Documentos CEDE

ISSN 1657-7191 edición electrónica

Conversations with Great Economists.
Economic Theory and Economic Policies
in Periods of High Turbulence

Robert H. Bates
Diego Pizano
Mauricio Carrizosa
Darrell Hueth

14

MAYO DE 2010

Serie Documentos Cede, 2010-14
ISSN 1657-7191

Mayo de 2010

© 2010, Universidad de los Andes–Facultad de Economía–Cede
Calle 19A No. 1 – 37, Bloque W.
Bogotá, D. C., Colombia
Teléfonos: 3394949- 3394999, extensiones 2400, 2049, 3233
infocede@uniandes.edu.co
<http://economia.uniandes.edu.co>

Ediciones Uniandes
Carrera 1ª Este No. 19 – 27, edificio Aulas 6, A. A. 4976
Bogotá, D. C., Colombia
Teléfonos: 3394949- 3394999, extensión 2133, Fax: extensión 2158
infeduni@uniandes.edu.co

Edición, diseño de cubierta, pre prensa y prensa digital:
Proceditor Ltda.
Calle 1ª C No. 27 A – 01
Bogotá, D. C., Colombia
Teléfonos: 2204275, 220 4276, Fax: extensión 102
proceditor@etb.net.co

Impreso en Colombia – *Printed in Colombia*

El contenido de la presente publicación se encuentra protegido por las normas internacionales y nacionales vigentes sobre propiedad intelectual, por tanto su utilización, reproducción, comunicación pública, transformación, distribución, alquiler, préstamo público e importación, total o parcial, en todo o en parte, en formato impreso, digital o en cualquier formato conocido o por conocer, se encuentran prohibidos, y sólo serán lícitos en la medida en que se cuente con la autorización previa y expresa por escrito del autor o titular. Las limitaciones y excepciones al Derecho de Autor, sólo serán aplicables en la medida en que se den dentro de los denominados Usos Honrados (Fair use), estén previa y expresamente establecidas; no causen un grave e injustificado perjuicio a los intereses legítimos del autor o titular, y no atenten contra la normal explotación de la obra.

CONVERSATIONS WITH GREAT ECONOMISTS

ECONOMIC THEORY AND ECONOMIC POLICIES IN PERIODS OF HIGH TURBULENCE

Robert H. Bates
Mauricio Carrizosa

Diego Pizano
Darrell Hueth

Abstract

In the 1970's there was a serious crisis in the world economy and a deep dissatisfaction with the state of economic theory. Between 1976 and 1979 Colombian economist Diego Pizano conducted a series of structured dialogues with some of the greatest economists of the second half of the 20th century, with the aim of discussing this situation. His project was supported from the outset by Professor Paul A. Samuelson from MIT. The result was a book on contemporary economic thought, which was published in spanish by the Fondo de Cultura Económica of México in 1980.

In 2009 the english version of this book was published in New York (Jorge Pinto books). In December 18th, 2009, The Brookings Institution of Washington DC decided to organize the launch of this book, because they thought it helps to understand the current crisis and is useful in rethinking economic theories and policies. This document brings together the presentations made on that occasion.

Key words: economic thought, economic theories, economic policies, crisis of the world economy.

CONVERSACIONES CON GRANDES ECONOMISTAS

TEORÍA ECONÓMICA Y POLÍTICAS ECONÓMICAS DURANTE PERÍODOS DE ALTA TURBULENCIA

Robert H. Bates
Mauricio Carrizosa

Diego Pizano
Darrell Hueth

Resumen

Durante los años setenta surgieron graves crisis que afectaron la economía mundial y una profunda insatisfacción con el estado de la teoría económica. Con el objetivo de discutir esta situación, entre 1976 y 1979 el economista colombiano Diego Pizano dirigió una serie de diálogos estructurados con algunos de los grandes economistas de la segunda mitad del siglo XX. Desde el principio su proyecto contó con el apoyo del Profesor Paul A. Samuelson del MIT. El resultado consistió en un libro sobre pensamiento económico contemporáneo, publicado en español por el Fondo de Cultura Económica de México en 1980.

La versión en inglés de este libro fue publicada en Nueva York en 2009 (Jorge Pinto libros). El 18 de diciembre de 2009, The Brookings Institution de Washington, D. C., decidieron organizar el lanzamiento de este texto, pues consideraron que hace una contribución para la comprensión de la crisis actual y es de utilidad para repensar las teorías y las políticas económicas. Este documento reúne las presentaciones realizadas en dicha ocasión.

Palabras clave: pensamiento económico, teorías económicas, políticas económicas, crisis de la economía mundial.

Excerpts from the book

"Depressions are not the result of the operation of the market. They are the result of government controls, particularly in the sphere of monetary policy". Professor F.A. Hayek, Nobel Prize winner in Economics.

"It is because I want to make economics more human that I want to make it more time conscious." Professor Sir John Hicks, Nobel Prize winner in Economics.

"The most important challenge facing the world economy is the need to strengthen the adjustment mechanism between the growth of supply and demand for primary products". Professor N. Kaldor, Cambridge University.

"Many people in the Soviet Union are aware that our economic system is not perfect... It is true that the Soviet economy's growth rate has decreased". Professor L.V. Kantorovich, Nobel Prize Winner in Economics.

"The unemployment of developing economies arises because productive capacity and effective demand have never been at an appropriate level". Professor J. Robinson, University of Cambridge.

"Schumpeter was wrong when he thought there is a timetable for the disappearance of capitalism". Professor P. Samuelson, Nobel Prize winner in Economics.

"I am not as optimistic as Keynes in the sense the economic problem will disappear as a result of compound interest and technical progress." Professor J. Tinbergen, Nobel Prize Winner in Economics.

Some comments about the book

"A useful and important book". Professor P. Samuelson, MIT, Nobel Prize winner in economics.

"A lively addition to the economics literature". Professor A. Hirschman, Institute for Advanced Study, Princeton, New Jersey.

"You will have read, studied or taught the work of these outstanding economists. Now you get a chance to meet them. Through the work of Diego Pizano we learn about how they thought and not just what they thought". Professor R. Bates, Harvard University.

