Five Policy-Relevant Observations and an Epilogue for 2008

Lawrence H. Summers

My broad views on the U.S. current account imbalances—what the United States should do and what other countries should do—have been documented in other speeches and are available on my web site. As I have explained my reasoning elsewhere, what I would like to do here is to make five policy-relevant observations bearing on various aspects of the situation. These observations responded to the situation in late June 2006, when these remarks were first delivered. At the end of this essay, revised for the conference volume, I will offer some further observations in light of the changed economic circumstances that have occurred since then.

First, Alan Greenspan was right some years ago when he urged that monetary policymakers must take a risk management approach to their task, meaning that they need to think about risks, even if it is not certain that these risks will materialize. The general costs to economic policy of thinking these real imbalances are not a real problem are, I would suggest, much smaller than the risks of remaining complacent if that complacency proves unwarranted. Therefore, making a case that this problem of current account imbalances should be taken seriously by policymakers does not require establishing that a hard landing will happen or is highly likely—only that there is a risk that something could happen, and that it would be good to be prepared to deal with such an event.

One lesson that I draw from economic history is that every bubble has its wise guys. On its face, it is not entirely unreasonable to suggest that U.S. stocks were properly valued in the summer of 1929, as Brad DeLong has quite aptly argued. In late 1988, Jeff Sachs published a paper using various urban economic theories to explain why land was properly valued
in Tokyo at that time. In late 1999, when it was clear that the Internet was a fantastic innovation, I asked a group of high-tech executives whether they could determine what fraction of this wave of transformation we had already ridden. They clearly regarded the question as a slightly odd one, and then one of them told me, “You don’t understand, Larry. It’s a river, not a wave, and it’s going to go on forever.” Likewise, as of mid-2006, the dollar has not plummeted, and there are a reasonable set of arguments that can be constructed as to why its value could go either way. One should assume that at any given moment in any financial market, people will always develop arguments for why the situation could go either way. Yet this recognition does not mean that those who advocate for policy complacency are wrong; it just means that one should not take too much comfort from the fact that these arguments are out there.

Looking back to the 1985 situation, which I think is instructive, it seems to me that there are two ways of reading that experience. One reading is that it was a huge crisis. The other interpretation is that the United States had a high dollar and a big current account deficit, and so if you look at the GDP statistics, in hindsight you would not think that something very dramatic had happened.

I lean toward the more negative reading of the 1985 situation. It seems to me that with 20 years of historical perspective, if you had to pinpoint something that triggered the global stock market crash on October 19, 1987, probably the best thing to examine was a certain amount of skirmishing between Jim Baker and the Germans over what was going to happen to the dollar, who should cut interest rates, and who should not. It seems to me that the Japanese monetary policy response of loosening to avoid excessive dollar depreciation had a great deal to do with the bubble that set the stage for 15 years of deflation in that country. But using this 1985 experience as the basis for predictions about the contemporary situation might not lead to particularly sanguine assessments of what lies ahead. You could say, for example, that given the current situation, the United States is going to have an experience like 1985, but it is probably going to be bigger because now the U.S. current account deficit is twice as big. If this is the likely effect, I doubt we would feel any better if someone tried to point out that the late 1980s correction wasn’t so bad in the larger scheme of things.

So the first thought I want to leave you with is that in the face of this potentially severe unwinding, prudent monetary policy and prudent planning should err on the side of paying attention to the alarmists. You will go very wrong if they are right, but you will not go so wrong if they are wrong.

My second observation is simply that on the question of resolving these global imbalances, I think everyone must be very careful about what they wish for. I believe Peter Garber and his colleagues are completely right to draw attention to at least one of the anomalies with respect to the traditional alarmist view: the observation that around the world, real interest rates are low, not high. If the U.S. failure to save was the dominant feature of the global system in creating these new imbalances, as Larry Kotlikoff has suggested, then you would expect new interest rates to be abnormally high, not abnormally low. Garber’s observation, taken from the level of real interest rates, is quite probative in its suggestion that understanding much about the imbalance has to come from understanding not what is happening in the United States, but what is happening in the rest of the world. Contra Ben Bernanke, I think the term “investment drought” is probably more correct as a description of what has been going on than his term “savings glut.”

