UNIVERSITY OF MISSOURI - KANSAS CITY
ECONOMICS CLUB

economicus

Student-refereed Economics Journal

Volume VII

2004-2005

Volume Contributors:

Andrew Barenberg (UMKC)
Zied Ben Hmida (University of Economics and Management of Tunis)
Shawn J. Gebhardt (UMKC)
Linda Hauner (UMKC)
Tae-Hee Jo (UMKC)
Fadhel Kaboub (UMKC)
Yan Liang (UMKC)
Gilberto Libanio (University of Notre Dame)
Mohammad Maljoo (University of Tehran)
Maximilien Nayaradou (Université Paris IX, Dauphine)
Corinne Pastoret (UMKC)
Sébastien Plociniczak (Université Paris XIII)
Ganna Pogrebna (UMKC)
Zdravka Todorova (UMKC)
Jonathan Watkins (UMKC)
Kevin Young (Carleton University)
In Memory of William D. Williams

A mentor and a friend
## Table of Contents

### Editorials

**Editor's Note**  
*By Fadhel Kaboub (UMKC)*  
3

**Farewell to Dr. Bill Williams**  
*By UMKC Students*  
5

### Articles

**Islamic Financing: Impacts on Development and Equality**  
*By Andrew Barenberg (UMKC)*  
17

**The Dominant Economic Discourse of Today’s Iran in Retrospect**  
*By Mohammad Maljoo (University of Tehran)*  
25

**The Influence of Firm Strategy on Business Cycles in Veblen’s Economic Theory**  
*By Maximilien Nayaradou (Université Paris IX, Dauphine)*  
37

**Neither Atomized nor Bi-lateralized: Market Actors Never Exchange outside a Social-Structural Context**  
*A Critical Analysis of the Economics of Transaction Costs*  
*By Sébastien Plociniczak (Université Paris XIII)*  
57

**Mathematical Formalism in Economics: Verdict of the Reality**  
*By Ganna Pogrebna (UMKC)*  
83

### Review Essay

**Reflections on the Empire of Capital**  
*By Kevin Young (Carleton University)*  
111

### Book Reviews

*The State, the Market and the Euro: Chartalism versus Metallism in the Theory of Money*  
(edited by Bell and Nell, 2003)  
*Reviewed by Zied Ben Hmida (University of Economics and Management of Tunis)*  
117

*Understanding Modern Money: The Key to Full Employment and Price Stability*  
(L. Randall Wray, 1998)  
*Reviewed by Shawn J. Gebhardt (UMKC)*  
121
Reviewed by Linda Hauner (UMKC)  

The Open Economy and its Financial Constraints (Penelope Hawkins, 2003)  
Reviewed by Tae-Hee Jo (UMKC)  

The Crisis in Economics: The Post-Autistic Economics Movement  
The first 600 days (edited by Edward Fullbrook, 2003)  
Reviewed by Fadhel Kaboub (UMKC)  

Reinventing Functional Finance: Transformational Growth and Full Employment  
(edited by Nell and Forstater, 2003)  
Reviewed by Yan Liang (UMKC)  

Growth, Distribution and Effective Demand: Alternatives to Economic Orthodoxy  
Reviewed by Gilberto Libanio (University of Notre Dame)  

Trade, Balance of Payments and Exchange Rate Policy in Developing Countries  
(A.P. Thirlwall, 2003)  
Reviewed by Corinne Pastoret (UMKC)  

The Countries of the Former Soviet Union at the Turn of the Twenty-first Century: The Baltic and European States in Transition (Ian Jeffries, 2004)  
Reviewed by Ganna Pogrebna (UMKC)  

Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries  
(Jennifer Clapp, 2001)  
Reviewed by Zdravka Todorova (UMKC)  

(W. Robert Brazelton, 2001)  
Reviewed by Jonathan Watkins (UMKC)  

Books Received  
Write a book review for Oeconomicus and receive a complementary copy of the book courtesy of the publisher  

Announcements  
Oeconomicus Call for Papers  

Editor’s Note

This volume is dedicated to the memory of Dr. Bill Williams (1945-2004) who was a great supporter of this *Journal* and a vast source of inspiration to many of the graduate students who interacted with him at UMKC. He did not live to read this volume in its entirety, but as usual he did read and comment on the drafts of some of the papers. His death is a tremendous loss to all of us.

This volume opens with a tribute to Dr. Bill Williams from some of the graduate students who had the honor to work closely with him. Even though the tribute is a collective effort, I would like to thank the following students for their kind contribution: Mehdi Ben Guirat, Panayotis Giannakouros, Tae-Hee Jo, Jairo J. Parada, Robert H. Scott, Linwood Tauheed, Zdravka Todorova, and Jonathan Watkins.

I would also like to thank the publishers who have agreed to support *Oeconomicus* and its contributors by offering complementary copies of books from their most recent catalogues to students who write book reviews for *Oeconomicus*. Those publishers are: Ashgate, Cornell University Press, Edward Elgar, M.E. Sharpe, Oxford University Press, Palgrave Macmillan, Routledge, State University of New York Press, and Yale University Press.

Finally, I would like to announce that this is the last issue of *Oeconomicus* to be published under my editorship and that the Economics Club will be meeting soon to select a new leadership team to carry on the publication of the *Journal*. During the four years that I served as editor I had the pleasure of working with many individuals who contributed in many ways to the success of the *Journal* either by writing, editing, proofreading, or refereeing articles. In addition to all the authors whose names appeared in this *Journal*, I would like to express my gratitude to the following individuals for the tremendous work they did behind the scene as anonymous referees: Rex Ballinger, Shakuntala Das, Linda Hauner, Tae-Hee Jo, Yan Liang, Gilberto Libanio, D. Marshall Meador, Daniel Melton, Erik Olsen, Jairo J. Parada, Corinne Pastoret, David Pringle, Pavlina Tcherneva, Zdravka Todorova, Eric Tymoigne, and Jonathan Watkins.

Fadhel Kaboub  
Editor
William D. Williams, Ph.D.
1945-2004
Farewell to Dr. Bill Williams

By UMKC Students

Dr. William Dean Williams (1945-2004) was an extraordinary person, a brilliant scholar, and an incredible source of inspiration for his students and friends. His death is a tremendous loss not only for UMKC’s economics tradition but also the broader community of Original Institutional Economics. Dr. Williams was an expert on the work of Thorstein Veblen and sought to provide the most adequate and up-to-date reading of Veblen’s work.

William D. Williams, Ph.D.
(1945-2004)

Dr. Williams was a John Dewey pragmatist and lived a Veblenian lifestyle. He did not pay any attention to the material and prosaic things of daily life, but rather he was looking for a simple and meaningful life. He was a scholar who was committed to finding the truth and developing a better economic theory of human behavior.

Dr. Williams came to UMKC as a research fellow at the Department of Economics and Social Science Consortium in the winter of 2001. He was a sharp thinker and a person of the highest integrity. He shared office space with graduate students in Royall Hall during the final three years of his life. He was always forthcoming with support, illumination, and challenges. His style was singular, full of novel insights, perplexing questions, paradoxical statements, and heavily loaded allusions.

Dr. Williams was particularly helpful and thoughtful in his discussions with graduate students. He would spend hours talking with students in Royall Hall about economics, philosophy, literature, history, politics, religion, physics, chemistry, biology, psychology, computer programming, science and technology, and virtually any other subject. He was a renaissance intellectual and a genius who never bragged about his intelligence and encyclopedic-knowledge, but rather he was always eager to read more and learn more. He read student papers at will, made comments and suggestions to improve and strengthen their arguments, recommended additional readings, and would even photocopy articles to students when he came across a paper that would be helpful to their research. It is no surprise that so many term papers and dissertation topics at UMKC were influenced by his work if not directly suggested by him. He was a mentor in the true sense of the word.

Bill Williams was someone immensely joyful with the things he was doing, and what he was doing up to his last day was learning. In the process, Bill was an example to all of us of the value of enjoying what one does and doing what one enjoys. When students would come to him with ideas they have been working on, he would always
take them as if they were important and would discuss them very seriously. His gift was that ‘You’ were always important to him.

Dr. Williams used to sign his emails (and hand-written notes to students) “Dr. Bill” to tease his students who felt close enough with him to call him by his first name but who also had such deep respect for his deep intellect not to call him “Dr.” From Dr. Bill we learned the virtues of humility and the value of intellectual integrity and honesty.

In his never ending quest for knowledge, Dr. Williams was humble enough to attend classes and seminars with graduate students to learn more about Critical Realism and Post Keynesian Economics in order to discover new ways to better understand social reality. His presence was always illuminating as he often disagreed, asking thought-provoking questions that sparked heated discussions among students, but he was an open-minded scholar and did not hold any dogmatic beliefs. He was an honest person, very respectful of other people’s points of view, and he always admitted the need for deeper analysis and further discussion.

Bill Williams was a tireless reader. Everyday he read articles published in the best journals and magazines of Science and Psychology. He accumulated an impressive amount of knowledge about Biology, Evolution, and Psychology and their relationship to Economics. To him, all the new discoveries in modern sciences were just confirmation of Veblen’s words about some issue related to human behavior. He would often kindly make a copy of an article from Science or Nature along with a quote from Veblen and leave it on a student’s desk as a follow up to a discussion they had the day before.

Bill Williams did not want to be part of the ceremonial aspects of the ‘imbecile institutions’ that our universities are, as Veblen called them. He was a real scholar who did not care about academic tenure and professorship, or publications in record numbers. Bill Williams wrote a lot but scarcely published anything. He was a perfectionist and very demanding of himself from a theoretical standpoint. He was doing path-breaking research on Control Theory for his book on Veblen. He refused to publish the book (How to Read Veblen) or any part of it before he had fully developed his message. He realized that his mission was a difficult one, and that he would be asking too much from the readers, therefore he knew that he would have only one shot to grab their attention and explain his theory. He was very close to achieving his goal, but life is unpredictable. His unfortunate accident and sudden death stopped him before he could quench his thirst for truth.

His main objective in his theoretical work was to build a modern theory of human behavior that would be superior to the Neoclassical one. Bill Williams also rejected the Ayresian theory of human behavior because of the excessive role of culture and blunt behaviorism. He could not accept that an ethereal culture will explain everything and he always thought that choice plays a role for the individual. Of course, his ‘individual’ had nothing to do with the Neoclassical Homo Economicus. To him, agency, the individual, and collective action formed a very important and crucial base for Veblen’s foundations.
Bill Williams thought that Veblen and Dewey have left the basic elements for the theory he wanted to develop but he argued that they could not get very far because the advances in sciences were not sufficient during their times. He was very much convinced that this was a task that could be done today. To him, Control Theory enunciated by Bill Powers was the tool. He used to say, it was time “to deliver the goods.”

Bill Williams devoted his life to the search for knowledge applied to Economics. He was also a living proof of the Veblenian instinct of idle curiosity. He invented a sensor that attached to soybean harvesters that moved the head to follow the contour of the field and increase the farmer's yield. He taught himself computer programming and wrote a program to analyze the empirical data from John R. Munkirs’ book, *The Transformation of American Capitalism* (1985). He read manuals and taught himself enough electronics to build his own computer. He developed his own MS-DOS based word processor, which he was still using up until the week he passed away. Dr. Williams gave up the opportunity to become an Olympic skier after he finished college in Colorado. He was also a very talented photographer (see some of his photographs at the end of this article).

Dr. Williams was in the process of building a super light weight aircraft but never got it quite finished. He even wrote a program to monitor his food intake and insulin injections after he got out of the hospital. He also was about to build his own prosthesis for the leg he lost in the accident. Nothing but death was going to stop him.

For many years, Bill Williams was a professional pilot. He often used anecdotes and stories from his many experiences in life to illustrate points about human behavior. Our favorite story of his was when one day he was flying a passenger and the engine of his plane failed in mid-flight. The passenger was screaming frantically, “the engine, the engine!” Dr. Bill summarily told him, “shut up, the plane still has wings, it does not fly on engines,” and he successfully landed the plane on a strip of road. This story, in a way, summarizes Dr. Bill to us, and always will. We will miss him as a friend, a mentor, and a scholar. We owe him a tremendous debt, he gave us everything he had and taught us everything he knew, and today we pledge to honor his legacy by continuing to work towards developing a more rigorous economic theory of human behavior in the tradition of Veblen and Dewey. Farewell to you Dr. Bill.
Eric Tymoigne (left) and Marc Humbert (right)

Stefan Kesting

Photo by Bill Williams
ICAPE Conference Participants, UMKC 2003

Photo by Bill Williams
Linwood Tauheed
Photo by Bill Williams

Edward J. Nell
Photo by Bill Williams
Portraits of Eliseo Fernandez and James Webb (photographed by Bill Williams at the Charles S. Peirce Studies meeting) carefully arranged by Bill Williams on a wall in Royall Hall 410-A

Photo by Bill Williams
Islamic Financing
Impacts on Development and Equality

By Andrew Barenberg

University of Missouri – Kansas City

So-called “Islamic Banking” has expanded into 60 countries with over $250 billion in reserves since the presentation of a plan to reform banking to foreign ministers at the Third Islamic Conference in 1972 [Siddiqi 2002, 1; and Kazarian 1993, 2]. According to its proponents, this new type of banking, that in principle rejects interest (riba), not only observes the religious laws (Shariah) but also obeys the Islamic injunction for socio-economic justice and facilitates economic growth. In this study we examine the success of this system compared to traditional interest-based banks in achieving these goals. In order to do this we will examine the success of Islamic banking in allocating funds to areas that assist development. Before turning to the empirical data we will discuss the underlying principles of Islamic Banking as laid out in Islamic Economics, examine its functions and then construct theories of how the instrument will function. By comparing the theories to the empirical data we will draw some conclusions on the role of Islamic banking in economic development and its sociological role in class relations.

History and Principles

Islamic Economics is a recent innovation, created by Pakistani economist Sayyid Abul A'la Maududi in the 1940s as an attempt to reclaim Islamic authority and defend Muslim society from the encroachment of western systems [Kuran 1995, 168]. By that time virtually all finance systems in Muslim countries had western banking as part of their colonial legacy. The combined radical political/Islamic awakening of the 1960s and the failure of western banking methods to transform oil wealth into meaningful development helped push Islamic economics from an esoteric field to a policy initiative. The early successes of using Islamic Profit/Loss Sharing in rural Egyptian villages to create new investments led to a 1972 proposal of reform at the Islamic Conference. Egypt created a state-sponsored Islamic bank in 1977 while wealthy Saudi ideologues helped fund other banks throughout the 1970s [Kazarian 1993, 144]. The 1980s saw complete reform of banking in Sudan, Iran, and Pakistan to the Islamic Model while in other countries Islamic banks competing with traditional banks saw deposits increase at a rate of 10-15% annually [Aggarwal and Yousef 2000, 1]. Since then, Islamic banking has grown into a major subsystem of worldwide banking.

The defining characteristic of Islamic Economics is a rejection of lending money at interest, but that is not the only requirement. Islamic Economics forbids all speculation and time-value of money; instead, agents are to be rewarded solely for effort or by assuming risk. Although the Qur'an endorses trade as permissible (Hallal), profit maximization is not the goal of agents in Islamic Economics, who are required to balance spiritual maximization through acting in ways that benefit society [Kavoossi 2000, 74, and
Andrew Barenberg

Kazarian 1993, 51]. Hence some potentially profitable ventures are prohibited because they violate Islamic norms or are considered to be destructive to society; for example selling alcohol, guns, pornography, and unhealthy foods [Kazarian 1993, 48]. On the other hand, there is a requirement for investments to aid society in funding projects that contribute to the social good. The ‘social good’ is considered to include job creation, housing projects, medical services, and/or projects that assist in the development of the nation [Kazarian 1993, 4 and 53].

While it is expected that achievement of these goals is somewhat dependent on the ability of the agents to make moral decisions, the instruments used are said to aid in bringing about socially beneficial results. The main instrument is Mudaraba - a system of profit/loss sharing. Generally, in Mudaraba the financiers create a contract with an entrepreneur to provide the capital for the entrepreneur’s project and then the financiers receive a share of the profits [Kazarian 1993, 62]. As risk and/or effort are required to receive Islamically-condoned returns, the financiers should not demand collateral. In the system of Mudaraba, the banks risk their funds and the entrepreneurs risk losing their time and effort [Kazarian 1993, 63].

Mudaraba (profit/loss sharing) defines not only the contract between the bank and borrowers but also the agreement between the bank and its depositors. A deposit at the Islamic bank will be used for the investments and the depositor is subject to risk. If the bank is profitable the depositors receive the appropriate portion of the profits, minus overhead [Kazarian 1993, 63].

Murabaha (mark-up pricing) and Ijara (rent to own) are two other instruments that are used; although many theologians argue that their use should be limited so as not to become a hidden interest [Aggarwal and Yousef 2000, 1]. Both Murabaha and Ijara use a system of payments whose total is higher than the original. This system allows a set predetermined rate of return with little risk, hence the debate over its appropriateness. Even less proper arrangements include penalties for late payment creating little difference between this system and one of interest.

Models of Mudaraba (Profit/Loss Sharing)

Islamic economists argue that the Mudaraba contract in itself—not assuming a higher moral responsibility of the agents—is superior to traditional interest-based loans in allocating funds to investment. The major shortcomings of the traditional system in developing countries (especially oil-rich countries with possibilities for rent-seeking behavior) is the failure to provide long-term high risk loans, find new entrepreneurs and profitable investments, and—an especially important failure for development purposes—to fund agricultural and industrial projects [Sikorski 1996, 2; and Studart 1995, 69]. In all criteria, its proponents expect Mudaraba to outperform traditional banks.

Without collateral requirements, virtually any entrepreneur, even one who is risk averse and without wealth should be able to receive financing [Kazarian 1993, 98]. With the bank exposed to financial risk, ideally it should try to minimize its vulnerability by
investing in a large number of investments in a diversified portfolio guided by project viability, not speculation. Given the developing countries’ lack of functioning stock markets and the high concentration of capital, such a measure could increase both the number of investments and the number of entrepreneurs. While increasing the number of investments, each investment will be enticed to rapid capitalization—since the financial burden is on the bank and the decision is with the entrepreneur—assisting in the country’s capital accumulation and technological growth [Kazarian 1993, 98]. Given the equity versus debt nature of *Mudaraba*; it follows that long-term investments should also predominate.

However, there are also theoretical reasons to believe that *Mudaraba* style contracts will not be successful in allocating funds based upon Stiglitz and Weiss’s concept of asymmetrical information [Sikorski 1996, 103]. The lack of collateral deprives the bank of its ability to use it to screen out nonviable or dishonest borrowers, leading to adverse selection—where those who have no plans of giving the bank their returns will be those most likely to borrow. The bank will have to compensate for this by rationing credit, often by resorting to irrational measures of determining reliability.

For a bank to receive its rewards, it must be assured that it will have access to accurate accounting of the project’s revenues. In the contractually incomplete and often corrupt settings that plague the developing (and developed!) world, such a guarantee is often difficult [Aggarwal and Yousef 2000]. Kuran notes “firms that would be natural candidates...are ordinarily highly secretive …lest information about their actual profits reach the governments tax offices” [Kuran 1995, 162].

Additionally, the bank must trust the entrepreneur to exert all possible effort to maximize profits, but there may be a moral hazard. As the entrepreneur receives a fixed portion of profits, the point where marginal effort exceeds marginal profits to the entrepreneur can be lower than the level of effort that maximizes social benefit [Kazarian 1993]. A system of increasing the entrepreneur’s ratio of profit can help to solve this problem in many cases. Still, many pitfalls must be avoided if the measure is to succeed in its social role. We now look at the empirical evidence to see how the Islamic banking system has functioned in reality.

**Empirical Cases**

In this part we will rely on Kazarian’s research on the investment practices of the Islamic International Bank for Investment and Development (IBID) and the Faisal Islamic Bank of Egypt (FIBE); the two largest Islamic banks in Egypt. Where other studies are available I will cite them; in virtually all cases they reinforce Kazarian’s findings.

Kazarian was unable to find any evidence that “Islamic banks pay any particular attention to other objectives than profit motive” [Kazarian 1993, 176]. In the extreme case throughout the research period 1981-84 the FIBE deposited no less than 60 percent of all funds in international accounts thereby creating a net out flow of funds and, in seeming violation of Islamic principles, received LIBOR in return [Kazarian 1993, 162]. While the
IBID had stricter requirements to follow Islamic principles precluding such deposits, it generally sought low risk investments; in all not a single Mudaraba investment was made in industrial or agriculture projects [Kazarian 1993,162]. Another study published in the *Journal of Money, Credit and Banking* found “no evidence that Islamic banks are providing significant amounts of long term capital to entrepreneurs” [Aggarwal and Yousef 2000, 1]. In Iran, the study found that investments in agriculture and industry were about half of the government's targets. Using cross-sectional data from 22 banks in thirteen countries, Aggarwal and Yousef find that “56.7 percent of financings by nominal value were for maturities lasting less than a year. Medium-term (one to two years) and long-term (two to five years) financings averaged 0.7 percent and 1.9 percent, respectively” [Aggarwal and Yousef 2000, 1].

This is not to say that the banks did not make productive investments. Instead of the industrial and agricultural sectors that the government had recognized as necessary for investment, the banks had directed themselves towards trade and service sectors. Kazarian emphasizes that these investments “may still have a positive impact on the growth of the economy” [Kazarian 1993, 177]. However, even here, “no significant evidence could be obtained that the banks stimulated new investors” [Kazarian 1993, 165]. The banks used previous records of borrowers with loans to weed out bad investments, effectively precluding new investors. One bank manager stated, “Nowadays I ask them if they have contacts with other banks.... If they do not, it is very difficult to provide them with a loan” [Kazarian 1993, 109]. In Kazarian’s study all investors were long time businessmen and 60 percent local agents of foreign companies, however this sample included only 19 investors over a two-week period in 1988 [Kazarian 1993, 166]. The banks’ inability to find profitable projects constituted a major impediment in funding new projects.

Overall Kazarian found that “the performance of the Islamic banks in the context of the allocation of funds has been shown to be similar to that of business and investment banks, which may be considered poor in terms of providing long term and risky finance to the agricultural and industrial sectors” [Kazarian 1993, 209]. If we ignore the stated purposes of these banks, however, and examine them by the standard measure of profitability, “they were among the most efficient and profitable in Egypt” [Kazarian 1993, 210]. From 1979 to 1988, the FIDE and IBID had yearly profit rates of 20% and 25% respectively, compared to 17-18% being earned by traditional development banks in Egypt [Kazarian 1993, 215]. Additionally, the banks were more successful at drawing deposits than were other banks given similar rates of return. Apparently this is the result of religious preference, in a survey of depositors in 1988, 71.6% cited the lack of interest as motivation and another 13.5% the banks contribution to the welfare of Muslims [Kazarian 1993, 156]. But mostly these funds were drawn from other bank accounts and not new deposits [Kazarian 1993, 199-200 and 216]. The faster growth in deposits is also shown in studies of other economies, reinforcing the thesis of religious preference [Siddiqi 2002]. Kazarian found that when Islamic banks were compared to traditional banks' interest rates that Islamic banks' “profit margin was higher by about 6 percentage points” [Kazarian 1993, 169]. This may earn the envy of other bankers but it directly contradicts the stated purposes of the banks. Other studies find parity between interest rates and the profit margin.
of the Islamic banks in all cases where they compete [Kuran 1995, 161]. In short the religious preference holds as long as there is no significant opportunity cost.

In addition to making deposits in foreign banks, banks consistently violate other principles. Debt-like instruments (Murabaha and Ijara) with fixed rates of return are the predominant activities of the banks in virtually every country [Kazarian 1993, 228; and Aggarwal and Yousef 2000, 1]. Additionally, despite the supposed prohibition of collateral, a majority of investments are secured in some way [Kazarian 1993, 228]. Aggarwal and Yousef found that “between 40 and 85 percent of the total funds provided [are secured in some way]. This seems to suggest that much of the lending done by Islamic banks is over collateralized” [Aggarwal and Yousef 2000, 1].

Despite this criticism of Islamic banking’s failure to live up to its principles, we should note that its application has had some successes. Some small projects did focus on agricultural sectors and often resulted in very successful endeavors. Apparently, due to stronger religious preferences in the rural settings [Kazarian 1993, 229], they drew in new savers – particularly women who turned to investing their dowries instead of holding jewelry – [Kazarian 1993, 139; Banking 1990, 1] – and had a default rate that was 75% lower than large urban investments [Kazarian 1993, 168]. It is possible that the current failure of the banks to achieve the supposed goals is a result of management by traditionally trained bankers and the imperfect contractual environment in which they operate, and not entirely the fault of an inherent contradiction of Mudaraba contracts. Aggarwal and Yousef’s critical review concludes that “equity financing (mudaraba) can be optimal and in certain circumstances, a ban on debt can be social welfare improving” [Aggarwal and Yousef 2000]. But despite these successes and the potential of the instruments, when compared with their stated goals we must agree with Ahmed al Naggar - - the founder of the first Islamic bank - that the existing Islamic banks are a “terrible failure” [as quoted in Kuran 1995, 162]. The banks do not significantly differ in the social value of their investments, they generally continue to receive high returns and often without taking risk, and all but in name do they charge interest. In general they have succeeded in little besides renaming their operations using Islamic terminologies.

“Islam is the Answer”: The Sociological Functions of Islamic Banking

To understand the failure of modern Islamic Economics, we must understand the context in which it was created and grew. The term was popularized by Sayyid Abul A’la Maududi who saw the need to reassert the authority of Islam as a defense against the cultural imperialism of the West [Kuran 1995, 156]. Generally, socially conservative, these early writers often wanted to preserve a traditional social order. On the theoretical side Islamic Economics maintained a strict adherence to the neo-classical orthodoxy of the West. Maududi’s goal “was not to galvanize a radical shift in economic thought or to unleash a revolution” [Kuran 1995, 169]. As Khaled Abu El Fadl (2002) has argued in regards to Islamic law, these ideologues often define themselves by the West-they-are-not; creating an unimaginative and reactionary definition of what Islam is. In economics this resulted in an ideology that created terminologies that gave claim to the moral legitimacy
and legacy of "Islam" and incorporated its symbolism without questioning the unequal distribution of wealth.

In sharp contrast to these ideologues were the popular Islamist movements of the 1960s that rose from radical universities and angry slums. The ideologues of these movements such as Ali Shari'ati, Ayatollah Taleqani, and Sayyed Qutb utilized developments of various schools of thought – including western ideas such as Marxism – to create a new understanding of Islamic injunctions. These thinkers saw the need not so much to protect the culture as to promote an Islamic praxis creating a new society based upon their understanding of Islamic social justice. Shari’ati (2003) argued that the main split was between the “Islam of the poor” and the “Islam of the state” tied to the upper classes, not between Islam and the West. Taleghani's (1992) saw as un-Islamic and exploitive any system that allowed profiteering from ownership of land or capital instead of work. Telghani wrote, “In the [hypothetical ideal] Muslim world, workers and wage earners […] are not kept under the thumb of the capitalist ruling class” [Telghani 1982, 44].

This radical vision that equated God's justice with ending the exploitive capitalist social organization created the movements from Iran to Egypt and made “Islam is the Answer” the radical chant of the streets. It was in this context that the elite classes turned to promoting “Islamic Economics” which did not threaten their control over incredible amounts of wealth. Masoud Kavoossi argued that “the ruling elites have resulted and will continue to resort to the symbolic or real measure such as the Islamization of the banking system… they are on the defensive and have to explain themselves in Islamic terms” [Kavoossi 2000, 1]. Hence, Islamic Banking provides cover for “the veil of piety” as Shari’ati (2003) called it, which creates the subjective conditions necessary for the perpetuation of the system of inequality – immense opulence amongst massive impoverishment. In return the economic relationship perpetuates the reactionary understanding of the religion: While a dismal 0.63 percent of loans are qard hassan (charitable grants so often bragged about in the Islamic banking literature), these loans overwhelmingly go to Islamic fundamentalist groups and politicians [Aggarwal and Yousef 2000, 1; and Kuran 1995, 169]. These groups strive to define Islam in terms of opposition to the West and cry for unity amongst the believers. This simultaneously undercuts anti-fundamentalist reformers and socially conscious Islamic activists [Kuran 1995, 169].

Thus, Islamic Economics provides a dual value to elites: one, it maintains the objective conditions of allowing rent seeking behavior that allows them to profit from mere ownership of wealth; and two, it provides the subjective justification and a “veil of piety” to this system of inequality in the context of Islam-inspired demands. Although there is a hypothetical potential for these measures to create socially meaningful advantages over traditional interest-based banking, this potential has yet to materialize. The cry of the poor can still be heard, and the need to find a means of utilizing the resources at hand to achieve the socioeconomic justice that they demand requires a more innovative project.
References


The Dominant Economic Discourse of Today’s Iran in Retrospect

By Mohammad Maljoo
University of Tehran

Introduction

For the last century, contemporary Iranian economists have considered western economic thought as an archive of systems of ideas. Different generations of Iranian scientific community have permanently used western economic thought all along to understand and explain Iranian economic life. The result of such cultivation was the formation of various economic discourses, the historically specific systems of meaning which form the identities of subjects and objects, determining the problems and subject-matters of which the scientific community speaks, paving the way to voice some statements, suffocating some other statements to be posed, thereby structuring the domain and form of the intellectual debate [Howarth 2000, 9; and Foucault 1972, 49].

Having been embryonically transmitted from the West since the early 1960s, the dominant economic discourse finally produced a doctrine about the health of economic research in the Iranian scientific community during 1990s. This doctrine defines the proper formulation of problems, the suitable method to inquire into economic life, the admissible language to articulate economic thinking, the effective interaction between economics and other sciences and, in short, the normal manners of economic researchers. All these canons – based on a very complex network of power diffusion – enforce themselves on the structure of the economic research and educational institutions, thereby prizing mainstream economics above heterodox economics and, perhaps even more, marginalizing the latter so strongly that there is little space left for formation, growth, and maturation of any kind of heterodox economics. The result is that a large part of the archive of economic thought is non-accessible to the scientific community in today’s Iran, a state that has led to a simplistic hegemony of orthodox economics, which is largely based on neoclassical microeconomics, mainstream macroeconomics, mathematical economics, and econometrics.

What has been said raises three strategic questions as the necessary elements of any counter-hegemonic project: firstly, how, under what conditions, and for what reasons, has the dominant economic discourse been introduced and established in the Iranian scientific community since the early 1960s? Secondly, on the basis of what mechanisms did the dominant economic discourse have achieved a hegemonic position in the Iranian scientific community since the early 1990s? Thirdly, how does the dominant economic discourse prevent the formation, growth, and maturation of alternative economic discourses? To set the stage for answering these questions, it is useful to appeal to a historical framework of development and expansion of economics in contemporary Iran. Such is the reason why we must return to more or less a century ago, even though the interest here is not so much a blind historiographical perspective as a problem-centered and present-oriented attitude.
The Embryo Stage of Economic Thought in Iran

As far as the Iranians’ vivid awareness of the western modern economic thought is concerned, the pre-late-Nasirean Age (1855-1895) can be recalled as the age of the silence. Iranians first acquainted themselves with modern economic thought just a few years before the Constitutional Movement (1906), which was accompanied by the first wave of the Iranian intellectuals being extremely influenced by the western world. Not surprisingly, at the time, some intellectuals and courtly elites were eyeing the modern science without noting its theoretical principles and methodological foundations. Throughout the first intellectual wave with such pioneers as Mirza Malkam Khan (1831-1908), Akhund Zadeh (1809-1887), and Talebof (1832-1910), the economic controversy was less loudly voiced than the social and political criticism. Apart from a few handwritten books which were based on the general economic wisdom, Sismonde de Sismondi’s *Nouveaux Principes d’ Economie Politique* (1819) was the first western economics book to be translated into Persian around 1882 by Jules Richard (1816-1891), in Iran known as Rishar Khan, a completely free translation in which the industrial and commercial society had been strongly criticized.

The second generation of Iranian intellectuals concerned themselves much more with economic thought. In 1899, they established the Political Sciences School (Madresey-e Uloum-e Siasi), a forerunner of today’s economics faculties in Iran. Mohammad Ali Foruqi (1878-1942), a well-known writer and the then Prime Minster, provided the first economic textbook in 1905, a Persian translation of a French textbook by the Parisian liberal economist Paul Beauregard (1853-1919) [Haney 1964, 848-9]. Generally speaking, although several written or translated books in handwritten or published form were available during the late Nasirean Age to the 1930s, the burden of economic debate was carried out by only few newspapers. Before the 1930s, economic writers and translators were indeed educated young men facing the general backwardness of the country after returning from the West to their homeland. They were working in various areas, from politics to literature, and the proportion of economic thought to them was not considerable. Generally speaking, this was the situation of economic thought when the University of Tehran, the first great university in contemporary Iran, was established in 1934: several economics books, either handwritten or published, either written or translated; some references to economic issues in non-economic literature; the occasional pieces in the papers about the day-to-day economic problems; the reliance on the economic common wisdom to face economic problems; the lack of opportunity and ability to adapt the contemporary economic lessons to the specific Iranian economic life; and, in short, the journalistic perception of economics.

The Childhood Stage of Economic Thought in Iran

Established in 1934, the University of Tehran’s Faculty of Law, Political and Economic Sciences – this inheritor of the Political Sciences School – gradually paved the way for the development of the teaching of economics in Iran. Apart from a few state institutions such as Iran’s National Bank (Bank Melli, established in 1927) and Plan Organization, the main role of economics was its educational functions and was limited to teaching in university before the 1960s. In this period, students could study economics at the faculty, “using a curriculum resembling that
of the French universities in the early decades of the twentieth century,” perhaps partly because “the first group of Iranian professors having studied in France in the 1930s and 1940s” [Behdad 1995, 195]. In the course of this period, the valuable but occasional efforts were made to transmit a diverse but limited spectrum of economic thought from the West to the country by a few numbers of educated Iranians, even though no dominant economic thought had began to form.

