10.01.00 Interfering in the Economy

This chapter describes interference in the economy. Especially it speculates on when interference can be justified or not.

Interference. The price system arises from the interaction of independent individuals, each person deciding how to allocate his/her resources to achieve his/her best welfare. If the entire economy were in perfect competition and did not have any flaws, the price system would result in the greatest welfare for everybody that was practically available. Any interference would result in less welfare for many people, even if it would result in some more welfare for some other people. The loss in welfare from interference exceeds the gain. Interference leads to less total welfare overall even if it also leads to more welfare for some particular people.

We can understand interference in the price system in the same way that we understood the effects of imperfect competition. Interference in the price system changes the distribution of resources so that the economy does not best allocate resources. With interference, some businesses get more resources than they should while some businesses get less. Some groups of people get more resources while some groups get less. Under perfect competition, consumers lead farmers to allocate the right amount of land, labor, machines, and chemicals between apples and peaches. Suppose that farmers grow five times as many apples as peaches. If we declare that farmers have to grow twice as many apples as peaches, then we force farmers to allocate land, labor, machines, and chemicals more toward peaches than would have happened on the free market. Those resources are misallocated. The total benefit to consumers is less than it would have been even though peach farmers receive more benefit than they did before.

Production Possibility Frontier. We have to dispose of a red herring.

In the 1950s through 1970s, economists contrasted free market capitalism with planned economies such as in the Soviet Union and China. Instead of allowing the market to decide how resources were used, planned economies deliberately applied resources to aspects of the economy that planners wished to expand such as mining, deemed necessary for state security such as the military, or deemed necessary to keep the citizens from agitating such as refrigerators. During that time, planned economies grew at a fairly high rate, often as much as 8% per year. State officials in the United States wondered if we should shunt some of our resources into sectors that we wished to grow faster, and they wondered about the effects of deliberately moving a lot of resources into sectors that were useful for security such as the military. To achieve the best all around, they wondered how much could be left to the market and how much should be planned – although they rarely talked in those terms but instead talked about using as

much as was needed for defense while still keeping the country wealthy. Economists talked about how to direct the total potential production possibility of an economy. To keep it simple, they phrased the argument in terms of a choice between two options: guns versus butter. Guns represented national security but they also represented sectors that we wished to grow so that we could better compete in all ways, such as heavy machine manufacturing. Butter represented consumer goods, such as people would choose on a free market.

Sometimes textbooks use a diagram that looks like a speedometer. Imagine a semi-circle with the open side downward and the bow side upward. The left is marked "butter" while the right is marked "guns". A needle can move between guns and butter to show how much we have chosen. The needle at full left means we have chosen all butter and no guns while the needle at full right means we have chosen all guns and no butter. Points in between represent different mixes. The semicircle represents the maximum production at any combination of guns or butter: the "production possibility frontier". A point on the semicircle represents a mix of guns and butter with the economy at full production possible. A point within the semicircle represents a mix of guns and butter with the economy at less than full production possible. No matter where we wish the mix to be, we want production to be at a maximum for that mix. If we choose 60% butter and 40% guns, we want as many guns and as much butter as we can get at that mix. We do not want anything less than the maximum no matter what mix we choose. Economists worried that a move away from the optimum mix set by the market might cause the economy to be less than efficient and to yield less than maximum possible production. To soothe the way, they argued that any movement away from the market optimal mix would be acceptable as long as total production did not diminish, as long as the economy stayed at the production possibility frontier.

This is not a bad approach but it has a flaw, which is why I avoided it until now. Go back to an imaginary garden. Suppose Joe has 10 acres to plant in two crops: raspberries (butter) and carrots (guns). Suppose that no matter how Joe mixes crops, the total poundage yielded from the garden is exactly the same, say 100 pounds per week. No matter how Joe mixes crops, he is at his production possibility frontier of total possible production. If Joe plants all raspberries, he gets 100 pounds per week; if he plants all carrots, he gets 100 pounds per week; if he plants 50-50, he gets 100 pounds per week; and if he plants 70-30, he gets 100 pounds per week. Even though Joe maintains maximum production no matter how he mixes crops, he does not maintain maximum utility. At either extreme, Joe has less utility than anywhere in the middle. All carrots, or all raspberries, yields less utility than a mix of carrots and raspberries even if Joe still gets 100 pounds per week no matter what. Joe tells us that his maximum utility is at 70% raspberries and 30% carrots. Only Joe could decide on this mix. There is no way that anybody outside Joe could decide on this mix.

