

TRUST AND ECONOMIC PROGRESS – FRANCIS FUKUYAMA’S WORK RE-EXAMINED

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ABSTRACT

In my view, contemporary economics is in a state of considerable ferment and change. The crisis academic economics faces today is partly reflected in a decline in the influence of economists on public discourse and economic policymaking. The failure of academic economics to satisfactorily address issues related to transitional economies and to produce a satisfactory explanation of the East Asian economic crisis has added to the discipline’s image problem. Our inexplicable attachment to mathematics frequently inhibits appropriate analysis. It also has created strains within the profession and hurt the image of the discipline in the minds of students and the ordinary citizen. Given this state of the discipline, it is especially relevant that we read and understand the critique of our models made by those outside the economist’s club. This paper uses Francis Fukuyama’s critique of the neoclassical model to discuss these issues. In his book, *Trust: The Social Virtues and the Creation of Prosperity*, Fukuyama presents an insightful perspective on several topics economists have long considered their domain. He makes the sensible claim that there are many issues related to economic development and progress that cannot be satisfactorily explained by the ruling neoclassical paradigm based on the assumption of rational behavior. He goes on to present social capital, ignored in economic models, as a major determinant in economic success. These arguments are extended in the more recent book *The Great Disruption* where he discusses the idea that in recent decades, the United States and other developed nations have undergone a profound transformation from an industrial society to the information or knowledge-based society. Once again dynamic changes in the social structure and economic forces have conspired to bring these changes and these must not be studied in isolation.

INTRODUCTION

In my view modern academic economics is currently undergoing a crisis. The influence of economists on public policy discourse has been in decline in recent

years.¹ The cure for the malaise have so far eluded consensus. Some believe that the decline is due to an excessive preoccupation with formalism that endangers a narrow focus detrimental to the humanistic methodologies that have always existed in political economy. McCloskey (1993) and Mayer (1990) have suggested that excessive formalism is clogging the channels of communication both within the economics community and more importantly between the academic economists and the broader public.² Others have expressed a concern that instead of treating other social sciences such as sociology, political science, and law as important foundations, mathematics has become the only underpinning for academic economics.³ The failure of academic economics to substantially assist transitional economies solve their unique problems, and to produce a satisfactory explanation of the East Asian economic crisis have added to the image problems faced by the discipline. Many believe that the decline in the number of economics majors is a symptom of the problems facing the discipline. The best academic economists are preoccupied with theoretical issues that are explored in highly formalistic models. The brightest in the profession are busy building models that ignore important real world realities and are generally barren of institutional and historical details.⁴ Many students in economics and economists recognize the problem and have recently presented approaches towards solutions. Based on his analysis of the East Asian economic crisis and the Russian debacle, Joseph Stiglitz, the 2001 Nobel Prize co-winner, has strongly emphasized the

¹ See Krugman (1996) among others.

² See Reder (1999), p. 300 and Quddus and Rashid (1994) for concerns regarding excessive formalism in academic economics. Also see Boettke (1996) for an Austrian economics perspective on the negative impact of formalism on modern economics. For counter-arguments, see Samuelson (1994).

³ Boulding (1992) pp. 73-84.

⁴ “Our concern is that as each successive generation of economists becomes more skilled at mathematics, each demands more of the next. If this trend continues indefinitely...some might worry that this would lead to a fundamental change in the character of academic economists, as teaching shifted more and more to passing on the tools and not the questions. We might teach the language of mathematics but not the logic of economics, and end up valuing the grammar of the discipline, rather than its substance.” Krueger et. al. (1991), p. 1041.

importance of institutions, capacity building and legal framework for both the transition economies and developing nations.⁵ Knack and Keefer (1995), and Barro (1996) in their cross-section studies have shown that economic variables, the exclusive focus of modern economists, cannot fully explain the complex mosaic of the worldwide economic performance.⁶ It is time for economists to use more holistic models and to think outside the box.