"Through penetrating and well structured questions, Colombian economist Diego Pizano manages to reveal the thought processes of five of the first Nobel Prize winners in Economics and two who could have obtained it, Joan Robinson and N. Kaldor. This book has to be read by all researchers interested in the history of economic thought and by all persons interested in economics as a discipline." Professor D. Hueth, University of Maryland.

TABLE OF CONTENTS

I. Foreword, Mauricio Cárdenas	5
II. Conversations with Great Economists, Diego Pizano	6
III. Remarks by Professor Robert Bates	13
IV. Remarks by Professor Darrell Hueth	18
V. Remarks by Mauricio Carrizosa	24

I. Foreword

The recent slowdown of the world economy, considered as the worst recession since the 1930's, has led to a rethinking of economic theories and policies. In this context, the Latin America Initiative at Brookings decided to organize the launch of the English version of the book, *Conversations with Great Economists*, prepared by Diego Pizano.

His book consists of structured dialogues with some of the most distinguished economists of the second half of the XX century, five of whom received the Nobel Prize. The other two are considered as the leading Keynesian economists of the 20th century. These great thinkers reacted to the crisis the world experienced in the 1970's and made very relevant observations on how to improve theories and policies.

The book was presented at Brookings on December 17th, 2009 by Professor Robert Bates (Harvard) and Professor Darrell Hueth (Maryland). Additional remarks were made by Mauricio Carrizosa (World Bank). I wish to thank the author and the discussants for participating in this stimulating event and to the CEDE- Universidad de los Andes (Bogotá) for editing this document.

Mauricio Cardenas
Senior Fellow and Director
Latin America Initiative

II. Conversations with Great Economists

Diego Pizano

First of all, I wish to thank Mauricio Cárdenas and the Brookings Institution for organizing this event. It is a real honor to talk at the most important economic policy think tank there is at the global level. Economists are considered to have a special ability to transform the obvious into the incomprehensible. I hope I will not succeed, since I will try to explain in a clear way how this book was prepared and what insights it could offer to understand the current economic crisis.

Origin of this book

Between 1972 and 1974 I was undertaking postgraduate studies in economics at Cambridge University in the UK. The discipline of economics was going through a difficult time and the international economy was experiencing many imbalances and a high degree of turbulence. Professor Joan Robinson (1) wrote about the ‘Second Crisis of Economic Theory’(1972) and Professor John Hicks (2) wrote a book on ‘The Crisis in Keynesian Economics’(1974).

In 1973-75 we had stagflation in many countries, high oil and commodity prices and a slowdown of the world economy. Stock prices fell 48% in 1973-74. The UK had to negotiate a program of support with the IMF in 1976.

Given this state of affairs, I thought at the end of 1975, that it would be useful and interesting to discuss some fundamental issues associated with economic theory and its applicability with some of the most important economists of the second half of the 20th century.

I proposed this project to Professor Paul Samuelson at the beginning of 1976 and he supported the idea with enthusiasm. The other outstanding economists also accepted to participate. I spoke to Professor Samuelson again in 2007 and he agreed with the idea of preparing this edition.

I want to express my gratitude to the brilliant scholars who participated in this project and in particular to this eminent and generous economist who died a few days ago. In October 2009 I invited him to participate in today’s event and he replied that he supported the idea of presenting the book at Brookings but although he was feeling well, he had decided he was a bit old to travel. This truly great man was the most important economist of the second half of the 20th century at the world level and he certainly deserves to rest in peace.

The seven wise men

The conversations were conducted in English but the book was initially published in Spanish by the Fondo de Cultura Económica of Mexico (3). Several scholars like Professor Albert O. Hirschmann (Institute of Advanced Studies, Princeton) and Professor

Darrell Hueth (Maryland) encouraged me to prepare the English version, which is the one we are presenting today.

One of the main issues I discussed with these eminent economists was the need to make economics more relevant by accepting we live in a non-ergodic world with a high degree of uncertainty. I suggested that economists need to integrate historic, institutional, legal and anthropological elements into their analysis. A critical examination of the foundations of economics was needed and that explains why we had to discuss epistemological issues. Some of my colleagues do not fully understand why this is a useful and indispensable exercise. They might understand this need better if they examine the following paragraph written by Professor Albert Einstein:

“The reciprocal relationship of epistemology and science is of a noteworthy kind. They are dependent upon each other. Epistemology without contact with science becomes an empty scheme. Science without epistemology is-insofar it is thinkable at all- primitive and muddled”(4).

We now need to reexamine the foundations of economics. The contributions of these seven wise men offer very important insights to undertake this task. Allow me a very brief comment on each one of these great economists.

Professor Friedrich A. Hayek (1899-1992)

He received the Nobel Prize for his pioneering work on the theory of money and economic fluctuations and for his analysis of the functional efficiency of different economic systems. He influenced the economic policies of Reagan and Thatcher and considered that the main task of economic theory was to explain how economic agents adapt to the unknown. He influenced the work of many scholars including Professor Oliver E. Williamson who got the Nobel Prize a few weeks ago.

He admired Adam Smith and David Hume and when I entered his private library I saw that behind his armchair he had two nice oil paintings of these two outstanding thinkers.

He emphasized the need for interdisciplinary research and considered that economics could not be a mathematical science like physics. He believed that “Nobody can be a great economist who is only an economist”. His book on the ‘Sensory Order’ is an important contribution in the field of cognitive science.

In 1980 we invited him to give a lecture at the Universidad de los Andes in Bogotá. He replied to me saying that he could accept if I managed to arrange a visit to the Galapagos Islands. He admired Darwin and he considered that the concept of evolution was important for understanding economic history. At that moment he had a commitment with the University of California and only had two days for his visit to Bogotá and the Galapagos. He told me that he was willing to take the night train from Bogotá to Quito. Unfortunately that connection that does not exist and we were not able to organize his visit with such a tight schedule.

Professor Herbert Simon (Nobel Prize in Economics) wrote in 1981 that no one explained better how market mechanisms work than Professor Hayek.

