Water: The Fate of Our Most Precious Resource


Many readers of Business Economics, while recognizing that water is essential for survival, take this resource for granted. This is because we live where there are adequate supplies of unpolluted water. Not everyone is so fortunate. Water supplies are scarce or irregular in many parts of the world and often are severely contaminated.

The basic problem with water, as de Villiers points out, is that the supply is fixed—same today as it was in ancient times—but demand has been increasing dramatically as a result of population growth and rising per capita consumption. Nonetheless, there would be sufficient water for everyone if supplies were distributed uniformly. But this is not the case. While there is a surplus of water in areas such as Siberia and Canada, regions such as North Africa and the Middle East have far less water than people need.

As de Villiers points out, many perils to the world’s water supplies are the result of human folly. Adam Smith noted that diamonds, although useless for life, are valued highly, while water, vital for life, costs nothing. Our failure to place an appropriate value on water has encouraged the abuse as well as waste of this precious resource. Thus, groundwater is being depleted in many areas, including the Southwestern United States. Silting, in large part the result of heedless logging and farming practices, is reducing the effectiveness of the Aswan, Hoover, and most other dams. Overpopulation, droughts, shortsighted agricultural practices, and irresponsible political decisions are causing the Sahara and several other deserts to expand. Ill-advised irrigation projects are depleting many major sources of fresh water, such as the Aral Sea and Colorado River.

Moreover, sewage and industrial effluents as well as pesticide, herbicide, and fertilizer runoffs and seepages have been allowed to pollute many of the world’s lakes, rivers, and aquifers. More than one-half of the world’s rivers have become so polluted that they pose major health hazards. Salinity and organisms such as parasites and algae have rendered many supplies of water unfit for human consumption. Some are so contaminated that they cannot be used to irrigate crops, and commercial and recreational fishing is no longer possible in many bodies of fresh water. A quarter of a billion people become ill and ten million die each year from drinking contaminated water. Putting it in starker terms, a child dies every eight seconds from drinking polluted water.

China is expected to be one of the nations hardest hit by a water crisis, according to de Villiers. It has twenty-two percent of the world’s population but only six percent of the supply of fresh water. Nonetheless, China isn’t running out of water since its shortages in some areas can be offset by surpluses in others. Exacerbating China’s problem is that water in almost four-fifths of its rivers is unfit for human consumption, and much of it is too polluted for agricultural uses. Having loosened its restrictions on family planning, China is expected to add as many people to its population over the next four decades as there are in North America. This, together with an expanding economy and a rising standard of living, will cause a rapid increase in the demand for water. As a result, China, like most other nations, is faced with water allocation, distribution, and management problems that will intensify in the years ahead.

Contamination, waste, and shortages of water have led to many catastrophes. Included are crop failures, increased poverty, epidemics, economic declines, and population shifts. It is estimated that twenty-five million people have become “environmental refugees” as a consequence of river pollution. Such developments have given rise to social unrest, political instability, revolutionary movements, and terrorism.

While most experts do not foresee a water apocalypse, they are convinced that the world is faced with a major water crisis. According to de Villiers, there are three widely accepted views on how it can be dealt with. One is to obtain more water, either from an area where there is a surplus or by desalinating seawater. The second is to use less water through (1) conservation, (2) pricing mechanisms, and (3) imaginative technologies coupled with the development of a water conservation ethic. The third solution is to slow the world’s population growth.

De Villiers offers a fourth solution: steal water from someone else. Such a step is not farfetched. Throughout history, many nations
have engaged in bitter water disputes, largely because bodies of water do not respect political boundaries. The Nile, for example, flows through eight countries with claims on its waters before it enters the Mediterranean. Disputes arise over demands for water for drinking, sanitation, agricultural, manufacturing, transportation, and recreational purposes.

Warnings have been voiced that the wars of the twenty-first century will be fought over water. The Middle East appears especially at risk. There also are conflicts within countries. Such international and intranational conflicts are expected to intensify, which helps explain why claims have been made that the survival of the human race in this millennium will be tied to whether fresh water is managed successfully.

Although de Villiers concludes that, “Everywhere you look, there are signs that the water supply is in peril,” his book ends on an optimistic note. He is encouraged by signs of a slowing of the world’s population growth. This, he suggests, together with human inventiveness and the development of a collective political will, is capable of providing a solution to the water crisis.

Marq de Villiers is to be commended for providing an absorbing and informative account of issues that deserve a great deal of attention. Water: The Fate of Our Most Precious Resource is highly recommended reading for everyone with an interest in business, economics, politics, and the future of the world.