Francis Fukuyama, a Harvard trained Political Scientist and a best selling author, is one of the more important non-economist writing on economic issues. He has recently addressed important economic and social issues in his books and other writings. His work and critique provides the discipline with an excellent opportunity to re-examine our weaknesses and to find solutions. In his first book, the bestseller *The End of History and the Last Man*, Fukuyama bluntly claimed that the triumph of capitalism over communism was largely due to the spread of liberal democracy, free market ideas, and the demise of communism in the Soviet Union and Eastern Europe. In his 1999 book, *Trust: The Social Virtues and the Creation of Prosperity*, Fukuyama praises neoclassical economics for convincing large parts of the global political and intellectual community that free markets provide the most effective mechanism for bringing prosperity. However, the praise is balanced with biting critique. In an introductory chapter, he claims that the neo-classical model is only "eighty percent

correct." There are many issues in contemporary world economic history that cannot be satisfactorily explained solely by the assumption of rationality and utility maximizing agents. This observation becomes the underlying theme of *Trust*, as Fukuyama proposes that culture and the presence of social capital are major explanatory variables for economic prosperity or lack thereof around the world.

TRANSACTION COSTS AND "SOCIAL CAPITAL"

Fukuyama plants his analysis in the neoclassical idea called Coase's theorem. University of Chicago economist, Ronald Coase in a seminal article in 1960 proposed that the existence of transaction costs play a crucial role in the way businesses are organized and exchange takes place.⁷ These costs arise due to mistakes, dishonesty, opportunism, or theft in the course of an economic exchange. For example, the more we have to pay lawyers to write out detailed contracts, the more we must search for or monitor our potential business partners, the more costly it becomes to conduct commerce and business dealings. Modern corporation can be viewed as an evolving attempt to reduce transaction costs. If transaction costs could be eliminated, there would be no need for companies to exist. For example, General Motors and Ford would cease to exist. Cars would be assembled in the backyard or household garage with the design and parts supplied by numerous subcontractors. Since inefficiencies do exist in market transactions, many of these activities are vertically integrated into large companies. Consequently, large firms exist to reduce the transaction costs in the marketplace. However, such firms do acquire the administrative costs of undertaking the activities themselves. Thus, firms must constantly deal with the trade-off between reducing transaction costs and administrative costs to determine the optimal size of the organization to maximize their efficiency.

Fukuyama asserts that the level of trust inherent in a national culture can impact the economic development of the national economy by lowering transaction costs. High levels of trust leads to a more prosperous economy by making commerce easier and promoting market efficiency. On the other hand, low levels of trust (high distrust), or insufficient "social capital," leads to increased transaction costs that market

⁵ In explaining the economic debacle in Russia he says "Russia's recent experience offers an excellent, if sobering, example....output remains a third below what it was before the transition started. The underlying resources may have deteriorated slightly, but the human capital and knowledge base remains. The explanation: *the destruction of organizational and social capital*, a process which had in fact begun under the previous regime, continued. Policymakers made inadequate efforts to develop new bases, and to provide the legal infrastructure necessary for markets, including bankruptcy, competition, and contract laws and their effective enforcement." (Emphasis added). Stiglitz (1998), footnote 25. Elsewhere, Stiglitz has noted that transparency and liberty are exceedingly relevant factors in the development process as they nurture trust, a respect for the basic human rights, and add to the social capital. See Stiglitz (1999). Interestingly, Professor Stiglitz's recent resignation from the World Bank may be the result of the importance he eventually came to place on developing appropriate institutions and social capital before economic liberalization is forced upon a society in transition or in a pre-industrial stage. This approach brought him in direct conflict with the so-called "Washington Consensus," that has come to stand to dominate the IMF-World Bank views and stands for unbridled liberalization.

⁶ Among other findings, Barro's study found that political stability is an important factor in economic growth. Knack and Keefer find that property rights have a significant explanatory power in explaining economic growth in cross section studies.

⁷ Coase (1960) argued that when transaction costs are non-existent, a change in the formal rule of liability would have no impact on resource allocation. Regulations would be unnecessary if transaction costs were zero.

activity more difficult and undermines commerce in the economy. Economies of scale, realized through the process of vertical and horizontal integration, leads to lower transaction costs. Network organizations, as demonstrated by the Japanese case, also reduce costs and result in a high degree of efficiency. What is essential in both cases, Fukuyama argues, is the presence of a generalized level of trust within the organization, as in the case of large corporations, and between organizations, as in the case of networks. He goes on to state that the degree of trust, crucial for lowering intra-firm and inter-firm transaction costs, is an important determinant of "social capital" that is embedded in the prevailing national culture.

