The Fruits of Free Trade

2002 ANNUAL REPORT • FEDERAL RESERVE BANK OF DALLAS



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"The essential difference between Free Trade and . . . Protection is, that under a system of Free Trade the excellence of the product is the only means by which it can secure a market; while under Protection an inferior article can dominate the market through the aid of legislation. The necessary effect of Free Trade is, therefore, to encourage efficiency in production, while the necessary effect of Protection is to encourage skill in corruption."



"Prosperity [is] an abundance of commodities. . . . The merit of any policy or system can be tested by its effect on the volume of commodities available for the use of the people."

William Bourke CockranIn the Name of Liberty, 1925

A LETTER FROM THE PRESIDENT

2002 was not the best of years. The pall of September 11 lasted all year and beyond. We had to adopt security measures and change our behavior in ways that eroded our personal liberty and economic efficiency. These necessary changes may not have reduced GDP much, but they lowered our standard of living nonetheless. GDP isn't everything.

The Economy in 2002

Following the 2001 recession, economic activity expanded throughout 2002, but not vigorously enough to sustain or promote employment growth. Increases in output and income were driven by continued gains in productiv-

ity. Although the unemployment rate never exceeded 6 percent during the year, the recovery so far has been a jobless one. Productivity gains may substitute for job growth in the short term when the economy is weak, but they augur well for a higher standard of living in the long run when both productivity and job growth are rising.

With aggregate demand too weak to stimulate job growth, monetary policy in 2002 did not reverse its accommodative stance. In fact, the FOMC reduced the federal funds rate another half percentage point in November, bringing the target rate down to 1.25 percent. Inflation remained subdued, however, with continued disinflation giving rise in some quarters to concerns about potential deflation.

The Fed and Banking

Banks in the Eleventh Federal Reserve District, like those in the nation, are generally in good condition. Unlike the aftermath of the 1990–91 recession, there has been no hint of a credit crunch to hinder economic recovery.

The operations of the Federal Reserve Bank of Dallas remained on a sound footing during 2002, although we did experience a slowing in the volume of checks processed. After years of anticipation, electronic payments transactions have finally made a dent in paper check volumes, and we are having to adjust our check infrastructure. When the churn affects our own employees, we have to remind ourselves that a transition from paper to electronic payments is probably good for the payments system overall and has been a goal of the Federal Reserve for many years. Watch out what you ask for. You may get it.



The Essay

Our essay this year discusses "The Fruits of Free Trade." The rhetoric of the free trade debate has always fascinated me. Sara Evans tells how her significant other won her over in a song titled "Three Chords and the Truth." Economists have known the truth about free trade since Adam Smith published *Wealth of Nations* in 1776, but they've had trouble finding the right three chords to resonate with the doubters and skeptics. They succeed temporarily, but they have to retake old ground over and over again. The problem is that the benefits of free trade are widely diffused and often difficult to trace to trade policy, while the costs of free trade are more concentrated and identifiable.

Perhaps the most eloquent defense of free trade was given by my hero, Frédéric Bastiat, the French Adam Smith, who used satire as his chief rhetorical weapon. In his famous petition on behalf of the French candlemakers, he urged parliament to pass laws requiring the closure of all blinds and shutters to block out the sun, which competed unfairly with the candlemakers in the production of light. Another favorite of mine is an observation attributed to economist Henry George that protectionists want to do to their own country during peacetime what the country's enemies would wish to do to it during wartime—that is, close its borders to imports.

I must confess to wondering, If such wisdom can't win the free trade argument once and for all, what chance do our authors have? What can they add that is fresh and new? Well, I should know by now not to underestimate them. Mike Cox and Richard Alm have made a real contribution by following the lead of two of my favorite economists: Yogi Berra, who said, "You can observe a lot just by watching," and Richard Pryor, who famously asked, "Who are you going to believe? Me or your own lying eyes?" Rather than relying exclusively on arcane arguments, the authors take us into a supermarket and let us see the fruits (and nuts) of free trade for ourselves.

Robert D. McTeen fr.

Robert D. McTeer, Jr. President and CEO

A Personal Footnote on Texas Picker-Poets

My own 2002 wasn't all that great. But focusing on the positives, I had lunch with Terry Allen, one of my main honky-tonk heroes, and I made a new friend—himself a fledgling songwriter—who introduced me to the blues of Delbert McClinton. ("When Rita leaves, Rita's gone" is as blue as blue can get.) On a recent visit to the Buddy Holly statue in downtown Lubbock, I noticed that Terry and Delbert had both been added to the Walk of Fame since I was last there.

The world lost Waylon Jennings in 2002, but Billy Joe Shaver is doing fine after his heart surgery and is getting a bit more well-deserved national recognition—thanks in part to a mutual friend. Alan Damron honored me with an invitation to his first annual Christmas party in Terlingua, down on the Tex—Mex border, and even offered to help me with some cowboy poetry (drugstore style, I assume). I couldn't go, but I'm holding my calendar open in 2003.

—Bob McTeer

The Fruits of Free Trade







Almost any American supermarket doubles as an international food bazaar. Alongside potatoes from Idaho and beef from Texas, stores display melons from Mexico, olive oil from Italy, coffee from Colombia, cinnamon from Sri Lanka, wine and cheese from France, and bananas from Costa Rica.

The grocery store isn't the only place Americans indulge their taste for foreign-made products. We buy cameras and cars from Japan, shirts from Bangladesh, videocassette recorders from South Korea, paper products from Canada and fresh flowers from Ecuador. We get oil from Kuwait, steel from China, computer programs from India and semiconductors from Taiwan. In 2001, U.S. imports of goods and services totaled \$1.6 trillion.

Most Americans are well aware of our penchant for importing, but they may not realize the United States ranks as the world's greatest exporter, selling \$1.3 trillion a year to the rest of the world. U.S. companies sell personal computers, bulldozers, financial services, movies and thousands of other products to just about all parts of the globe.

International trade and investment are facts of everyday life. Over the past three decades, the sum of U.S. imports and exports increased from 11 percent of GDP to about 30 percent. International financial transactions have grown

A Global Fruit Basket

On a trip to the grocery store, consumers can find goods from all over the globe.

arrinia goods iroin an	over the globe.
Apples	New Zealand
Apricots	China
Bananas	Ecuador
Blackberries	Canada
Blueberries	Chile
Coconuts	Philippines
Grapefruit	Bahamas
Grapes	Peru
Kiwifruit	Italy
Lemons	Argentina
Limes	El Salvador
Oranges	Australia
Pears	South Korea
Pineapples	Costa Rica
Plums	Guatemala
Raspberries	Mexico
Strawberries	Poland
Tangerines	South Africa
Watermelons	Honduras



rapidly, too. Incoming and outgoing investments rose from less than 1 percent of total output to more than 3 percent. (See Exhibit 1.)

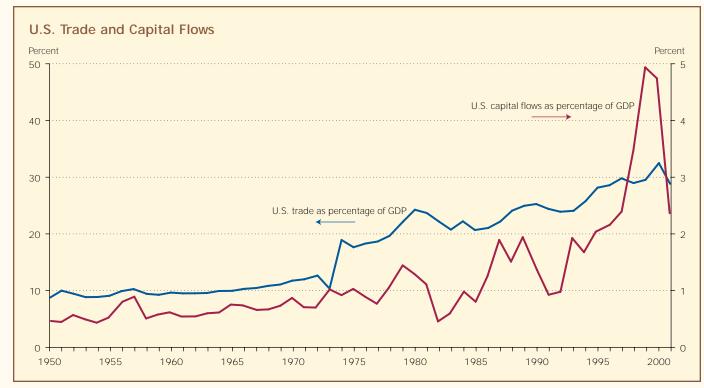
The United States isn't alone. The rest of the world has seen a similar surge in cross-border business. As foreign trade and investment touch communities from Orléans, France, to New Orleans, Louisiana, they've become lightning-rod issues. One of the great debates of the early 21st century centers on globalization, a shorthand term for the intermingling of the world's economies in an era of jet travel, instant communications, mass migration and falling trade barriers.

Globalization's critics attack open markets as a pernicious force that destroys local industries, breeds poverty and dilutes cultures. Protesters attack the open trading system Western nations have forged since the end of World War II. Their favorite targets are often American multinationals, such as McDonald's.

EXHIBIT 1. A Trading Nation

Over the past three decades, U.S. trade in goods and services (exports plus imports) increased from 11 percent to roughly 30 percent of GDP, and capital flows more than tripled. The economy's increased openness helped create 50 million new jobs, and per capita disposable income nearly doubled. Free trade helps the economy grow.





Even as they snap up food, cars and electronic goods from overseas, some Americans fear that foreign competition is destroying jobs for factory workers, fishermen and others. They worry, too, that the nation is becoming dependent on overseas suppliers of oil, computer chips and other inputs.

Attacks on free trade don't make economic sense. In fact, the critics often get it backwards.

We hear that trade makes us poorer. It's just not so. Trade is the great generator of economic well-being. It enriches nations because it allows companies and workers to specialize in doing what they do best. Competition forces them to become more productive. In the end, consumers reap the bounty of cheaper and better goods and services.

We hear that trade costs jobs and depresses wages. Again, it's just not so. By spurring economic activity and reducing costs, trade helps create jobs. By enhancing productivity, it keeps U.S. companies vibrant, leading to fatter paychecks and added benefits. Workers protected by trade barriers might keep their jobs a while longer, but the costs in inefficiency and higher prices make it economic folly. Whenever we erect barriers to trade, we negate the gains from free exchange and competition. Trade protection degenerates into a negative-sum game in which special interests jostle for advantage at the expense of the common good.

We hear that exports are good because they support U.S. industry but imports are bad because they steal business from domestic producers. Actually, imports are the real fruits of trade because the end goal of economic activity is consumption. Exports represent resources we don't consume at home. They are how we pay for what we buy abroad, and we're better off when we pay as little as possible. Mercantilism, with its mania for exporting, lost favor for good reason.

We hear that free trade isn't fair trade. Cheap imports can hurt higher-cost U.S. suppliers, but consumers certainly will gain. Why penalize them with tit-for-tat retaliation that only raises prices in the United States? Other countries' trade transgressions don't warrant missteps of our own. A nation will consume more whenever it opens its markets, even if other nations don't reciprocate.

We hear that trade makes us dependent on foreign suppliers, but America doesn't have the climate and resources to make everything it needs. Other nations can produce many goods and services at lower cost. The price of independence is too steep.

Americans can't afford to buy into these trade fallacies. As a society, we often have to choose between protecting domestic industries and opening markets. In a weakened economy, steelmakers, catfish farmers and other producers are lining up to declare war on imports, creating a potential hit on Americans' wallets. At the same time, U.S. negotiators are seeking to expand the world trading system with new free trade agreements.

We need to understand what's at stake. Being wrongheaded on trade increases the risk of making bad choices that will sap our economy and sour our relations with other nations. Getting it right will promote prosperity and peace.









The Secret to Wealth

When the ancient Greeks faced a dilemma, they consulted the Oracle at Delphi. If we were to ask the Oracle the secret to wealth, what would she say? Work hard? Get an education? Probably not. Diligence and intelligence are strategies for improving one's lot in life, but plenty of smart, hard-working people remain poor.

No, the Oracle's advice would consist of just a few words: *Do what you do best. Trade for the rest.* In other words, specialize and then trade.

The farmer grows wheat, the baker makes bread, the weaver produces cloth, the tailor sews clothing, the lumberjack harvests wood, the carpenter builds houses. By exchanging the fruits of their labor in the marketplace, they all can enjoy more food, clothing and shelter than they could if each tried to meet his needs in isolation.

Magnified many times, that is our world. Americans live and work in a highly interdependent society where jobs are specialized and a typical household buys goods and services from thousands of sources, not just in this country but around the globe. We've embraced specialization and trade, and the reward lies in a standard of living that's the envy of the world.