Now I would like to comment on one persistent fallacy and make one prescriptive observation. The greatest, most enduring fallacy in official economic circles—a fallacy sometimes perpetuated in the financial community—is what I shall call the “Immaculate Conception” theory of current account improvement. This theory posits that if a country has a current account deficit and then decides to save more, its current account deficit will improve. The value of its currency will remain constant or appreciate because a higher savings rate will engender more confidence, while its economy will get stronger and grow faster. No European central banker in the last decade, with the exception of Mervyn King, has addressed the question of current account deficits without committing this fallacy. Constant repetition does not make the Immaculate Conception theory any less fallacious. For a nation’s current account deficit to improve when it increases its savings, something must happen that changes the level of imports or exports. This adjustment can either be a change in the relative
price—in other words, a fall in the exchange rate—or it can be an economic slowdown that reduces the demand for imports. There is no other way that a current account deficit can improve.

Current G7 communiqués elide these tradeoffs by suggesting that if only the United States increased its savings, then there would be a stronger global economy, a stronger dollar, and all will be right with the world. These theoretical assertions are simply not supported by practical experience, and are similar to suggesting that if only people could fly, transportation would be easier. These comments were successfully excised from the communiqués during the time when I had some influence over their content, but they have since found their way back in.

Economic reality implies that if we wish to find a policy that will correct these global imbalances, we need to be very careful what we wish for. If the United States successfully increases its savings rate, and nothing else happens, the result will be a decline in global aggregate demand to the extent that the reduced pressure on U.S. interest rates reduces capital inflows into the United States and causes the dollar to fall. If this adjustment happens without a recession, then expenditures will switch from the rest of the world to the United States. After all, that is the idea, and the global result will be deflationary and contractionary.

It is far from clear that this would be a good thing. Remember that while the United States is a leading nation—and therefore U.S. political support is crucial to any effective global solution—the fact that the real interest rates have fallen, not risen, suggests that the dominant impulse observed here reflects in important ways the policies that are being enacted in the rest of the world.

Thus, those who wish to see this situation addressed need to focus on the question of what is happening with monetary and fiscal policy in the international macroeconomy. I have already discussed what European central bankers say about these issues. In the developing world, central bankers often resort to a common refrain: “Isn’t it terrible that the United States is running this huge current account deficit because of its huge budget deficit, and therefore is sucking capital out of the developing world where it could do so much good?” This sentiment rings hollow, to put it mildly, when the central banker in question has accumulated $50 billion in U.S. Treasury bills on behalf of his country’s citizens that in the preceding year paid a real interest rate of about 1 percent. The finance minister in India is not innocent of this particular sin, and I choose to believe that it is being committed in order to bolster domestic consumption, rather than being reflective of a conviction that this is the best policy course for the global economy.

The moral of the second observation is that while the United States should not be complacent about its role in creating global imbalances, what takes place in the rest of the world is probably even more important to a resolution of these imbalances than what happens in the United States.

The third observation pushes a hobbyhorse of mine, which I touched on earlier. One thing that is most remarkable about the global economy is the rate at which reserves are being accumulated in developing countries. If we use what seems to me to be an extremely cautious standard proposed some years ago, the so-called Guidotti-Greenspan rule, this maintains that a country is well reserved against financial crisis if it holds reserves equal to all of its short-term debt coming due in one year. But even if we are hyperconservative and assume that the necessary reserves are twice that amount, then today in the developing world there is approximately $2 trillion of excess reserves beyond what is necessary for insurance against financial crisis. That $2 trillion figure is rising at about $500 billion a year.

It is a mystery to me why these funds are being invested at rates that in dollar terms probably average a 2 percent yield. In local currency terms, given that appreciations will happen at some point, these funds are earning close to zero. It seems to me that while we essentially have an international financial architecture that is designed entirely with a view to promoting the flow of capital from industrial countries to poor countries, we have a global financial system in which the dominant flows are going in the opposite direction. Thinking through how that reversal is going to take place is, in my opinion, a question of profound importance.

My own view is that the developing world could receive the “least expensive lunch” if it more prudently invested its reserves in risk-bearing assets that earn a comparably high return. It seems to me the question of how these resources are invested is a matter of great importance.

All three of these observations lead to my fourth observation: what does this current situation of global imbalances say about U.S. monetary policy in particular, and what does it say monetary policy more gener-
ally? In a world that is changing very rapidly—a world that is financially integrated and very different than any we have seen before—this is no time for slavish adherence to mechanistic rules of any kind, even if adherence to such rules might create the possibility of greater predictability. The most important rule for stability is to remain responsive to what is happening in the world, rather than to behave predictably at the cost of being unresponsive to the things that are most important in this brave new world. In a world where asset prices and currency fluctuations are ever more important, it would be quite unwise to straightjacket monetary policy. My hope is that in the future the Federal Open Market Committee would, as it has in the past, take a catholic view of the variables that need to be considered in the context of monetary policy. If past monetary policy deserves any criticism—and I am not sure any criticism is merited—it is due to an excessive focus on Taylor Rule variables, like output gaps relative to asset prices. I would be sorry to see any set of changes in monetary policymaking directed at pushing further in those predetermined directions.