Professor Sir John Hicks (1904-1989)

He was awarded the Nobel Prize in 1972 for his pioneering work on general equilibrium theory and welfare theory. He made a great effort to introduce time into economic theory to “make it more human”. He was a kind and brilliant scholar who made contributions to micro and macroeconomics, business cycles, welfare economics, growth theory and economic history. He liked to think his answers very carefully and at one point in our conversation he asked me to give him a week to prepare a better reply to some of my questions. He met Keynes and exchanged several letters with him. His father-in-law was Sidney Webb, one of the main founders of the London School of Economics.

He developed the IS-LM diagram which was very useful for explaining basic Keynesian macroeconomics to many students around the world; however, in our conversation I pointed out to him he was not including the effect of uncertainty in his analysis and in that sense his presentation was not complete. He accepted this criticism in a positive way, an attitude that not all scholars share. It was interesting to note that a few years later he wrote an article in which he accepted the limitations of his original scheme (5).

He was aware that economic laws were not like the laws of physics: “Economists, who deal with the daily actions of men and the consequences of these actions, can rarely find the same permanence.” He considered that economic theories do not have permanent validity. He wrote an important book about causality and economics(6). I made some remarks on this book at a meeting of the World Econometric Society which took place in Bogotá in 1984. More than 300 of the top international econometricians were present and to my surprise very few knew this book. I found that one of the few scholars attending this conference who had examined this issue thoroughly was Professor Amartya Sen, who was the President of the Econometric Society at that time.

Professor Lord Nicholas Kaldor (1908-1986)

He was one of the leading Keynesian economists of the postwar period. In 1975 he was elected as President of the Royal Economic Society. He made important contributions to the theory of growth and distribution, welfare economics, business cycle theory and to the understanding of disequilibrium economics. He developed the cobweb model which has been very useful for understanding fluctuations in commodity markets and worked out the so called Kaldor-Hicks efficiency criteria for welfare comparisons.

He met Professor John Von Neumann (they were both born in Budapest, Hungary) and exchanged views with him on the theory of growth. He did not agree with some of his economic writings, but he considered this famous professor as the most creative genius he had ever encountered.

Among his outstanding students: Professor L. Hurwicz (Nobel Prize winner), Professor J. Bhagwati (leading international trade theorist) and his Excellency, M. Singh (Prime Minister of India). He exchanged views with some important economists working in Latin America like Professors Lauchlin Currie of Colombia and Celso Furtado of Brazil.

He considered that well designed government interventions could accelerate growth in developed and developing countries. He was convinced that Keynesian economics offered very valuable insights to manage effectively a free enterprise system and achieve growth and stability. He influenced British economic policies for many years. He had intense debates with Professor Friedrich Hayek and with Professor Milton Friedman.

He was a tax advisor to several countries, including India, Mexico and Turkey. His Cambridge colleagues used to say that one of the best ways of promoting a revolution in a given country was to invite Professor Kaldor as a tax advisor! (in some countries strikes were organized when he proposed to tax consumption).

Professor Leonid V. Kantorovich (1912-1986)

A mathematical prodigy who developed the theory of linear programming, he was awarded the Nobel Prize for his contributions to the optimal allocation of resources.

In our conversation (1979) he displayed great intellectual honesty and he accepted the Soviet Economy was having serious problems. However, he was convinced that the theory of optimal planning (which he developed) would enable his country to have a better performance than the free market economies of the west. He expressed admiration about the works of Keynes, Leontieff and Von Neumann. He considered that science and technology were fundamental in accelerating the growth of any economy.

When I visited him in Moscow he was the Director of the Institute for the Control of the Soviet Economy.

Professor Joan Robinson (1903-1983)

Keynes regarded her as the most brilliant of his collaborators. Many economists consider she should have obtained the Nobel Prize. She made important contributions to several fields of economics including the theory of imperfect contribution, the theory of growth, the theory of employment, Marxian economics and economic philosophy. Her father was General Frederick B. Maurice, who was a controversial figure because he accused Prime Minister Lloyd George of misleading Great Britain during the First World War.

She considered that Keynesian dynamics could be applied to developing countries. In our talks she made reference to her experiences in countries such as India, China and Mexico. Her books about China were controversial partly because she found positive aspects in Chairman Mao's policies and in the so called cultural revolution.

For many years he had a controversy about the theory of capital with Professors Samuelson and Solow of MIT.

Professor Amartya Sen (Nobel Prize) was one of her outstanding students. She believed economics could never be an exact science and stated that:

“As a discipline, economics has to float between metaphysic, moral and scientific statements”.

Professor Paul A. Samuelson (1915-2009)

He had a very wide range of interests and contributions. He wrote more than 600 papers and was widely considered as the last great generalist in economics.

He was awarded the Nobel Prize because “more than any other contemporary economist, he has contributed to raising the general analytical and methodological level in economic science”. I visited him again in October 2007 and found him reading the main economic journals. We had a good exchange of ideas on globalization, free trade and other issues. He asked me about former President Virgilio Barco of Colombia (who studied at MIT) and Professor Lauchlin Currie (former economic advisor to President Roosevelt, who became a Colombian citizen). At that time he was 92 years old and his memory and his analytical skills were in very good shape.

He liked to say that ‘Economics is the oldest of the arts and the newest of the sciences’. He also insisted that ‘an efficient and humane society requires both halves of the economist system-market and government’. Several of his students got the Nobel Prize in economics among them Professors Stiglitz, Akerlof and Krugman.

Professor Jan Tinbergen (1903-1994)

He was awarded the first Nobel Prize in Economics for having developed and applied dynamic models for the analysis of economic processes.

He developed the first national comprehensive macroeconomic model. He is considered as one of the main pioneers of econometrics; he studied US economic cycles.

He had the chance to discuss physics with Albert Einstein and the foundations of economics with John Maynard Keynes.

He supported the idea of the mixed economy and made contributions to the theory of optimal economic policies. His brother Nicholas also obtained a Nobel Prize (in Medicine), a very unusual event. When I talked with him in 1977, he was worried about nuclear war and also about environmental degradation at the global level. He had a strong interest in developing countries.

Short reflections

I am neither a freshwater economist (those purists who believe the market will solve every economic problem) nor a saltwater economist (who tend to believe in strong government intervention). Both schools have made extremely important contributions and I respect them. However, both schools accepted the efficient market view of the financial sector as Professor Krugman (a saltwater economist) has accepted (7). Their models cannot explain the current crisis.