Fukuyama analyzes the size of the largest firms in a several economies and comes away with the conclusion that the average firm in the United States, Germany, and Japan—examples of high trust societies—is significantly larger than those the average private firm in Italy, France, Taiwan and Hong Kong (examples of low trust societies). Fukuyama attributes variations firm size to the existing levels of social capital (trust), and proceeds to classify nations as high and low trust societies. High trust societies (United States, Germany and Japan) were the first to develop large, modern, professionally managed hierarchical corporations. On the other hand, economies in low trust societies (Taiwan, Hong Kong, France and Italy) have traditionally been dominated by family businesses that tend to be small.

One of the chief reasons for the popularity of Fukuyama's book is the abundance of examples of the impact of social capital on national economies. Social capital is a concept that is increasingly gaining attention in many academic fields, such as economics, management, and public policy. It was originally used to demonstrate the importance of relationships in developing responsible individuals in a society (Jacobs, 1961), and now is most commonly understood as "the dense networks of norms and social trust which enable participants to cooperate in the pursuit of shared objectives" (Norris, 1996: 474).

Since nearly all commercial transactions and social interactions embody some form of trust (Galston, 1996), the term can be used to study relationships at the firm level, the community level, and the national level. At the firm level, social capital is often being recognized to be as important as human and physical capital in attaining corporate success (Lin and Dumin, 1986; Lin, Ensel, and Vaughn, 1981; Mardsden and Hurlbert, 1988). For example, management researchers have found that companies with more social capital were more innovative (Tsai and Ghoshal, 1998) and attain longer organizational survival (Pennings, Lee, and Van

Witteloostuijn, 1998). Pennings, Lee, and Van Witteloostuijn note that this is evidence that "researchers should no longer treat firms as black boxes. Rather it is the content of those black boxes that yields answers to the question of firm performance." (page 435)

Social capital has gained perhaps the most attention at the community level due to the popularity of Robert Putnam's seminal essay "Bowling Alone: America's Declining Social Capital" (1995). Putnam presents the novel case of bowling leagues as an example of the decline in civic involvement in America. He notes that bowling increased in popularity by 10% between 1980 and 1993, but league bowling, which is a staple of American culture that brings together people from all facets of the community, dropped by 40%. Putnam (1995) followed shortly thereafter with another popular essay explaining how television is the chief source of the erosion in social capital in America.

Although Putnam's thesis has been questioned both empirically⁸ and theoretically,⁹ it ought to be recognized for its contribution to contemporary economic thought. Important empirical studies, which explore the relationship between social capital and economic performance, have begun to come out.¹⁰ Significant ground has also been gained in finding alternate and improved measures¹¹ and explanations for social capital. As a result of these developments, Putnam's original observations have been enriched by various important qualitative distinctions. For instance, Fukuyama, in his most recent book (1999), suggests that when using group data as a measure for social capital, it is necessary to differentiate between groups organized for lobbying for tobacco and groups organized with the explicit intent of building affordable housing for poor people. He proposes that the "radius of trust" is not the same among groups that are based on shared ideas and values and groups that are based solely on financial returns. As a consequence, the economic impacts of the two groups on the society as a whole are not the same.

FIRM PERFORMANCES IN HIGH-TRUST AND LOW-TRUST SOCIETIES

⁸ See for instance The Ladd Report (Everett, 1999), where the author contested Putnam's data by arguing that his study failed to account for substitution of one group by another.

⁹ Rich (1999) maintains that using specific examples to prove there is a malaise that threatens democracy "is a risky business."

¹⁰ Knack and Keefer (1997) presented evidence that social capitals matter for measurable economic performance, using indicators of trust and civic norms from the World Values Surveys for a sample of 29 market economies.

¹¹ See for instance Paxton (1999), where the author provides a model that has explicit links to theories of social capital.

Fukuyama devotes much of *Trust* to case studies showing how the degree of mutual trust has affected the creation of wealth in different parts of the world. Starting with firm sizes, he explores both the causes and consequences of being a high or low-trust society; then he proceeds to examine the cultural dimension, defining it as an inherited ethical habit. Ethical systems constitute the major source of culturally determined behavior and, in general, create a degree of trust among their members. Certain ethical codes tend to promote a wider radius of trust by emphasizing the imperative of honesty, charity, and benevolence toward the community at large. Spontaneous sociability resulting from a larger radius of trust, Fukuyama argues, is what enables a society to form new associations and cooperate within the terms of reference they establish. In this measure, Germany and Japan are easily identified as group-oriented societies. Due to its Protestant work ethic, the U.S. also ranks high, despite the widespread perception of it as an individualistic society. On the other hand, family-oriented societies, such as Taiwan, Hong Kong, and China, have weak voluntary associations because they have no basis for trusting one another. Such characteristics are also found in France and Italy where there is a deficit of trust among people not related to one another.