I would like to make one comment on the general monetary policy framework as it currently stands. It seems to me that a very crude history of business would suggest that individual business cycles end. Eventually, expansions end for one of two reasons. The canonical pre-World War II reason held that business cycles ended because of the kinds of things that Henry Kaufman and Al Wojnilower understand much better than I do: excessive credit cycles, excessive risk-taking, inflated asset prices, overbuilding, overinvestment, nonsustainability, nervousness, collapse, withdrawal, falling asset prices, and reduced demand. That’s the story, I would argue, of most business cycles before World War II.

Before 1999, the tale of postwar business cycles was very different. It was a story of expansion, rising inflation, and a nervous Federal Reserve that, in trying to hit the brakes without causing a skid, braked a bit too hard, skidded, and caused a recession. This is the story of the recessions or slowdowns in 1958, 1967, 1971, 1974, and 1989, as well as what happened after 1979 with the oil supply shift. In contrast, the story of the 2000 business cycle reflects the fact that we actually had achieved credibility by reestablishing a low-inflation environment, so it was not surprising that when the business cycle ended, it ended for the same reasons that cycles ended in the pre-World War II era.

As of June 2006, we are in a situation where we do not know what the expansion will die of, but there are two risks in the environment. One risk is a contraction prompted by falling house prices, falling demand, and a falling dollar. A second risk is rising inflation, an increase in the Federal Funds rate, and an ensuing economic slide. Precisely because of the presence of both of these risks, this seems to be a more difficult and fragile moment for monetary policy then we have seen in a long time. In a way, the dilemma that monetary policy faces now is a mild version of the classic postcrisis dilemma of Mexico in 1994 or Asia in 1998, which I hope the United States will not experience in the next five years. This is the dilemma in which the economy is slowing, the financial system is failing, and people are taking money out of their banks and selling their currency. In such a situation, there are two plausible money policy responses. Because people are selling the currency, one option is to print less currency so that it will hold its value. The second option is to print more currency because the banks have no liquidity. Unfortunately, it is not possible to print less currency and more currency at the same time.

It is important to avoid a crisis precisely because it is not possible to solve the tension between the liquidity provision objective of U.S. monetary policy and the basic stabilization objective of monetary policy once a crisis has occurred. Today we are seeing a situation that has a little bit of both elements of this tension, as we have signs of bubbles bursting at the same time as there are signs of rising inflation.

My fifth and final observation is of a different kind. I am struck not only by how much of the conversation here is about China, an emerging Asia, or the oil-exporting countries, but also by how ill-equipped Americans are to participate in this conversation. Our average citizen has a very limited understanding of other countries, the opportunities they present, the challenges they face, and how these nations interact with the United States. Shankar Acharya’s remarks provide a good example of this problem. On a trip to India in March 2006, I learned that Shankar is right: the gap between India and China is much greater than we realize. In other words, the set of impressions I had formed before my trip by reading the American media reasonably assiduously were wrong. The gulf between the economies of China and India now is vastly greater than what I imagined prior to my trip to India. I am sure that this misapprehension reflects sloppiness and lack of careful thought on my part, but
perhaps it was fueled by all the U.S. media accounts I read, which had a certain tendency to generalize.

It seems to me if the United States is going to be successful in the twenty-first century, we are going to need a large cadre of people in the private sector, in the public sector, and in the academic sector who are much more knowledgeable about the countries with which we will have to cooperate than has been the case traditionally. On my trip to India I learned that while its population is about one-sixth of the world’s entire population, while it is a country of immense strategic importance to the United States, and while a large percentage of its population speaks English, only 1,100 American students studied in India last year. That is about one-seventh of the combined number of Americans who studied in Australia and New Zealand. Without in any way denigrating the pedagogical and intellectual benefits of study in Australia and New Zealand, it seems to me that in terms of broadening the U.S. perspective with respect to the rest of the world, we have a very long way to go.

It is hard to believe that we Americans will realize our potential without making a much greater effort to understand the world outside our borders. It is a combination of what does and does not happen in our universities, what prestige does and does not attach to joining our foreign service, and what attitudes our national leaders project. I am continually stunned by the contrast between the detailed knowledge of political, social, and economic developments in the United States that exists on the part of elites in other countries that I visit, and the shallow knowledge of other major countries that is pervasive among American elites. Redressing this imbalance is also an important challenge if we are to find our way forward.

