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Frontiers in Economics and Christian Scholarship

By J. David Richardson

I. Introduction

The purpose of this paper is to assess economics and evangelical Christian contributions to it, outlining an agenda for future scholarship. Economics is a professional discipline and I have endeavored to write about its scholarly core, with less attention to its popularity as a commercial science or as a social prism. I will argue that its core, though distinctive, rests importantly on philosophy, law, history, and other social sciences. Evangelicals are well represented among professional economists, but I have tried to be mindful also of other extensive Christian (and Jewish) scholarship that I find relevant to evangelical endeavors, for example, Tamari (1987) and extensive references in the recent "Bishops' Letter."¹

I write as a trained economist and a simple believer in Jesus as Savior and Lord. I have never had the privilege of studying theology, nor other scholarly disciplines, nor even economics very deeply outside my own specialization (international trade). I invite my readers to correct any misunderstandings so that I can learn further, and look forward to our interchange.

Section II discusses the character and pre-suppositions of economic analysis,² and how they have changed over the recent life of the discipline. In crafting my character study, I hope to persuade the reader that unlike a familiar stereotype of economics, its modern morphology is multi-faceted and multi-hued, reflecting and refracting many concerns of serious believers. Section III describes terrain that Christian scholars have inhabited in economics, easily tilled and fruitful fields. It argues that those lands need some Sabbath rest, and that there are marvelous frontiers yet to explore, and highways, and places of springs. The

In his paper on the role of Christians in the discipline of economics, J. David Richardson deprecates the tendency of Christians to concentrate on broad, "ideological" economic issues and to neglect detailed analysis. He proposes a number of recent developments in economic research which...

remainder of Section III outlines my recommendations for where to journey, with travel tips scattered through Section II as well.

Readers who are already professional economists may not need either introduction or persuasion, but I have attempted to make my remarks interesting to them anyway. For readers who are not (yet) economists, nor believers, I have tried to be both interesting and intelligible. The task may be impossible. I hope not. It has led me to leave several terms undefined and several ideas unrefined, and tempted me toward allusion and metaphor. Please forgive any failings.

II. Economics, Traditional, and Modern: Character and Presuppositions

A. Natal Parables: Economics in the Beginning Economics was born at the Fall. Not only did the resources necessary to meet human needs become scarce and grudgingly available, but humankind succumbed to the competitive desire to be like God, unlimited in attainment, achievement, and power.

The confrontation of unlimited desires with scarce resources forced men and women into regretful choices called (after many millennia) trade-offs. More of one thing can usually be enjoyed only by giving up something else that uses the same limited resources. Yes, resources could grow and be replenished, yet that generally required time and some current sacrifice. Time itself became a scarce resource, as life on this earth was punctuated with death, and troublesome tradeoffs were forced among the seventy- or eighty-year "length of our days."

Economics is the science of decision-making under scarcity. Given human desires, some decision-making rules make sense by "economizing" on scarce resources, and others do not make sense because they "waste" scarce resources. The first are called efficient rules, and decision-making by their light is called rational; the second are called inefficient, and lead to irrational decision-making. Efficiency and rationality are stewardship principles aimed at the conservation of scarce resources.

*Many of the perspectives in this paper have developed out of conversations over the years with colleagues and graduate students; John Dodge was one of the first, and deserves special thanks. Many people have given me ideas, citations, criticisms, and papers, for all of which I am very grateful. They include Robert J. Bartel, John M. Boersema, Ronald R. Burnette, A. B. Cramp, Barend A. deVries, Kenneth G. Elzinga, Ross B. Emmett, James C. Halteman, Robert D. Hamrin, Kim Hawtrey, P. J. Hill, James L. Johnston, Carl Krieder, John Mason, Brent Nelsen, Douglas J. Puffert, Robert Rogowsky, Wayne K. Shockley, Peter A. Streufert, John Tiemstra, Anthony M. C. Waterman, Charles K. Wilber, Michael Wiseman, and University of Wisconsin colleagues who were exposed to an earlier draft in the Faculty Dinner Seminar. I have not always conditioned my remarks in ways that these people recommended, nor have I always noted our disagreement on some points. I hope to do both some day, God-willing, in a longer development of these and related themes.

¹See National Conference of Catholic Bishops (1987), especially its notes and bibliography. See also the critique of the letter by the Lay Commission on Catholic Social Teaching and the U.S. Economy (1986).

²It is perhaps significant that "analysis" is almost always the term economists use to describe what we do, and almost never "scholarship."

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Economics is traditionally agnostic, despite its genesis. Economists are willing to consider that among other human desires, pleasing God is important, even dominant. It may perhaps be that with God all resources are possible, and that he can, if he chooses, throw open the floodgates of heaven and pour resources down. It may even be that a much more satisfying, more enduring treasure can be built up in heaven than on earth. But if none of these things were true, there would still be enough good works for economists to do by sight, faith notwithstanding. The discipline has been content to focus on those good works.³

B. Economics as a Social Science Economics stands out among the social sciences for a number of reasons. It is the least intrinsically social of them: if Adam alone had been banished from the garden, he would still have had to satisfy desires by allocating scarce time and resources among fishing, farming, resting, exercising. Economics is also the most "scientific" of the social sciences, if by that is meant reliance on axiomatic reasoning, deduction, prediction, measurement, and hypothesis testing. This has not always been so. The earliest "economists" were philosophers. Economists a century ago occupied themselves diligently with what would today be called sociology or political science. History was the earliest crucible in which economists refined their theories. Only in the past 50 years or so have narrowly economic data and experimentation⁴ relegated historical investigation to a sub-field of economics, and a fading one at present.

Economics is also, among social sciences, arguably the most arrogant, combative, and imperialistic. This is due in part to commendable scientific ambition (and dubious scientific pretension), and in part perhaps to the important role that economic analysis assigns to market competition or functional class conflict. Marxian economics emphasizes class conflict, "neo-classical" economics emphasizes market competition.

These are, further, the two dominant schools of economic thought with rigorous scholarly traditions. Marxian economics shares many of the concerns addressed above. It diverges, however, with respect to both the substance of economic goals and institutional means of meeting them. I am not professionally qualified to comment on its disciplinary perspectives, and will therefore say nothing about them below. However, in light of the world-wide importance of Marxian categories in shaping economic perspectives and institutions, and even some commentary within the Christian church, one item for Christian econo-

³The influence of Enlightenment perspectives is obvious here, and described in greater depth by Goudzwaard (1979), Griffiths (1982, 1984), and Waterman (1987).