In societies where spontaneous sociability is lacking, government has to step in to help create large-scale businesses through subsidies, guidance, or even outright ownership. France is a case in point where state sponsorship has allowed the creation of large-scale, capital-intensive firms in the public sector. The case of Korea, a low trust society by Fukuyama's classification, is an interesting one since Chaebols--giant commercial conglomerates--constitute the largest segment of its economy. Fukuyama attributes this to an activist and competent state, which, unlike the case in France and Italy, channeled government subsidies into strategic sectors through private rather than state-owned enterprise and overcame an inherent cultural tendency towards small organization. According to Fukuyama, the Korean case demonstrates that a determined state can overcome the perceived disadvantages of a low trust society and conversely enhance the advantages of a high trust society.¹²

Cultural tendencies at the national level trickle down to the firm level, and Fukuyama furnishes many

interesting examples of the role of trust in production and economic activity from around the world. For example, he explains how in every Toyota plant any one of the thousands of assembly line workers can bring the entire assembly operation to a halt by pulling a cord at his or her workstation, and yet they seldom do so unless the work stoppage is actually necessary. Another vignette describes a situation in Southern Italy in the 1950s. Wealthy Italian citizens were unwilling to establish a badly needed school, hospital, or factory in a small town, despite an abundance of capital and labor, because they did not trust each other and believed it was the public sector's obligation to provide such facilities. The case of Nucor Corporation is also presented. In the recession of 1983-1984, the steel company was hit hard, but it did not lay off any worker. Instead, the company put all its employees, including the CEO, on a two or three-day work week with a corresponding cut in pay which demonstrates a high level of trust in their employees and a fair sharing of the burden. When the recession ended, the company enjoyed tremendous growth due to the goodwill built between the workers and the management in the company.

THE INTERDISCIPLINARY NATURE OF TRUST

In the neoclassical model of perfect competition, firms maximize profits by equating price and marginal costs. This results in a price and output combination that is efficient, technically and economically speaking (Ferguson and Ferguson, 1994).¹³ A general corollary that follows from the neoclassical view of firm efficiency is that in the absence of profits, i.e. markets, firms are less efficient. In other words, ownership is correlated with efficiency. Economic literature is replete with examinations of ownership implications of firm efficiency (Vining and Boardman, 1992), which generally tend to find private ownership leading to better efficiencies when there are no regulatory distortions. Hence, by Fukuyama's assertions, policy decisions in France and Italy to promote large institutions in the public sector have different economic implications than policy decisions in Korea to promote the same type of institutions in the private sector.

Isolation from market forces, as Leibenstein (1978) has demonstrated through theories of x-

¹² The importance of the policy variable also implies that a corrupt and inefficient state can destroy the advantages of a high trust society. Pro-growth culture and high levels of social capital are a necessary but not a sufficient condition for prosperity of a nation.

¹³ Productive or technical efficiency is a measure of efficiency in producing goods at the lowest opportunity costs. Economic or allocative efficiency measures if the firm is producing the right goods in the right quantities given consumer demand and market conditions.

efficiency, also affects a firm's dynamic efficiency. Dynamic efficiency relates to the capability of free markets or other institutional arrangements to promote new technology that lowers costs, improves product quality, or creates new marketable products (Wolfe, 1993). It is closely tied to a firm's ability to introduce systematic innovations in products, processes and management—a factor related to the level of trust inherent in the society.

Fukuyama argues that although the United States and other industrialized countries were quick to adopt lean production, the process was met its first success in Japan because of an extremely high level of generalized social trust. Lean production systems allow the assembly line worker an extraordinary degree of trust and authority, which is generally reserved for top management in the Fordist/Taylorite mode of production. Downward delegation of authority places a higher demand on workers' skills and more investments need to be made in in-house training than is necessary in a classical mass production system.