I am a high altitude economist! (I live 8000 feet above sea level) who believes competitive and well regulated markets have a very important role to play, but I also consider that economists have to develop better theories and undertake much more empirical work to understand how the world economy works.

We need to work with real and not abstract human beings. Humans tend to be emotional, not fully informed and often value more the present than the future. That means accepting uncertainty and bounded rationality. We will have to sacrifice mathematical elegance but we might improve explanatory power.

It could be argued that the crisis was due to excessive risk taking on the part of bankers and Wall Street brokers and executives and to government failures in the field of regulation. Markets do not regulate themselves and they need to function within appropriate institutions. This is a point that Adam Smith accepted. He also thought that ethical and moral behavior was absolutely imperative and essential for a good economic system, a fundamental point which was dismissed by some economic agents.

The crisis could also be seen as a failure of models and ideas. The distinction made by Professor F. Knight in the 1920's about risk and uncertainty, later developed by Keynes, was forgotten. There are many uncertain events which cannot be expressed by means of objective probabilities. People who invested in subprime mortgages seemed to be unaware of this reality. Models based on perfect information and rational expectations might be useful as thought experiments of ideal economic systems but they cannot be used to formulate economic policies without major adjustments.

Insights from behavioral and new institutional economics are very relevant for improving the relevance of economic theory. But I would like to say that I agree with The Economist (8) when it states that the main problems of the discipline are concentrated in the areas of macroeconomics and financial economics. We should not forget that globalization and open economies have lifted more than 300 million people out of poverty in the last 20 years.

In the case of Latin America we are used to booms and busts, to market failures and government failures. In the last 10-15 years policies have improved but we continue to need consistent macroeconomic policies, dynamic entrepreneurs, productivity increases, open economies and better institutions (in the sense of rules of the game). We need to invest a great deal in human capital and infrastructure, develop better safety nets and continue to integrate into the world economy.

The ideas discussed in this book are relevant for improving theories and policies. In addition the works of people like Douglass North (9), George Akerloff (10), Amartya Sen (11) and Robert Skidelsky (12) offer very important insights.

Finally, I would like to express my thanks to Professor Robert Bates, to Professor Darrell Hueth and to Mr. Mauricio Carrizosa for taking the time to read the book and for preparing very useful comments.

References

Joan Robinson, 'The Second Crisis in Economic Theory'. *American Economic Review*, 1972.

John Hicks, *The Crisis in Keynesian Economics*. Oxford, 1974

Diego Pizano, *Algunos Creadores del Pensamiento Económico Contemporáneo*. Fondo de Cultura Económica. México, 1980.

Paul A. Schlipp (editor), *Albert Einstein, Philosopher Scientist*. MJF Books, New York, 1970.

John Hicks, "IS-LM: An explanation", *Journal of Post Keynesian Economics*, 1980.

John Hicks, *Causality in Economics*, New York, Basic Books, 1979.

Paul Krugman, "How Did Economists Get It So Wrong?", *New York Times Magazine*, September 6, 2009.

The Economist, "What went wrong with economics", London, July 16th, 2009.

Douglass North, *Understanding the Process of Economic Change*. Princeton University Press, 2005.

George Akerlof and Robert Shiller, *Animal Spirits*. Princeton University Press, 2009.

Amartya Sen, "Capitalism beyond the Crisis". *New York Review of Books*, March 26, 2009.

Robert Skidelsky, *Keynes, The Return of the Master*. Public Affairs, New York, 2009.

III. Remarks by Professor Robert Bates

Dr. Pizano labors simultaneously in at least three fields: public service, scholarship, and international commerce. No one who has come to know his work can fail to admire the grace with which he spans these fields and the level of excellence he has brought to each. As a scholar, I have long benefited from his studies of the economic history of Colombia and in particular its coffee industry. In *Conversations with Great Economists*, he shifts his focus from the application of economic reasoning to its production. He illuminates the contributions of some of the greatest figures in the field and through deft probing elicits the philosophical underpinnings and habits of mind that shaped their work.

In his interviews, Dr. Pizano finds them repeatedly alluding to the academic impact of “real world” events. Several, and especially Samuelson, alludes to the Great Depression. Hayek and Kantorovich participate in the great debate between planning and the market that marked the Cold War. Robinson, Kaldor and Tinbergen are profoundly moved by the realities of the developing world. The theoretical work of each was animated by the realities around them.

Against this background, it is useful to conjecture how the work of contemporary economists may be shaped by the recent economic crisis. Discussions with colleagues draw attention to three lines of innovation. One is the explicit treatment of the role of expectations in the formation of prices. A second is a greater appreciation of the macro-level significance of micro-level incentives, especially in capital markets. A third is a greater appreciation of the role of politics.

This Time it is Different

Students of macro-economics and trade tend to be dismissive of those surprised by the crisis of 2008. As documented by (Reinhart and Rogoff, 2009), such crises have recurred throughout the history of modern capitalism. They arise when demand rapidly expands in a major economy, as consumers and governments increase the level of consumption and investors acquire and transform assets. This expansion, they argue, then ramifies, coursing through commodity and financial markets. The result is a global expansion of debt. Should adjustments in financial and currency markets be deferred, the result is a later, greater, and more costly adjustment, i.e. a crisis. In their recent book, Reinhart and Rogoff (2009) record numerous instances of such phenomena.

Despite the regularity with which they occur, Reinhart and Rogoff (2009) note, each collapse is greeted with surprise. Each time, investors and governments appear convinced that “this time it is different”. Not only that, Reinhart and Rogoff record, individuals, institutions and governments “serially default.” The recurring nature of these crises and the repeated incidence of default suggest a failure to learn and the holding of beliefs that are irrational.

In an era when economic beliefs are held to be rational and in a profession in which models require them to be so, the great recession suggests that our theories must change.

