Globalisation and the Information Economy

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There is a host of books on the subject of globalisation and on the information economy, and with the débacle at the World Trade Organization meeting in Seattle in late 1999 and the continuing changes in computer technology, there will certainly be a host more. Perhaps two of the best at present are the sweeping academic treatment of the current state of economics and of the international political economy by financier George Soros and the practical guide to corporate strategy in the information age by economics professors Carl Shapiro and Hal R. Varian.

That is surprising: the businessman wrote the academic book (albeit without footnotes or bibliography), and the professors wrote the guidebook (albeit with an impressive though short bibliography). Together the books form an interesting set for those concerned with the state of the world at the turn of the century and millennium and how to cope with it—either as a businessperson or as a citizen of global society.

The books address some very fundamental questions about the new global economy: What kind of new global economy are we facing? Do we need a new kind of economics to understand it? Is the new global economy better or worse than what we have had? How do we cope with it, as businesspeople and as citizens? Following Walras, the first two questions are positive, the third normative, and the fourth applied.

Positive Economics: What Kind of New Global Economy are we Facing?

Shapiro and Varian are not starry-eyed about the information age:

…and today’s breathless pace of change and the current fascination with the information economy are driven by advances in information technology and infrastructure, not by any fundamental shift in the nature or even the magnitude of the information itself. The static, publicly accessible HTML text on the Web is roughly equivalent in size to 1.5 million books. The UC Berkeley Library has 8 million volumes, and the average quality

of the Berkeley library content is much, much higher! If 10 percent of the material on the Web is “useful”, there are about 150,000 useful book-equivalents on it, which is about the size of a Borders superstore. But the actual figure for ‘useful’ is probably more like 1 percent, which is 15,000 books, or half the size of an average mall bookstore.4

One theme of Shapiro and Varian is that present trends and problems in the information economy are not much different from similar ones in the industrial economy: Internet networks are similar to railroad and telephone networks in that sense. There are some differences, but not fundamental ones. For example, they say: “More so than in the past, however, in the information economy the lion’s share of the rewards will go to the winner, not the number two player who just manages to survive”.5

Ultimately Shapiro and Varian take the world economy as given and in that sense imply that it is fine as it is, just a little tricky at times to make money in. Soros, who made lots of money in the world that is given us, is by contrast very concerned with where it is going. He believes that the present international financial system is inherently unstable, unsustainable, and corrosive of human values. The global economy is not at the moment balanced by a global polity and global society of comparable strength. Here the argument seems based on personal experience and casual empiricism but in fact is very similar to ones made by Boulding, Arthur, and Schumpeter.6 He cites only Arthur, but the others are visible in the book. Soros does not mince words:

I seek to make two related points. One is that the spread of monetary values and their influence on politics renders the political process less effective in serving the common interest than it used to be when social values, or “civic virtue”, weighed heavily on people’s minds. The other is that the political process is less effective than the market mechanism in correcting its own excesses. These two considerations reinforce each other in a reflexive fashion. Market fundamentalism undermines the democratic political process and the inefficiency of the political process is a powerful argument in favor of market fundamentalism. The institutions of representative democracy that for so long have functioned well in the United States, much of Europe, and elsewhere, have become endangered, and civic virtue, once lost, is difficult to recapture.7

Do We Need a New Kind of Positive Economics?

The two sets of authors differ on whether mainstream economics can do the jobs of explanation, prediction, and control. Shapiro and Varian argue convincingly that in the case of the economics of information, current theory does just fine—

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5. Ibid., p. 182. Italics in original.
the problem is that current theory is not taught in the basic economics courses (but see Stiglitz, or Pindyck and Rubenfeld\textsuperscript{8}). New developments that they discuss include network externalities, standards, transaction costs, positive feedback, and lock-in. Their book reflects an attempt to bring that research (much of which is their own) to a business readership.