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Taxing Ourselves: A Citizen’s Guide to the Great Debate over Tax Reform


For most people (including, I suspect, most economists), a book or article on taxes is about as entertaining as a trip to the dentist. The subject at its best is complex, and the writer usually has some pet project or pet peeve to espouse. An even-handed treatment of taxation written in plain language is rare indeed, but the authors of this volume have pulled it off nicely.

Slemrod is well known for his work on taxation. He is Paul W. McCraken Collegiate Professor of Business Economics and Public Policy as well as director of the Office of Tax Policy Research at the University of Michigan. Bakija is a graduate of the University of Michigan, a former research assistant at the Office of Tax Policy Research, and is now an assistant professor of economics at Williams College.

The purpose of the book is simply stated in the preface: “...to bridge the gap between sound bytes and treatises. It lays out what is known, and what is not known, about how taxes affect the economy, offers guidelines for evaluating tax systems, and provides enough information to evaluate both the current income tax system and the leading proposals to replace or reform it.” The focus is on the individual and corporate income taxes. Estate and inheritance taxes, gift taxes, excise taxes, customs duties, and other federal taxes are not covered.1 The writing is clear, even-handed, and nontechnical. Excellent charts and tables provide historical background and essential information. The authors mercifully decline to offer their own pet plan because, as they say, this would “require applying not only our judgments on the economics of taxation, but our values as well.” The result is a book that is appealing to the intelligent layman as well as the business economist, regardless of specialty.

The authors discuss in some detail just about every aspect of the income tax system and the various proposals to reform it. At the outset, they list the conventional beliefs that taxes are too high, too complicated, too hard to enforce, bad for the economy because they distort choices, and unfair as well. Solutions offered by others, which take up about half the book, fall under the headings of either radical reform or fixing the current system.

Chapter two provides an excellent overview of the existing federal income tax system, with international comparisons as well as historical perspective on both personal and the corporate income taxes. Chapters three through five present the basic criteria by which tax policy should be judged: fairness, the promotion of economic prosperity, simplicity, and enforceability. In Chapter three, “fairness” is reasonably presented as essentially an ethical judgment, with attention focused on “vertical fairness” (the appropriate tax burden on households of different levels of well being) and “horizontal equity” (the

equal treatment of equals rather than special tax breaks for some). Chapter four ties fairness to the simplicity of the tax system and discusses the impact of taxes on economic performance, particularly saving and investment. Chapter five elaborates on the questions of simplicity and enforceability. These chapters also discuss the evidence on how the burden of the tax system is distributed and what is known about the economic effects of taxation.

Beginning with Chapter six, the emphasis shifts to the key elements of many tax reform proposals: a clean base (removal of all exceptions and deductions in the current tax code), a single rate, and taxes based on consumption rather than income. Because of current proposals to simplify the tax code by adopting some form of a consumption-based tax, the section on a consumption tax is especially interesting. The authors explain that a consumption (or uniform or flat tax) on current and future consumption does not alter the reward for postponing consumption (i.e., saving), while an income tax penalizes the return to saving and makes consumption in the future more expensive than consumption now. The authors also address the issue of the regressive nature of a consumption tax, explaining why it may not be as regressive as it appears. The thorny issues of special deductions (home mortgage interest, health care deductions by corporations and individuals, and charitable contributions) are examined analytically, together with the admission that politically it would be very difficult to do away with them.

Chapter seven examines consumption tax alternatives to the income tax, including a retail sales tax, a value-added tax, and a personal consumption tax. Chapter eight considers options that would keep the income tax but reform it. This chapter includes the controversial issues of double taxation of corporate income, inflation indexing, corporate welfare breaks (e.g., preferences for oil drilling), and the treatment of capital gains. Finally, chapter nine provides a short voter's guide to enable the reader, when bombarded with tax rhetoric, to sort out fact from fiction and promises from reality.

While reading this book, from time to time the reader may object to the treatment of a particular topic but then realize that this judgment is influenced by some personal tax benefit that may be adversely affected. The authors are not afraid to tackle controversial issues and in the final analysis treat them impartially. The end result is a highly informative, interesting, and challenging book that is well worth the time spent going through it.

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This book is "must reading" for business economists, investment professionals, and anyone concerned with the interaction between financial markets and the real economy, both in the United States and in emerging markets. The book is a pithy and penetrating analysis of the four major financial crises—Latin America 1982-83, Mexico 1994-95, Southeast Asia 1997-98, and Russia from 1998—that affected recent global financial markets. I particularly like Lamfalussy's balanced assessment of the causes of these crises, with attention paid to inappropriate policies in the industrialized countries as well as in the emerging markets. His conclusion that globalization—while speeding economic development in emerging market countries—has made our financial world riskier is an important warning for the future.