Imperfect Markets

The great recession also reminds us of the importance of incorporating into macro-models something that has long been recognized but too long ignored: that capital markets are inherently imperfect. One reason is that they are inter-temporal. They therefore give rise in time to (in) consistent behavior. And high levels of information are required to facilitate credit markets, such as information concerning the willingness and ability of borrowers to complete transactions. Because of these characteristics, capital markets are often lodged within non-market institutions: both lenders and borrowers benefit when that is so. In the words of (Elster 1979), borrowers, like Ulysses, are willing to be coerced: they do better “tying themselves to the mast,” thereby rendering themselves unable to succumb to the temptations of non-repayment. By doing so, agents can increase the volume and reduce the costs of borrowing. And, as recognized by Akerloff (1984), those who are better than average credit risks may voluntarily render their assets vulnerable to seizure; by pledging collateral and posting bonds, they can credibly signaling their intention to repay.

Being inter-temporal, moreover, capital markets are laden not only with the risk of non-performance but also with risks arising from stochastic behavior and unforeseeable contingencies. One result is economies of scale, as firms seek the benefits to be derived from the law of large numbers. Another is high costs of entry, as firms that survive multiple shocks acquire enhanced reputations and therefore lower costs of borrowing.

These same factors – the inter-temporal nature of exchange and imperfect information – re-introduce the role expectations. Characteristically, when choices are based upon expectations, multiple equilibria exist (Schelling 1960). As a result, both booms and busts become possible. Attempts to comprehend “contagion,” “fads,” and other forms of collective behavior typically focus on the relationship between well-informed and poorly informed agents and the manner in which the choices of the first influence the beliefs of the second (Akerloff 1984; Kuran 1995; Schleifer and Vishny 1997), and their behavior.

For several important and well-known reasons, then, capital markets are imperfect. A clear lesson of the recent financial shock is that these insights should influence the manner in which adjustments are depicted in models of the macro-economy. Insofar as they do so, we – and those who govern us – are less likely to be surprised by financial markets

Firms and Industry

Not only do recent events suggest that knowledge of capital markets should influence models of the macro-economy. They also suggest that micro-level data – data about incentives that prevail within firms and industries – should also influence our models. ¹

Innovations in product markets led to changes in the behavior of firms in capital markets. In the banking industry, securitization transformed large and illiquid assets into divisible and highly liquid securities: mortgage contracts were bundled, tranced, and sold. As a

¹ Biais, B., T. Mariotti, et al. (2009). Large Risks, Limited Liability and Dynamic Moral Hazard. Toulouse, Toulouse School of Economics (GREMAQ/CNRS, IDEI). Represents an important attempt to design contracts to counter excessive preferences for risk.

result, bankers began to behave as traders; and the caution once engendered by having to borrow short term while lending long term dissipated. The creation of new ways of hedging risks in securities markets and insuring against counter-party default also led to a downward revision in the assessment of risk. When high levels of leverage were employed by traders, the result was a massive explosion of debt – underwritten by a slow changing quantity of assets in the real economy.

Beginning in roughly 2005, Goldman Sachs began to insure themselves against defaults on mortgage-backed securities (Morrison and Story 2009). Goldman-Sachs would certainly have been regarded as well informed. By Bayes Law, however, when people are certain – i.e. when their beliefs approach 0 or 1 – new information can engender but small revisions in beliefs; and perhaps for that reason, the firms' had little impact on the expectations of others. When, shortly thereafter, large-scale firms failed, expectations began to alter. As traders sought to fulfill their contracts, many sought to unwind leveraged contracts; and following the logic of Schleifer and Vishny (1997), the crisis began to alter from one of liquidity to one of solvency. Asset prices fell at rates that meant that debts could not be repaid without further borrowing. But because the solvency of other institutions could not be appraised accurately, banks were reluctant to lend; they hoarded capital in efforts to self-insure. The result was a massive and precipitate, rather than smooth and gradual, adjustment in capital markets – and a sharp contraction of the macro-economy.

The “story” of the crisis which is well known (Brunnermeier 2009)) once again highlights the importance of belief formation in environments of uncertainty. It highlights the importance of incentives at the firm and industry level. It highlights how rational behavior at the micro-level can generate irrational outcomes for society. The logic communicated by the story, then, is once again one of market imperfection.

Political Economy

The increase in consumption and the decline in savings that elicited the rapid expansion of debt originated in the public as well as the private sector. The recession of the 1970s had followed the rapid expansion of the late 1960s, triggered by President Johnson's determination to fight two wars: one at home against poverty and another abroad against North Vietnam. The tax cuts of George W. Bush's administration resulted in a comparable expansion of public debt. Instructively, both presidents had presided over one-party regimes, Johnson for both terms and Bush for the first six years of his presidency. In both instances, then, the checks built into the United States' government were disabled. Eras of financial profligacy corresponded to eras of single party rule.

The structure of interest groups also played a major role in the crisis (Johnson 2009). The financial industry is characterized by large economies of scale and therefore high degrees of concentration. And if only because of its role in intermediation and settlements, its reach extends from Wall Street to Main Street. One result is that political threats, issued by Congress or the Executive branch, have become incredible; the firms are too big to fail. Another is that their executives can credibly believe that they can reap the rewards of risky gambles while transferring the costs onto the taxpayers.

The flood of funds unleashed by the politically unconstrained governments therefore finances wagers of firms whose executives no longer needed to act prudentially. The last lesson for economists is thus this: attend to political factors when modeling the behavior of the economy.

References

Ahamed, L. (2009). *Lords of Finance*. New York, Penguin.

Akerloff, B. (1984). *An Economic Theorist's Book of Tales*. New York, Cambridge University Press.

Biais, B., T. Mariotti, et al. (2009). *Large Risks, Limited Liability and Dynamic Moral Hazard*. Toulouse, Toulouse School of Economics (GREMAQ/CNRS, IDEI).

Barbera, R. J. *The Costs of Capitalism: Understand Market Mayhem and Stabilizing our Economic Future*. New York, McGraw Hill.

Brunnermeier, M. K. (2009). "Deciphering the Liquidity and Credit Crunch 2007-2008." *Journal of Economic Perspectives* 23(1): 77-100.

Cassidy, J. (2009). *How Markets Fail: The Logic of Financial Calamities*. New York, Farrar, Straus and Giroux.

Elster, J. (1979). *Ulysses and the Sirens*. New York, Cambridge University Press.