⁴Experimentation in economics cannot usually be tightly controlled. In the past few years, however, respect has grown for the economics that can be verified and learned from tight laboratory experiments that simulate economic interchange, much like experiments in psychology. Hoffman and Spitzer (1985) and Smith (1986) survey these experiments. The best feasible control is always sought in economic experimentation, of course, even that conducted in the "real economy" such as "income maintenance" experiments surveyed and referenced in Munnell (1987) and Federal Reserve Bank of Boston (1987).

mists' agenda is to master rigorous Marxian economics thoroughly, then to speak credibly to its professors and disciples on their own terms.⁵

Economics is also the most mathematical of the social sciences. Utilitarian calculus describes its maximization operations, linear algebra and topology describe its interdependent equilibria among markets, differential equations and probability theory describe its inter-related equilibria over time and across contingencies. Mathematics, maximization, equilibria—the mechanistic concepts assault a visitor familiar only with economic journalism. They also assault first-year graduate students seduced by undergraduate stress on the relevance of economics to the exclusion of its rigor. The assault seems to me most sadly vicious on those students imbued with missionary zeal to use economics to minister to peoples and nations. Christian graduate students seem often unwilling or unable to continue serving such a cruel, seemingly heartless disciplinary master.⁶

C. Rigor and Relevance The cold, mechanistic reputation of economics is quite unfortunate in my opinion. It is more warmly human than it seems. For all its rigor, the core of the discipline remains "relevant." Let me try to illustrate. One of the most rigorous yet important theorems in mathematical neo-classical economics is that ubiquitous perfectly competitive markets can satisfy economic desires efficiently and "Pareto optimally."⁷ The theorem is arresting because it is not at all obvious. It is important because it lies at the heart of neo-classical confidence that markets are generally a desirable means of organizing economic activity. It is even robust: variations and corollaries have been documented in many, if not all, circumstances. No reputable economist claims that markets work well in *all* instances, but most believe that the burden of proof to the contrary should be on those who articulate alternative means.⁸ Markets are

⁵Other schools of economic thought—Austrian, neo-Keynesian, participatory—are usually closely related to Marxian or neo-classical perspectives, and do not approach their history or depth. They will be ignored in this paper. Within neo-classical economics, the widely accepted view is that the most thorough training is in the top 5 to 10 U.S. graduate schools. Graduate programs in neo-classical economics exist throughout the developed world, however, and are also prominent in India, East and Southeast Asia, and Latin America (where Marxian perspectives are also strong).

⁶Malik (1980, p.32) may be reflecting the way they feel when he comments ominously:

In order to create and excel intellectually, must you sacrifice or neglect Jesus? In order to give all your life to Jesus, must you sacrifice or neglect learning and research? Is your self-giving to scholarship and learning essentially incompatible with your self-giving to Jesus Christ? These are the ultimate questions, and I beg you to beware of thinking that they admit of glib answers. I warn you: the right answers could be most disturbing.

⁷This quality makes up part of the typical economist's minimal requirements for desirable outcomes. It implies that no one can be made better off without making someone else worse off. The theorem and proof are part of the work of two Nobel laureates in economics, Kenneth J. Arrow and Gerard Debreu.

⁸Articulation of alternatives is essential. Economists have little patience with criticism made up of mere litanies of market shortcomings. We are ourselves accomplished composers of such litanies, as I will reveal. Composing alternative social structures that somehow work *better* than admittedly imperfect markets, or that moderate market imperfections, is the challenge. For several starts, from a Christian perspective, see Cramp (1983), Graham et al. (1986), Hamrin (1986), or Halteman (1988).

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meetings of sellers and buyers wishing voluntarily⁹ to exchange property rights to goods (products or services). "Perfectly competitive" denotes that each seller or buyer takes as given the rate (price) at which two goods can be exchanged.¹⁰ Ubiquity implies that transactions of all kinds can be made—even across time or contingent events (such as my purchase of an insurance policy to pay me in case my business fails).

I want to try using the "weaknesses" of this theorem to persuade the reader of the warmth and relevance of modern economics. The theorem contains the seeds of its own undoing, reasons to doubt its conclusions. It is interesting to investigate what might reject or restore it. These activities have occupied considerable professional attention over the past ten to twenty years.

For example, the theorem "suggests" that markets may not be so desirable if sellers and buyers enjoy concentrated market power, with opportunities to influence price or to coerce rivals or customers. Recent developments in game theory and bargaining analysis have allowed economists to examine whether or not countervailing market power could maintain market benefits as well as the perfectly competitive absence of market power.

The theorem also "suggests" that an incomplete system, missing some crucial market (e.g., for insurance), may not function as well as predicted. This has led modern economists to consider other social arrangements to substitute for missing markets (e.g., unemployment insurance). It has also led them to consider that markets may be "missing" because property rights have not or cannot be defined (e.g., to clean air).¹¹

Property rights, though, may be hard to define if a product or service is hard to measure, or if sellers, buyers, and a government are not equally well informed about its exact character. Information about goods is itself a good, after all,

⁹This word is more subtle than it appears, and is usually taken to rule out not only coercion, but also the kind of voluntarism induced by threats of injury.

¹⁰This might occur, for example, because each has transactions that are so insignificant compared to those of a very large number of similar transactors that no single one can influence the prevailing price.

¹¹Boulding (1985, p. 264), who is no strict neo-classical economist, nevertheless observes,

There is a magic in property. There really is. We even see this in the socialist countries, where if it wasn't for the private plots of land the whole thing would fall apart.

"Private" property rights are often made synonymous with "individual" property rights in economic analysis, and antonymous to centralized communal property rights such as are prominent in communist social systems. The tendency to analyze and compare only these two most extreme types of property rights is especially pronounced in Christian writings. That is unfortunate because the most important real issue—and the most interesting analytical questions lie between these extremes. Which property rights could/should be vested in families (economists call them households) as opposed to individuals? Which property rights could/should be vested in a community of shareholders called a limited-liability corporation (economists call them firms)? Which could/should be vested in institutions such as labor unions, churches, local communities, national governments, international bodies . . . ? Much of modern economics is about non-market transactions within and among such institutional repositories of property rights, as described below. Much modern economics aims to describe the outcomes of some given institutional array of property rights, and to assess whether a different array would conserve scarce resources or meet economic goals better.

requiring scarce resources to produce. But information is an unusual good because your possessing it does not leave less of it for me to possess. Furthermore, if you can't exclude me from sharing the information nor coerce me to contribute toward its resource cost, then insufficient information may be produced.¹² If you *can* exclude me from sharing the information, then it is not clear whose information or what information is conveyed by the price at which you and I agree to transact.¹³ There may even be opportunity for you to deceive and exploit me, stealing from me by lying about the benefits of a voluntary purchase or sale—I think I'm buying prime Florida farmland; so do my neighbors who hear about my "deal"; you know I'm buying a swamp; but you want them to believe the (mis-)information in the alluring price that you offer to me. Asymmetric information, though, may not be due to deception, but to unavoidable resource costs of transferring the information. The economics of "signalling" and "reputation" analyzes how workers or firms convey indicators of honesty or quality that are too costly to measure directly. The economics of "efficiency wages" shows how the concept of efficiency must be modified to include incentives for "good" yet unmeasurable behavior (e.g., loyalty) and dis-incentives for "bad" (e.g., laziness that cannot cheaply be detected).

Implicit in this stream-of-consciousness introduction to the modern discipline is an important pre-supposition that economists themselves sometimes forget. Markets require ethical, legal, and institutional foundations to work. They are more aptly social creations than natural ones, characteristic of an advanced society, not the jungle, desert island, or prison camp in which several simple economic parables are set. Markets don't spring up haphazardly like mutant wildflowers. They are cultivated plants. Wild and woolly frontiers are known for their self-sufficiency. Civilization is known for its markets.