An Epilogue: 2008

The late Rudi Dornbusch was fond of remarking that in economics, “things take longer to happen than you think they will, and then they happen faster than you thought they could.” Almost two years have passed between when these original remarks were delivered in late June 2006 and their revision in May 2008. In mid-2006, we were in a situation that many thought could continue for a long time—in a show of hands, the overwhelming majority of conference attendees indicated that they expected a smooth correction. Yet a similarly large majority responded affirmatively when Jeff Fuhrer, the Boston Fed’s research director, asked if there was at least a 10–20 percent chance that a financial crisis would force such an adjustment to occur.

While it is too soon to tell if current events will prove decisive in permanently reversing the long-standing global imbalances, we have had a financial crisis, a crisis precipitated by problems in the U.S. subprime mortgage market. This tipping point was predicated on related but distinctive patterns of excessive valuations in housing markets, and excessive complacency in credit markets—issues experienced observers have drawn attention to for many years. The cracks took longer to appear than many expected, and these fissures have subsequently proven to be far more structurally damaging than almost anyone predicted.

While we are still debating whether this episode will be counted as a “true” recession according to the textbook definition, this business cycle has clearly slowed down, and it has closed down according to the pre-World War II script outlined above: excessive credit cycles, excessive risk-taking, inflated asset prices, overinvestment, nervousness, and withdrawal. We are now confronting a combination of the risks envisioned in June 2006, including falling house prices, a falling dollar, and rising inflation that has been stoked by rising commodity prices. The increasing demand for oil and food, particularly from China and other emerging economies, does seem to augur a permanent shift in the global demand for scarce resources that will only become more pronounced in the coming years. The falling value of the U.S. dollar may help our trade deficit to some degree, but given our oil-dependent economy, in the near-term this gain may be offset by higher energy prices that feed through to other cost increases.

In terms of globalization, there is a very real danger that the mood among Americans will shift toward protectionist tendencies—we are already seeing evidence of such tendencies in the 2008 presidential campaign. Yet there is a very real reason for this sentiment. Americans are feeling much less certain about their economic security and future, and this is not just a sudden shift given the current problems with energy prices and the housing market. U.S. factory workers have seen their jobs
outsourced to other countries, medical costs have been skyrocketing for years, income disparities have grown, and real incomes have stagnated for the vast majority of Americans. Promoting internationalism in an open global economy must work on successfully aligning the interests of working people and the middle class in rich countries with the success of the global economy.

One of my observations from 2006 remains particularly relevant today: what takes place in the rest of the world is critically important to how both the global economy and the U.S. economy weather the current storms. Will the tipping point in the U.S. economy, and its spillover effects in the rest of the world, call forth policies elsewhere that may help mitigate a global downturn? Will the policies have the capacity to manage some of the long-term structural adjustments that have been prescribed for years, even as the day of reckoning had been continually postponed?

It has always seemed to me that those of us involved with financial and monetary policy have a great responsibility. To have well-functioning capital markets and a credible currency are immensely important. But much more important is the reality that when the economy is successfully managed, people's fortunes are largely determined by their own choices and efforts. When the wrong economic policies are pursued, people's lives can be wrenched apart as they lose their jobs, their homes, and their ability to provide for their families because of complex forces entirely beyond their control. The U.S. economy and the world economy stand at a critical juncture, and as economic policymakers search for sensible solutions, they bear a tremendous responsibility.

Contributors

Shankar Acharya is honorary professor and member of the Board of Governors at the Indian Council for Research on International Economic Relations (ICRIER) and chairman, Kotak Mahindra Bank. Previously, he was a member of the Prime Minister's Economic Advisory Council, chief economic adviser to India's Ministry of Finance, and a member of the Securities and Exchange Board of India. Acharya has played a key role in formulating India's budget and tax policies, monetary policy, and foreign trade and payments policies, as well as helping steer the development of the country's capital markets. While serving at the World Bank, he was the principal author of the World Development Report (1979). Acharya's two most recent books are Essays on Macroeconomic Policy and Growth in India (2006) and Can India Grow without Bharat? (2007). Acharya earned his B.A. at Oxford University and his Ph.D. in economics from Harvard University.