They do a creditable job of weaving the old and new into something useful:

How can you earn more than a ‘normal’ rate of return in a market with lock-in? By and large, the key to obtaining superior financial performance in ‘lock-in’ markets is the same as in other markets: by product differentiation, offering something distinctly superior to what your rivals can offer, or by cost leadership, achieving superior efficiency. Ideally, you would seek both differentiation and cost advantages. In the network economy, simply being the first to market can generate both differentiation and cost advantages. The key is to convert a timing advantage into a more lasting edge by building an installed base of users.\textsuperscript{9}

Soros on the other hand believes that, certainly in the cases of macroeconomics and financial economics, the profession has let us down. He provides first a critique, then an alternative conceptual framework, and finally a generalisation of the argument to wider issues. His critique is sweeping:

Marxism claims to have a scientific basis; so does market fundamentalism. … Both Marxist and laissez faire ideologies have been thoroughly discredited. The laissez faire ideology was the first to be dismissed, as a consequence of the Great Depression and the rise of Keynesian economics. Marxism lingered on in spite of the excesses of Stalin’s rule but, following the collapse of the Soviet system, it is now in almost total eclipse. … I believe that the revival of market fundamentalism can be explained only by faith in a magic quality (“the invisible hand”) that is even more important than the scientific base.\textsuperscript{10}

Soros spends considerable time developing his “conceptual framework”, central to which are the notions of fallibility and reflexivity. “Fallibility” is the principle that any theory contains a flaw that will eventually cause it to self-destruct. For example, in financial markets, whatever theory traders have about what the hot companies are will contain some contradiction that will undo the theory and cause the trend to reverse itself. “Reflexivity” is similar to the phenomenon of self-defeating prophecies and the idea that systems should include the observer as well as the observed. Fallibility and reflexivity imply that the social sciences cannot be exactly like the natural sciences in their ability to predict future events. Soros explicitly bases many of his ideas on those of Karl Popper,\textsuperscript{11} but there are also ideas from general systems theory (Boulding\textsuperscript{12}), and macroeconomics

\textsuperscript{9} Shapiro and Michelson, \textit{op. cit.}, p. 147.
\textsuperscript{10} \textit{Ibid}.
\textsuperscript{12} Cf. \textit{op. cit.}
Soros takes the economics profession to task for failing to take these concepts sufficiently into account.

Soros then generalises his ideas from financial economics to areas sometimes considered outside of economics itself. In doing so he reflects, sometimes unwittingly, an underground stream in the profession that has recently begin to surface: “...economic behavior is only one kind of behavior and the values that economic theory takes as given are not the only kind of values that prevail in society. It is difficult to see how the values pertaining to these other spheres could be subjected to differential calculus like indifference curves”. True, it is difficult for most economists too, but not for David Collard, or Abram Bergson, two authors still not widely read in the profession (though the latter is often cited).

As a matter of fact, Soros is ahead not only of most economists but also many political scientists and sociologists who are interested in rational-actor theory. Collard and others show that rationality in the sense that economists use the term does not mean selfishness, and that not all “altruism” can be reduced to enlightened self-interest. Nor need an altruist sacrifice himself or herself entirely for the sake of others: even Mother Teresa ate food herself, rather than starve by giving up hers to another. Soros recognises that values outside oneself are necessary for society to function. A few economists are doing that too, as I mention in a recent paper.

Shapiro and Varian are not so far from Soros. Some of their differences are attributable to the different perspectives of their books and some to the different sectors of the economy they study. The rest are not so large as one would find in other social sciences; that is a result of the state of the economics profession at the moment.

Normative Economics: Is the New Economy Good or Bad?

Shapiro and Varian take both the economy and the economics as given, because they are using it to give advice. Their bias is clear: in Chapter 6 there are six pages of advice for buyers and twenty-eight pages for sellers. That does not, however, mean that they are starry-eyed about the economy. Some economists believe that the market always picks winners by definition, but not Shapiro and Varian: “Quadruphonic sound, stereo AM radio, PicturePhones, and digital audiotape did not fare ... well”. The discussion of antitrust and standards is interesting, especially in light of something in the International Herald Tribune last year. “A good example of a standard that passed antitrust muster is that of the Motion Picture Expert Group (MPEG). The group was formed in 1988 to design technical

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17. Shapiro and Varian, op. cit., p. 11.
standards for compressing digital video and audio data”.\textsuperscript{18} Contrast this with the fact that the same Reagan Administration’s Antitrust Division had six years before struck down a code of standards by the National Association of Broadcasters dating from 1952. The code placed responsibility on the television industry for the decency and the educational and cultural value of the programmes and the advertising. The implications for the ongoing debate on Internet pornography are fascinating to contemplate.