Modern economics consequently builds on ethics, law, political science, and sociology. Ethics and law argue that deceit is wrong and make fraud a criminal

It is not clear to me why Christian economists have seemed slow to warm to these richer and more realistic perspectives on property rights. Nor do I think it acceptable scholarship that Christian apologia for status-quo social institutions (e.g., corporations) in developed economies rest almost always on individual property rights. Their arguments are not congruent to the reality they are defending unless, as economists often do, they assume that every institution is made up of identical homogeneous agents and can be analyzed as if "it" "were" any single one of those agents. Christians aware of the diversity of the body and all humankind ought to know better than this. Sociologists do; see Coleman (1984) for a discussion of the uneasy economic implications of "representative agent aggregation."

¹²Economists describe goods with these characteristics as public goods and the problem as the "free rider" problem.

¹³The most important function of market prices in traditional economic analysis is that they convey information to sellers and buyers that helps them to meet goals and conserve scarce resources in an effective manner. Akerlof (1984a) is an excellent introduction to modern perspectives where because of informational asymmetries, prices cannot play this role clearly. Stiglitz (1987) covers similar issues where agents enjoy market power. Katz (1986) surveys research applying these perspectives to wages and labor markets. Christian economists seem to be unaware of these modern perspectives, or to emphasize the traditional perspective anyway, perhaps because they suspect that the traditional provides the rule and the modern only the exception; Hill (1987) is a recent illustration.

offense, allowing markets to work better.¹⁴ Law and enforcement institutions define property rights, defend the sanctity of contracts, and regulate concentrations of market power, allowing markets to work better (more "voluntarily"). Social contracting binds together consumers or workers into institutions (unions) that may countervail other concentrations of market power, allowing markets to work better (again, more "voluntarily"). Social contracting creates still other institutions such as limited-liability corporations or unemployment insurance or bankruptcy arrangements—all of which may alleviate problems of missing insurance markets, allowing other markets to work better. One of government's most widely accepted economic functions is to provide publically for public goods, allowing markets to work better.¹⁵

Modern economics is inspecting its ethical, legal, and institutional foundations much more attentively today than just a few years ago.¹⁶ The economics of illegal activity and the "law and economics" movement describe both symbiosis and conflict between ethical/legal norms and economic incentives.¹⁷ There has developed an economics of self-enforcing contracts to describe situations where promises are unbelievable and rules or law are impossible, for example, in relationships between sovereign debtor governments and their commercial bank creditors. Managerial/organizational economics and the economics of "clubs" study social mechanisms other than markets for trading goods *within* a firm or social institution.¹⁸ The economics of fiduciary or principal-agent relationship explores the incentives necessary to make institutional representatives (such as managers) responsible and accountable to constituents (such as shareholders).

The economics of marriage, divorce, and the family describes mechanisms and incentives for implicit trade in services among family members—obviously hard to measure and only implicitly priced, but nonetheless real exchange.¹⁹ The economics of patents, appropriability, and innovation tries to resolve the trade-off between progress and public diffusion—the need for temporarily exclusive

¹⁴See Hirsch (1976) for a discussion of how markets depend on trust, or else failing that, on elaborate and (resource) costly contracts that must replace trust as market economies grow.

¹⁵Public goods include more than just information. National defense, minimal standards and certification, and laws and institutions insuring the kinds of economic justice described above are other important examples. Commons (1924) is a classic that illustrates many of the points in this paragraph.

¹⁶See Hirschleifer (1985), MacKenzie and Tullock (1981), and Radnitsky and Bernholz (1985). A sampling of session titles from the December 1986 annual meeting of the Allied Social Science Associations—largely economists despite its catholic name—also reveals this trend: Philosophy and Economics, Ideology and Economic Structures, Psychology and Finance, Do People Behave Rationally?, Intergenerational Altruism, Conflict and Peace Economics, The Economics of Science.

¹⁷The economics of illegal activity encompasses economic incentives for individual criminal behavior, black markets, the underground economy, smuggling, illegal immigration and tax avoidance. Most economics principles books cover these topics in a simple way. The "law and economics" movement includes analyses of how to make laws more consistent with economic incentives, how to use economic incentives to increase adherence to law, and related topics. The *Journal of Law and Economics* is the pre-eminent vehicle for this brand of modern economics. See Posner (1987) for a survey.

¹⁸Sandler and Tschirhart (1980) survey the literature on "clubs."

property rights to induce innovators to bear the resource cost of their activity and the immediate public-good gains to the whole economy of immediate access to new technological information. The economics of asymmetric information reveals the advantage of an intermediate, independent, non-market institution serving variously as monitor, honest broker, scapegoat, frontier marshall, shepherd, auctioneer, mediator.²⁰ The economics of public choice has delineated the incentives facing public servants (politicians, bureaucrats), assessed the effectiveness with which public authorities deliver public goods, and evaluated structural changes that would enhance this effectiveness²¹ (for example, constitutional amendments to balance the government's budget, or voucher systems instead of public schools to provide needful education to a society).

In sum, I believe that modern economics is more relevant and more winsome than its caricature, without being any less rigorous.

D. *Economics Distilled* In my opinion, economics today is in a state of healthful ferment. Most of the new wines are excellent quality, and ought to be especially appealing to the palates of Christian scholars.²² There are still large stock of choice vintages in case the new turn unexpectedly to vinegar. And some of the least palatable wines of the past are being properly consigned to the deepest cellars.

The new wines of economics include "bounded rationality" and "rolling (temporary, sequential, evolutionary, dynamic) equilibria," much fuller-bodied than the old full-information rationality and indefinite (static) equilibria. The ingredients that distinguish these new from old are admissions that current information may be only partial and that learning takes place over time. Thus economic decisions are being analyzed today as if they were made by (partially informed) "faith" and "rules" (of thumb), all being continually updated with experience and new "revelation."²³ Some rational dynamic equilibria turn out, furthermore, to be just "bubbles"—catastrophes (judgments?), such as stock-market crashes or the collapse of pegged exchange-rate systems. Other new wines to gladden a believing economist's heart have been sampled above: economics with a bouquet of trust, deceit, reputation, integrity, shirking,²⁴ conflict resolution,²⁵ and changing preferences.²⁶ Much of this economics is concerned with exchange within institutions rather than in traditional markets: exchange

²⁰I think the images ought to awaken the senses of any Christian. Private, governmental, and inter-governmental examples are, respectively, the Financial and Accounting Standards Board, the Federal Reserve System, and the International Monetary Fund.

²¹The most recent Nobel prize in economics was awarded for this kind of work to James M. Buchanan.

²²I ask forgiveness of readers who are offended by this metaphor. It seemed to me sufficiently suitable to incur the risk.

²³Economic decisionmakers might be said to see "now only in a mirror darkly, but then face to face."

²⁴See Akerlof (1984b) and Katz (1986) for discussion and references.

²⁵See Hirschleifer (1985) for a survey and references.

²⁶See Becker and Stigler (1977), Sen (1977), and Hirschman (1984, pp. 89-90, 95) for discussion and references. Since Christians are respectful of life-changing experiences, models of learning and changing preferences may have natural appeal.

within families, firms, communities, polities, joint ventures. Much of this economics depends on virtue, vice, character, and relationship. I think Christians should enjoy this kind of social drinking, and that it marks a return of economics toward genuinely social science.