In the same way, the market automatically decides on the mix of final goods that give the greatest

practically available total welfare (utility). Only the people in the market can decide on that mix. Under near-perfect competition with no flaws, nobody else can decide that mix. Any movement away from that market optimal mix decreases the available welfare even if somehow the dollar amount of the total production stays the same and even if the physical amount of total production stays the same. It might make sense to say we can always make sure the economy stays at the production possibility frontier, but that is not the same as saying that the economy does as well as it could. If we forcibly move the economy away from the optimum mix set by the market, then we must reduce the total practically available welfare (utility) even if we keep the economy humming at maximum production possibility.

The only time we can move the economy away from the mix determined by the free market and still maintain maximum practically available welfare is when the economy has flaws that need correction, and our correction does not cause more harm than good. Then, we do need to consider how to shunt resources but we do not necessarily think more accurately by worrying about whether or not we are on the maximum production possibility frontier.

Only after we have understood the economy in more basic terms can we use the idea of the production possibility frontier without misusing it. I explained it here because readers will encounter it and I do not want them to get confused.

This book does not worry about whether we can stay on the maximum production possibility frontier even with some interference. It leaves total production aside. The arguments here would apply even if we stayed at maximum total production. This book assumes that any interference that does not correct a flaw reduces welfare regardless of other effects on total production. This book looks at the consequences of interference for total welfare and for employment.

Some More Prior Considerations.

Collective Goods or Communal Goods. Some goods are not held by a particular person, family, or firm but are held in common by a group of people, a group of families, a group of firms, or a group of nation states. Sometimes use rights in an apparently communal good amount to temporary private sequential ownership, as in the right to use a time-share cabin. Collective goods are not like that. They involve real communal access and real communal responsibility where possible. Real collective goods include the oceans, most rivers, the air, many forests, and many large plains.

Collective goods necessarily involve problems of harvest, maintenance, abuse, cost figuring, and responsibility. People and states have evolved many plans to solve these problems. My apartment complex allows dogs. People are supposed to clean up after their dogs, but they do not, and much of the time the pathways are covered in dog shit and the lawns reek. People treat the lawns as a

communal resource, and then abuse it. This chapter does not deal with the details of managing communal resources.

Collective Action. A collective action involves a group of actors together doing what no one of them, or any lesser group of them, could do alone, such as building a large dam that supplies electrical services and water for irrigation. The benefit and costs of a collective action can be thought of in terms of collective goods. Collective actions are subject to the same problems as collective goods and near-free goods (see below).

Free Goods. A "free" good is one that does not enter the public price system and that has no obvious cost. The most common example is air. In the Northwest, in many places, before urban populations, water was a free good. Before the days of cable, after having invested in a TV set, the three major network stations were almost like free goods. Collective goods might not really be free goods but often people treat them that way and so abuse them.

Soon there may be no more free goods. Fresh water is the single scarcest resource in the modern world. Air pollution now comes to the Western United States from China. Many people, including me, have to use air filters to live in modern polluted environments.

While goods are still free, people have no clear signals on how much to use a free good and when to stop. Biology determined for us how to use air and water for personal needs, and when to stop. When water is free, people tend to use it for irrigation and recreation until they over-use and it goes away or it declines in quality. People use it to dump all kinds of crap into, until it is polluted.

Near-Free Goods. There is no particular economic term for this category, so I use the term "near-free". A near-free good has some cost associated with it, but the cost is low, the cost does not increase much with additional use of the good, and the user might not have to pay all the cost. Near-free goods are not really collective goods but people often treat them that way and so abuse them.

After the Native Americans were mostly gone, particular people of the United States claimed huge tracts of land, some of which they could not use right away. When Europeans first came here, the forests were huge, and the Europeans cut trees as fast as they could until the forests were gone. The passenger pigeon once darkened the skies of the United States but now is fully extinct. The same almost happened to the buffalo (bison).

More familiar examples now are common local resources such as a local small lake or local soccer field. People do not have to pay the upkeep directly so they tend to over use the resource until it is degraded. People overcrowd the swimming hole or the soccer field. They ride jet skis in the lake or they ride ATVs

(all terrain vehicles) on the soccer field.

For this chapter, a more apt example is un-metered electricity and water in an apartment complex. Suppose the cost of electricity and water is included in the rent, or suppose people pay a modest flat fee per month for utilities. The cost does not go up as people use more. In that case, some tenants, but not all, use a lot of water and electricity. They leave the water running. They do not report leaky faucets and leaky toilets. They leave the lights on. They leave the air conditioning on all the time, or they leave the air conditioning on and open a window at the same time. People really do all this.

