LET A BILLION FLOWERS BLOOM George Gilder

The first great rule of enterprise is do not solve problems, pursue opportunities. Problems are infinite and they multiply continuously; when you solve them, you are back where you began. Governments specialize in creating problems that they then generously solve for the people, creating yet more serious and more systemic problems in the process. The key to the success of China will be to spurn the problem solvers of the world and to pursue the supremely inviting opportunities that now exist.

The Age of Information

China now stands at the threshold of the greatest opportunity in human history: a new economic era promising greater wealth and achievement than any previous epoch. This chance to begin again is a great advantage for China, because China almost entirely missed the last economic era. The new era is the age of information, and the prime measure of the previous failure in China is the gap between the incomes of Chinese people in China and Chinese people in the rest of the world. By some measures, if the incomes of the Chinese people in China had grown just one-third as fast as the incomes of Chinese in other countries, China would be the world's largest economy and the world economy would be some 25 percent larger than it is.

Forget oil, gold, land, the ocean floor, or the reaches of outer space. The single greatest untapped resource in the world economy is the Chinese people. Many demographers and political scientists—and even the words of the Chinese language itself—treat the Chinese

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people as if they are mouths: a burden on the world's food supplies. But far more than mouths, the Chinese people are minds. The key issue of the next 25 years is whether the minds of the Chinese people in China will be emancipated on the frontiers of the new economic era.

The law of the new economy is mind over matter. A typical information product of the previous era is a book. A book is not just a paper product or a product of wood and chemical technology. A book is an information technology. That means its worth derives not from its material substance but from its informational content—not from its chemical value but from its conceptual value. A book costs about 80 cents to two dollars to manufacture in volume, but it sells for between 10 times and 100 times that amount depending on the value of the ideas it contains.

I want to present a new information technology. You cannot really see it, because it is a set of microchips in which the actual components are invisible. Microchips, now available in prototype, are the size of your thumbnail and can hold the contents of a large textbook. They will cost about the same amount as the book to mass-produce: between 80 cents and two dollars. An optical compact disk holds 600 megabytes of information—the equivalent of 600 large books. That compact disk also costs between 80 cents and two dollars to produce in volume and will sell for the value of the information it contains.

Microchips are the prime products of the new age, the key source of value in every computer and computer-related product. The substance of a microchip is mostly sand: the silicon in sand, the most common substance on the face of the earth. What matters again is not its substance but its contents: the idea, the design, the function.

So what does this mean for China? What this new technology means for China is that one of Chairman Mao's most cherished dreams can now come true. That dream can be summed up, perhaps, as power to the people. Twenty-five years ago, Chairman Mao tried to fulfill this dream by launching a program of steel mills in every backyard. This approach was very stupid. Steel mills are very bad things to have in your backyard. To function efficiently, they require huge economies of scale, involving many thousands of regimented workers.

The new microchip technology, by contrast, is based on economies of microscale. The smaller each device on the chip, the more powerful the machine. This fact means that in the information age power constantly is pulled down to individuals who command single work stations, single personal computers based on the power of the chip.

The new economy is based not on digging into the world for valuable resources, but on designing new worlds on valueless grains of sand. A single computer work station can create value in the new economy greater than a huge steel mill. A computer work station linked to a global ganglion of satellites and fiber-optic cables can transport more value in microseconds than an entire fleet of super-tankers in months.

The new technology means that Mao's dream can come true not in the backyard but on the kitchen table. For example, software programs are perhaps the most important products of the information revolution. Some 80 percent of the value of a telecommunications system comes from software and 80 percent of the value of a computer system comes from software. Even the design of a microchip itself begins as a software program. Software can be created by any individual at a work station. In the new age, power moves from the managers of large steel mills and other huge facilities to the masters of small computers.

Thus it is easily possible to fulfill Mao's dream of industrial power distributed to the people. However, to fulfill that dream absolutely requires that China abandon Mao's other dream: the dream of central planning of an economy.