Wines of waning popularity in economics seem to me to include materialism, measurability, individualistic self interest, and strict positive-normative distinctions. In my experience these have been some of the fruits of economic vines that were least palatable to informed believers. Economists are learning better how to analyze non-material, non-measurable goods—the value of an option, for example, or of insurance and other services (in contrast to tangible products), or of loyalty, quality, and risk. Economists have made some progress analyzing altruism,²⁷ usually using the simple device of making my attainment of desires one of your desires, too. And economists have become more cautious in claiming that they practice a value-free science.²⁸

There remain some traditional favorites at the tables of economists. Scarcity and choice; the need to "economize," trade-offs, and opportunity costs; incentives to save, acquire, and avoid waste—these wines are so robust as to be the meat and potatoes of economics new and old. Another hearty favorite is the idea that men and women rationally optimize to meet their goals. This sometimes is too bitter for Christians to swallow, seeming too cruel and cool for what we know about passionate human (and spiritual) nature. But it is sweetened palpably by the new willingness to include non-material, non-measurable, and interpersonal well-being among economic goals. And if still not diluted adequately, reservations to rational optimization become innocuous as long as one more venerable vintage remains: the existence of a "margin" of men and women who are rational optimizers is for most purposes quite adequate to make economic analysis arguably accurate. Individual men and women can be quite unpredictable satisficers, even the majority can be so; economic analysis will nevertheless be accurate as long as an adequate minority respond to economic incentives as predicted. A little margin leavens the whole loaf.

E. *Personal Concerns* All this said, however, I am concerned that the technical skills necessary to vint the new wines, and to preserve the best of the old, are intimidating. There is no wide gate and easy path by which we progress comfortably toward becoming winemakers in modern economics. It is more like four (or more) years in the austere wilderness of secular graduate school, to say nothing of pretenure probation, without many Mosaic mentors on our faculties to strike the rocks from time to time and bring forth water, to say nothing of the fine wine. It's no wonder that Christian graduate students in economics grumble with thirst and look longingly back toward various Egypts from which they have come.

Nor is all their grumbling groundless; there are some streams in modern

²⁷See, for example, Collard (1978), Sugden (1982), Cox and DeFina (1986), or Cox (1987).

²⁸See McCloskey (1983, 1985), North (1986), and Wilber and Hoksbergen (1986) for instance.

economics for which I am no apologist. I will mention three only. I worry about a decline in integrity, a narrowing of priorities, and an emasculation of method. I am concerned that genuine, objective intellectual curiosity and scholarly discipline in economics are being supplanted by personal gamesmanship and ambition for the "stardom that this stuff can bring me." I am concerned that we have become preoccupied with "progress in the profession," so that even our most brilliant scholars spend their (scarce!) time doing nothing but talking about and listening to the latest ideas, ignoring the accumulated wisdom and example of our (professional) ancestors. I am concerned that axiomatic reasoning and deductive logic are overrunning observational reasoning and inductive logic; I am concerned that economists are abandoning not only the historian's daunting arsenal of experience and insights, but also the laboratory scientist's dogged determination to measure accurately, to design experiments that control properly and truly inform, and to match the data at hand to the very best empirical methods available; I am sick of waging war against glib "documentation" by "stylized fact" and anecdotal appeal.²⁹

Perhaps these are worries that colleagues in other disciplines share as well. Perhaps they are shaped as much by my own professional mid-life as by dispassionate observation. I will look forward to the reactions of my readers.

We turn in the next section to an agenda for persons who by grace are both serious Christians and economists (grace indeed!).

III. Christian Scholarship in Economics: Concerns and an Agenda

A. *Its Present Status* There is a Christian scholarly tradition in economics going back, by some lights, to before St. Thomas Aquinas. It proceeds into the twentieth century in the work of Catherwood (1980), Munby (1956), and possibly Boulding (1981),³⁰ among others. For the more recent period, Anderson (1986) is an excellent survey, and Mason and Webb provide excerpts from the most important contributors. Countryman (1980) summarizes economic thought and practice in the church of the first three centuries (see also Hengel (1974)).

There is also a long tradition of Christian commentary on economics that has been reinvigorated in recent years. Christian economists are well represented: Beckmann (1981), Brennan (1986), Cramp (1975, 1983), Daly (1980, 1987), Goudzwaard (1979), Graham et al. (1986), Griffiths (1982, 1984), Hay (1975, 1982, 1987, 1989), Hill (1987a,b), Klay (1986), McKee (1987), North (1973, 1983, 1986), Sleeman (1953, 1976), Stamp (1926, 1939), Storkey (1979), Vickers (1977, 1982),

²⁹Arthur F. Holmes and Mark Noll have pointed out that many of these concerns reflect my uneasiness over the particular paradigm of "science" to which neoclassical economists cling. There are certainly alternative paradigms, and their exploration would seem a quite suitable endeavor for economists and philosophers of science working together.

³⁰Boulding (1981) is a revision of Boulding (1973). See also Boulding and Pfaff (1972), Boulding and Pfaffs (1973), Boulding and Wilson (1978), and Boulding (1968).

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Waterman (1987), and Wilber and Grimes (1987) are some of the most noteworthy references. Christian non-economists are also well represented: volumes edited by Bernbaum (1986), Block, Brennan, and Elzinga (1985), the Calvin College Department of Economics (1986), Clouse (1984), and Schaeffer (1985) include many illustrations³¹; further illustrations are the "Bishops' Letter" (National Conference of Catholic Bishops (1987)), similar statements on economics from many Protestant denominations, and writings of social ethicists.³²

I am not eager or prepared to make detailed evaluations of the ratio of scholarship to commentary in each these references.³³ I admit to concern, however, that recent work by Christian economists has been on average too rich in commentary and too lean in scholarship,³⁴ too preoccupied with methodology and with extremes of comparative economic systems—"pure market capitalism" vs. "pure cooperative socialism" (and only a slippery slope between)—too shallow, too rhetorical, too taxonomic, too dusty, musty, and fusty by comparison to what modern economists were really doing. May I be forgiven for any unwarranted wound that this sharpness provokes? There are praiseworthy exceptions to my general discontent. Yet on average, I do not think that Christian economists have rendered to our professional Caesar what is rightfully his. I side with Malik (1980, p. 34) in what I hope to be a pregnant exhortation:

Evangelicals cannot continue living on the periphery of responsible intellectual existence.

B. *A Constructive Agenda?* I believe that an important part of Christian scholarly character is to be as constructive as we are critically demanding. I will try in this section to outdo myself in showing constructiveness.

I have attempted a number of constructive asides in Section II. I have suggested there that believing economists might profitably master the economics of: rigorous Marxian analysis, especially its treatment of social conflict and the dynamics of market equilibrium; asymmetric information, its market effects and ethical implications; learning, changing preferences, interdependent preferences, and altruism; fiduciary relationships, trust, deceit, and contracts (covenants); the role of brokers, monitors, and mediators in markets, and what market impetus (if any) creates them; familial, organizational, social, and public choice.

³¹Also noteworthy are pro-market commentaries by Gilder (1981), Lindsell (1982), Nash (1986), and Novak (1982). Boersema (1983, 1986, 1987) illustrates a thoughtful economist reacting to those outside the professional fold but inside the household of faith.

³²Lind (1986) surveys the contributions of ethicists, which also include more recent work by Mott (1987a,b), Wogaman (1977, 1986), and the mixed marriage of Pemberton (ethicist) and Finn (economist) (1985).

³³Neither am I eager or prepared to meet a challenge to define scholarship more precisely in distinction from commentary. My concern will be clear enough, I believe, even if my definitions are not.