Alexandre Lamfalussy was born in Hungary and now lives in Belgium. He worked with the Bank for International Settlements from 1976 until the end of 1993, when he retired as the general manager, a post he held from 1985. During this period he "had the opportunity to observe from close quarters the development of bank supervisory and regulatory practices" (e.g. the BIS capital standards) and actively participated in the efforts by G-7 central banks to prevent the financial crises in emerging markets from leading to a global financial crisis. This experience gave him special insights into the role played by international bank lending in increasing financial instability.

After his retirement from the BIS, he was appointed head of the European Monetary Institute (which prepared the way for the European Central Bank) and confirmed unanimously by the European Parliament. During his three and one-half years at EMI, he nursed the fragile concept of European monetary union with persuasion and solid analysis. After his retirement from this post in June 1997, he was invited to give the 1998 Henry L. Stimson Lectures at Yale,
which he did in March and April of that year. This book is based on those lectures and represents the distillation of years of experience in the private sector, at the BIS as a bankers’ banker, and finally in helping to bring the euro into being. He has been honored with a barony by the Kingdom of Belgium.

One of the nice features of this book is its conciseness. In 175 pages, Lamfalussy provides an overview of the four crises cited above, describes their common features, discusses the role of financial globalization in aggravating the crises, provides some sensible advice on crisis prevention and crisis management, and concludes with some cogent observations and prescriptions for the future. Along the way he makes a number of points that, once expressed, seem so obvious that the reader is ashamed not to have thought of them before. One of them, “that the process of financial globalization aggravated all four crises and, if left unattended, would be likely to contribute to the eruption of new crises in emerging markets” should be taken to heart by the managers of high-yield bond funds who have been investing heavily in emerging market debt.

Another point, obvious in retrospect, is that there is a fundamental “disproportion,” in Lamfalussy’s words, between the size of an emerging market’s GDP and financial system compared to the lending and investment capacity of the financial systems in the developed countries. He cites the example of Thailand in 1995 receiving new bank loans of $36.5 billion, with a GDP of $100 billion. When one considers that bank balance sheets, even in the OECD, are as opaque as possible, it is easy to understand how rapidly capital inflows or outflows can change the financial position of an emerging market economy.

A very helpful feature of Lamfalussy’s analysis of the four crises is a synoptic table that provides a step-by-step comparison of each crisis as it developed. From this table it is quite clear that the truly common element in all the crises was a rapid buildup in external short-term debt. Of course, the BIS was probably in a better position to detect this buildup than most observers, since it received regular reports from the major international banks. Still, few investors seem to have paid attention to the BIS’s annual report which, on the eve of the first Mexican Crisis in 1982, called attention to the fact that “in many cases, external reserves are insufficient to meet the repayment of maturing external debts.”

His advice for preventing or mitigating crises in the future is quite practical, as one would expect from his years of experience as a banker. Starting with the most basic of his observations: that there can be no over borrowing without over lending, he believes it is the responsibility of the monetary authorities in the OECD countries to prevent a boom-and-bust cycle in bank lending. He recognizes that there will always be periods of euphoria, which tend to lead to excessive lending but hopes that better bank supervision will dampen these cycles. The Eurozone, he notes, faces the difficult challenge that each country maintains separate bank supervision and that the common monetary policy may result in conditions that are too easy or too tight in individual countries.

His emphasis on the banks—particularly the large international banks—is well founded, since in most countries the banking system is still the main channel through which credit is allocated. In the U.S., which has, in his words, a more nearly market-centric system, the challenge is to get investors to pay attention to the available data and thereby strengthen the discipline of the market.

One piece of advice, which I especially appreciated, is that sound macro-economic policies are important in the industrialized countries as well as in the emerging markets. He cites the sharp swings in U.S. monetary policy in the 1970s and early 1980s as an important contributor to the crises in Latin America in 1982-83. In addition, he notes the need to avoid major misalignments between the three key currencies—the dollar, the euro, and the yen—and hopes for better coordination between the U.S. and Europe. With the euro effortlessly sliding to new lows against the dollar, it seems that this view is not receiving enough attention. Alexandre Lamfalussy is in distinguished company on this point as 1999 Nobel laureate Robert Mundell’s op ed piece in The Wall Street Journal last March, “Threat to Prosperity,” makes clear. Perhaps this advice coming from both a renowned theorist and a renowned practitioner of international finance will eventually be taken to heart by the politicians.