The Futility of Central Planning

The law of the microcosm—the law of the microchip—is that the power of individual work stations always grows much faster than the power of large computer systems. Gone is the long dream of the socialist that giant computers will allow planners to simulate markets and thus manage large economies. The socialist dream has been confounded at the heart of the computer itself. The power of the chip always grows faster than the power of the larger system. Today's individual personal computers are more than 100 times more cost effective than large mainframe computers.

The previous technology of the industrial era to some extent favored control. By control over territory, control over natural resources, control over industrial capital, and control over taxes and trade, governments could increase the power of nations. Governments could increase national power by increasing governmental power. The new technology, on the other hand, favors freedom. It truly fosters power to the people.

Breaking the Iron Rice Bowl

Mao said: "Let a hundred flowers bloom; let a thousand thoughts contend." This showed his incomparable misunderstanding of the

powers of the Chinese people. The rule of capitalism is "Let a billion flowers bloom; let a trillion thoughts contend." I believe that this is going to happen. We are going to have an efflorescence of entrepreneurship in China that will make China the richest economy in the world within the next 25 years.

How do I know this? Because whenever and wherever you set the Chinese free, they create new wealth. China liberated agriculture and within eight years, output tripled in rural areas and the Chinese now export rice. The new era is no different. Everywhere in the world except China the Chinese people are in the forefront of the information age. In the United States, for example, there are thousands of crucial information companies launched by Chinese entrepreneurs.

Now, however, there are exciting signs of progress in China itself. One of the fastest growing computer firms on earth was started just five years ago on a street in Beijing. "When you go out into the dark night," says Chinese entrepreneur Wan Ruttan, "the first thing you must do is throw out a stone to see where the road is." Wan Ruttan is the Communist Chinese entrepreneur who began that computer company. His "dark night" was the totalitarian murk of the economy of this so-called People's Republic.

Without market prices or consumer choices to reveal patterns of scarcity or need, an economy operates in the dark. Because no one knows what is needed in what amounts, output and demand are always mismatched, and no one produces very much. Starting a firm is pretty much a matter of throwing dice—or a stone.

Nonetheless, despite the dark shadows, Wan Ruttan hit the road hard with Stone Computer Inc. Now generating \$137 million in revenues, Stone is breaking new ground in China. Within four years after its founding, Wan's firm passed all the numerous state-run computer firms to rank number one in China.

How did he do it? One young Chinese who had studied in the United States told me Wan and his ilk got rich through "greed" and "corruption." A more insightful report in *Electronic Business* magazine, however, ascribes Wan's success to his willingness, as he put it, to "break the iron rice bowl."

The "iron rice bowl" symbolizes the employment security of the Chinese: Everyone supposedly gets a job and a bowl of rice no matter how little or how ineptly he works. But in another sense, any totalitarian economy is an iron rice bowl. Designed to provide an income floor, the iron bowl always ends up imposing a rigid lid on all personal achievement and economic growth.

Wan substituted a clay rice bowl that is "stronger than iron but breaks more easily." In other words, Wan was willing to accept risk as well as rice. Accepting risk, he also created a shocking Communist scandal: a \$9.5 million after-tax profit in 1987. The fact that he was allowed to keep this money is an exciting portent for the future of China.

Everyone wants security. But if a system tries to provide security for every individual, it will create insecurity and sterility for all. The iron bowl of socialism is designed to shield the citizens from risk. But the result is to shield them from knowledge of the real dangers and opportunities in any society.

Rather than benefiting from a multiplicity of individual ventures and plans, the entire economy absorbs the much greater risk of remaining static in a dynamic world. Sooner or later, even the iron bowl is empty, and all too often it is worn as a helmet for a war of conquest or civil suppression. This cycle sums up a millennium of Chinese history.