Giridharadas, A. (September 22, 2008). *Land of Gandhi Asserts Itself as Global Military Power*. New York Times. New York: A9.

Johnson, S. (2009). "The Quiet Coup." *The Atlantic Monthly* (May).

Krugman, P. (2009). "How Did Economists Get it so Wrong." *The New York Times Magazine* (September 8): 36-43.

Kuran, T. (1995). *Private Truths, Public Lies*. Cambridge MA, Harvard University Press.

Morrison, G. and L. Story (2009). *Banks Bundled Debt, Bet Against It and Won*. New York Times. December 24: A1, B7.

Reinhart, C. M. and K. S. Rogoff (2008). *This Time it is Different: A Panoramic View of Eight Centuries of Financial Crises*. Harvard University.

Reinhart, C. M. and K. S. Rogoff (2009). *This Time it is Different: Eight Centuries of Financial Folly*. Princeton, Princeton University Press.

Schelling, T. (1960). *The Strategy of Conflict*. Cambridge MA, Harvard University Press.

Schleifer, A. and R. Vishny (1997). "The Limits of Arbitrage." *The Journal of Finance* 52(1): 35-55.

Sorkin, A. R. (2009). *Too Big to Fail*. New York, Viking.

IV. Remarks by Professor Darrell Hueth

Before presenting my formal remarks I would simply like to express my great happiness that this book (Pizano 2009) is now available to my English speaking colleagues. I recall how excited I was when Professor Pizano first gave me a copy of this book in Spanish in 1993, as I recall. After looking at the names of the economists interviewed on the cover I could hardly wait to get my English/Spanish dictionary and begin reading. Reading this book was a pleasure that exceeded my expectations and also gave me great respect for Professor Pizano as a scholar. The framing of the questions in this book and its publication reflect qualities I have observed in many Colombian economists. First, as with other Colombian economists, Diego amply exhibits great intellectual curiosity and a deep understanding of the discipline of economics. Second, the great audacity he had to think that as an unknown and very young man he could obtain interviews with this group of giants was remarkable. It reminds me of his father and Mario Laserna who as young men thought they could found a first rate University in Colombia and then had the audacity to ask Professors Einstein and Von Neumann for their help (which in the end they received!). And finally, he had the capability to pull it off, first in Spanish and now in English. Felicitaciones Estimado Diego.

Now my formal remarks:

When Diego first asked me to say a few words at this event, I was initially inclined to decline the invitation because he suggested that I discuss the relevance of the focus of this wonderful book on Keynesian economics in light of the present economic environment. I hesitated. My hesitation was because I am an Agricultural and Resource Economist and macroeconomics is not a major focus in this field of study. Indeed, most agricultural economists regard macroeconomics as being more closely related to witchcraft than to a scientific field of study. However, I then remembered where we are, Washington DC, and that competence and knowledge in a field is not a necessary condition to expound at great length on any subject in any forum in this town. So, I was a bit more comfortable. Moreover, Diego also gave me the liberty to discuss other contributions of these giants of economic thought and several of them have also made seminal contributions to a field I can claim some competence in, that of Applied Welfare Economics, that is, the theoretical foundations for all of what is commonly known as benefit cost analysis.

More specifically, these economists have investigated in detail the conditions under which the use of the triangular area above the price line and below the demand curve for a good can be used as a measure of welfare for a consumer, and under which changes in this area measure the benefits or costs to a consumer resulting from a policy or project which either changes price or shift the demand curve. This metric, originally proposed by the French

engineer Dupuit (1844), and formalized by the great English economist Alfred Marshall (1930), has been one of the most controversial in the history of economics. In addition, several of these economists have contributed to the development of an aggregative criterion by which we can say whether society as a group is better off when the gains and losses using these surplus measures are added up over gainers and losers.

Let me start with the concept of individual consumer's surplus. Although he was not alone, Professor Samuelson was the perhaps the most influential critic of this concept as a useful measure of welfare. Indeed in his doctoral dissertation (later published as the *Foundations of Economic Analysis* (1941)), he stated that in his ideal book on principles of economics, consumer's surplus would not appear in the chapter on welfare economics except perhaps as a footnote. More importantly, in a classical 1942 paper he demonstrated that one of the key assumptions commonly employed by economists to justify its use, namely the constancy of the marginal utility of income, implied consumer behavior rarely encountered in the real world.

Thus, in spite of several valiant attempts by Sir John Hicks (Hicks 1940-41, 1943, 1956) to rehabilitate the concept², for some 40 years consumer surplus was largely absent from the mainstream journals of what are now called the salt-water universities. If the concept was used at all in the mainstream economic journals, it was immediately followed by a statement generally apologetic for its use.

The second closely related concept of applied welfare economics which came under scrutiny, the Compensation Principle, originally proposed by Nicolas Kaldor (1939) and Sir John Hicks (1939) (although it should be mentioned that Harold Hotelling suggested it earlier in his 1938 *Railway Rates* paper) has been just as controversial. Simply stated, this Kaldor/Hicks Principle or Criterion states that if the gainers are willing to pay more for the gain than the losers are willing to accept for the loss there is at least a "potential" economic gain to be had from the policy or project. One person could potentially be made better off with no one else being made worse off. The criterion was attacked on several grounds.

First, the principle was dependent on the initial distribution of income. Second, compensation was seldom if ever paid and hence this criterion was consistent with making the poor poorer and the rich richer as long as the gains to the rich exceeded the losses to the

² And this was in spite of Professor Hicks's demonstration in his wonderful little 1956 book, *A Revision of Demand*, that if one focused on what is now called the Hicksian demand curve, along which utility is constant, rather than the Marshallian demand curve, along which income is constant, and if one accepted that the consumer's willingness to pay for a change is a reasonable monetary measure of welfare change to the consumer, then indeed the change in the consumer surplus area also could be regarded as a monetary measure of welfare change.

poor. Further, more technically and most importantly Professor Scitovsky (1941) showed that if compensation was not paid, a policy suggesting a gain, if adopted, could then be reversed and generate a gain anew! This criticism, called the reversal paradox, was not an argument over values, like the income distribution issues, but one of serious theoretical challenge. Hence several modifications to this criterion were suggested. Samuelson suggested a more general criterion to include consideration all possible redistributions of income before and after the change. Little agreed with Scitovsky that a policy should not present potential reversals and the resulting income distribution must be “acceptable.” But the Samuelson Criterion (Samuelson 1950) was so difficult to apply it was never widely adopted and “acceptable” was so subjective, the Little criterion was also not widely applied.