At the margin of this academic economic thought, the role of the Left as an underground political movement must be noted. The point of departure of the Iranian left groups was the introduction of social democratic ideas into the country in the course of the Constitutional Movement. The Iranian left was followed by the formation of Iran’s Communist Party in 1920 and later on by the so-called ‘Fifty-three’ Group (Gorouh-e Panjah-o Se Nafar) during the late First Pahlavi Reign (1937-1941). Upon the fall of Reza Shah’s dictatorship (1941), the Tudeh Party formed and gradually became an influential political party as well as an unfortunate mastermind of a Stalinist deviation. A few exceptions aside, both Tudeh Party and its separated groups were generally trying to promote the Marxist-Leninist approach, an approach which had a highly political attractiveness in Iran despite its pale economic thought.3 The significance of this political stream with all of its accessories arises from the fact that the intellectual leftist currents of the subsequent periods were somehow its scions despite their contrary behavior. Nevertheless, neither the academic economic thought nor this, sometimes underground and sometimes openly leftist, political stream was dominant in the intellectual scene before the early 1960s.

Enter the Dominant Economic Discourse into the Scene

The present position of economics in today’s Iran has its origin in the early 1960s and the succeeding decades. With the aim of an historical periodization, the 1960s and 1970s can be considered as a very different period from its preceding and succeeding periods. The two different intellectual spectrums were formed during this period: the radical approach and the conservative approach.4

The radical approach indeed encompassed a wide spectrum of leftist opinions which was tied to the armed struggle of the organizational leftists against the Pahlavi Regime as a symbol of capitalism on the one hand and with some repressed political economists in academia on the other hand. The various organizational leftists saw political economy as an instrument for armed struggle against both world capitalism as imperialism and the established regime as an incarnation of capitalism, and the umbilical cord of these leftists was connected with Russian Marxism, Chinese Marxism, and Latin American Marxism.5 At the same time, radical political economists in universities, in spite of vigorous political obstacles that faced them, relied on an anti-imperialistic and anti-capitalistic attitude, based on the dependency school as their key intellectual source. Among their main research subjects, one can mention explaining the long-term trajectories of capitalism, understanding the nature of capitalism, and discovering the contradictions of capitalism,6 in a similar way as their contemporary counterparts around the world. The radical political economist was constantly faced with the severe police state; for example, as once a writer put it, “they would also have to camouflage forbidden terminology. For example, ‘group’ (guruh) would be used for ‘class’ (tabaqeh), ‘market system’ (nezam-e bazaar) for ‘capitalism’ (kapitalizm), ‘planned economy’ (eqtesad barnameh) for ‘socialism’
Mohammad Maljoo

(susializm), ‘benefiting’ (bahregiri) for ‘exploitation’ (bahrekeshi or estesmar), ‘employees’ (karkunan or huquqbegiran) for ‘workers’ (kargaran), ‘manager’ (mudir) or ‘entrepreneur’ (karfarma) for ‘capitalist’ (kapitalist), and so on” [Behdad 1995, 197]. Among the leftist contributions to economic thought, a series of interdisciplinary studies held a unique position. These studies – which were common product of political economy, history, historical sociology, and economic history – started to form during the late 1960s, and were the best fruits of the left tradition; a series of Iranian studies which concentrated on such questions as: is modern Iran a developed form of capitalism? Or, on the contrary, is it a traditional system in the process of shedding its feudal remnants and moving towards the purer form of modern capitalism? What are historical obstacles to the development of a bourgeoisie in Iran? Although these various leftist currents, in the form of Marxist asphyxia, had encompassed the intellectual community in the 1960s and 1970s, they were faced with political repression and a lot of political obstacles both in society and in the academic communities. One might say that, contrary to the 1990s, the repression of these streams had its origin in the political scene rather than the scientific community itself. As it will be seen, it was their tragic destiny in the 1980s and 1990s to be more or less violently marginalized by the academic communities. The stream that developed and stayed during the next decades, however, was their counter-current: the conservative approach.

Throughout the 1960s and 1970s, the conservative stream developed the contemporary mainstream economics in the scientific community according to the western dominant economic thinking of the time, forming both a more or less new content of economics and a modern structure of economic research and educational institutions, initiating and amplifying the postgraduate courses in economics, increasing the number of economics departments and faculties, publishing the first scientific economic journal, setting up the first economic research institution, and, in short, starting to establish modern economics which is the embryo of the dominant economic discourse in today’s Iran.

The aim of the conservative current was to train specialists in order to do theoretical and applied research on world and Iranian economic issues. “The curriculum of the Faculty of Economics of the University of Tehran was devised in 1968 in consultation with John Hicks and Ursula Hicks, who visited Tehran for that purpose. The economics curriculum at the University of Tehran, like those at the National University and Pahlavi University, was based on the American model” [Behdad 1995, 195]. The economics of the time in Iran was gradually based on the four main pillars: neoclassical microeconomics of the time and its various related fields; Keynesian macroeconomics and its different connected fields; mathematical economics; and econometrics.

In this period, the curriculum chiefly encompassed the neoclassical-Keynesian approach. Nevertheless, the level of discussion among the conservative stream was not comparable to that of both its western counterpart and its subsequent generation. In the conservative research program, for example, although mathematical economics and econometrics were of great importance, none of those main pillars were taken seriously in both curriculum and research. Few courses in statistics, mathematical economics, and econometrics were offered in faculties. In a similar vein, throughout the 1960s, just three percent of the pages of the Quarterly Journal of Economic
Research (Tahqiqat-e Eqtesadi), the first and most important economic journal in Iran, were allocated for papers, which had used mathematical economics techniques. Interestingly enough, none of papers of the journal used econometrics techniques in that same time period. The conservative stream largely rested on literary economics rather than math-oriented economics, and was mainly fed by the facts of Iranian economic life rather than economic techniques. In other words, the conservative stream was an essentially qualitative approach rather than quantitative approach. Hence, it seems that this stream was methodologically more pluralistic than its subsequent but more advanced economic discourse counterpart that was formed during the 1990s.

The conservative stream was basically unable to handle a powerful critical thinking. On the one hand, it essentially conflicted with the critical, albeit superficial, approaches toward mainstream economics, and on the other hand, it argued in favor of the economic policies of the time despite its disagreement with some political orientations of the Pahlavi Regime.

In spite of what has been said here about the conservative stream, the fact is that it was by no means a homogenous whole, but a heterogeneous one which was made up of various economists embarking upon a program of expansion of economic thought in Iran under a wide variety of mainstream economics of the time, even though it was at an enormous distance, both in quantity and in quality, from the original western economics. For the later argument of the present paper it is of considerable interest that although the conservative stream had a firm foothold in the formal body of universities throughout the 1960s and 1970s, it neither achieved a hegemonic position nor changed to a power relationship in the scientific community; therefore it did not suffocate and marginalize the alternative stream at all. Of course, as noted above, the repression of the radical stream continuously continued all the time, but the point here is that such a repression originated from the political scene of the country rather than the scientific community itself. There were still no monopolistic canons for the proper formulation of economic problems, suitable research method, admissible language articulating economic issues, effective interaction between economics and other sciences, and, in sum, ‘normal’ and ‘abnormal’ manners of researchers. In other words, there was still no monopolistic power network to shape norms of educational and research conducted in the scientific community. Once the 1979 Revolution occurred, the scene was gradually shifted in favor of a completely new conservative generation. But the real story of this enormous change is more roundabout than has usually been thought. As a matter of fact, the political events that took place after the revolution had a decisive impact on the domain and form of economic discourse during the 1980s and 1990s.

The 1979 Revolution and its Impact on the Rise of New Conservative Discourse

The 1979 Revolution led to deep and immediate shifts in the social and political life of Iranian society. The unplanned and chaotic atmosphere of society had imposed itself on the universities during the late 1970s. The campuses had been converted into the hub of political activities in the wake of the revolution, full of all kinds of political groups. In such a disorder, all universities were closed on June 5, 1980 by an order from the Revolutionary Council. Considering a lot of revolutionaries as new authorities who had the desire for islamizing society as a whole, disguised as
an Islamization of the academic system, the exclusion of intellectuals and opposition
groups from campuses was the key justification for what the Council did. Such was
the onset of the so-called Cultural Revolution. This was just the beginning.

Although the 1979 Revolution was a child of the alliance of various political
currents against the Pahlavi Regime, it led to a political and ideological struggle in the
wake of the victory, with both the political scene and academic arena as
battlegrounds. Therefore, the complex political systems of exclusion and inclusion
began to take form in both the arenas of politics and academia. The universities were
finally reopened in 1983, even though there were really no universities as such in
those three years. In the meanwhile, the various Marxist groups were gradually
excluded from the political scene by a series of terrible struggles. In a similar way, the
leftist economists also underwent an ideological cleansing. These events continuing
for year after year gave the radical approach in academia the coup de grace once and
for all, so that no manner of the radical approaches found a place in faculties of
economics any longer. Some underground radical economists, who had escaped the
vicious years, gradually moved into the intellectual community. A few years later, the
disintegration of the Eastern Bloc in the world scene led many radical economists in
the intellectual community to recede from Orthodox Marxism and turn their thoughts
to social democratic ideas. The faculties of economics, of course, had no role in these
changes perhaps because of the lack of radical economists in universities. But the
story did not end there.

In a series of events called the Cultural Revolution, the radical economists
were not the only current undergoing a cleansing campaign in universities. From then
on, the universities were purged in someway or another so that only the ideologically
tested and trusted Muslim group was allowed to attend academia, in a very similar
way to the political scene of the time. The result of such policy was a deficiency of
members of economics faculties though. There were few academicians in faculties
immediately after the Cultural Revolution, either because of the Islamic cleansing and
its subsequent dismissal of previous members, or because of the unfriendly milieu that
resulted in intellectual migration. The shortage of academicians was a serious
predicament solving outwardly through a rigorous recruitment of young educated
Muslims from American universities. Thus the academic community underwent a
premature generational change during a short stretch of time, a generational change
that suddenly restructured economic thought in the Iranian scientific community. In
other words, the new generation of young economists who should have gradually
entered into the conservative stream suddenly became the most important spokesmen
for the new conservative stream in academia. Furthermore, the selection of these
newcomers was based on such criteria as fidelity to the revolutionary ideology,
constructive activities for the revolution, friendly relations with the Islamic network
of the country, good collaboration with the inchoate revolutionary organizations, and
the like. Due to these criteria, the new economists in fact arose right in the center of
the power structure and the establishment of the time. Hence, they could rapidly
become such reliable persons for the Islamic Republic that they easily entered into the
key centers of policy-making sooner or later. Such was the process through which a
new conservative generation arrived on the scene. In fact, the shift in economic
discourse in Iran from the 1960s and 1970s to the 1980s occurred rapidly over a few
years as the leftist economists were purged by the new regime and the old
conservative economists were discarded by the new unfriendly milieu on the one
hand, and the entrance of the young ideologically tested economists – the then new conservative stream – on the other hand.

The Newcomers’ Steps toward the Dominant Position

Slowly during the 1980s and rapidly during the 1990s, not only did the new academic economists wholly subjugate the educational and research centers in universities, but they also took the helm of all of the state research centers, having a key role in expanding the fourfold pillar of the mainstream economics, so that a dominant economic discourse was shaped among the scientific community in accordance with the conventional economics of the 1960s to the 1980s. In comparison with the old pre-revolution conservative stream, the academic newcomers rapidly developed the disciplines of microeconomics and macroeconomics as well as such courses as public economics, international economics, labor economics, managerial economics, resource economics, agricultural economics, and the like under conventional economics during the 1980s and 1990s, even though these courses were different in quantity and quality from the same courses in the first-rate American and European departments. They did their best to expand of mathematical economics and econometrics, so that such courses seemed the major ones in economics faculties in a short period. At the same time, some courses such as economic history, economic history of Iran, economic sociology, and economic anthropology were completely eliminated from the curriculum, and some courses such as history of economic thought, economic systems, and methodology of economics were regarded as less important and less relevant. Needless to say that the same was true for courses like sociology, anthropology, political science, history, philosophy and the like in undergraduate curriculum.

In graduate education, since then all the attention has been focused on technical skills that have completely overshadowed all other skills, so that a heavily quantitative approach has predominated within economics faculties. The evidence is, for example, the rise in the proportion of articles in the journal of *Tahqiqat-e Eqtesadi*, one of the most important economic journals in Iranian universities that used no more than 4% of algebra and geometry in the 1960s and 26% in the 1970s to around 55% in the 1980s and 71% in 1990s. In the same manner, the proportion of articles in the journal that used econometrics models rose from no more than 7% in the 1970s to around 58% in the 1990s. This change signals a very quantitatively oriented approach as well as “a different mode of arguing or a different rhetoric” in the 1990s [Backhouse 1998, 1848]. The same changes occurred in other academic journals, the content of doctorate dissertations, and economic research of academic centers in less than two decades. In any case, although the new conservative economists changed the content of economics in universities, they did not launch a change in the structure of the university itself except a strategic variation in the relation of the university to both state research centers and policy-making centers.

Since the new conservative economists had wholly settled in the policy-making hubs, the demand of policymakers for quantitative answers led them, on the one hand, to gravitate toward a heavily quantitative economics and, on the other hand, to manage the research activities in universities in such a way that only such an economics was allowed to grow. The policy-making demands, thus, gradually made a reward and punishment macrosystem and many reward and punishment microsystems.
in favor of conventional economics that were supported by the new conservative economists. Such a system of systems has also defined a doctrine about the health of economic research since the 1990s, a series of canons for determining the ‘normal’ manners of economic researcher. In fact, based on its control of the reward and punishment system, the new conservative stream inheriting the American conventional economics has been able to exercise its mental and intellectual leadership among the scientific community since the early 1990s.

**The Dominant Economic Discourse as a Monopolistic Identity**

As a matter of fact, the point here is not the scientific canons being imposed by the new conservative stream, but their monopolistic character. The new conservative stream holds that the language of scientific discourse is the only admissible language of economic science. Indeed, “each symbolic language has its own codes and conventions in communication,” and “in scientific literature as in all other forms of symbolic language, there are stylistic codes, rules of expression and codes of truth” [Ingrao 2001, 7]. But, this stream does not acknowledge the “radical diversity in codes and purposes of expression, in values and criteria of truth” [Ingrao 2001, 8], and hence it believes in mathematical modeling as the language of scientific discourse par excellence. For this reason, the use of such mathematical techniques as geometry, algebra, set theory, and topology is assumed as the top priority of the discipline. Due to this monopolistic belief, many economic questions in the Iranian economy have really disappeared into thin air. If what is today literally called economics has a derogatory meaning, it is indeed due to this belief. That is its firm belief in mathematical modeling as a language. The new conservative stream believes, however, in model-building methodology as a method. It holds that “the use of an agreed set of methods for the solution of certain types of problem” is the only suitable method to inquire into economic life [Backhouse 1998, 1848]. Based upon this belief, “the use of optimizing models of behaviour – whether the optimization is of utility or profit, or take account of phenomena such as transaction costs or imperfect information – and use of probabilistic models and Neymann-Pearson hypothesis testing” are prized above other method such as case studies, participant observation, discourse analysis and the like [Backhouse 1998, 1849]. “Observation of phenomena from different vantage points using data-gathering techniques may offer new insights into phenomena and enhance our understanding of them” [PAE 2001]. But, it seems that the scientific community in Iran has completely closed its members’ minds to the other methods. Interestingly enough, just due to this chronic closeness, the empirical sides such as the functioning of institutions, historical facts, survey of agents’ opinions, study of their strategies, and such like have all been neglected on the whole. Furthermore, the new conservative stream maintains that the mainstream theoretical framework to formulate economic problems is the only body of theory that is worthy of attention. Hence, some schools of thought such as Marxism, Institutionalism, Social Economics, and even the Austrian school, which are most alive among heterodox economists in Iran, are usually disregarded, with the result that we see, on the one hand, the increasing frequency of standard research and, on the other hand, the increasing paucity of heterodox research in the scientific community. Last but not least, the new conservative stream chose to stress the relationship between economics and mathematics rather than the relationship between economics and other social sciences. Therefore, the standard economists have all but no interdisciplinary dialogue with other social scientists, a key component of the dominant discourse in Iran that
has so strongly overshadowed economic research and education that orthodox scholars usually close their minds to other social sciences and do not recognize insights from sociology, politics, history, psychology, law, and philosophy.

The new conservative stream leaning upon its reward and punishment system defines the above-mentioned canons (i.e. mathematical modeling as a only admissible language to articulate economic thinking, model-building as a sole suitable method to inquire into economic life, mainstream theoretical framework as a unique viewpoint to formulate economic problems, and a math-oriented approach as the most effective interdisciplinary dialogue between economics and other sciences), enforcing them on the economic research and educational manners of researchers in such a way that if scholars want to resort to alternative canons, they have to bear some social or economic costs. The reward and punishment system ceaselessly signals practitioners to orient their research and educational manners toward those monopolistic canons. The reward and punishment system is strongly activated in such stages as evaluation of economics student, to allow student to enter graduate education, to pass proposal for doctorate dissertation, to hire new members at economics departments and research centers, to publish in academic journals, to pass research projects in the state research centers, and so on. All these stages as the powerful mediums of orthodoxy propagation have a decisive role in the academic and social position of scholars in the scientific community, and make a structured social force in favor of the mainstream economics’ durability. Therefore, one can see a complicated network of social power today originating from the scientific community itself, a network of social power that did not exist at all in the 1960s and 1970s. Fed by the dominant orthodox economics in the West as well as some complicated and decisive events in Iran herself, such power relations favoring orthodox economics in the Iranian scientific community have their origins in the 1980s and fully developed in the 1990s.

The Current Scene at a Glance

Therefore, the dominant economic discourse in Iran is, on the one hand, a heterogeneous system of meanings, concepts, and methods and, on the other hand, the economic research and educational structures that consists of not only a set of linguistic forms but also a system of power relations in the Iranian scientific community. It seems that these power relations are central to any analysis of the present position and prospects of economics in Iran. It is of considerable importance to understand how power operates and defines the rhetoric of exclusion. Of course, power is a ubiquitous relation and cannot be thought of as a dual division between the dominating and the dominated. But at the same time, these power relations have devised a system of exclusions involving alternative schools of thought, dissident scholars, avant-garde books, and progressive non-academic journals, which serve as focal points for heterodox thought. For example, dissident scholars are usually attacked by such ways as withdrawal of research grants, denial of tenure, ostracism by colleagues, transfer to different jobs, and other forms of suppression. The other side of the coin is a system of inclusions involving mainstream economic thought, conservative practitioners, standard books, and academic journals, which serve as pillars of orthodox economics. Such a system of exclusions and inclusions originating from reward and punishment system as a medium of power relations prizes orthodox economics above all kind of heterodox economics in such a way that there is less chance for marginalized heterodox economics to rise, grow, and mature in the
scientific community. The result is nothing but the non-accessibility of very much of the archive of economic thought in today’s Iran, a component of the present position of economics that gives rise to a simplistic hegemony of orthodox economics in the country. It seems that this monopoly in Iran’s marketplace of ideas has its origin in the dominance of orthodox economics in the West as well as in the social structures of the Iranian scientific community itself.

Notes

1. Of course, Hosseini criticizes the Schumpeterian ‘Great Gap’ thesis because “this ‘Great Gap’ in economic thought … coincides with the Islamic golden age, when various Muslims writers made substantial contributions in various fields of enquiry, including economic matters…. The contributions of medieval Muslim writers and this [their] impact on Christian scholasticism should be regarded as a refutation of the Schumpeterian Great Gap thesis…. A great many medieval Islamic contributions to economic analysis… were made by Persian-speaking Iranian writers……” And later he demonstrates that “these Persian writers… were able to understand and to a remarkable degree analyze the economic realities of their age.” See Hamid Hosseini (1996, pp. 63-82). It is obvious that what Hosseini says is one thing and what is claimed in this paper is wholly another. The interest here is not the ‘Persian’ economic tradition, but just the ‘western’ economic thought. It seems that there is a difference between the old ‘Persian’ tradition and the western economics, and the latter has been developed in the contemporary Iran irrespective of the former.

2. The most important among these are: Seyed Jamalo’din Vaez Esfehani (1900); Mohammad Ali Jamalzadeh (1917). As Bozorg Alavi says, the latter was a series of articles that was published in a Persian journal, *Kaveh*, in Berlin and then published in the form of a book in the same city in 1917. See also Alavi (1998, p. 96).

3. As Abrahamian writes, some examples of such writings are: E. Eshaq (1946), A. Ansari (1949), D. Nava’in (1948), M. Farnai, (1946), M. Kaveh (1948), and M. Babak (1948). See also Abrahamian (1982).

4. Such a nomenclature is depends on how each current took a position toward capitalism system.

5. Maziar Behrooz Writes: “Based on research done in the 1960s, the Fadaian [one of these political groups] also produced a number of studies on the land and reform in Iran which were the only in-depth works of their kind by Iranian Marxists.” See for example, the Rural Studies Series (1973a, 1973b, 1978a, and 1978b). See also Behrooz (1999). It seems that Behrooz completely neglects the academic Marxist studies when he speaks to “works of… Iranian Marxists.”

6. See, for example, Farhad Nomani (1973, and 1975). The former was an edited volume that included some articles by E. K. Hunt, Maurice Dobb, and Oskar Lange, and the latter consisted of some articles by Paul Baran, Maurice Dobb, Oskar Lange, and Farhad Nomani himself.

7. Among these were Ahmad Ashraf (1975), Farhad Nomani (1972), Farhad Nomani (1979), and Homa Katouzian (1981). Interestingly enough, nowadays the scientific community does not regard this kind of studies as
economic work. Among such new works are Abbas Vali (1993) and John Foran (1993).

References


Mohammad Maljoo


The Influence of Firm Strategy on Business Cycles in Veblen’s Economic Theory

By Maximilien Nayaradou

Université Paris IX, Dauphine

Throughout the history of economic thought, numerous attempts have been developed to explain the causes of business cycles. Hayeck (following Wicksell) highlighted the importance of bank credit, and Schumpeter focused on the leading role of clusters of innovation. In this article, we will study the economic interpretation of the cycles given by the American Institutionalist Thorstein Veblen. In this work, we will examine the texts dealing with the business cycles theory that can be found in two of Veblen’s books: Theory of Business Enterprise and Absentee Ownership.

The purpose of this paper is to study the Veblenian theory of cycles, a theory that, as we will see, considers a firm’s strategies as a central issue in the economic dynamic. Veblen’s thesis is that the strategic use of bank credit in a long-term contract creates business cycles. Indeed, Veblen shows how the competitiveness of a firm’s strategy is linked to business cycles. How does a strategy help determine the business cycles? Why do business cycles favor the dominant firm’s strategy during economic growth and favor the strategy of the challengers during times of recession? These are precisely the questions Veblen offers to answer. As we will see, Veblen points out to the fundamental role of new technologies and the hysteresis effects in his explanation about business cycles. Veblen is suggesting a theory on business cycles, which takes into account the role of money, contractual hysteresis effects, new technologies, expectations, and above all, how firms use all the available means to implement their strategies. For Veblen, macroeconomic theory cannot be considered without including the microeconomic attitude of economic agents.

First, we will study the changes the economy went through during Veblen’s time. Next, we will try to examine what makes the upturn of the cycle. This will allow us to consider the downturn phase of the cycle. The second section will begin by analyzing the burdens weighing on leading firms in periods of crisis. We will examine a firm’s strategies during the cycle and the effect they have on the business cycle. It will be indicated that, strategically, crisis gives an unequivocal advance to the challenger.

After showing that business cycles are due to competition among firms, and to the differential use that firms make with regard to the modes of bank financing in a capitalist economy; it will be explained that, according to Veblen, competition is allowed between firms, mainly in the interest of their most important owners, namely bankers and financiers. This competition is authorized in the prospect of replacing the no longer profitable firms with more lucrative new firms. According to Veblen, the pattern consists, therefore, in financing the challengers and letting the “manufacturing corporations compete among themselves, to the greater gain of the investment bankers and to the cost
of the underlying community,” [Dorfman 1934 (1972), 476]. This paves the way for a phase of growth during the business cycle that will end with an economic crisis similar to the previous one. However, this incentive for competition is made to a certain extent. Keen competition is necessary during the crisis when the size of the market decreases. Yet, it becomes pointless to have too much competition in a period of growth, for it would mean a significant loss of profit for firms.

In this article, we take an interest only in one facet of Veblen’s theory of business cycles and the influence of firm strategies on business cycles. This theory is too huge, so we examine this theory only from the angle of the strategic decisions of firms. Of course, there are different interpretations of Veblen’s theory of business cycles. Our original interpretation of Veblen’s theory of business cycles will bring closer Veblen to the mainstream theory of industrial organization (e.g. game theory). In fact, we think that institutional economics inspired a lot the mainstream theory of industrial organization. In conclusion, we will briefly present another explanation of Veblen’s theory of business cycles. So, we present here an original interpretation of Veblen’s theory of business cycles and the influence of firm strategy on business cycles, but of course, according to Veblen the firm strategy is not the only cause of business cycle.

I. Why the Crisis?

A) Business Cycles as the Direct Consequence of the Firm’ Pecuniary Management

1) The Development of the Bank Controlled Economy

By the end of the 19th century and the beginning of the 20th century: there is a noticeable increasing dissipation of capital among a small group of shareholders as firms grow and firm owners behave more like creditors. The capital being invested is only to generate an inflow of dividends. Bankers get more involved in the internal management and in the firm’s strategy in order to grant loans; and shareholders are more scattered. Banks buy the minimal part of capital that allows them to take over the strategic control of the firm while awaiting repayment through stock dividends and interest payments on loans. Hence, the fine line between credit and capital, or between debt and ownership is blurred. For Veblen, this is a credit economy rather than an industrial economy. Capital being constituted by “shareholders’ credit” and bank credit; both of whom expecting important gains. Thus, in Absentee ownership the bank’s managerial role is increased. Banks became the actual engine through which the strategic regulation of the industry is developed. “When the Captain of Industry then made the passage from industrial adventurer to corporation financier it became the ordinary care of his office as Captain to keep a restraining hand on employment and output, and to administer a salutary running margin of sabotage on production, at the cost of the underlying population” [Veblen 1923 (1969), 338].

Bankers became the guardians of the absentee ownership in charge of the planning of what Veblen calls “the paying waste.” The absentee ownership is first of all, to Veblen, the total disconnection of the ownership from the production when it switches
from the hands of a captain of industry, who of course knew his firm, to the hands of investment bankers. We now reach another level of abstraction, ownership concerns to two types of agents; thousands of small shareholders and a few great financial institutions (which are for Veblen mainly trading banks) have the decision-making power. Veblen sees the origin of the economic crises of his time in this shift of the firm’s control by the captains of industry to a control of firms transformed into trusts by the captains of finance, namely bankers. To be more precise we could say that, to Veblen, it is when the financing of the economy by banks, via the *ex nihilo* credit, gets more important that the first cyclical crises emerges, replacing the crisis due to climatic factors in the economy of the old regime. According to Veblen, as the crises becomes more acute, in tune with the increasing power of banks, the relative importance of bank financing by the *ex nihilo* credit becomes increasingly important. The trading bank’s management of the firm favors the *ex nihilo* credit financial tool rather than anything else.

Investment bankers are responsible for the depression with their creation of a stable make-belief structure of credit and finance in the free pursuit of profit and capital. Credit, which is now merely an accounting and a make-belief concept, “is also one of the time-worn institutions that are to suffer obsolescence by improvement” [Veblen 1921 (1963), 70].

The process of pooling and syndication has been greatly helped by the establishment of Federal Reserve System and other similar devices, which provide unified control to the large financial interest of the country’s credit system. The ideal of a definitive stabilisation of business is now closely reached, since this maturing of corporation finance reduces financial traffic to a reckless routine [Dorfman 1934 (1972), 440-441].

Later, we will explain the economic mechanisms that make credit the main factor for crisis according to Veblen. Let us point out that the creation of the Federal Reserve System (Fed) – i.e., a lender of last resort in case of bankruptcy, guarantees to refund the customer’s deposits, whether from firms or private individuals – allows the banking system to develop in a relatively secure way. The Fed also regulates through its economic policy the possible excesses of banks in the distribution of credit. To Veblen, placing economic policy under direct state control is the obvious evidence of the collusion of interest between the State and those with vested interests. Especially, as the Fed guarantees loans, which are granted, in order to fructify the private interests and which harm general interest. However, we shall now see that the control of the Fed will not be efficient enough to avoid the economic crisis. The very causes of the crisis are also responsible for growth: i.e., the financial and banking management of the firm (pecuniary according to Veblen) which far from slowing down, rises as banks take over the firm’s strategy its financing plan.

We will now link up the theory of the firm’s bank financing to the theory of business cycles while analyzing the consequences onto the management of the firm and onto the firm’s strategy in the case of dominant firms and competitors. We will notice that the cyclical conjuncture determined by the financing of the economy, essentially
through credit and financial markets, will shape the different financing strategies to favor either the currently dominant firms or the competitors.

2) Origins of the Firm Growth during the Expansion

We will start this analysis from a period of prosperity onwards. To Veblen, such a period takes its origins from the rise in prices: “An era of prosperity is an era of rising prices” [Veblen 1904 (1932), 97]. “Prices rise first in some one industry or line of industries” [Veblen 1904 (1932), 95]. “As, e.g., the era of prosperity 1897-1902 took its start from the demand for supplies caused by the Spanish-American War” [Veblen 1904 (1932), 95; note 7, 207]. First, a rise in prices influences a particular industry, then extends to other sectors. Businessmen try to take advantage of this rise by making new investment in the industrial sectors that are favored by the rise, while controlling to their advantage the expansion of the market. This implies, as a consequence, a spreading of this effect of expansion to the rest of the economy. Businessmen then take, not only the improved demand in present time into account, but also the expectation of future demand. Long-term contracts are concluded, based on these anticipations. Thus, the expansionary movement extends and becomes even stronger beyond the primary causes, through a multiplier effect from the rising of prices. This movement extends because of a feverish urge to speculate that characterizes prosperity, and of the more or less long period needed to honor the required long-term contracts. Concerning a firm’s financial earnings during a period of prosperity, industries with rising prices rise relatively to other industries will make a differential profit, this profit is all the more important because the cost of production (e.g., wages) do not rise or at least not as fast as prices.

Concerning financial markets, the capitalization of this profitability goes up at the same time: share prices go up, more shares are issued at higher and higher prices, given the profit growth and the even more important expectations of profit growth. During a period of prosperity the firm share prices become inflated, which is a benefit from growth. This will entice the cash rich firms to implement strategies of merger and acquisition as described above. Thanks to market capitalization and the increase of bank credit, the big firms can proceed to massive mergers and acquisitions. During economic growth, dominant firms are the ones that have the upper hand and benefit from a growth of their financial means and, therefore, of their possibilities of market concentration (like during the 1990s when dominant firms massively buyout the dot.com companies). However, this growth of profitability of the firm actually intensifies much more rapidly than the firm’s real means of production. Indeed the firm’s profitability is based on the improvement of its financial capacities, in particular through its bank credit.

Indeed the amount of bank credit is determined by the firm’s social asset, which depends on its profitability. In a period when the prevailing trend is an increase in prices, the profitability of firms goes up and therefore the opening of granted credits follows the same trend. For Veblen, credit finances mainly financial capital (goodwill), that is to say rights to sabotage production (patents, advertising, etc…). Production inevitably goes up slower than the quantity of money in circulation. This generates a rising of prices that is again more important in the expanding sectors than in others. Yet they spread more
quickly in the economy, as banks do not stop lending as long as it is remunerative. This rise in prices becomes widespread and leads to steady inflation. Veblen puts forward the fact that it is only when the rising of prices stimulates the production of goods that credit directly influences the industrial production, but this increase in production is always slower than the rise in prices. According to Veblen, growth is more of a value (fiduciary) growth than a volume growth of real goods produced.

We will see that this is different in a time of depression. Indeed, the initial differential advantages wane afterwards as the movement of rising prices extends from the selling price to the cost price. The expected earnings are not acquired in fact and there occurs a divorce between expectations and reality, which heralds the crisis.

B) The Crisis Hits Mainly the Capital’s Immaterial Factors

1) The Crisis Process

To Veblen, the economy is inherently unstable, because the price system is not able to regulate the capital market or the currency market. As prices rise, credit supply should slow down as the real interest rate falls, but none of this happens. On the contrary, credit supply increases to meet the ever-growing demand for credit. It becomes more interesting for firms as prices rise, since the cost of borrowing becomes relatively lower than any other form of capital financing. Banks keep lending as long as the inflation rate is not too high and they can continue to make profits out of these credits that become more and more bulky to counter the “falling price” effect (of the real interest). In addition, banks continue to lend as long as the Fed acts as a lender of last resort. The Fed is responsible for allowing the period of growth to endure artificially. It allows banks to increase their credit by refinancing them while the price increase worsens. At this point the only way to stabilize the system is to somehow validate the rising prices. Apparently, the task of the Fed never seems to end, since it only creates, through its expansionary policy, means to increasingly worsen the inflation and the gap between the real and the financial value.

Obviously, all this cannot last forever, according to Veblen, in spite of the Fed’s support. Before the generalization of the bank controlled firms, the forming of trusts and the creation of the Fed, this type of expansion of the pecuniary values could not last for long. Competition between firms allowed them to fully utilize technical progress and increase their supply; this increase contributed to counter the rise in prices and was so strong that it lowered them down (deflation). Such a decrease in prices was a disaster for the business world and firms relying on credit, which have opted for credits in anticipation of rising prices. Yet, Veblen only partially accepts this hypothesis to account for the crisis during his time, which also had other causes.

Indeed, according to him firms agree on certain terms, in a more implicit rather than explicit way, not to add too much to the supply. The constant reduction in the cost of production resulting from increased efficiency means ever-decreasing prices and chronic depression. The remedy is business coalition to neutralize the cheapening of goods
resulting from industrial progress. Such a coalition would fix prices at the level that would bring in the largest aggregate net earnings with due regard to demand elasticity and economies of scale. But how will the crisis take place?

First of all, the inflating of financial values (which according to Veblen are equivalent to the Malthusian right to slow down production) created rights not to produce while fictitiously causing the profitability of the firms to increase: prices can only increase massively; this corresponds to the Malthusian strategy of the trusts.

The aggregate of values employed in a given undertaking increases, with or without a physical increase of the industrial material engaged; but since an advance of credit rests and the collateral as expressed in terms of value, an enhanced value of the property affords a basis for further extension of credit, and so on [Veblen 1904 (1932), 55].