If the total fees for electricity and water from all the tenants has to cover the cost of utilities for the entire complex, even though some tenants use more while some other tenants use less, then the tenants that are responsible and that use less end up paying for the irresponsible tenants that use more.

The total use of resources is greater than it would be if people were individually responsible. This increase in total use represents the distortion of the economy, distortion in the use of resources, and decrease in total welfare. Both outcomes are typical of near-free goods, communal goods, and collective actions.

Privatization. When apartment managers are faced with a larger bill for water and electricity than they had imagined, they reverse the situation by installing meters for each apartment. It costs money to install the meters, to keep up the meters, to inspect the meters monthly, to bill the tenants separately, and to collect frequently from tenants that do not pay promptly. But that cost might still be less than the waste of not reckoning individually. The total resource use soon goes down, and the responsible tenants quit complaining to the landlord. Even with the additional costs, resources are better used than before and total welfare is greater than before. This situation represents the greatest practically available welfare of the free market where costs accompany goods and where individuals are responsible for goods and costs.

Some economists and state officials argue for privatization of all communal and near-free goods as a way to force the goods into the public price system, to force a cost accounting on all goods, to force an accounting of particular actors, and to force people to be responsible. Some economists and state officials argue for privatization because their clients want to capture the goods, regardless of whether or not privatization would really lead to the best outcome. We need to be able to distinguish situations in which privatization would work from those where it would not work. This chapter cannot go into that topic. I only mention it again later in the proper context.

Externalities. An externality is a good or cost that does not fall within the public price system. It is hard to gauge the proper use of any good that has associated externalities. An externality may be a positive

externality such as when a neighbor puts up houses for blue martins so that the blue martins will catch his the mosquitoes and they also catch our mosquitoes; but usually economists think of externalities as costs such as air pollution for which the polluter does not pay the cost of clean-up and does not pay the cost of the damages such as increased asthma in children. Collective goods, free goods, and near-free goods might be considered externalities but usually they get their own categories.

As with near-free goods, some people wish to privatize externalities by forcing them back into the public price system, usually called "internalizing". Sometimes internalizing externalities works and sometimes it does not. Sometimes motives for internalizing are aimed at the general welfare and sometimes they are not. This chapter is not concerned with the details of externalities but only that the reader has a general idea. A later chapter goes into more detail.

A Lot in A Little Place; A Little from a Lot of Places. Programs tend to give a lot of resources to one group (or in one place) while taking only little bit from a lot of people. Welfare gives a reasonable amount to a few people while taking a little bit from a lot of people. The military gets an awful lot of resources concentrated in a few places by taking comparatively little from very many people.

If this shift occurred in the market, we could argue that the utility gained by recipients was greater than the utility lost by donors. If the people on the whole decide that they wish a few expensive blockbuster movies rather than a lot of good detective film noir movies, then we can guess that the few people that pay to go see the blockbusters gain more than the people who lose from not seeing the detective film noir movies. When this shift occurs as a result of state action, we cannot say anything for sure about the gains and losses. Because the state does not take give according to the public price system, we cannot use the same logic to argue for the best use of resources and for reaching maximum welfare (collective utility). It might be that the recipients gain more than the donors lose, or it might be the other way around, or it might be even; we just cannot say.

Even aside from the inability to assess these situations due to the state operating outside the public price system, these situations are intrinsically hard to assess. Suppose that somebody asked us to donate food to hungry families. No taxes or other coercion is involved. We just cannot be sure that the utility the families gain is at least equal to the utility that we lose. That is what it means to say that utility is subjective and that we "cannot get into other people's heads". We can argue that the utility that we get from giving more than makes up for the few cans of food that we lose, but that point seems to be not quite what matters.

When taxes are light, the economy is going well, and people have big hearts, they usually do not mind losing a little if they might help other people a lot. When taxes are heavy, people are not sure of the world economy, people are worried about comparative competition, people are not sure their

contribution will actually do any good, and people are worried about cheating, then their hearts are not so big and they want an accurate accounting.

Cheating. Because it is so hard to assess effects that lie outside the public price system, and because many people each contribute a little to provide a potentially great benefit for a few, it is easy for the few to cheat. People and firms ask for a handout because they know that all the givers have to give only a little and are not prone to say "no". The standard image is of welfare cheaters, especially "welfare queens"; but other cheaters do as much damage: the military, farmers, middle class house buyers, small business, large finance companies, steel makers, affirmative action, research at universities, the arts, and programs to improve hunting. We need to look at all programs in the same way, not only the programs that fit our ideological biases.

