - V_i) / (V_{max} - V_{min})$  multiplied by 10.  $V_i$  represents the country's mean tariff rate. The values for  $V_{min}$  and  $V_{max}$  were set at 0% and 50%, 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 0 as the mean tariff rate approaches 50%. (Note that except for two or three extreme observations, all countries have mean tariff rates within the range of 0% to 50%.)

OECD, Indicators of Tariff and Non-tariff Trade Barriers (1996); World Bank, World Development Report 2000, 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 0-to-10 ratings for this component was:  $(V_{max} - V_i) / (V_{max} - V_{min})$  multiplied by 10.  $V_i$  represents the standard deviation of the country's tariff rates. The values for  $V_{min}$  and  $V_{max}$  were set at 0% and 25%, 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%, ratings decline toward 0. (Note that except for a few very extreme observations, the standard deviations of the tariff rates for the countries in our study fall within the range of 0% to 25%.)

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 Regression analysis was used to derive an expected size of the trade sector based on various structural and geographic characteristics. A basic description of the methodology can be found in chapter 3. 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 0-to-10 scale:  $(V_i - V_{min})$  /  $(V_{max} - V_{min})$  multiplied by 10.  $V_i$  is the country's actual value for the component.  $V_{\rm max}$  and  $V_{\rm min}$  were set at 100% and minus 50%, respectively. (Note that minus 50% is symmetrical with positive 100%.) 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, World Development Indicators CD-ROM (various editions); 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%, countries were given a rating of 10. When private deposits constituted between 75% and 95% of the total, a rating of 8 was assigned. When private deposits were between 40% and 75% of the total, the rating was 5. When private deposits totaled between 10% and 40%, countries received a rating of 2. A 0 rating was assigned when private deposits were 10% 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  $(V_i - V_{min}) / (V_{max} - V_{min})$ multiplied by 10.  $V_i$  is the share of the country's total domestic credit allocated to the private sector. V<sub>max</sub> is the maximum value and V<sub>min</sub> the minimum value for the figure during the 1990 base year. Respectively, these figures were 99.9% and 0%. 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%). A rating near 0 results when the private sector's share of credit is close to the base-year minimum (0%).

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 determined by the market 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 singledigit 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 rating of 0 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 rating of 0 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.