Whether trade involves the dry cleaner down the street or the carpet maker on the far side of the planet, all involved in the transaction end up better off. Why? Because trade is voluntary. No one would accept a raw deal of his own free will.

If there's a secret to wealth, it lies in the alchemy of specialization and trade. Buyer and seller consume more without added effort. It sounds too good to be true. Yet unlike the alchemist's false promise of turning lead into gold, the gains from specialization and trade occur wherever markets are allowed to function.

It's a matter of working smarter, not harder.

Societies reaped the benefits of specialization and trade for thousands of years before English economist David Ricardo (1772–1823) finally demonstrated why it works. His theory of comparative advantage helps explain why the United States exports soybeans to China and imports shoes in return.

Suppose an average American worker can produce 100 bushels of soybeans or five pairs of shoes and a typical Chinese worker can turn out eight bushels of soybeans or four pairs of shoes.

The United States is more productive than China in both industries, but consumers in both countries can still gain from specialization and trade. Shifting a U.S. worker from shoe factory to soybean farm produces a gain of 100 bushels of soybeans at the cost of five pairs of shoes. Shifting two Chinese workers from farm to factory raises shoe output by eight pairs but cuts soybean production by 16 bushels. The net effect is an increase of 84 bushels of soybeans and three pairs of shoes.

Total output of both products reaches a maximum when the United States specializes in soybeans and China in shoes. Through trade, the two countries

can divide the added production between themselves, leaving both better off than they were on their own. (See Exhibit 2.)

In the real world, trade isn't a two-party swap meet. The United States does business with more than 225 other nations—from Albania to Zimbabwe. The dizzying number of potential transactions increases the opportunities to gain from trade.

This potent international division of labor enables America to take advantage of its expertise in such industries as jet-aircraft manufacturing and financial services while other countries exploit their edge in oil production or hand assembly.

Specialization and trade arise out of the profit motive. Except when transaction costs are too high or governments impose barriers, buyers and sellers will find each other. We're not meant to go it alone.

Self-sufficiency may sound noble in the abstract, but it condemns people to meager living standards. History shows us as much. The American pioneers, living on remote homesteads and ranches, had no choice but to produce just about everything on their own. They embodied the virtue of self-reliance; yet

EXHIBIT 2. The Alchemy of Exchange

Five hundred Chinese workers can each produce four pairs of shoes or eight bushels of soybeans. One hundred U.S. workers can each produce five pairs or 100 bushels—more productive in both jobs but comparatively more so in farming. Under an autarkic regime—isolated from foreign trade—Chinese workers can afford one pair of shoes each and six bushels of soybeans; Americans, three and 40. Trading freely, China will specialize in shoes and America in soybeans, raising world production of shoes from 800 to 2,000 pairs and soybeans from 7,000 to 10,000 bushels. Chinese workers can then afford three pairs of shoes and 10 bushels of soybeans; American workers, five and 50.





	Autarky		Free	Trade	
	China	U.S.	China	U.S.	
Labor Force	500	100	500	100	
Output per worker					
Shoes	4	5	4	5	
Soybeans	8	100	8	100	
Employment					
Shoes	125	60	500	0	
Soybeans	375	40	0	100	
Production					
Shoes	500	300	2,000	0	
Soybeans	3,000	4,000	0	10,000	
Consumption					
Shoes	500	300	1,500	500	
Soybeans	3,000	4,000	5,000	5,000	
Consumption per person					
Shoes	1	3	3	5	
Soybeans	6	40	10	50	

they worked from sunup to sundown, seven days a week to eke out a subsistence living. (See Exhibit 3.)

A jack of all trades will never be rich. Because specialization and trade create wealth, independence becomes a fool's errand—for countries as well as individuals.

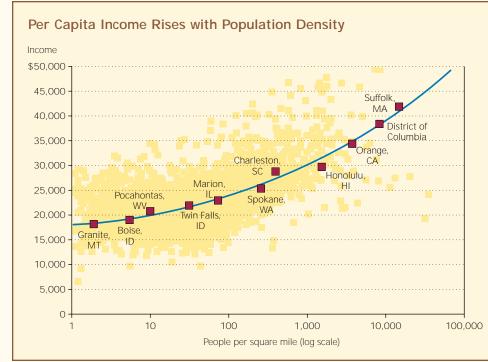
The United States could grow its own bananas, but it would take a huge capital investment to reproduce the tropics' growing conditions. Using mammoth glass-domed greenhouses, artificial lighting and sprinklers, we could probably achieve banana self-reliance. Our bananas, of course, would be the world's most expensive. It's absurd in economic terms.

EXHIBIT 3. Independently Poor

Imagine the living standard each of us would have if we consumed only the goods and services we could produce. Few of us can make our own clothing, build our own house or even grow enough food to survive. At best, our self-sufficient living standard would reach that of the pioneers, who toiled long hours but remained dirt poor. As Adam Smith, the father of modern economics, revealed in *Wealth of Nations*, the keys to wealth are specialization and trade, not just work.

Nebraska pioneer family, 1886



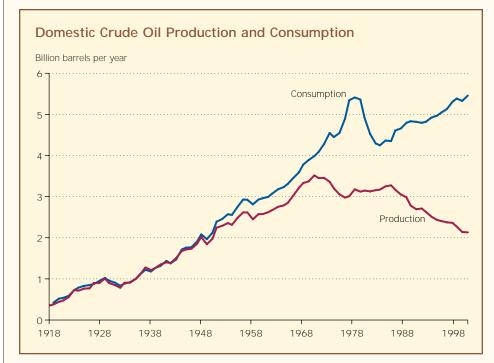


The Extent of the Market

There are no valets in the countryside. You won't even find a taxi. That's because "the division of labor is limited by the extent of the market," as Adam Smith noted some 225 years ago. Only in cities is specialization great enough that someone can drive or park cars for a living. Plotting a regression line for more than 3,000 U.S. counties shows that per capita income tends to rise with population density. New York (not shown) is the most densely populated county (66,940 people per square mile) and has the greatest per capita income (\$93,999). Loup County, Nebraska, among the sparsest populated (1.2 people per square mile), has the lowest per capita income (\$6,831).

EXHIBIT 4. Oil Independence — at \$7.50 per gallon

America has been a net importer of oil since the late 1940s. Today, nearly two-thirds (61 percent) of our oil comes from abroad. Some say this situation makes the nation vulnerable and we should seek energy independence. But what would it cost? Economists put price elasticity at about 0.04 for U.S. oil production and -0.5 for domestic oil demand. This means that a roughly 500 percent increase in oil prices would be needed to equate domestic supply and demand over a 10-year period. U.S. motorists would pay close to \$7.50 for a gallon of gasoline and have to drive nearly 60 percent less. Prices for plastics and other oil derivatives would rise sharply, and we'd have to consume less of these products as well. All told, the nation would suffer an \$80 billion annual loss in GDP, which would grow over time as we depleted our limited oil reserves. We'd be independent—and poor.





No one advocates banana independence, but energy is another matter. With this nation growing more dependent on foreign oil and with the increasing potential for disruption in international oil markets, isolationists want America to quench its own thirst for gasoline. As with bananas, the United States could achieve oil self-sufficiency—if consumers were willing to pay the price.

Over the past two decades, America's demand for oil has risen steadily. At the same time, the nation's ability to extract energy at competitive prices has waned. We now import 61 percent of our oil, so doing without foreign suppliers would require much higher prices to boost production and reduce consumption.

Domestic oil prices would have to jump to about \$145 a barrel to increase output 7.5 percent, to 3.7 billion barrels a year. We'd still have to get by on 60 percent less oil, so pump prices would triple, to at least \$7.50 a gallon. Energy independence would condemn consumers to sharply lower living standards and raise costs to just about every U.S. industry. Overall, GDP would fall 6.7 percent. (See Exhibit 4.)

Oil isn't any different from other goods and services. We're much better off importing oil from nations that produce it at a lower cost. We pay for it by selling our goods and services to oil suppliers in other countries.

Consuming Interest

Since the days of Adam Smith, economists have preached that competition is the consumer's best friend. The principle doesn't change with the nationality of the suppliers. Imports enrich the marketplace by adding to the variety of goods and services. Sometimes, foreign products offer higher quality, better design or added features. Often, imports are cheaper.

Imagine the American consumer without foreign goods and services. Car buyers couldn't drive off the lot in eight of the 10 highest-rated vehicles. Brides' fingers would no longer sparkle with the best diamonds from Africa. Restaurants couldn't serve real margaritas because Mexico makes the only genuine tequila. There'd be no titanium to forge the high-tech clubs that help golfers hit monster tee shots. We'd have no Swiss chocolate or German cutlery.

The United States imports nuts from 67 different countries. Italy sends us almonds. We get cashews from India, pistachios from Turkey and Brazil nuts from Bolivia. Variety is the spice of life, and we'd lose some of it without imports: cloves from Madagascar, nutmeg from Guatemala, pepper from India.

In millions of everyday decisions, American shoppers show they're quite aware of the value of imports. Just look at what we're buying from one country—China. The Asian giant has become one of the United States' leading sup-

The World in a Can

In the average can of mixed nuts, you might find almonds from Italy, walnuts from China, Brazil nuts from Bolivia, cashews from India, pistachios from Turkey, hazelnuts from Canada—a true international assortment. Imports add spice to life by offering consumers a nearly limitless array of choices.

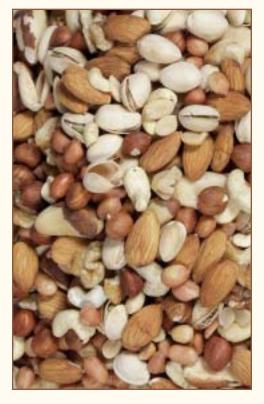




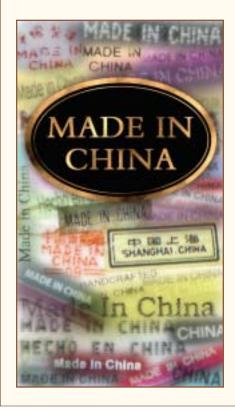






EXHIBIT 5. Made in China

You don't have to shop at Pier 1 Imports to see "Made in China." A trip to just about any major U.S. retailer—Wal-Mart, Best Buy, Toys "R"Us, Banana Republic—will turn up troves of Chinese imports that we enjoy in everyday life. We get 88 percent of our imported radios from China, 83 percent of our imported toys, 70 percent of leather goods and 67 percent of shoes. In 2002, the United States imported more than \$8 billion in sneakers and other shoes from China, \$6 billion in toys and \$3 billion in VCRs. It adds up to 11 percent of overall U.S. imports, up from just 0.5 percent in 1980. What would we do without China? Pay more and have less, that's for sure.



Stocking Up on Chinese Goods			
Top imports (billions of dollars) Top imports (percentage of all imports)			imports (percentage of all imports)
8.6	Shoes	88	Radios
6.1	Toys	87	Christmas and festive items
5.6	Input-output units	83	Toys
5.1	Data processing machine parts	70	Leather goods
3.2	VCRs	67	Shoes
2.6	Wood furniture	67	Handbags
2.0	Transmission equipment	65	Lamps and lights
1.7	Data storage units	64	Cases for cameras, eyeglasses, etc.
1.6	Christmas items	60	Drills, power tools
1.6	Video games	56	Household plastics
1.6	Telephone sets	54	Sporting goods
1.4	Sweaters and pullovers	53	Ceramic kitchenware

pliers of toys, leather goods, power tools, shoes and electronics. Americans bought \$123 billion in products from China in 2002. (See Exhibit 5.)

If imports only added variety and quality to the marketplace, they'd be a boon to consumers. But foreign goods also help keep a lid on prices. They do it in two ways—by being cheaper themselves and by encouraging U.S. competitors to lower their prices.