³⁴I wonder tongue-in-cheek if this explains part of the encroachment on economic turf by non-economists. If economists abandon their comparative advantage in economic scholarship for the alluring vestments of economic commentators, it is no wonder that others sense exposure and competitive

These examples reveal my belief that some of the substance of economics is more intrinsically interesting to Christians than other substance, and more interesting to Christians than to other spiritually-minded persons or to humanists. I also believe that the style of some economic research suits Christian temperament eminently well, that there are attractive opportunities for symbiotic cross-disciplinary research, and that structural innovation might deepen Christian scholarship in economics.

The First Priority. Yet I hasten to say before expanding on these opinions that my first entry on an agenda for Christian economists is to do the very best economics they can, serving the profession wholeheartedly, as if they were serving the Lord, not men. This is important not only for the obvious parallel with Scripture, but also because of the manner of diffusion of ideas and influence through the profession. Ideas and influence filter from the most scholarly economists in the highest-ranked academic departments in the most dynamic fields down toward others of us in outlying departments and less engrossing fields.

I wish for the sake of the faith and the profession that more believers were committed to being numbered among the apostles of modern economics. I wish that part of their fellowship with graduate students and with us journeyman disciples were to help us to understand better the frontiers of economics, getting as close to them in our own scholarship as our gifts allow. I wish that scholarly trust would permeate such relationships. I wish that secrecy and the jealousy that festers over proper credit for ideas and influence would be gracefully superseded by forgiving spirits and the proprietary casualness of those who understand that in Christ alone are all the treasures of wisdom and knowledge. If my wishes were ever to come true, that would surely be a bright light shining on a dark scholarly hill. There would be economic benefit as well. Scholarship itself can be supplied to its demanders quickly and with much smaller resource cost when trust is high and transactors love each other enough both to challenge and to forgive.³⁵

Christian economists with this calling need not and probably should not be too firmly pre-committed to any particular specialization. The disciplinary frontier will define the substance of their endeavors.

³⁵I don't think I am naive about the struggle it is to train up an economist in the way he or she should go. I have parented many professional children, some quite painfully. But I am also the thankful beneficiary of mentors and colleagues who cared about me (although not from belief) while also appearing often to rough me up.

I think in making this the first entry on my agenda for Christian scholarship in economics that I am more sanguine about its results than one of my discussants and my greatly admired colleague Ken Elzinga. Elzinga (1980) writes with quizzical and wry parabolic grace about the doubtful prospects for Christian topology and its "Fellowship of Christian Topologists." He would/will note the absence of any paper on Mathematics at this very conference, to say nothing of Topology! I wonder though if he gives enough weight to human relationship in the development and diffusion of scholarship, and to the potential for scholarly blessings as spillovers from relational blessings when Christians achieve great professional stature. I don't think it was any coincidence that the dedicated scholar Daniel was surrounded by the dedicated scholars Hananiah, Misbael, and Azariah.

Other believers, though, might find their economics inspired by particulars of substance and style.

Substance. I think that some of these other believing economists ought to be fascinated broadly by transactions within and across "communities" and by their interchange with markets. I mean communities as above to encompass not only families and neighborhoods, but firms, unions, nations, and generations—any of the many groups whose internal life is not governed solely by markets. Christian economists' fascination should come from their being intense students of human nature and relational incentives, as well as of economic nature and market incentives. Christians above all other economists should recognize incentives for sin—and incentives for redemption, too! If they insist on studying comparative economic systems, let them argue the case from a fresh perspective: let them study systemic incentives for evil, discipline, repentance, forgiveness, and so on.³⁶ Not that a single perspective will emerge: Vickers (1982), for example, adopts such a perspective and ends up skeptical about markets, especially for human services; Hill (1987), however, believes that markets curb sinful behavior.

I believe, to illustrate these suggestions, that there is inadequate documentation of how markets discipline the most ruthlessly greedy, quick to parlay . . . , gamble . . . , exploit . . . , cash in Such agents often end up as broken bankrupts rather than as rich capitalist pigs. And what happens to them then? Can they be restored? In my opinion, believing economists ought to light up to the idea of studying losers, either firms or individuals: what they learn; how they adapt; whether failure occurs again; how bankruptcy institutions might be "improved" ethically and economically. This kind of study, with its strong redemptive themes, mimics our own experience after all. We have known the loser's bitterness in competition with God; we have known the rejuvenation of having our debts nailed to the cross! I would think Christian economists would leap at the chance to study economic rehabilitation, e.g., of convicts, perhaps best done with sociologists. I would think Christian economists living in the sovereign debt crisis would begin analyzing whether an international equivalent of bankruptcy provisions was: scriptural? economically desirable? institutionally feasible? I would think Christian economists would become concerned with the way economic elites of debtor nations can shift the burdensome discipline of communal failure to "losers" by exporting their capital or by emigrating themselves, bleeding their society of its entrepreneurial endowment. Endeavors like these would have professional as well as Christian interest. Many economists recognize the sampling bias that is created when "losers vanish" and "winners remain" to be sui reved.

In my opinion, at least some believing economists ought to be drawn to the

³⁶Boulding (1985, p. 265) comments:

I do find the whole symposium very deficient in one important regard. None of the papers really discusses the potential pathologies of systems of different kinds, yet this seems to me the fundamental problem at the heart of ethics and ideology.

study of economic spillovers that are not priced and that do not pass through markets. Such spillovers almost always involve social relations and have strong ethical undercurrents. This study would include externalities of the classic kind, and also some that are less familiar. An example is economic "injury" caused by market forces, and whether some varieties warrant institutional compensation mechanisms or statutory investiture of property rights to allay the alleged market failure (lack of an appropriate insurance market).³⁷ The study of spillovers would also include inter-generational economics, since markets to allow trade between the living and the unborn are primitive at best. Among other subjects to be addressed would be bequest behavior, inheritance laws, social security systems, policy toward non-renewable resources, government budget deficits and capital formation.³⁸ The general theme is to make careful distinctions between transactions for which markets work well on economic and scriptural grounds and transactions for which markets do not work well. For the latter, believing economists might ask carefully what sort of laws and social institutions, if any, might improve things.

In my opinion, all believing economists ought to have healthy respect for and ample documentation of the way that pure market forces can overwhelm communal goals that are not economically grounded. Example of such communal goals are maintaining strong families, providing for the poorest, observing Sabbaths, treating employees "rightly and fairly." Such communal goals are arguably inefficient (wasteful), and firms, communities, or nations that maintain them suffer discipline from unadulterated market forces: Firms with communal commitment are ripe for takeover by those with less;³⁹ communities with social concern may lose businesses to communities with less;⁴⁰ nations may perceive foreign competition to be undermining their social policies. Very few families would favor voucher systems for children at an appropriate age to search about in the market for the best parents that money can buy!

One implication of this discussion is that barriers to market forces are not only defensible, but often necessary to meet communal goals. I wish that believing economists would admit that more often, and then apply their analysis to deter-

³⁷For example, many countries have legislation that allows firms and workers who are seriously injured by foreign competition to enjoy temporary protection, avoiding injury by taxes levied on others. But are there better solutions on either economic or scriptural grounds? Or, for example, what might Christian economists say about injury in the form of declining property values when "markets" integrate a neighborhood in the face of prejudice? Are there really externalities present or not? And if so, what then?

³⁸Daly (1980, 1987) and Hay (1987) tie some of these themes to stewardship and "steady-state" economics.