Commonly beginning at some point where the extension of credit is exceptionally large in proportion to the material substratum of productive goods, or where the discrepancy between nominal capital and earning-capacity is exceptionally wide, the overrating is presently recognized by the creditor and a settlement ensues [Veblen 1904 (1932), 58].

Apart from secondary effects, such as heightened efficiency of industry due to inflated values, changes of the rate of interest, insolvency, etc., the main final outcome is a redistribution of the ownership of property whereby the creditor class, including holders and claimants of funds, is benefited [Veblen 1904 (1932), 58].

In the long run, this definitely provokes a crisis, generally because agents will understand that the price inflation was, if anything, fictitious (the monetary illusion does not last as a monetarist would say). The purchasing power that had been given to firms was fictitious: only based on a pure belief and not at all on a real value. Actually, it is the price increase of production factors (wages, intermediate goods, credits) that will make the investment plans less and less profitable and this will provoke the gap between real profitability and expected profitability. Thus, the market shrinks as the price increase extends primarily due to the supply (which had become more massive during the growth period) becoming too high (because of the declining demand). Firms with sharply declining profitability now want to curb their losses. The implicit or explicit agreements between firms no longer hold because each firm wants to take advantage of what is left in the market. The price wars begin at this stage, thus only worsening the depression. As profit margins decrease, the inflated capitalization of the preceding era seems excessive, not only in current terms, but in view of further expected declines in profits. Correspondingly, the loan collateral of this firm made away to the point were confidence turns to nervousness, and the action of some important creditor to liquidate part of his outstanding contract and loans will tend to trigger a wild spread liquidation in all major sectors of the economy. As the liquidation of claims, ensues, forced sales, bankruptcies, and subsequent reorganisation become the normal course of affairs.
Thus, the depression comes from the fact that the businessmen no longer find the means to make substantial gains. The imbalance is not material, but financial (pecuniary as Veblen says). There is an excess of consumer goods and of means of production compared to the insufficient demand to absorb the products at a profitable price for the business man (i.e. a price that covers the costs and leaves sufficient profit). Indeed to Veblen, the crisis mostly hits the immaterial elements of capital, which constitute the financial capital. They are at the core of the speculative bubble, market capitalisation and the pyramid of credits, and it is precisely this fictitious belief that collapses during the crisis: “the nominal accepted valuation of the capital, on which its return are computed, exceed its actual value as indicated by its present earning capacity. The property, perhaps the general aggregate property of the community, has come to be rated at a capitalized value above the cost at which it, or its equivalent for purposes of production could now be replaced” [Veblen 1892, 490-491].

The value of the firm was assessed with the expectation of the earnings that it could yield while keeping pace with prices. In the depression, the probability to earn is decreased; profitability no longer corresponds to the borrowed and capitalized values. The purely material and technical elements are not amply hit. In the aftermath of the crisis, according to Veblen, these elements become the way they were before. Thus, the quantities that are produced are not much different during a period of depression, than one of prosperity. The major difference is only the one reflected through differences between the values.

It must be understood that what used to sell at a high price in a period of prosperity is sold at a derisory price during depressed periods. Major transfers of ownership are carried out between the solvent debtors and the creditors. “It is largely a matter of the shifting of ownership rather than a destruction of wealth or a serious reduction of the aggregate productiveness of industry as measured in goods” [Veblen 1892, 491]. The unhappy debtors are dispossessed of their firm, some non preferential creditors are ruined after the bankruptcy of their debtors, since the State, banks, debenture holders, preferred-stock holders are the first to be served in the refunding of debts. As the financial capital has vanished, there is nothing left for them.

2) Overproduction and Underconsumption from the Pecuniary Interests angle

The fact that businessmen do not manage to sell their goods at a price that will cover their cost and yield a minimum profit according to economists (Malthus and Keynes) is due to either under-consumption or overproduction. To Veblen, these expressions are accurate only from the point of view of financial (pecuniary) interest. Indeed it is only the businessman, according to his constraints, who considers that there is overproduction and more often an overproduction compared with the solvent demand (a demand that would cover costs while securing sufficient profit). Veblen points out that it stems from the collective will angle (as the neoclassical economists have it) and at an industrial capital level including that of the work force. It would be an underproduction crisis, rather than an overproduction crisis since a certain number of plants are stopped and an important number of workers are out of work. “Overproduction or
underconsumption is a business, not an industrial fact; that is, the fluctuation and cessation of industrial activity are due not to the material needs of industry but to the fact that waits on business capital” [Veblen 1904 (1932), 104]. “Overproduction means production in excess of what the market will carry off at a sufficient profitable price. So it appears that the continued prosperity of the country from day to day on ‘a conscientious withdrawal of efficiency’ by the business men who control the country’s industrial output. They control it all for their own use, of course, and their own use means always a profitable price” [Veblen 1919, 8].

This point is not far from Veblen’s criticism of the Malthusianism of the firm: the will to increase its profit even though illusory financing means causing a crisis. This worsens the Malthusianism of the firm, which becomes vital to its survival during the crisis (to cut costs) whereas during the boom it was only a means of control in view of earning a maximum profit.

Veblen wants to show in his theory of crises, their necessity in the capitalist system where the strategy of the firm mainly targets profit maximization and where firms possess market power. He foretells brisker and more lasting crises, in which periods of growth are longer. It is interesting that Veblen, like Keynes, discusses the economic waste that is implied in crises (i.e., unemployment, abandoned plants, etc…). However, the two opinions differ in so much that Veblen states the causes of these crises lie precisely in the Keynesian solution to get out of it, that is to say: the expansionary economic policy.

It is important to stress that for Veblen the nature of the economic cycle is viewed in relation to beliefs. These beliefs incite agents to anticipate high future earnings or incite banks to lend more. These beliefs are completely disconnected from the reality of production; they incite to always give more rights to slow down production which in the meantime encourages the distribution of purchasing power. Veblen takes for instance the classes that live on fixed income (workers). In a period of recession, the wage-earners are overcome by the prevailing anxiety, whereas, in reality, on the material level, they are wealthier than in a period of growth since they benefit from the fall in prices as consumers, given that their fixed income is not reduced. Their concern, when they are not unemployed, is therefore more psychological than material. It comes from the psychological context which makes them fear unemployment, whereas they are not hit yet, and in complete objectivity, they do not have any reason to think that they could be affected. Of course unemployment is in practice for people that suffer from a real impoverishment, but Veblen wants to show the way in which those affected who live on fixed income (wage workers) can be worried but cannot really say that life is too expensive. Businessmen on the contrary, are the ones to be really hit (along with the unemployed, of course) in so much that even if they lose only fictitious capital from a social point of view according to Veblen, they individually win considerably less money than in a period of growth. And as they handle the spiritual life of all the community, there is therefore not only an emulation effect in consumption but also in the general psychological health of the society.\(^8\)
II. The Consequence of the Crisis on the Firm’s Attitude

A) Strategic Impediments for the Dominant Firms: The Hysteresis Effects

1) The Lack of Flexibility in Contracts

We have now arrived to the dynamic section of Veblen’s system. Since vested interests control markets to their own profit, then how can the mortality of very large firms be explained from a Veblenian perspective? Taking a contemporary example, many leading firms on the American market did not exist 20 years ago and their unexpected appearance is not only due to the creation of new markets that lead to growth. In fact, the main factor for this relative dynamics (we shall see that it remains basically an asset for the established interests) will be the economic crisis. The crisis will pave the way for a relative competition to take place; a competition that is there again made acceptable by vested interests represented by trading banks. The economic crisis weakens the dominant firms and makes them more vulnerable when faced with a storm of challengers, which favors a more efficient competition.

We will start with the study of one of the first handicaps of the dominant firms: the lack of flexibility in the contract that compels firms to honor commitments made during the period of growth. Indeed to Veblen, what fundamentally leads men is not rationality (or all the more the economic rationality). Their practical actions are conducted by thinking patterns based on these beliefs acquired though tradition and experience. Thus, the longer the growth is, the more present the beliefs acquired during this period become. Veblen says that they become institutions; that is to say constraining mental habits.

First, firms conclude all short term contracts to avoid any risk, but as the growth period endures, and as one gets used to the increasing prices and demand, one starts to conclude longer term contracts with the expectation that prices and demand will continue to rise in the future. Contracts based on these rosy forecasts are therefore extended to longer terms. These contracts are actually crystallizations, the official materialization of beliefs acquired through the practice of business in economic growth. Thus there are contracts, whose fulfillment requires a certain amount of time and cannot be modified while in process, will be heavy on the industries during the crisis. One of the reasons of the crisis would then be the rigidity of attitudes: the agents (above all those who take advantage of the extension) would have difficulties as they are still deluded by economic growth to handle the variations of the real relative prices beyond their nominal variation and are unable to guard themselves against a sudden variation of the real interest rate.

This naturally leads us to examine the relationship between competition and crisis. To begin with, the established business man is hindered and is, in the long run, put in a difficult position of owing huge amounts of commitments (let alone debts that we will see later on) made during the period of prosperity and according to the scale of values and the anticipations of this period. These commitments weigh heavy on the dominant firm and there are as many set charges that overburden its profit.
Indeed, the dominant firms have to maintain crushing fixed costs (purchase contract, maintenance of capacity of production that are from there on pointless during the depression, clients who have already paid and must receive delivery) and can no longer expect to sell their products more expensively than the new firms which for their part do not suffer from as heavy costs. These fixed costs can sometimes lead the dominant firm to bankruptcy, if, for instance, it had a commitment for the purchase of such quantity to such price during a certain time (the term ‘market’ does not exist yet at that time) and the supplier’s prices turn out to be too expensive compared to the low selling price that must be set. The dominant firms can therefore lose its considerable strategic edge.

We will now take another example of a firm, which at the beginning began granting very long terms of payment in order to obtain market shares. The firm could go bankrupt in case of a depression because of cash problems that become rapidly insolvent. Quickly it appears that, what was once a strategic advantage for a big firm in a period of growth can end up with a disaster. During a crisis, it is also true for a big trust, if the trust’s contracts happen to be too constraining compared to the new conditions the firm must face. We shall now examine another type of fixed costs that penalise trusts: debts, which were contracted in expansion and the servicing of equipment that is technologically too obsolete.

2) The Interest Rate and the Obsolescence of Machines

Beyond the relations between the firm and its competitors, its relationship with banks becomes difficult. During the period of growth, the firm has gone so far as to increase its financing through external means through financial markets and above all by bank credit. As the period of growth unwinds, interest rates continue to rise following the increasing prices. The firm commits itself to the repayment of its loans on the basis of high rates that are prevailing during the expansion. Actually, the firm had based its expectations on a relatively low real interest rate because of the rising prices. However, all the financing plans completely change when the nominal interest rate goes down (and thus follows the deflation). The dominant firm does not benefit from the fall in interest rates since its contracts were concluded prior to them falling. Thus, the real interest rate to which the dominant firm is confronted increases considerably. In fact the firm must repay its loans at a rather high interest rate, but above all – there lies the main problem –it must face decreasing proceeds after the fall in prices. The low prices make the real interest rate higher than the nominal interest rate, which was already high during the period of growth. The credits of the firm become real dead weights. Not to mention the financial markets which are depressed and cannot be a profitable means of financing. Indeed stock prices of dominant firms have decreased so drastically that an increase in capital, if it was to find acquisitions (which is far from being certain, given the prospects of profit) would be largely insufficient. The firm’s elaborated financing strategy during the expansion now seems to be a sheer disaster. This can be added to the strategic handicap of the firm compared to the challengers, these have easier financing conditions (we shall study these later) with among other advantages, a lower interest rate corresponding to the crisis period. The factor (interest rate) that alleviates some firms
Weighs heavy on others. In the market, firms are subject to a double strategic constraint due to a considerable heaviness of their financial charges and because of the competition from challengers that have a healthier financial situation that helps them speed up their development.

The problem is not only financial but also technical. During a crisis, dominant firms finance their investments made during the previous period. The firm that is hit by the heaviness of its costs can no longer invest in new machines; it has to pay the production equipment that it had bought on credit during economic growth. As the firm’s capacities to invest are blocked, the available machines though not unusable will end up being a drawback in its competition with the challengers. Indeed, the challengers are equipped with new machines equipped with the most up-to-date technology; the old firms therefore do not have greater productivity compared to the new firms. Unlike the traditional Malthusianism of the old firms, the challengers play on quantity (selling a lot, lowering prices to capture shares of the market from the old firms) and use in a more efficient manner (in the sense given by Veblen) their productive capacity. The old firms must produce more to avoid losing the remaining shares of the market, which not only lowers prices even more, but also worsens the situation. This may not always be possible, since these firms are by nature less productive than the challengers and maybe they do not have the means to increase the volume of their production, since they already have difficulties to pay their usual suppliers and creditors.

3) The Defensive Strategy of Dominant Firms

The firm that during the period of growth made mergers and acquisitions in order to concentrate market share or simply did so with a speculative aim is now on the defensive. The old established firms that are at this point to stave off the disaster of bankruptcy. The firm suffers more than it acts, but it still has a few assets. Its goal will be to survive during the crisis period, to endure the competition of the challengers while waiting for the halcyon days. To do so, the restructuring of the firm must take place as soon as possible during the crisis. The recently reorganized firm that suffered liquidation early in the recession, had its capital structure brought down and simplified, and can earn a reasonable rate of return now on its new capitalization. This restructuring must occur on two levels: financial interests and industrial organisation. Speaking from a pecuniary perspective, a certain number of decisions will be made. Firms that had enlarged during the expansion will be dismantled. The activity of those firms that became less profitable (financially speaking) will be left in order to concentrate on precise tasks.

Veblen notes that this type of ceasing of activity is sometimes made to the detriment of technical efficiency and social well-being. Veblen does not oppose market concentration of only one firm or, rather, more precisely of only one unit of production that is sometimes the optimal size to minimize the cost of production. Veblen’s theory is against the vested interests that do not fully use the productivity of a firm that has reached an optimal size (from a technical point of view) be it large or not. In fact, during a crisis period, the aim of the firm will be to narrow its range of business and opt for the activities in which it possesses a stronger market power. Firms will strive to acquire the
more monopolistic position possible in their sector. To reach this goal, firms begin ceasing all further activities that turn out to be dead weights for their functioning. Knowing that in these activities, these firms do not have a strong market power, they only undergo the competition and can no longer make profits. This is why ceasing their activities becomes more profitable. In a similar manner, and still linked to the concentration strategy for a vertically integrated firm, which is technically less costly (use and construction of machines, transportation costs) can become less costly on the market in terms of prices after deflation. Then firms decide to outsource production, even if it is socially inefficient. For example, one can decide to externalize the production of meat abroad, as it is cheaper in terms of paid price, yet it is more expensively at the social level in terms of transportation costs, pollution, and refrigeration costs. Sometimes what is socially less efficient is more efficient in price terms.

The other aspect of the firms’ strategy consists in using their infrastructures at a lower cost, thus in practice part of the staff will be laid off. For Veblen, this can be an asset in so much that it is better to operate a firm with 10 people than with 20 people.12 Above all, if the 10 people put out of work are commercial agents, advertisers who are, according to Veblen, non productive from a social perspective. These consist of activities that only raise the final price of the good, and then increase the Malthusianism of the firm according to Veblen. Even the force of selling can be reduced to the congruent portion, but the firm will be careful to save a hardcore that will turn to be precious from the point of view of vested interests to conquer a clientele (the goodwill). As a consequence, for Veblen, the main problem comes only if the most productive workforce (workers, technicians) is put out of work). The engineers will then be well cared for, as they are the only ones to be able to reorganize the tool of production left for it to work at a lower cost (technically). Thus, businessmen rely on engineers to get them out of their troubles. Businessmen are not able to withdraw earnings from the financial capital, deciding to turn to the industrial capital. Industrial capital must be a function determined by low cost (technically) and of the more profitable way, not necessarily to use this productivity straight away but to make it available as a strategic weapon in the fight against challengers.

Veblen considers that a crisis can still have some positive effects, while intensifying competition it compels the business to avoid waste (cost killing) and to be competitive on prices without resorting to inflating or through advertising and marketing expenses. Veblen believes the competition is always inferior to the co-operation, but it is superior to the collusion of the established interests. The earnings of productivity made by the dismantled firms do not balance the technical waste involved by the division of the centers of production into an increasing number of firms and by the fact that most of these firms do not reach the size that is technically optimal during a crisis period.
B) The Advantage of the Latecomer

1) Difficulty to Enter Markets in Periods of Growth

According to Veblen we could believe that the periods of crisis are favorable to the creation of new firms because, as the market size increases, it seems that there could be enough room for all, the rising prices being able to attract investors into the market (it is what the neoclassical theory foretells). Yet, according to Veblen, periods of growth are usually not favorable to challengers and this is because of at least two main reasons.

First, dominant firms handle the market to their own profit. The increase of their profitability has a counterpart, according to Veblen, the increase of their goodwill. That is to say, strategically incorporating rights that allow them to control the production to their profit (patents, agreements). It must be added that the strategies that aim to capture the whole clientele and occupy all the segments of the market (product differentiation and price discrimination) erect barriers to entry (intensive advertising).\textsuperscript{13} It then becomes difficult for a new challenger to enter the market. The new challenger’s only asset would be to play on the prices to capture shares of the market that these Malthusian firms control.

The latecomer faces financing difficulties and it cannot propose lower prices compared to the dominant firms and move into the market successfully. Indeed, the financial markets are reserved for big firms already settled and having shown evidence of success. For the challenger, bank financing is the only solution left, but with interest rates so high during economic growth, such a mode of financing can turn to be very costly. An interest rate implies that the prices will necessarily be high to make repayments possible. This also means that the strategic advantage of the new coming firms is non-existent. There are no earnings expectations while moving into a market in these conditions. Now we can see that the economic growth impedes the challengers’ financing conditions and do not ease their entry into the market. However, these conditions will change radically during crisis and the challengers will seize the opportunity.

2) The Challenger’s Strategic Asset: low financing cost and technological progress

In fact, during a period of depression, the investment continues but is mainly made by challengers. Capitalisation is implemented and can be invested in a fruitful plan because the contracts that are concluded with these new funds are made on the basis of far lower (cheaper) new values (price and interest rate are lower), due to the deflation caused by the recession. New firms benefit from this decline and their bank creditors propose lower fees than the ones dominant firms have. Thus, these firms will be penalised in the early competition between dominant firms and new challengers during a period of recession. During the boom, market forces do not allow challengers to finance a competitive strategy, but in periods of crisis, the challengers take advantage of the lower interest rate unlike the dominant firms.
These financing conditions allow challenging firms to introduce low prices while having a sufficient profitability. Therefore banks decide to lend because they will be repaid. These are precisely the conditions of financing that allow the challengers to be so aggressive, going sometimes to the extent of buying out old firms, which were in receivership. The price war launched among challengers harm the dominant firms. This war is all the more intensive that challengers do not have all the commitments that the dominant firms have with their suppliers or clients. In fact, the hysteresis effect blocks the dynamic of the latecomers, it can display its strategy without bearing the weight of past constraints. This freedom of action is all the more important since the challenger knows how to make the most of the technological progress.

For Veblen, the new challenger has the technological advantage of the latecomer. The author draws an analogy with the competition between the nations of his time. He compares two forefront countries, Germany and Japan, to England on the technological level. This advantage of coming late: the late-comer can borrow the newest, most advanced technology from the early industrial leaders and adopt it, free from the resistance of vested interest, depreciation costs, and the like. Thus, even without purely financial advantage, even if the interest rate does not decrease, the firm has a strategic asset: the technological progress at the service of challengers, with or without cheap financing. The technological advantage is double in terms of costs and productivity. It has become cheaper to produce, which improves the well being of the community because fewer resources are needed to produce the same quantity of goods. A challenger, when lowering prices to win shares of the markets, becomes less Malthusian. However, there remains a problem due to the very crisis; demand is depressed and therefore everyone cannot benefit from this fall in prices. In a way capitalism becomes less Malthusian but not for long, only during the waiting period before the new cycle begins.

3) The Saving of Vested Interests and the Conditions for a New Expansion

For many economists, this harsh fight between latecomer firms and old dominant firms proves that capitalism is efficient and competitive, so much that some captains of industry go bankrupt. The problem for Veblen comes from the fact that managers are no longer the firm’s owners.

The era of the Rockfellers and the Carnegies is long gone. Now the absentee ownership owns the firms consisting of thousands of smaller shareholders. In addition, commercial banks control the firm’s strategy when they do not own a part of it. As a consequence from growth to crisis, the vested interests, the big commercial banks, the big shareholders having diversified their portfolio, all of them save the major part of their interest. Granted, the profitability of their investments slackens during the crisis but thanks to the aggressiveness of the challengers against firms that have already earned money and from which no earning can be obtained during the crisis, the investments remain profitable compared to the deflated values of the crisis period (low interest rate, low prices).
In some rare cases, the profitability of certain firms in specific sectors can even be higher during a period of crisis than their profits in a period of growth, when for example, the low price (low interest rate) differential is superior to the high price (high interest rate) differential. As far as the stock market is concerned, when new challengers start to become very important and their prospects for profit rise, stockowners dump the stocks of the struggling old firms. As stock prices fall drastically, these firms can hardly raise their profitable capital. On the other hand, the agents dash to the stocks of the challengers and of the restructured old firms with as a consequence an important growth of their market capitalization and the financing is made all the more easier. In fact, and this essential to keep in mind, “the manufacturing corporations compete among themselves, to the greater gain of the investment banker and to the cost of the underlying community” [Dorfman 1934 (1972), 476].

This process of competition between old firms and new ones, also between and the firms in competition, takes place on the labor market. Entrepreneurs will benefit from competition between salaried employees because this can lead to a decrease in real wages. According to Veblen, if the firm’s owners, who are actually salaried employees, want to keep their position, then they must battle one against the other, especially in the midst of a crisis period. Indeed, banks and absentee owners are well aware that competition must not reach a certain extent. If they allow the challengers, when financing them, to destroy the fortresses that they have contributed to build, it is because these fortresses do not earn them anything and it then becomes necessary to build new ones. In the meantime it is not advisable to lower prices, in the firms’ view it would be too dangerous, the Malthusianism being the core of the vested interests, of absentee owners and of bankers.

The refuge for businessmen lies in the internal dynamic of the system: prices cannot go down indefinitely. Prices will reach a ground floor from which the demand for goods becomes greater than the supply. During the crisis they ripped off each other to survive. On the other hand economic growth implies that supply needs to be controlled if one wants the maximum level of profitability. Therefore, it is more rational to set up alliances than being in competition (this is also what the bankers and financiers explain to the firm owners). However, during a crisis period, alliances are impossible because of an insufficient demand compared to an overabundant supply leading to a consequence that some firms will be forced out of the market.  

This is not the case in a period of growth when it would be suicidal to not seek alliances (the loss of profit would be huge). In addition, more or less at the same time, challengers become leaders. They have made profits during the crisis but they forecast the opportunity to make even higher profits during periods of growth, provided demand is controlled and they do not wage any price wars. They then decide to agree with the remaining competitors to block the access to the market. The agreement can only be maintained while the rates go up (it is not possible to keep prices low in such circumstances). Firms get used to these new conditions and, in order to raise their financial capital, resort more and more to using credit. They fall into the same pitfall as the previous dominant firms. They become blinded by the success and they will commit
to long term contracts that become technically less and less successful as they acquire more goodwill. Note that this is not in vain, for unlike all of our previous analyses this could lead us to believe that the mortality of dominant firms is not important and the number of challengers emerging from each crisis is not very important either.

**Concluding Remarks**

First, we examined the changes that the economy underwent during Veblen’s time: firms became bigger and bigger and their market power significantly increased following the massive processes of integration. Therefore, having this market power, firms are able to use bank credit as a means to finance the growth of their market power. Firms will also restrict the competition to their own profit and diminish the production growth through patents, implicit or explicit agreement, the capture of the clientele through product differentiation, price discrimination, and intensive advertising. For Veblen, bank financing can only serve to finance the parasitism of the monopolies.

Next, we studied what makes the ascending phase of the business cycle. Veblen notices it in a sector where prices go up following an order from the state. Therefore, growth spreads because of a sector’s increase in profitability and leads to a multiplier effect on the entire economy, due to new investments. Veblen believes that during a period of growth, businessmen are more optimistic and willing to accept long-term commitments. As prices rise faster than costs, the profitability of the firm increases. Firms are enticed to concentrate and consider mergers and acquisitions. Veblen points out that the credits used by firms to finance their growth, finance above all the right to sabotage production: production rising on a slower pace than prices. Gaining monopoly-type market power, firms can be Malthusian; this sabotage of the production implies that the rise in prices worsens.

This is when the conditions for the crisis are reached. Which led us to examine the descending phase of the cycle: the very high rise in prices leads to a decrease in demand, as costs for the firm become too high to protect its profitability. Thus, to save its market share, the firm decides to lower its prices: deflation begins. As the market’s size shrinks and no one wants to bear the cost, the alliances whether explicit or implicit blow up: competition becomes keen, expectations suddenly become pessimistic. The firms which were overvalued lose their profitability because they have to finance their investments made during the prosperous period while sustaining loans with high interest rates acquired during inflation; besides, their proceeds fall noticeably.

Then we examined the firm’s strategies during the business cycle and their effects. Here we first studied the difficulties for ailing dominant firms during the crisis. These handicaps are due to the lack of contract flexibility based on businessmen’s trust in the long lasting of the expansion. In fact, what was an asset (the stability of the long term contracts) in a period of growth becomes a liability during a crisis period. The new competitor for its part is not hindered by constraining contracts. A second handicap afflicting the firm is the weight of the debts contracted during the expansion. The firm having anticipated in the long term a low real interest rate at the end of the crisis period,
its financing plan becomes hard to maintain, as it has to repay debts set at a high interest rate, whereas its earnings go down because of the deflation. The new competitor firm benefits from contracting the rates during the period of deflation. This gives a new competitor a considerable competitive advantage.

Finally, with regards to technology, we saw that the leading firm was declining for it must also pay for machines that are potentially obsolete. This makes it very difficult for the dominant firm to proceed to new investments. On the other hand the new competitor has a technological bonus, as it is equipped with the latest machines, which allows it to obtain a maximal productivity. Thus, we remark that during the crisis period the dominant firm is on the defensive. The dominant firm stops its mergers and acquisitions strategy and prefers the externalisation and the vertical disintegration while narrowing its range of activity. The firm resorts to laying off workers to make productivity gains.

Thus, we have seen that at a strategic level the crisis period gives a clear advantage to the new challenger. Indeed, during expansion the new firm is not competitive. It does not have low enough costs when compared with dominant firms. It cannot set lower prices. The price variable is precisely the only one on which it could play, since the market is locked by the sabotage of production strategy of the dominant firms. Therefore, new firms will have better chances of success during crisis periods, especially since they will have access to cheaper financing. Also they will have a maximal productivity thanks to the new technologies and will be free from any heavy commitment.

After showing that the cyclical movements of the economy are due to the competition of firms and to the differential use by firms through the modes of bank financing and the capitalist economy, we have shown that, according to Veblen, competition is allowed between the firms only according to the interest of their main owners: namely, investment bankers and the financiers. This competition is authorized with prospect to discard the firms that are no longer profitable and to replace them by more profitable ones. Then it becomes time to finance the challengers so that “the manufacturing corporation compete among themselves to the greater gain of the investment bankers onto the cost of the underline community” [Dorfman 1934 (1972), 476]. This paves the way for a growth in the business cycle, which will end up in a crisis like the previous one. This enticement to competition is made up to a certain extent. Indeed, keen competition is necessary during crisis since the size of the market decreases. A keen competition becomes pointless during growth for it would represent a considerable loss of profit for the firm.

What must be kept from the Veblenian theory of the cycle is that the economy is inherently unstable because the price system is unable to regulate the capital market and the currency market. This is because expectations are guided by the beliefs of the economic agents and not by an abstract rationality (habits of thoughts of businessmen facing economic activity). These beliefs entice agents to expect that future earnings to be too high, or that banks to always continue lending more. These beliefs are completely
Maximilien Nayaradou

disconnected from the reality of production that incites to always give more rights to slowdown production. It, in the meantime, encourages distributing evermore purchasing power. If these beliefs are so meaningful it is because the agents are doing well to believe in them. Their strategy depends on them.

In this article we explained business cycles only through the firms’ strategy, which showed the analogy between industrial organization theory and Veblen’s theory. The use of industrial organization theory concepts enabled us to clearly illustrate Veblen’s theory. But obviously the firms’ strategy is not the only cause of business cycles in Veblen theory. In fact, for Veblen (according to Mouhammed [2003]), the major cause of the crisis is the struggle for income share between labor and capital: “Veblen analyzes the business cycle through concepts of business and industry, salesmanship and workmanship, combines workmen and combined businesses, etc, - concepts that carry the idea of class struggle between vested interests and the common man” [Mouhammed 2003, 171]. We chose to explain business cycles by only examining firms strategies, but Veblen’s theory is more complex and it studies others important causes of business cycles such as income distribution.

Notes

2. Today it would not only be banks, but also insurance companies, investment companies, investment funds, and mutual funds.
3. This can be shown through protectionism during Veblen’s time.
4. For instance, as wages rise, prices must rise too, but in the long run workers have a declining purchasing power, thus lowering aggregate demand.
5. Usually the non-preferred-stock owners consist of ordinary shareholders who only own financial capital and are usually the smaller shareholders.
6. For Veblen, it is the equipment, as opposed to the purely fictitious financial capital, that is used to slowing down to a maximum, the use of machines.
7. Veblen (1922) foretells with a keen sharpness that the inflation of the twenties will last for some more years thanks to the Fed, but that it will inevitably lead to a sudden crisis and to a severe deflation, it is precisely what happened in 1929, three month after his death.
9. Here, the ideas are taken from Veblen (1904), “The theory of Modern Welfare” and of Veblen (1923) “The Larger Use of Credit,” and “Secular Trend”
10. Long-term investments, long-term purchase contracts of raw materials, long-term contracts with salaried employees, long-term commitments to meet clients’ demand, commercial credit extension; high compensations if the contract is broken. The high compensation for a broken contract did not exist as far as I know in the U.S. in Veblen’s time, I add it to indicate that his theory on the lack of flexibility of the contracts can also be applied to the job market.
11. “Market power” is not Veblen’s terminology, but rather it is used in industrial organization theory. Here we use this terminology to explain Veblen’s position. In fact for Veblen the firm’s goal is to slowdown production, and the firm’s market power enables it to do that.

12. There is in Veblen’s theory, the concept today called “the slack”, but to him, it is a technical point of view and not a pecuniary aspect. From his technical angle the marketing department is part of the slack the mere existence of which implies a reduction of the production department to find techniques to raise prices, thus resources are wasted for the sake of a socially harmful department.

13. We use here a lot of modern industrial organization concepts to illustrate Veblen’s theory. They perfectly suit Veblen’s theory of the firm.

14. We can imagine a solution of sharing the market in shortage period, but who will bear the cost of the fall in demand? The inclination to free riding prevails as each firm considers that none of them will honour the agreement; doing so would mean risking to go bankrupt. During economic growth, each one benefits from a better market control, the free riding tendency is weaker but still exists. Nevertheless it will be sanctioned by the system as none of them can keep the prices low following the rise of prices. It is a classical problem in game theory. Indeed, Veblen didn’t know game theory, but his examples could be better illustrated thanks to game theory.

15. New terms from industrial organization theory to illustrate Veblen’s theory.

References


Maximilien Nayaradou

_____. Absentee Ownership and Business Enterprise in Recent Times: The Case of America, New York: NY, Huebsch, 1923.
Neither Atomized nor Bi-lateralized: Market Actors Never Exchange Outside a Social-Structural Context

* A Critical Analysis of the Economics of Transaction Costs*

By Sébastien Plociniczak

Université Paris XIII

“Transaction cost economics and embeddedness reasoning are evidently complementary in many respect. […] transaction cost economics is preoccupied with dyadic relations, so that network relations are given short shrift” [Williamson 1994, 84].

“An economy can be depicted as a network or graph that links economic actors with one another in a flow of exchange. […] imagine an economy that was somehow devoid of networks – i.e., where there was limited interaction among economic agents and all interaction that did take place occurred anonymously, at arm’s length. Does anyone believe that such an economy would function as well as our own? […] the point is that a network perspective sensitizes us to phenomena that are missed when we regard the economy strictly through the lens of orthodoxy economics” [Zuckerman 2003, 545-562].

Introduction

For the most critical market transactions, those that feature a hold-up problem, Transaction Costs Economics (TCE hereafter) aim at identifying the contractual mechanisms that ensure their progress in an efficient way.¹ Beyond the distinctions that may be made between the formal or informal nature of these mechanisms,² these TCE studies most often seek to define a “private ordering”, i.e. without the implication of a third party within which the mechanisms work in a self-enforcing manner [Klein 1980; Williamson 2002]. Moreover, through transaction unit analysis and individualistic paradigm observance, TCE works try to define a strictly bilateral economic enforcement of transaction that focuses on private arrangement.

Here, I use the term “enforcement” to signify all the formal and informal mechanisms used to facilitate the progress of transactions. According to North (1990), differences in the capabilities of contract enforcement are probably a major reason for differences in economic growth and human welfare between societies. Here, I use the expression strict bilateral economic enforcement to refer to formal and informal mechanisms based on economic incentives that two actors may define and use during economic exchange to prevent the opportunism of his partner and ease the development of transaction on a bilateral basis. In this article, I will attempt to portray a different type of arrangement that could provide extra-contractual mechanisms that facilitate transaction enforcement not by negating but by completing contractual devices.