Over the past five years, U.S. prices have actually fallen for a wide range of traded goods, such as computers, clothing, toys and photographic supplies. Most television sets now come from overseas, and their prices are down nearly 10 percent in the past five years. Americans pay 15 percent less for other video equipment and more than 25 percent less for computers and peripherals.

At the same time, inflation hit hardest at goods and services that face little or no foreign competition, such as college tuition, medical services and cable television service. (See Exhibit 6 on the next page.)

Above all else, trade is a pocketbook issue. Consumers' well-being, not corporate profit, is the true measure of an economy's success. When producers from all over the world vie with our homegrown companies for Americans' dollars, our consumers win.

EXHIBIT 6. Wanted: More Cheap Imports Trade fosters competition, which rewards productivity and restrains cost. That's why products that cross borders tend to have lower inflation rates than ones that don't. Between 1997 and 2002, prices fell for a whole array of highly traded goods—TV sets, toys, dishes, clothing, cars, rice and more—while rising for largely nontraded ones—sugar, peanut butter, haircuts, rent, prescription drugs, hospital services and the like. Free trade is the consumer's best friend. Video equipment TV sets Toys Photographic equipment Roasted coffee Audio equipment Dishes and flatware Women's outerwear Men's shirts and sweaters Film and photographic supplies Girls' apparel Men's footwear New cars Women's dresses More-Traded Products Rice Household laundry equipment Five-year price change (percent) _12 -10 -16 _14 Household electricity Less-Traded Products Sugar and artificial sweeteners Peanut butter Garbage and trash collection Full-service meals and snacks Haircuts and other personal care services Motor vehicle repair Rent of primary residence Funeral expenses Dental services Admission to movies, theaters, concerts Prescription drugs and medical supplies College tuition and fees Cable television Admission to sporting events Inpatient hospital services

EXHIBIT 7. Free to Consume

People who live in free countries enjoy substantially higher living standards than those living in repressive countries. The World Bank collects data on per capita consumption by country. Two independent research groups—the Heritage Foundation in Washington, D.C., and the Fraser Institute in Canada—measure economic freedom across the world using a broad variety of criteria based on key components of free enterprise, including trade policies and openness to foreign investment. Relating the consumption and freedom data sets, one finds that per capita consumption in the economically freest fifth of countries is eight to nine times that of the least free fifth.

Economic Freedom and Consumption Per capita consumption \$20,000 Heritage study Fraser study 16,000 -14,000 12,000 10.000 8.000 6,000 4,000 2,000 4th Least free 3rd Most free Quintile

A Tale of Two Countries



In North Korea, which ranks lowest in economic freedom, consumers must wrangle for the most basic items, even food. Per capita income averages just \$950 annually.



South Koreans enjoy the bounty of a capitalist-oriented, economically free society. Per capita income is \$11,428—12 times that of North Korea.

Nations open to the world economy prosper, while those that hide behind trade barriers do not. Consider China. Once a leading economic power, China closed itself off from the rest of the world in the 15th century. The result was hundreds of years of economic decline, only now being reversed by more open policies. Research comparing nations' economic freedom with their economic performance finds that citizens of countries ranking in the top fifth in economic freedom consume almost twice as much per capita as those living in the next lower 20 percent. They're eight to nine times better off than residents of the least free nations. (See Exhibit 7.)

Not surprisingly, the United States and other capitalist nations rank high in both per capita consumption and economic freedom. For the most part, U.S. tariffs are low, averaging just 1.7 percent of the value of imports. What tariffs



we do impose impact only a few industries, such as agriculture, textiles and apparel. (See Exhibit 8.)

The poorest consumers live in countries ranked as the most closed to the outside world, including Cuba, Zimbabwe, Laos, Libya and Belarus. Communist North Korea sits at rock bottom in terms of economic freedom, and its standard of living pales in comparison with that of capitalist South Korea, a much more open country with similar cultural roots.

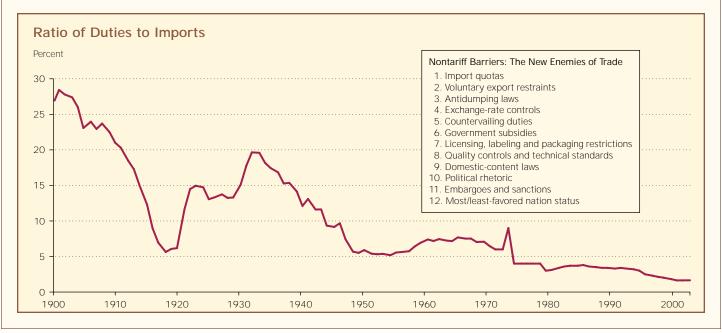
Competition makes nations stronger. Protectionism condemns them to weakness. Countries that hide behind barriers don't perform as well as free traders. Switzerland's International Institute for Management Development generates an annual index of competitiveness, based on hundreds of factors that reflect economic strength. A strong correlation exists between the most competitive nations and countries that rank high on measures of economic openness. Closed economies, of course, are among the least competitive.

Liberal trade policies aren't a panacea, of course. Like Argentina, countries can continue to struggle after opening their markets to foreign competition. They fail to understand that free trade works when nations integrate it with other key tenets of capitalism, such as respect for property rights, free labor markets and less government regulation.

Competition from abroad can dislocate some workers, sap some company profits and roil some markets. So do new products, new technologies and new business strategies. We've learned to endure—even celebrate—the homegrown forces of economic change as essential elements of economic progress. We should do the same for international trade and investment.

EXHIBIT 8. The Tax on Trade

Reduced tariff rates lowered trade barriers and helped stimulate economic growth in recent decades. A growing number of nontariff barriers, however, threaten to undo the good. Voluntary export restraints; antidumping laws; government subsidies; licensing, labeling and packaging restrictions; domestic-content laws and others have emerged as the new enemies of free trade.



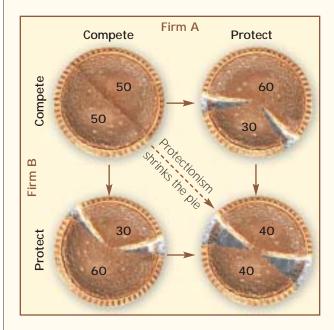


EXHIBIT 9. The Politics of Protectionism: A Negative-Sum Game

By offering trade protection, lawmakers create a dilemma for producers: Compete or seek protection. The economic pie is never greater than when firms compete because then they focus every resource on production. But suppose firm A can increase its piece of the pie (say, from 50 to 60 out of 100) by promising votes or campaign contributions in return for political favors. Then its incentive is to do so even though the total pie will shrink (say, to 90) as resources shift from production to protection. Its competitor, firm B, will do likewise, with similar results. The politics of protectionism lead ultimately to the worst possible outcome: a negative-sum game in which less is produced than under free trade. The only way out of this mess: *Nobody* gets protection.

Producers Versus Consumers

Although trade protection makes no economic sense, just about every nation on earth indulges in it to some degree. To understand why, we need to distinguish the general interest, which favors freer trade, from special interests, which profit at the expense of the overall economy—a negative-sum game. (See Exhibit 9.)

This tug-of-war pits producers against consumers. Producers want scarcity—high prices and fat profits. Consumers want abundance—many goods and services at low prices.

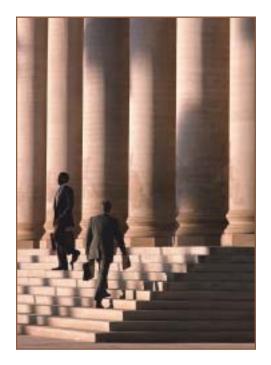
Although consumers outnumber producers, those who seek protection often gain an upper hand. That's because producers are willing to invest more resources in reducing competition than consumers are in fighting for open markets. The imbalance is inherent in the economic system.

Consumers buy in thousands of markets. No individual possesses the time, energy and financial incentive to fight for lower prices in each of them. The overall gains from open trade may be large, but each household's share is usually a few dollars or even a few cents—an amount too small to fire up consumers.

Producers, on the other hand, sell in one market. It gives them a strong incentive to focus on their own industry or jobs. Producers, unlike consumers, are usually few in number. Even if curtailing foreign competition adds only a few pennies per sale, each producer stands to reap a nice profit.

So producers are willing to organize and spend big money in the fight for government favor. We see it in the growing number of lawyers and lobbyists who represent producers' narrow interests. In the past quarter century, the number of registered lobbyists in Washington tripled, to over 60,000. There are 44,000 more lobbyists at the state level.

The imbalance between producers and consumers shows up in America's long-standing import quotas on sugar. Because of inflated prices, a small number of growers and refiners pocket an estimated \$400 million a year. The



quotas deny consumers cheaper foreign-made sugar, so they're worse off. The overall cost to a typical household, however, totals just \$21 a year, hardly enough to incite anyone to petition, picket or politic.

Each instance of protection might involve small amounts of money. Add them up, though, and consumers are left significantly poorer. The Institute for International Economics estimates the annual cost of U.S. foreign protectionism at \$6,027 per household.

Special interests are difficult to police because they're a natural byproduct of our economic success. They derive from specialization, the concentration of producers' efforts to do what they do best. So the major force undermining open trade arises from the very thing that creates wealth in the first place.

Protectionism persists because it's never pitched as a conspiracy to raise consumer prices. Instead, it's presented as a worthy idea. Who could object to saving American jobs or ensuring the survival of industries vital to the national interest?

Troubled industries with political clout—automobiles, steel and agriculture, for example—blame competition from imports for lost jobs and declining sales. It makes for the perfect bumper sticker: *Buy American. The Job You Save May Be Your Own*.

Producers complicate the trade debate by putting the onus on other countries. The offenses of foreign governments include subsidizing textile manufacturers and farmers. Often, American industries charge that foreign companies dump their products on the U.S. market at unfairly low prices. (See Exhibit 10.)

So-called unfair trade practices provide a justification for breaching the common sense of free trade. We should, however, ask, Unfair to whom? Subsidies are surely unfair to European taxpayers. Dumping might seem unfair to U.S. producers. Neither is particularly unfair to American consumers, who benefit from the lower prices.

When other countries' trade negotiators fight U.S. dumping complaints, they're standing up for their nations' companies. Without intending to, they're also working for American consumers.

Another trade complaint centers on nations where workers earn just \$1 or \$2 a day. Protectionists claim that cheap foreign labor drives down domestic wages and hurts U.S. industry. That's not how economies work. American workers command high wages because of their skills, education and productivity. They'll still be well paid even if American consumers take advantage of the bargains trade offers.

Indeed, trade correlates with higher wages. Workers in Mexico's maquiladoras—which assemble products for export—earn more than those in similar jobs in domestic industries. U.S. workers in export industries command an 18 percent premium. In general, export-oriented firms are more productive, and they pay better.

Governments often succumb to the lure of temporary trade barriers. Poor countries, for example, may restrict imports to give infant domestic industries a chance to take root. Such strategies trust bureaucrats to pick winners. If they're wrong, it simply wastes money. And if they're right, the outcome is even worse: Industries become addicted to protection, so they marshal their political clout to preserve it long after it may have served its purpose.

Buy American. The Job You Save May Be Your Own.

A common myth is that it's better for Americans to spend their money at home than abroad. The best way to expose the fallacy in this argument is to take it to its logical extreme. If it's better for me to spend my money here than abroad, then it's even better to buy in Texas than in New York, better yet to buy in Dallas than in Houston. . .in my own neighborhood . . .within my own family. . .to consume only what I can produce. Alone and poor.



EXHIBIT 10. Dumping: Trash or Treasure?

Dumping is a word normally associated with refuse. But dumped goods can be a boon to consumers. Over the past two decades, U.S. producers have filed more than 300 antidumping claims against foreign suppliers. The allegedly offensive products run the gamut from tin cans to toothbrushes, aspirin to alcohol, hammers to honey, pencils to pasta. Trash or treasure? The consumer surely knows.