³⁹Management of the firm taken over may be accused of failing to serve its shareholders adequately. That is in fact an inexorable market consequence of serving one's employees or one's community better than managers of other firms do! See Hay (1989, Ch. 3) on these problems. In this light, one can understand why many "Christian" businesses are closely held, so that managers and owners are similar or identical. This illustrates the principal-agent problem described in Section II, and shows again the importance of institutions and relationship in economics.

⁴⁰Social concern is, after all, almost necessarily "bureaucratic regulatory interference."

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mining which alternative communal interventions (inevitable interferences!) in the market were "best" on economic and scriptural grounds.⁴¹ Those who believe in a "new paradigm" for economic structure, beyond mere markets, and those who believe that such a paradigm ought to rule within the household of faith (Hamrin (1986), Halteman (1988)) ought correspondingly to be analyzing devices that defend such structures against market forces.

Topics like these have an unwarranted reputation for being "soft," and hence "inconsistent" with the ambition (godly or otherwise) to excel professionally, recommended as the First Priority. The reputation is unwarranted in my experience. Research of the utmost "rigor" can be applied profitably to these topics: references are rife—Baumol (1986), Foster (1984), Sen (1985), and almost the entirety of the work of Nobel laureate Kenneth J. Arrow (see especially (1983)) are only a few references.

Style. I find much Christian commentary on economics long on ideology and short on integrity, full of unsupported assertion, unsubstantiated allegation, and unrepresentative anecdote. I believe it is needful ministry and needful scholarship for at least some believing economists to cultivate a reputation for definitive, documentary, empirical and historical work on controversial issues such as poverty, welfare experience, income distribution, immigration, and economic development. We need to reassure our colleagues, I believe, that we do not fear fact. Then, among other things, they may be more willing to investigate the truth that sets men free, with the same integrity that we model.

I also think many of the tools of this kind of scholarship fit a Christian's relational temperament. Interviews, surveys, longitudinal (panel) studies, and experimental economics are all social science of a very social sort!

Symbiosis. I hope I have made it clear that I think there is ample room for some believing economists to work closely with other social scientists, and with biblical scholars, theologians, and social ethicists. To do this fruitfully, however, I am afraid that we will have to master much more of other disciplines than our professional pride and priority naturally allow. Mason's papers (1987a,b) illustrate how demanding this sort of work can be. And I would not want this kind of activity to detract significantly from the agenda above, especially not from the First Priority.

Structure. Finally, I think that believing economists could enhance their scholarship and their witness with structural innovation. I wonder if Christian (and other) colleges would be willing to support a two-year sabbatical retooling for economics faculty at leading graduate schools, perhaps fourteen or fifteen years after the Ph.D. I wonder if any faculty would apply! I wonder if believing economists in leading graduate programs would be willing and able to set aside other priorities to cooperate. I wonder what kinds of lectures or conferences or institutes or summer programs would draw believing economists together better

⁴¹See Hawtrey and Nevile (1986) for an illustration of work along these lines. I find it professionally

for scholarly pursuit and provocation. I wonder how undergraduate believers, especially in Christian colleges, might better learn the rewards and costs of battling to build the tower of professional expertise in graduate economics.⁴²

The reader is correct to think that I wish I had had such opportunities as a young professional and as a young disciple. Perhaps with the consciousness that created this very conference and its supporting institutions, some of these ideas are now timely.

REFERENCES

- Akerlof, George A. (1984a), *An Economic Theorist's Book of Tales: Essays That Entertain the Consequences of New Assumptions in Economic Theory*, Cambridge, England: Cambridge University Press.
- (1984b), "Gift Exchange and Efficiency Wage Theory: Four Views," *American Economic Review* 80 (May), pp. 79-83.
- Anderson, Mal E. (1986), "Themes in the Rise of Christian Economics," *Interchange*, 38, pp. 11-24, Australian Fellowship of Evangelical Students Graduates' Fellowship.
- Arrow, Kenneth J. (1983), *Social Choice and Justice*, Volume 1 of Collected Papers, Cambridge, Massachusetts: Belknap Press of Harvard University Press.
- Baumol, William J. (1986), *Superfairness: Applications and Theory*, Cambridge, Massachusetts: the MIT Press.
- Becker, Gary S. (1976), *The Economic Approach to Human Behavior*, Chicago: University of Chicago Press.
- (1981), *Treatise on the Family*, Cambridge, Massachusetts: Harvard University Press.
- and George Stigler (1977), "De Gustibus Non Est Disputandum," *American Economic Review*, 67 (March), pp. 76-90.
- Beckmann, David (1981), *Where Faith and Economics Meet: A Christian Critique*, Minneapolis: Augsburg Publishing House.
- Bernbaum, John, ed. (1986), *Economic Justice and the State*, Grand Rapids: Baker Book House.
- Block, Walter; Geoffrey Brennan; and Kenneth G. Elzinga, eds. (1985), *Morality of the Market: Religious and Economic Perspectives*, Vancouver: The Fraser Institute.
- Boersema, John (1983), "A Judeo-Christian Defense of Free Enterprise?—THE Christian Alternative?," *Reformed Perspective*, February, pp. 24-27.
- (1986), "Is Capitalism Christian?," *Reformed Perspective*, September, pp. 12-15, and October, pp. 11-14.
- (1987), "Is Capitalism Christian? The Debate Goes On," processed, March.
- Boulding, Kenneth E. (1968), *Beyond Economics: Essays on Society, Religion, and Ethics*, Ann Arbor: University of Michigan Press.
- (1973), *The Economy of Love and Fear*, Belmont, California: Wadsworth.
- (1981), *A Preface to Grants Economics*,
- (1985), "Discussion," in Block, Brennan, and Elzinga (1985), pp. 262-265.
- Boulding, Kenneth E. and Martin Pfaff, eds. (1972), *Redistribution to the Rich and the Poor: the Grants Economics of Income Distribution*, Belmont, California: Wadsworth.
- Boulding, Kenneth E.; Martin Pfaff; and Anita Pfaff, eds. (1973), *Transfers in an Urbanized Economy: Theories and Effects of the Grants Economy*, Belmont, California: Wadsworth.
- Boulding, Kenneth E. and Thomas Frederick Wilson, eds. (1978), *Redistribution Through the Financial System: the Grants Economics of Money and Credit*, New York: Praeger.

