Applications in Basic Marketing

Clippings from the Popular Business Press

1991-1992 Edition

E. Jerome McCarthy

William D. Perreault, Jr.

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Preface

This is the *second annual edition* of *Applications in Basic Marketing*. We developed this set of marketing "clippings" from popular business publications to accompany our texts—the 10th edition of *Basic Marketing* and the new 5th edition of *Essentials of Marketing*. All of these clippings report interesting case studies and current issues that relate to topics covered in our texts and in the first marketing course. We will publish a new edition of this book *every year*. That means that we can include the most current and interesting clippings. Each new copy of *Basic Marketing* will come shrink-wrapped with a free copy of the newest (annual) edition of this book. It can also be ordered from the publisher separately for use in other courses or with other texts.

Our objective is for this book to provide a flexible and helpful set of teaching and learning materials. We have included clippings (articles) on a wide variety of topics. The clippings deal with consumer products and industrial products, goods and services, new developments in marketing as well as traditional issues, and large well known companies as well as new, small ones. They cover important issues related to marketing strategy planning, including ideas related to selecting target markets and developing a marketing mix. The readings can be used for independent study, as a basis for class assignments, or as a focus of in-class discussions. Some instructors might want to assign all of the clippings, but we have provided an ample selection so that it is easy to focus on a subset which is especially relevant to specific learning/teaching objectives. A separate set of teaching notes discusses points related to each article. We have put special emphasis on selecting short, highly readable articles—ones which can be read and understood in 10 or 15 minutes—*so that they can be used in combination with other reading and assignments for the course*. For example, they might be used in combination with assignments from *Basic Marketing*, exercises from the *Learning Aid to accompany Basic Marketing*, the *Computer-Aided Problems to accompany Basic Marketing*, or *The Marketing Game!* micro-computer strategy simulation.

All of the articles are reproduced here in the same style and format as they originally appeared. This gives the reader a better sense of the popular business publications from which they are drawn, and stimulates an interest in ongoing learning beyond the time frame for a specific course.

We have added this new component to our complete set of **P**rofessional **L**earning **U**nits **S**ystems (our **P.L.U.S.**) to provide even more alternatives for effective teaching and learning in the first marketing course. It has been an interesting job to research and select the readings for this new book, and we hope that readers find it of true value in developing a better understanding of the opportunities and challenges of marketing in our contemporary society.

E. Jerome McCarthy and William D. Perreault, Jr.

Acknowledgments

We would like to thank all of the publications that have granted us permission to reprint the articles in this book. Similarly, we value and appreciate the work and skill of the many writers who prepared the original materials.

Linda G. Davis played an important role in this project. She helped us research thousands of different publications to sort down to the final set, and she also contributed many fine ideas on how best to organize the selections that appear here.

The ideas for this book evolve from and build on previous editions of *Readings and Cases in Basic Marketing*. John F. Grashof and Andrew A. Brogowicz were coauthors of that book. We gratefully recognize the expertise and creativity that they shared over the years on that project. Their fine ideas carry forward here and have had a profound effect on our thinking in selecting articles that will meet the needs of marketing instructors and students alike.

We would also like to thank the many marketing professors and students whose inputs have helped shape the concept of this book. Their ideas—shared in personal conversations, in focus group interviews, and in responses to marketing research surveys—helped us to clearly define the needs that this book should meet.

Finally, we would like to thank all of the people at Richard D. Irwin, Inc., our publisher, who have worked hard to turn this idea into a reality. We respect their commitment to excellence in all stages of the project, and are grateful for their vision in making these materials widely available.

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Small Shopkeepers Losing Grip on Japanese Consumers

Mom-and-Pop Stores, Wholesalers Who Supply Them Fall Out of Favor

By CHRISTOPHER J. CHIPELLO
Staff Reporter of THE WALL STREET JOURNAL

TOKYO—In the shopping arcade next to a train station in Tokyo's upper-middle-class Meguro ward, Yoshiyuki Abe and his wife operate the Japanese equivalent of a delicatessen. Wielding chopsticks, they insert pieces of marinated meat, fish and vegetables into takeout boxes.

The couple's teen-age sons help part time, as does their grandmother. But while the sons lend a hand, their friends scoff at the thought of working in such a place, says Mr. Abe, rubbing a hand over his shaved head.

The Abes are fortunate. Three other shops in the arcade have shut down this year because the owners' sons didn't want to help keep them going. "It's got everyone around here talking," Mr. Abe says.

What's happening in his neighborhood is no isolated event. Throughout Japan, small businesses like Mr. Abe's—the mom-and-pop stores that once dominated retailing—are losing their clout.

Emerging in their place are convenience stores and chains specializing in everything from shoes to audio equipment. At the same time, department stores and supermarkets are stepping up efforts to sell their own brands directly. Manufacturers, too, are moving to establish their own marketing channels.

Wholesale Scramble

As a result, wholesalers are being squeezed, and some are scrambling to find new roles in a changing system.

"A vast restructuring of the Japanese retail industry is under way," says a recent report by Salomon Brothers Inc. Adds Yoshihiro Tajima, president of the Distribution Economics Institute of Japan, "The basic picture is changing."