Where are the dumped goods?

In the grocery cart

Sugar

Fresh Atlantic salmon

Crawfish tail meat

Honey

Pasta

Nonfrozen apple juice concentrate

Frozen concentrated orange juice

Canned pineapple

Individually quick-frozen red raspberries

Preserved mushrooms

Fresh tomatoes

Fresh garlic

In-shell pistachios

Aspirin

Petroleum wax candles

Natural-bristle paint brushes

Paper clips

Folding gift boxes

Cased pencils

Stainless steel cookware

Polyethylene terephthalate film (used in soda containers)

Greige polyester cotton print cloth (dish

Polychloroprene rubber (latex gloves)

Tin mill products (battery tops)

Potassium permanganate (disinfectant) Alloy magnesium (aluminum cans)

Anhydrous sodium metasilicate (dish-

washing soap)

Sebacic acid (toothbrush bristles) Sulfanilic acid (food coloring)

Barium chloride (bug spray)

Sorbitol (cough medicine)

Electroluminescent flat-panel display (calculator)

Magnesium (vitamins)

Grocery cart

Melamine (plastic cart handle) Ball bearings (cart wheels)

On the shopper

Synthetic indigo (purple-dyed sweater) Polyester staple fiber (skirt) Extruded rubber thread (hosiery) Coumarin (perfume)

Store construction

Softwood lumber

Gray portland cement

Furfuryl alcohol (paint)

Granular polytetrafluoroethylene resin

(electrical wire insulation)

Carbon steel wire rods

Stainless steel bars

Steel concrete reinforcing bars

Structural steel beams

Welded carbon steel pipe

Malleable cast-iron pipe fittings

Seamless pipe

Silicon metal

Iron construction castings

Pressure-sensitive plastic tape (aisle marking and labels)

Car

Replacement glass windshield

Brake rotors

Foundry coke (used in the production of engine blocks)

Polychloroprene rubber (belts and hoses)

Alloy magnesium (auto body) Industrial nitrocellulose (paint)



Protection's Price

Although specialization and trade make us wealthier, most societies spend a lot of time, money and energy trying to thwart the exchange of goods and services. At home, companies pursuing their self-interest often breed monopolies that restrict supply and hike prices. The same impulse to stifle competition leads to a variety of trade measures aimed at imports.

As the United States reduced tariffs over the past six decades, producers turned to import quotas, antidumping penalties, domestic-content laws, "voluntary" export restraints and other nontariff barriers. Export subsidies, exchange-rate controls, trade licenses, and onerous labeling, packaging and technical requirements further tilt the market against foreign goods.

In whatever guise, protectionism is pure poison for an economy. Time and again, economic studies show that import restraints aren't worth it. They saddle consumers with huge costs. Dozens of researchers have reached this conclusion for a host of products, from steel, automobiles and semiconductors to textiles, apparel and farm products.

Even when they temporarily stave off job losses, trade barriers are costly. For example, trade protection saved 216 U.S. jobs in the production of benzenoid chemicals, used in suntan lotion and other products—but at a cost of nearly \$1.4 million per worker. Because the chemical workers earn a fraction of the protectionist toll, it would cost far less to simply pay them not to work!

In case after case, the costs of protection outweigh the benefits. The tab for each job preserved in the luggage industry is nearly \$1.3 million; in softwood lumber, more than \$1 million; in sugar, more than \$826,000. Moreover, some of the jobs saved are dirty, dangerous and low paying. (See Exhibit 11.)

And trade barriers don't deliver on their promise to save beleaguered industries. Even when shielded from foreign competition, most protected sectors have continued to shrink. Steel and textiles—beneficiaries of years of protection—are still not strong enough to compete on their own.

The U.S. automobile industry provides a good illustration of the economic forces unleashed by trade protection. Under pressure from automakers and unions, Washington coaxed Japan into accepting "voluntary" limits in the 1980s on the number of cars it would sell in the United States.

Protectionism didn't spark the renaissance the U.S. auto industry wanted. Asian and European automakers kept coming, lured by American consumers' craving for cars. The companies adapted their strategies for penetrating the U.S. market; they moved production to plants in the United States and shifted their focus to high-quality, luxury vehicles.

As a result, foreign producers captured a larger share of the high-priced, high-profit segment of the car market. In the 1990s, the average prices of imported and domestic models were relatively close. In 2001, the imports sold for nearly 40 percent more, on average, than U.S.-made cars. Even with protection, Detroit couldn't hang onto this lucrative slice of the market. Domestic (Continued on page 21)

EXHIBIT 11. The High Cost of Protectionism

How much does it cost to protect a job? An average of \$231,289, figured across just 20 of the many protected industries. Costs range from \$132,870 per job saved in the costume jewelry business to \$1,376,435 in the benzenoid chemical industry. Protectionism costs U.S. consumers nearly \$100 billion annually. It increases not just the cost of the protected items but downstream products as well. Protecting sugar raises candy and soft drink prices; protecting lumber raises home-building costs; protecting steel makes car prices higher; and so forth. Then there are the job losses in downstream industries. Workers in steel-using industries outnumber those in steel-producing industries by 57 to 1. And the protection doesn't even work. Subsidies to steel-producing industries since 1975 have exceeded \$23 billion; yet industry employment has declined by nearly two-thirds.

	Protected industry	Jobs saved	Total cost (in millions)	Annual cost per job saved
1	Benzenoid chemicals	216	\$ 297	\$ 1,376,435
2	Luggage	226	290	1,285,078
3	Softwood lumber	605	632	1,044,271
4	Sugar	2,261	1,868	826,104
5	Polyethylene resins	298	242	812,928
6	Dairy products	2,378	1,630	685,323
7	Frozen concentrated orange juice	609	387	635,103
8	Ball bearings	146	88	603,368
9	Maritime services	4,411	2,522	571,668
10	Ceramic tiles	347	191	551,367
11	Machine tools	1,556	746	479,452
12	Ceramic articles	418	140	335,876
13	Women's handbags	773	204	263,535
14	Canned tuna	390	100	257,640
15	Glassware	1,477	366	247,889
16	Apparel and textiles	168,786	33,629	199,241
17	Peanuts	397	74	187,223
18	Rubber footwear	1,701	286	168,312
19	Women's nonathletic footwear	3,702	518	139,800
20	Costume jewelry	1,067	142	132,870
	Total Average (weighted)	191,764	\$44,352	\$ 231,289

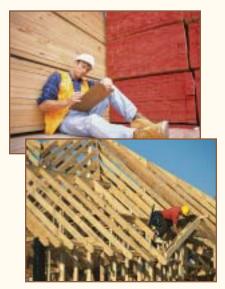








EXHIBIT 12. Any Which Way It Can

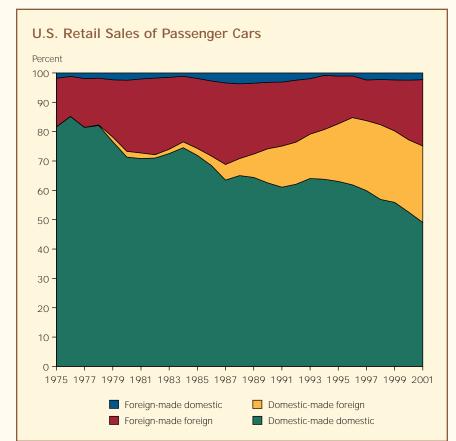
There are 768 million motor vehicles in operation around the globe. Nearly 200 auto companies run 741 assembly plants in 508 cities and 59 countries, producing thousands of different vehicles for consumers in more than 150 countries. Ford Motor Co. produces cars in 17 countries—nearly three-fourths of its production now occurs outside the United States. General Motors Corp. exports more cars from Germany than does BMW. Half of all Toyotas and three-fourths of all Hondas sold in America are built here. The 2001 Honda Civic coupe is 75 percent domestic content; the Ford Escort, 60 percent.

What's the message in all this? A highly globalized and competitive auto industry gets vehicles to consumers any which way it can. That's how markets work.

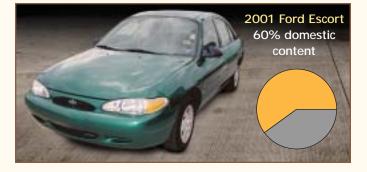
Protection only thwarts the process, and it can't deliver what it promises to workers or industry anyway. A prime example is the "voluntary" export restraint imposed on Japanese automakers in 1981. At the time of the protectionist legislation, foreign-based imports were 26 percent of U.S. auto sales and domestically made foreign cars were just 2 percent. Imports made up 23 percent of the nation's luxury car market; the average import sold for \$8,896—slightly less than a U.S.-made car (\$8,912). There were 1.9 million workers in the U.S. transportation equipment industry.

In 2001, 23 percent of U.S. sales were imports, but 26 percent were foreign cars built in this country. Imports comprised 58 percent of the U.S. luxury market; the average import sold for \$27,477, nearly 40 percent more than a domestically made car (\$19,654). Since 1981 the U.S. transportation equipment industry has lost more than 210,000 workers. Moreover, according to *Consumer Reports*, foreign-based producers make 25 of the 30 most reliable used cars.

Protect—and harm.









automakers' market share and employment continued to slide in the 1990s, although new jobs were created in the foreign-owned factories. (See Exhibit 12.)

Protectionism fails domestic industries because it delays and weakens their response to market forces. Particularly when in trouble, companies need to confront reality and avoid wasting precious time and resources. Sometimes, that reality demands that jobs be cut, companies shut down and even whole industries wither. When industries pursue political favors instead of efficiency or innovation, they only delay the inevitable.

Responding to market signals, vibrant economies shift resources from declining sectors to emerging ones. Trade barriers short-circuit the process by muting the market's message. Labor and capital that could be more productive elsewhere end up stuck in industries where cheaper or better import alternatives are readily available.

When steel companies or sugar producers want to fend off imports, they complain to Washington. A second but far less visible free trade contest takes place in state capitals, where the makers of some goods and services seek to restrict out-of-state rivals.

Commerce Clause

The Congress shall have power to...regulate commerce with foreign nations, and among the several states, and with the Indian tribes.

—U.S. Constitution

The U.S. Constitution's commerce clause creates a hurdle for state and local interference with the flow of goods and services. Although it's more difficult to impose trade barriers within U.S. borders than without, producers still try. To skirt the commerce clause, they often cloak homegrown trade protection in the guise of promoting consumer protection or public safety.

An 87-year-old Oklahoma law, for example, decrees that only licensed funeral directors can sell caskets—a policy that discourages consumers from shopping around and keeps prices high. Vermont restricts its milk market to in-state dairies. Internet commerce creates a new avenue for state meddling; for example, Texas prohibits the online sale of used cars, and Georgia restricts commerce in replacement contact lenses.

Domestic trade barriers hurt consumers just as much as those aimed at foreigners. The Fraser Institute finds that government intervention costs residents of West Virginia—the least open state—\$5,294 annually, weighted against a national average of \$26,765 in per capita personal income. In contrast, Delaware's citizens gain an average of \$3,882 a year by living in the state with the lowest barriers. A per capita gap of \$9,176, or 34 percent of per capita disposable income, shows just how much even interstate trade issues matter.

The Great Depression provides an example of how trade restrictions lead to economic ruin. America's highly restrictive Smoot–Hawley tariff, passed in 1930, prompted other countries to retaliate by imposing their own trade barriers. Under the weight of the restrictions, world trade contracted sharply over the next few years, compounding excess capacity problems. At



the Depression's depths, about a quarter of U.S. workers were unemployed. (See Exhibit 13.)

Whether aimed at foreigners or fellow Americans, trade restraints aren't just a matter of lost dollars and cents. All protectionist schemes violate basic economic freedoms. They involve third parties using the power of government to thwart the right of others seeking an exchange that will make them better off. Each time it happens, Americans are less free—and poorer.