Frontiers in Economics and Christian Scholarship

- Brennan, Geoffrey (1986), "Economist vs. Christian: Drawing the Battle Lines," April, presented at a St. John's College Conference of Anglican Economists, Winnipeg, Manitoba, May.
- Calvin College Department of Economics and Business (1986), *Through the Eye of a Needle: Readings on Stewardship and Justice*, Grand Rapids. Evert Van Der Heide, Project Coordinator.
- Catherwood, H. F. R. (1980), *The Christian in Industrial Society*, Leicester, England: Inter Varsity Press. Revised edition.
- Clouse, Robert G., ed., (1984), *Wealth & Poverty: Four Christian Views of Economics*, Downers Grove, Illinois: Inter-Varsity Press.
- Coleman, James S. (1984), "Introducing Social Structure Into Economic Analysis," *American Economic Review*, 80 (May), pp. 84-88.
- Collard, David A. (1984), *Altruism and Economy: A Study in Nonselfish Economics*, . . . : Martin Robertson and Company.
- Commons, John R. (1924), *Legal Foundations of Capitalism*, New York: Macmillan.
- Countryman, L. Wm. (1980), *The Rich Christian in the Church of the Early Empire: Contradictions and Accommodations*, New York and Toronto: The Edwin Mellen Press.
- Cox, Donald C. and Robert H. DeFina (1986), "Warm Feelings and Cold Calculations: Economic Theories of Private Transfers," *Federal Reserve Bank of Philadelphia Business Review*, March/April, pp. 15-22.
- Cox, Donald (1987), "Motives for Private Income Transfers," *Journal of Political Economy*, 95 (June), pp. 508-546.
- Cramp, A. B. (1975), *Notes Towards a Christian Critique of Secular Economic Theory*, Toronto: Institute for Christian Studies, monograph.
- (1983), *Economics in Christian Perspective: A Sketch Map*, Toronto: Institute for Christian Studies, monograph.
- Daly, Herman E., ed., (1980), *Economics, Ecology, Ethics: Essays Toward a Steady-State Economy*, San Francisco: W. H. Freeman and Company.
- (1987), "A Biblical Economic Principle and the Steady-State Economy," presented at the 1986 Forum of the Au Sable Institute of Environmental Studies, Mancelona, Michigan, June 17-21.
- Elzinga, Kenneth G. (1972), "The Demise of Capitalism and the Christian's Response," *Christianity Today*, 16 (July), pp. 960, 962-963.
- (1980), "Comments" on George N. Monsma, Jr. (1980), presented at "International Economics and the Bible: A Dialogue," Bel Air Presbyterian Church, Los Angeles, October 23-27.
- (1981), "A Christian View of Economic Order," *Reformed Journal*, (October), pp. 13-16.
- Federal Reserve Bank of Boston (1987), *Lessons From the Income Maintenance Experiments*, Boston: Conference Series No. 30.
- Fischer, Stanley, ed. (1986), *NBER Macroeconomics Annual 1986*, Cambridge, Massachusetts: The MIT Press.
- Foster, James E. (1984), "On Economic Poverty: A Survey of Aggregate Measures," In R. L. Bassman and G. F. Rhodes, eds., *Advances in Econometrics*, Volume 3, Connecticut: JAI Press.
- Gilder, George (1981), *Wealth and Poverty*, New York: Basic Books.
- Goudzwaard, Bob (1979), *Capitalism and Progress: A Diagnosis of Western Society*, translated and edited by Josina Van Nuis Zylstra, Toronto: Wedge Publishing Foundation and Grand Rapids, Michigan: William B. Eerdmans Publishing Company. In Dutch, *Kapitalisme en vooruitgang*, Assen, the Netherlands: Van Gorcum, 1978.
- (1986), "Christian Economics and the Stewardship Mandate for Creation Management," presented at the 1986 Forum of the Au Sable Institute for Environmental Studies, Mancelona, Michigan, June 17-21.
- Graham, W. Fred; George N. Monsma, Jr.; Carl J. Sinke; Alan Starkey; John P. Tiemstra; with a contribution by Daniel M. Ibbels (1986), *Reforming Economics: A Christian Perspective on Economic Theory and Practice*, Grand Rapids: Calvin College Center for Christian Scholarship.

⁴²One idea from the field of environmental studies is an extended summer institute for undergraduates with instructional credit granted by the student's home institution, yet supervised by visiting professional faculty. I am indebted to my Wisconsin colleague Cal DeWitt, who directs the Au Sable Institute for Environmental Studies, for this idea and research.

- Halteman, James (1988), *Market Capitalism and Christianity*, Grand Rapids: Baker Book House, forthcoming. Currently in manuscript.
- Hamrin, Robert D. (1986), "Ethical Economics: A New Paradigm for Justice and Stewardship," processed, March.
- Hawtrey, Kim and J. W. Neville (1986), "A Christian Perspective on the Accord," Sydney (Australia) Christian Economists Group Discussion Paper No. 4, August.
- Hawtrey, Kim (1985), "Economy and State: A Christian Framework," *Interchange* 36, pp. 41-52, Australian Fellowship of Evangelical Students Graduates' Fellowship.
- Hay, Donald A. (1975), "A Christian Critique of Capitalism," Grove Booklet on Ethics No. 5a, Nottingham, England: Bramcote, revised version in Hay (1989, Ch. 3).
- _____ (1982), "A Christian Critique of Socialism," Grove Booklet on Ethics No. 5b, Nottingham, England: Bramcote, revised version in Hay (1989, Ch. 4).
- _____ (1987), "Biblical Economics and the Long Term Future of Creation," presented at the 1986 Forum of the Au Sable Institute of Environmental Studies, Mancelona, Michigan, June 17-21, revised version in Hay (1989, Ch. 7).
- _____ (1989), *Essays on Christianity and Economics*, Grand Rapids: Wm. B. Eerdmans, forthcoming. Currently in manuscript.
- Hengel, Martin (1974), *Property and Riches in the Early Church*, Philadelphia: Fortress Press.
- Hill, Peter J. (1987a), "An Analysis of the Market Economy: Strengths, Weaknesses, and Future," *Transformation*, 4 (June-September/October-December), pp. 40-47.
- _____ (1987b), "Appropriate Intervention in a Market System: A Critique of the Literature," presented at a Wheaton College Conference on Biblical Perspectives on the Mixed Market Economy, September.
- Hirsch, Fred (1976), *Social Limits to Growth*, Cambridge, Massachusetts: Harvard University Press.
- Hirschman, Albert O. (1984), "Against Parsimony: Three Easy Ways of Complicating Some Categories of Economic Discourse," *American Economic Review*, 80 (May), pp. 89-96.
- Hirschleifer, Jack, (1985), "The Expanding Domain of Economics," *American Economic Review*, 75, December (AEA Directory), pp. 53-68.
- Hoffman, E. and M. Spitzer (1985), "...," *Columbia Law Review*, 85, ...
- Katz, Lawrence F. (1986), "Efficiency Wage Theories: A Partial Evaluation," with comments by Joseph G. Altonji and Laurence Weiss, plus general discussion, in Fischer (1986), pp. 235-289.
- Klay, Robin Kendrick (1986), *Counting the Cost: the Economics of Christian Stewardship*, Grand Rapids: Wm. B. Eerdmans.
- Lay Commission on Catholic Social Teaching and the U.S. Economy (1986), "Liberty and Justice for All," *Crisis*, December, pp. 4-16.
- Lind, Christopher (1986), "Christian Ethics for Christian Economists," *Bulletin of the Association of Christian Economists*, 8 (Fall), pp. 14-24.
- Lindsell, Harold (1982), *Free Enterprise—A Judeo Christian Defense*, Wheaton, Ill.: Tyndale House.
- Malik, Charles (1980), *The Two Tasks*, Westchester, Illinois: Cornerstone Books.
- Mason, John D. (1987a), "Biblical Teaching and Assisting the Poor," *Transformation*, 4 (April/June), pp. 1-14.
- _____ (1987b), "Scriptural Lights on Redistribution Policies," processed.
- Mason, John D. and Bruce G. Webb, eds. *Christian Teaching on the Economy*, in process.
- McCloskey, Donald N. (1983), "The Rhetoric of Economics," *Journal of Economic Literature*, 21 (June), pp. 481-517.
- _____ (1985), *The Rhetoric of Economics*, Madison, Wisconsin: University of Wisconsin Press.
- McKee, Arnold F. (1987), *Economics and the Christian Mind*, New York: Vantage Press.
- McKenzie, Richard B. and Gordon Tullock (1981), *The New World of Economics: Explorations into the Human Experience*, Homewood, Illinois: Richard D. Irwin, Third edition.
- Monsma, George N., Jr. (1980), "Biblical Principles Important for Economic Theory and Practice," reprinted in Calvin College Department of Economics (1986).
- Mott, Stephen Charles (1987a), "The Bible and Economics: What Does It Tell Us?" *Transformation*, 4 (June-September/October-December), pp. 25-33.