It is no surprise, then, that Nonaka (1991) found that growth of investments in Research & Development and knowledge creation in Japanese firms outpaced the growth of investment in capital. These investments help explain why Japanese firms exhibit an ability to recognize and exploit external information known as absorptive capacity. Cohen and Levinthal (1990) maintain that absorptive capacity is a function of a firm's level of prior related knowledge. Ability to exploit external knowledge is critical to a firm's commercial success because most organizational innovations result from borrowing rather than inventing.¹⁴

APPLICATION OF ECONOMICS AND ORGANIZATION THEORY

The application of both economics and organization theory in the above examples demonstrates how the sociological notion of trust can be used to establish a link between culture and the creation of prosperity. This interdisciplinary approach overcomes a serious disconnect that currently exists between neoclassical economics and the business management view of the firm and may present an alternate model of how researchers in related fields can collaborate for mutual gain. Neoclassical economists tend to view inter-firm differences in terms of factor prices, availability of factors, product markets, and more generally, in broader aggregates such as industry or economy wide

performance (Nelson, 1996). Business management concentrates on the behavior and performance of individual firms in their own right without necessarily connecting them to the broader social and economic context. Fukuyama's usage of culture, both at the firm level and at the national level creates a bridge by which inter-firm and inter-industry differences can be evaluated and understood in a broader and meaningful context.

A FEW CRITICAL NOTES

In my view there are flaws in Fukuyama's general approach to the role of social culture in wealth creation. Fukuyama has not dealt with the issue of how the level of trust and social capital can be measured or even monitored. He asserts that social capital is likely to be helpful from an economic standpoint only if it is used to build wealth-creating economic activity. Still, this qualification does not offer the necessary and sufficient conditions to distinguish between the roles of an illegal organization such as a mafia and an industry cartel in promoting the wealth of participants. As a result, the policy implications of his important insights have not been sufficiently explored.

Second, in trying to disprove the neoclassical assumption of rational choice, he inadvertently falls into the trap of cross-national growth accounting exercise. Solow (1995) argued that if indeed neoclassical economics could explain eighty percent of the growth differential between countries, the remaining twenty percent ought to be explained in terms of technology and social capital. Using rough calculations based on two studies conducted by economists, Solow attempts to undermine Fukuyama's hypothesis on the importance of social capital and shows that residual performances do not closely correlate with a country's stock of social capital. He thus labels the thesis as "loose parlor-theorizing, replete with fudge factors."

In Fukuyama's defense, one could argue that he did not divorce himself as much as he needed to from the neoclassical static equilibrium view of the world. Evolutionary economists, such as Nelson and Winter (1982), have argued that exercises of "squeezing down" the residuals were inherently flawed because neoclassical economists used the notion of technological change as an exogenous variable to account for the unexplained growth in output. In other words, had Fukuyama not committed himself to the neo-classical framework, Solow would not have much to argue in his defense. In fact, Fukuyama has gone on record accusing economists of using culture as a grab bag or residual category to explain whatever cannot be accounted for by general theories of human behavior.

¹⁴ March and Simon (1958).

Third, Fukuyama's thesis is also hurt by the lack of focus on inter-firm and inter-industry differences within high and low trust societies. Solow (1995) uses productivity differences, such as differences between electronics and financial services in Japan, and questions why they are not consistent across the board. "If cultural differences in 'trust' and 'sociability' were the key factors in industrial efficiency, one would expect them to work their magic across the board."¹⁵

It is not that Fukuyama does not mention firm level anomalies. For instance, he speaks of the case of Wang Laboratories, which had revenues of \$2.28 billion in 1984 but was forced to file for bankruptcy by 1992. The unfortunate turn of events occurred when An Wang, its founder, decided to relinquish control of his company to his son Fred Wang instead of several senior managers with competent track records. Fukuyama attributes this to the senior Wang's Chinese origins and cites it as an example where firm culture originating from its owner could temporarily dominate the culture of the nation where the firm was located. In this respect, it could be argued that national culture is an important determinant in firm performance in the absence of a countervailing corporate culture.

Amsden and Kim's (1989) comparative study of Hyundai Motors and Daewoo Motors shows that between the largest Chaebols in Korea there could be vast differences between corporate cultures, even when both were subject to similar social conditions and inducement mechanisms. Culture inside Hyundai Motors was a direct by-product of the "Hyundai Spirit," or "Hyundai Style," that was characterized by self-reliance and independence (Hyun, 1995) and was carried over from Hyundai Shipbuilding and Hyundai Construction. By contrast, Daewoo Motors was a passive participant in a joint venture with General Motors and fell behind significantly in terms of technological capability and self-sufficiency.