* I would like to express my thanks for very helpful comments from my supervisor, Professor Olivier Weinstein, as well as to *Oeconomicus* anonymous referees. My colleague and friend Samira Guennif’s thoughtful suggestions made a decisive contribution to the clarity of the manuscript. I am also grateful for the intellectual and financial supports provided by Université Paris XIII.
My argument is that TCE [Williamson 1975, 1985, 1996a; Williamson and Masten 1999] does not succeed in describing a strict bilateral enforcement. Contrary to all expectations, they confirm the embeddedness of economic relations within social structures, i.e. social networks [Granovetter 1985; Uzzi 1996, 1997, 1999; Zuckerman, 2003]. Transactions occur within social networks of n actors (n > 2) bound in one way or another by systems of stable and ongoing social relationships, within which intangible and tangible resources circulate. In a market setting, there exist many different forms of more or less formally organized social networks such as joint ventures, co-operatives, R&D Consortia, strategic co-operative agreements, cartels, franchising, licensing, subcontractor networks, industry alliance networks, small supplier networks, small-firm networks, regional alliance networks, organizational field alliance networks, business groups, network incubators, and innovation clusters.

The complex transactions described by the TCE take place precisely because they occur within such social networks that influence actors’ behavior and thanks to a particular type of enforcement, which I will call structural enforcement. This notion requires going beyond the strict bilateral dimension of enforcement because it emphasizes the location of actors in social networks as a factor conditioning market interactions and actors’ orientations. It expresses the idea that ongoing relationships between market actors (the bilateral level) and their overall structure in webs of social relations (the structural or multilateral level) shape actors' behavior in ways neglected by TCE and ensure the use of social mechanisms, which curb opportunistic behavior during market transactions. Put simply, structural enforcement expresses the idea that social networks, by influencing actors’ behavior, constitute structures of constraint and opportunity that facilitate the use of formal and informal mechanisms in complementary ways to sustain the progress of transactions between two actors outside a private arrangement, i.e. private ordering. Whether they will be enabling and constraining depends on the nature of the social networks (structure, or architecture and types of ties). Reciprocity, reputation, trust, solidarity, loyalty, ostracism, contract and price are all social mechanisms that ensure the efficient progress of the most critical transactions within inter-organizational networks, alliances, and communities.

Therefore, I propose to make obvious how TCE fails to define a concept of strict bilateral enforcement of transactions consistent with a private arrangement because it addresses the irreducible multilateral nature of transaction enforcement. At the same time, I will see how “instrumental reductionism” may be overcome [Swedberg and Granovetter 2001] through a middle ground vision of economic actions, i.e. a vision located between “under-socialized and over-socialized” visions of economic behavior [Wrong 1961; Granovetter 1985], by combining economic and sociological works. In fact, to understand the structural enforcement framework, one must acknowledge that rationality is not the feature of an isolated market actor; it derives not only its strength but also its significance from the social context within which it is embedded [Polanyi 1957, 1977; Granovetter 1985; Arrow 1986; March 1994; Hodgson 1994; Stiglitz 1994; White 2002; Plociniczak 2003a]. More precisely, I think that this structural enforcement may explain why “general principles” such as “beliefs and preferences may be the product of social interactions that are not mediated through price mechanism or market” [Arrow 1998, 97]. Thus, we need to appreciate the social processes by which social networks shape transaction enforcement.

To achieve this goal, I will begin by discussing the TCE theoretical framework and more particularly its predictions about the progress of complex transactions within a special governance structure that is a hybrid form [Williamson 1991; Masten 1996 part 3;
Ménard 1996, 1998]. This self-enforcing arrangement is based on hostage or private arbitration, which is to say that court judgments are not involved. However, these transactions rely intrinsically on “relational contracting” [Macneil 1974, 1978, 1980, 1983, 2001] where hostage and private arbitration play no role, for it is the real capacity of actors to cooperate and to trust each other that prevents the opportunistic behaviors predicted by the TCE (§1). Nevertheless, through the examination of this theory about efficient private arrangement I hope to emphasize the presence of both levels of enforcement - bilateral and structural - and attempt to demonstrate how the two are intimately intertwined. For complex transactions, bilateral enforcement is largely dependent upon structural enforcement within small-and-dense social networks. The latter encompasses the former and favors the flow of reliable information about actors’ past behavior in social structures, facilitates social control and sanctions, and finally justifies the use of informal mechanisms such as trust and reputation to sustain the progress of economic relationships (§2).

I. Bilateral Islands and Formal Mechanisms in Private Arrangement

“Relational contract theory advances the proposition that it is both more efficient and more sure to engage in combined contextual analysis of relations and transactions that to commence with noncontextual analysis of transactions. […], transaction cost analysis adheres in considerable measure, but by no means entirely, to this proposition” [Macneil 2001, 376].

Developing Coase’s argument (1937), Williamson (1975, 1985, 1996a) carefully identifies the essential attributes of “transactions.”6 With supposedly realistic assumptions about the resources invested (asset specificity) and about actors’ behavior and motivations – potential opportunism, bounded rationality, and farsightedness [Williamson 1999] –, the TCE school defines the most critical transactions, those endangered by “interaction effects” or “hold-up problems.” Subsequently, this theory searches for the most efficient governance structure, one that is able to solve strategic uncertainty, reduce transaction costs, and preserve economies of scale. It asserts that recurrent transactions with mixed assets will take place within hybrid contractual arrangements.

1. From Potential Hold-up to Hybrid Organizational Forms: Williamson’s Predictions

For TCE, market actors may decide to invest in specific assets7 to create a quasi-rent, i.e. “the excess of its value over its salvage value, that is, its value in its best use by another lessor” [Klein et al. 1978]. In doing this, market actors expect to receive ex-post a part of this quasi-rent [Klein et al. 1978; Klein 1980; Monteverde and Teece 1982]. However, they also expose themselves to their partner’s potential strategic behavior, i.e. probable ex-post opportunism [Williamson and Ouchi 1981; Williamson 1993a, 1993b]. Opportunism extends beyond simple selfishness to include “self-interest seeking with guile” [Williamson 1975, 26-37; 1985, 46-52]. It refers to the “incomplete or distorted disclosure of information, especially to calculated efforts to mislead, distort, disguise, obfuscate, or otherwise confuse” [Williamson 1985, 47]. In this perspective, the real
economic man appears as “a more subtle and devious creature than the usual self-interest seeking assumption reveals” [Williamson 1975, 255].

In market settings, the partner may allege non-anticipated expenses to appropriate the quasi-rent ex-post and opportunistically. This kind of quasi-rent opportunistic appropriation gives rise to a strategic (behavioral) uncertainty called the “hold-up problem” or “interaction effects” [Klein et al. 1978; Klein 1980; Williamson 1985]. A well-known illustration of the hold-up problem refers to the business relation between General Motors (GM) and Fisher Body (FB) in the 1920’s. This phenomenon arises from a “fundamental transformation” of the atomized market: transactions are no longer discrete when “small-numbers competition” appears, because a “bilateral offer situation” gives rise to ex-post opportunistic behavior [Williamson 1985, 61-63]. This kind of opportunistic behavior is all the more likely in that actors are rationally bounded. Actors cannot write comprehensive contracts [Williamson 1994, 102], or perform a “complete presentation” of the transaction [Macneil 1974, 1978]. Hence, to appropriate opportunistically part of the quasi-rent, actors may take advantage of their partners’ bounded rationality [Klein 1980, 357] or try to exploit the “areas of contractual incompleteness” [Crozier and Friedberg 1977].

After this detailed examination of the attributes of transactions, Williamson proposes a typology of contracts and describes the different governance structures distributed along a continuum: “Suppose that transactions were to be classified in terms of the level of autonomy of each party. Discrete transactions would thus be located at the one extreme, highly centralized, hierarchical transactions would be at the other, and hybrid transactions (franchising, joint ventures, other forms of non-standard contracting) would be located in between” [Williamson 1985, 83]. Like MacNeil [MacNeil 1974, 736-737], Williamson indicates a “spectrum” ranging from highly discrete to highly relational transactions. Along this spectrum lies a class of contracts, tools meant to solve coordination problems among actors involved in economic activity. Williamson then links every class of contract to a type of transaction and to a type of “governance structure”: transaction costs are economized by assigning - aligning - transactions to governance structures which differ in their costs and competencies, in a discriminating (mainly, transaction cost economizing) way [Williamson 1991]. In this perspective, governance structure appears as “a shorthand expression for the institutional framework in which contracts are initiated, negotiated, monitored, adapted, enforced, and terminated” [Palay 1984, 265]. The aim is “an effort to craft order, thereby to mitigate conflict and realize mutual gains” [Williamson 2000, 599]. They are “the means by which order is accomplished in a relation in which potential conflict threatens to undo or upset opportunities to realize mutual gains” [Williamson 1996b, 12; Williamson 1999, 5].

In particular, between the two extremes of the governance continuum lie occasional, possibly even recurrent transactions that involve mixed or highly specific assets. These transactions take place within a hybrid governance structure subject to neoclassical contracting to prevent ex-post quasi-rent opportunistic appropriation [Williamson 1991; Ménard 1996, 1998, 2000; Masten 1996 part 3]. It encompasses “various forms of long-term contracting, reciprocal trading, regulation, franchising, and the like” [Williamson 1991, 280], or “long-term contracts, complex contracts with reciprocity agreements, agreements to provide offsetting specific investments (‘hostages’), equity linkages, and so on” [Shelanski and Klein 1995, 344-345]. Because they lack comprehensive contracts or complete presentation, actors may use the neoclassical contract insofar as it tolerates “the existence of gaps in their planning and the presence of a range of procedures and techniques used by contract planners to create
flexibility instead of either leaving gaps or trying to plan rigidly” [Macneil 1978, 865]. This contract contains a “tolerance zone” [Williamson 1991, 272] within which autonomous parties seek appropriate adaptations to price or quality considerations, for example. In addition, both actors have an interest in the duration of transaction because it engages specific assets and contains quasi-rent to be shared ex-post. Thus, a neoclassical contract provides for third-party assistance (a private arbitrator) to undo flexibility and fill gaps, to solve any dispute. Courts do not intervene in dispute resolutions; litigation would signify the breaking-off of relations.

Williamson argues that a private ordering is finally reached [Williamson 1985, 9-10]. However he notes, “[p]roblems with markets arise as bilateral dependencies, and the need for cooperative adaptations, build up. Markets give way to hybrids which in turn give way to hierarchies” [Williamson 1994a, 90]. And related to the hybrid form, “[a]lthough the efficacy of all forms of governance may deteriorate in the face of more frequent disturbances, the hybrid mode is arguably the most susceptible. That is because hybrid adaptations cannot be made unilaterally (as with market governance) or by fiat (as with hierarchy) but require mutual consent. Consent however takes time. An increase in market and hierarchy and a decrease in hybrid will thus be associated with an (above threshold) increase in the frequency of disturbances. […], the hybrid mode could well become nonviable when the frequency of disturbances reaches high levels” [Williamson 1991a, 291].

Here some remarks may help to understand the use that Williamson makes of Macneil’s typology. Macneil lists the attributes of the discrete transaction paradigm of standard theory, before asserting that discrete transactions are relatively rare compared to relational transactions. He then argues for the capacity of relational contracting to govern complex transactions within specific hybrid forms [Macneil 1974, 1978; Ring and Van de Ven 1992, 1994; Ring 1997].

2. Hybrid Organizational Forms and Relational Contracting: Macneil’s Original View

Interviewing 68 executives and lawyers from 43 companies and 6 law firms in Wisconsin, Macaulay (1963) studies their commercial practices. He shows that in dispute settlement these actors only rarely resort to courts or legal sanctions. As far as possible, they try to keep lawyers out of the dispute settlement process to avoid the relation termination perceived as detrimental for all parties. In this process, actors activate non-legal sanctions or relational norms instead of settling disputes in courts [Macaulay 1963, 63]. Among these norms, reciprocity plays a critical function: actors give and take, and are prepared to sanction any deviant behavior [Macaulay 1963, 61-63]. Underlying these non-legal sanctions, Macaulay reveals the non-contractual nature of transactions among executives. They have ongoing exchanges, they know each other, and they prefer to rely on “a man’s word.” Therefore, there is a moral commitment symbolized by the “handshake” [Macaulay 1963, 58].

Later, Macneil (1974, 1978) drew on this work to assert that most transactions are quite different from the discrete transaction so widely studied in standard economics. There are transactions of significant duration, where ongoing relations are of great importance, but in which uncertainty is also noteworthy. For these transactions, actors may be reluctant and incapable of specifying all possible contingencies and obligations for all parties over the long term. Therefore, they assume contract incompleteness and
promote flexibility in ongoing transactions. Finally, Macneil emphasizes the relational nature of contracts.

In complex transactions (including specific assets), according to Macneil, classical contracts cannot be used to solve the hold-up problem. Instead, cooperation among actors plays a critical role. Cooperation is viewed as the prerequisite for the efficient execution of transactions. Cooperation is based on relational norms such as solidarity. When actors trust each other and display solidarity, then transactions take place successfully and the quasi-rent is shared ex-post. In others words, because transactions are of a significant duration, the identity of the parties is important and personal relations are established. As a result, actors observe and expect others to observe norms that favor the enforcement of complex transactions and the effective share of quasi-rent [MacNeil 1986]. To sum up, the relational contract emphasizes the long-term tendency of the actors to be cooperative [MacNeill 1983; Campbell 2001].

For example, Macneil (1983) states that transactional relations such as franchising occur on a relational contract basis: “Close whole person relations form an integral aspect of the relation. […]. The entangling strings of friendship, reputation, interdependence, morality and altruistic desire are integral parts of the relation”, “common contract norms” sustain the progress of complex transactions. Among other factors, these norms include “integrity”, “reciprocity”, “consent”, “reliance”, “contractual solidarity” and “restraint of power” [Macneil 1983, 346-356].

Whereas Williamson predicts opportunistic appropriation of quasi-rent, Macneil describes the relational nature of contracts and suggests that actors make use of “essential elements of contractual behavior” [Macneil 1983, 346]. These relational norms accompany contractual relations and influence the behavior of the parties so that these relations can last over time. Norms guide, control, and regulate proper and acceptable behavior [Macneil 1980, 38].

II. From Strict Bilateral… to Structural Enforcement: The Network Effect

“Like the work of other new institutionalists, Williamson’s is constructed in atomistic and individualistic terms because its elemental conceptual building block is the given, “opportunistic” individual. He does not consider the possibility that the preference functions of the individual may be modeled by circumstances, […], or that this phenomenon may be significant in analyzing such institutions” [Hodgson 1994, 70].

1. The Social Structural Nature of Opportunistic Motivation

We have seen that the object of the TCE work is to specify the conditions under which the hypothetical opportunism of the actors could be controlled to allow the accomplishment of transactions. Based on this strategic risk, which weighs on transactions when there is a harmful conjunction of asset specificity and bounded rationality, the TCE evokes a “fundamental transformation” [Williamson 1985, 61-63] that would tend to favor ex-post opportunist behavior. As assets become more specific, the continuity of the relation and the identity of the actors grow in importance, shifting the transactions from the discrete mode to the relational mode. For TCE, these transactions will be accomplished with difficulty on the - atomized - market: actors must
incur prohibitive transaction costs to guard against risks of opportunist appropriation by carrying out a complete presentation of the transaction. They must then reflect on the definition and use of a specialized governance structure (firm or hybrid) to manage this permanent tension between the profits to be made from cooperative behavior and the costs caused by the potential opportunism of the partner.

In the context of sponsor (buyer) firms and R&D suppliers, Pisano (1990) summed up the relationship between small numbers bargaining and the probability of such hold-up behavior:

> a pharmaceutical company that contracts with an outside supplier has limited options should the supplier bargain opportunistically during one of the renegotiation cycles. Because the sponsor could not credibly threaten to switch partners, it would be stuck in a small-numbers bargaining situation, which itself creates an incentive for the R&D supplier to bargain opportunistically. [This] suggests that the costs of market governance for a biotechnology R&D project are related to the number of R&D suppliers [...]. These hazards provide an incentive for internalization [Pisano 1990, 158-159].

It is true that internalization and contractual mechanisms offer undeniable means of guarding against opportunism. However, developing a *gloomy vision* of the market actors and making opportunism an almost inherent characteristic of human nature can only give us a partial and necessarily biased representation of these actors who, being wary if not feverish, would systematically try to protect themselves by resorting to a whole set of formal mechanisms.

Williamson is well alert about the inaccuracy of this human nature description. He writes, “[t]hat is plainly not an attractive or even an accurate view of human nature. [...] [TCE] makes little provision for attributes such as kindness, sympathy, solidarity, and the like [...] however, a richer theory of economic organization awaits deeper behavioral insights” [Williamson 1985, 391-392]. In his early work, *Markets and Hierarchies* (1975), he recognized that “trust is important and businessmen rely on it much more extensively than is commonly realized” [Williamson 1975, 108], but he never paid enough attention to what he called the “atmosphere” [Williamson 1975, 37-39] in which transactions precisely take place. More importantly, he acknowledges that “[t]his unattractive view of human nature nevertheless generates numerous refutable implications” [Williamson 1985, 392]. In addition, he recognizes the theoretical pertinence of the embeddedness concept, referring the reader more or less directly to Granovetter’s (1985) essay: “[...] the costs [of transaction] need to be located in the larger context of which they are a part. [...] The social context in which transactions are embedded [...] have a bearing, and therefore need to be taken into account” [Granovetter 1985, 22]. “Transaction cost economics and embeddedness reasoning are evidently complementary in many respect” [Williamson 1994, 85]. Moreover, Williamson acknowledges that TCE “always stands to benefit from good critics, of which Simon has been one and Mark Granovetter (1985) is another. The dialogue will continue and the outcome will be decided by others” [Williamson 1999, 1].

But paradoxically, as Williamson indicates, more sociological motivations like power or trust are misleading by arguing that market relations are invariably calculative, and market actors only focused on transaction attributes, mainly asset specificity [Williamson 1993a, 1993b, 1994, 1995]. *De facto*, the economic concept of “calculative risk” alone should be used to describe market transactions and to resolve potential hold-up behavior under supposed “efficient governance structures” (see Slater and Spencer,
2000), and to the extent that social factors like kindness, sympathy, solidarity, are acknowledged, their costs, rather than their benefits, are emphasized [Williamson 1985, 391]. Do you think that the Williamsonian unattractive view of human nature, one which makes little provision for social attributes such as kindness, sympathy, solidarity, reciprocity, and loyalty is the good theoretical option for understanding real transaction enforcement?17

Rather than understanding opportunism as a natural human motivation – an “aprioristic assumption about human behavior” [Parada 2002, 46] – that is effective in the presence of asset specificity, surely the real issue lies in defining the socio-structural factors that affect the potential opportunism of the actors. For our purpose, I believe that opportunism is not valid as a primary strong individual motivation because it has an irreducibly contextual nature: “behaviour and institutions […] are so constrained by ongoing, social relations that to construe them as independent is a grievous misunderstanding” [Granovetter 1985, 482]. More accurately, one must acknowledge that the motivations and the interests of the market actors vary according to the parameters of the social network in which they are more or less strongly embedded.

More precisely, within small-and-dense networks (groups of market actors in which each is directly and strongly linked to all the others, i.e. without disconnected actors), the bilateral relations of exchanges and the overall structure (architecture) of the network locally curb the tendency of an actor to act in an opportunist way. Insofar as opportunism is a dependent variable – dependent on the bilateral relations between the actors and on the network structure – it is important to emphasize the contextual and essentially structural element of this opportunism. If market actors do not indulge in opportunism as often as the TCE would like, it is precisely because their transactions are embedded within small-and-dense social structures where bilateral and structural enforcement acts in a satisfactory way. At the level of bilateral relations, repetition of the interactions establishes conditions favorable to the appearance of social mechanisms that help actors coordinate, adapt, and protect their transactions.

If the repetition of interactions constitutes one side of enforcement (its relational dimension), we have not yet defined its reverse side. To do so, we must re-insert relational enforcement within the small-and-dense social networks in which a small number of market actors are embedded. When social networks display small size and weak social distance between its members, density among members increases. Network density indicates the communication between SDN’s members and is defined as the ratio of the number of effective (direct communication) relationships between network members to the number of all possible (communication) relationships in a particular time period [Barnes 1979; Marsden 1993]. Network density tends to attenuate as the number of actors rises or as the network grows larger [Mayhew and Levinger 1976]. The higher the density of the network is the faster the information is distributed through it. It is in fact impossible to examine bilateral relations in isolation, without “structurally embedding” them into these broader social structures that are the networks of relations. Methodologically, “Structural embeddedness or positional perspectives on networks go beyond the immediate ties of firm and emphasize the informational value of the structural position these partners occupy in the network” [Gulati 1998, 296]. More specifically, the structural dimension of embeddedness corresponds to “mutual dyadic contacts […] connected to others” [Granovetter 1992, 35], in other words to the fact that “economic action and outcomes, like all social actions and outcomes, are affected by actors’ dyadic (pairwise) relations and by the structure of the overall network of relations” [Granovetter 1992, 33].19
As we will see, taking into account the influence of this structural dimension of transaction enforcement within small-and-dense social networks questions the theoretical results obtained by TCE, and in particular the Williamsonian thesis of the fundamental transformation.

2. The Relational Dimension of Enforcement

At the bilateral level, the repetition of interactions transforms the behavioral orientation of the actors with respect to their partners. This encourages the creation of implicit obligations favorable to the reinforcement of cooperation and the introduction of non-contractual mechanisms. These social mechanisms — formed, reinforced, and modified through successive interactions — constitute a common framework making it possible to monitor behavior and to settle disagreements among the actors.

Various empirical studies reveal that frequent contacts between actors favor the sharing of information and the emergence of a set of behavioral norms, informal rules that make it possible to supervise and regulate behavior [Macaulay 1963, 1985; Baker 1981, 1984; Granovetter 1985; Grabher 1993; Larson 1992; Uzzi 1996, 1997, 1999; Gulati 1998]. As Emile Durkheim (1978) had already emphasized: “in a contract, not all is contractual” [Durkheim 1978, 189]. And as Galaskiewicz and Zaheer (1999) summarize: “there are certain rules, norms, and assumptions that actors in relationships respect and honor”²⁰ [Galaskiewicz and Zaheer 1999, 245]. Such social devices make it possible to save resources by drawing aside from the thought conscious the repetitive aspects of a market situation. In fact, the continuous and long-term character of the transactions creates complex bonds, which makes it possible to manage the negotiations and the conflicts inherent in any durable relation. For example, Macaulay (1963) observes that actors expect their counterparts to continue their business without putting temporal limits on it. Buyers and sellers consider that their colleagues will occupy their positions indefinitely. He suggests that over the years, a set of norms encourages an auto-execution of contracts and that recourse to the courts to solve conflicts is only effective for situations involving large monetary sums or when an actor wishes to put a term to his trade. Macaulay (1963) observes that conflicts between the actors are “frequently settled without reference to the contract or potential or actual legal sanctions. There is a hesitancy to speak of legal rights or to threaten to sue in these negotiations […] or as one businessperson put it, “You can settle any dispute if you keep the lawyers and accountants out of it. They just do not understand the give-and-take needed in business” […] Law suits for breach of contract appear to be rare” [Macaulay 1963, 61].

Although Williamson (1975) himself recognized that “repeated personal contacts across organizational boundaries support some minimum level of courtesy and consideration between the parties (and) discourage(s) efforts to seek a narrow advantage in any particular transaction” [Williamson 1975, 107], he does not study the evolution of the relations over time. He does not grasp, therefore, how the underlying informal social mechanisms of coordination and control are built up during this relational evolution. As the temporal dimension is occulted by the transactional analysis, it becomes impossible to admit that repeated exchanges constitute one of the significant aspects of economic relations because they enable provision to be made against the problems of defection or free riders.

Berger, Noorderhaven, and Nooteboom (1995) use the expression “temporal embeddedness” to describe the history of a bilateral relation and the influence of this common history on the expectations of the two actors concerning their future
transactions. They assert that if the repetition – the accomplishment of past transactions – is satisfactory for both parties, then the expectations of the two actors will grow (i.e. the desire to work together in the future will grow). Just like Granovetter, these authors draw on the work of Berger and Luckman (1966) for whom the repetition of interactions forms and institutionalizes practices of behavior. They argue that this dimension subjectively reduces the level of dependence perceived for a given level of asset specificity, and so reduces the degree of uncertainty associated with the relation. In a study relating to a panel of 166 inter-organizational alliances in Japan, the United States, and Europe, Gulati (1995b) observes that actors who have previously formed an alliance subsequently engage in other partnerships, suggesting that “over time, each firm acquires more information and builds greater confidence in the partnering firm” [Gulati 1995b, 644]. He supports the idea that familiarity between actors, through repeated interactions, generates a reciprocal feeling of confidence that makes it possible to elicit positive behavior, favorable to the progressive replacement of formal or contractual relations by abstract relations. According to Ring and Van de Ven (1994) this dimension creates abstract psychological contracts based on confidence, which supplement or replace the formal safeguard clauses. As Peter Blau (1964) observes, the relations between actors “evolve in a slow process, starting with minor transactions in which little trust is required because little risk is involved […] Hence, processes of social exchange, which may originate out of pure self-interest, generate trust in social relations through their recurrent and gradually expanding character” [Blau 1964, 94].

Contrary to the Williamsonian prediction, various studies reveal that the present intensity of exchange is positively associated with the stability of the future exchange, suggesting that the methods of resolution of problems of coordination do not result in the delivery of hostages, nor in a vertical integration, but rather take the form of discussions: day-to-day exchanges [Larson 1992, 88], joint problem-solving arrangements [Johanson and Mattson 1987; Powell 1990; Uzzi 1996, 1997, 1999], or face-to-face discussions [Nohria and Eccles 1992]. To sum up, actors use their voice rather than the exit door [Hirschman 1970], i.e. they demonstrate the wish to improve the situation rather than abandon their partner.

These social mechanisms tend to personalize exchanges (i.e. identities matter); they favor a mutual tacit knowledge and establish a common memory that increases the diffusion of routines favorable to the resolution of problems encountered by the actors in relation. From this point of view, Macaulay (1963) notes:

top executives of the two firms may know each other. […] They may know each other socially […]. Even where agreement can be reached at the negotiation stage, carefully planned arrangements may create undesirable exchange relationships between business units. Some businessmen object that in such a carefully work out relationship one gets performance only to the letter of the contract. Such planning indicates a lack of trust and blunts the demands of friendship, turning a cooperative venture into an antagonistic horse trade. […] Threatening to turn matters over to an attorney may cost no more money than postage or a telephone call; yet few are so skilled in making such a threat that it will not cost some deterioration of the relationship between the firms [Macaulay 1963, 63-64].
Bilateral enforcement seems to mitigate the potential opportunism of the actors. For this reason, it should not be neglected. However, it would be equally unwise to exaggerate its role. Even if it appears to ensure satisfactory enforcement, it does have limits. It does not eradicate power relations or oppositions of potential interests between market actors. In the same way, it does not eliminate the risks of hold-up behavior. We must not fall into the trap of functionalism, for we cannot deny the existence of a dark side to bilateral relations, nor the fact that the structural configuration of the relations can provide golden opportunities for acting with opportunism, especially in large (and thus sparse) social structures. But TCE omits to consider the important structural basis of post-contractual opportunism: its social construction in the context of multilateral market links and overlapping, mutually dependent decision making processes.

3. The Structural Dimension of Enforcement

Setting aside the bilateral framework of enforcement for an examination of the structural level, we must observe that small-and-dense networks form channels that make it possible to spread out a set of both tangible and intangible resources: norms of behavior, informal rules, information, money, etc... Ronald Burt thus emphasizes the informational properties of network relations. He affirms that networks act as a filter that directs, concentrates and legitimizes the information received through relations. Burt [1992, 13-18] underlines the fact that they ensure access, synchronization and referrals between its members. These interactions thus give access to a much greater quantity of information than one isolated actor could collect. Even more significantly, networks have the particular characteristic of circulating reliable information that is available at the right time [Gulati and Gargiulo 1999].

As Carruthers and Babb (2000) suggest, “in the real world, markets often display a non-random structure in which transactions are repeatedly built around embedded ties and social relationships. Trading partners are not selected at random” [Carruthers and Babb 2000, 53]. Nevertheless, as an agent of information about potential partners, the network is used as a map for future collaborations and makes it possible to reduce the costs of research as well as the uncertainty inherent in the selection of a partner [Gulati 1995b; DiMaggio and Louch 1998; Gulati and Gargiulo 1999; Powell et al. 1996; Walker et al. 1997; Plociniczak 2003a, 2003b; Guennif and Plociniczak 2004]. Discussions between members of a network provide information concerning the good behavior of an actor, his capacity to act in a co-operative way [Burt 2001, 2002; Burt and Knetz 1995]. According to Brian Uzzi, these social structures ensure the circulation of (tacit, strategic, and credible) “fine-grained information” between actors [Uzzi 1997, 45-47]. Moreover, numerous links with mutual third parties result in better access to information [Burt 2001, 2002; Guennif and Plociniczak 2004].

In the context of inter-organizational networks, Gulati (1995b) thus notes that “the social network of indirect ties is an effective referral mechanism for bringing firms together” [Gulati 1995b, 644]. Through the obtainment of this information, via network relations, actors know who in the past has behaved well or not. They end up holding information on those with whom they can or cannot transact, in consideration of their past propensity to opportunism. On this subject, Macaulay (1963) writes: “each has something to give the other. Salesmen have gossip about competitors, shortages and price increases to give purchasing agents who treat them well” [Macaulay 1963, 63]. In this way, the salesmen who do not satisfy their customers “become the subject of discussion in the gossip exchanged by purchasing agents and salesmen, at meetings of purchasing agents
associations and trade associations or even at country clubs or social gatherings” [Macaulay 1963, 64].

The flow of information is all the more abundant when the structural embeddedness is strong [Gulati 1998]. Indeed, this latter enables “the spreading of more efficient information about what actors in a bilateral relation are doing, and thus greater ability to shape behavior” [Granovetter 1992, 35]. Thus, failure to respect certain rules within a given bilateral relation could be quickly sanctioned by a loss of credibility or even certain ostracism by the other actors in the network (third parties) at the time of future exchanges [Larson 1992; Guennif and Plociniczak 2004]. Sanctions may even go as far as exclusion from the network. Here again, Williamson agrees with this reasoning. Earlier Williamson recognized these “informal group influences” [Williamson 1975, 99], and more specifically that “individual aggressiveness is curbed by the prospect of ostracism among peers, in both trade and social circumstances” [Williamson 1975, 107-108]. Nevertheless, as he views each transaction as a discrete event between two autonomous actors, he does not incorporate these emerging social mechanisms in his analysis; the contract remains the only safeguard against the actor’s potential opportunism.

On the contrary, I believe that it is not so much the establishment of strict mechanisms of incentive and monitoring on a strict contractual basis, i.e. economics weapons that minimize the potential opportunism of actors. However, the social effects induced by the structural embeddedness of the transactions between small numbers of market actors: the architecture of the social network and the nature of the ties that favor the construction and maintenance of social mechanisms of consultation and sanctions. In this perspective, inside small-and-dense networks the sanctions are rather of the normative type, the more so as these relations can take place outside any formal agreement. Faced with the opportunist behavior of an actor, members of the network thus take note of this attitude and can sanction it both individually and collectively without necessarily resorting to any contractual clause. These sanctions attenuate the opportunist temptations of the actors at least as much as contracts do, by making the total outcome of the opportunist behavior undesirable [Jarillo 1988, 37].

From this point of view, a small number of actors with frequent relations does not lead to an increase in opportunist behavior, as the thesis of the fundamental transformation would have it. On the contrary, the small number of market actors increases with frequent interactions which ensures the development of mutual knowledge through multilateral information channels and adaptation provides coordination that is more fluid and renders the justification of opportunist behavior more difficult. Jeffrey Dyer (1996, 1997, and 2000) thus described the movement that led big U.S. car manufacturers to reduce the size of their network of suppliers and to increase the duration of the relations with those that remained. He argues that the effect of this strategy was to encourage the development of inter-organizational routines favorable to the coordination of efforts.

The fact that actors act on each other imposes a structural constraint on all of them. It results in the creation of a community of interests favorable to the emergence of strong ties which limit the costs involved in surveillance, in the implementation of incentives between actors, for “actors who share direct connections with each other are likely to possess more common information and knowledge of each other” [Gulati 1998, 296]. Thus “densely knit networks of actors, […] generate clearly defined standards of behavior easily policed by the quick spread of information about instances of
malfeasance” [Granovetter 1985, 492]. In their study of the U.S. biotechnology industry, Walker et al. defend the same thesis and note: “If all firms in an industry had relationships with each other, inter-firm information flows would lead quickly to established norms of cooperation. In such a dense network, information on deviant behavior would be readily disseminated and the behavior sanctioned” [Walker et al. 1997, 111].

Large and scattered social structures, on the contrary, can encourage actors to act with opportunism [Helper 1990; 1991; Burt 1992, 1993; Dyer 1997; Guennif and Plociniczak 2004]. Because of their respective limits in terms of resources (time, energy, etc...), actors interact less frequently than they do within relational structures where their numbers are limited. The attention they focus on the respective identities of their contacts is therefore less sustained. As the actors have little knowledge of each other and share few experiences, opportunism is more easily practicable and justifiable. In fact, weak ties tend to be more numerous than inside small-and-dense networks, and as weak ties create local bridges between the sectors of a network or between networks [Granovetter 1973, 1982; Watts 1999, 2003], there are then more opportunities for exploiting the social vacuums offered by the sparser social structure [Baker 1990; Helper 1991], or by the structural holes [Burt 1992, 1993, 2002]. Structural holes are gaps between nonredundant contacts, or put differently gaps in information flows between alter linked to the same ego but not linked to each other. For Burt, a structural hole indicates that the actors on either side of the hole have access to different flows of information. Structural holes present opportunities for brokering information flows among unconnected actors. With a structural hole, an actor can play others off against one another: for example, a seller facing two buyers is in stronger position if the buyers do not know each other and cannot compare the seller’s different price quotes.