Abhijit V. Banerjee is the Ford Foundation Professor of Economics at the Massachusetts Institute of Technology (MIT), the director of the Poverty Action Lab, and a past president of the Bureau for Research in Economic Analysis and Development (BREAD). His areas of research are development economics, the economics of financial markets, and the macroeconomics of developing countries. Before joining the MIT faculty in 1996, Banerjee taught at Princeton University and at Harvard University. He is a fellow of the Econometric Society and the American Academy of Arts and Sciences, and has been a Guggenheim Fellow and Alfred P. Sloan Research Fellow. Banerjee was awarded the Mahalanobis Memorial Medal in 2000 and received the Malcolm Adishesiah Award in 2001.
He received a B.Sc. from the University of Calcutta, an M.A. from Jawaharlal University (New Delhi), and a Ph.D. in economics from Harvard University.

Selva Bahar Baziki is a graduate student in economics at the Johns Hopkins University, where in August 2008 she began her Ph.D. studies in economics. From 2005–2006 she was a research assistant, and from 2006–2008 a senior research assistant at the Federal Reserve Bank of Boston, where she worked under the direction of Jane Sneddon Little. A native of Turkey, Baziki has a B.A. in economics from Bryn Mawr College, and spent her junior year abroad studying at the London School of Economics.

Suzanne Berger is the Raphael Dorman and Helen Starbuck Professor of Political Science at the Massachusetts Institute of Technology (MIT), where she serves as director of the MIT International Science and Technology Initiative and as director of the MIT-France Program. Berger’s research focuses on comparative politics and the political economy of advanced industrial countries. Her current research program is investigating the impact of globalization on domestic economies and politics. Berger has published extensively on issues of international economic competitiveness. As a member of the MIT Commission on Industrial Productivity, she co-authored the Commission’s report, “Made in America: Regaining the Competitive Edge.” Berger is a fellow of the American Academy of Arts and Sciences. She holds a B.A. from the University of Chicago, and an M.A. and a Ph.D. from Harvard University.

Surjit S. Bhalla is the principal of Oxus Research and Investments, a New Delhi-based economic research, asset management, and emerging-markets advisory group. Prior to joining Oxus in 1996, he worked at the Rand Corporation, the Brookings Institution, the World Bank, Goldman Sachs, and Deutsche Bank. Bhalla has served as executive director of the Policy Group in New Delhi, the first non-government-funded think tank in India, and he currently serves on the board of India’s National Council of Applied Research. A frequent advisor to the Indian government on financial and securities markets, Bhalla has written books and articles on poverty and inequality in India for both academic and general publications. Among his works are articles on economics, politics, and cricket published in Indian newspapers and magazines. Bhalla holds a B.S. in electrical engineering from Purdue University, an M.P.A. from the Woodrow Wilson School of Public and International Affairs at Princeton University, and a Ph.D. in economics from Princeton University.

Stephen W. Bosworth is dean of the Fletcher School of Law and Diplomacy at Tufts University, a position he assumed in February 2001. Prior to being appointed at the Fletcher School, he served as the U.S. Ambassador to the Republic of Korea from 1997–2001, to the Philippines from 1984–1987, and to Tunisia from 1979–1981. From 1995–1997 Bosworth was the executive director of the Korean Peninsula Energy Development Organization, and from 1987–1995 he was president of the United States-Japan Foundation. He has served in a number of senior positions in the U.S. Department of State, and has been an adjunct professor at Columbia University’s School of International and Public Affairs. In 1987 he received the American Academy of Diplomacy’s Diplomat of the Year Award and twice received the Department of State’s Distinguished Service Award, first in 1976 and then in 1986. Bosworth currently serves as a director of the Council on Foreign Relations and the Japan Society of Boston, is a member of the Trilateral Commission, and is on the International Board of Advisers for the President of the Republic of the Philippines. He is a graduate of Dartmouth College.

Richard N. Cooper is the Maurits C. Boas Professor of International Economics at Harvard University and vice-chair of the Global Development Network. His recent research, some conducted jointly with others, has focused on country-level fiscal booms and crises, international macroeconomic management, and global environmental policy. He served in the U.S. government as chair of the National Intelligence Council from 1995–1997, Under-Secretary of State for Economic Affairs from 1977–1981, Deputy Assistant Secretary of State for International Monetary Affairs from 1965–1966, and as senior staff economist for the Council of Economic Advisers from 1961–1963. From 1990–1992 Cooper chaired the Federal Reserve Bank of Boston’s Board of Directors. Currently he is...
Global Imbalances and the Evolving World Economy

Cooper holds an A.B from Oberlin College, an M.Sc. in economics from the London School of Economics, and a Ph.D. in economics from Harvard University.