A shifting distribution structure ultimately could help restrain Japan's notoriously high prices. It will certainly offer consumers more choices. And the move by some big Japanese companies to set up wholesale importing operations may even help foreigners crack the world's second-largest consumer market.

But the changes are bad news for the hundreds of thousands of people who run Japan's candy stores, vegetable stands, fresh-fish outlets and other small shops.

After decades of uninterrupted growth, the number of stores run by individuals stagnated between 1976 and 1982, and declined by 8% from 1982 to 1985, the latest year for which figures are available. Corporate-run stores in the most recent four-year period increased by 35%.

Chain Reactions

"The small-scale traditional type of stores are disappearing," says Mr. Tajima, of the economics institute, making it likely that "the wholesalers who supply them will also disappear."

The forces behind these changes range from a new breed of fashion-conscious Japanese consumers to the strong yen. Computerized check-out systems and data networks linking retailers with suppliers are pushing the process along. The government's proposed 5% value-added tax—if it survives the storm of criticism it has generated—could accelerate these trends.

Japan's sprint from deprivation to affluence has altered personal values and tastes. Young Japanese are less interested in taking over the family business and squirreling away money than they are in working for prestigious companies and skiing on weekends. Buying habits have shifted, forcing retailers to adjust or be left behind.

The three defunct shops near the train station fell victims to what Mr. Tajima calls the "bubble effect." As Japan rebuilt itself helter-skelter on the rubble of World War II, people returning from China and Korea made a living peddling goods on the streets, moving to indoor premises when they had saved enough. With the economy rising fast through the early 1970s, there was enough new business to accommodate big and little retailers alike. But since the mid-1970s, the surge in oil prices and other factors have made Japan's double-digit growth a thing of the past.

"The bubble became bigger and bigger," says Mr. Tajima. "But now it's finished."

Of Japan's 1.3 million small shops, industry analysts say, the ones that specialize stand the best chance of surviving.

Take Kojima Denki, a small electronics shop across the street from the Abes' establishment. Two years ago the store was a typical neighborhood *denkiya*, a household-appliances shop crammed with everything from televisions to washing machines. Today, disco music spills out of the store, and the shelves are filled with videotapes, pocket radios, floppy disks and a few compact blow-dryers.

A gray-haired employee who has spent much of the past 25 years making house calls on regular customers sits these days behind a partition keeping the books. Targeting the *shinjinrui*—literally, the "new humankind," as Tokyo's upwardly mobile trendies are known—has paid off, he says. For small retailers, "It's hard to get by anymore being a we've-got-it-all shop."

Seven-Eleven Japan Co. has it all—or so it might seem. Thirteen years after the first Japanese Seven-Eleven opened for business, under an agreement with Southland Corp. of the U.S., some 3,000 of the convenience stores, with their orange, green and red trim, dot the country's urban neighborhoods and rural highways.

A First for Japan

In 1983, Seven-Eleven became the first Japanese retail chain to introduce computerized check-out systems in all its outlets. It also pioneered a system in which suppliers pool their deliveries to outlets. Before this so-called vendor system was introduced, "it was unthinkable to put one maker's goods on another's trucks," says Yoshinobu Naito, spokesman for Ito Yokado Co., which owns 51% of publicly traded Seven-Eleven Japan.

The strong yen is also encouraging retailers to go bargain hunting overseas. Last September, for instance, Korean-assembled rolls of Fuji Photo Film Co. film began showing up on the shelves of a major superstore chain. The retailer's representative in Seoul had discovered that exchange-rate shifts made it possible to repatriate the film and still undercut the standard Japanese price.

The 5% value-added tax before Japan's parliament could speed consolidation of the distribution industry. Despite exemptions for 51 product categories and measures to insulate small businesses from the proposed levy, many small operations will be hit hard, analysts believe. "We expect the small middleman to virtually disappear," says the Salomon report.

Out of Stock

Soviet Retail System Gets Strikingly Worse In Era of Perestroika

More Stores Sell by Invitation Only, Creating a Market In Options to Buy Goods

One Ruse: Fake Engagements

By Peter Gumbel
Staff Reporter of The Wall Street Journal

MOSCOW—A consignment of clothes from Eastern Europe has just arrived at Moscow's Belgrade department store. An expectant crowd soon gathers on the sidewalk outside, only to be shooed away by seven beefy policemen with truncheons.

The police point to a handwritten sign in the window: "Closed to the public." The only people they let in, a few at a time, are those with special printed invitations to shop at the store.

"It's outrageous," an elderly woman shouts at the police. "Even when there's something to buy, it's not for sale."

In an office high above the crowd, meanwhile, store director Nina Moskaleva entertains four visitors. As they sip coffee, smiling store assistants bring in an array of men's suits from East Germany, leather shoes from Italy and winter boots from Yugoslavia. The visitors are impressed. "You really can't purchase these anywhere," confides one, a middle-aged Georgian, packing three pair of dapper woolen trousers and some boots into his bag.

Sorry, Closed

The Soviet state-run retail system has never been a model of efficiency. But over the past few months, as shortages of most goods have become the norm, it has all but broken down. Across the nation, consumers now need more than just money to buy anything worth having, particularly imported goods. They either must have a special invitation to shop, be unusually ingenious, or know people who will sell them goods under the counter.