Thus, contrary to TCE, it is large number behavior that leads actors to act opportunistically. A small number of actors interacting frequently on a long-term basis would tend on the contrary to structure coordination and safeguard transactions by creating a community of interest favoring honest, loyal and cooperative behavior. Quoting the example of subcontracting relations and the diamonds market based on work carried out respectively by Eccles (1981) and Ben-Porath (1980), Granovetter defends the idea that the densely connected market actors create the necessary but non-systemic conditions for the emergence of trust and the attenuation of malfeasance. With regard to subcontracting relations, he writes: “the long-term relations of contractors and subcontractors, as well as the embeddedness of those relations in a community of construction personnel, generate standards of expected behavior that not only obviate the need for but are superior to pure authority relations in discouraging malfeasance” [Granovetter 1985, 498]. Taking the example of the diamonds market, Granovetter notes that market exchanges are concluded most of the time by a handshake. According to him, the explanation of the possibility of such transactions is to be sought in the architecture of the diamond cutters’ network of relations, “because [they are] not atomized from other transactions but embedded in a close-knit community of diamonds merchants who monitor one another’s behavior closely” [Granovetter 1985, 492]. Likewise, Gulati (1995b) suggests that “dense co-location in an alliance network enhances mutual confidence as firms become aware of the possible negative reputational consequences of their own or other’s opportunistic behavior” [Gulati 1995b, 644].

Since small-and-dense social networks facilitate the circulation of information concerning the behavior of actors and render effective the use of mechanisms of consultation and of sanction against opportunists, I agree with Granovetter (2002) when
he affirms that one task of economic sociology is to lay bare the circumstances under which people may safely set aside the suspicion that rational action would require them to have.

**Conclusion**

As Granovetter (1995) observes, “the concept of embeddedness could easily be completely empty; it is easy to use it as nothing more than a tautology, a concept to explain everything”[Granovetter 1995, 20]. However, if “Personalized relationships [...] significantly affect [...] the gains from trade. Further study of these interactions is likely to lead to a better understanding of the emergence, disappearance and efficiency of different organizational forms” [Kranton 1996, 846]. Embeddedness is in fact only “an idea or means to start reflecting on economic facts and institutions. It is only a starting point, a kind of suggestion for a research program, research which deals with the complexity of the interactions between individuals” [Granovetter 1995, 20]. By highlighting the need to embrace the concept of structural embeddedness, this article attempted to give credit to the endogenous nature of the social structural context (the prism of social relations and relational structures), to apprehend a major economic fact: the enforcement of transactions.

Based on a network analysis, I have linked together different analytical levels considered by many researchers to be distinct and incompatible: action and structure, individual and collective actors, objective and subjective, micro and macro. By focusing my analysis on the networks of relations, I have showed that these small-and-dense social structures could constitute the binder that transcends the dualism of these abstract dichotomies, to explain the enforcement of transactions such as I believe it to occur in the real world. This attempt at conceptualization should not be seen as an amalgam of a series of social mechanisms whose purpose is the obstruction of market exchange and social welfare, but rather much more as essential elements in its construction and accomplishment. In no way would I claim that the idea of structural enforcement could determine the solution to the enforcement of transactions. It simply underlines the limits of a strict bilateral calculative analysis by showing how the influence of these social structures can fashion and direct the course and accomplishment of the market transactions. There is thus neither determinism nor functionalism.

Furthermore, structural enforcement underlines two fundamental aspects of market exchange: its contextual and relational character. Contextual, in the sense that each act of exchange is indissolubly associated with other actors, events and circumstances. Relational, in the sense that the actors “do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations” [Granovetter 1985, 487]. Structural enforcement thus goes no further than affirming that any transaction depends on the intrinsic characteristics of the social structure considered (i.e. the social networks within which it takes place). The focus of the explanation of transaction enforcement thus shifts from the isolated actor or the Williamsonian governance structure to a broader and more social framework of reference [Granovetter 1994, 88]: the social structures of the market.

Finally, I would like to specify that as a young economist, I have deliberately drawn on sociological literature to build the arguments of my work. In trying to integrate sociological work into the field of economic study, I have endeavored to show how it is
possible and desirable to treat economic facts – and more specifically of the enforcement of market exchanges – sociologically. As George Akerlof (1984) observes: “the boundaries between sociology and economics are by no means clear; if economic models can explain sociological phenomena, so also the process can work in reverse with sociological models describing economic phenomena” [Akerlof 1984, 36]. By positioning my work from the point of view of the Economic Sociology, I wish to demonstrate my conviction that many economists would gain from collaboration with sociologists, in understanding reality as it is. It is not by claiming to isolate the economic facts from the social facts that economists will be most capable of studying them.

**Notes**

2. According to Elster (1998), a mechanism refers to “frequently occurring and easily recognizable causal patterns that are triggered under generally unknown conditions. They allow us to explain but not to predict” [Elster 1998, 45].
3. For Commons (1931): “The bargaining transaction derives from the familiar formula of a market, which, at the time of negotiation, before goods are exchanged, consists of the best two buyers and the best two sellers on that market. The others are potential. Out of this formula arise four relations of possible conflict of interest, on which the decisions of courts have built four classes of working rules” [Commons 1931, 652-653].
4. Embeddedness has been used to refer to the contingent nature of economic action with respect to (i) cognition, (ii) culture, (iii) politic, (iv) economics, and (v) social structures conceived as networks [Zuckin and DiMaggio 1990, 14-23; Callon 1998a, 1998b]. In this article, I limit my analysis to the latter form embeddedness, i.e. network or structural embeddedness. As rightly acknowledge by Coase (1998):

   We cannot confine our analysis to what happens within a single firm. This is what I said in a lecture published in Lives of the Laureates [Coase 1995, 245]: ‘The costs of coordination within a firm and the level of transaction costs that it faces are affected by its ability to purchase inputs from other firms, and their ability to supply these inputs depends in part on their costs of coordination and the level of transaction costs that they face which are similarly affected by what these are in still other firms. What we are dealing with is a complex interrelated structure.’ Add to this the influence of the laws, of the social system, and of the culture, as well as the effects of technological changes such as the digital revolution with its dramatic fall in information costs (a major component of transaction costs), and you have a complicated set of interrelationships the nature of which will take much dedicated work over a long period to discover [Coase 1998, 72].

Parada (2002) suggests that we need to acknowledge that “governance structures […] cannot be isolated from the realities of economic power. Hierarchies are not just a choice under bounded rationality and opportunism, they also stem from the social and political structure of a society that are translated into wealth and power inequalities” [Parada 2002, 55].
5. As Arrow (1986) observed, when the assumption of perfect competition does not apply, “the very concept of [individual] rationality becomes threatened, because perceptions of others and, in particular, of their rationality become part of one’s own rationality”.

6. Williamson (1985) has offered the following definition: “A transaction occurs when a good or service is transferred across a technologically separable interface. One stage of activity terminates and another begins” [Williamson 1985, 1].


8. After a ten-year contractual agreement concluded in 1919, GM's demand for closed-body cars increased to such an extent that GM complained about the contractual price provisions. In order to save on transportation and inventory costs, GM urged FB to locate its body plants adjacent to its assembly plants. FB resisted the demand and was finally merged into GM in 1926. As Coase (1993) recalls: “the main reason for the acquisition was to make sure that the body plants were located next to General Motors assembly plants” [Coase 1993, 43].

9. In opposition to standard economics, Simon (1957) asserts that actors are “intentionally rational, but only in a limited way” because they possess neither extraordinary computational capacities, nor phenomenal access to information [Simon 1957, xxvi].

10. The size of the hold-up is “a multiplicative function of two factors: the presence of specific-capital, that is appropriable quasi-rents, and the costs of contractually specifying and enforcing delivery of the service in question -the incentive for contract violation and the ease of contract violation” [Klein 1980, 357].

11. Moreover, being rationally bounded, “individuals are not always able to adjust and then carry out opportunistic actions” because “they do not always perceive opportunism as a globally beneficial strategy” [Brousseau 1996, 41].

12. “Probably the most recognized aspect of my work in contract is the use of a spectrum of contractual behaviour and norms with poles, labelled relational and discrete, respectively” [Macneil 2001, 378].

13. At one end, “market governance” supports transactions that involve generic assets. At the other end, “unified governance” (firm) underlies transactions that include highly specific assets.

14. That the firm offers superior control over opportunism – “the internal incentive and control machinery is much more extensive and refined than that which obtains in market exchanges” [Williamson 1975, 10] – means that internal organization will be favored over the market in market settings featuring asset specificity.

15. Atmosphere refers to “interactions between transactions that are technologically separable and are joined attitudinally and have systems consequences” [Williamson 1994, 92].

16. Both are social constructions embedded in horizontal (cooperative) and vertical (hierarchical) social relationships [Granovetter 2002].

17. The answer to a question of this type is central for all works in social sciences because “[n]othing is more fundamental in setting our research agenda and informing our research methods than our view of the nature of the human beings whose behavior we are studying” [Simon 1985, 303].
18. All of us can be viewed as members of different networks situated at different social distances from each other. For example, consider your friendships network. A friend of a friend of a friend is a more distant contact than a direct personal friend.

19. For a presentation of Granovetter’s thesis of embeddedness, see Plociniczak (2002, 2003a). It is important to note that for Old or “Original Institutional Economics” [Parada 2002] this meso-level of analysis (i.e. the links between individual actions and social groups) is fundamental for understanding social institutions. For Veblen (1899): “[institutions] are at the same time special methods of life and of human relations, […], institutions are, in substance, prevalent habits of thought with respect to particular relations and particular functions of the individual and of the community” [Veblen 1899, 131-132]. As Jairo J. Parada (2002) notes: “With respect to individualism or holism […] one can find some sort of middle ground between holism and individualism in Commons” [Parada 2002, 45]. Common’s notion of institution involves specific social relationships (called transactions) among individuals embedded in a specific hierarchy (see infra, note 3). According to him, only transaction can enable the containment of conflict, order and dependence, those critical dimensions neglected by standard atomized analysis.

20. According to Commons (1990): “All economic investigations are investigations of people in their economic activities. In order to understand why they act so and so, it is necessary to discover the assumptions which they take for granted as so familiar that they are not formulated in words. It is these assumptions that we consider to be equivalent to the meanings of many words in the history of ethical and economic thought, such meanings are fixed beforehand not in nature but in the customs and habits of participants in transactions” [Commons 1990, 697].

21. A hostage refers to “a class of arrangements where, for example, both parties to an agreement are committed to specific and non-salvageable costs. The effect is to tighten the bond between the two parties to minimize the chance of default before the contract is completed” [Hodgson 1988, 155].

22. Theories of communication networks indicate that larger networks tend to form pockets of highly connected participants, i.e. small-and-dense networks. Whereas communication intensity is low between pockets, it is high between participants [Baker 1984; Monge and Contractor 2003]. Establishing tight ties for all members would be inefficient in a large network. Furthermore, large networks limit interaction between exchange partners because actors’ resources (time, effort, etc.) are spread thinly over many contacts and reduce the opportunity to construct ongoing relationships.

23. “The most useful information is rarely that which flows down the formal chain of command in an organization, or that which can inferred from shifting price signals” [Powell 1990, 304].

24. Because “to an economist, a contract is an agreement under which two parties make reciprocal commitments in terms of their behavior – a bilateral coordination arrangement” [Brousseau and Glachant 2002, 3].


26. Tie strength is defined as the “(probably linear) combination of the time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie” [Granovetter 1973, 1361]. Most empirical studies of networks in the economy implicitly use such a definition when they focus on
patterns of exchange that display more repeated or concentrated exchange than would be expected if the parties were transacting on an arm’s length basis. While most quantitative studies of such networks infer the existence of relationships from their degree of concentration or repetition, analysts often argue on the basis of qualitative evidence that these relationships also encompass more of the dimensions of tie strength as initially defined by Granovetter. Granovetter (1982) himself indicated that “strong ties have greater motivation to be of assistance and are typically more easily available” [Granovetter 1982, 113]. See Baker (1990); Uzzi (1996, 1997, 1999); Uzzi and Gillespie (2002); Gulati (1995a, 1995b); Gulati and Gargiulo (1999); Hansen (1999); Zuckerman (2003); and Hite (2003).

27. According to Giddens (1984), repetition is the fundamental concept underlying structuring.

28. For similar assertions, see Uzzi (1996, 1997); Nee and Ingram (1998); Portes (1998). But symmetrically, as Fischer (1977) observes: “Transaction costs have a well-deserved bad name as a theoretical device, because solutions to problems involving transaction costs are often sensitive to the assumed from of the costs, and because there is a suspicion that almost anything can be rationalized by invoking suitably specified transaction costs” [Fischer 1977, 322].

29. Remember the famous Adam Smith belief (1776): a group of businessmen “in the same trade seldom meet together […] but the conversation ends in conspiracy against the public, or in some [diversion] to raise prices.”

References


Sébastien Plociniczak

_____.

“Human Nature in Politics: The Dialogue of Psychology with Political Science,”

Slater, Gary; and Spencer, David A. “The Uncertain Foundations of Transaction Costs Economics,”


_____.


_____.


_____.


_____.


_____.


_____.


_____.


_____.


Mathematical Formalism in Economics: Verdict of the Reality

By Ganna Pogrebna*

University of Missouri - Kansas City

1. Introduction

“Mathematics brought rigor to Economics. Unfortunately, it also brought mortis”

Kenneth Boulding

Starting from the second half of the 20th century mathematical logic dominates the methods of economic inquiry. Language of models, adopted by the majority of researchers, has a manifold effect on the economic argumentation. On one hand, mathematical logic brings elegance to economics, significantly clarifying the meaning of economic theories and simplifying the process of their communication [Dow 1999]. On the other hand, formal expression seems to monopolize economic studies, leaving numerous phenomena that lie beyond the limits of mathematics behind the consideration of economics.

Modern economic analysis is nothing else but an enormous mathematically driven conveyor, producing increasingly complicated algorithms, designed to explain economic behavior. As Wassily Leontief once pointed out: “The mathematical model-building industry has grown into one of the most prestigious, possibly the most prestigious branch of economics” [Leontief 1971, 2]. Obviously, the application of non-quantitative methods receives an unambiguous excoriation of the majority of economists. The question, however, remains whether mathematics managed to become exceedingly successful in assessing economic phenomena.

While some researchers argue that mathematical tools significantly contributed to the progress of economics, catalyzing the development of new approaches and increasing the predictive value of theories, others maintain that mathematics in many ways inhibited the diversification of analytical methods in economics, generating the stockpiles of highly technical and unrealistic papers. Recent advances in mathematical methodology as well as new technological developments transformed these antithetic positions into contending sides of the radical controversy. Though there seems to remain a weak voice, opposing to the usage of mathematics in economics, there is, however, a shared feeling that mathematics as such is not a problem. This paper argues that the main drawback of mathematical expression is a formal judgment, oversimplifying complex social phenomena and forcing ambiguity in economic theorizing.

* I am grateful to Dr. James I. Sturgeon for helpful comments on the earlier drafts of this paper. Remaining errors are mine.
In many studies, the terms mathematics and mathematical formalism are considered as almost synonymic [Krugman 1998]. However, for the purposes of this paper let us try to distinguish between the two. Cambridge dictionary gives the following general definition of mathematics: “the study of numbers, shapes and space using reason and usually a special system of symbols and rules for organizing them [Cambridge Advanced Learner’s Online Dictionary, 2004].” Therefore, mathematics should be viewed as a special language enabling one to efficiently communicate economic ideas.

Unfortunately, the semantics of the term mathematical formalism seem to be missing. The reason for this is twofold: first, economists are not quite straightforward about the best semantic and contextual abstractions for this concept, and second – it is really difficult to draw the dividing line between the two since formalism in some way is always an element of mathematical logic. Nevertheless, Dow quoting Chick (1998) argues that “an argument need not be mathematical to be formal” [Dow 1999, 4].

Here, by mathematical formalism we mean a particular way of theorizing, described by Leontief (1971) as a formal application of mathematical methods which becomes a goal on its own, crowding out the initial economic problem. Mathematical formalism significantly oversimplifies reality in order to negotiate it into solvable mathematical equations, obeying the rules of quantitative logic. The paper tries to show that formal judgment affects theoretical representation of real phenomena by translating it into a hypothetical abstraction, unconfirmed by empirical tests and weakening theoretical results.

The goal of this paper is to analyze the main features of mathematical formalism and its implications on economic discipline. Although the study is descriptive, an attempt is made to relate the theoretical findings with empirical data from the two top economic journals, namely American Economic Review and Econometrica. The research gives a brief illustration of the history of mathematics in economics and discusses the significance and future prospects of mathematical tools in economic theorizing.

The remainder of the paper is organized as follows. Section two gives a brief overview of the evolution of mathematics in economics. Section three discusses the limits of mathematical reasoning, preventing it from fully explaining economic phenomena. Section four analyses the features of mathematical formalism as well as examines the availability of alternative methodologies. Finally, section five concludes with the future prospects for the development of mathematics in economics.

2. The Rise and Evolution of Mathematics in Economic Theorizing

“Mathematics is the queen of Sciences.”

Carl Frederick Gauss

Hundreds and hundreds of pages were written in a try to find out how, when, where, and why mathematics entered economics. Researchers still disagree on who was...
the first to introduce mathematical logic to economic theories. There is one thing that seems to be certain – the choice of mathematics as a main powerful instrument for developing economic models was not accidental. Economic historians almost unanimously associate the introduction and diffusion of mathematics in economics with the names of Cournot, Walras, Pareto, Edgeworth, Marshall, Samuelson, Dorfman and Debreu, occasionally adding several other characters to their stories.

While it is a non-trivial task to depict the only “true” variant of the history of mathematics in economics, it might be worthwhile to divide this history into three stages:

- Stage I – prior to 1900: introduction of mathematics in economics
- Stage II – from 1900 to 1944: development of mathematical argumentation in economic theories
- Stage III – after 1944: diffusion of mathematics and its adoption as a main tool of economic analysis

The fundamentals of economics were formed deductively, without reliance on mathematical techniques. Nevertheless, mathematical logic was introduced to economics in the earliest stages of its development. While Adam Smith created his theory based on purely descriptive methods, David Ricardo and other representatives of Classical economics already used simple algebra to support their arguments. The product of the time was the classical economics “corn model”, which did not go beyond elementary mathematical tools.

By the early 1830s economists realized that they could make use of more complex mathematics [Blinder 1999]. The first name to mention in this regard is Antoine Augustin Cournot (1801-1877), who coined and formalized a concept of interactive rationality. Then the development of mathematics in economics was continued by Leon Walras (1834-1910), Carl Menger (1845-1921), Francis Edgeworth (1845-1926) and Vilfredo Pareto (1848-1923). Alfred Marshall (1842-1924) summarized previous findings and popularized optimization technique in his *Principles of Economics* (1890). Even though he targeted a wide audience of non-economists and for that reason organized his book in a simple and comprehensible way, putting mathematical formulation in the footnotes, it is Marshall’s *Principles of Economics* that cemented the methodology of *comparative statics* as well as the deductive mathematical reasoning in economics. John Maynard Keynes (1933) analyzing Marshall’s contributions argued:

The way in which Marshall’s *Principles of Economics* is written is more unusual than the casual reader will notice. It is elaborately unsensational and under-emphatic. Its rhetoric is of the simplest, most unadorned order. It flows in a steady, lucid stream, with few passages which stop or perplex the intelligent reader, even though he knows but little economics...By this stylistic achievement Marshall attained some of his objects. The book reached the general public. It increased the public esteem of Economics [Keynes 1933, 231-233].
The publication of *Theory of Games and Economic Behavior* by John von Neuman and Oskar Morgenstern in 1944, considered as a “turning point” [Debreu 1991, 1] in the history of mathematics in economics, opened new horizons in the application of mathematical logic and signified a new era in economics. The mathematization of economics was finalized by Samuelson’s *Foundations of Economic Analysis* (1947), Dorfman’s *Linear Programming and Operations Analysis* (1958) and Debreu’s *Theory of Value* (1959). These three works strengthened the position of mathematics as a prerequisite for economics, however even the proponents of mathematics recognized that by the early 1990s “…the cost of mathematization sometimes outweigh[ed] its benefit” [Debreu 1991, 5].

Comparing the present and the past of economic analysis one can easily infer that theoretical techniques have undergone profound and dramatic changes. Evidently, economists of the past were not endowed with such powerful and complex mathematical and statistical techniques that theorists enjoy today. In fact, they were constrained by the limited methodology, namely simple arithmetic tools and seldom elementary calculus. Their findings were based for the most part on the intuitive guesses backed up with minimum observations. Rather theorists used common sense and descriptive means to support their ideas. Moreover, little empirical data was available at that time. Discussing this issue Alan Blinder argues:

> When I think about what an economist of the year 1900 would find if he rose from the grave today, I think first and foremost of two interrelated developments: the availability and use of numerous sources of data, and the development of econometric methodology with which to analyze them [Blinder 1999, 3].

However, he continues, this significant drawback of the past did not prevent researchers from forming an important basis for economic theory [Blinder 1999].

Recent advances in mathematics and computer science require from theorists at least familiarity with linear programming, mathematical dynamics and econometrics in order to carry out economic research. Of course, one may argue that it is possible to pursue many disciplines without mathematics based on purely analytical tools. Though this scenario seems quite plausible, such rejection might lead to the loss of many ingenious endeavors. For example, black holes in astronomy were first introduced only as a mathematical abstraction in the relativity theory and only afterwards, with the invention of sophisticated telescopes, scientists found their traces in the space. Taking examples from the history of economics, Leontief initially developed his “Paradox” as a mathematical idea and only then tested it on the U.S. industry data. The mathematical discovery of John F. Nash Jr., published in 1950 in the *Proceedings of the National Academy of Sciences* became a major basis for experiments in game theory in the 1980s-1990s and continues to be of great use in behavioral and experimental economics today. Moreover, with the emergence and progress of computer science and digital technology mathematics became an integral part of everybody’s life. Technically speaking, even the verbal argument typed using the keyboard of a personal computer is nothing else but a sequence of unities and zeros, generated by the complex process of digital coding.
Nevertheless, despite the obvious significance and unquestionable benefits of mathematical tools, the creation of new theoretical concepts forced the preoccupation with mathematics, traced to overrating its possibilities. Alarmed by this overestimation, two presidents of the American Economic Association, Leontief (1971) and Gordon (1976), urged that mathematical formalism might escalate obsession with the technical side of mathematical logic among economists. Moreover, they expressed concerns with the shifted benchmark in economics, judging theoretical findings based solely on the utilization of mathematical and statistical methodology. Particularly, Leontief maintained:

Continued preoccupation with imaginary, hypothetical, rather than with observable reality has gradually led to a distortion of the informal valuation scale used in our academic community to assess and to rank the scientific performance of its members. Empirical analysis, according to this scale, gets a lower rating than formal mathematical reasoning. Devising a new statistical procedure, however tenuous, that makes it possible to squeeze out one more unknown parameter from a given set of data, is judged a greater scientific achievement than the successful search for additional information that would permit us to measure the magnitude of the same parameter in a less ingenious, but more reliable way [Leontief 1971, 3].

Obviously, starting from the second half of the 20th century economic mathematics was stroke by a severe disease of formalism and oversimplification of social phenomena, which built up a non-transparent wall between theory and practice in economics. Moreover, if the researchers of the past often did not have an opportunity to test their hypotheses, today the majority of theorists seem to be ignorant to analyzing empirical data or trying to understand the premises of economic problems. Rather, they engage in the construction of more and new layers of theories around old “core” unverified assumptions.

For centuries, theorists in many social sciences grappled with the problem of interaction between theory and practice. Notably, the American philosopher John Dewey developed one of the most detailed studies of logic as a theory of inquiry, where he addressed the issue of inseparability between ideas and facts. In his Essays in Experimental Logic, Dewey argued that not only theoretical ideas should be tested and proved by empirical facts, they should emerge from reality:

It is said that what makes a man’s idea of his environment true is its agreement with the actual environment and “generally a true idea in any situation consists in its agreement with reality” […] If we exclude acting upon the idea, no conceivable amount or kind of intellectualistic procedure can confirm or refute an idea, or throw any light upon its validity. How does the non-pragmatic view consider that verification takes place? Does it suppose that we look a long while at the facts and then a long time at the idea, until by some magical process the degree and kind of their agreement become visible? Unless there is some such conception as this, what conception of agreement is possible except the
experimental or practical one? And if it be admitted that verification involves action, how can that action be relevant to the truth of an idea, unless the idea is itself already relevant to action? [Dewey 1916, 237; 240-241].

This view was later developed by the representatives of institutional economics. Particularly, Wesley Mitchell argued that economic theorizing should be based on empirical findings and only by verifying hypotheses by observed facts could one make conclusions about social phenomena. According to him, the main problem of economic discipline is that:

too many among us [economists] urge action before we have acquired sufficient knowledge of the practical problems we want to help solve, including their quantitative aspects. Careful deliberation and thorough realistic research are certainly called for before we assume the responsibility of giving advice in the name of our science [Mitchell 1944, 50].

In the late 1960s by analyzing empirical data and connecting facts to their theoretical generalizations, Mitchell’s student, Simon Kuznets created a new field of development economics. Justified utilization of quantitative techniques along with examination of macroeconomic data from underdeveloped countries allowed him to show that these nations were facing problems different from those experienced by industrialized states in the past. By conducting this study, Kuznets not only disproved the previously dominant oversimplified approach to economic development, which argued that all countries undergo standard “linear stages” before they reach prosperity, but also demonstrated the superiority of his methodology over the purely formal derivation.

Some experts argue that the appreciation of mathematics in economics stems from the fact that the majority of researchers, standing at the forefront of economic discipline, were initially trained as mathematicians [Weintraub 2002]. Undoubtedly, one can find historical evidence supporting this argument – Cournot, Edgeworth, Menger, Walras, Marshall, Keynes and many others had a significant background in mathematics before engaging in economic research. However, it seems that the analysis of the discipline’s development starting form second half of the 20th century disproves this argument. A simple look at the list of Nobel Memorial Prize laureates (see Figure 2.1) in economics shows that only 18 (34%) out of 53 Nobel Memorial Prize winners have primarily mathematical training. Furthermore, summing up all “scientific” disciplines on the list of Nobel Memorial Prize winners (mathematics, physics and engineering) yields 44%. Even assuming that the remaining six percent (for which the data is unavailable) were mathematicians, leaves us with 50%. Therefore, it is impossible to explain the mathematization of economics by the presumption that its leading representatives are mathematically intelligent.
Nevertheless, throughout history, mathematics played an important role in economic analysis, gradually increasing its influence on the theoretical methodology of the discipline. Significantly, starting from the middle of the 19th century mathematical logic has gone a long way, developing increasingly sophisticated techniques designed to target economic problems. Today it transformed into one of the main methodological tools of economic enquiry, having made a number of important contributions, which catalyzed the development of economic theorizing. Theorists even believe that economics, dominated by mathematics, is inevitably evolving into science [Blinder 1999]. However, before assessing this issue, one needs to investigate not only the achievements, but also the limits of mathematical reasoning, eroding the theoretical findings of economics.

3. Achievements and Limitations of Mathematics in Economic Analysis

“Much economic theorizing today suffers, I think, because it attempts to apply highly precise and mathematical methods to material which is itself much too vague to support such treatment.”

John Maynard Keynes

Mathematics embellishes economics, providing astute clues to any researcher of how to make his theories more consistent and understandable. In fact, one can hardly imagine how economics would ever be able to progress without numerical techniques.
Mathematics enables one to construct well-structured and elegant models to support the descriptive argument. Obviously, major economic achievements of the past and present in many ways could be traced to the employment of mathematics.

However, mathematics attenuates economics by tying it closely to its own development. In other words, economic models are constrained by the solvability of mathematical equations. Keen (2001) adapted the finding of Costanza (1993) on the technical limitations of mathematical derivations and summarized them in the following table (see Table 3.1):

**Table 3.1: The Solvability of Mathematical Models**

<table>
<thead>
<tr>
<th>Equations</th>
<th>Linear</th>
<th>Non-linear</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One equation</td>
<td>Several equations</td>
</tr>
<tr>
<td>Algebraic</td>
<td>Trivial</td>
<td>Easy</td>
</tr>
<tr>
<td>Ordinary Differential</td>
<td>Easy</td>
<td>Difficult</td>
</tr>
<tr>
<td>Partial Differential</td>
<td>Difficult</td>
<td>Essentially impossible</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>One equation</th>
<th>Several equation</th>
<th>Many equations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liner</td>
<td>Very difficult</td>
<td>Very difficult</td>
<td>Impossible</td>
</tr>
<tr>
<td>Ordinary Differential</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial Differential</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: [Keen 2001, 265].

It could be easily inferred from the table that while being a very powerful tool, mathematics has significant limits. More than half of the categories presented are classified as very difficult, essentially impossible or impossible. Keen (2001) argues that “economic theory attempt to analyze the economy using techniques appropriate to the upper left-hand part of the table […], when in fact the appropriate methods are those in the lower right-hand part (with cells shaded gray)” [Keen 2001, 265]. In fact, it is the lower right-hand part of the table, where the main interests of modern economics lie.

One may argue, however, that this argument is valid only in application to the solvability of equations in a closed form. Indeed, the numerical techniques and contemporary technology enable economists to solve all kinds of equations presented in Table 3.1. However, the result will reveal itself only as a so-called “trivial” solution, in other words, a solution for specific numerical example as opposed to the “general” result.

In order to alleviate this problem economists adopt various assumptions, framing social phenomena into solvable mathematical models. There exists a fundamental duality between reflective and predictive theorizing, traced to the divergence of researchers’ opinions on whether these assumptions should or should not be verified empirically. One of the most radical views, expressed by Milton Friedman in 1953, seems to dominate modern economics. Friedman argued:
Truly important and significant hypotheses will be found to have assumptions that are widely inaccurate descriptive representation of reality, and in general, the more significant the theory the more unrealistic the assumptions [Friedman quoted in Keen 2001, 49].

He went further, saying that what really mattered was not the ability of the theories to explain reality, but rather to predict it. In other words, according to Friedman, economic models could be judged only based on their “predictive value”. Though Paul Samuelson labeled Friedman’s concept an “F-twist”, this approach became widely accepted as the *instrumentalist* view of economics and soon transformed into a popular argument supporting the validity of economic theories irrespective of the underlying assumptions.

Significantly, Friedman never defined the terms ‘assumption’ and ‘prediction’. Discussing Boland’s (1979) article on Friedman’s instrumentalism, Dennis (1986) maintained:

> We could only search in vain to discover what Friedman really-really means by the words ‘assumption’ and ‘prediction’. He repeatedly encloses the word “assumption” in quotation-marks as if to indicate his doubts or reservations about using the word, confiding that “the very concept” (that is, word) is “surrounded with ambiguity” [Friedman 1959, 23] and Section 4 of his essay, intended to clarify the matter, only adds to the confusion [Dennis, 1986, 637].

In opposition to Friedman’s instrumentalism, Leontief argued:

> In the presentation of a new model attention nowadays is usually centered on a step-by-step derivation of its formal properties. But if the author – or at least the referee who recommended the manuscript for publication – is technically competent, such mathematical manipulations, however long and intricate, can even without further checking be accepted as correct. Nevertheless, they are usually spelled out at a great length. By the time it comes to interpretation of the substantive conclusions, the assumptions on which the model has been based are easily forgotten. But it is precisely the empirical validity of these assumptions on which the usefulness of the entire exercise depends. What is really needed, in most cases, is a very difficult and seldom very neat assessment and verification of these assumptions in terms of observed facts [Leontief 1971, 2].

Unlike Freidman, Leontief believed that unrealistic assumptions jeopardize the “reflective value” of the theory, which, he believed, was the most important component of any economic finding. According to Leontief, economic theories could be evaluated only in relation to their efficiency in explaining reality. Surprisingly, similar assessment of economic assumptions could be found in Debreu:
When it [theory] acquires an axiomatic form, its explicit assumptions delimit its domain of applicability and make illegitimate overstepping of its boundary flagrant [...] The assumptions, which cannot be satisfied by all economic observations, are present outcome of a continuing weakening process [Debreu 1991, 3].

Keen (2001) extended Leontief’s argument by explaining the nature of unrealistic assumptions. He distinguished among three types of assumptions, common to modern economics. Notably, he defined negligibility, domain, and heuristic assumptions.

- **Negligibility assumptions** enable a researcher to assume that some factor has no impact on the system, in other words is negligible.
- **Domain assumptions** are “core” assumptions of the theory – if they do not hold, neither does the theory.
- **Heuristic assumptions** state something inherently false to be true in order to disprove it afterwards.

There is another drawback stemming from the employment of mathematical tools in application to social phenomena. Notably, formal mathematical judgment can only deal with observable and endogenous factors. However, elements that are observable exogenous, unobservable endogenous, unobservable exogenous might influence economic systems. Nevertheless, it seems that they all are often assumed away from economic analysis.

Furthermore, constant borrowing from other sciences, especially mathematics and physics, catalyses the transformation of economics into a technical discipline. Though Debreu argued that “in its mathematical form economic theory is open to an efficient scrutiny for logical errors” [Debreu 19991, 3], it seems that formal logic became a source of economic faults of different kind. Obviously, economics can afford to maintain neither a pure logic of mathematics nor the assurance of physics since it deals with more complex phenomena social in nature. Let us prove it by a simple example.

Bentham (1780) first coined the term “utilitarianism”, which later reverberated around the globe. The concept invited numerous interpretations until it transformed into the assumption of rational utility maximizing individual (with complete, reflexive, transitive, monotone, locally non-satiated, convex preferences) as we know it today. This assumption not only allowed for a well-behaved set of characteristics easily put into mathematical terms, but also insured the maximization of consumer’s utility, leaving therefore, the only method of mathematical optimization applicable to the analysis of the hypothetical system. However the assumptions about consumer preferences were not tested until the late 1960s (for example, Tversky 1969) when it turned out that individuals can behave irrationally and, moreover, often do so. Nevertheless, graduate textbooks still use the same terminology and the same set of assumptions as before.

Furthermore, economic experiments and empirical data collection is very different from those in, for example, physics, chemistry and biology. First of all, it is a more complicated and time consuming process. That is why the majority of researchers prefer
to use statistics collected elsewhere rather than try to erect needed data by initiating one’s own empirical study. Second, even if some of them engage in this risky affair and decide to generate their own set of observations, they, however, often face different kinds of biases making the outcome inadmissible for the further analysis (for example the subjects of the survey might be untruthful). Of course, such a situation is unimaginable in physics. Moreover, in pursuing to the data analysis one should be very careful in choosing the correct methodology and appropriate tools.