Alan V. Deardorff is the John W. Sweetland Professor of International Economics at the University of Michigan, where he holds dual appointments in the economics department and the Gerald R. Ford School of Public Policy. He has written extensively on issues of international trade theory and policy. Deardorff, with his co-author Robert M. Stern, has developed a computable general equilibrium (CGE) model of production, trade, and employment in 34 major countries. They have used this model for a variety of purposes, including analysis of the Tokyo and Uruguay Rounds of multilateral trade negotiations and possible outcomes of the ongoing Doha Round. Along with Drusilla K. Brown, they have also developed a series of four- and eight-country CGE models to evaluate the sectoral employment implications of various regional trading arrangements in North America, the Western Hemisphere, Asia, and Europe. Deardorff has been a consultant to numerous government and non-government agencies, including the Asian Development Bank, the Organisation for Economic Development and Cooperation, the U.S. Agency for International Development, the U.S. Senate, the U.S. Treasury Department, and the World Bank. He earned a B.S. from Stanford University, and a Ph.D. in economics from Cornell University.

Guy Debelle is the assistant governor in charge of the Financial Markets Group at the Reserve Bank of Australia, a position he assumed in March 2007. Prior to this, he headed the Reserve Bank's International Department from 2004–2007 and its Economic Analysis Department from 2001–2003. Debelle has researched and published in the areas of financial markets, inflation, inflation targeting, and monetary policy. He first joined the Reserve Bank in 1994 as an economist in its research department, but Debelle has also worked at the International Monetary Fund from 1995–1997, as a visiting professor of economics at the Massachusetts Institute of Technology in 2003, and at the Bank for International Settlements in 2004. He has an undergraduate degree from the University of Adelaide, and a Ph.D. in economics from the Massachusetts Institute of Technology.

J. Bradford DeLong is a professor in the department of economics at the University of California at Berkeley, and chairs the interdisciplinary program major in political economy for the Berkeley International and Area Studies Teaching Program. His research interests range broadly in the fields of macroeconomics and economic history, including work on business cycle dynamics, economic growth, inflation, international finance, political economy, the history of economic thought, and behavioral finance. DeLong is a research associate at the National Bureau of Economic Research, a visiting scholar at the Federal Reserve Bank of San Francisco, and served as the U.S. Treasury Department’s deputy assistant secretary for economic policy from April 1993 through May 1995. He has an A.B. in social studies and a Ph.D. in economics from Harvard University.

Michael P. Dooley is a professor of economics at the University of California at Santa Cruz, which he joined in 1992. His research interests cover a range of issues in open economy macroeconomics, crises in emerging markets, debt management, capital controls, capital flight, and liberalization in financial markets. Dooley is a research associate at the National Bureau of Economic Research, a research fellow at the Kiel Institute of World Economics, and is one of the three main editors of the International Journal of Finance and Economics. His prior positions have included working as an economist in the division of international finance at the Board of Governors of the Federal Reserve System from 1971–1983, including as assistant director of this division from 1982–1983; serving as the assistant director for the research department at the International Monetary Fund from 1983–1991; and being chief economist for Latin America at Deutsche Bank from 2002–2003. Dooley has a B.S. in economics from Duquesne University, an M.A. in economics from the University of Delaware, and a Ph.D. in economics from Pennsylvania State University.
David Folkerts-Landau is a managing director and head of Global Markets Research (Equities and Fixed Income) at Deutsche Bank AG in London. He is also a member of the Bank’s Global Markets Executive Committee. Prior to joining Deutsche Bank in 1997, Folkerts-Landau was the division head of international capital markets and surveillance and financial markets research at the International Monetary Fund, a position he held since 1992. Before beginning at the International Monetary Fund in 1985, Folkerts-Landau was an assistant professor of economics and finance at the University of Chicago’s Graduate School of Business. He has a Ph.D. in economics from Princeton University.

Richard B. Freeman, a labor economist, is the Herbert Ascherman Professor of Economics at Harvard University, and co-directs the Labor and Worklife Program at the Harvard Law School. He directs the Labor Studies Program at the National Bureau of Economic Research (NBER). Freeman is a senior research fellow at the London School of Economics’ Centre for Economic Performance and visiting professor at the London School of Economics. Freeman has published over 300 articles and 35 books on a wide range of research interests, including the effects of immigration and trade on inequality; the job market for scientists and engineers; the growth and decline of unions; Chinese labor markets; self-organizing non-unions in the labor market; employee involvement programs; and income distribution and equity in the marketplace. Currently he is co-directing the NBER/Sloan Science Engineering Workforce Project. Freeman is a fellow of the American Academy of Arts and Sciences. He has served on five panels of the National Academy of Sciences, including the Committee on National Needs for Biomedical and Behavioral Scientists. He earned his B.A. at Dartmouth College and his Ph.D. at Harvard University.