It is impossible in this brief review to discuss all of Lamfalussy’s observations, policy recommendations, and warnings for the future. Be assured that the reader of this elegantly-written book will be amply rewarded.

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Transition and Economics: Politics, Markets and Firms


Transition and Economics is an outstanding advanced-undergraduate to graduate-level introduction to the rapidly growing field of Transition Economics. This new field of economics uses as its laboratory the one-third of the world's population that left the market system for central planning in the first half of the twentieth century and then launched an attempt to return to a market system toward the century's end. From an academic standpoint, this laboratory is unique because it permits researchers to examine how economies behave when markets are just being created and established phenomena of advanced economies, such as unemployment, are just starting to appear. Analysts of the transition economies are able to provide valuable information about the functioning of market economies, as well as to analyze the transition process itself. From a policy standpoint, understanding the transition process is important for the formulation of public policy in and toward these economies. Finally, the transition economies constitute an important part of the world market, and an understanding of their problems and performance is essential for the formulation of an effective business strategy in and vis a vis these economies.

The performance of the transition economies to date has also been very uneven, providing variation that analysts need in order to draw significant conclusions, showing the sensitivity of outcomes to variations in policies, and leading businessmen to select specific countries for investment. In particular, the fall of the Berlin Wall in 1989 led to a rapid demise of the Soviet system of central planning and the launch of a relatively rapid transformation of the Soviet-style centrally planned economies into ones that would be based on free prices and newly created markets. Yet, while all the former Soviet bloc countries suffered an unprecedented decline in output at the start of the transition, their subsequent economic performance diverged considerably. The Central European and Baltic countries performed relatively well, while countries further east, including Russia and Ukraine, suffered further decline in output and achieved only limited structural transformation. In contrast, China's gradual reforms since 1978 led to a remarkable transformation of the Chinese (more decentralized) version of the centrally planned system and generated a long-term period of rapid economic growth. These varied outcomes naturally gave rise to a debate as to which types of initial conditions and reforms are more conducive to a successful transition.

The author presents a careful account of the main economic developments, provides an in-depth theoretical analysis of the principal issues arising in the context of the transition, and refers to much of the empirical work that has been carried out to date. The content of the book is based on a careful evaluation of most of the existing literature, to which Gérard Roland has himself contributed in an important way.

In part one of the book, Roland examines reform strategies in light of various political constraints. He presents the principal theoretical models related to the part played by ex ante and ex post political constraints and by uncertainty in the determination of optimal sequencing and speed of reforms. He also outlines the main theories related to the political economy of mass privatization, focusing on issues of possible privatization reversals, giveaway of shares of state-owned firms to the population at large versus managers and workers in these firms, and Thatcherian-type underpricing of shares. Finally, he examines key empirical evidence related to all these issues. In short, the first part of the book provides the reader with a detailed understanding of the interplay of political and economic forces in the context of the transition process.

The second part of the book focuses on allocative changes that take place during the transition. The reader is first introduced to theoretical models and empirical evidence dealing with sectoral shifts, labor reallocation, labor market frictions, and capital accumulation. Theories of speed and methods of price liberalization, including the Chinese dual-track approach, are presented next. The third section of this part of the book deals with the large output fall at the start of the transition, including explanations such as disruptions of supplies, inefficiencies of bargaining, and search frictions. The last section examines the effect of weakness or collapse of government on economic performance. It covers issues related to the switch from a strong communist government to a weak government plagued by corruption and inability to collect taxes, enforce laws, and prevent the rise of organized crime and underground economy. The importance of government and institutions conducive to a market system is particularly highlighted.
Perspectives on issues of corporate governance, as well as governance at the level of a country, are provided in the third part of the book. The author starts by analyzing the problem of government control of a socialist firm, including the ratchet effect in managerial compensation and the soft budget constraint. He shows how the nature of these problems changes during the transition and then examines different policies and theoretical models of privatization of state-owned firms. Issues of incentives within government bureaucracy and federalism are considered next, and they are related to the performance of firms in Russia and China. Since the development of the banking sector has been accompanied by banking crises and large-scale bailouts of banks, an important part of the book is devoted to the modeling and empirical evidence related to these issues. The book ends with a useful summary of what has been learned about and from the transition.

Overall, Gérard Roland has written an excellent textbook in an important new area of economics. The book provides an introduction to the principal issues that arise in transition, and it presents the main theories that have been developed to explain these issues. While empirical analysis is not the main focus of the book, the author systematically confronts the theoretical predictions with available econometric evidence. All professionals who need to understand what is going on in the transition economies should read the book.

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