So how did the practitioners of applied welfare economics and benefit cost analysis respond to these theoretical challenges? Did agricultural economists, environmental economists, and project evaluation folks at the World Bank abandon the use of consumer surplus and the Compensation Principle? As John Krutilla, who spent most of his professional life working a few blocks from here at Resources for the Future, put it in his 1981 Presidential Address to the Association of Environmental and Resource Economists: “...did we observe – as we might expect – hesitancy in using welfare economics in the applied area? Quite the contrary. Applied Welfare Economics flourished throughout this period as though (if not actually) innocent of the controversy over its theoretical underpinnings.” Indeed, the Flood Control Act of 1936 said that benefits and costs must be added “independently of to whomsoever they may accrue.” Thus, there was a legal requirement that the Kaldor/Hicks Compensation principle be satisfied for a project to be approved. Moreover, the Water Resources Council later in the famous “Green Book” required the use of consumer surplus changes as a measure of welfare change for consumers when projects were sufficiently large to result in price changes.

Most importantly, particularly for the Salt Water Economists, Robert Willig in 1976 published a path breaking paper in the American Economic Review entitled “Consumer Surplus Without Apology.” This paper, which explicitly accepted the willingness to pay measures of Professor Hicks, namely Compensating and Equivalent Variation, as measures of welfare for the consumer, showed that one could use consumer surplus calculated from the Marshallian demand curve as a very good approximation to the true consumer surplus calculated from the Hicksian demand curve for almost all goods of interest. Moreover, Professor Hausman, in 1981, has shown, using Duality Theory, that for some cases it is not necessary to approximate the willingness to pay measures of Professor Hicks. That is, it is possible to exactly measure Hicksian consumer surplus from the econometric estimation of the Marshallian demand curve. Thus, today, we find the MIT, Harvard, Berkeley and

Stanford types using this concept without apology as the applied folks and the Chicago group has always done.

The Compensation criterion is still a bit controversial. In our book (Just, Hueth and Schmitz (2004)) we show that reversals cannot occur if compensation is paid and that likewise reversals cannot arise if one policy results in the elimination of a distortion completely. It is also implied but not shown explicitly that reversals are unlikely to occur for goods that are like those which satisfy the Willig condition, that is, those which have small income effects or are a small amount of the consumer's budget. That is, it is not widely recognized that the same conditions that make consumer's surplus a good approximation to the willingness to pay measures, also make it highly unlikely a reversal can occur. Thus, applied welfare economics as envisioned by Professors Hicks and Kaldor is alive and well in the new millennium in spite of many theoretical challenges it has faced. I like to say Pythagorean economics survives.

Let me close with one comment on macroeconomics.

Of all the insightful questions Professor Pizano asked, the question and response I found most interesting was the one he asked Professor Hicks: "With reference to this question about the future, would you agree with Keynes when he pointed out that the long run is for undergraduates and in the long run we are all dead?" And Professor Hicks responded: "I must say that was a very dangerous and irresponsible remark."

I had long known that Professor Hayek was highly critical of the focus of Professor Keynes on the short run, but I had not been previously aware that Professor Hicks shared this view. It seems both were greatly concerned about the mischief that could be done by adopting short run stimulative measures that would prove to be long run disasters. Indeed it appears to me that Professor Keynes was not sufficiently concerned about efficiency in public investment. I could be wrong about this, and if I am I am sure Professor Pizano can correct me, but it seems to me Keynes would be indifferent to stimulating consumer demand by building pyramids in the Arizona desert, versus rebuilding bridges and modernization of JFK, as long as the expenditure levels were the same. That is, I have found very little in the work of Keynes to suggest that a portfolio of projects should be selected that maximizes the social rate of return for a given stimulus program.

As we all know, there has been a great deal of critical analysis of the first Obama stimulus program from the standpoint of the number of jobs created. In some cases it has been found that the Administration has claimed jobs created in Congressional Districts which do not exist. The administration seems to be reacting to this criticism. In a speech last week in this institution, President Obama indicated that a second stimulus will focus on job

creation. But really, where are his economic advisors on this issue? Should maximizing jobs be the objective? Perhaps they should from a political standpoint but are jobs what should be counted from an economic welfare standpoint? Are for example 10 McDonalds jobs at \$20,000 more economically justifiable than 4 lineman jobs at \$80,000 a year rebuilding our power grid?

I think it is quite unfortunate that Professor Keynes did not give more attention to the allocative efficiency of resource use in the implementation of the fiscal measures he proposed. Thank you.

References

- Dupuit, J., "On the Measurement of Utility of Public Works," *Annals des Ponts et Chaussées*, Second Series, 8 (1844).
- Hausman J.A. "Exact Consumer's surplus and Deadweight Loss." *American Economic Review*, 71: (1981) 662-76.
- Hicks, J. R., "The Foundations of Welfare Economics," *Economic Journal*, 49, no. 196 (December 1939), 696-712.
- , "The Four Consumers' Surpluses," *Review of Economic Studies*, XI, no. 1 (Winter 1943), 31-41.
- , "The Rehabilitation of Consumer's Surplus", *Review of Economic Studies*, 8 (February 1940-41), 112.
- , *A Revision of Demand Theory*. Oxford England: Clarendon Press, 1956.
- Just, R., D.L. Hueth, and A. Schmitz., *The Economics of Public Policy: A Practical Guide to Policy and Project Evaluation*, Edwin Elgar Press, Cheltenham UK. (2004)
- Kaldor, Nicholas, "Welfare Propositions of Economics and Interpersonal Comparisons of Utility," *The Economic Journal*, 49, no. 195 (September 1939), 549-52.
- Krutilla, John V., "Reflections of an Applied Welfare Economist," presidential address at the Annual Meeting of the Association of Environmental and Resource Economists, Denver, Colorado, September 1980.
- Marshall, Alfred, *Principles of Economics*. London: Macmillan & Company Ltd., 1930.