Non-Cheating. On the other hand, we can also get used to the idea that state programs are good, and we can overlook real damage. Because any state action usually hurts some people, we get used to the idea that any state action will cause some people to complain, and so we treat all complaints as "crying wolf". We do not take seriously some serious damage, as when the state confiscates private property to develop a new shopping center. We use money to measure utility and so make mistakes. We overlook losses of utility to the poor because the money loss to the poor is smaller than the money loss of other groups even when the utility loss to the poor is much greater.

Non-Smithian. The next chapter deals explicitly with this issue. Some markets just are not stable, do not come to clear prices, and wobble in ways that increase uncertainty for the whole economy. The money market is the best example. We need to try to increase certainty in these markets, to make them more Smithian.

The Road to Hell is Paved with Good Intentions. Most people are willing to give a little to help because the givers really wish the best and really think that their giving can help. Yet, in giving, we often set up a chain of events, relations, and expectations that undermine the good we had hoped to achieve, that add even more bad on top, and from which situation we find it hard to get out. Even when most recipients do not wish to take advantage of the public, they do take advantage of the public, act in ways that they might otherwise deplore, and show aspects of bad human nature that they wish never showed up in themselves. These bad outcomes are a negative form of Spontaneous Unplanned Persistent Organization (SUPO). Again the standard example is welfare but the real incidence is greater, including all the situations just listed above. I do not find that farmers, soldiers, business people, factory workers, retail workers, doctors, or college professors behave much better than welfare recipients when their programs are "on the line".

How good intentions can lead to a bad SUPO, and how the SUPO can sustain itself sometimes

independently of how it arose, are large topics that we cannot go into here. It helps to think ahead as much as possible to results, keeping in mind that people are not angels. We always have to ask, "And what then? And what then?" Programs can create damage even if they are successful on their own terms because of the bad example of interference. Successful programs can cause damage because they rationalize interference and invite interference. State intervention leads to bad habits even it succeeds. We can get used to the idea that the state is correct to intervene. Instead of assessing situations for ourselves, we can get used to the idea that the state does a better job, and so we let the state make up our minds for us. When we let the state make up our minds for us about projects such as a bridge, we tend to let the state make up our minds for us in other ways as well such as what doctor to see. We cannot foresee all bad results by hard thinking but it is good practice to try.

State Interference. In theory the idea is easy: assess when the market does the job and when it does not. If the market does the job, leave it alone. If the market does not do the job, assess whether or not the state could do the job better without causing any more severe problems. If the state can handle the problem better, let the state do it. If not, live with the problem. In practice, this assessment is impossibly hard.

A general theory about interference by the state would require an assessment of when the market has a fault such as imperfection like oligopolies; when the market cannot provide some benefit, such as the police or the military (when the market has a shortcoming); when the state can provide a benefit better than the market without causing more harm, such as fire protection; when the state is the proper agent for large projects, such as dams; when the state is the proper agent to care for communal resources, free goods, and near-free goods such as the oceans or the Great Plains; when the state is the proper agent to correct for externalities including pollution, soil erosion, and acid rain; when the state is the proper guardian of nature; when privatization would not be enough to handle problems; when privatization would be enough to protect nature, such as endangered species; when the state can run utilities, such as electricity and water; why the state seems so often to do a bad job, as with relief for Hurricane Katrina; when the state actually does a good job, as with most roads and with national park management; when the state is the proper guardian of some relations, such as contracts; when the state is the proper guardian of some morals, such as freedom of religion; when the state is not the proper guardian of some morals, such as being kind; when and how people might cheat; how well we can foresee results; and when any interference causes more harm than good, either directly or by example. These assessments are far beyond this book. Instead, this part of the book addresses the topic by looking at some hypothetical instances of interference.

No state programs result from the public price system. All state programs come about in other ways such as through voting. Nearly all state programs require some taxes and some giving. The cost effectiveness of the taxes and the giving are not easily assessed because they are not done in a

market. Thus all state programs are a kind of interference, including all stimulus programs, all taxes, all tax breaks, and all attempts to level the playing field against unfairness. So we have to look at taxes as well.

Warranted Interference. Not all state programs necessarily reduce total welfare. If a government program corrects an obvious fault, and does not cause even worse problems, then state action can help.

We could only be sure state intervention helps or hurts is if we could objectively sum up the utility from each individual in different situations, "before and after", and compare the situations. We cannot do that.