The breakdown in retailing is one of the worst failings of *perestroika*, Mikhail Gorbachev's attempt to overhaul the economy. It has enraged consumers and fed the burgeoning black market. It also puts a question mark over the effectiveness of any big aid program for the Soviets of the sort being considered by the U.S. and Western Europe. Even when imports arrive, the murky distribution system means they rarely reach most ordinary people, except through the back door.

"Ugly forms of commodity distribution have emerged," Prime Minister Nikolai Ryzhkov told parliament recently, explaining why shopping has become so difficult. Otto Latsis, a leading economist, is more blunt. "Trade has actually ceased to exist," he told the Izvestia daily. "For people this is not abstract statistics, but a fact of life they have to face each time they go shopping."

Members Only

At the top of the list of government and consumer complaints is shopping by invitation, a fast-growing form of special distribution. It involves big factories cutting deals with department stores such as the Belgrade to enable their workers to buy hard-to-find goods.

For example, people wanting a refrigerator or a television set apply to union officials at their workplace. When a consignment arrives at the store, the officials hand out coupons entitling workers to buy the items. In Moscow alone, invitation shopping has soared 20-fold since 1986, accounting for sales last year of $2.5 billion.

The procedure is fraught with so many difficulties that authorities in Moscow are now trying to ban it. One drawback is that people who don't work for enterprises big enough to organize such activities lose out. So do pensioners and others who don't work at all.

Moreover, with demand far outstripping supply, corruption is rampant. In theory, union officials give invitations to people who work well. In practice, they often keep them for themselves.

Options Market

"No social justice is achieved this way," complains Vasily Buslakov, a senior official in the Ministry of Trade. "It's accompanied by all sorts of abuse of power that are very difficult to control."

Sometimes the abuse of power is so blatant it backfires. Workers at a rubber factory in Yaroslavl almost went on strike recently when 90 out of 108 video recorders ended up being taken by union and factory officials instead of handed out to the workforce, according to Alexander Tsvetkov, a local journalist who exposed the incident.

"In times of shortages, you can't eliminate certain subjective approaches to questions of distribution," acknowledges Pyotr Fyodorov, a senior official at labor union headquarters in Moscow. "Only Jesus Christ could distribute five loaves and two fishes to thousands of people fairly."

Mr. Fyodorov says union bosses are opposed to their officials' organizing such activities, fearing that it harms labor's already poor reputation. But many factories ignore such objections. They argue that shopping by invitation is still better for workers than having to shop at depleted stores or on the black market.

In fact, the practice has added a new twist to the shadow economy: the rise of a new, semi-legal options market. An invitation to buy a color TV set costing 600 rubles may trade for 200 rubles and upward. The right to buy furniture worth 10,000 rubles goes for about 2,000 rubles.

"Strictly speaking, it's not a crime," frowns Col. Mikhail Shestopalov. "It's sale of a right, not a good."

Col. Shestopalov is the Elliot Ness of Soviet shopping. A beefy plain-clothes cop with thick glasses and slicked-back hair, he runs the Moscow Administration for Combating Theft of Socialist Property, with the mission of fighting the black market. He has his work cut out for him.

"Speculators" are the main target—people who aim to buy low and sell high. Such an ambition may be close to the heart of capitalism, but in the Soviet Union it is illegal. Authorities hate it because it involves people siphoning off goods from the state sector, where prices are fixed, and reselling them for a big markup on street corners. As the number of products in short supply has soared, speculating has become big business.

"In principle there's speculation with everything—everything except for bread," Col. Shestopalov growls. "In the U.S. you had it during Prohibition. Now *we're* in a tough situation."

Well-organized groups of black marketeers are working hand-in-hand with corrupt retail officials, he says, diverting truckloads of goods ranging from shoes to mink coats. In the first three months of this year, Col. Shestopalov and his men caught more than twice as many big-time speculators and store directors taking bribes as in the whole of 1989. And that's just scratching the surface.

"There are entire underground department stores," says Rimma Kogay, a retail specialist at Moscow's All-Union Institute for Market Research. "Some speculators have goods worth 20,000 to 30,000 rubles, the same amount a normal shop has."

The black market has long played an important role in Soviet society, enabling people to overcome the inadequacies of the creaky state-controlled economy. For every big fish, there are a multitude of nimble minnows. They are quick to spot holes in the special distribution nets. Just ask Ludmila Kurakina.

Bride for a Day

Mrs. Kurakina is the cheery director of the Department Store for Newlyweds, a squat, two-story building in the north of Moscow. It is the nearest thing to a Soviet shopper's paradise. The shelves are laden with piles of cotton shirts from India, woolen suits from East Germany and mountains of socks—an item in woefully short supply nationwide. Best of all, behind a metal grille are rows of dainty shoes imported from Yugoslavia and Finland.

As its name suggests, the Store for Newlyweds isn't open to all. To shop here, consumers must produce documents from a registry office showing they are to be married. Along with the papers comes an invitation enabling the couple to shop.

That's where the fiddling starts.