EXHIBIT 13. Protect and Destroy: The Lesson of Smoot - Hawley

The stock market hates protectionism. That lesson—perhaps the clearest history has ever taught—comes from the Smoot—Hawley Tariff Act of 1930. In the late 1920s farmers, whose economic fortunes had not kept pace with industrialists', lobbied Congress for tariffs on agricultural products. The proposed act had few political sponsors at first (two of the three major political parties opposed it), and the stock market ignored it.

But as word of the bill spread, more and more U.S. producers joined the bandwagon, arguing for tariffs to assist domestic industry or protect them from foreign competition. Smoot—Hawley eventually expanded to cover more than 20,000 items across the gamut of U.S. production, with rates practically prohibitive to trade. With so many political constituents now on board, the Progressive and Democratic parties jumped the fence and on October 28, 1929, joined the Old Guard Republicans in supporting the legislation. That day the stock market crashed, falling 12 percent.

In the months that followed, foreign governments filed 34 formal protests, and 1,028 economists petitioned President Hoover not to sign the bill. But he did, on June 17, 1930, and the Great Depression engulfed the nation. The Dow Jones Industrial Average fell from a daily high of 381 in September 1929 to a low of 41 in 1932 as world trade contracted from \$5.7 billion to just \$1.9 billion three and a half years later. It was the most expensive lesson markets have ever taught: Protect and destroy.





EXHIBIT 14. Compete and Prosper: The Lesson of NAFTA and GATT

The passage of the General Agreement on Tariffs and Trade, the North American Free Trade Agreement and GATT's successor, the World Trade Organization, ushered in an era of freer trade that's been applauded by stock markets worldwide. Smoot—Hawley taught us trade's lesson the hard way—protect and destroy. Today, we're relearning it the right way—compete and prosper.



Prosperity or Poison?

The 1930s taught a painful lesson—one that for the most part has been heeded. Despite lapses into protectionism, freer trade has been a theme of both Democratic and Republican administrations since Truman. Under American leadership, a half-dozen rounds of global negotiations stripped away trade barriers and, in 1995, created the World Trade Organization, a 144-nation forum for opening markets.

We've enlarged our market by entering into an economic alliance with Canada and Mexico under the nine-year-old North American Free Trade Agreement. Policymakers are opening free trade talks with five Central American nations in an effort to forge a hemispheric free trade zone stretching from Alaska to Tierra del Fuego.

Consumers aren't getting the benefits of trade at the expense of the overall economy. Between 1980 and 2001, world trade more than tripled, to \$12.5 trillion. At the same time, the U.S. economy doubled and the Dow Jones Industrial Average rose ninefold, even after taking into account the past three years' declines. (See Exhibit 14.)

Was our expanding trade bad for workers? Hardly. The United States has added 35 million jobs in the past two decades. Despite a sluggish economy, unemployment is still lower than it was in 1980. Our wages buy more. The past two decades disprove the idea that trade saps America's economy.



Acknowledgments

The Fruits of Free Trade was written by W. Michael Cox and Richard Alm. The essay is based on research conducted by Cox, senior vice president and chief economist, Federal Reserve Bank of Dallas. Julia Kedrova and Steve Brown provided important research assistance. Also helping with research was Charlene Howell.

Exhibit Notes and Data Sources

All dollar amounts in text and exhibits are in 2002 U.S. dollars except where noted

■ Exhibit 1. A Trading Nation

Bureau of Economic Analysis (BEA); Historical Statistics of the United States, Colonial Times to 1970, Census Bureau, 1975; Statistical Abstract of the United States. 1980. 1990.

■ Exhibit 2. The Alchemy of Exchange

Authors' calculations

Exhibit 3. Independently Poor

BEA's Local Area Personal Income tables (2000); Census Bureau population tables (2000). The regression line is obtained by eliminating all counties that have no more than one person per square mile and all counties on Alaska's North Slope—78 counties total out of 3.085.

■ Exhibit 4. Oil Independence—at \$7.50 per Gallon

Energy Information Administration, Department of Energy; Department of Commerce; U.S. Bureau of Mines; *Twentieth Century Petroleum Statistics* (Dallas: DeGolyer and MacNaughton, 1990, 1998, 2001).

Exhibit 5. Made in China

U.S. International Trade Commission's Trade DataWeb, using 4- and 5-digit SITC codes. Transmission equipment includes transmission apparatus for radiotelephony, radiotelegraphy, radio broadcasting or television, incorporating reception apparatus.

■ Exhibit 6. Wanted: More Cheap Imports

Bureau of Labor Statistics.

Exhibit 7. Free to Consume

Index of Economic Freedom, The Heritage Foundation, 1999 scores, www.heritage.org/research/features/index: Economic Freedom of the World, 1999 scores (Vancouver, B.C.: The Fraser Institute); World Development Indicators 2002, 1999 data (Washington, D.C.: World Bank).

Exhibit 8. The Tax on Trade

Historical Statistics; Statistical Abstract, 1998; Census Bureau.

■ Exhibit 9. The Politics of Protectionism: A Negative-Sum Game Authors' calculations.

■ Exhibit 10. Dumping: Trash or Treasure?

"Antidumping and Countervailing Duty Orders in Place as of March 3, 2003," U.S. International Trade Commission.

■ Exhibit 11. The High Cost of Protectionism

G. C. Hufbauer and K. A. Elliott, *Measuring the Costs of Protection in the United States*, (Washington, D.C.: Institute for International Economics, 1994), pp. 11–13.

Exhibit 12. Any Which Way It Can

Various issues of Ward's Motor Vehicle Facts and Figures, Ward's Automotive Reports and Ward's Automotive Yearbooks.

■ Exhibit 13. Protect and Destroy: The Lesson of Smoot—Hawley World trade: League of Nations, Monthly Bulletin of Statistics, vol. 15, Geneva, January 1934, p. 3. Dow Jones Industrial Average: Federal Reserve Board. For a detailed review of this period, see Jude Wanniski, The Way the World Works, Chapter 7 (New York:

■ Exhibit 14. Compete and Prosper: The Lesson of NAFTA and GATT

World trade: International Monetary Fund, International Financial Statistics database. Dow Jones Industrial Average: Bloomberg LP (year-end).

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■ Al Crespo, p. 4 upper.

Simon & Schuster, 1978).

- U.S. Department of Agriculture, p. 7 lower.
- Nebraska State Historical Society, p. 8.
- World Food Program/Tom Haskell, p. 13 left.
- Fullwood Ltd., England, p. 19 third from top right.
- The Port of Los Angeles, p. 20 upper.
- Library of Congress, Prints and Photographs Division: Farm Security Administration, Office of War Information Collection, LC-USF33-002673-M1, p. 22.

The lesson of the marketplace hasn't been lost on Europe. By fits and starts, the continent has moved over the past five decades to create a single market, reducing barriers to the movement of goods, money and people. At the start of 2002, a dozen European nations embraced a single currency.

Last December, the European Union invited 10 additional countries to join by 2004, laying the foundation for what could become a 25-nation market of 475 million consumers. Existing EU nations are well-off. The countries joining the enlarged market realize they'll face new competition, but they're eager to open their economies so they can heed the Oracle's wisdom:

Do what you do best.

Trade for the rest.

Like Estonians, Czechs and other potential EU members, Americans have a large stake in a free trade future—internationally, of course, but at home as well. If we open markets, specialization and trade will work their magic for American consumers, just as they have for most of our history.

American consumers will get better goods and services and lower prices. American companies will thrive in the crucible of global competition. Our economy will flourish and innovate.

Trade leads to prosperity. Just look at the past six decades of relatively open trade. Protectionism leads to stagnation and decline. It's a lesson learned decades ago from the Great Depression and more recently from the economic development gap between open West Germany and closed East Germany.

Despite the World Trade Organization, NAFTA and other advances, trade policy continues to be a contest between free trade advocates and protectionist forces, between consumers' broad interest in abundance and producers' narrow interest in scarcity. The producers will win if Main Street Americans don't comprehend their stake in open trade and aren't vigilant against protectionist poison.

Do we harvest the fruits of free trade or suffer the spoils of special interests? It's our choice.

-W. Michael Cox and Richard Alm



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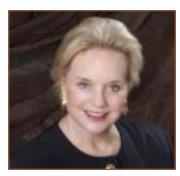


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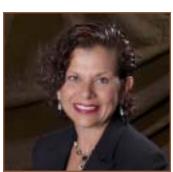
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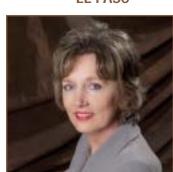
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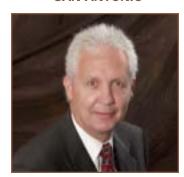


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As of December 31, 2002

MANAGEMENT'S ASSERTION

February 13, 2003

To the Board of Directors of the Federal Reserve Bank of Dallas:

The management of the Federal Reserve Bank of Dallas (FRBD) is responsible for the preparation and fair presentation of the Statement of Financial Condition, Statement of Income, and Statement of Changes in Capital as of December 31, 2002 (the "Financial Statements"). The Financial Statements have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of the Federal Reserve System and as set forth in the Financial Accounting Manual for the Federal Reserve Banks ("Manual"), and as such, include amounts, some of which are based on judgments and estimates of management. To our knowledge, the Financial Statements are, in all material respects, fairly presented in conformity with the accounting principles, policies, and practices documented in the Manual and include all disclosures necessary for such fair presentation.

The management of the FRBD is responsible for maintaining an effective process of internal controls over financial reporting including the safeguarding of assets as they relate to the Financial Statements. Such internal controls are designed to provide reasonable assurance to management and to the Board of Directors regarding the preparation of reliable Financial Statements. This process of internal controls contains self-monitoring mechanisms, including, but not limited to, divisions of responsibility and a code of conduct. Once identified, any material deficiencies in the process of internal controls are reported to management, and appropriate corrective measures are implemented.

Even an effective process of internal controls, no matter how well designed, has inherent limitations, including the possibility of human error, and therefore can provide only reasonable assurance with respect to the preparation of reliable financial statements.

The management of the FRBD assessed its process of internal controls over financial reporting including the safeguarding of assets reflected in the Financial Statements, based upon the criteria established in the "Internal Control-Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, we believe that the FRBD maintained an effective process of internal controls over financial reporting including the safeguarding of assets as they relate to the Financial Statements.

Federal Reserve Bank of Dallas

Robert D. McTeer for Helen E. Holcomb First Vice President

Federal Reserve Bank of Dallas

Chief Financial Officer

Federal Reserve Bank of Dallas

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors of the Federal Reserve Bank of Dallas:

We have examined management's assertion that the Federal Reserve Bank of Dallas ("FRB Dallas") maintained effective internal control over financial reporting and the safeguarding of assets as they relate to the financial statements as of December 31, 2002, based on criteria described in "Internal Control–Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission included in the accompanying Management's Assertion. Management of the FRB Dallas is responsible for maintaining effective internal control over financial reporting and the safeguarding of assets as they relate to the financial statements. Our responsibility is to express an opinion on the assertion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants, and accordingly, included obtaining an understanding of the internal control over financial reporting, testing, and evaluating the design and operating effectiveness of the internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control over financial reporting to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assertion that the FRB Dallas maintained effective internal control over financial reporting and over the safeguarding of assets as they relate to the financial statements as of December 31, 2002, is fairly stated, in all material respects, based on criteria described in "Internal Control–Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission.

March 3, 2003

Dallas, Texas

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REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Governors of The Federal Reserve System and the Board of Directors of The Federal Reserve Bank of Dallas:

We have audited the accompanying statements of condition of The Federal Reserve Bank of Dallas (the "Bank") as of December 31, 2002 and 2001, and the related statements of income and changes in capital for the years then ended, which have been prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of The Federal Reserve System. These financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on the financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 3, the financial statements were prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of The Federal Reserve System. These principles, policies, and practices, which were designed to meet the specialized accounting and reporting needs of The Federal Reserve System, are set forth in the "Financial Accounting Manual for Federal Reserve Banks" and constitute a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Bank as of December 31, 2002 and 2001, and results of its operations for the years then ended, in conformity with the basis of accounting described in Note 3.