Even though we cannot be sure, sometimes we feel that we have to act anyway. For those situations, we have to rely on our theories of human nature and on our moral codes. Even without an objective measure, by listening to economic analysis, and by using common sense, we can have a pretty good idea when individual actions on the free market have not led to the greatest total welfare, and we can have a pretty good idea of when the state has helped or hurt.

This section lists situations for which we are likely to ask for state interference despite any potential problems. It does not list all situations and it does not give a full analysis. Later chapters give some more explanation. People do not agree that interference is warranted even here. Libertarians and some Conservatives argue that it is not. But historically we have allowed state interference and are likely to continue.

- (1) Security: the military, the police, and the fire department.
- (2) Collective Action. People want some material goal such as building a park, want some moral goal such as a recreation program, want to act together to correct a fault such as chronic unemployment, want to manage collective resources such a the Snake River, or want to provide a military.
- (3) Imperfect competition such as oligopoly and differentiated markets, including the labor market. For firms, current state programs of minimal interference are pretty good. The best thing is to wait for innovation to undermine market control. For unemployment and poor employment, this part of the book discusses what to do.
- (4) Externalities. We now recognize the need to deal with pollution.
- (5) Non-Smithian.

- (6) Unavoidable Unfairness. Some end-points are just unfair even when they do not arise from any of the sources listed above, and even when we think the free market works pretty much as it should. Perfect competition does not guarantee absolutely fairness for all people even if it guarantees much welfare for the group as a whole. When a hard-working single mother has to steal ketchup packets to feed her children, or when her children cannot get medical care, something is wrong, even if the market is otherwise fine. When an honest hard-working family cannot find work and has to live in their car, then something is wrong, even if the market is otherwise fine.
- (7) Protecting Nature. In the modern world, only cockroaches can protect themselves. We are on the verge of eliminating nature as it has been for the last three billion years. If we are to keep nature, we have to protect it. We have not done a good job of looking ahead or of protecting so far. Because the problem of nature is so large and so important, this book can only touch on it.

Some Particular Situations. This section goes into more detail. This is not a logically minimal list or complete list. There is duplication between items.

Collective Safety. This is a lesson from the English philosopher John Hobbes. We prefer one single large police force rather than several small overlapping police forces. We prefer universal law to gangs. Whenever force is involved, there is too much potential for abuse, and the results of bad action are so severe, that we cannot resort to competitive offering of services. "Competitive offering of services for force" soon leads to being the slaves of those who offer the services. I lived where gangs held sway, and where the police and military were really just more gangs for hire; and it does not lead to better welfare than a single public police force. We need objective standards, and we need consistent funding from the entire group. We need to discourage private funding of force. A good novel for this subject is "Red Harvest" by Dashiel Hammett, which became, in turn, the movies "Yojimbo", "Fistful of Dollars", and "Last Man Standing".

Communal Projects. Communal projects, such as the police, electrification, dams, and even public buses are hard to fund through individual contributions.

- (A) Sometimes it is hard to get people over the threshold of acting together.
- (B) Sometimes there is no clear relation between individual contributions and what individuals get out of the project.
- (C) Sometimes it is easy to cheat.

(D) Sometimes the project leads to costs or to benefits that cannot be fit into the accounting for the project. These are externalities.

For example, we might want a dam for irrigation. We need to be able to give people water from the dam but there is not always a clear way to do this in relation to what people pay. Some people do not want the extra water but might have to pay anyway. Some people might even be hurt by the extra water, or might be hurt when water is diverted from their place to the public pool. People that do not fund the dam are likely to get water, even if they do not cheat. People benefit from irrigation even when they do not gain directly from the water, such as the firms that supply farmers with seed and fertilizer. These beneficiaries do not pay for the dam. The irrigation increases the number of birds, beavers, and other animals, thus benefiting hunters even though they do not pay for the dam. People actually do steal water from canals.

Instead of spending a lot of money and effort to make individuals pay precisely for what they get, sometimes it is easier to collect a common fee from each user, or each person in a district, regardless of specific benefit, such as people pay to use a state park. Even if the fee structure is not entirely fair, as long as people in general get more than they give, the project is still worthwhile.

If cheating does not detract from the benefit too much, then the project (the dam) can still go on. If cheating does detract from the benefit too much, then the project can get shut down. People get sick of subsidizing cheaters, and the cost of discriminating people that pay from people that do not pay can get too high.