Peter M. Garber is a global risk strategist at Deutsche Bank and a research associate at the National Bureau of Economic Research. Previously, he was an economics professor at the University of Virginia, the University of Rochester, and Brown University. Garber has written extensively on international financial markets, trade regimes, and speculative investment bubbles, both for academic audiences and general readers. His most recent book is Famous First Bubbles: The Fundamentals of Early Manias (The MIT Press). Garber has been a consultant to and a visiting scholar at the Inter-American Development Bank, the International Monetary Fund, and the World Bank. He has an A.B. from Princeton University and a Ph.D. in economics from the University of Chicago.

John, F. Helliwell is the Arthur J.E. Child Research Fellow of the Canadian Institute for Advanced Research, where along with George Akerlof he co-directs its program on “Social Interactions, Identity, and Well-Being.” Helliwell’s wide-ranging research interests include applied macroeconomics, comparative economic growth, international economics, natural resource economics, social capital, and well-being. He is a member of the National Statistics Council, a research associate at the National Bureau of Economic Research, and an emeritus professor of economics at the University of British Columbia. From 2003-2004 Helliwell was a visiting special advisor at the Bank of Canada, in 2003 was a visiting research fellow at Merton College, Oxford University, and in 2001 was a visiting fellow at St. Catherine’s College, Oxford University. He was the Mackenzie King Visiting Professor of Canadian Studies at Harvard University from 1991–1994, and during 1995–1996 he was a Fulbright Fellow and co-chair of Harvard University’s Canada Program. Helliwell has an undergraduate degree from the University of British Columbia, and spent a year as a Rhodes Scholar at Oxford University, where he earned an M.A. and a D.Phil. in economics.

Donald L. Kohn took office in August 2002 as a member of the Board of Governors of the Federal Reserve System for a full term ending January 31, 2016. On June 23, 2006, Kohn was sworn in as vice chairman of the Board of Governors of the Federal Reserve System for a four-year term. Kohn has written extensively on issues related to monetary policy and its implementation by the Federal Reserve. Prior to becoming a member of the Board, Kohn served on its staff as adviser to the Board for Monetary Policy from 2001–2002, secretary of the Federal Open Market Committee from 1987–2002, director of the Division of Monetary Affairs from 1987–2001, and deputy staff director for Monetary and Financial Policy from 1983–1987. He also held several positions in the Board’s Division

Laurence J. Kotlikoff is a professor of economics at Boston University, where he has taught since 1984 and twice served as chair of the department. From 1977–1984 Kotlikoff was a postdoctoral fellow in the economics department of the University of California at Los Angeles, and from 1980–1984 he taught in the economics department at Yale University. In 1981–1982 Kotlikoff served as a senior economist with the President’s Council of Economic Advisers. He specializes in macroeconomics and public finance, and has published extensively, both in academic journals and in popular media, on issues of fiscal deficits, the tax structure, Social Security, Medicare, healthcare reform, generational accounting, pensions, saving, insurance, and personal finance. Kotlikoff is a research associate of the National Bureau of Economic Research, a fellow of the Econometric Society, a fellow of the American Academy of Arts and Sciences, and president of Economic Security Planning, Inc., a company that specializes in financial planning software. He earned his B.A. in economics from the University of Pennsylvania and his Ph.D. in economics from Harvard University.

Jane Sneddon Little is a vice president and economist in the research department of the Federal Reserve Bank of Boston, where she leads the macroeconomic applications and policy studies section. Little’s research focuses on international macroeconomic issues. In the past few years she has written or co-authored papers on asset prices and economic stabilization, the evolution of the international monetary system, the offshoring of jobs, and the practice of inflation targeting overseas. Recent contributions include editing this volume and the volume entitled Wanting It All: The Challenge of Reforming the U.S. Health Care System. In addition to her duties at the Boston Fed, where she has spent her entire career, starting as a research assistant, Little has worked on the Massachusetts Governor’s Council on Economic Growth and Technology and on the Task Force on the Health Care Industry. She has also been a lecturer for Simmons College. Little holds a B.A. from Wellesley College and M.A.L.D. and M.A. degrees from the Fletcher School of Law and Diplomacy at Tufts University.