March 3, 2003 Dallas. Texas

Princevaterhouse Cooper LIP

Statements of Condition (in millions)		
	December 31, 2002	December 31, 2001
ASSETS		
Gold certificates	\$ 485	\$ 477
Special drawing rights certificates	98	98
Coin	163	128
Items in process of collection	624	202
U.S. government and federal agency securities, net	14,184	10,183
Investments denominated in foreign currencies	378	398
Accrued interest receivable	121	103
Interdistrict settlement account	14,306	4,041
Bank premises and equipment, net	166	164
Other assets	50	49
Total assets	\$ 30,575	\$ 15,843
LIABILITIES AND CAPITAL		
Liabilities		
Federal Reserve notes outstanding, net	\$ 28,416	\$ 14,378
Securities sold under agreements to repurchase	468	_
Deposits:		
Depository institutions	727	695
Other deposits	4	3
Deferred credit items	505	350
Interest on Federal Reserve notes due U.S. Treasury	21	29
Accrued benefit costs	56	54
Other liabilities	6	6
Total liabilities	30,203	15,515
Capital		
Capital paid-in	186	164
Surplus	186	164
Total capital	372	328
Total liabilities and capital	\$ 30,575	\$ 15,843
The accompanying notes are an integral part of these financial statements.		

Statements of Income (in millions)			
	FOR THE YEARS ENDED		
	December 31, 2002	December 31, 2001	
INTEREST INCOME			
Interest on U.S. government and federal agency securities	\$ 530	\$ 637	
Interest on investments denominated in foreign currencies	6	9	
Total interest income	536	646	
OTHER OPERATING INCOME			
Income from services	63	64	
Reimbursable services to government agencies	12	12	
Foreign currency gains (losses), net	45	(40)	
U.S. government securities gains, net	1	6	
Other income	2	2	
Total other operating income	123	44	
OPERATING EXPENSES			
Salaries and other benefits	98	96	
Occupancy expense	15	14	
Equipment expense	12	11	
Assessments by Board of Governors	14	14	
Other expenses	30	33	
Total operating expenses	169	168	
Net income prior to distribution	\$ 490 	\$ 522 	
DISTRIBUTION OF NET INCOME			
Dividends paid to member banks	\$ 10	\$ 10	
Transferred to (from) surplus	22	(24)	
Payments to U.S. Treasury as interest on Federal Reserve notes	458	536	
Total distribution	\$ 490	\$ 522	
The accompanying notes are an integral part of these financial statements.			

Statements of Changes in Capital for the Years Ended December 31, 2002, and December 31, 2001 (in millions)			
	Capital Paid-In	Surplus	Total Capital
BALANCE AT JANUARY 1, 2001			
(3.8 million shares)	\$ 188	\$ 188	\$ 376
Net income transferred from surplus	_	(24)	(24)
Net change in capital stock redeemed (0.5 million shares)	(24)		(24)
BALANCE AT DECEMBER 31, 2001			
(3.3 million shares)	\$ 164	\$ 164	\$ 328
Net income transferred to surplus	_	22	22
Net change in capital stock issued (0.4 million shares)	22		22
BALANCE AT DECEMBER 31, 2002			
(3.7 million shares)	\$ 186 =====	\$ 186 	\$ 372 =====
The accompanying notes are an integral part of these financial statements.			

Notes to Financial Statements

1. STRUCTURE

The Federal Reserve Bank of Dallas ("Bank") is part of the Federal Reserve System ("System") created by Congress under the Federal Reserve Act of 1913 ("Federal Reserve Act") which established the central bank of the United States. The System consists of the Board of Governors of the Federal Reserve System ("Board of Governors") and twelve Federal Reserve Banks ("Reserve Banks"). The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics. The Bank and its branches in El Paso, Houston, and San Antonio serve the Eleventh Federal Reserve District, which includes Texas and portions of Louisiana and New Mexico. Other major elements of the System are the Federal Open Market Committee ("FOMC") and the Federal Advisory Council. The FOMC is composed of members of the Board of Governors, the president of the Federal Reserve Bank of New York ("FRBNY"), and, on a rotating basis, four other Reserve Bank presidents. Banks that are members of the System include all national banks and any state chartered bank that applies and is approved for membership in the System.

Board of Directors

In accordance with the Federal Reserve Act, supervision and control of the Bank are exercised by a Board of Directors. The Federal Reserve Act specifies the composition of the Board of Directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as Chairman and Deputy Chairman, are appointed by the Board of Governors, and six directors are elected by member banks. Of the six elected by member banks, three represent the public and three represent member banks. Member banks are divided into three classes according to size. Member banks in each class elect one director representing member banks and one representing the public. In any election of directors, each member bank receives one vote, regardless of the number of shares of Reserve Bank stock it holds.

2. OPERATIONS AND SERVICES

The System performs a variety of services and operations. Functions include: formulating and conducting monetary policy; participating actively in the payments mechanism, including large-dollar transfers of funds, automated clearinghouse ("ACH") operations and check processing; distributing coin and currency; performing fiscal agency functions for the U.S. Treasury and certain federal agencies; serving as the federal government's bank; providing short-term loans to depository institutions; serving the consumer and the community by providing educational materials and information regarding consumer laws; supervising bank holding companies and state member banks; and administering other regulations of the Board of Governors. The Board of Governors' operating costs are funded through assessments on the Reserve Banks.

The FOMC establishes policy regarding open market operations, oversees these operations, and issues authorizations and directives to the FRBNY for its execution of transactions. Authorized transaction types include direct purchase and sale of securities, matched sale-purchase transactions, the purchase of securities under agreements to resell, the sale of securities under agreements to repurchase, and the lending of U.S. government securities. The FRBNY is also authorized by the FOMC to hold balances of, and to execute spot and forward foreign exchange ("F/X") and securities contracts in, nine foreign currencies; maintain reciprocal currency arrangements ("F/X swaps") with various central banks; and "warehouse" foreign currencies for the U.S. Treasury and Exchange Stabilization Fund ("ESF") through the Reserve Banks.

3. SIGNIFICANT ACCOUNTING POLICIES

Accounting principles for entities with the unique powers and responsibilities of the nation's central bank have not been formulated by the Financial Accounting Standards Board. The Board of Governors has developed specialized accounting principles and practices that it believes are appropriate for the significantly different nature and function of a central bank as compared to the private sector. These accounting principles and practices are documented in the *Financial Accounting Manual for Federal Reserve Banks* ("Financial Accounting Manual"), which is issued by the Board of Governors. All Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the Financial Accounting Manual.

The financial statements have been prepared in accordance with the Financial Accounting Manual. Differences exist between the accounting principles and practices of the System and accounting principles generally accepted in the United States of America ("GAAP"). The primary differences are the presentation of all security holdings at amortized cost, rather than at the fair value presentation requirements of GAAP, and the accounting for matched sale-purchase transactions as separate sales and purchases, rather than secured borrowings with pledged collateral, as is generally required by GAAP. In addition, the Bank has elected not to present a Statement of Cash Flows. The Statement of Cash Flows has not been included as the liquidity and cash position of the Bank are not of primary concern to the users of these financial statements. Other information regarding the Bank's activities is provided in, or may be derived from, the Statements of Condition, Income, and Changes in Capital. Therefore, a Statement of Cash Flows would not provide any additional useful information. There are no other significant differences between the policies outlined in the Financial Accounting Manual and GAAP.

Effective January 2001, the System implemented procedures to eliminate the sharing of costs by Reserve Banks for certain services a Reserve Bank may provide on behalf of the System. Major services provided for the System by the Bank, for which the costs will not be redistributed to the other Reserve Banks, include the Bulkdata Transmission Utility, Check Electronic Access and Delivery, Check Standardization, Centralized Loans Automated System, National Examination Data System, Desktop Standardization Initiative, and Lawson Central Business Administration Function.

The preparation of the financial statements in conformity with the Financial Accounting Manual requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates. Certain amounts relating to prior year have been reclassified to conform to the current-year presentation. Unique accounts and significant accounting policies are explained below.

a. Gold Certificates

The Secretary of the Treasury is authorized to issue gold certificates to the Reserve Banks to monetize gold held by the U.S. Treasury. Payment for the gold certificates by the Reserve Banks is made by crediting equivalent amounts in dollars into the account established for the U.S. Treasury. These gold certificates held by the Reserve Banks are required to be backed by the gold of the U.S. Treasury. The U.S. Treasury may reacquire the gold certificates at any time and the Reserve Banks must deliver them to the U.S. Treasury. At such time, the U.S. Treasury's account is charged and the Reserve Banks' gold certificate accounts are lowered. The value of gold for purposes of backing the gold certificates is set by law at \$42 2/9 a fine troy ounce. The Board of Governors allocates the gold certificates among Reserve Banks once a year based upon average Federal Reserve notes outstanding in each District.

b. Special Drawing Rights Certificates

Special drawing rights ("SDRs") are issued by the International Monetary Fund ("Fund") to its members in proportion to each member's quota in the Fund at the time of issuance. SDRs serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for United States participation in the SDR system, the Secretary of the U.S. Treasury is authorized to issue SDR certificates, somewhat like gold certificates, to the Reserve Banks. At such time, equivalent amounts in dollars are credited to the account established for the U.S. Treasury, and the Reserve Banks' SDR certificate accounts are increased. The Reserve Banks are required to purchase SDRs, at the direction of the U.S. Treasury, for the purpose of financing SDR certificate acquisitions or for financing exchange stabilization operations. At the time SDR transactions occur, the Board of Governors allocates SDR certificate transactions among Reserve Banks based upon Federal Reserve notes outstanding in each District at the end of the preceding year. There were no SDR transactions in 2002.

c. Loans to Depository Institutions

The Depository Institutions Deregulation and Monetary Control Act of 1980 provides that all depository institutions that maintain reservable transaction accounts or nonpersonal time deposits, as defined in Regulation D issued by the Board of Governors, have borrowing privileges at the discretion of the Reserve Banks. Borrowers execute certain lending agreements and deposit sufficient collateral before credit is extended. Loans are evaluated for collectibility. If loans were ever deemed to be uncollectible, an appropriate reserve would be established. Interest is accrued using the applicable discount rate established at least every fourteen days by the Boards of Directors of the Reserve Banks, subject to review by the Board of Governors. Reserve Banks retain the option to impose a surcharge above the basic rate in certain circumstances. There were no outstanding loans to depository institutions at December 31, 2002 or 2001.

d. U.S. Government and Federal Agency Securities and Investments Denominated in Foreign Currencies

The FOMC has designated the FRBNY to execute open market transactions on its behalf and to hold the resulting securities in the portfolio known as the System Open Market Account ("SOMA"). In addition to authorizing and directing operations in the domestic securities market, the FOMC authorizes and directs the FRBNY to execute operations in foreign markets for major currencies in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC in carrying out the System's central bank responsibilities. Such authorizations are reviewed and approved annually by the FOMC.

In December 2002, the FRBNY replaced matched sale-purchase ("MSP") transactions with securities sold under agreements to repurchase. MSP transactions, accounted for as separate sale and purchase transactions, are transactions in which the FRBNY sells a security and buys it back at the rate specified at the commencement of the transaction. Securities sold under agreements to repurchase are treated as secured borrowing transactions with the associated interest expense recognized over the life of the transaction.