- _____ (1987b), "How Should Christian Economists Use the Bible: A Study in Hermeneutics," presented at a Wheaton College Conference on Biblical Perspectives on the Mixed Market Economy, September.
- Munby, Denis (1956), *Christianity and Economic Problems*, London: Macmillan.
- Munnell, Alicia H. (1987), "Lessons from the Income Maintenance Experiments: An Overview," Federal Reserve Bank of Boston, *New England Economic Review*, May/June 1987, pp. 32-44.
- Nash, Ronald H. (1986), *Poverty and Wealth: The Christian Debate Over Capitalism*, Westchester, Illinois: Crossway Books.
- National Conference of Catholic Bishops, United States Catholic Conference (1987), *Building Economic Justice: The Bishops' Pastoral Letter and Tools for Action*, Washington.
- North, Douglass (1986?), "Institutions, Transactions Cost, and Economic Growth," St. Louis: Washington University School of Business, Center in Political Economy Working Paper.
- North, Gary (1973), *An Introduction to Christian Economics*, Nutley, New Jersey: The Craig Press.
- _____ (1983), *The Dominion Covenant: Genesis*, Tyler, Texas: Institute for Christian Economics.
- _____ (1986), *The Sinai Strategy*, Tyler, Texas: Institute for Christian Economics.
- Novak, Michael (1982), *The Spirit of Democratic Capitalism*, New York: Simon and Schuster.
- Pemberton, Prentiss and Daniel Finn (1985), *Toward a Christian Economic Ethic: Stewardship and Social Power*, Minneapolis: Winston Press.
- Posner, Richard A. (1987), "The Law and Economics Movement," *American Economic Review*, 77 (May), pp. 1-13.
- Radnitsky, Gerard and Peter Bernholz, eds. (1985), *Economic Imperialism: the Economic Approach Applied Outside the Traditional Areas of Economics*, New York: Paragon House.
- Rose, Tom (1986), *Economics: Principles and Policy—From a Christian Perspective*, second edition, Mercer, Pennsylvania, American Enterprise Publications, 1986.
- Sandler, Todd and John T. Tschirhart (1980), "The Economic Theory of Clubs: An Evaluation Survey," *Journal of Economic Literature*, 18 (December), pp. 1481-1521.
- Sen, Amartya (1977), "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory," *Philosophy and Public Affairs*, 6 (Summer), pp. 317-344.
- _____ (1985), "Social Choice Theory," in Kenneth Arrow and Michael Intriligator, eds., *Handbook of Mathematical Economics*, Amsterdam: North Holland.
- Schaeffer, Franky, ed., (1985), *Is Capitalism Christian?*, (Westchester: Crossway).
- Sleeman, J. F. (1953), *Economic Problems—A Christian Approach*, London, SCM Press, 1953.
- _____ (1976), *Economic Crisis: A Christian Perspective*, London, SCM Press, 1976.
- Smith, Vernon L. (1986), "Experimental Methods in the Political Economy of Exchange," *Science*, 234 (October), pp. 167-173.
- Stamp, Josiah (1926), *The Christian Ethic as an Economic Factor*, London, The Epworth Press.
- _____ (1939), *Christianity and Economics*, New York: Macmillan.
- Stiglitz, Joseph E. (1987), "The Causes and Consequences of the Dependence of Quality on Price," *Journal of Economic Literature*, 25 (March), pp. 1-48.
- Storkey, Alan (1979), "Economic Perspectives" and "A Christian Economic Perspective," Ch. 13-14 of *A Christian Social Perspective*, London: Inter-Varsity Press.
- Sugden, Robert (1982), "On the Economics of Philanthropy," *Economic Journal*, 92, pp. 341-350.
- Tamari, Meir (1987), *With All Your Possessions: Jewish Ethics and Economic Activity*, New York: The Free Press, a division of Macmillan.
- Vickers, Douglas (1976), *Economics and Man: Prelude to a Christian Critique*, Nutley, New Jersey: The Craig Press.
- _____ (1982), *A Christian Approach to Economics and the Cultural Condition*, Smithtown, New York: Exposition Press.
- Waterman, Anthony (1987), "Economists on the Relation Between Political Economy and Christian Theology: A Preliminary Survey," *International Journal of Economics and Ethics*, 2 (March ?), forthcoming.
- Wilber, Charles K. and Roland Hoksbergen (1986), "Ethical Values and Economic Theory: A Survey," *Religious Studies Review*, 12 (July-October), pp. 208-214.

- Wilber, Charles K. and Laura Grimes (1987), "The Moral Defense of Market Capitalism: A Critique of the Literature," presented at a Wheaton College Conference on Biblical Perspectives on the Mixed Market Economy, September.
- Willis, Robert J. (1987), "What Have We Learned from the Economics of the Family?" *American Economic Review*, 77 (May), pp. 68-81.
- Wogaman, J. Philip (1977), *The Great Economic Debate: An Ethical Analysis*, Philadelphia: Westminster.
- (1986), *Economics and Ethics: A Christian Inquiry*, Philadelphia: Fortress Press.

Comments on J. David Richardson

By Kenneth G. Elzinga

There is a strong tradition in the world of books and ideas that a discussant should have grave reservations about a paper. If a discussant actually likes a paper, this means the conference organizers failed in making the session lively and the discussant simply was not clever enough to dismantle the paper. Whether the blame lies more with our hosts, or with me, is for you to judge. But I like Professor Richardson's paper and learned from it. Indeed I must confess a second shortcoming of mine as a discussant. In rereading the paper, I violated one of the most venerable principles of economic theory: namely, the law of diminishing marginal utility. Incremental readings added to my appreciation of Richardson's work.

To achieve some credibility as a discussant, let me go through the motion of correcting one error in the paper. I shall select the first one I encountered. Richardson begins by claiming that "Economics was born at the Fall." Economics actually is older. The wise husbanding of resources is what economics is all about and this begins not with the fall but with creation. Now to be sure, the demand for the services of economists is increased as a result of the fall, because the fall changed the economic problem profoundly. But economics was born at the time of creation.

For both the insider and the outsider, Richardson's paper contains a concise and informative summary of what economics is today and where it is going. Make no mistake about it: for better or for worse, economics is the imperialistic science. The study of law for example has been altered profoundly by economics. For several years, I have taught federal judges the third in a series of courses they are taking in economic analysis. One might contend that the fact that the courses are taught on the island of Captiva is what explains the interest of judges in economic theory. But the classes are too long and the assigned reading too

In his reply to Richardson, Kenneth G. Elzinga applauds Richardson's suggestions but also voices support for an alternative agenda—one in which Christian economists "interact more aggressively with the fields of biblical studies and ethics" with the hope of