

*History shows that these policies lead to shortages and stagnation;
so why do we want to control prescription drug prices?*

The Problems of Price Controls

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ONE OF THE MOST IMPORTANT issues to Americans is how to manage prescription drug prices, especially for seniors who depend on Medicare coverage. Some policy advocates are urging the federal government to contract directly with drug manufacturers to purchase drugs for seniors – at prices set by the government. Despite the high-minded intentions of these advocates, such price controls could be very harmful to Americans' future health.

When prices are held below natural levels, resources such as talent and investor capital leave an industry to seek a better return elsewhere. This means that there will be less discovery and innovation, and fewer new drugs will become available to consumers. Often this change happens over the long term — longer than the tenure of any policymaker. Thus, it is vitally important to remind policymakers of the effects of price controls whenever they are proposed as government policy.

DISRUPTING SUPPLY AND DEMAND

THE DETERMINING OF MARKET PRICES THROUGH THE dynamic interaction of supply and demand is the basic building block of economics. Consumer preferences for a product determine how much of it they will buy at any given price. Consumers will purchase more of a product as its price declines, all else being equal. Firms, in turn, decide how much they are willing to supply at different prices. In general, if consumers appear willing to pay higher prices for

a product, then more manufacturers will try to produce the product, will increase their production capacity, and will conduct research to improve the product. Thus, higher expected prices lead to an increased supply of goods. This dynamic interaction produces an equilibrium market price; when buyers and sellers transact freely, the price that results causes the quantity demanded by consumers to exactly equal the supply produced by sellers.

But when government adopts a price control, it defines the market price of a product and forces all, or a large percentage, of transactions to take place at that price instead of the equilibrium price set through the interaction between supply and demand. Since supply and demand shift constantly in response to tastes and costs, but the government price will change only after a lengthy political process, the government price will effectively never be an equilibrium price. This means that the government price will be either too high or too low.

When the price is too high, there is an excessive amount of the product for sale compared to what people want. This is the situation with many U.S. and European farm programs; government, in an effort to increase farm incomes, purchases the output that consumers do not want. This, in turn, prompts farmers to raise more cows and convert more land to pasture or cropland. However, the higher prices discourage consumers from buying farm products, causing an excess of supply (e.g. a "butter mountain"). Government then exacerbates this situation by continuing to purchase the excess crop at the set price.

Serious problems also result when government sets prices below the equilibrium level. This causes consumers to want more of the product than producers have available. When the federal government restricted gasoline price

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THE COST OF CONTROLS: Motorists wait in line to purchase price-controlled gasoline.

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increases in the 1970s, long lines formed at gas stations and only those motorists who waited long hours in line received the scarce gasoline.

In both cases of government price controls, serious welfare loss results because not enough of the good is sold. The wasted chance to create both producer and consumer surplus from those sales is known as ‘deadweight loss’ because it is income that is lost forever. In addition to creating deadweight loss, an artificially high price transfers profits from consumers to producers; these rents are often wasted because producers spend them on lobbying and other influence activities to maintain the regulated price. In the case of a low price, producers transfer profits to consumers. Consumers, in competing for a limited amount of the controlled product, may waste as much as they gain from getting it at a low price. For instance, the people who waited in the 1970s gas lines probably shouldered as much cost from the lost time queuing as they saved from the price controls on gasoline. (Researchers Robert Deacon and Job Sonstelie have even argued that the gas lines cost consumers more than they saved from the controlled gas prices.) Thus, the artificially low prices not only hurt producers, but also consumers.

PRICE CONTROLS AND HISTORY

GOVERNMENT GAINS FAVOR WITH VOTERS and constituents when it lowers the price of popular goods. Government also gains favor from lobbyists and firms when it raises prices to promote the health of the industry. Given these benefits to policymakers, it should not surprise us that price control is common in the history of western economies.

Bread and revolution Early twentieth century economist Henry Bourne documented the

effects of price controls on France in the years following the French Revolution, when city residents found it difficult to purchase grain. The grain shortages were not due to any agricultural problems; Bourne noted that 1793 France was a prosperous agricultural nation capable of feeding itself. Instead, the threat of famine was due to internal procurement and distribution problems created by the government. For example, agents for the city of Paris, the military, and the government competed with each other in trying to purchase grain. This created local shortages where none had existed before, and led to social unrest.

The city of Paris, in an effort to appease the public, decided to subsidize flour. This prompted bakers from neighboring towns to travel to Paris to purchase flour, creating even more shortages in the city.

The French Convention, which governed the nation at that time, tried to address the problem by establishing maximum prices for grain and instructing farmers to supply it



BREAD AND REVOLUTION: French women march on Versailles, 1789.



SOVIET CONTROL: Russian queue to purchase bread.

DIMITAR DENOV / AP

to local markets. As one might expect, farmers did not cooperate with the new law. Markets were empty of grain; further shortages developed; official tallies of grain supplies failed to find and keep track of stocks; urban riots continued.