The FRBNY has sole authorization by the FOMC to lend U.S. government securities held in the SOMA to U.S. government securities dealers and to banks participating in U.S. government securities clearing arrangements on behalf of the System, in order to facilitate the effective functioning of the domestic securities market. These securities-lending transactions are fully collateralized by other U.S. government securities. FOMC policy requires FRBNY to take possession of collateral in excess of the market values of the securities loaned. The market values of the collateral and the securities loaned are monitored by FRBNY on a daily basis, with additional collateral obtained as necessary. The securities loaned continue to be accounted for in the SOMA.

F/X contracts are contractual agreements between two parties to exchange specified currencies, at a specified price, on a specified date. Spot foreign contracts normally settle two days after the trade date, whereas the settlement date on forward contracts is negotiated between the contracting parties, but will extend beyond two days from the trade date. The FRBNY generally enters into spot contracts, with any forward contracts generally limited to the second leg of a swap/warehousing transaction.

The FRBNY, on behalf of the Reserve Banks, maintains renewable, short-term F/X swap arrangements with two authorized foreign central banks. The parties agree to exchange their currencies up to a pre-arranged maximum amount and for an agreed upon period of time (up to twelve months), at an agreed upon interest rate. These arrangements give the FOMC temporary access to foreign currencies that it may need for intervention operations to support the dollar and give the partner foreign central bank temporary access to dollars it may need to support its own currency. Drawings under the F/X swap arrangements can be initiated by either the FRBNY or the partner foreign central bank, and must be agreed to by the drawee. The F/X swaps are structured so that the party initiating the transaction (the drawer) bears the exchange rate risk upon maturity. The FRBNY will generally invest the foreign currency received under an F/X swap in interest-bearing instruments.

Warehousing is an arrangement under which the FOMC agrees to exchange, at the request of the Treasury, U.S. dollars for foreign currencies held by the Treasury or ESF over a limited period of time. The purpose of the warehousing facility is to supplement the U.S. dollar resources of the Treasury and ESF for financing purchases of foreign currencies and related international operations.

In connection with its foreign currency activities, the FRBNY, on behalf of the Reserve Banks, may enter into contracts which contain varying degrees of off-balance sheet market risk, because they represent contractual commitments involving future settlement and counter-party credit risk. The FRBNY controls credit risk by obtaining credit approvals, establishing transaction limits, and performing daily monitoring procedures.

While the application of current market prices to the securities currently held in the SOMA portfolio and investments denominated in foreign currencies may result in values substantially above or below their carrying values, these unrealized changes in value would have no direct effect on the quantity of reserves available to the banking system or on the prospects for future Reserve Bank earnings or capital. Both the domestic and foreign components of the SOMA portfolio from time to time involve transactions that can result in gains or losses when holdings are sold prior to maturity. Decisions regarding the securities and foreign currencies transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, market values, earnings, and any gains or losses resulting from the sale of such currencies and securities are incidental to the open market operations and do not motivate its activities or policy decisions.

U.S. government and federal agency securities and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and adjusted for amortization of premiums or accretion of discounts on a straight-line basis. Interest income is accrued on a straight-line basis and is reported as "Interest on U.S. government and federal agency securities" or "Interest on investments denominated in foreign currencies," as appropriate. Income earned on securities lending transactions is reported as a component of "Other income." Gains and losses resulting from sales of securities are determined by specific issues based on average cost. Gains and losses on the sales of U.S. government and federal agency securities are reported as "U.S. government securities gains, net." Foreign currency-denominated assets are revalued daily at current foreign currency market exchange rates in order to report these assets in U.S. dollars. Realized and unrealized gains and losses on investments denominated in foreign currencies are reported as "Foreign currency gains (losses), net." Foreign currencies held through F/X swaps, when initiated by the counter-party, and warehousing arrangements are revalued daily, with the unrealized gain or loss reported by the FRBNY as a component of "Other assets" or "Other liabilities," as appropriate.

Balances of U.S. government and federal agency securities bought outright, securities sold under agreements to repurchase, securities loaned, investments denominated in foreign currencies, interest income and expense, securities lending fee income, amortization of premiums and discounts on securities bought outright, gains and losses on sales of securities, and realized and unrealized gains and losses on investments denominated in foreign currencies, excluding those held under an F/X swap arrangement, are allocated to each Reserve Bank. Income from securities lending transactions undertaken by the FRBNY are also allocated to each Reserve Bank. Securities purchased under agreements to resell and unrealized gains and losses on the revaluation of foreign currency holdings under F/X swaps and warehousing arrangements are allocated to the FRBNY and not to other Reserve Banks.

e. Bank Premises, Equipment, and Software

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over estimated useful lives of assets ranging from 2 to 50 years. New assets, major alterations, renovations, and improvements are capitalized at cost as additions to the asset accounts. Maintenance, repairs, and minor replacements are charged to operations in the year incurred. Costs incurred for software, either developed internally or acquired for internal use, during the application development stage are capitalized based on the cost of direct services and materials associated with designing, coding, installing, or testing software.

f. Interdistrict Settlement Account

At the close of business each day, all Reserve Banks and branches assemble the payments due to or from other Reserve Banks and branches as a result of transactions involving accounts residing in other Districts that occurred during the day's operations. Such transactions may include funds settlement, check clearing and ACH operations, and allocations of shared expenses. The cumulative net amount due to or from other Reserve Banks is reported as the "Interdistrict settlement account."

g. Federal Reserve Notes

Federal Reserve notes are the circulating currency of the United States. These notes are issued through the various Federal Reserve agents (the Chairman of the Board of Directors of each Reserve Bank) to the Reserve Banks upon deposit with such agents of certain classes of collateral security, typically U.S. government securities. These notes are identified as issued to a specific Reserve Bank. The Federal Reserve Act provides that the collateral security tendered by the Reserve Bank to the Federal Reserve agent must be equal to the sum of the notes applied for by such Reserve Bank. In accordance with the Federal Reserve Act, gold certificates, special drawing rights certificates, U.S. government and federal agency securities, securities purchased under agreements to resell, loans to depository institutions, and investments denominated in foreign currencies are pledged as collateral for net Federal Reserve notes outstanding. The collateral value is equal to the book value of the collateral tendered, with the exception of securities, whose collateral value is equal to the par value of the securities tendered, and securities purchased under agreements to resell, which are valued at the contract amount. The par value of securities pledged for securities sold under agreements to repurchase is similarly deducted. The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize the Federal Reserve notes. The Reserve Banks have entered into an agreement that provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes of all Reserve Banks in order to satisfy their obligation of providing sufficient collateral for outstanding Federal Reserve notes. In the event that this collateral is insufficient, the Federal Reserve Act provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, as obligations of the United States, Federal Reserve notes are backed by the full faith and credit of the United States government.

The "Federal Reserve notes outstanding, net" account represents the Bank's Federal Reserve notes outstanding, reduced by its currency holdings of \$8,424 million, and \$19,062 million at December 31, 2002 and 2001, respectively.

h. Capital Paid-in

The Federal Reserve Act requires that each member bank subscribe to the capital stock of the Reserve Bank in an amount equal to 6 percent of the capital and surplus of the member bank. As a member bank's capital and surplus changes, its holdings of the Reserve Bank's stock must be adjusted. Member banks are those state-chartered banks that apply and are approved for membership in the System and all national banks. Currently, only one-half of the subscription is paid-in and the remainder is subject to call. These shares are nonvoting with a par value of \$100. They may not be transferred or hypothecated. By law, each member bank is entitled to receive an annual dividend of 6 percent on the paid-in capital stock. This cumulative dividend is paid semiannually. A member bank is liable for Reserve Bank liabilities up to twice the par value of stock subscribed by it.

i. Surplus

The Board of Governors requires Reserve Banks to maintain a surplus equal to the amount of capital paid-in as of December 31. This amount is intended to provide additional capital and reduce the possibility that the Reserve Banks would be required to call on member banks for additional capital. Pursuant to Section 16 of the Federal Reserve Act, Reserve Banks are required by the Board of Governors to transfer to the U.S. Treasury excess earnings, after providing for the costs of operations, payment of dividends, and reservation of an amount necessary to equate surplus with capital paid-in.

In the event of losses or a substantial increase in capital, payments to the U.S. Treasury are suspended until such losses are recovered through subsequent earnings. Weekly payments to the U.S. Treasury may vary significantly.

j. Income and Costs related to Treasury Services

The Bank is required by the Federal Reserve Act to serve as fiscal agent and depository of the United States. By statute, the Department of the Treasury is permitted, but not required, to pay for these services.

k. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property, which are reported as a component of "Occupancy expense."

4. U.S. GOVERNMENT AND FEDERAL AGENCY SECURITIES

Securities bought outright are held in the SOMA at the FRBNY. An undivided interest in SOMA activity and the related premiums, discounts, and income, with the exception of securities purchased under agreements to resell, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of interdistrict clearings. The settlement, performed in April of each year, equalizes Reserve Bank gold certificate holdings to Federal Reserve notes outstanding. The Bank's allocated share of SOMA balances was approximately 2.219 percent and 1.813 percent at December 31, 2002 and 2001, respectively.

The Bank's allocated share of securities held in the SOMA at December 31, that were bought outright, was as follows (in millions):

	2002	2001
Par value:		
U.S. government		
Bills	\$ 5,031	3,301
Notes	6,611	4,821
Bonds	2,326	1,879
Total par value	13,968	10,001
Unamortized premiums	239	205
Unaccreted discounts	(23)	(23)
Total allocated to Bank	\$14,184	\$10,183

Total SOMA securities bought outright were \$639,125 million and \$561,701 million at December 31, 2002 and 2001, respectively.

The maturity distribution of U.S. government and federal agency securities bought outright, which were allocated to the Bank at December 31, 2002, was as follows (in millions):

	Par value			
Maturities of Securities Held	U.S. Government Securities			
Maturities or Securities Heid	Securities	Obligations	Total	
Within 15 days	\$ 609	\$ —	\$ 609	
16 days to 90 days	3,422	_	3,422	
91 days to 1 year	3,148	_	3,148	
Over 1 year to 5 years	3,834	_	3,834	
Over 5 years to 10 years	1,183	_	1,183	
Over 10 years	1,772	_	1,772	
Total	\$ 13,968	\$ —	\$ 13,968	

As mentioned in footnote 3, in December 2002, the FRBNY replaced MSP transactions with securities sold under agreements to repurchase. At December 31, 2002, securities sold under agreements to repurchase with a contract amount of \$21,091 million and a par value of \$21,098 million were outstanding, of which \$468 million each were allocated to the Bank. At December 31, 2001, MSP transactions involving U.S. government securities with a par value of \$23,188 million were outstanding, of which \$420 million was allocated to the Bank. Securities sold under agreements to repurchase and MSP transactions are generally overnight arrangements.

At December 31, 2002 and 2001, U.S. government securities with par values of \$1,841 million and \$7,345 million, respectively, were loaned from the SOMA, of which \$41 million and \$133 million were allocated to the Bank.

5. INVESTMENTS DENOMINATED IN FOREIGN CURRENCIES

The FRBNY, on behalf of the Reserve Banks, holds foreign currency deposits with foreign central banks and the Bank for International Settlements, and invests in foreign government debt instruments. Foreign government debt instruments held include both securities bought outright and securities purchased under agreements to resell. These investments are guaranteed as to principal and interest by the foreign governments.

Each Reserve Bank is allocated a share of foreign-currency-denominated assets, the related interest income, and realized and unrealized foreign currency gains and losses, with the exception of unrealized gains and losses on F/X swaps and warehousing transactions. This allocation is based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31. The Bank's allocated share of investments denominated in foreign currencies was approximately 2.234 percent and 2.731 percent at December 31, 2002 and 2001, respectively.

The Bank's allocated share of investments denominated in foreign currencies, valued at current foreign currency market exchange rates at December 31, was as follows (in millions):

	2002	2001
European Union euro:		
Foreign currency deposits	\$124	\$125
Government debt instruments including agreements to resell	74	74
Japanese yen:		
Foreign currency deposits	40	52
Government debt instruments including agreements to resell	138	145
Accrued interest	2	2
Total	\$378	\$398

Total investments denominated in foreign currencies were \$16,913 million and \$14,559 million at December 31, 2002 and 2001, respectively.

