

# A Glass Half Full? Thurow Dissects the Third Industrial Revolution

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*Building Wealth: The New Rules for Individuals, Companies, and Nations.* Lester C. Thurow. New York: HarperBusiness, 1999, 288 pp. \$27.50.

For almost two decades, Lester C. Thurow has been one of the most widely read economists in the United States. His *Zero Sum Society* (1981) is in its 19th printing. Four of his books have made *The New York Times* bestseller list -- and understandably so. Throughout the Reagan-Bush-Clinton years, Thurow has had his thumb on the pulse of the public agenda, commenting on budget deficits, trade battles, income inequalities, sagging productivity, public and private investment, education, and technological change. Amid a plethora of new economic theories and management fads, he has always focused on long-term fundamentals. Most impressive, he has been a leading interpreter of modern capitalism itself, skillfully blending economics, psychology, politics, and history.

Thurow is also a master at breaking down complex subjects into digestible bites while never losing perspective. He understands the power of good stories and anecdotes better than most academics; economics for Thurow is not just theories of impersonal forces but the impact of those forces on people's lives. To the extent he can be criticized, it is because his ideas are often very broad and sometimes lack analytical substantiation, and he is consistently too pessimistic, especially about the United States. His predictions can be wrong, too. A good example is his 1992 conclusion in *Head to Head: The Coming Economic Battle among Japan, Europe, and America* that Europe would be the most competitive entity in the world. But then again, who with the guts to publicly express views about global economics and politics has consistently gotten it right?

*Building Wealth* is vintage Thurow, for both good and ill. Its focus is the third industrial revolution, the first having revolved around the invention of the steam engine in the eighteenth century, the second around electrification and systematic research and development at the end of the nineteenth century. All revolutions are both caused by technological discontinuities and create new ones, he writes. This makes old formulas for creating wealth obsolete. So what must countries do to create wealth in this third revolution?

## THE EMPTY PYRAMID

Thurow's book is based on a central metaphor: the wealth pyramid. This structure needs a solid base, and every layer must be constructed on top of the others. Whereas the Egyptian pyramids were built of stone, today's wealth pyramid is built on knowledge. The central challenge is to build a durable edifice of knowledge, one that will stand the world (and particularly the United States) in good stead in developing and benefiting from industries like microelectronics, computers, robotics, and biotechnology. In the past, Thurow says, when capitalists talked about their wealth they were talking about their ownership of equipment or natural resources. In the future they will be talking about their control of knowledge.

Thurow's ideal pyramid has at its base a way of organizing society that lets most people profit from the development of knowledge-based industries. Its other layers build on each other. They include, from bottom to top, environments that encourage entrepreneurship, create knowledge, develop specific skills, equip societies and individuals with tools ranging from good schools to good tax codes, and optimize use of natural resources. As he examines the pyramid that U.S. society has created to date, he observes that the outside of America's wealth pyramid "is the most impressive mankind has ever seen. . . . [But] the inside of the pyramid is empty." The emptiness, for Thurow, is the lackluster growth in America's productivity in the last few decades.

## LAYING THE FOUNDATIONS

Thurow is concerned about not just the United States but Europe and Japan as well. He believes that no one is giving enough attention to building the required pyramids for this third revolution. America's economic and social inequalities worry him, and he presents a stream of statistics showing that wealth is being transferred from the many to a few, creating an ever-widening gap in living standards between the top and the rest. He argues that Europe and Japan need social, political, and economic revolutions to unleash the entrepreneurial energies necessary to build durable wealth pyramids. Moreover, Thurow is quite cynical about whether adequate global arrangements will emerge to facilitate wealth accumulation for broad segments of society.

Lest this all sound theoretical, the book abounds with proposals. Many are familiar: America must upgrade its secondary school system, Europe must develop more flexible labor policies, Japan and other Asian nations must rely more on internally generated growth than exports. Among the most interesting and freshest themes is the importance of a new regime for intellectual property rights (IPR). The current system is unworkable and ineffective, says the author. IPR is central to knowledge-based capitalism, but people continue to use regulations invented a century ago for a much different world. Thurow calls not for minor modifications but for a new system from the ground up. This includes jettisoning the one-size-fits-all patent system and customizing patents for different kinds of knowledge -- a system that distinguishes, for example, between creating truly new knowledge and extending older discoveries. He wants policymakers to rethink what knowledge should appropriately be in the private and public domains, given that so much new R&D is funded by companies, not governments. Thurow is also rightly disturbed by the unenforceability of IPR rules, since all manner of information can be copied from the Internet and since so many countries blatantly violate copyright rules.

Thurow's ideas about education warrant attention, too, particularly those on rethinking professional training as traditional careers give way to pressures and choices unimaginable just a few years ago. He is dead right in saying, "There is no system for organizing skill acquisition after the age of 25."

## THE PESSIMISTS VS. THE OPTIMISTS

As with his other books, it is easy to get swept away by the coherence and grandeur of Thurow's ideas. He has captured the big issues of the day: how to get the most out of 21st-century capitalism and make it work for more than a few. But Thurow's downbeat view of the future is sure to provoke controversy. For example, is the United States really as weak as he asserts? Even leaving aside quibbles about how Thurow presents statistics on productivity and income distribution, he could have given more than a nod to the possibility that the U.S. model of capitalism is finally on the cusp of delivering higher productivity, thanks to technology and the competitive pressures of globalization. He could have acknowledged, too,

that wages are currently rising for almost all levels of workers. A more nuanced discussion of savings rates is also in order; true, Americans are chronic spenders and lousy savers, but many economists question whether statistics properly account for the wealth stored in homeownership or personal assets locked up in the stock market. When Thurow declares that America must reinvent itself, surely he vastly underestimates what has been going on here this decade.

When it comes to Europe, everyone knows that the continent seems stuck with high unemployment, unaffordable social-safety nets, and arthritic labor rules. But new entrepreneurial capitalism is emerging as companies leap over borders to engage in takeovers and governments scurry to keep their most dynamic companies from relocating. Japan is a mess, no doubt, but the seeds of major change have been planted by, for instance, the move by many leading firms toward shareholder capitalism. Thurow also might have identified the decline of lifetime employment and the disintegration of the keiretsu system as harbingers of Japanese economic reinvention.

On an international scale, although a new global financial architecture may not soon materialize, Thurow underestimates how much is happening to create a stronger global economy. Since global government will never be accepted, he writes, the world's economy will sport no enforceable, agreed-upon set of rules and regulations, no sheriff to compel acceptable behavior, and no judges and juries to whom to appeal. But between a global czar and anarchy lies an expansive middle ground. Thurow could have acknowledged the massive international efforts underway to strengthen banking standards, improve the reliability and transparency of information, create global accounting conventions, build a consensus on better IPR protection, emphasize meaningful corporate governance, reduce corruption, expand membership in the World Trade Organization, and launch a new round of global trade talks to deal with, among other things, electronic commerce and biogenetic engineering.

In short, much of the infrastructure for wealth creation that Thurow wants to see is being established. It may be a slow and spotty process, but it is happening. To be sure, Thurow is trying to create a national debate, and what is most important about *Building Wealth* is that it may well provoke one. Thurow forces you to agree passionately or take him on passionately; there is no middle ground. As he says, the big divide in the upcoming years will not be between the political left and right but between the forces of chaos and order, between individualism and community, and between cooperation and competition. In this third industrial revolution, moreover, the big debate will occur between optimists and pessimists, between those who feel that every such fundamental transition has made more and more people better off and those who believe the opposite. I am in the first camp; judging by this book, Thurow is in the other.