Fourth, the size of the firm may not be an important factor in its efficiency and ability to innovate. An efficient and determined state in South Korea fostered the growth of large industrial conglomerates in the private sector and allowed them to command greater market share. By comparison, Taiwan's interventionist state decided not to artificially create large national champions and opted for and macroeconomic stability. This created a situation in Korea where the Chaebols, in the absence of local small and medium-size enterprises, continue to rely heavily on Japanese companies for the supply of critical components for automobiles and electronics (Kim, 1997). By contrast, the absence of big

industrial conglomerates prevented Taiwanese companies from becoming dominant players in the global market. However, because of the flexibility accorded by its base of small and medium-size firms, Taiwan managed to avoid the worst of the Asian financial and economic crisis, which created serious structural problems in the Korean economy.

Finally, Fukuyama's attempt to link cultural with economic variables is neither unique nor comprehensive in its coverage. Although Fukuyama discusses several societies in Europe and Asia, he ignores African, Latin American, and Middle Eastern countries in his case studies. Hofstede (1983) undertook studies of work-related values among 50 countries and looked at factors in four dimensions: individualism versus collectivism, large versus small power distance, strong versus weak uncertainty avoidance, and masculinity versus femininity. Although this was a cross-sectional study and as such a static exercise, it nevertheless demonstrated the limitation of ethnocentric management techniques a decade earlier. Also, while paying abundant attention to the subject of culture and economy, Fukuyama's model has no means for addressing technological innovations or technological change, a key factor in determining competitiveness at the firm, industry and national levels. In that respect, Porter's (1990) study in the competitiveness of nations and Nelson's (1993) study of national innovation systems provide much greater insights into the varying patterns of wealth creation throughout the world.

The Great Disruption: Human Nature and the Reconstitution of Social Order

It appears though that Fukuyama has attempted to address some of these concerns in his new book, *The Great Disruption: Human Nature and the Reconstitution of Social Order*. In *The Great Disruption*, he takes his ideas from *Trust* to a deeper level of analysis, by attempting to explain the natural mechanisms by which social capital is developed. In a chapter titled Self-Organization, Fukuyama posits issues related to organization in the private and the public sector. He posits that the norms chosen by a particular group are a cultural choice not a biological predisposition. He employs a four-quadrant model where the quadrants are alternately political, religious, self-organized, or natural.¹⁶ He analyzed the concept of "self organization" that has become the buzz word with many management consultants who have advise the modern information-age firms to abandon hierarchy and to organize themselves in highly

¹⁵ See Solow (1995).

¹⁶ Fukuyama (1999), page. 188.

decentralized forms of cooperation. According to Fukuyama this cannot be a universal formula for achieving coordination in human groups. He goes on to discuss the concept of spontaneous order. The tragedy of commons that arises from the existence of public goods that create a free rider problem. He discusses the solution of privatization (internalizing the externalities) and the Coase theorem which holds that if transaction costs are zero or small, the private parties can deal with the problem. He explains that over thousands of years the human species has evolved ways to recognize cheaters. If one violates social norms, he or she risks being discovered as a cheater and thus denied the fruits of society. While many treatises of human nature have long stated this perspective, Fukuyama's contribution is to bring these findings from life sciences into the realm of social sciences, in order to explain the foundations of trust and social capital. Those who have read both books may conclude that he repudiates his earlier views with *The Great Disruption*. For example, in *Trust*, he often uses the United States as the prime example of a country that embodies great social capital. However, in the first part of *The Great Disruption*, he discusses how the United States has lost a great deal of social capital during a period of greater individualism and social unrest. Yet, we believe the two books do not necessarily cancel each other out but rather offer different angles of answering his research question, for it is quite possible that although the U.S. has lost social capital over the last thirty years, it still has a greater supply left than other countries. Fukuyama exhibits concern for this trend, but concludes with optimism that human nature, which he posits is based on cooperation, will once again lead to social order, just as it has during previous periods of revolutionary changes in forces of production.