All these reasons lead to the decline in the number of studies, employing individually generated empirical data. Let us illustrate this statement with several examples. Leontief (1982) conducted a study of the articles in *American Economic Review*, finding that the number of publications containing mathematical models without any data increased by 49.9% from 1972 to 1976 and by 46% from 1977 to 1981. On the other hand, the number of empirical analyses based on data generated by the author’s initiative rose at the same time periods by 0.8% and 1.4% respectively. Based on Leontief’s methodology let us evaluate the articles of two economic journals *American Economic Review* and *Econometrica* from 1991 to 2003 (see Appendices I, II and III).

Appendix I shows the percentage of articles, by type, published annually in *American Economic Review* and *Econometrica*. Though during 1991-2003 works containing mathematical models without any data tended to dominate both journals, this trend was stronger in *Econometrica* (see Appendix I Figure 1.1), where the share of the contributions of this type has never fallen below 50% annually. Moreover, due to the specifics of the latter journal, the number of articles without mathematical formulation and data during the period under consideration was almost negligible (see Appendix I Figure 1.2). Significantly, even though *American Economic Review* outruns *Econometrica* by the percentage of empirical analyses based on the data generated by the author’s initiative, the number of works containing such investigations was very low in both journals (see Appendix I Figure 1.4). Over the last thirteen years their share did not exceed 7% in *American Economic Review* and 3.8% in *Econometrica*. Of particular interest is the overall increase in the number of publications containing economic experiments and simulations in *Econometrica* (see Appendix I Figure 1.8.b) while *American Economic Review* failed to generate a sustained trend in this category (see Appendix I Figure 1.8.a). During the last three years mathematical analysis without any empirical support was very significant for *American Economic Review* (see Appendix III Figure 3.1) and dominated *Econometrica* (see Appendix III Figure 3.2). Another leading category obviously incorporated empirical studies with statistical analysis based on the data generated elsewhere, which recently assumed a leading position in the *American Economic Review*.

Except for the illustrated “blind” mathematization of the theories, economics (especially on the macro level) tries to heal a severe “handicap” – inability to run “controlled experiments” [Blinder 1999]. Keen (2001) gives an example of Margaret Thatcher’s almost textbook monetary policies, which, however, failed to produce all the positive outcomes predicted by Milton Friedman. Explaining this phenomenon, the proponents of monetarism argued that it could be traced to the inability to ensure all
necessary conditions envisioned by the theory. In other words, they claimed that British policy “experiment” was not a controlled experiment. This particular feature of theorizing makes the conclusions “falsifiable”[Popper 1977] - in other words economists can always blame the failure of their theories on inability to perform controlled real-world experiments, where all their assumptions hold.

4. Features of Mathematical Formalism

There are two sides of mathematical formalism. One of them is normally considered as positively influencing economic theories. Dow quoting Backhouse (1998) itemizes the main advantages of formal judgments for economics:

- clarifying what is known through demonstrating what can and cannot be proved;
- enabling a cumulative growth of knowledge since formal arguments may be readily understood by subsequent generations;
- providing an engine for discovery [Dow 1999, 5].

Though the proponents of mathematical techniques in economics, such as Paul Samuelson and Gerard Debreu were optimistic about employing formalism in explaining economic phenomena, other researchers, such as Alfred Marshall, Joan Robinson, John Maynard Keynes, acknowledging the significance of mathematics, however, saw it only as an aiding tool, expressing their concerns about the possibility of absolutization of formalism in economics. Particularly, while Debreu argued that:

Being denied a sufficiently secure experimental base, economic theory has to adhere to the rules of logical discourse[11] and must renounce the facility of internal inconsistency, a deductive structure that tolerates a contradiction does so under the penalty of being useless since any statement can be derived flawlessly and immediately from that contradiction [Debreu 1991, 2-3].

Keynes believed that:

It is a great fault of symbolic pseudo-mathematical methods of formalizing a system of economic analysis…that they expressly assume strict independence between the factors involved…; whereas, in ordinary discourse…we can keep “at the back of our heads” the necessary reserves and qualifications…in a way in which we cannot keep complicated partial differentials “at the back” of several pages of algebra which assume that they all vanish [Keynes, quoted in Dow 1999, 7].

Discussing the problem of mathematization, Leontief (1971) and Keen (2001) argued that economists over the years have abused mathematics, engaging into so-called “inadequate” or “bad” mathematics, plagued by the formalism. Keen (2001) discusses three major drawbacks of mathematical formalism:
“Omitted variables” – some variables are assumed away or thought of as negligible in the model in order to make them transferable into solvable mathematics. One of the most notorious examples of “omitted variable” is the elimination of time from the theoretical set-up [Keen 2001]. Due to the complexity of dynamic models, the researchers prefer to ignore time in their derivations. Another explanation for the elimination of time from economic models was proposed by Foster, who once remarked that “there are not enough verbs in mathematics to account for the forces of “action” or change in the economy.”

“False equations” – some term is simply assumed to be equal to something without any empirical proof. Keen (2001) illustrates this phenomenon by an example of the demand curve faced by the perfectly competitive firm. It is usually assumed to be horizontal as each competitive firm is extremely small and therefore has no impact on the market, taking the market price as given. However, the market demand curve in a competitive framework is downward-sloping, hence requiring all firms to have in one way or another downward-sloping demand curves.

“Unexplored conditions” – the brightest example of such conditions is the assumption that supply curve of the perfectly competitive industry is the same as the marginal cost curve for the monopoly. However, it cannot be proved even mathematically [Keen 2001].

To this classification one could also add such feature of mathematical formalism as oversimplification of reality. Nevertheless, despite its significant disadvantages, formalism seems to exhibit a never ending capacity for survival in economic research. It might be suggested that this phenomenon stems from the ways in which the questions are asked and studies are conducted. Sturgeon (1989) points out that:

The selection of means is based on what is known and how it is known. This selection process is based not only on the “immediate” consequences of a choice, but also the future consequences [Sturgeon 1989, 9].

In fact the deductive procedure of economic research is often predetermined by the assumptions of the model or even earlier by the way the research question is posed. Analyzing scientific inquiry, Dewey (1938) argued:

The nature of the end to which measuring is relative determines both criterion and the method employed. It is as absurd to insist upon numerical measurement when the end to consequence is qualitative, as it is to be content with qualitative measurement (which is then guess-work) in the case of other ends-in-view [Dewey 1938, 205].

However, when the formulation of the problem in itself not only defines specific methodology but also anticipates certain answers to the question or at least their domain, the value of inquiry is forced out of the task, thereby, jeopardizing the result of economic study. Veblen (1909) maintained that economic theorizing suffers from a severe disease:
The two methods of inference – from sufficient reason and from efficient cause – are out of touch with one another and there is no transition from one to the other; no method of converting the procedure or results of the one into those of the other. The immediate consequence is that the resulting economic theory is of teleological character – deductive or “a priori” as it is often called – instead of being drawn in terms of cause and effect [Veblen 1909, 4].

It appears that the prescription to cure this illness of economic discipline reveals in many propositions, one of which was articulated by Leontief (1954):

Direct factual study and quantitative descriptions of the structural properties of the economic system, detailed in content, comprehensive in coverage, and systematically designed to fill the specific requirement of an appropriate theoretical scheme, seem to offer the only promising approach to empirically significant understanding of the operational characteristics of the modern economy [Leontief 1954, 230].

Today, the advances in computer technologies create several ways for implementation of the suggested therapy, which is capable of alleviating the problem of mathematical formalism. Notably, system dynamics and computer simulations could be employed to carry out research. First proposed by Jay W. Forrester (1961), system dynamics offers methodological tools for assessing and monitoring complicated “feedback” systems social in nature. It includes several stages:

- “identification of the problem;
- development of dynamic hypothesis explaining the cause of the problem;
- building a computer simulation model of the system at the root of the problem;
- testing the model to be certain that it reproduces the behavior seen in the real world;
- devising and testing in the model the alternative policies that alleviate the problem;
- implementation of the solution.”

System dynamics methodology requires constant reviewing and refining earlier steps and hypotheses of the research. This allows for better specification of the problem and development of dynamic approach to finding the solution.

Though computer simulations are incorporated in the system dynamics approach, they could also stand as a separate methodological tool. Representatives of evolutionary economics, particularly Vriend (1995), Arthur et al. (1997), Tesfatsion (1997), Dosi (1999), Gigerenzer (1997), made significant contributions to the employment of computer simulations in investigating economic phenomena. The value of this method lies in the fact that economics is treated as social and open system. Valente (1999) argues that “being freed from the constraints of building a model that admits analytical solutions
allows for a more realistic representation of economic phenomena.” The elements of computer simulations method were specified by Tesfatsion (1998):

- agents are treated as semi-autonomous and heterogeneous and are evaluated based on their actual behavior;
- broad range of interactions among agents: for instance, cooperation or imitation are considered crucial for the analysis;
- “selection operates on individual agents, rather than being the property of population”;
- the model is developed from the “computational descriptions of the entities involved” [Tesfatsion quoted in Valente 1999, 13].

Computer simulations allow not only to perform dynamic analysis, but also to construct an evolving model, which has a capacity to adjust to the changing inputs. Unlike traditional computer programs, simulations do not require manual changes of all variables as a result of shift in one of them. This task could be performed automatically, creating new opportunities in analyzing complex systems, especially those of social nature. However, despite their indisputable potential, both system dynamics and computer simulations are still in their infancy, traced to endogenous and exogenous constrains ranging from the insufficiency of technological capabilities to the difficulties in collecting the actual data. Meanwhile, the problem of preoccupation with formal mathematical logic in economics is far from being solved. Despite several positive features, the drawbacks of mathematical formalism seem to outrun its advantages. Formal reasoning, focusing on mathematical tools alone, puts the process of technical derivation in imperative of economic theorizing, jeopardizing the practical value of economics. With this respect, the future development of mathematics in economics acquires particular importance.

5. Conclusion

Mathematics is a universal language adopted by many disciplines ranging from biology to economics. This language, designed to express academic ideas in a more efficient way, endowed humankind with numerous findings, including those in the area of economic theorizing. However, the overestimation of mathematical capabilities and the application of formal logic as a major method of economic reasoning, reallocate the emphasis in the theoretical framework transforming mathematical formalism into a purpose of theorizing within the economic discipline.

Obviously, this tendency is very strong and could be expected to become even more significant in the future. One can expect further development of quantitative methodology in economics, including mathematical, statistical and econometric techniques, supporting economic research. This trend, spurred by the new technological advances, might result in the further aggregation of mathematical formalism.

Therefore, the main objective of contemporary economics, as a complex discipline incorporating social, natural, and technical sciences, is to effectively compromise among different kinds of methods, enabling it to ensure the gradual progress
towards the development of new theories, which would not only predict but also effectively reflect economic reality. The ability of economics to analyze and construct theories based on empirically verified assumptions as well as on the rate of its success in enlarging the field of its application will define its chances to solve methodological problems and alleviate the negative effects of mathematical formalism. Only by doing so will economics be able to regain the balance between theoretical findings and empirical evidence as well as revisit its role in social planning.

Notes

3. It should be noted, that the example of Nobel Memorial Prize laureates could not be used to derive any conclusion on the academic training of the whole population of economists, however, as The Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel is considered as one of the most prestigious in the discipline, it could be anticipated that these economists made significant contributions to the development of economic discipline and therefore, in many ways, were determining the past of mainstream economics over the last four decades.
4. following Godel’s axiom, that proved the failure of mathematical systems to be self-contained (Keen 2001).
5. Though it is not within the scope of this paper to examine the phenomenon of instrumentalism, it should be pointed out that Friedman’s instrumentalism is distinct from the original instrumentalism of John Dewey (1938). Particularly, Dennis (1986) argues that Dewey himself certainly did stress the role of prediction. But it is quite misleading to say that Dewey’s instrumentalism was founded upon the idea of success-in-prediction as the criterion for appraising and choosing between alternative scientific theories or to interpret workability as mere predictive success [Dennis 1986, 634].
6. The idea is borrowed from one of the problems in the problem set, offered by Dr. Frederic S. Lee in his graduate course of Microeconomics at the University of Missouri – Kansas City
7. However, recent developments in game theory, experimental and behavioral economics allow researchers to perform a well-controlled experiment, creating incentives that a subject behaves exactly as in a real-world decision making setup.
9. For a better understanding of the direction of movement in the groups of articles under consideration, Appendix II shows the annual percentage change in different categories of publications during 1991-2003.
10. Popper was particularly concerned about the possibility to falsify conclusions in social sciences. For more on Popper’s discussions of falsifiable conclusions in scientific theorizing, see Popper (1977) The Logic of Scientific Discovery, Routledge, 14th Printing.
11. However, Debreu neither explains what exactly stands behind the term “logical
discourse” nor defines any of its essential elements.
12. Quoted as heard on one of the lectures given by Dr. James I. Sturgeon in his
Advanced Institutional Economics course at the University of Missouri – Kansas
City (Winter 2004).
13. Quoted from the web page of the System Dynamics Society at
http://www.albany.edu/cpr/sds

References

Amman, H., Rustem, B., and Whinston, A. (eds.). *Computational Approaches to
Arthur, W.B., Durlauf, S.N., and Lane, D. *The Economy as an Evolving Complex Systems
II*, Santa Fe Institute Studies in the Sciences of Complexity, Addison Wesley,
1997.
Backhouse, Roger E. “If Mathematics Is Informal, Then Perhaps We Should Accept That
1848–1858.
http://dictionary.cambridge.org/ on 02/12/2004
Chick, Victoria. “On Knowing One’s Place: The Role of Formalism in Economics,”
633-660.
Assessment of the Evolutionist and Regulationist Research Programs,” in Nielsen,
Dosi, G., and Egidi, M. “Substantive and Procedural Uncertainty: An Exploration of
Economic Behaviours in Complex and Changing Environments,” *Journal of
1916.
Dow, Sheila C. “The Appeal of Neo-classical Economics,” *Cambridge Journal of
______. *The Use of Mathematics in Economics*, 1999, accessed at
http://www.ioe.ac.uk/esrcmaths/sheila1.html on 01/26/2004


Appendix I

Figure 1.1  Mathematical models without any data (percentage to the total number of articles published annually) in *American Economic Review* and *Econometrica*

Figure 1.2  Analysis without mathematical formulation and data (percentage to the total number of articles published annually) in *American Economic Review* and *Econometrica*

Source: Figure 1.1 and Figure 1.2 were compiled from data in *American Economic Review* and *Econometrica* 1991-2003
Figure 1.3  Statistical methodology (percentage to the total number of articles published annually) in *American Economic Review* and *Econometrica*

Figure 1.4  Empirical analysis based on the data generated by the author’s initiative (percentage to the total number of articles published annually) in *American Economic Review* and *Econometrica*

Source: Figure 1.3 and Figure 1.4 were compiled from data in *American Economic Review* and *Econometrica* 1991-2003
Figure 1.5  Empirical analysis using indirect statistical inference based on data published or generated elsewhere (percentage to the total number of articles published annually) in *American Economic Review* and *Econometrica*

Figure 1.6  Empirical analysis not using indirect statistical inference based on data generated by author (percentage to the total number of articles published annually) in *American Economic Review* and *Econometrica*

Source: Figure 1.5 and Figure 1.6 were compiled from data in *American Economic Review* and *Econometrica* 1991-2003
Figure 1.7  Empirical analysis not using indirect statistical inference based on data generated or published elsewhere (percentage to the total number of articles published annually) in *American Economic Review* and *Econometrica*

Figure 1.8  Empirical analysis based on artificial simulations and experiments (percentage to the total number of articles published annually) in *American Economic Review* and *Econometrica*

Source: Figure 1.7 and Figure 1.8 were compiled from data in *American Economic Review* and *Econometrica* 1991-2003
Appendix II

a. American Economic Review

Figure 2.1 Mathematical models without any data (percentage change to previous year) in American Economic Review and Econometrica

b. Econometrica

Figure 2.2 Empirical analysis using indirect statistical inference based on data published or generated elsewhere (percentage change to previous year) in American Economic Review and Econometrica

Source: Figure 2.1 and Figure 2.2 were compiled from data in American Economic Review and Econometrica 1991-2003
**Figure 2.3**  Empirical analysis based on artificial simulations and experiments (percentage change to previous year) in *American Economic Review* and *Econometrica*

**Figure 2.4**  Analysis without mathematical formulation and data (percentage change to previous year) in *American Economic Review*

**Figure 2.5**  Empirical analysis based on the data generated by the author’s initiative (percentage change to previous year) in *American Economic Review*

Source: Figure 2.3, Figure 2.4 and Figure 2.5 were compiled from data in *American Economic Review* and *Econometrica* 1991-2003
Appendix III

Figure 3.1 Annual shares of different types of articles published in American Economic Review from 2001 to 2003

Source: Compiled from data in American Economic Review 2001-2003
Figure 3.2  Annual shares of different types of articles published in *Econometrica* from 2001 to 2003

Source: Compiled from data in *Econometrica* 2001-2003
Reflections on the Empire of Capital

By Kevin Young

Institute of Political Economy, Carleton University

Ellen Meiksins Wood has contributed a great deal in recent years to the debate on the origin and nature of capitalism. Both Empire of Capital (2003) and an earlier work, The Origin of Capitalism (2002) argue that the historical uniqueness of capitalism lies in the way that it transforms the market from a source of opportunity into an imperative, thus instituting a system of uniquely economic coercion. Market dependence ensures that the propertylessness of producers and the rigorously competitive environment of appropriators drive the former to sell their labour on the market and the latter to engage in profit maximization through improvements in labour productivity. For Wood, the “...basic objective of the capitalist system...is the production and self-expansion of capital” [Wood 2002, 3]. The imperatives of competition, accumulation, and profit maximization mean that “exchange-value” is put before “use-value,” and, in Wood’s terms, “profit before people” [Wood 2003, 14].

Drawing heavily on this conception of capitalism, Wood’s recent book Empire of Capital is an impressive work that provides valuable insight into the debates about globalization and modern imperialism by contrasting many of history’s “great” empires against each other, and by discussing the uniqueness of the present capitalist empire. Unlike former colonial empires, which “dominated territory and subject people’s by means of “extra-economic” coercion, by military conquest and often direct political rule,” capitalist imperialism is able to exercise its rule through economic means, by “manipulating the forces of the market” [Wood 2003, 12]. While insistently emphasizing that modern empire is as dependent as ever on states for its reproduction, Wood relies on her trademark characterization of capitalism as an historically unprecedented system under which market imperatives constitute the distinctive form of social governance in society. While “extra-economic” coercion, annexation of territory, and the pursuit of trade are common to all forms of empire, the British imperial project was the first to be driven and rationalized by the logic of capitalism. Likewise, today’s global capitalist empire is driven by similar imperatives, but with more a frightening degree of coercive power accompanying it than in any previous time. While Wood is careful to emphasize that the internationalization of capitalist imperatives was aided in some significant instances by the dynamics of military rivalry, such as the pressure of military capacity faced by France and Germany in response to an industrializing capitalist Britain [Wood 2003, 119], her emphasis is clearly on the importance of states in reproducing the conditions for capitalist reproduction. For Wood, although the dynamics of economic coercion provided by the market mechanism are a distinctive form of social governance, such a dynamic is made possible by a system of multiple states:
Kevin Young

The very fact that ‘globalization’ has extended capital’s purely economic powers far beyond the range of any single nation state means that global capital requires many nation states to perform the administrative and coercive functions that sustain the system of property and provide the kind of day-to-day regularity, predictability, and legal order that capitalism needs more than any other social form [Wood 2003, 114].

While Wood’s argument is decidedly materialist, she does not neglect the importance of intellectuals and ideas. An admirable feature of Empire of Capital is that different key intellectuals are associated with the imperial ambitions of their respective sovereigns. Hugo Grotius, for example, with his “just war” theory and emphasis on international conflict, is associated with the Dutch commercial empire. William Petty and John Locke – theorists who devoted much of their attention to an explicit defense of expropriation of land based on new and distinct theories of value – are associated with British imperialism. For Wood, it is the particular rationalization of “improvement” based on potential exchange-values of land that provided the justification for land expropriation, and the administration of capitalist property rights during subsequent development. The way that empire was executed and rationalized in the British empire was different in this respect. The logic of capital was extended even further after the First World War, this time with the United States at the primary helm of dominance.

While the above description certainly does not do justice to the many subtleties of her argument, many could rightly identify obvious shortcomings with her conception of capitalism. Several shortcomings immediately come to mind: the existence of oligopoly; the role of finance making market imperatives less imperious; the partial socialization of many capitalist societies; and the absence of the absolute propertylessness of producers in advanced capitalist countries all complicate her system and certainly challenge its totalizing character.

At the same time, Empire of Capital emphasizes extremely well the fact that governance and coercion occur in a historically unique manner under capitalism; that social governance often operates through market imperatives. For all the post-structuralist and Neo-Gramscian critiques of Neo-liberalism that currently proliferate within the critical “globalization” literature, it is enlightening to have an author explain the consolidation of rule not just by the advanced organization of a hegemonic bloc or by particular “discourses,” but to take matters back to the inner logic of capitalist development. To be sure, Wood is adroit in emphasizing the importance of states in managing capitalism’s requirements or in consolidating conformity to the logic of capital. Her emphasis (and her insight above many others) however, is that in capitalist societies, the governing dynamic of market imperatives acts as a substitute for “traditional” forms of more direct and conscious social governance. This is not to say that such a dynamic is without its limits or ideological accompaniments. For Wood, the separation of the political from the economic in capitalism is an important quality that has assured its long life thus far, since the moment of appropriation and the moment of coercion appear to be separated.
While emphasizing these points repeatedly, Wood recognizes that social dislocation and the existence of collective human agency can potentially subvert and disrupt capitalist development. Correspondingly, in *Empire of Capital*, she emphasizes that it is the modern state (or, rather, states) that must facilitate the periodic correction of deviant subjects, both in the global system of states and within states themselves. While this emphasis should not be disregarded in its importance, it is the unique dynamics of the capitalist market which is understood to be the predominant form of social governance in modern empire. To be sure, the behavior of states and the market imperatives that predominate under capitalist production relations clearly affect one another: part of the point of *Empire of Capital* is that the contradictions that arise from capitalist economic and social (dis)organization encourage military aggression in order to keep deviant global actors disciplined. The United States is cited as the state taking the dominant lead in this regard during the present capitalist empire. While such an analysis is of great value in helping to understand current world (dis)order, one could argue that her emphasis on market imperatives doesn’t go far enough in explaining the unique role that markets play in facilitating social governance under capitalism.

Wood’s emphasis on the historical uniqueness of capitalism because of its market imperatives acting as a form of social governance (i.e. not simply as a strategy of economic appropriation) can be extended to understand how the “disruptive tendencies” and the “ravages of the market” are increasingly not only addressed by states, but also by the market itself [Wood 2003, 25]. Wood is correct that the compulsions of competition, accumulation and profit-maximization “constantly threaten to disrupt the social order,” but her depiction of the “extra-economic” practices and institutions of states compensating for such destructive tendencies is somewhat misleading [Wood 2003, 16]. It is misleading in the sense that it neglects the manner in which the composition of what is being produced, exchanged and consumed on the market is itself conditioned by the social disruption that capitalism generates. Whether or not one accepts the claim made by Michael Hardt and Antonio Negri (2000) that the process of formal subsumption to capital has been consolidated, what does seem to be an increasingly evident characteristic of capitalist societies is the intensive expansion of markets into spheres of everyday life on a level that was not present before. “Capital no longer looks outside but rather inside its domain, and its expansion is thus intensive rather than extensive” [Hardt and Negri 2000, 271-2]. What this means is that when the market imperatives that Wood alludes to disrupt social relations in some adverse way, the market may substitute for some of the burden of social governance provided by the state by introducing commodities that provide “treatment” for the adversities that people experience.

A subtle, yet perhaps increasingly important dynamic within liberal capitalist societies is the market’s function as a form of non-disciplinary social governance in which the psychological, social, and environmental adversities generated by Neo-liberal restructuring actually stimulate market activity. There is little doubt that the International Labour Organization’s recent warning of a rising “world epidemic” of serious mental health disorders (which was linked to increased stress in the workplace) can be attributed to the kind of market imperatives to which Wood so adroitly alludes are sweeping the planet [ILO 2000, and Chomsky 2002]. Without a doubt, states may be compelled to
respond to this in a diversity of ways. But hasn’t the Pharmaceutical industry, which benefited from an 800 percent increase in antidepressant use over the course of the 1990s in the United States, had an important placating effect on this development? [Lasn 2002] In an attempt to understand how socio-economic forces destabilize social relations within American and Japanese households, Arlie Russell Hochschild has recently pointed out that there exists an expanding “commodity frontier” which provides commercial substitutes for the physical and emotional needs of families experiencing the manifold stresses of Neo-liberal restructuring [Hochschild 2003]. As some Green political economy and ecofeminist literature have also pointed out, environmental devastation routinely produces new markets for environmental cleanup, stimulates economic activity, and contributes to the GDP [Halstead and Cobb 1996, 197-206]. Some of the most groundbreaking work in theoretical criminology has recently explored how the perception of violent crime in many communities has created a new market for private security companies [Rigakos 2002, Shearing and Stenning 1983, and Tinsley 1999]. The ways in which private security provision has manifested at the international level also speaks to this issue of “disorder” creating new markets [Shearer 1998a, 1998b, and 2001, Singer 2001/2002, Sheppard 1998, and Davis 2000]. The market activity in all of the above examples, it should be emphasized, is not politically neutral; indeed, the changing composition of what is being produced, exchanged and consumed on the market is increasingly explicitly oriented toward “treating” the “social disorder” that is itself been produced by the imperatives of the market that Wood describes.

States may still face the burden of actively mitigating the “ravages of the market” both nationally and internationally, but most of the problems that arise only need to be actively mitigated once capitalist contradictions has been recognized, informed through some kind of social theory, and then translated into political action which is actually or potentially destabilizing to the legitimacy of the kind of social order which capitalism requires. What the intensive expansion of markets ensures is that this linkage between people’s objective material circumstances and their conscious agency becomes blocked – not because they were ideologically deceived or misled regarding what forms of action are possible, but because the raw sense of experiencing a culmination of adversities and contradictions is hidden from view in the first place. The effects of alienation arising from the radical labour market restructuring illustrated in the above ILO example may be mitigated, for example by depression medications, the burgeoning market for self-help literature, and even through the consumption of an ever diversifying plethora of commodities designed explicitly to “help people cope.”1 Such an economic dynamic, which might be called an “economy of passive mitigation,” is a dynamic that can be seen as inextricably linked with capitalist empire as Wood defines it.2

Although such a function of the market is in some ways at odds with Wood’s emphasis on the role of the state in facilitating social governance amidst capitalist contradiction, other aspects of her analysis are helpful for making sense of such a market dynamic. It is instructive, for example, that the intensive expansion of markets is enabled by the ideological separation of the “political” from the “economic” that Wood reminds us is distinct to the capitalist ideological milieu. Indeed, the production, distribution, and consumption of commodities that are designed to “treat” many social adversities are
rarely (if ever) politicized, due to the relatively unquestioned penetration of commercial activity into nearly every sphere of life. Through Wood’s emphasis on market imperatives, it is also possible to conceptualize that the kind of imperatives that produce the “ravages of the market” are the same imperatives that induce the kind of intensive expansion of markets in the first place, which in turn serve to substitute for the social governance role of states. While it is without question that states play a crucial role in facilitating the kind of social governance roles that are alluded to in Empire of Capital, the conception of an “economy of passive mitigation” may prove to be a useful supplement to future analysis of capitalist empire.

Notes

1. The ability to 'mitigate' with such consumption is of course itself limited by individual purchasing power, and by personal access to credit markets; when people cannot purchase commodities for 'treatment,' then important limits are placed on this dynamic.

2. For a full explication of this approach, see Young (2004).

References


Kevin Young


In this very rich and enlightening volume, a group of experts in political economy undertake the task of discussing and clearing up the thesis developed by Charles A. E. Goodhart in his *European Journal of Economy* article entitled “The Two Concepts of Money: Implications for the Analysis of Optimal Currency Areas” (1998). The article in question stems from the indisputable observation that the debate on the merits and the weaknesses of the euro was carried out almost exclusively in reference to the theory of optimal currency areas. For C. A. E. Goodhart, the form taken by this debate clearly illustrates the domination of a particular approach to the nature and evolution of money, known as the Metallist approach, which does not have a real historical or empirical basis. Goodhart thus prefers the Chartalist approach to the Metallist optimal currency areas approach because according to him it is in conformity with the facts and is better capable to clarify the stakes of the European monetary integration.

The book is thus articulated around the opposition between these two approaches to money on historical, theoretical and policy levels. According to the Metallist approach, money evolved in a spontaneous way, through a process of the minimization of transactions costs carried out by private agents without any action taken by the State. This conception brings to consideration the historical evolution of the means of payment from the least efficient form (barter) to most efficient one (credit), while passing by coins and fiat money. Within such framework, the idea that a currency is established and used without reference to national borders given is completely natural, since in fact private economic exchange determines (or should determine) the form taken by the means of payment.

The Chartalist approach, however, conceives of money as an instrument of political sovereignty. A tool created and designed by public authorities with the aim of simplifying and of making coherent the system of payment of debts and taxes. This is no guarantee that the means of payment will evolve from the least efficient to most efficient form. In fact, the emergence and the replacement of a monetary form by another would obey more to the institutional upheavals than to a random drive for economic efficiency.

The contributors to this volume take turns highlighting the opposition between the Chartalist and Metallist approaches either by trying to redefine it, deepen it, revalue it, or quite simply by employing it as a starting point of a broader or more targeted analysis. Michael Hudson (chap. 3), for example, uses the debate launched by Goodhart as a frame of reference for an overall historical exposition retracing the evolution of monetary management from ancient Mesopotamia to modern days. Hudson’s account constitutes not only support for the Chartalist approach (an approach largely enriched by the author) but also a plea for the return to finance for the service of production and development instead of the current system which is far too favorable to creditors and speculators.
Another chapter to be noted is that of Edward Nell (chap. 6), which seeks to go beyond the “ideological” and historical controversy by treating the Chartalist and Metallist approaches as the reflections of alternative monetary systems both of which have an indisputable real range. The Metallist approach refers to the systems in which the issued currency gets its value from its convertibility into a real commodity (generally gold). In such systems, the existing reserves of real standard play the role of automatic stabilizer of the value of the currency in circulation. The Chartalist approach, however, refers to our modern systems, which gave up convertibility for the benefit of the more flexible mechanisms of creation and destruction of liquidity, which means the disappearance of any automatic stabilizer with the risk of an uncontrolled expansion of credit and expenditures leading to the persistence of inflation.

On the basis of these principles, Nell supports in a rather convincing way that the euro is a Chartalist system built with the aim of functioning like a Metallist system, with automatic-stabilizing mechanisms (the stability pact) intended to prevent any demand-pull inflation. The resulting policy is thus characterized by an austerity and a rigidity that is incompatible with the needs for a modern policy of growth and fight against unemployment. In order to avoid this dead-end road, Nell proposes to reject the current policies for the benefit of a system that makes it possible to combine the flexibility offered by Chartalism with a similar stability, in principle, to that of Metallism; namely the policy of employer of last resort (ELR) in which the stock of job-seekers plays the role of automatic stabilizer of the budgetary expenditure and the wage bill. Here Nell agrees largely with L. Randall Wray (chap. 5) and with many Post Keynesians who see the Chartalist approach (a vision close to that of Goodhart) as a basic foundation of their doctrine.

One of the most important contributions to the debate is that of Eric Helleiner (chap. 4) who shows, inter alia, the significant character of the concept of transaction costs even within the Chartalist approach. Indeed, the search for the most efficient monetary system also interests the State for several reasons, initially to facilitate and homogenize the fiscal system, then to simplify the economic life of its subjects or citizens.

The richness of the contributions contained in this volume is such that even a summary report of all the chapters and of all the analyses is impossible to present in a few paragraphs. As a proof, C. A. E. Goodhart, the man who is at the origin of the debate, felt the need to comment on the work of the various contributors at the end of the book (chap. 9). His chapter, quite simply entitled "A Reply to the Contributors," offers a sort of synthesis of the main ideas developed in the book. Reading this chapter, as well as first chapter, constitutes, in my opinion, the least one can do in order to have a precise idea of the multiple facets of the book and its theoretical and practical implications.

For everyone interested in monetary history, The State, the Market and the Euro represents without any doubt a reference to know and to study. In this context, the chapters by Hudson, Wray, and Guttman (chap. 7) are to be noted. For those rather concerned with theory and monetary policy in their noblest sense, Nell’s chapter constitutes a real enrichment. Lastly, for all Institutionalists, this book makes it possible to clearly display the stakes of a coherent and global institutional approach to monetary questions.
The *raison d'être* of the book remains of course the reexamination of the architecture and the theoretical bases of the current European economic policy. In that, the predictions and criticisms of the authors (in particular those of C. A. E. Goodhart and Stephanie Bell) find a broad echo today. Indeed, the limits of the Stability Pact do not need to be demonstrated. The ECB seems unable to carry out anything but an anti-growth policy. In spite of that, the constitutional treaty recently ratified by the EU leaders leads almost to the same institutional structure with the same sterile separation between severely constrained national fiscal policies and a supranational and conservative monetary policy. All things considered, nothing leads to the belief that in the near future the European construction will move towards a true political and fiscal union, making it possible to counterbalance and equilibrate the existing monetary union.

Reviewed by Shawn J. Gebhardt
University of Missouri – Kansas City

“It appears obvious that, at the very least, it is preferable to pay people for showing up to work than to pay them to stay home” [Wray 1998, 178].

In Understanding Modern Money, L. Randall Wray lays out a thoughtful and compelling case for a paradigm shift among economists, policymakers, and the general public. Specifically, he explains why the way in which modern economies operate forces policy makers to choose between lower rates of unemployment or higher rates of inflation and why a third alternative exists. This alternative amounts to establishing the federal government as an “employer of last resort” (ELR), thereby guaranteeing a job for every citizen ready, willing, and able to work. An ELR program, Wray argues, potentially offers the best of both worlds to a government that desires to maintain full employment with price stability. Wray also identifies why he and others share the belief that such an alternative has yet to be widely embraced: most of us fail to understand the nature of modern money. It is impossible to convey the nuances of the author’s analysis in the limited space presently available, so here I shall merely present a very basic outline.