If Shapiro and Varian’s purpose is to help people work within the system, Soros’s is to help us criticise and improve it. Ironically, there is little love lost between him and the very economists who most valiantly defend the system that benefits him: “… economists have gone out of their way to avoid introducing value judgments, but because of that very fact their theories have been appropriated by the advocates of laissez faire and used as the basis for the most pervasive value judgment imaginable—that no better social outcomes than those available under market competition can ever be achieved”.\textsuperscript{19} Moreover, “The central contention of this book is that market fundamentalism is today a greater threat to open society than any totalitarian ideology”.\textsuperscript{20} In saying that “economic values, on their own, cannot be sufficient to sustain society”,\textsuperscript{21} he follows a tradition dating back at least to Adam Smith\textsuperscript{22} and moving through Schumpeter, Boulding, Etzioni, and others.\textsuperscript{23}

\textbf{Applied Economics: How do we Cope with the New Economy?}

The Shapiro and Varian book is full of tips, some of which are surprisingly candid for someone not used to reading “how-to” business literature. For example, if you want to produce several versions but do not know how many, offer three versions or three sizes. Customers tend to buy the one in the middle. “Every restauranteur knows that the best-selling wine is the one with the second-lowest price on the menu”.\textsuperscript{24} Other advice is downright shocking to the naïve: When I see the standard version and deluxe version of a product side by side, I assume they designed the standard version first and added features later to get the deluxe version. “With information you usually produce the high-quality version first, and then subtract value from it to get to the low-quality version … [So] if you add a fancy new feature to your software or information product, make sure there is some way to turn it off! Once you’ve got your high-value, professional product, you often want to eliminate features to create a lower-value, mass-market product”.\textsuperscript{25} One of my students tells me that serious computer users often know how to respond: they buy the low-cost version and figure out how to turn the fancy features on again.

\begin{itemize}
\item \textsuperscript{18} Ibid., p. 307, and Minow, Newton and Craig L. LaMay, “Curbing Violence in the Media Doesn’t Violate Free Speech”, \textit{International Herald-Tribune} (12 May 1999), p. 9.
\item \textsuperscript{19} Soros, \textit{op. cit.}, p. 35.
\item \textsuperscript{20} Ibid., p. xxii.
\item \textsuperscript{21} Ibid., pp. 45–46.
\item \textsuperscript{22} Adam Smith, \textit{The Theory of Moral Sentiments} (Indianapolis: Liberty Classics, 1976 [1759]).
\item \textsuperscript{24} Shapiro and Varian, \textit{op. cit.}, p. 71.
\item \textsuperscript{25} Ibid., p. 63.
\end{itemize}
There is only one disappointment in the book. In Chapter 10, “Information Policy”, they say that “the focus, of course, is a bit different. Instead of looking at strategies to increase profitability, we look at strategies to increase the net social benefits.” Unfortunately, the chapter does not always bear this out. For example, on the very next page the question on “lock-in” is not “does lock-in increase net social benefits?” but “will you be branded an aftermarket monopolist under antitrust law if you are the sole supplier to some locked-in customers?” This is a perfectly legitimate question to ask but not if one wishes to discuss net social benefits. Ironically, it would have strengthened the chapter and the book to have left this sentence out; then our expectations would not have been raised.

None the less, there are some public policy positions in Shapiro and Varian, albeit still from the business point of view. True to form, the position is based on sound economic reasoning: “… bootleggers have the same problem that any other sellers of contraband material have: they have to let potential customers know how to find them. But if they advertise their location to potential customers, they also advertise their location to law enforcement authorities. … This puts a natural limit on the size of for-profit, illegal activities: the bigger they get, the more likely they are to get caught. Products such as MarcSpider can automate the search for contraband. Digital piracy can’t be eliminated, any more than any other kind of illegal activity, but it can be kept under control. All that is required is the political will to enforce intellectual property rights.”

In any situation, there is always the tension between “working within the system” and criticising that system. Shapiro and Varian take the first perspective in their book and Soros does a very good job of taking the second. Soros first defines a normative criterion for any socio-economic system to meet, then he shows how the present one fails to meet it, and finally he puts forth several proposals for moving the system closer to meeting the criterion.

The normative goal Soros suggests is that of the open society. “Open society is based on the recognition that our understanding is imperfect and our actions have unintended consequences. All our institutional arrangements are liable to be flawed and just because we find them wanting we should not abandon them. Rather we should create institutions with error-correcting mechanisms built in. These mechanisms include both markets and democracy. But neither will work unless we are aware of our fallibility and willing to recognize our mistakes.”