In more recent writings, Fukuyama takes issue with the Internet Bubble and its gurus. He addressed the implications of the Internet and other technologies that greatly impact possibilities of human communications in a white paper.¹⁷ He is quick to point out the promise of Internet is great but those of make a living selling the promise that it will be a cure all for all problems faced by the human civilization are selling snake oil. "The information revolution has in fact opened up new doors to vaster realms of commerce and organization, but as in past technological revolutions, the full effects won't come until the technology is mated to new institutions and new social relationships. Trust arises from the interaction of individuals who live up to their commitments and tell the truth, and those are

¹⁷ Fukuyama (2001), page 3

much harder to come by than through processing, power or bandwidth."¹⁸

CONCLUSION

Fukuyama's attempt to link economics and sociology, however valuable, is not novel. Adam Smith, the father of contemporary economic science, and other Classical economists employed sociological, political, and cultural factors in their analysis. They used an interdisciplinary approach by asking questions broad questions: what causes the wealth of nations to increase, and what causes poverty to persist? The Marginalist revolution in economics (1870s) caused the discipline to move away from these Classical traditions by a narrow focus on economic factors alone. These trends accelerated in the post World War II period, partly from an influx of scholars trained in physics and mathematics into the ranks of academic economists.

Today at the turn of the century as we step into a new millennium, we find the landscape of economics to be radically different from what it was a hundred years ago. Modern economics in nature and scope is vastly different from the vision of writers such as Adam Smith, David Ricardo, Thomas Malthus, David Hume, and John Stuart Mill, who founded political economy as a branch of philosophy concerned with the betterment of the society and the process of wealth creation. Classical economists effectively used rhetoric as their dominant theoretical tool to persuade policymakers. Conventional economics has moved away from these humanistic traditions—it accepts as theory only something that could be presented mathematically and sharply demarcates theoretical analysis from empirical research in favor of the former. Nelson (1996) and McCloskey contend that in recent years, by abandoning the rhetorical component, formal theorizing has become a self-referential exercise, losing much of its contact with the subject matter it was designed to address. As a result, the quantitative record of growth that is available today can account for only a relatively small portion of what economists know empirically about growth. What is needed at this juncture is an effective interaction between formal theorizing and 'appreciative theorizing' that, according to Nelson, could accord economic research

its best results.

Trust reminds economists how every economic activity is also a social activity. Although many contemporary economic scholars look upon interdisciplinary work with disdain, Fukuyama's work

¹⁸ Fukuyama (2001), page 2.

effectively demonstrates the benefits of this approach. The reader of *Trust* learns not only facts about current global conditions but also much about history, politics, economics, and sociology. The author is especially to be commended for writing a book on comparative cultures and economic systems in a manner understandable to the non-specialist. Fukuyama's work is a contribution to modern economics since it provides an introspective examination of the role played by culture in today's economies. It may be considered a modern day treatise in economics where the author--not formally trained in academic economics--transcends the self-imposed boundaries in modern economics to present an analysis of wealth creation in the true spirit of classical political economy. Indeed, the merit of this approach in understanding prosperity and poverty issues in the coming century may be greater than esoteric models neoclassical economists presently employ in their work.¹⁹

Fukuyama's work is timely. It coincides with a renewal of interest among economists in the causes and limits of growth. There is also renewed interest among sociologists and management scholars in the role played by trust within a business organization, a social community and in the society at large.²⁰ Other authors have focused on the concept of social capital and have suggested research on other dimensions, including the idea of intellectual capital (Nahapiet and Ghoshal, 1998). These ideas, if incorporated in the neoclassical economic paradigm, would add richness and diversity to the models used by economists. If the profession chooses to ignore these developments, the discipline would also stand to lose an opportunity to refocus its energies towards a more interdisciplinary agenda consistent with its classical roots. We end with a quote from Bob Solow's review of Fukuyama's book,

I believe that the sorts of things that Fukuyama wants to talk about are more important than my colleagues in economics are willing to admit. I would

¹⁹ In this regard Stiglitz's resignation from the World Bank is of significance. Professor Stiglitz has come to believe that mistakes were made in the way the World Bank and IMF dealt with the transition economies and the East Asian crisis. He has suggested that we need to move beyond the so-called Washington consensus to emphasize the importance of the role of institutions in building the wealth of a nation. The subsequent award of the 2001 Nobel Prize in Economics to Professor Stiglitz indicates that many mainstream economists agree with his views and respect his contributions.

²⁰A 1995 conference in Stanford University brought together scholars interested in the many facets of trust. An edited volume of the conference papers was published by Sage (Kramer and Tyler, 1996).

rather they are discussed imprecisely than not discussed at all. (Solow, page 39)

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