Large Projects. Suppose the dam was expensive, and people were not sure before building the dam that they would get back more than they put in. In that case, people would not contribute to the dam. Suppose people knew that, if the dam were built, and the dam was successful, they definitely would get back what they had put in; but they were afraid that the dam would not be built or that too many people would cheat. The dam still could not be built. In this case, if the state forces everybody to contribute, and everybody does get back more than he/she put in, then everybody gains.

Space exploration is a large-scale project. The world has benefited far more from space projects than the cost of those projects. The Hubble telescope gave far more in benefit than it cost. Yet it would have been very hard to get people to subscribe to a private venture of this kind because there were no clear immediate links between input (cost) and output (benefit). However, keep in mind that in 2005 the first private space ship flew successfully, funded in large part by Paul Allen, the co-owner of Microsoft. The pioneers in that venture hope to make space travel profitable within two decades.

The classic example for over a hundred years in economics is a lighthouse. The lighthouse would be a

great benefit for a port city so as to improve traffic for the city in general. Almost everybody would benefit. But it is hard to get people to subscribe to build the lighthouse because there is no clear link between giving and getting. Here the state can step in to the mutual benefit of all.

Collective Goods. Large projects are a special case of collective goods.

If a collective good does not already exist, trying to establish a collective good leads to the problems listed above for large projects. Even after it is established, a collective good presents problems of figuring out how to assess fees for its use, and in preventing abuse such as over-cutting of the forests or over-grazing of the range. We have to figure who has access, who will not have access, and fees for people who do have access. Many collective goods are abused, such as the whales and tuna.

Non-Duplication. The market works through competition, and competition needs some duplication. GM and Toyota could not compete if both did not both make mid-size sedans, the Impala and Camry. But some situations do not make sense with a lot of duplication. There is no point in having multiple railroad tracks next to each other all going from Houston to Denver and there is no sense in digging multiple canals from New York City to Detroit. There is no sense in having multiple operating systems for computers, especially if the operating systems are not fully compatible. If we want complete compatibility between computer software products, then we need to have most computers running on the same operating system, which turns out now to be Microsoft Windows. We have already seen that we do not want more than one police force at a time. We do not want more than one fire department either.

The classic case of non-duplication is public utilities such as water, electricity, and natural gas. It makes no sense to have multiple water mains, gas pipes, or even electrical lines running in and out of houses. Some duplications reduce total welfare, and so we are better off entrusting them to one provider. That provider is a monopolist. Who is the one provider to be? Will the operation be owned by the state or by a private firm? How will that one provider set the amount of service and the price? Who will oversee the one provider? Here we need the state to step in even if the provider is private.

Some situations that seem as if they might work best with only one provider actually work better with a few providers. Sometimes situations work best with a few providers because of the innate characteristics, and sometimes because the alternative of one provider led to abuses. Most American cities have only one system of public buses. We think that is a situation of only one provider. But taxis and private cars actually compete with the buses, and the competition makes sure that all modes of transportation are better. In most of the world, small motorcycles intensify the competition. It seems to make sense that there would be only one bus carrier for service between all cities, but the U.S. had at least two bus carriers (Greyhound and Trailways), and that level of competition seemed to work

tolerably well. It might seem as if we need only one airline between cities, and that we do not need half-empty planes flying between Washington and New York fifty times a day wasting fuel; but it turns out that competition for such redundant lines actually leads to lower fares and somewhat better service.

Markets that need only a few providers or that need only one provider tend to develop non-Smithian yo-yo effects. These are described in the next chapter.

Minimize Transaction Costs. We could privatize the road system if we were willing to pay a toll every few hundred yards and willing to endure different driving conditions every few hundred yards. Capitalism only took off in Europe when it overcame such silly conditions. Non-duplication and single systems serve to reduce transactions costs. They make it easier to "do business". Any loss that we suffer because of a single system, we more than make up for through the reduced costs of doing business.

High Uncertainty, Great Risk, Great Cost, Possible High Yield, Need for Great Coordination. There is no convenient term for such situations. A dramatic example gets the point across: We do not hire out war. We have to be able to conduct it ourselves. The stakes are too high, the outcome is too uncertain, the cost is too great and therefore needs to be borne collectively, the possible gain is great, and we need to do these things together. High uncertainty with a possible great gain leads people to do things together and leads them to need an organization. That is why pre-modern people got together to hunt a bear. Large business firms, such as Microsoft, sometimes allow for internal competition on small projects when such internal competition might make particular units "sharper" and lead to more efficiency for the firm as a whole. But for a large, important, unsure project, they stress that the entire firm pull together as a team. Two arenas of uncertainty in which the state takes the lead are product safety and research. Later chapters take up those two topics.