The maturity distribution of investments denominated in foreign currencies that were allocated to the Bank at December 31, 2002, was as follows (in millions):

Maturities of Investments Denominated in Foreign Currencies			
Within 1 year	\$ 349		
Over 1 year to 5 years	20		
Over 5 years to 10 years	9		
Over 10 years			
Total \$ 378			

At December 31, 2002 and 2001, there were no open foreign exchange contracts or outstanding F/X swaps.

At December 31, 2002 and 2001, the warehousing facility was \$5,000 million, with zero balance outstanding.

6. BANK PREMISES AND EQUIPMENT

A summary of bank premises and equipment at December 31 is as follows (in millions):

	2002	2001
Bank premises and equipment:		
Land	\$ 30	\$ 30
Buildings	115	115
Building machinery and equipment	24	24
Construction in progress	11	3
Furniture and equipment	68	76
	248	248
Accumulated depreciation	(82)	(84)
Bank premises and equipment, net	\$166	\$164

Depreciation expense was \$10 million for each of the years ended December 31, 2002 and 2001.

Approximately \$7 million of architectural fees and other costs associated with the construction of a new building in Houston are included in Construction in progress.

7. COMMITMENTS AND CONTINGENCIES

At December 31, 2002, the Bank was obligated under noncancelable leases for premises and equipment with terms ranging from one to approximately five years. These leases provide for increased rentals based upon increases in real estate taxes, operating costs, or selected price indices.

Rental expense under operating leases for certain operating facilities, warehouses, and data processing and office equipment (including taxes, insurance, and maintenance when included in rent), net of sublease rentals, was \$2 million for each of the years ended December 31, 2002 and 2001. Certain of the Bank's leases have options to renew.

Future minimum rental payments under noncancelable operating leases, net of sublease rentals, with terms of one year or more, at December 31, 2002, were (in thousands):

	Operating	
2003	\$ 206	
2004	168	
2005	89	
2006	57	
2007	35	
Thereafter	_	
Total	\$ 555	

In 2002, the Bank entered into a \$10 million long-term contract for services relating to a new Houston building, of which approximately \$4 million had been paid by December 31, 2002. The remaining commitment of \$6 million has not been recognized as a liability in the financial statements.

Under the Insurance Agreement of the Federal Reserve Banks dated as of March 2, 1999, each of the Reserve Banks has agreed to bear, on a per incident basis, a pro rata share of losses in excess of one percent of the capital paid-in of the claiming Reserve Bank, up to 50 percent of the total capital paid-in of all Reserve Banks. Losses are borne in the ratio that a Reserve Bank's capital paid-in bears to the total capital paid-in of all Reserve Banks at the beginning of the calendar year in which the loss is shared. No claims were outstanding under such agreement at December 31, 2002 or 2001.

The Bank is involved in certain legal actions and claims arising in the ordinary course of business. Although it is difficult to predict the ultimate outcome of these actions, in management's opinion, based on discussions with counsel, the aforementioned litigation and claims will be resolved without material adverse effect on the financial position or results of operations of the Bank.

8. RETIREMENT AND THRIFT PLANS

Retirement Plans

The Bank currently offers two defined benefit retirement plans to its employees, based on length of service and level of compensation. Substantially all of the Bank's employees participate in the Retirement Plan for Employees of the Federal Reserve System ("System Plan") and the Benefit Equalization Retirement Plan ("BEP"), and certain Bank officers participate in a Supplemental Employee Retirement Plan ("SERP"). The System Plan is a multi-employer plan with contributions fully funded by participating employers. No separate accounting is maintained of assets contributed by the participating employers. The Bank's projected benefit obligation and net pension costs for the BEP at December 31, 2002 and 2001, and for the SERP at December 31, 2002, and for the years then ended, are not material.

Thrift Plan

Employees of the Bank may also participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System ("Thrift Plan"). The Bank's Thrift Plan contributions totaled \$4 million and \$3 million for the years ended December 31, 2002 and 2001, respectively, and are reported as a component of "Salaries and other benefits."

9. POSTRETIREMENT BENEFITS OTHER THAN PENSIONS AND POSTEMPLOYMENT BENEFITS

Postretirement Benefits Other Than Pensions

In addition to the Bank's retirement plans, employees who have met certain age and length of service requirements are eligible for both medical benefits and life insurance coverage during retirement.

The Bank funds benefits payable under the medical and life insurance plans as due and, accordingly, has no plan assets. Net postretirement benefit costs are actuarially determined using a January 1 measurement date.

Following is a reconciliation of beginning and ending balances of the benefit obligation (in millions):

	2002	2001
Accumulated postretirement		
benefit obligation at January 1	\$ 41.5	\$ 34.9
Service cost-benefits earned during the period	1.0	1.0
Interest cost of accumulated benefit obligation	2.7	2.8
Actuarial loss (gain)	(1.2)	6.2
Contributions by plan participants	0.4	0.3
Benefits paid	(1.9)	(1.7)
Plan amendments (curtailments, special termination benefits)	0.5	(2.0)
Accumulated postretirement		
benefit obligation at December 31	\$ 43.0	\$ 41.5

Following is a reconciliation of the beginning and ending balance of the plan assets, the unfunded postretirement benefit obligation, and the accrued postretirement benefit cost (in millions):

	2002	2001
Fair value of plan assets at January 1	\$ —	\$ -
Actual return on plan assets	_	_
Contributions by the employer	1.5	1.4
Contributions by plan participants	0.4	0.3
Benefits paid	(1.9)	(1.7)
Fair value of plan assets at December 31	<u> </u>	\$ —
Unfunded postretirement benefit obligation	\$ 43.0	\$ 41.5
Unrecognized initial net transition asset (obligation)	_	_
Unrecognized prior service cost	13.6	15.3
Unrecognized net actuarial loss	(7.9)	(9.2)
Accrued postretirement benefit costs	\$ 48.7	\$ 47.6

Accrued postretirement benefit costs are reported as a component of "Accrued benefit costs."

At December 31, 2002 and 2001, the weighted-average discount rate assumptions used in developing the benefit obligation were 6.75 percent and 7.0 percent, respectively.

For measurement purposes, a 9.0 percent annual rate of increase in the cost of covered health care benefits was assumed for 2003. Ultimately, the health care cost trend rate is expected to decrease gradually to 5.0 percent by 2008, and remain at that level thereafter.

Assumed health care cost trend rates have a significant effect on the amounts reported for health care plans. A one percentage point change in assumed health care cost trend rates would have the following effects for the year ended December 31, 2002 (in millions):

	One Perce Point Inc		One Perc Point De	
Effect on aggregate of service and interest				
cost components of net periodic				
postretirement benefit costs	\$	0.1	\$	(0.2)
Effect on accumulated postretirement benefit obligation		1.4		(1.8)

The following is a summary of the components of net periodic postretirement benefit costs for the years ended December 31 (in millions):

	2002	2001
Service cost-benefits earned during the period	\$ 1.0	\$ 1.0
Interest cost of accumulated benefit obligation	2.7	2.8
Amortization of prior service cost	(1.2)	(1.0)
Recognized net actuarial loss	0.1	0.1
Net periodic postretirement benefit costs	\$ 2.6	\$ 2.9

Net periodic postretirement benefit costs are reported as a component of "Salaries and other benefits."

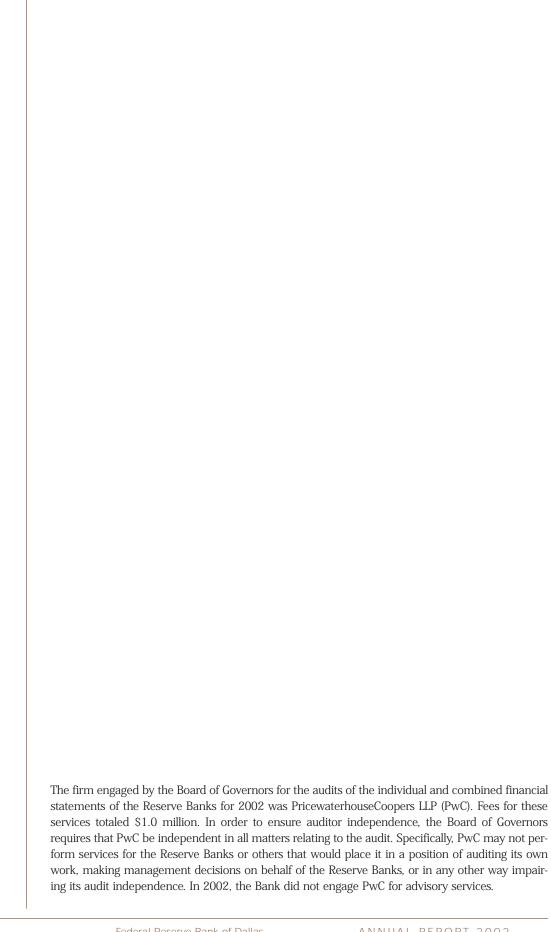
Postemployment Benefits

The Bank offers benefits to former or inactive employees. Postemployment benefit costs are actuarially determined and include the cost of medical and dental insurance, survivor income, and disability benefits. Costs were projected using the same discount rate and health care trend rates as were used for projecting postretirement costs. The accrued postemployment benefit costs recognized by the Bank at December 31, 2002 and 2001, were \$7 million and \$6 million, respectively. This cost is included as a component of "Accrued benefit costs." Net periodic postemployment benefit costs included in 2002 and 2001 operating expenses were \$2 million and \$1 million, respectively.

10. SUBSFOUENT EVENT

In January 2003, the System announced plans to restructure its check collection operations. The restructuring plans include streamlining the check management structure, reducing staff, decreasing the number of check-processing locations, and increasing processing capacity in other locations. The restructuring, which is expected to begin in 2003 and conclude by the end of 2004, will result in the Bank discontinuing its check operations at the El Paso and San Antonio offices, increasing its check processing capacity at the Dallas office, and consolidating its check adjustment function at the Houston office. At this time, the Reserve Banks have not developed detailed estimates of the cost of the restructuring plan in the aggregate or for the individual Reserve Banks affected.

Volume of Operations (UNAUDITED)				
	Number of Items Handled (Thousands)		Dollar Amount (Millions)	
	2002	2001	2002	2001
SERVICES TO DEPOSITORY INSTITUTIONS				
CASH SERVICES				
Federal Reserve notes processed	2,575,034	2,394,863	41,295	37,720
Currency received from circulation	2,569,936	2,448,543	41,108	38,533
Coin received from circulation	812,381	1,383,392	113	173
CHECK PROCESSING				
Commercial-processed	1,312,897	1,321,166	845,267	818,354
Commercial—fine sorted	66,444	81,087	133,982	92,803
LOANS				
Advances made	280*	202*	785	350
SERVICES TO THE U.S. TREASURY AND GOVERNMENT AGENCIES				
Issues and reinvestments				
of Treasury securities	67	70	2,635	2,535
*Individual loans, not in thousands.				





About the Dallas Fed

The Federal Reserve Bank of Dallas is one of 12 regional Federal Reserve Banks in the United States. Together with the Board of Governors in Washington, D.C., these organizations form the Federal Reserve System and function as the nation's central bank. The System's basic purpose is to provide a flow of money and credit that will foster orderly economic growth and a stable dollar. In addition, Federal Reserve Banks supervise banks and bank holding companies and provide certain financial services to the banking industry, the federal government and the public.

The Federal Reserve Bank of Dallas has served the financial institutions in the Eleventh District since 1914. The district encompasses 350,000 square miles and comprises the state of Texas, northern Louisiana and southern New Mexico. The three branch offices of the Dallas Fed are in El Paso, Houston and San Antonio.

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