"Unfortunately, many young couples apply to be married in three or four different registry offices," Mrs. Kurakina says. That means they can buy three or four times as much. "In fact, it's possible to get six invitations," she says: two from the place of residence of the bride and the groom, and one from each of four Moscow wedding palaces where people can also go to register.

"They don't care about the wedding dresses," she says. "It's the shoes they're after."

In the past, such abuses were impossible because the registry offices would mark a small dot in the passports of prospective couples. But Mr. Gorbachev inadvertently loosened the system by ordering local bureaucracies to cover their costs. Offices in Moscow immediately raised the price of registering marriages from 1.5 rubles to 15 rubles and stopped putting dots in passports. That made it lucrative for the bureaucrats to register people as often as possible.

In fact, thousands of people just get engaged to go shopping, and never get married at all. Last year, 31,500 couples didn't show up at their weddings in Moscow, one-quarter of those who registered. "People are pretty enterprising," Mrs. Kurakina shrugs.

Better Bookkeeping

Soviet officials say that similar scams regularly occur at other special stores, which include shops for invalids and war veterans. At the same time, they are trying to fight an alarming increase in the longstanding Soviet practice of selling scarce goods under the counter. The Russians even have a word for it: *nalevo*, or "on the left."

Last year the government issued instructions to all retailers to be more vigilant. Stores now must keep a book listing delivery and sale date of all hard-to-find and imported goods in an effort to prevent shop assistants from siphoning the stuff off and selling it to their friends. Inspectors from a union-run organization called Workers' Control drop by from time to time to take a look at the book.

The measure hasn't been too effective. Last year, Workers' Control uncovered just 85 million rubles worth of goods that had been put to one side, a drop in the bucket. For speculators, says Col. Shestopalov, the book "isn't a big obstacle, just an additional one."

His organization has had a little more success fighting the organized crooks. In one provincial town recently, investigators caught a couple selling invitations to buy liquor. They had been printed and distributed by the local town council, where the wife worked. According to Soviet news media, the woman obtained more than 70,000 invitations enabling the holder to buy vodka at less than half the regular price. The scam was uncovered when police filmed one of the couple's friends trying to buy 80 bottles at once.

Despite such successes, Col. Shestopalov isn't a happy man. The only way to uncover such scams is by catching the people red-handed, he complains. He dreams of the day when the Soviet Union will allow police to use stings, plea-bargaining and other techniques. "If we could use the methods of our U.S. colleagues, it would be easier," he says. "We would uncover much more."

Mr. Buslakov, the trade ministry official, isn't so sure that giving police extra powers would help solve the problems of the state retail industry. "We've always had speculation and corruption," he says sadly, blaming the special distribution networks for much of the present shortages. "I think only a market economy can help solve the problem."

Glutted Markets

A Global Overcapacity Hurts Many Industries; No Easy Cure Is Seen

Among Those Hit Are Autos, Steel, Computers, Chips; Some Chemicals Recover

One Winner: The Consumer

A WALL STREET JOURNAL *News Roundup*

Raise the subject of America's industrial problems, and you hear a lot of complaints. You are told that much of U.S. industry is performing sluggishly because Americans don't want to work anymore or have forgotten how; that foreign rivals are competing unfairly through government machinations, ridiculously low wages or both; that the U.S. just hasn't surmounted the legacy of an overvalued dollar.

But all this emphasis on what is going wrong in the U.S. and in its relations with trading partners—especially Japan, with its mercantilist drive to export—tends to obscure a world-wide problem: Many major industries, all around the globe, are burdened with far too much capacity.

"Overcapacity is a world-wide problem, and it's getting worse," says Lester Thurow, an economist at the Massachusetts Institute of Technology. "We're still investing as if the world economy were growing at 4% a year instead of the actual rate of about 2%."

Demand Sluggish

While a lot of automated capacity has been added, effective demand has been sluggish. Knocking many buyers out of the market have been the debt burdens in Latin America, the political and economic slide of much of Africa, and the torpor of most Communist economies.

Even then, the forces of supply and demand should, theoretically, produce prices that clear the markets. But they seem not to be doing so, or are working only slowly and painfully, partly because of protectionism, government subsidies and other forms of political interference with the process of economic adjustment. In many industries, moreover, declining prices have rendered some high-cost facilities uneconomic.

Not everyone is rattled by the overcapacity, however. Marvin Runyon, a former Ford executive who runs Nissan's plant in Smyrna, Tenn., says: "You read that we're putting too much capacity in place, but that's the way it has to be in a competitive industry. I say hooray for the American consumer, because somebody is going on political interference with the process of economic adjustment. In many industries, moreover, declining prices have rendered some high-cost facilities uneconomic.

Not everyone is rattled by the overcapacity, however. Marvin Runyon, a former Ford executive who runs Nissan's plant in Smyrna, Tenn., says: "You read that we're putting too much capacity in place, but that's the way it has to be on a competitive industry. I say hooray for the American consumer, because somebody is going to have to do things better than somebody else. The consumer will benefit."