Pizano, Diego, *Conversations with Great Economists*, New York: Jorge Pinto Books, 2009.

Samuelson, P.A., "Constancy of the Marginal Utility of Income," *Studies in Mathematical Economics and Econometrics in Memory of Henry Schultz*, ed. O. Lange et al. Chicago: University of Chicago Press, 1942.

———, "Evaluation of Real National Income," *Oxford Economic Papers*, New Series, 2, no. 1 (January 1950), 1-29.

———, *Foundations of Economic Analysis*. Cambridge, Mass.: Harvard University Press, 1947.

Scitovsky, T., "A Note on Welfare Propositions in Economics," *Review of Economic Studies*, 9, no. 1 (November 1941), 77-88.

Willig, Robert D., "Consumer's Surplus Without Apology," *American Economic Review*, 66, no. 4 (September 1976), 589-97.

V. Remarks by Mauricio Carrizosa

This book by my old college classmate, Diego Pizano, presents conversations that he held about thirty years ago with eminent economists that were active at the time. Its preparation benefited from the author's deep familiarity with the writings of these economists and from an intelligent selection of issues that he discussed with them. Dr. Pizano's book also deserves credit for the clarity and readability of a subject matter that is at times complex, albeit always considerably interesting. With these ingredients, the reader will readily appreciate a set of economic controversies of the time, important both because of the academic interest they elicited as well as for their application to issues that were in fact not too different from those we face today.

The economists covered by the book span the widest ideological gamut, ranging from the free market extreme represented by Professor Hayek, to Professor Robinson's Keynesianism, and to Professor Kantarovich's economic planning. The author exploits this wide range of views to elicit responses from these economists to issues of interest that mark the book's thematic unity. By way of example, I point to three of those issues that should be of interest to readers. One relates to the methods that these economists used to develop their arguments, an issue that straddles the threshold between economics and philosophy and in which the book displays the author's deep interest and knowledge. The discussion highlights Hayek's support for an approach akin to the philosophy of Karl Popper, who argued that scientific theories, by their abstract nature, can be verified only by probing into their observable implications (the "pattern of a process", in Hayek's formulation). This contrasts with the more Kantian approach that emerges in the conversations with Professor Robinson, with economic phenomena being approached from the broader perspectives of metaphysics, morals and science; or with the "a priori truths" of Lionnel Robbins and Ludwig Von Mises that Samuelson, in turn, rejects in his chapter and in favor of an inductive approach. Throughout these discussions, the author also raises the difficult issue of whether mathematics is as potent a tool as words for developing economic arguments, with the discussion with Samuelson being of considerable interest in this regard.

The second example refers to the ubiquitous debate between free-market advocates and those that support planning and state intervention. It is particularly interesting that the pendulum of public opinion between the two continues to this day as each of the two approaches shows its positive and adverse manifestations. We have Hayek arguing for the conservative vision of a state that provides an appropriate legal framework for the functioning of the market (e.g. to keep inflation at bay); taxes at flat rates in order to provide those goods that the market cannot supply adequately; and provides goods and services to those earning less than a certain minimum. Advocating the latter objective is surprising for an author that claims that "the concept of social justice makes sense only in a centrally planned economy", a claim that is something of a shock today, when governments increasingly collect taxes, reputedly to achieve greater "social" justice through public spending. And at the central planning extreme, the chapter covering Kantarovich is an interesting testimonial of optimism on the merits of planning ten years prior to the

disintegration of the Soviet Union. In-between, Kaldor argues for governments intervening in those situations where intervention can better deal with uncertainty.

A third example touches on how to model economic cycles. I found Hayek's interpretation most akin to the discussion today. He predicted the 1929 US crash and reasoned that the efforts to prolong the boom that threatened to cease in 1927 originated the bust that followed, the latter exacerbated as he admits by the deflationary policy that followed. The discussion today highlights precisely the excessive liquidity that preceded the deep recession that started in 2008, now followed by even more liquidity to help economic recovery but that may lead anew to recession (the so-called w-shaped recovery). I found Hicks's take less tractable. He argues in the book that depressions are caused by a variety of different shocks (for example invention, public investment, non-linearities between investment and growth, and growth itself when below capacity). Isolating those forces may be far more complex than relying on the liquidity-based explanations used by Hayek then and by Friedman and Schwartz later.

The examples above illustrate the depth and ample thematic content of a book that also discusses several other issues such as economic development and long term economic growth and capital accumulation. The care that Dr. Pizano afforded to the preparation of these discussions and the clarity in their presentation made it a pleasure to read and enjoy again this book in its second edition.

Biographical notes on contributors

Robert H. Bates is the Eaton Professor of the Science of Government at Harvard University. He is the author of several books including one on the world's coffee trade (Princeton University Press, 1997), two on the political economy of growth in Africa (Cambridge University Press, 2007) and one on state failure in Africa (Cambridge University Press, 2008).

Mauricio Cárdenas is a senior fellow and director of the Latin American Initiative at Brookings Institution. He was minister of Economic Development and Transportation and director of National Planning of Colombia. He is the author of several books and articles and was recently the President of the Latin American and Caribbean Economic Association.

Mauricio Carrizosa was for many years the Director of Economic Policy for Latin America at the World Bank. He is working now as a senior advisor of the Independent Evaluation Group of the World Bank. He studied economics at the Universidad de los Andes (Bogotá) and the University of Chicago. He has written several articles and reports.

Darrell Hueth, is Professor Emeritus of Agricultural and Resource Economics at the University of Maryland. For many years he was the coordinator of the Master's program on Environmental Economics at the Universidad de los Andes (Bogotá). He is the author of

several books and articles including one on the economics of public policy (with R. Just and A. Schmitz, Edwin Elgar Press, 2004).

Diego Pizano was economic advisor to the President of Colombia (1982-1986). For many years he was the international and economic advisor of the Federación Nacional de Cafeteros de Colombia. He is the Chairman of the Board of the Universidad de los Andes (Bogotá) and the President of the Common Code for the Coffee Community Association (Bonn, Germany). He is the author of several books and articles.