The present international political economy fails to meet that goal on two counts: it relies too much on the market mechanism, and as a cause and consequence of this it allows market values to take over from broader social ones:

The incursions of market ideology into fields far outside business and economics are having destructive and demoralizing social effects. But market fundamentalism has become so powerful that any political forces that dare to resist it are branded as sentimental, illogical, and naïve. Yet the truth is that market fundamentalism is itself naïve and illogical. Even if we put aside the bigger moral and ethical questions and concentrate solely on the economic arena, the ideology of market fundamentalism is

26. Ibid., p. 289.
27. Ibid., p. 299.
29. Soros, op. cit., p. xxix.
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profoundly and irredeemably flawed. To put the matter simply, market forces, if they are given complete authority even in the purely economic and financial arenas, produce chaos and could ultimately lead to the down fall of the global capitalist system. This is the most important practical implication of my argument in this book.  

In contrast to his sweeping attack on the system, his proposals for reform are remarkably mild, perhaps because he wants to proceed in feasible steps. He wants a world-wide union of open societies to take over as a majority in the UN and ratify its resolutions automatically as they are passed.  

The UN would set up a new global financial body: “The new institution, which would presumably remain part of the IMF, would explicitly guarantee international loans and credits up to defined limits … The new institution would function, in effect, as a kind of international central bank”, which would supervise and regulate the global system through the national monetary authorities. These are small but attainable steps—once the US decides to get on board. This is applied international political economy at its best.

Conclusion

Shapiro and Varian stick to their promises: their book is not about trends or analogies, and it is jargon-free, except where they need it. The prose is a little too clever at times, but mostly it flows, and occasionally one finds something clever, as: “In the Middle Ages, professors used a primitive form of intellectual property protection: they lectured in darkened rooms so that the students couldn’t take notes. Today, middle-aged professors still lecture in darkened rooms, but note it’s so the students can see the PowerPoint presentation; “History may not repeat itself, but it rhymes; and “A Web surfer in motion tends to stay in motion, and a Web reader standing still has probably just gone for a snack”. As one who teaches in an international college in a trilingual country, I especially appreciate the explanation of “collective switching costs”: “When I invest by learning to write programs for the Access database language, then Access software, and investments in that language, become more valuable for you”.  

The Soros book is also full of quotable paragraphs, a few of which are reproduced above. It is in other ways, however, a little rough around the edges. He explains that it was produced in haste, in response to the Asian crisis, which has now of course abated. In a larger sense, however, it would have been produced in haste even if it had taken a bit longer. Soros is a decision-maker and he is trying to influence other decision-makers. Many of his critics are scholars. A scholar is never satisfied with any book, because scholarship is a continuous process. But people of action must decide, and move on.

30. Ibid., p. xxvii.
31. Ibid., p. 234.
32. Ibid., pp. 182–183.
33. Ibid., p. xvii, quoting his testimony before Congress, 15 September 1998.
34. Ibid., pp. 93–94.
35. Ibid., p. 94.
36. Ibid., p. 110.
37. Ibid., p. 184.
Like Shapiro and Varian, Soros draws on cutting-edge trends in economics (increasing returns) and chaos theory. However, Soros is guilty of a few Type I errors, criticising the economics profession for not doing what it actually does. He admits that he is not familiar with theories of rational expectations and efficient markets, but there are other areas where he may not be aware that there is work being done: hysteresis, disequilibrium, the notion that rational people may be selfish in one role and altruistic in another. Economists have been working on all of these ideas. They have even been working on the concept of reflexivity, though under other names.

His knowledge of political science is, perhaps understandably, less extensive, but he does have some insights:

For laissez-faire, the subject is the individual market participant; for geopolitics, the state. Closely allied to both is the vulgar version of Darwinism according to which the survival of the fittest is the rule of nature ... The idea that the state ought to represent the interests of its citizens is beyond its frame of reference. This perspective can yield some strange results. Geopolitical realism could not cope, for instance, with the popular opposition to the war in Vietnam. More recently, it could not deal with the disintegration of states such as the Soviet Union or Yugoslavia.

No, but there are other branches of political science for that. On the other hand, they were perhaps not much better at dealing with those problems.

If there is a synthesis possible of the main themes of these two books, it would be this: the economy is changing in ways both good and bad, economists can tell us only something about what is going on, and we have to both cope with it and try to guide it. These two books, taken together, move us that much farther in understanding that theme.