Many Industries Afflicted

Whether good or bad, overcapacity is obvious in many industries. Among them:

Autos. Roger Vincent, an expert at Bankers Trust Co., estimates that world automotive demand stands in the "low 30 millions" of vehicles annually, while capacity "is in the low to mid-40s." By 1990, capacity should rise to the mid-40s, he says, and demand won't grow very much. Thus, world overcapacity could expand to about 15 million units from about 10 million currently, he believes.

Steel. Estimates vary, but most economists calculate the annual global overcapacity at 75 million to 200 million metric tons—compared with total capacity of 570 million tons in non-Communist countries and 455 million tons in industrialized nations. John Jacobson, an economist at Chase Econometrics, figures that only if the entire U.S. steel industry shut down would demand equal supply in the non-Communist world.

Computers. Although no figures on the industry's capacity use are published, most computer makers are clearly being plagued with overcapacity. The problem is reflected in declining orders and intense competition.

Semiconductors. In the U.S. and Japan, which together account for 87% of global chip making, the equipment-use rate—the best measure of overcapacity—skidded from nearly 100% in 1984 to about 60% in 1985. However, Dataquest Inc., a market-research firm, says it is now back up to roughly 70% and rising.

Heavy Equipment. Makers of farm and construction eqnipment are buried in overcapacity, but, surprisingly, some countries, especially South Korea, are nonetheless believed to be planning more plants.

Textiles. In the textile industry, cheap-labor foreign competition is causing the howls. Overcapacity lingers on as more and more mills are built in less developed nations, with more and more mills in the U.S. thus turned into surplus capacity.

Rebound in Chemicals

However, some once-glutted industries have got supply and demand back into balance. For example, much of the chemical and plastics group has cut capacity and expanded sales, and the glut of a few years ago has been largely cured.

Looking at many troubled industries, Joseph L. Bower, a Harvard Business School professor, attributes much of the excess capacity to "country after country building world-scale facilities." Newly industrializing countries have ample reason for fostering development, of course. They want to create industrial jobs at a time of rapidly expanding populations, of an influx into the cities and of rising educational levels, which create labor forces sufficiently skilled for factory work. The weakness in many commodity markets also encourages the idea that any hope for economic growth lies in industry.

Industrialization has been rapid, Mr. Bower adds, "because technology and capital are now highly mobile—it's staggering how fast they can move around the world nowadays." No longer, he says, is the game played by "just four or five good players." He urges that American companies "understand that we've moved from Ivy League football to the Big Ten."

Many economists trace the overcapacity back to the booming early 1970s, when many manufacturers saw tremendous growth in demand ahead and expanded accordingly. Other analysts go back much further. Jay W. Forrester, also of MIT, traces the problem—which he thinks will get worse—largely to "the big buildup of capacity during and after World War II." He recalls that "the idea took hold that more capital plant was invariably desirable," and building it was facilitated by "the enormous forced savings that had accumulated during the war years."

Also greasing the path to industrial overcapacity are plentiful supplies and low prices of many raw materials—an incentive for marginal manufacturers to keep producing and for newcomers to enter the game. The gluts affect a wide range of commodities. For example, producers of nickel and molybdenum, both used in producing steel, are operating at roughly 70% to 75% of capacity world-wide, estimates Robin Adams, the president of Resource Strategies Inc., a consulting firm in Exton, Pa. The copper industry is operating at a little over 80% of capacity, he adds.

The stage for the commodity gluts was set in the inflationary 1970s, when price shocks stimulated investment in production capacity in many commodities. But in many cases, demand hasn't grown to meet the increased production.

Pressure to Produce

Moreover, many debt-laden countries increased the output of commodities to avoid spending precious foreign exchange on imports. Others invested in commodity-producing capacity to generate export cash regardless of price. Many countries "only had one option, and that was to produce more. So we didn't follow the normal corrective path," says Donald Ratajczak, the head forecaster at Georgia State University. Copper, for example, has responded slowly to reduced demand.

Oil is abundant, too. The Organization of Petroleum Exporting Countries is producing less than 15.8 million barrels of oil a day, compared with capacity of nearly 30 million. However, the surplus is mainly in crude oil—both in the ground, in production capacity, and above it, in inventories. In petroleum refining, much of the overcapacity has been trimmed back. U.S. refineries are operating at about 80% of capacity, a relatively high level, and as gasoline demand rises, processing facilities may be approaching their effective limits.

But the oil-service sector remains awash in red ink. After the collapse in petroleum prices last year, oil companies slashed exploration and production spending by 40% to 50%. This year, spending remains depressed. Thus, only 25% of the U.S. drilling-rig fleet is active, and manufacturers of oil-field equipment have several times the capacity currently needed.

Here is a detailed look at the overcapacity problems in major industries.

Autos

Automotive experts agree that the industry suffers from vast overcapacity world-wide and that Japan, like North America and Europe, will soon be hit as it builds more U.S. plants. But they disagree about the extent of the overcapacity; some measure cars, for example, and others measure all vehicles.

Ford, which gauges capacity quite differently from Bankers Trust, estimates 1985 world-wide overcapacity at 3.8 million cars and trucks, and it believes that by 1990, world-wide excess capacity will rise to six million units, 5.7 million of which will be aimed at North America.