Catherine L. Mann is a professor of economics at Brandeis University’s International Business School, which she joined in fall 2006 after more than 20 years working in think tanks and policy institutions in Washington, DC. These positions include being a senior fellow at the Institute for International Economics (1997–2006), assistant director of the international finance division at the Federal Reserve Board of Governors (1994–1997), a senior staff economist for the President’s Council of Economic Advisers (1991–1992), and a research economist and special assistant at the World Bank (1988–1989). Mann’s current research focuses on two related topics: information technology and services trade in global markets, and the U.S. trade deficit and the dollar. She has written many articles and books, including Accelerating the Globalization of America: The Role for Information Technology (2006). She received an A.B. from Harvard University and a Ph.D. in economics from the Massachusetts Institute of Technology.

Christopher M. Meissner is an associate professor of economics at the University of California at Davis and a research fellow at the National Bureau of Economic Research. He specializes in the economic history of the international economy, particularly the period between 1870 and 1913, and focuses on the history of international financial flows, exchange rate regimes, and the evolution of the gold standard. Before coming to the University of California, Davis, Meissner was at the University of Cambridge, where he was a tenured lecturer, a fellow, and director of studies in economics for King’s College. In 2006 he visited at the Bank of England as the Houbon-Norman/George Fellow, in 2005 he was a visiting scholar in the department of economics at Harvard University, and he
spent summer 2003 as a visiting researcher at the International Monetary Fund. He has an A.B. in economics from Washington University, and a Ph.D. in economics from the University of California, Berkeley.

Eswar S. Prasad has been the Tolani Senior Professor of Trade Policy at Cornell University since 2007. He was previously at the International Monetary Fund (IMF), where he was chief of the financial studies division in the research department and, before that, was the head of the IMF’s China division. Prasad’s research has spanned a number of areas including business cycles, labor economics, and open economy macroeconomics. His current research interests include the macroeconomics of globalization, the relationship between growth and volatility, and the Chinese and Indian economies. Prasad has co-authored or edited several books and monographs on financial globalization, China, and India. He has contributed op-ed articles to the Financial Times, the International Herald Tribune, the Wall Street Journal Asia, and various other newspapers. Prasad has testified before the Senate Finance Committee and the House of Representatives Committee on Financial Services in China, and his research has been cited in the U.S. Congressional Record. Prasad received his B.A. in economics, mathematics, and statistics from the University of Madras, his M.A. in economics from Brown University, and his Ph.D. in economics from the University of Chicago.

Lawrence H. Summers is the Charles W. Eliot University Professor at Harvard University. He served as the 27th president of Harvard University from July 2001 until June 2006. As a research economist, he has also taught on the faculty at the Massachusetts Institute of Technology. Summers has made seminal contributions in labor economics, macroeconomics, monetary economics, and public finance. In 1987, Summers was the first social scientist to receive the annual Alan T. Waterman Award of the National Science Foundation, established by Congress to honor an exceptional young American scientist or engineer whose work demonstrates originality, innovation, and has a significant impact within his or her field. In 1993, Summers received the John Bates Clark Medal, given every two years to the outstanding American economist under the age of 40. Summers has served in a series of senior public policy positions, beginning in 1991, when he left Harvard to serve as the chief economist of the World Bank, and then in various posts in the Clinton administration. Summers was the U.S. Secretary of the Treasury from 1999–2001, following earlier positions as Deputy Secretary of the Treasury and Undersecretary of the Treasury for International Affairs. He currently writes a widely followed column for the Financial Times. Summers received his S.B. in economics from the Massachusetts Institute of Technology and his Ph.D. in economics from Harvard University.

Alan M. Taylor is professor of economics and director of the Center for the Evolution of the Global Economy at the University of California at Davis. A specialist in international economics and economic history, Taylor has written scores of articles and contributed to books on global market integration, the development of financial markets, and capital and labor flows. He is a research associate at the National Bureau of Economic Research and at the Centre for Economic and Policy Research in London, and a visiting scholar at the Federal Reserve Bank of San Francisco. Before joining the University of California, Davis in 1999 as an associate professor, he was an assistant professor of economics at Northwestern University from 1993–1999. Taylor earned a B.A. and M.A. at the University of Cambridge, and an A.M. and a Ph.D. in economics at Harvard University.

Lixin Colin Xu is a senior economist in the development research group at the World Bank. He specializes in the political economy and industrial organization of Chinese firms, and he has published widely on Chinese market efficiency and investment at the national-, industry-, and firm-levels, including his co-authorship of “Improving City Competitiveness through the Investment Climate,” the World Bank’s most requested Chinese-language study. Xu also serves on the editorial board of the China Journal of Economics and is a past vice president and director of the Chinese Economist Society. He holds a B.A. and an M.A. in economics from Peking University and a Ph.D. in economics from the University of Chicago.