Microstability—guaranteed jobs and incomes—comes at the cost of macroinstability: the inflexibility, weakness, and insecurity of the system as a whole. During the heyday of Maoism and the iron rice bowl guarantee, the nation's total rice production actually declined for several years. Despite all Communist claims, Harvard demographer Nick Eberstadt reports, millions of Chinese died of famine.

After the death of Mao, China began to take the lid off, allowing farmers to keep all their production and sales beyond their quota owed to the state. This system is the opposite of the iron rice bowl, a quota of food for every citizen. Instead, the state got the iron bowl—an assured quota of rice—while the farmer got freedom to keep all production beyond the quota.

In effect, the Chinese had discovered supply-side economics, imposing a zero marginal tax rate on all income beyond the government's guarantee. The result was that China began feeding itself and even exporting some rice. Output from the rural areas more than tripled, rising 246 percent according to government data. Breaking the redistributive iron bowl made China the rice bowl of the world.

The most deadly force in business life is the search for the sure thing. Only the past is ever sure. Pursuing safety first, businesses and managers end up copying the previous successes of others and often achieving obsolescence in the process. To find the road ahead—the road to future success—even in free economies, it is still necessary to throw a stone, take a risk, and break the iron bowl like Wan Ruttan.

Stone throwers, however, are not popular in the iron bowl bureaucracies. The state-run Science and Printing Institute has threatened to sue Wan's company for alleged violation of patents. Many bureaucrats at the government computer firms are said to resent the triumph of Stone Inc. Wan told *Electronic Business:* "They claim it's my fault that nobody wants to buy their products. They would prefer it if I sold lower-quality products at higher prices."

Wan now plans to extend the reach of his risk taking to the United States. His key products are IBM-compatible word processors and printers adapted with software to use either English or Chinese characters. He also resells Unisys business computers in China. Wan believes that the increasing relations between Chinese-speaking nations and the United States and that the large number of Chinese Americans afford an opportunity to sell his products outside of China.

Indeed, Wan must know that the overseas Chinese—in Taiwan, Singapore, Hong Kong, the United States, and other countries where the iron bowl was broken decades ago—earn incomes between 25 and 55 times larger than the \$300 per capita yearly earnings in the "Peoples' Republic." In fact, in nations where incomes are not guaranteed, people come to take several bowls of rice and other foods for granted. The irony is that risk taking leads to relative security and wealth for all, while the search for safety leads to totalitarian darkness at noon.

Pursue Opportunity

So my advice to Chinese reformers is, do not solve problems—inflation, corruption, trade deficits, inequality, poverty. You will just increase the power of government, weaken the power of the people, and create newer and worse problems in the process. Take the route of Wan Ruttan: Pursue opportunity.

Ruttan did not solve the problem of the 20 government computer companies that were far ahead of him when he began five years ago. He did not eliminate inflation, corruption, poverty, bureaucracy, or inequality. Instead he pursued his opportunity to create a new firm that would leap ahead of all the government companies. He did not try to liquidate the government firms or privatize them. He did not try to reform the financial system. He did not overthrow the communist cadres. He simply transcended them. Today on that same street in Beijing there are 170 other new high-technology companies and 1,000 more such companies applying for licenses. None of them will solve the systemic problems of China. But they will ultimately transform the Chinese economy by pursuing opportunity.

I would like to conclude by telling a story about problems and opportunities. Two shoe salesmen were sent deep into the boondocks of Africa. One wired back to the home office: "Get me out of here. No one even wears shoes. There is no chance for sales." The second shoe salesman wired back: "Great opportunity! Everybody is barefoot here. Send all stock; we can dominate the market."

There are still a lot of barefoot people in China. But 25 years from today I believe that China is going to be the richest economy in the world if it pursues the opportunity of freedom and profit like Wan Ruttan. Let a billion flowers bloom!

References

Eberstadt, Nick. The Poverty of Communism. New Brunswick: Transaction Books, 1988.

Electronic Business, 18 August 1988.