The principal force behind the projected increase is the expansion of Japanese auto manufacturing. The Japanese, having pushed aggressively into the U.S. auto market, are reacting to the voluntary export restraints and the threat of more American protectionism. "The building of Japanese plants in the U.S. wasn't motivated by economics," Bankers Trust's Mr. Vincent says. "It was motivated by concern over future protectionism."

As a result, the auto glut bedeviling the U.S. industry is being worsened. Starting in 1989, Daihatsu Motor will be producing cars in Canada, thus becoming the last of Japan's nine auto makers to put an assembly plant in North America.

Meanwhile, other players keep getting into the game. In the wake of the success of South Korea's Hyundai Excel, Kia Motors of Korea is planning to export cars and vans world-wide by the end of this decade. Yugoslavia is exporting its Yugos to the U.S., and Malaysia plans to send its Proton Sagas here next year. Thailand and Taiwan also are trying to export.

Japanese Auto Makers

A comprehensive listing of Japanese companies that build cars in North America or are planning production:

COMPANY	YEAR: TOTAL CAPACITY
Honda of America	
Marysville, Ohio	1986: 220,000
Nissan Motor Mfg. U.S.A.	
Smyrna, Tenn.	1986: 65,690
Toyota Motor Mfg. U.S.A.[1]	
Fremont, Calif.	1987: 50,000
Georgetown, Ky.	1988: 75,000
	1989: 200,000
Mazda Motor Mfg.[2]	
Flat Rock, Mich.	1988: 135,000
	1989: 240,000
Diamond Star Motors[3]	
Bloomington-Normal, Ill.	1989: 182,400
Daihatsu Motor[4]	
Valcourt, Que.	1989: 37,200
Isuzu-Subaru	
Lafayette, Ind.	1990: 240,000
Suzuki/GM	
Ingersoll, Ont.	1990: 200,000

[1]Joint venture with General Motors
[2]Joint venture between Mazda and Ford
[3]Joint venture between Mitsubishi Motors and Chrysler
[4]Joint venture with Bombardier

Source: Chase Econometrics

"Newly industrialized countries all want auto companies so they can have steel industries and reasons to build roads and purchase technology from the outside world," says Susan Jacobs, the manager of automotive research at Merrill Lynch Economics Inc.

However, she also attributes the excess capacity to sluggish world-wide demand. In addition, she says, new plants were built to make the small cars that became popular during the energy crisis of the 1970s and to enter new market niches, such as that for light trucks.

Japan hasn't had more automobile start-up companies than Europe or the U.S., Mr. Vincent says. "It's just that they all managed to survive"—with government help. Other nations have done much the same, however. The U.S. government saved Chrysler. And Donald Petersen, Ford's chairman, notes the heavy French subsidies for Renault and American Motors and says he expects the two French producers, Renault and Peugeot, to survive "as long as there is a France."

Japan and South Korea also have stimulated their auto industries by closing their home markets to outsiders and encouraging exports. Moreover, the Japanese also have helped South Korea develop its auto industry. Mr. Vincent believes that the Japanese are saying, "It's inevitable, and why not be part of it?"

Mr. Vincent notes that in the past, American auto companies, looking forward to the next auto-buying boom, often created excess capacity. If the market grew, "you are bailed out by higher demand; otherwise, you get stuck with overcapacity—which is what has happened to some companies," he says.

But the patterns have shifted. Ford reacted to flatter demand by changing its philosophy—keeping capacity tight, forgoing some sales but betting that lower capacity would cut costs and keep it profitable when demand fell. But until recently, General Motors kept more capacity running than its sales warranted. Now, however, GM also is closing more plants.

James P. Womack, the research director of the international motor-vehicle program at MIT, believes that apparent world overcapacity might not be as large as it seems because "some plants are dedicated [to a certain type of vehicle] and can't be switched from product to product." While the Japanese have built flexible plants that can make more than one vehicle, he says, "the North American philosophy has been not to complicate matters by mixing products"—a policy that aggravates the overcapacity.

(cont.)

Steel

The global glut of steel reflects poor investment decisions in the 1970s, dwindling use of steel in industrialized economies, burgeoning production in industrializing countries, and high financial and political barriers to closing mills.

Anticipating shortages, steelmakers in Europe and Japan greatly expanded capacity in the 1970s, and U.S. producers modernized existing mills. Not only did scarcity never come, but consumption fell sharply in industrialized countries. Between 1970 and 1980, according to the World Bank and International Iron and Steel Institute, capacity in industrialized nations climbed 14% to 485 million metric tons, while consumption dropped 8% to 334 million metric tons.

Yet despite mounting evidence of a "phony boom," steel executives "just wouldn't give up the illusion that the market was headed up," says Hans Mueller, a steel-industry consultant.

Plunging consumption in industrialized nations, which is expected to continue into the 1990s, reflects the maturation of their economies. Construction of railroads and highways has largely been completed. And in other big steel markets—autos and containers, for example—alternative materials are increasingly supplanting steel. Donald F. Barnett, a World Bank consultant, calculates that had U.S. steel usage since 1960 matched the growth in gross national product, steel consumption in 1985 would have been some 70% higher.