Wray’s analysis rests on two major themes: the Chartalist view of money and Abba Lerner’s “functional finance” approach. The Chartalist, or “taxes-drive-money” view holds that money has value because it is required by the state to pay taxes. This stands in contrast to the (prevailing) Metallist view, which maintains that money has value because it is backed by either some precious metal (i.e., gold or silver) or by the “full faith and credit” of a sovereign government (i.e., government fiat). The Chartalist view demonstrates that a sovereign government can choose to accept anything from its citizens for payment of taxes – pieces of wood, plastic, stones, etc. – and those things will immediately have value. This value emerges not because of the object’s inherent desirability, but because suddenly everyone who is subject to government taxation must have a sufficient amount of “that which is necessary to pay taxes” (what Wray refers to as ‘twintopt’). Put differently, it is the state’s ability to punish those who fail to pay that creates demand for money, and thus gives money value. The Chartalist view is therefore based on the State’s power to extract real goods and services from its citizens. Chartalism’s relevance to the issue at hand is that it establishes the principle that (legitimate, sovereign) governments are fully in control of their monetary systems – more so than those who accept the Metallist position are willing to admit – and this has important ramifications. In particular, the Chartalist view maintains that the federal government doesn’t “fund” its operations through tax revenue and bond sales. As we have seen, the government doesn’t have to “fund” its operations at all – it merely has to
Shawn J. Gebhardt

persuade citizens (by taxation) to provide it the goods and services it requires. Government controls money, not the reverse.

The second major component of Wray’s analysis, Lerner’s concept of functional finance, is based on two fundamental principles: First, that it is the government’s responsibility to ensure an adequate level of spending so as to maintain full employment, and second, that the government should use banks as fiscal agents, and should sell bonds or raise taxes only if private spending would otherwise create excessive aggregate demand. Functional finance implies that so long as a nation’s government retains control over its sovereign currency, it needs not fear that there are significant limits on its power to affect its real domestic conditions. Lerner’s concept is “functional” as opposed to “sound” finance because Lerner took issue with the conventional doctrine of operating a nation’s finances as one might operate one’s own – the two are subject to different rules. The implication is that the mainstream aversion to “large” (a subjective term) structural deficits are misplaced, and that such deficits are not only harmless, but necessary and desirable. The significance of Lerner’s (and Wray’s) assertion is difficult to overstate, and it is one I must admit I find difficult to accept. That being said, its invalidity would not seem to necessarily cancel Wray’s specific policy proposal (an ELR program); it would simply make it more politically difficult to implement.

The two streams of thought run together in Wray’s employment proposal. By serving as employer of last resort, he argues, the federal government establishes a “buffer stock” of labor, which provides countercyclical stabilization to the economy. Such a buffer stock would act, as did gold under the gold standard, to stabilize prices: “…just as a gold standard ensures that gold is always ‘fully employed’ (‘idle’ gold can always be sold to the government at the fixed price if it is not desired as a hoard), the ELR ‘labour’ standard ensures full employment of labour” (Wray, 135). These two benefits are, of course, in addition to the more obvious one – that structural unemployment, at least as most commonly defined by economists, all but ceases to exist. Of course some unemployment would remain, but it would largely be isolated to those in society unready, unwilling, or unable to work; or those who fail to conform to the minimum requirements of the government’s ELR program.

Wray makes several clarifications about his proposed ELR implementation. First, by establishing basic public sector employment (BPSE) at the basic public sector wage (BPSW), the government wouldn’t seek to displace current public sector workers, force the unwilling or disabled to work, or try to “rob” the private sector of employees. The goal is merely to create a reservoir of guaranteed jobs for those who can’t find work in the private sector. Further, while it is clear that an ELR program would dramatically reshape a nation’s needs in terms of its system of social safety nets (welfare, workfare, disability insurance, food stamps, etc.), it would by no means eliminate the need for any of these. Wray notes, “We recognize that ELR alone cannot resolve all employment, unemployment, underemployment, low income, and disability problems. We do believe that it offers a major improvement over the current situation” (Wray, 125).
Wray’s work is highly recommended even though many readers who remain outside or on the fringes of heterodoxy (particularly those who identify themselves as ‘free agents’) may remain unconvinced or half-convinced. Understanding Modern Money forces the reader to reexamine much of what she takes for granted – and in doing so presses her to defend, modify, or cast off ideas which were previously accepted uncritically. At the same time, Wray constructs a fascinating alternative that offers the promise of a society which can “have its cake and its eat, too”. Whether one buys Wray’s arguments or not, the author is commended for approaching capitalism’s oldest problem in a fresh and rigorous manner. Readers will finish Understanding Modern Money with new appreciation for Keynes’ words: “The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is generally understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist” (Keynes, 383).

References


 Reviewed by Linda Hauner  
 University of Missouri – Kansas City

The essays in this volume constitute the theoretical background of, and the policy prescriptions for, the concept of “chock full” employment, as originally envisioned by William Vickrey. The authors show that contrary to the widely accepted notion of the non-accelerating inflation rate of unemployment (NAIRU), it is possible – indeed, imperative, for the federal government to provide employment for all job-seekers, and that such a policy will not result in uncontrollable inflation. For anyone unfamiliar with the work of Vickrey, or with full employment theories in general, it would be best to start this book by reading the two Vickrey essays at the end of the book – they are a concise, less technical explanations of how such policies will work, and why they will not result in the negative impacts that are so widely ascribed to them. They are an excellent introduction to the essays contained in the rest of the volume.

Despite the fact that the Vickrey essays are oddly located at the back of the volume, the essays have a well-organized flow, beginning with Mathew Forstater’s explanation of the theoretical foundations of full-employment policies and an explanation of Vickrey’s concept of “non-spending” that forms the core of several arguments found later in the volume. From this starting point, the essays are divided into three major areas. The first section contains essays that elaborate and expand on the concepts of full-employment and provide the theoretical underpinnings for the rest of the work. Papadimitriou and Harvey follow this essay with explanations of the mechanism by which the government can provide for full employment, which is to act as the employer of last resort (ELR). ELR programs are a direct mechanism through which the federal government provides employment to anyone ready, willing, and able to work. This sets a floor to wages and eliminates structural and cyclical unemployment.

The second group of essays deals with the implications of ELR for the concept of the welfare state. Gertrude Goldberg provides a comparative historical narrative of the critical differences between the welfare programs in the United States and the full-employment programs initiated in Europe during beginning in the late 1930s. She shows how welfare programs in the United States have historically fallen short of Vickrey’s chock full employment goals. Helen Ginsburg follows this with an explanation of what should be changed in our welfare programs to achieve the benefits of Vickrey’s vision. These two essays are an expansion of Vickrey’s ideas that can be easily understood by readers without an economics background. Heather Boushey provides a more analytical and theoretical approach based on Marx in her essay, as she examines the problems of unemployment and discrimination. She effectively ties together the social problems of inequality and poverty to unemployment, and a sound theoretical basis for the benefits of full employment programs.
The final group of essays discusses the implications of full employment policies for the global economy. In this section, two competing views of the present floating exchange rate system are presented. For Paul Davidson, full employment on the global scale means nothing less than rethinking the flexible exchange rate system of the post-Breton Woods era, and recalls Keynes’ prescriptions for an international payments system. Thomas Palley provides a short answer to this argument, citing other reasons for the post-war expansion beyond the fixed exchange rate system. This section shows that while there may be some consistency in theories regarding implementing Vickrey’s ideas domestically, there are some issues that must be worked out for global implementation.

James Kenneth Galbraith provides the final chapter for this work, and it is his article that sums up the primary difficulty for implementing Vickrey’s programs: the lack of access to or support from policymakers. He says that, for these programs to be taken seriously, “there needs to be something that can be taken to Capitol Hill” (p. 185). The goals and the benefits of these programs cannot be achieved if they cannot be implemented. This book is a starting point for this process.

Overall, this book presents theory and narrative that should be accessible to both economists and non-economists, and could be used as a primer on full employment ideas and programs. Ironically, it is Vickrey’s articles themselves that present the most intuitive and non-technical explanation of his theories, while the supporting articles either elaborate on, or provide a technical explanation, for his concepts.
A series of financial crises in the 1990s questioned the efficacy of foreign capital inflows in promoting economic growth. A rapid increase in international capital inflow accelerated by the financial liberalization and deregulation of domestic markets has significantly increased economic fragility. Even growth rates have slowed down regardless of the huge capital inflows. Did orthodox economists and policy-makers find any solutions? Yes, more deregulation and liberalization! In this book, however, Penelope Hawkins challenges such orthodox panacea and suggests alternative theoretical frameworks from a Post Keynesian perspective. In the first half of the book, she delineates and extends Post Keynesian theories in that the liquidity preference theory should be applied to the issue of capital flows. In the second half, she applies theoretical arguments to some highly vulnerable countries such as Thailand, Brazil, and South Africa. Overall, this is book very insightful and informative.

In the first chapter, Hawkins examines different notions of constraints. The traditional concept of constraints (i.e., budget constraints) in economic theory is narrowly defined and is applicable only to a closed system. In an open system that is characterized by interdependency, uncertainty, and non-ergodicity, she argues, the term ‘constraining tendency’ is suitable. Furthermore, in a monetary production economy liquidity preference is a ‘constraining tendency’ in an open economy and, also, in an open system (p. 13). It means that financial constraints of individual agents (firms, banks, and households) and sovereign countries are endogenous with respect to creditworthiness, prospective yields, growth rates, and other external conditions. In chapter 3, Hawkins develops the concept of financial constraints into three states: financial exclusion, financial fragility, and financial vulnerability. In this context Hawkins explains that capital inflows during expansion periods are absorbed by the domestic economy as long as the boom is sustainable. At the same time, by the very nature of speculative foreign capital movements, it is highly susceptible to unexpected credit withdrawal if a country is on the fringe of international capital provision or is ‘vulnerable’ (chap. 3). Liquidity preference of lenders (banks) and domestic borrowers might exacerbate a situation since they are more risk-averse when expectations are going bearish. Thus, Hawkins’ constraining tendency is a better theoretical and practical concept than that of the orthodoxy. In chapter 6 and 7, Hawkins strengthens her argument by explaining the experiences of Thailand, Brazil, and South Africa.

From a Post Keynesian perspective, liquidity preference, endogeneity of money supply, and the multiplier effect are essential elements in the theory of effective demand in a monetary production economy. In this line of reasoning, Hawkins argues that the ‘conditional’ endogeneity of money should be accompanied with the theory of liquidity preference (as a constraining tendency) (pp. 36-45). That is, the liquidity preference of
private lenders constrains monetary transaction in the form of price or quantity rationing (‘financial exclusion’, in Hawkins’ terms). Thus, financial provisioning is subject to business cycles as well as lender’s degree of risk aversion and borrower’s creditworthiness. Moreover, financial provisioning (credit expansion and bank lending) have a close positive relationship with investment, employment, and economic growth.

A theoretical strength of Hawkins’ analyses of financial constraints comes from the distinction between center and periphery countries. Conventionally, there is no significant difference in the orthodox analyses of capital movements between developed and developing countries. It is, in orthodox theories, an arbitrage opportunity that matters for lenders and borrowers. By contrast, Hawkins convincingly argues that individual countries can be stratified through a spectrum of financial provision (pp. 63-67). In particular, borrowers of periphery countries standing on the fringe between the financially included and excluded try to hoard liquid assets of center countries. So, their desire for foreign capital might not be met. On the other hand, lenders, mostly from center countries, abstain from providing funds to periphery countries. Furthermore, even the lenders easily withdraw outstanding credit from periphery countries. Therefore, economic circumstances of periphery countries are inevitably vulnerable and fragile if they are highly exposed to foreign capital flows. Additionally, Hawkins suggests an alternative measure of the vulnerability index (chap. 5). The index includes not only trade openness, but also financial exposure (measured by financial account, FDI, portfolio investment flows, and debts). Consequently, the index shows more realistic implications.

Following Hawkins’ theoretical and empirical arguments throughout the book, it is apparent that the argument that financial liberalization would promote economic growth is paradoxical. The more domestic markets are liberalized and deregulated, the more likely to face financial vulnerability and fragility. The aforementioned orthodox remedy makes the vulnerable countries more unstable and unsustainable in terms of employment and growth. For the purpose of sustainable and socially favorable development, “vulnerable economies have to devise growth policies which move them beyond their speculative standing in world markets” (p. 235). Rather than too much reliance on international capital, therefore, domestic demand management and institutional improvement are more important for the development of vulnerable countries.

Reviewed by Fadhel Kaboub
University of Missouri – Kansas City

The Crisis in Economics is an excellent historical reference book that documents the birth of a worldwide economics students revolt against the lack of pluralism in the teaching and practice of economics. The post-autistic economics (PAE) movement started in France in June 2000 when a group of economics students published a petition in which they argued that economics has become an “autistic science” through the “uncontrolled use” of mathematics as “an end in itself” in economic theory. The revolting students deplored the repressive dominance of Neoclassical theory in the university economics curriculum, and the dogmatic teaching style, which leaves no place for critical and reflective thought (p. 1). The students’ petition called for prioritizing science over scientism in the teaching of economics through engagement with empirical and concrete economic realities, and for creating a pluralistic and interdisciplinary approach to studying complex social and economic problems (p. 1).

The PEA movement spread quickly in France and around the world as the media picked up the news about the revolting economics students. The complaints reached the French Minister of Education, Jack Lang, who commissioned an investigation led by Jean-Paul Fitoussi. In September 2001, the Fitoussi report was published (“L'Enseignement Supérieur de l'Économie en Question”) and called for two fundamental reforms that must be made in the teaching of economics:

First, it calls for the integration of debate on contemporary economic issues into both the structure and content of university economics courses […]. Second, Fitoussi’s report demands that multidisciplinarity be placed at the heart of the teaching of economics (p. 5-6).

It is important to note that the Neoclassical camp did not remain idle throughout this process. In October 2001, the Neoclassicals launched their counter-attack. Notably, Robert Solow, Olivier Blanchard, and Amartya Sen were brought into the debate in a three-page Le Monde series of eight articles that displayed an interesting strategy they used to mislead the audience and to avoid the real issues at hand.

For their defence they have adopted the strategy of misrepresenting their adversaries' position. This cynicism stunned members of the French student opposition […]. From its inception, the post-autistic challenge to traditionalist practice has been very clear about its two principal points of contention:
1. the issue of pluralism versus single-minded dogmatism and the imperative need for the former in economics, and
2. the need to liberate economics from its autistic obsession with formal models that have no obvious empirical reference (p. 22-23).

Furthermore, to avoid unnecessary misunderstanding, the reform movement has emphasized – and the French students especially – that it does not oppose the instrumental use of mathematics in economics any more than it does in the natural sciences, but rather its use as an end in itself. It is mathematics for science versus mathematics for scientism that is the dividing line. The traditionalists, however, have seized upon the possibility here for misunderstanding as their main line of defence. Several of the Le Monde articles exploit this possibility as a means of deflecting discussion into a pseudo-debate. Counting on the relative ignorance of their readers, the articles work to convey the false impression that the reform movement wants and only wants to banish all mathematics from economics (p. 23; emphasis in original).

Several prominent non-orthodox economists were actively involved in the debates around the PAE movement, many of them are amongst the contributors to this volume, including James K. Galbraith, Geoff Harcourt, Peter E. Earl, Steve Keen, Tony Lawson, Anne Mayhew, Susan Feiner, Julie A. Nelson, Edward Fullbrook, Deirdre McCloskey, Sheila C. Dow, Paul Ormerod, Geoffrey Hodgson, Ben Fine, Marc Lavoie, Warren J. Samuels, and James G. Devine. Today (April 2005), more than 8,000 people from approximately 150 countries subscribe to the PAE Review (formerly known as the PAE Newsletter), which is edited by Edward Fullbrook. A wealth of information and resources can be found at the PAE website at www.paecon.net.

After the introduction from the editor, the book is organized in three parts. Part One contains the key documents from the PAE movement such as the initial petition by the French students followed by that of the French professors, two of the initial issues of the PAE newsletter, the Opening up Economics statement by the Cambridge 27, and The Kansas City Proposal.

Part Two, entitled Teaching, contains seventeen essays dealing specifically with the dominance of Neoclassical economics and the lack of pluralism in the teaching of economics. The contributors to this part are: James K. Galbraith, Joseph Halevi, Hugh Stretton, Jacques Sapir, Gilles Raveaud, Geoff Harcourt, Steve Keen, Grazia Ietto-Gillies, Emmanuelle Biencourt, Alan Shipman, Peter E. Earl, Peter Söderbaum, Susan Feiner, Geoff Harcourt, and Bernard Guerrien.

Part Three contains twenty-six essays gathered under the general heading of Practice and Ethics. The contributors to this part are: Frank Ackerman, André Orléan, Edward Fullbrook, Deirdre McCloskey, Tony Lawson, Sheila C. Dow, Kurt Jacobsen, Paul Ormerod, Geoffrey Hodgson, Ben Fine, Frank Ackerman, Michael A. Bernstein, Julie A. Nelson, Geoff Harcourt, James K. Galbraith, Jeff Gates, Anne Mayhew, Bruce Edmonds, Jason Potts, John Nightingale, Steve Keen, Marc Lavoie, Jean Gadrey, Warren
J. Samuels, Katalin Martinás, George M. Frankfurter, Elton G. McGoun, and James G. Devine.

It is impossible to review all the articles in this book, but I have to say that all of them are equally insightful and make important points. The contributors show a broad agreement about their critique of Neoclassical economics, but it is hard to discern a common/unifying paradigm in such very short articles. The book brings together a great deal of pluralistic contributions highlighting the possibilities for common ground among heterodox traditions. After following the PAE movement and recent developments in heterodox economics, I have a feeling that we have reached an unprecedented level of cohesiveness to build a unified paradigm in a Critical Realist tradition; an interdisciplinary heterodox paradigm that is grounded in reality because it encompasses the plurality of theories that Post Keynesians, Marxists, Institutionalists, Feminists, and Social Economists bring to the fore.

The book does not have a conclusion chapter, perhaps on purpose, but it would have been useful for the readers to have some sort of conclusion at the end of the book. A conclusion does not have to mean a conclusion to the PAE movement, but rather a summary statement for the lessons learned in the first 600 days of the movement as well as a forward-looking statement about what could be done to support and strengthen the reforms called for by the students.

*The Crisis in Economics* would be an excellent supplementary text for courses such as history of economic thought, economic methodology, and political economy. The material is easily accessible to non-economists and could be used in other social sciences to illustrate the similarity in terms of lack of pluralism in other disciplines as well. Every economics student and teacher as well as anyone interested in recent developments in intellectual and social trends should read *The Crisis in Economics*. We owe it to ourselves as a community of scholars who value intellectual integrity; and we owe it to society as a whole to deliver the most honest and comprehensive work to better our understanding of social reality. *The Crisis in Economics* and the PAE movement aim to move us in that direction.
Reinventing Functional Finance: Transformational Growth and Full Employment.

Reviewed by Yan Liang

University of Missouri – Kansas City

As Abba Lerner called it, we live in a “topsy-turvy” world. In this world, we face incessant financial crises, economic fluctuations, and involuntary unemployment. The inherent flaws of the capitalist economy preclude the self-adjusting market equilibrium. Grounded on the fundamental analysis of the state nature of money and the role of government in the modern capitalist economy, Reinventing Functional Finance is without any doubt a great book through which solutions to various economic problems can be sought.

Reinventing Functional Finance develops the legacy of Lerner’s functional finance theory put forward six decades ago. This book wonderfully traces the historical development of the functional finance, improves it with modifications and new dimensions, and incorporates theoretical analyses with policy recommendations. For example, David Colander adds a fourth principle of the functional finance theory; Musgrave incorporates functional finance into his three-branch model and extends the its functions; Per Gunnar Bergland gives new dimensions to the functions of taxes by proposing a fundamental tax reform; and Mathew Forstater integrates functional finance approach in the modern economy to derive 15 lessons. Moreover, the contributors write on different aspects or look at one aspect from different perspectives; this gives diversity and comprehensiveness to this book.

The book is organized in the following manner. Edward Nell begins by delineating the transformational growth of the economy; this is followed by Richard Musgrave and Robert Hilbroner’s opening remarks. Next, a theoretical background of the Functional Finance approach is laid out. The authors present the works of Hansen, Lowe, and Neisser, which complement or contribute to the functional finance thesis. The great concern about inflation in relation to full employment policy brings forth Part III, which deals with the inflation barrier to functional finance. In Part IV, “Fiscal and Monetary Linkages,” the authors elucidate how fiscal and monetary policy can be used as means to achieve full employment and price stability; these policy implications are essentially based on the Chartalist theory of money. Part V, entitled “Functional Finance and Full Employment,” examines specific policies to achieve full employment. Finally, “The final hour” gives a good summary of the book and triggers continuing thoughts. In addition, the interludes of roundtable discussion and open conversations give the readers an opportunity to experience heated debates, constructive conversations, and insightful inquiries and responses.
The central themes of functional finance were formulated in the thinking of leading German emigrants at the New School for Social Research in the mid-1930s. Lerner was the key developer of the radical implications of the Keynesian approach; his work shaped the essence of functional finance. The functional finance approach has evolved with the development of macroeconomics. In particular, Lowe’s theory stressing structural change and technological evolution, Nisser’s interventionist policy framed in terms of the non-orthodox quantity theory of money and Hansen’s evolutionary thinking on the role of government provide a theoretical background and contribute to the development and evolution of the functional finance literature.

The conventional wisdom about the trade-off between employment and inflation challenges the practicability and desirability of functional finance. Robert Eisner’s econometrics test sheds light on this problem by showing that although high unemployment does tend to lower inflation, “[…] with low unemployment, there is the converse, inflation does not seem to rise as unemployment gets lower” (p. 99). Moreover, other authors show that the excess fear from demand-side inflation is unwarranted since most inflation comes from the supply side. These studies effectively remove the so-called inflation barrier to the implementation of functional finance policy.

Functional finance provides a legitimate alternative to the “sound finance” approach in which government spending must be financed by taxes or borrowing, and budget deficit inhibits economic growth. By contrast, hinging on the state theory of money, L. Randall Wray shows that government spends by emitting its own High Power Money (HPM) independent of previous tax revenue or borrowing. Taxes serve the purpose of maintaining the value of the HPM and of adjusting effective demand. Bond sales, on the other hand, is essentially an interest rate maintenance device. Based on these analyses, many important conclusions can be drawn. For example, budget deficit is not a sin but a norm; any constraints on incurring public debt can be reasonable but indeed artificial; budget surplus can by no means be “locked away and saved” for the future (p. 151). Wray also points out that “[Lerner’s] approach can be applied to all modern economies in which the government provides the domestic currency” (p. 145). Along the same lines, Forstater draws 15 lessons from the functional finance approach with respect to fiscal and monetary relationships, emphasizing the role and powers of government and its interactions with the private economy in a modern state. Nell links the transformational growth with the evolution of money and monetary system, pointing out that the fundamental changes of money and monetary system lend legitimacy to the functional finance theory. Nell, however, undermines the Chartalist approach by his contention that the evolution of money involves intrinsic value money, fiduciary money, fiat money and modern bank money. For him, institutional evolution and transformational growth change the nature of money; money becomes a creature of the state in the modern society. However, this seems to be unconformable with historical evidence and the chartalists’ approach in which money is always by nature a Chartal means of payment.

Finally, John Smithin looks into the interrelation between interest rates, wages and profits. His analysis, however, is somewhat problematic, or at least confusing. The
interest-wage-profit frontier upon which Smith hinges his discussion seems to remove monetary factors from the analysis; rather, he looks into the “real” variables (real interest, real wage and real profit) and their interrelations.

Part V explores specific policies derived from the functional finance approach. Berglund’s proposal of tax reform is very interesting. He argues that taxes should be levied to “discourage private spending and encourage saving in order to make room for big, permanent public deficits” (p. 260). Therefore, tax reform, exempting supply side taxation and imposing progressive consumption taxes, helps achieve equity and enterprise by stimulating the supply side and by evening out living standards. As Berglund argues, the government can substitute debt growth for taxation so that “[t]he overall rate of net taxation → taxes less subsidies – [amounts] to zero” (p. 260). This does not conflict with tax-driven money since taxes are not abolished. In the disaggregated level, whoever consumes is subjective to taxes and must pay whatever the government declares. Therefore, taxes still give incentives for people to accept the government’s HPM and provide goods and service to obtain it. Ingrid Rima and William Mitchell examine and justify the public service employment program or job guarantee policy (JGP). As Mitchell states, “unemployment arises because the budget deficit is too low” (p. 292); JGP is a “logical way” to provide jobs while keeping price stability via the buffer employment ratio.

Pertaining to the current economic situation and the rising controversy of government budget issues, Reinventing Functional Finance provides important implications for policy making. The book correctly directs our attention from the demand-side inflation to the supply-side inflation and further to deflation, thus showing the right path and target for policy-making. Reinventing Functional Finance effectively stresses the important role played by the government and its fiscal policy in particular, thus recommending appropriate policy tools. In the mainstream chorus of praising the budget surplus, Reinventing Functional Finance raises different voices, warning that a budget surplus might do more harm than good for society; notably, the attempt to save a monetary surplus for the future is totally flawed.

Given its limited scope, the book does not address all the issues related to functional finance. For example, although Wray convincingly points out that the budget constraint is indeed artificial; there still remains controversy among the contributors on whether or not this artificial limit can be a “real” constraint. Second, is there any rule for deficit spending? Is it necessary to separate the government budget into current account and capital account and keep the latter as a constant ratio to the GDP as suggested by some authors? Third, if we extend the functional finance approach to the international level with a complicated exchange rate regime and other external factors, how should we modify our theory? These questions require further study and researches. Overall, Reinventing Functional Finance came out at the right time and provides valuable implications for the real world economy. It is a must read for those who are skeptical about the mainstream sound finance literatures.
Edward Nell has undoubtedly made innumerable contributions to many different issues in economics during the last four decades. The themes to which Nell devoted his efforts cover a wide range within economics, such as macroeconomic theory and policy, growth theory, the capital controversy, economic methodology, and monetary theory, among others. A major feature of Nell’s approach is the openness to methodological and theoretical alternatives, along with a critical attitude towards established modes of thought, either within orthodox economics or outside it.

The volume in honor of Edward Nell, put together by (his former students) Argyrous, Forstater, and Mongiovi, reflects the broad range of issues to which Nell has made contributions, as well as his critical approach to economics. The book is divided into three parts, namely: (i) Growth, Distribution, and Technical Change; (ii) Money Employment, and Effective Demand; (iii) Theory, Method, and the History of Ideas. Due to space constraints, this review will describe only a few among the twenty chapters of the book. More than a complete and accurate description of its contents, it will serve as a general introduction intended to encourage the reader to take the time to enjoy some or all the parts of this eclectic book.

Part one begins with a chapter by Lavoie, Rodriguez, and Seccareccia (Transformational Growth, Interest Rates, and the Golden Rule), in which the authors proceed to a theoretical and empirical evaluation of Nell’s views on the relation between the interest rate, the profit rate, and the rate of growth. In terms of theory, Lavoie, Rodriguez, and Seccareccia propose a conciliation of two different views on the determination of the normal rate of profit: the Post Keynesian view, in which the normal rate of profit is determined by the secular rate of capital accumulation (Cambridge equation), and the Sraffian view, in which it is given by the normal rate of interest. According to this chapter, Nell spouses the former, and “quite adamantly reject[s] the latter” (p. 5). On the empirical side, the authors proceed to an econometric evaluation of Nell’s statement of the Golden Rule, according to which the long-term rate of interest must necessarily gravitate around the rate of growth of output, and analyze the long-term relation between the two variables in Canada and in the U.S. in the postwar period. Their findings suggest that there is a stable long-period relation between rate of interest and output growth (which seems to support Nell’s interpretation), but also that the causality runs from the former to the later, which is more consistent with horizontalist and Sraffian views on this debate.
Neri Salvadori presents chapter 4, entitled *Wealth in the Post-Keynesian Theory of Growth and Distribution*. In this chapter, wealth is introduced in the model as a determinant of capitalists’ savings, and this modification implies that the saving function may be nonlinear on income. Salvadori explores the dynamic properties of the model under different assumptions regarding the relation between profit rates and interest rates, and concludes that the inclusion of wealth does not alter the structure of the Post Keynesian theory of growth and distribution, although some assumptions and properties need to be changed.

The first part of the book also contains chapters by Ertürk on the nature of the business cycle; Michl and Foley on a classical growth model; Thomson on technological change; Hagemann and Seiter on the effects of new information technologies on growth and employment; and Phillips on a Transformational Growth perspective on education.

The second part of the book, *Money Employment, and Effective Demand*, starts with *Labor Market Dynamics within Rival Macroeconomic Frameworks*, by Anwar Shaikh. The chapter analyzes the dynamics of the labor market within four alternative macroeconomic models: neoclassical, Keynesian, Harrodian, and Marx-Goodwin. Two types of dynamics are considered: disequilibrium dynamics, which focuses on the way in which the wage share and the employment rate respond to imbalances in the labor market, and growth dynamics, which examines how these two variables are affected by technological change and the growth of labor supply. Shaikh shows that in the standard formulation of all four frameworks the long-run equilibrium profit-wage ratio is determined solely by technical factors and by labor supply growth, and that social factors such as labor strength have no influence on the standard of living of workers. Considering this result to be empirically implausible, Shaikh introduces the additional assumption that the rate of mechanization depends not only on the wage share, but also on the employment rate. In this case, the theoretical conclusion that the wage share is independent of labor strength is no longer valid.

In Chapter 12 (*Interest Rates, Effective Demand and Financial Fragility: Edward Nell and the Trieste Tradition*), Rochon and Vernengo argue that the horizontalist approach permits a conciliation of Post Keynesian, Sraffian, and Circuitist views on money supply. The authors use that approach to discuss the effects of the relation between growth and interest rates on debt stability, and develop a categorization of alternative macroeconomic regimes based on financial infrastructures, especially on the existence (or not) of capital controls. Finally, Rochon and Vernengo examine bank behavior and bank failures under different financial regimes, i.e. under different degrees of financial fragility.

The second part of the book is completed by chapters by Freedman, Harcourt and Kriesler on the long-run Phillips Curve; Majewski on an employer of last resort program; Argyrous and Neale on labor markets and welfare policies; Dymski on the urban multiplier; and Block on historical macroeconomics.
The third and last section of the volume is *Theory, Method, and the History of Ideas*. The second chapter in this part (*Is There a Classical Theory of Supply and Demand?*) is written by David Laibman, and presents a classical interpretation of supply and demand curves. Laibman shows that the Marshallian demand-supply apparatus cannot be reconciled with classical price theory in general, and outlines a model based in a systematic distinction between underlying costs of production and supply behavior. According to Laibman, such distinction is always present in the classical school, and has important implications for the determination of the supply curve (and as a consequence, for the mechanism of market price adjustments). One of the main conclusions of this chapter is that in the classical approach supply and demand differ from one another in their modes of operation, and are historically and institutionally conditioned.

Mathew Forstater presents chapter 18 (*Cumulative Causation a la Lowe: Radical Endogeneity, Methodology, and Human Intervention*), in which he discusses some aspects of the work of Adolph Lowe, considered to be an important influence on Edward Nell’s trajectory. In particular, Forstater emphasizes three features of Lowe’s contribution to the theory of cumulative causation: (i) the idea that everything in the social and natural world is subject to systemic transformations that result from cumulative processes; (ii) the argument that new economic theories and new methodologies are needed to examine the basic tendencies of a changing system; and (iii) the notion that “the cumulative processes of the last hundred years or so have resulted in an important transformation for the scope of human intervention into the cumulative processes themselves” (p. 311).

The third part of the book contains also articles by Hodgson on Veblen; Pashkoff on stability problems in general equilibrium theory; Mongiovi on the epistemological status of economic propositions; and Gehrke and Kurz on David Ricardo’s discussion of agricultural improvements.

Overall, this diverse volume is a valid and adequate tribute to Edward Nell, given his contributions to theory and policy, as well as his critical outlook on many important economic issues. In an era when conventional modes of thought in economics and elsewhere are claimed to be “the only game in town,” such a critical and eclectic collection of papers is definitely welcome.

Reviewed by Corinne Pastoret

University of Missouri – Kansas City

A. P. Thirlwall proposes, in this short book entitled Trade, Balance of Payments and Exchange Rate Policy in Developing Countries (2003), a summary of his research on the monetary consequences of trade. A specific attention is given to developing countries which pay the price for unsuitable orthodox development policy. Thirlwall adopts a heterodox perspective on trade and balance of payment. He critically evaluates the dominant neoclassical development theories, without denying their relative explanatory power. This book must not be seen as an end in itself; instead, Thirlwall gives us the foundations to understand orthodox and heterodox views on growth and development. Our curiosity about Thirlwall’s work, and more generally about development theories, is teased by many references to ‘more detailed’ publications. Empirical and econometric studies are widely used to strengthen his point of view. These references are very useful for anyone wishing to conduct empirical studies about developing countries.

Thirlwall’s book is composed of five chapters. The first three chapters give us the necessary background knowledge to understand issues about trade, growth, balance of payment, and exchange rates. Chapter 4 answers a fundamental question for Thirlwall: what is wrong with traditional balance of payments theories? Finally, chapter 5 provides the foundations for a new international order that should harmoniously generate growth in both developing and developed countries.