Taxes as Interference. Even when governments try to make a tax as fair as possible, a tax is still a kind of interference, and distorts the market. This is true of ALL taxes, although some kinds of taxes are worse than others. Since it is not possible to run a state without some taxes, and since we do need a state for some things such as the police, then we have to live with taxes and we have to live with distortions of the price system. How taxes affect the economy, how best to collect taxes, who actually pays for a tax, and who actually benefits from a tax, are all topics that concern professional economists but into which this book cannot go. This chapter only offers a few remarks on taxes.

All taxes move resources from one group to another, even if that is not the intent of the tax. Even if all income were taxed at a flat rate of 30%, some people could not afford to pay any taxes, and they would benefit by default from the other people that did pay taxes. We would give exemptions to some people, such as the elderly, the sick, and the poor, and they would gain by default. A sales tax is not aimed at

any social group in particular, yet poor people use more of their income in purchases than do middle class people, and so the poor end up subsidizing the middle class through a sales tax. The movement of resources (benefit) from one group to another is called "redistribution".

Redistribution of Wealth and Income. Not only taxes, all state programs result in redistribution from one group to another, even when the state tries hard to make the programs as fair as possible. Where programs are not financed immediately by taxes, programs are financed by debt and inflation, and those forces inevitably hurt and help groups in different ways. The differential hurting and helping shifts wealth, that is, it redistributes. The increase in gas prices during the Iraq war caused a large redistribution of wealth from the middle class to the upper middle class and the wealthy.

Sometimes the forced movement of resources intends to redistribute wealth from one group to another group, as when the rich are taxed proportionally more than the poor, or when the poor have to pay sales tax to support middle class children in college. This redistribution is what most middle class people objected to in the poverty programs of the 1960s and 1970s. Middle class people saw poverty programs of the 1960s and 1970s as massive redistribution of wealth away from themselves to poor people. Middle class and upper middle class people tend to see any dis-proportionate taxation in the same way, as when higher income is taxed at a higher rate than lower income.

Taxing higher incomes at a higher rate than lower incomes is called "progressive" taxation. Taxing \$20,000 per year at 15% while taxing \$200,000 per year at 40% is progressive taxation. All advanced capitalist countries now practice some kind of progressive taxation. Sometimes the intent is to redistribute income from the wealthy to the poor but more often the tax is rationalized in terms of "ability to pay". People with a greater income do not need to spend as much of their income on necessities, and so they have more ability to pay. Taking more of their income affects core industries such as food and housing less than taking income from the poor, and so is more affordable to the economy as a whole. If we could directly measure utility we would see that the marginal income of the rich represents less marginal utility than the marginal income than the poor. The last \$1000 made by a person with an annual income of \$1,000,000 represents less marginal utility than the last \$1000 of a person who makes \$20,000 per year. Taking away marginal income from the rich reduces total welfare (total utility) less than taking away marginal income from the poor. Taking \$30 from a rich person decreases the total welfare (utility) of the economy less than taking \$15 from a poor person.

Sometimes programs and taxes result in considerable redistribution even when that was not the intent, and this kind of redistribution can be more important than deliberate redistribution. This is a contentious topic. For example, I believe that tax breaks for landowners, combined with a sales tax, together redistribute more income from the poor to the rich than any progressive income tax redistributes income from the rich to the poor.

"There is No Free Lunch". Because usually many people pay a little for each program while a few people receive a lot, people in general have gotten the idea that a benefit, especially from the state, is basically free for the recipients. People feel that the state conjures money out of a hat. This is definitely not true. ALL programs lead to a shift in resources, and have a cost that some people must pay, even if the cost is small for most people and the shift of resources is small for most people. Even such obviously beneficial programs as the police and national defense cost money and shift resources.

Hungry children learn little, and so tax dollars are wasted on them. If we force them to go to school, we might as well pay a little bit more to make sure they benefit, and we benefit, while they are in school. A program of the 1970s gave a free lunch to schoolchildren. "There is no free lunch". This slogan helped kill that program. The program died when Republicans convinced working people and middle class people that it would cost them too much. The program was never actually called "free lunch" but Republicans convinced working people and middle class people that it was called that. Republicans meant that Liberals had misnamed the program "free lunch" and had misled people by implying that state social programs came for free. Republicans said that Liberals had misused the idea of "free" as an extension of the above idea that the cost to most people was so small ("free") that most taxpayers did not miss it.