Faced with excess capacity, European and Japanese steelmakers, in particular, have turned to export markets. But there they are increasingly finding limits. U.S. producers have won import curbs, and less developed countries, though consuming more and more steel, are producing much of it themselves.

Some, moreover, are becoming major exporters, penetrating traditional European and Japanese export markets. In 1976, Brazil, for instance, produced 7.3 million metric tons of steel products and exported a mere 264,000 tons. Today, it is the world's fifth-largest non-Communist steelmaker, and it exported 40% of the 17.3 million tons it produced in 1985.

Rapid growth in steelmaking capacity may have as much to do with nationalism and industrial prestige as economic growth. Today, Zimbabwe and Qatar have steel industries. "Every industrializing country wants an airline and a steel mill," Chase's Mr. Jacobson says. "It's something that planning ministers push for."

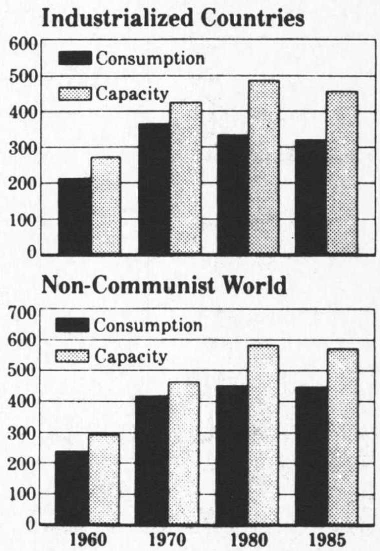
Capacity has fallen modestly among industrialized nations since 1980, and the reductions are continuing. In the U.S., steelmaking capacity (including recently announced cutbacks) is being slashed to 111.9 million short tons from its 1977 peak of 160 million tons. Even with the cutbacks that have been carried out, the U.S. industry is operating at only 55% of capacity, Georgia State's Mr. Ratajczak estimates.

In Japan, all five major steelmakers are cutting production capacity, although only one, Nippon Steel, has specified its plan in terms of crude steel-production capacity; it is cutting back to 24 million metric tons annually from 34 million tons.

Louis L. Schorsch, a consultant at McKinsey & Co., expects future mill closings to be much more difficult. In the U.S., many steelmakers, saddled with huge unfunded pension liabilities, are reluctant to shut even unprofitable plants because they can't absorb the cost of paying off workers and other expenses. Chase Econometrics estimates the total cost of closing a mill at $75,000 per employee. "Given an average of 4,000 employees per plant," Mr. Jacobson says, "we estimate that a typical integrated-plant closure today would cost over $300 million."

The Glut in Steel

(In millions of metric tons)



NOTE: Consumption figures are on a crude-steel-equivalent basis (number of tons of raw steel needed to make finished products)

Sources: Economic Associates Inc; World Bank, International Iron and Steel Institute.

Mr. Barnett adds: "So far, steelmakers have closed mostly old plants that hadn't been in operation anyway. Now, they've got to get rid of relatively modern capacity that can still make a satisfactory product. The hard part is just beginning."

Computers

Seduced by huge sales gains during the 1983-84 boom, computer companies expanded rapidly. Most "invested in growth rates that aren't materializing," says Ulric Weil, a Washington-based securities analyst. "Demand just didn't develop." According to Commerce Department figures, factory orders for the office-equipment and computer industry plunged 15% in the two-year period ended in 1986.

A good barometer is International Business Machines, which accounts for 40% of the world's computer sales. Last year, IBM's revenue rose only 2% to $51.25 billion, and profit slumped. This isn't the type of growth IBM anticipated. In the past five years, IBM spent more than $20 billion on plant and equipment, says Steven Milunovich, a First Boston analyst.

IBM responded to last year's disappointments by consolidating operations at several U.S. locations "to bring capacity in line with current and projected needs," IBM Chairman John Akers said in the company's 1986 annual report.

Nevertheless, many computer makers expanded in the fight for sales. "People who participated in niches in the past want to expand and provide complete systems for their customers," says David Penning, the director of manufacturing-automation service at Dataquest. For instance, he adds, some personal-computer companies now make work stations, while some computer makers best known for mainframes make personal computers.

Technological advances have aggravated the overcapacity. With more power being stored on silicon chips, computer companies can make smaller, more powerful machines. "Any given square footage of plant can produce a lot more stuff in terms of horsepower," Mr. Weil says. The minicomputer market is being squeezed from two sides: on the lower end, by more powerful personal computers, and on the upper end, by lower prices on computers with the power once associated with mainframes.

The emergence of manufacturers in the Far East, especially those in Japan and South Korea, has compounded the overcapacity problem for U.S. computer makers. Last year, the U.S. computer and parts trade deficit with Far Eastern countries

(cont.)

soared 77% to $5.3 billion, according to the Commerce Department. Japan's exports to the U.S., ranging from parts to portable personal computers to supercomputers, surged 43% to $4.75 billion last year.

Moreover, countries that had primarily produced peripherals are exporting full machines now, says Tim Miles, a program manager in the department's Office of Computers. "The South Koreans began penetrating the U.S. market in terminals and other areas," Mr. Miles says. "Now, they're producing complete PC systems."