Chapter One deals with the orthodox relationship between trade and growth. Gains from trade were before highlighted by classical economists. Adam Smith argues that trade increases production, division of labor, and productivity by absorbing the domestic surplus. David Ricardo’s comparative advantage theory emphasizes static gains from trade, provided that countries specialize in specific goods. Dynamic gains from trade are associated with the stimulus to competition and economies of scale generated by export markets. Capital accumulation, productivity and industrialization are stimulated by exports. These dynamic gains are primordial for small countries in which the production of certain goods would not be profitable without trade. Thirlwall, however, argues that gains from trade are unequally distributed between developed and developing countries. Developing countries that specialize in primary commodities are likely to experience unemployment, decline in the terms of trade, and slower economic growth. Thirlwall does not deny the necessity for developing countries to trade. The real issue is, according to him, not whether to trade or not, but in what to trade and under which terms. Thirlwall then reviews three models on the relation between exports and economic growth. The supply-oriented neoclassical model highlights the beneficial impact of exports for the growth of all the sectors of the economy. In particular, the competitive export sector confers externalities that increase the productivity of the non-export sector. Two
heterodox models are then proposed by Thirlwall. The balance of payments constrained model focuses on the demand side. It reveals that exports influence growth by relaxing the balance of payment constraint on growth and the shortage of foreign exchange. In an open-economy, export is the only component of demand that provides the foreign exchange reserves to allow the other components of demand – with import content – to grow faster. The last model presented is the virtuous circle model of export-led growth. The relation between exports and growth is circular and cumulative. Exports increase output which allows higher productivity; products become more competitive and exports increase. An economy with a competitive advantage in a particular industry will always keep it, and thus make it difficult for other countries to compete. In particular, the ‘periphery’ that produces agricultural products with a low elasticity of demand will have problems to produce the same goods as the “centre”. Finally, Thirlwall critically evaluates several empirical studies on the relationship between trade liberalization and export performance, and between trade liberalization and economic growth.

In chapter 2, Thirlwall analyzes the relation between growth or trade and the balance of payment from orthodox and heterodox perspectives. He first argues that Neoclassical growth theory neglects the impact of demand. Despite Keynes’ critique of Say’s Law and Harrod’s work, Neoclassicals still believe that growth only depends on resource availability and technical progress. Classical trade theory is ‘real’ in the sense that it ignores the monetary consequences of trade for economic growth. Following the Humean tradition, the balance of payment is supposed to be self-equilibrating. Employment issues are also neglected, since continuous full-employment is assumed. In fact, Thirlwall explains that payments balance is not achieved through price change, but through the adjustment of expenditures and output.

Thirlwall claims that the balance of payments is not self-equilibrating. Growth and development can be affected by a ‘non-adjusting’ balance of payments. The first economists who understood this relation were the Mercantilists. Thirlwall considers that mercantilism did not promote the state’s accumulation of a ‘bounty’ for itself; instead, mercantilists understood that accumulating foreign exchange reserves could stimulate economic activity by lowering interest rates and thus stimulating investment. Thirlwall then refers to Keynes’s defense of Mercantilism. Mercantilists understood that the economy would not automatically be at the full-employment level because of the monetary dimension of the interest rate. Keynes criticized free-trade theory for its inability to deal with unemployment and the lack of investment. According to Thirlwall, Keynes would prefer protection and a more favorable balance of trade to induce a higher level of investment.

Thirlwall presents Roy Harrod and Raul Prebisch as the ‘latter-day Mercantilists’. According to Thirlwall, Harrod’s foreign trade multiplier is the most important concept for understanding growth and the rhythm of industrial development. Prebisch is highlighted for his challenge to the mutual profitability of trade thesis. Prebisch argues that the specialization of developing countries on primary commodities can lead to terms of trade deterioration, but also to major balance of payments problems.
Thirlwall then critically assesses empirical evidence on the impact of trade liberalization on the balance of payments. Despite the benefits of trade liberalization, countries should remain cautious. Indeed, specialization for developing countries presents many disadvantages. In particular, there is no guarantee about equal distribution of the gains from trade. Primary commodities have diminishing returns. Economies can become vulnerable if they specialize in a small number of goods. Finally, the social costs of free-trade can be so high that protective measures would be required.

Chapter 3 deals with exchange rate systems. A specific attention is given to the alternative exchange rates regimes available for developing countries; their benefits and disadvantages are analyzed. Five main types of exchange rate regimes are distinguished. Rigidly fixed exchange rates systems include the gold standard, currency boards, currency unions, and dollarisation. Thirlwall raises doubt about the ‘supposed’ harmonious functioning of the Gold Standard. He questions the existence of an automatic adjustment mechanism related to gold movements as well as the validity of the quantity theory of money. In particular, he points out the frequency of income adjustments to restore balance of payments equilibrium. Despite their efficiency to control inflation, currency boards are criticized for rationing credit and thus, discouraging investment, and for threatening competitiveness when the reserve currency appreciates. Currency unions also present some benefits in term of reduction of uncertainty and protection from exchange rate instability. However, Thirlwall argues that balance of payment problems do not disappear with the adoption of a single currency. Indeed, adjustment takes place through employment and output changes.

The Bretton Woods system that ruled over the 1944-1973 period is an example of pegged exchange rates regime. The Gold Exchange Standard is an adjustable peg system in the sense that countries with unsustainable balance of payments disequilibrium can modify their exchange rate with the dollar. This system succeeded in providing exchange rate stability and reduced uncertainty; competitive devaluations have also been avoided. However, this system was unable to cope with the increasing capital mobility and speculative pressure; it collapsed in 1973. Thirlwall adds that developing countries that tried to peg their exchange rate also suffered from the constraining power of speculative capital flows. Thirlwall points out the importance of choosing the right peg.

Managed exchange rates systems combine flexibility and control of exchange rates. However, countries are constrained by the amount of reserves they have accumulated. The crawling peg arrangement and the setting of target zones are described by Thirlwall.

Freely floating Exchange rates systems assume that countries are indifferent to the exchange rate levels, which cannot be true in practice. Thirlwall argues that increased flexibility has not kept one’s promises, in particular setting exchange rate at their fundamental levels. Moreover, developing countries do not benefit from the greater flexibility of exchange rates for developed countries. Indeed, their commodities, exports, reserves, and debts are priced or denominated in the currency of the dominant developed countries.
Thirlwall is sympathetic to the *multiple exchange rates systems* for developing countries, despite the official hostility of the IMF for this arrangement. In this system, different exchange rates are applied for different transactions. Agricultural countries which want to industrialize can apply a different exchange rate for primary and manufactured goods. Thirlwall concludes that the choice among exchange rate systems depends both on the characteristic of each country, and on the exchange rate arrangements chosen by other countries.

In Chapter 4, Thirlwall underlines the weak points of traditional balance of payments theories, with a specific attention given to developing countries. Three orthodox approaches are distinguished, namely the *elasticities*, the *absorption*, and *monetary* theories of balance of payments. Finally, Thirlwall supports a more heterodox approach, called the structuralist view, which corrects the weak points of the three orthodox theories.

In the *elasticities view*, the balance of payments disequilibrium results from distorted relative international prices. This view studies the conditions for a devaluation to solve the balance of payments problems by restoring competitiveness. In particular, the elasticity of demand for exports must be sufficient to compensate for the foreign exchange earnings loss linked to the devaluation. Thirlwall argues that in the real world, exports have low price elasticities. Moreover, demand needs time to adjust so that the theoretical benefits of the devaluation will not be instantaneous. It is likely that domestic inflation will take place before demand adjustment, thus compensating for the beneficial impact of devaluation.

In the conventional *absorption approach*, balance of payments disequilibrium comes from excessive expenditures relative to output. The absorption approach causally links balance of payments disequilibrium with discrepancy between the decisions to produce and to spend. Thirlwall claims that this result, based on an identity, might not be true in practice. Indeed, other causes can contribute to balance of payments deficits. In the case of developing countries, the IMF’s inability to identify these ‘other causes’ has led to erroneous diagnosis and inappropriate policies, like the structural adjustment programs.

The *monetary approach* to the balance of payments is then critically analyzed. From this perspective, payments disequilibria are expressed through the quantity of international reserves. In particular, payment deficits are the manifestation of an excess supply of money. Balance of payments equilibrium can be attained by restoring the balance between the supply and demand for money. Thirlwall criticizes the monetary approach for its inability to understand the primary origins of payments disequilibrium. The use of higher interest rates to attract foreign funds, and restore balance of payments balance, might have a catastrophic impact on real income and employment.

Thirlwall criticizes the static dimension of the traditional balance of payments theories. He proposes a structural approach to the balance of payments. In his view, parameters and variables, which are constant in a static framework, play a role in a...
growth context in which countries with slow growth and foreign exchange shortage need structural change. In particular, Thirlwall advocates the necessity for certain developing countries to increase exports of goods with favorable demand characteristics, like manufactured goods. This would be an example of non-orthodox solution to the balance of payments problems in developing countries.

In the last chapter, the necessity to build a new international order is acknowledged. Income inequalities between developed and developing countries are striking. Thirlwall does not expect a higher convergence between these two groups. Indeed, he argues that depressive cumulative forces exist that perpetuate the development gap. Developing countries’ specialization for primary products condemns them to slow growth and development; the main reasons being their low income elasticity of demand and the existence of diminishing returns in agriculture. In contrast, manufactured goods characteristics are exactly the opposite, which gives an advantage for developed countries. The deterioration of the terms of trade since the 1900s, together with the volatility of primary product prices, constitute other depressive forces harming developing countries. Indeed, not only growth and development are retarded, but debt in foreign currency can become unsustainable. When a worldwide depression is generated, developed countries are also affected. Finally, Thirlwall ‘revives’ Keynes’s plan as the basic foundation to build a new international economic order. In particular, Keynes proposed the creation of an international clearing union, the stabilization of commodity prices, the penalization of surplus countries and the control of capital flows.

Thirlwall clearly supports heterodox views on economic growth, development, balance of payments, and on the need for a new international economic order. Despite his claim that developed countries would also benefit from abandoning the free trade dogma, no change seems to occur. The United Nations have made repeated appeals in more heterodox directions, but in vain. Like Keynes, Thirlwall and other heterodox economists are like Cassandra, condemned to preach without convincing those in power to make a new economic order possible.

References


_____.


_____.

Corinne Pastoret


Reviewed by Ganna Pogrebna
University of Missouri – Kansas City

The Countries of the Former Soviet Union at the Turn of the Twenty-first Century: The Baltic and European States in Transition is a logical extension of Ian Jeffries’s earlier research on economic, political, and social development of transition societies. His works, published in the 1990s: A Guide to the Socialist Economies (1990), Socialist Economies and the Transition to the Market: A Guide (1993) and Guide to the Economies in Transition (1996) reveal one of the best examples of interdisciplinary research on the states of the former Soviet Union and other post-socialist countries during the period from late 1980s to the mid-1990s. Since that time, Jeffries’s original insight into the reform processes of transition societies evokes the interest of both professionals and the wider public to the issues of transformation from planned to market economy and continues to attract readers’ attention.


The scope of The Countries of the Former Soviet Union at the Turn of the Twenty-first Century: The Baltic and European States in Transition is not only to investigate the past of seven countries of the former USSR during the last years, to analyze their political, economic and social achievements and problems, but also to provide students, professionals as well as the wider public with a source of reference on the states in transition. The book is based on extensive materials, including reports of international organizations such as the United Nations Organization, World Bank, International Monetary Fund, OECD and European Bank of Reconstruction and Development as well as numerous monographs and articles in newspapers and journals.
Ganna Pogrebna

The accumulated information was logically systematized and placed in chronological order.

The book is divided into two main sections: the Baltic States of Estonia, Latvia and Lithuania and the other European States, incorporating Belarus, Moldova, Russia and Ukraine. The monograph is organized in the following manner. Introduction and Overview constitutes a significant part of the book and introduces the reader to the problems discussed further, providing a brief summary of developments in each of the seven countries under consideration. Part I analyzes economic and political development of the Baltic States. Part II gives an overview of the events in Belarus, Moldova, Russia and Ukraine starting from the mid-1990s up to 2004. The book ends with a bibliography and an index.

One of the main contributions of Ian Jeffries to the analysis of transition societies is the interdisciplinary approach, which gives an opportunity to capture the complex mosaic of political, economic, and social juncture of events in all seven countries and therefore, to find an explanation for the differences in the process of transformation among different nations of the former Soviet Union. Jeffries’s determination to show the uniqueness of each country on its way from planned to market economy allows the readers to “live through” the years of transformation with each country in particular from the comfort of their homes. For example, the book discusses the problem of discrimination of Russian national minority in the Baltic States, traced to the citizenship restrictions introduced in the 1990s in Estonia, Latvia, and Lithuania for the Russian-speaking inhabitants. It also provides an objective view on the political crisis in Belarus stemming from the unconstitutional regime of President Lukashenko.

Jeffries pursues his analysis of the economic situation in the states under consideration based on seven major categories: financial policy, prices, privatization, foreign trade, foreign direct investment, agriculture, and economic performance. Occasionally, Jeffries extends this list trying to capture the peculiarities of each country. Notably, he incorporates the economic background category in the analysis of Estonia, the economic system category in the analysis of Belarus.

In this book, Jeffries elaborates on a number of issues. Particularly, he tries to provide an explanation of the growing gap in economic development between the Baltic States and the rest of the former USSR, and analyzes the process of accession of Estonia, Latvia, and Lithuania to the EU, including their gradual steps toward the compliance with the acquis communautaire. ¹ A significant part of the book is devoted to the Russian economic development in the late 1990s. Notably, Jeffries overlooks the Russian liberalization process, privatization in the non-agricultural sectors, macroeconomic stabilization, and foreign debt and aid before the August 1998 financial crisis. He also makes an attempt to determine the reasons for the Russian financial crisis of the late 1990s and investigates its impact on the other states of the former Soviet Union.

¹ As defined by the European Union regulations, “… the acquis communautaire is the body of common rights and obligations that bind all the Member States together within the EU…”. For further information on the acquis, please see http://europa.eu.int/comm/justice_home/fsj/enlargement/acquis/wai/fsj_enlarge_acquis_en.htm
particularly on Lithuania, Belarus, and Ukraine. Other important issues discussed in the book include: the difference in reactions of the transition states to the war in Iraq in 2003; the Russian-Belarusian initiative concerning the formation of a political, economic and monetary union; Crimean issue and the division of the Black Sea Fleet in the Russian-Ukrainian political and economic relations, especially the ongoing political controversy over the status of Sevastopol; the consequences of Chernobyl nuclear catastrophe as well as the European nuclear security initiatives.

Overall, The Countries of the Former Soviet Union at the Turn of the Twenty-first Century: The Baltic and European States in Transition is a wonderful point of reference for people engaged in research in the field of transition economics of the former Soviet Union. It clearly stands out from the numerous works in this area because of its evolutionary analysis, interdisciplinary insight, and thorough consideration of facts related to the process of economic and political reforms. Clearly, Ian Jeffries’s book is a “must-have” material not only for any school library, but also for anyone interested in the economics of transition.

References


Reviewed by Zdravka Todorova

University of Missouri – Kansas City

Actual and attempted exports of toxic waste from the Organization for Economic Cooperation and Development (OECD) countries to developing and transition counties increased significantly since the late 1980s. This trend was a part of the globalization process of production, where parts of a good were produced in different countries, yet assembled elsewhere, and sold to various markets. Disposal of industrial waste is simply another stage of the globalized production process, and another business opportunity; hence the issue of waste trade, and foreign direct investments (FDIs) by the recycling industry. The globalized form of production has been concurrent to the processes of financial and trade liberalization, structural adjustment, and increased international borrowing for financing development.

Toxic Exports by Jennifer Clapp, a professor of Comparative Development Studies and Environment and Resource Studies, is geared towards situating, via factual narrative, the political and legal process of hazardous waste trade in the global economic structure. The book provides documentation of hazardous waste trade and investment, and references to various reports on the issue. The interplay between global tendencies, state policies, environmental non-government organizations (NGOs), and business groups is emphasized.

Clapp devotes special attention to the role of nongovernmental organizations (NGOs) in putting proposals and practices of toxic dumping in the international spotlight. The book gives numerous examples of such investigations and pressure, and discusses the political responses to the exposure of waste trade - the negotiation of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, as well as some regional waste trade agreements. Clapp documents the role of lobbying by environmental NGOs and business groups in this process.

The Basel Convention attempted to restrict the export of domestically prohibited goods or dangerous substances from developed (OECD) to financially poor countries. Clapp addresses some legal, definitional and enforcement weak points of the Basel Convention, but especially its inability to address exporting wastes under the name of recycling. She documents the growth in toxic waste exports for recycling and further use, together with the efforts of NGOs to push for a complete ban on both disposal and recycling in the context of the Basel Convention.

After The Basel Convention, waste exporters shifted from the export of hazardous wastes destined for final disposal to recycling operations, which made waste trade more difficult to track. Another practice was to label wastes as products. Since the Basel
Convention states that wastes can be exported if they are required as raw materials for recycling in the country of import, exporters of hazardous wastes have relabeled them as commodities that are imported for recovery operations or for further use.

“The dynamic nature of the global economy facilitated this shift, enabling the trade in wastes to develop into a global recycling business” (p. 79). The author cites practices of shipping toxic waste such as outdated pesticides, and other obsolete chemicals as “humanitarian aid” to Eastern Europe and developing countries (p. 66). Furthermore, disguising wastes by mixing them with other products is another way of exporting toxic wastes as commodities (p. 67).

Waste-to–energy schemes were one of the first strategies for waste exporters to recycle hazardous wastes in developing countries undertaken in the late 1980s and early 1990s. The imported hazardous waste is burned in incinerators often to run a power plant. In return, the country is offered foreign reserve currency, roads, ports, and incinerators (p. 62). In other schemes, in Angola for example, the government was offered projects to promote health and education in return not only for accepting wastes for incineration but also for the use of semi-desert land on which to store imported toxic wastes (p. 62).

The Basel Ban Amendment was primarily designed to ensure that hazardous wastes generated in OECD countries were not being exported to developing countries for indiscriminate dumping and sham recycling. Clapp notes that these bans put the burden of identifying waste imports on the importing states, and argues that if such bans were to be effective they needed to be supported by a global ban in which both sending and receiving countries would have to cooperate (p. 72). The decision called for individual states to report to the secretariat of the convention on its implementation, rather than active monitoring by the secretariat (p. 73). Clapp notes that the secretariat lacked the funding to monitor implementation of the decision, and that there were no severe sanctions to ensure compliance (p. 73).

Throughout the book Clapp puts an emphasis on the importance of NGOs, especially on Greenpeace’s practice of embarrassing companies in violation and states that opposed the ban. Further, she argues that “the alliance between environmental NGOs and developing country governments made its biggest impact on the global waste trade rules” through uncovering of data on waste trade schemes and pushing hard toward further changes to the Basel Convention (p. 80). The book documents the political and legal process and the efforts of developing countries, in particular those in Africa, to curb waste exports from OECD countries, as well as sham recycling.

Industrial lobbying groups, especially those from the recycling industry, also receive special attention in the book. With the Basel Ban Amendment adopted in September 1995 the global community had outlawed the trade in wastes from rich to poor countries. These lobbies argued that the Basel Ban Amendment was inconsistent with World Trade Organization (WTO) rules. Clapp discusses the involvement of various lobbying groups such as: The Bureau of International Recycling; the International Council on Metals and the Environment; the International Precious Metals Institute, the
Institute of Scrap Recycling Industries, the Business Recycling Council, and the International Chamber of Commerce.

Clapp goes over some of the arguments of the industry lobbies against the Basel ban. She points to the claim that a ban on hazardous waste trade and recycling will ultimately cause more damage to the natural environment because recycling will be discouraged, and use of new materials will increase. Further, industry groups claimed that if local recycling in the poorer countries is denied enough stock to make them efficient and profitable, recyclable material might end up in final disposal instead in recycling (p. 88). Also, the adoption of the ban was presented by industrial lobbies as a potentially harmful for the economic prospects of developing countries because recyclable scrap material was believed to be much less expensive for developing countries (p. 89). In addition, the business lobbies warned that the ban will likely lead to an increase in illegal traffic.

Finally, the industrial groups emphasized that the Basel Ban Amendment puts the global free trade system at risk (p. 89). Behind this argument stand the assumptions that growth is essential to the attainment of sustainable development globally, and that threats to free trade are direct attacks on growth. Clapp argues that the industry has found ways to ensure that its interests are met in the context of the Basel ban (p. 83). A special chapter of the book is dedicated to FDIs in hazardous industries in developing countries. Clapp discusses also issues of technology transfer. She notes that many of the sales to developing and transition countries involved in FDI represent a transfer of outdated technologies which firms from developed countries are seeking to replace in order to meet rising environmental standards at home (p. 119).

Clapp points out that, increasingly transnational corporations (TNCs) are investing in hazardous industries in developing countries with negative environmental impact (p. 105-124). She documents recent trends in toxic FDIs, including maquiladora. In the 1960s and 1970s most of these factories were in garment assembly, while in the past decade, their composition “has changed dramatically to the main sectors being chemicals, electronics, and furniture, all of which generate large amounts of toxic waste.” Clapp relates this trend to tightening of environmental regulations in the US (p. 114).

Thus, the author emphasizes the attempt by firms to escape from stringent environmental regulations in developed countries as a major motive for such FDIs. This argument, however, could be complemented by considering the global tendencies of low wages and lax labor standards, which have been pursued for the sake of “flexible labor markets” as an institution that is claimed to welcome FDIs, and believed to create the potential for accumulation of foreign currency reserves. Further, in the context of external debt of developing countries and their loss of currency sovereignty through dollarization and currency boards, the accumulation of such foreign reserves has been viewed as compelling, hence the trend for the liberal regulation of FDIs. Global macroeconomic tendencies are implied or mentioned in the book, but could stand elaboration in further extension of this project.
Clapp critiques the tendency for “privatization of environmental governance.” The discussion about voluntary change in corporate culture toward cleaner production is based on the argument that it is in the industry’s best economic interest to pursue “green strategy,” mainly because of economic efficiency gains over the long run (p. 167; see also: “The Business of Greening” Fineman, ed. 2000). Clapp argues that the focus on market-based and voluntary initiatives has resulted in weak mechanisms and little clean technology transfer (p. 167). The reason that she points at is that “… certain features of the global economy, particularly financial globalization, dampen incentives for transfer of clean technology” (p. 167). Clapp puts much emphasis on the outside pressure and incentives for firms to adopt cleaner production. Generally, her arguments often rely on the lack of or the potential of “incentives.” While the book does not go into deeper exploration of structural characteristics of global monetary production, I believe this will be a valuable research project to be pursued.

Theoretical discussion was not the objective of Clapp’s book. However, especially Post Keynesians and Institutionalists could elaborate on the provided facts and issues in the context of economic theory. An exemplary exercise is Peter Dorman’s work (2004), which provides valuable analysis of the relation between external debt and deforestation in a theoretical context. Dorman demonstrates that the external financial position of developing countries alters economic calculations by individuals and governments, with the result that natural and less commodifiable forest values are ignored in favor of “unnatural” financial constraints. “Why should the financial process bias the direction of development away from the preservation of ecological values?” Dorman asks (p. 214).

Clapp’s book is a valuable step toward identifying the dynamic nature of global environmental problems and their relationship to economic globalization developed in inequality. Clapp provides valuable material for such discussion. She puts much emphasis on non-State actors in the evolution of the environmental problems and the consequent agreements. The book is an excellent source of research material. Students of Post Keynesian and Institutionalist strand working on globalization could pick up Toxic Exports and contribute to a deeper understanding of the global environmental problems.

References


Robert Brazelton set out to write An Analytical Biography of Leon H. Keyserling’s life as an economic policymaker. By studying the life of Keyserling, Brazelton is able to detail U.S. economic policy since the Truman administration. Before the Truman Administration the U.S. did not have a Council of Economic Advisors (CEA). Brazelton does a very good job detailing Keyserling’s lifelong work dealing with public economic policy.

In Chapter 1, Brazelton details Keyserling’s biography to help give the readers some knowledge about his background. This chapter provides the basis needed to try and grasp an understanding of how Keyserling formulated his economic policy views. Keyserling studied for his Doctorate in Economics at Columbia University. Keyserling opted to go directly into public service in 1932 instead of finishing his Dissertation.

Brazelton recollects the memorial service for Keyserling on August 9, 1987 in which both politicians and academics praised his accomplishments and his lifelong mission to help develop economic policies to better the nation as a whole. Brazelton recalls that “several of the speakers spoke of his belief in the ability of the economy to give a good life to us all; and in the ability of the social system to achieve more equity and well-being – in part, through continued economic growth shared by everyone” (p. 5).

The next chapter deals with analyzing the economists and the time period which contributed to the formation of Keyserling’s perspective on economic policy. Keyserling had grown up during the “Roaring Twenties” and was in college during the Great Depression before getting his first taste of public policy in 1932. Keyserling wanted to make an impact on economic policies, and one of his professors, Rexford Guy Tugwell, persuaded him to go to Washington with him after Franklin Delano Roosevelt was inaugurated in 1932.

Chapter 3 begins the real analysis of U.S. economic policy beginning with a look at The Employment Act of 1946 that stemmed from the “period following the economic calamities of the 1929 to 1933 period which had brought Roosevelt to power and such persons as Keyserling to Washington after the election of 1932” (p. 19). Brazelton shows that John Maynard Keynes played a major role from a theoretical perspective for the Employment Act.
Brazelton outlines the development of the first U.S. CEA that derived from the Employment Act. Here Brazelton does an excellent job describing the way in which the CEA was developed and the councils interaction with the President and Congress. The first Chairman, Edwin Nourse, disagreed substantially on what exactly the role of the CEA should have because of the potential political agenda that could be perceived from showing support for the President’s economic policies. Unlike Nourse, Keyserling believed the CEA should interact at all costs with the President. Brazelton wrote that “The President was, to Keyserling, the President. If one strongly disagreed with the policies accepted by the President, he should resign first, and then, publicly criticize” (p. 23).

In an appendix to Chapter 3, Brazelton highlights Keyserling’s Anti-inflationary Policy and Cost Curves to help explain Keyserling’s belief that a shortage of supply is more likely to lead to inflation, not increased production. This is based on the view that a firm will not be operating most efficiently on their cost curve when they are not producing enough to meet costs at the prevailing pricing structure.

Chapter 4 highlights selected testimonies by Keyserling before the Economic Committee of Congress. Analytically, Keyserling viewed the economy as a triangle with each side representing one of the major parts of the economy, that is, consumption, government spending, and investment. Like Keynes, Keyserling believed the government needed to play a bigger role to assist economic activity, while maintaining that the private sector has a primary role in generating income, output, and production. Through the triangle Keyserling shows that “full production was not the prime cause of inflation if demand-supply balances are growing proportionally to one another” (p. 66).

Keyserling was a Keynesian in much of his theoretical perspectives emphasizing the need to maintain high aggregate demand and consumption levels in the economy. Keyserling also emphasized that there should be a low rate of interest to help facilitate stable growth in the economy or at least a variety of interest rates targeted at different industries which are flagged as growing too fast. Keyserling also theorized that it is best to target tax cuts to income groups that are most likely to use the tax break to consume more which is a step further than Keynes’s proposal in The General Theory.

“Consumption and investment must grow together if stability and full employment growth was to be maintained” (p. 67). Keyserling spent his working days trying to develop policy recommendations that would help get the economy towards full employment, while trying to change the prevailing Orthodox view that inflation is best prevented through implementing higher rates of interest.

Chapter 5 consists of analyzing the majority of Keyserling’s career (1953-87) focused on generating enough growth in the economy to achieve and sustain full employment. Keyserling also noticed that some prices are set administratively while others are market-based. For administered pricing he noticed the tendency for firms to increase prices when production volume decreased. In respect to agricultural commodities, Keyserling noticed the tendency for farmers to produce more crops when
Brazelton shows that Keyserling was able to analyze the economy and promote policies that would today be considered Post Keynesian. In order to cure inflation Keyserling promoted a rate of growth that coincides with full employment and utilization of resources, increasing public expenditure on public and private goods, and focusing on generating greater income equity. Keyserling also believed that the Federal Reserve Bank should not act independently from the government. Instead fiscal and monetary policy should be developed together with the aim to achieve a rate of growth to be sustainable to that of full employment.

In the next chapter, Brazelton analyzes Keyserling’s other writings that appeared in newspapers, magazines, and/or academic journals. This chapter again focuses on economic growth and equality, but adds another ingredient to achieving maximum economic performance: balance amongst the sectors of the economy.

In the concluding chapter Brazelton praised Keyserling for his deep insight and understanding of Keynesian Economics. “In many ways, however, Keyserling, was a rather iconoclastic Keynesian. Perhaps he saw Keynes’ *The General Theory of Employment, Interest, and Money* (1936) clearer than most. The “gist” of Keynes to Keyserling was aggregate demand” (p. 141).

Unfortunately, for the American public, much of Keyserling’s insight and hard work has been kept under the radar. Brazelton’s book will be a real eye opener to economists, economic students and lay persons alike who have not really attempted to study the subject from a non-Orthodox perspective.

Any person, especially Post Keynesians, interested in studying, developing, and/or analyzing economic policy and social welfare should read this book as Brazelton does an excellent job explaining Keyserling’s theoretical perspective and basis for the realist economists. Further, this book provides a detailed account of U.S. economic policy history since the former-President Truman signed *The Employment Act of 1946* along with many sources for further information. Brazelton challenges the readers to think analytically about how Keyserling’s policy would be related in today’s economy.
Books Received

*Oeconomicus* is proud to announce that several book publishers have agreed to provide complementary copies of their most recent publications (free of charge) to students who would write a book review for the *Journal*. Among these publishers are: Cornell University Press, Yale University Press, State University of New York Press, Edward Elgar, M.E. Sharpe, Oxford University Press, Ashgate, Palgrave Macmillan, and Routledge. Please consult the publishers’ online catalogues and contact the editor to request the book that you want to review. *Oeconomicus* reserves the right to select reviewers based on familiarity with the material to be reviewed. The following three books are available for review upon request.

**Contemporary Post Keynesian Analysis**
Edited by L. Randall Wray and Mathew Forstater (Edward Elgar, 2005), 368 pages.
ISBN: 1-84376-460-1

**Credit And State Theories Of Money**
*The Contributions of A. Mitchell Innes*
Edited by L. Randall Wray (Edward Elgar, 2004), 288 pages.

**Full Employment And Price Stability**
*The Macroeconomic Vision of William S. Vickrey*
Edited by Mathew Forstater and Pavlina R. Tcherneva (Edward Elgar, 2004), 176 pages.
Call for Papers

Oeconomicus

UMKC Student-Refereed Journal

ISSN: 1546-2803

Oeconomicus is a students-refereed economics journal sponsored by the Economic Club at UMKC. All undergraduate, MA, and Ph.D. students as well as non-UMKC graduate students are invited to submit articles, book reviews, review articles and comments via email (MS word format) to Dr. Ben Young (youngb@umkc.edu).

Students must follow the instructions to the author indicated in the journal’s web site (see the URL below). Failure to do so may result in the rejection of the paper. Previous issues of the journal are available online at:

http://www.umkc.edu/econ/Oeconomicus

For more details or for any other inquiry, please contact Dr. Ben Young:

Dr. Ben Young
Faculty Advisor, Oeconomicus
University of Missouri-Kansas City
211 Haag Hall - Department of Economics
5100 Rockhill Road
Kansas City, Missouri 64110
Phone: (816) 235-5699
Fax: (816) 235-2834
E-mail: youngb@umkc.edu
Aims and Scope

_Oeconomicus_ is a student-refereed economics journal sponsored by the Economics Club at the University of Missouri – Kansas City. The _Journal_ welcomes contributions in all areas of political economy, economic methodology, economic history, and history of economic thought. All economic traditions – including but not limited to Post Keynesian, Institutionalist, Marxist, Feminist, Austrian, and Sraffian – are welcomed in our _Journal_. _Oeconomicus_ publishes both theoretical and empirical research, as well as interviews with distinguished economists and policy makers. We encourage contributors to submit book reviews, and we welcome any comments on publications appearing in our _Journal_.

To join the Economics Club, send an email to Fadhel Kaboub at KaboubF@umkc.edu. Your email should include your First Name, Last Name, Academic Major & Level (Undergraduate, Graduate, Faculty, Alumni...), and a preferred e-mail address.

To submit an article, an interview, a book review, or a comment, send your document in MS word format to Dr. Ben Young: YoungB@umkc.edu.
Editor's Note
By Fadhel Kaboub (UMKC)

Farewell to Dr. Bill Williams
By UMKC Students

Islamic Financing: Impacts on Development and Equality
By Andrew Barenberg (UMKC)

The Dominant Economic Discourse of Today’s Iran in Retrospect
By Mohammad Maljoo (University of Tehran)

The Influence of Firm Strategy on Business Cycles in Veblen’s Economic Theory
By Maximilien Nayaradou (Université Paris IX, Dauphine)

Neither Atomized nor Bi-lateralized: Market Actors Never Exchange outside a Social-Structural Context - A Critical Analysis of the Economics of Transaction Costs
By Sébastien Plociniczak (Université Paris XIII)

Mathematical Formalism in Economics: Verdict of the Reality
By Ganna Pogrebna (UMKC)

Reflections on the Empire of Capital
By Kevin Young (Carleton University)

The State, the Market and the Euro: Chartalism versus Metallism in the Theory of Money (edited by Bell and Nell, 2003); Reviewed by Zied Ben Hmida (University of Economics and Management of Tunis)

Understanding Modern Money: The Key to Full Employment and Price Stability (L. Randall Wray, 1998); Reviewed by Shawn J. Gebhardt (UMKC)

Commitment to Full Employment: The Economics and Social Policy of William S. Vickrey (edited by Warner, Forstater and Rosen, 2000); Reviewed by Linda Hauner (UMKC)

The Open Economy and its Financial Constraints (Penelope Hawkins, 2003); Reviewed by Tae-Hee Jo (UMKC)

The Crisis in Economics: The Post-Autistic Economics Movement - The first 600 days (edited by Edward Fullbrook, 2003); Reviewed by Fadhel Kaboub (UMKC)

Reinventing Functional Finance: Transformational Growth and Full Employment (edited by Nell and Forstater, 2003); Reviewed by Yan Liang (UMKC)

Growth, Distribution and Effective Demand: Alternatives to Economic Orthodoxy Essays in Honor of Edward J. Nell (edited by Argyrous, Forstater and Mongiovi, 2004); Reviewed by Gilberto Libanio (University of Notre Dame)

Trade, Balance of Payments and Exchange Rate Policy in Developing Countries (A.P. Thirlwall, 2003); Reviewed by Corinne Pastoret (UMKC)

The Countries of the Former Soviet Union at the Turn of the Twenty-first Century: The Baltic and European States in Transition (Ian Jeffries, 2004); Reviewed by Ganna Pogrebna (UMKC)

Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries (Jennifer Clapp, 2001); Reviewed by Zdravka Todorova (UMKC)