The Republican argument against "free" state programs is true when it means that no resources can be moved into one use without being taken away from another use, and so nothing is free. The Republic argument criticizes misguided generosity that starts out well but has unintended bad results. Even the small payments that individuals "don't miss" add up, and, taken collectively, the small payments distort the economy. It always takes resources to get something done, and resources are not free, so there are never any free programs. The economy gets "nickel-ed and dime-d to death". Misguided generosity can have disastrous results even when done in small doses.

After the campaign killed the program, Republicans adopted the slogan as a battle cry against all social programs, implying that all social programs are not worth it, and that all social programs inevitably escalate to where the distortion is bad. We still hear it today.

The idea that there are no free state programs applies to ALL programs, not just lunch for hungry schoolchildren, including programs for national defense, police departments, fire departments, growth incentives, tax breaks, protective tariffs, insurance for pensions, bailouts for large business firms that go bankrupt, etc. There is no free lunch for farmers, airline workers, or car companies either.

There is no free ANYTHING. This is the true lesson of the production possibility frontier.

Focusing on a lunch program as the example of misguided generosity is a political ploy. Working class people and middle class people did not like paying indirectly for lunch for poor children when they also paid directly for lunch for their own children. They resented the poor, and free lunch became a focal point for that resentment. The Republicans selectively used a correct economic analysis as a tool for class conflict for partisan benefit. If the idea had been used correctly, it should have been applied to all programs, not just free lunch.

The real questions are where we wish to move money (resources) to, what we wish to move money (resources) from, and what we can afford.

No Cost Bonanza. The point of many programs is to give people benefits at below cost for them (paid for by other people), costs so low that people cannot gauge their use of the program by the costs. Why else do we give care to sick children with cancer, pay the heating bills for old people, or feed the homeless? If these people could pay the accurate cost for their benefits, then we would not need any programs. Some programs are all about disturbing the normal cost-to-value considerations. Some taxes are all about disturbing the normal cost-to-value considerations. Thus many programs invite some abuse.

Conservatives argue that these cases arise only because the state interferes in the market to begin with. Church ladies can afford to provide free soup but the state cannot. The Conservative response is to "privatize" these situations, as when apartment complex managers install electrical meters for each apartment. When the state does not provide a free good or low-cost good, then people and business firms have to face real costs, and so have to adjust use to cost. We have to force business firms off protection and off tax breaks, and back on to the free market. We have to force people off welfare so that they have to deal with the real costs of life.

With business firms, I generally agree. However, forcing individual people to deal with real costs works some of the time but not all of the time. The point of some programs is precisely just to insulate some people from real costs. Some people cannot bear real costs, such as widows, orphans, and poor children, and we need to insulate them from real costs. Some people really cannot find jobs that allow their children to be healthy and educated, because of the intrinsic operation of the economy. In these cases, the problem is to give people the benefit without allowing them to "overfeed at the trough" to the extent that their behavior endangers the source of the benefit. I cannot solve this problem definitively. Several of the remaining chapters in this part of the book address these issues in other ways.

Optional Sub-section. Addiction is a nasty version of the abuse effect. Unlike as with normal people consuming normal goods, with drug addicts the utility gained from each bout of drug use does not

decline much. In this way, the addicted good is like a near-free good. As a normal person, as I eat chocolate ice cream, the utility declines with each cupful until the utility declines to equal cost. But with addicts, that is not so. As long as cost does not increase much, then utility stays well above cost, so the drug user does not know when to stop. Tobacco use is like this, and alcohol use can be like this. On a less frightening level, some people can get stoned on marijuana and then play computer games all day long without getting bored, and, for them, the cost of pot and a new video game is small compared to the never-ending bits of joy.

A secondary complication arises when the naughtiness of the activity adds to the thrill. This can happen when we learn how to pilfer office supplies, to shoplift, to download porn from the Internet, or to shop compulsively. The thrill never diminishes so that it is less than the cost - until we have developed a habitual vice and it is long too late. This happens when people get a thrill out of buying jeans on sale even if they do not need them, from stealing paper clips that they do not need, or from getting any tax break: "money stolen is twice as sweet as money earned". Drug firms and health care providers do this when they abuse payments they get from the state, or what business firms do with protection and tax breaks. The military does this sometimes when it develops new weapons. Getting an appropriation from Congress is worth the wheedling even if we do not need the program. Then it is very hard to stop the behavior.

Ordinary people have a good intuitive sense of all these situations when they call abusive welfare recipients "junkies" and call modern mercantilism "corporate welfare".