Not all computer makers have been suffering, however. Some companies, such as Tandy Corp., which makes personal computers, and Digital Equipment Corp., a minicomputer maker, have grown rapidly, primarily because of revamped product lines. Moreover, the pressure on the industry would be reduced by any pickup in sales. Already, there are signs of rebounding volume in personal computers.

Semiconductors

The glut in the semiconductor industry eased last year, as orders picked up from a disastrous 1985, but most chip makers remain deeply troubled. The roots of the problems are twofold: Huge miscalculations of future demand and Japanese producers' targeting practices, under which they ignored market conditions while aggressively pursuing market share.

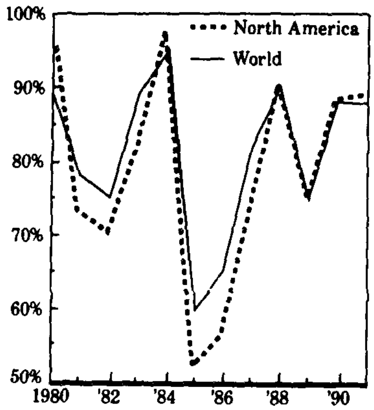
The introduction of the personal computer early this decade spawned a sudden surge in demand for chips. Global chip consumption jumped from about $15 billion in 1982 to $29 billion in 1984. Thus, chip makers rushed to add capacity to meet growing, apparently insatiable demand. Japanese chip makers' capital spending rose a total of 116% in 1983 and 1984, while U.S. chip-company spending doubled in 1984. World-wide capacity to produce chips increased about one-third in 1984 alone.

Then, when falling personal-computer sales sent global chip demand plummeting about 14%, to $25 billion, in 1985, chip companies started losing big money. Dataquest says the chip industries in Japan and the U.S. each lost about $1 billion last year.

Moreover, Japanese producers exacerbated the industry's overcapacity problems by continuing to add production and slash prices on certain products right through the slump. Taking advantage of their lower-cost capital, patient stockholders and government research assistance, the Japanese drove U.S. producers out of some major commodity markets by drastically underselling them.

Semiconductors

Utilization of plant capacity



NOTE: Figures for 1987-1991 are projections.

Source: Dataquest Inc.

Indeed, the U.S. government found that Japanese companies "dumped" certain chips in the U.S. and other markets, and the U.S. may soon penalize them if they don't raise their prices. Japan's Ministry of International Trade and Industry, trying to save a semiconductor trade pact signed last summer, has told Japanese chip makers to cut production 10%.

Heavy Equipment

Plunging demand has blighted the farm-equipment industry with huge worldwide overcapacity. The glut has persisted despite sharp cutbacks in the number of factories producing tractors, combines and other agricultural equipment.

Sales have consistently trailed even the most pessimistic forecasts. In retrospect, that isn't surprising. The world is awash in food. A few years ago, fears of shortages, embargoes and price gouging led many food-importing countries, such as Japan, to give agriculture a high priority. Many nations imported new agricultural technology that now has borne fruit.

The global surplus of food and feed grains is expected to surge to a 13-week supply this year; an eight-week supply would be ample. The U.S. has more than a one-year supply of wheat, enough for both exports and domestic consumption.

With farmers in dire financial trouble, the business of supplying them with new equipment is as dead as last year's cornfield. World-wide tractor output fell to 120,000 units last year from 230,000 in 1979. For larger equipment, the declines have been even sharper. Manufacturers produced 20,000 over-100-horsepower tractors last year, down from 80,000 in 1979.

"The downturn has been so dramatic that no one has done anything but cut back," says John Ruth, Massey-Ferguson's president. He says he doesn't know of any additions to industry capacity anywhere in the past five years. Because of high costs, some U.S. facilities were among the first to close, with part of their production moving to existing foreign plants.

Mr. Ruth sees further cutbacks in capacity needed for anyone to make a profit. But for now, companies are playing an industrywide game of chicken. No one wants to get out of the business so that rivals can make money again.

In construction equipment, too, demand is down, but, surprisingly, capacity is still rising.

In the late 1970s, construction-equipment sales surged, and plants were operating at close to capacity even though Japan was working hard to build a construction-equipment industry. But from 1980 to 1983, demand plunged 70%, beaten down by reduced demand for coal as well as a decline in world-wide construction activity. Construction was hurt in part by declining oil profits and international-debt problems.

Now, demand has recovered a bit, but the industry is still running only at about 60% of capacity. Nevertheless, some countries are planning to expand even more. Industry analysts expect South Korea soon to begin an assault on the market. "Korea is a big emerging threat," says Frank Manfredi, the publisher of Machinery Outlook, an industry newsletter. "Everyone is expecting them to come into the market like gangbusters." Other countries that have added capacity in construction equipment are China and Italy.

"It's ironic that even though sales have been lousy, there's more capacity in the industry than there was five years ago," says Mitchell Quainn, a securities analyst at Wertheim Shroder & Co. "It's almost as if every country wants to have its own bulldozer manufacturer."

Textiles

Seeking crucial foreign exchange and jobs for surging populations, many developing nations are producing textiles and apparel at rates far above domestic de-