The Convention passed another law later in 1793 extending maximum prices to other essential supplies. Those price controls, in combination with government requisitioning and corruption, created chaos in the French economy. Merchants responded by reducing the quality of their goods and the black market blossomed, Bourne noted. "It was the honest merchant who became the victim of the law. His less scrupulous compeer refused to succumb. The butcher in weighing meats added more scraps than before... other shopkeepers sold second-rate goods at the maximum [price].... The common people complained that they were buying pear juice for wine, the oil of poppies for olive oil, ashes for pepper, and starch for sugar."

Twentieth century examples The last century provided many examples of price control-generated economic problems in communist Europe. Economist David Tarr noted some of these problems in his study of the distribution of domestically produced television sets in communist Poland. Because the Polish government kept TV prices artificially low, demand far outstripped supply and televisions became scarce. A consumer who wanted a TV had to sign on to a waiting list. In most cases, the consumer had to visit the store every day to keep his place on the list. Tarr calculated that the social cost of the queue for television sets was 10 times the size of the standard dead-weight loss and that the cost of the price controls on televisions to the Polish economy was more than the industry's total sales.

In the 1980s, the Ministry of Finance in Japan regulat-

resources from household savers to large corporate investors.

If government prevents firms from competing over price, firms will compete on whatever dimensions are open to them. In the era of U.S. airline regulation when the Civil Aeronautics Board set prices, airlines tried to attract customers with food, empty seats, and frequency of flights. This form of competition can be as expensive as competing on price. Despite high prices and protection from new entrants, established carriers competed away their rents and did not earn high profits.

PRICE CONTROLS TODAY

DESPITE THIS WORRISOME HISTORY OF PRICE CONTROLS, government continues to follow the practice. In some cases, government disguises these policies with elaborate pricing schemes, but they still lead to serious problems for producers and consumers.

Rent Control Rent control provides a classic example of the distortions created by price controls. There are various forms of rent control, but they all take the shape of legally imposed below-market rates for rental housing. The results are well documented and perverse. First, a shortage of rental units arises as landlords become less interested in renting at below-market rates. Instead, the landlords choose to live in the units themselves, rent them to relatives, or sell them.

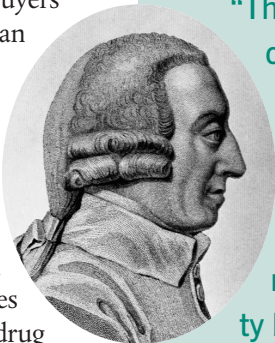
This shortage leads to a host of related distortions. For example, since there is a queue of people willing to rent each apartment and landlords are not permitted to discriminate based on price, the landlords will discriminate on whatever characteristic they please. Landlords may also ask for under-the-table payments from tenants or require renters to hand over an initial fee in order to sign the lease. Moreover, landlords have little incentive to maintain apartments;

it is more difficult to recoup the cost of improvements through the government-established price and, at the same time, there is a strong demand for apartments regardless of their condition. Consequently, the quality of housing stock declines and the area may come to attract less affluent residents. This hurts neighborhood businesses. New housing stock is less profitable to construct if government controls rental prices; thus fewer investors will engage in that activity and economic development will slow.

Medicaid and drugs In 1990, the federal government passed legislation setting new price levels that state governments would pay for pharmaceuticals provided by Medicaid. The rules varied across drugs, but in some cases Medicaid was entitled to pay no more than the lowest price that the drug company charged to any other customer.

Such a scheme may sound reasonable, but it distorts incentives in the drug market. Medicaid uses the existing network of chains and independent pharmacies to distribute drugs to its members, but many of these organizations do not have the scale to bargain for good prices nor the control to influence the prescribing physician. In these circumstances, they would not normally get the lowest price in the market; that goes to large buyers and HMOs or others who can “move market share.”

Faced with having to charge Medicaid the lowest price given to any other customer, pharmaceutical firms reduced discounts. The legislation resulted in an increase in drug expenditures for many private buyers as drug manufacturers tried to raise prices on government sales.



“The market price of any particular commodity, though it may continue long above, can seldom continue long below its natural price. Whatever part of it was paid below the natural rate, the persons whose interest it affected would immediately feel the loss, and would immediately withdraw either so much land or so much labor, or so much stock, from being employed about it, that the quantity brought to market would soon be no more than sufficient to supply the ... demand. Its market price, therefore, would soon rise to the natural price. This at least would be the case where there was perfect liberty.”

— Adam Smith, *The Wealth of Nations*

MARKET FAILURE

ONE OF THE REASONS THAT governments invoke price controls is to ensure that goods and services are sold at a ‘fair’ price. In a situation with numerous well-informed consumers purchasing from multiple sellers who can develop a reputation for high or low quality, the free market works well. The market price is ‘fair’ due to the competition between innovators and between buyers. However, there are occasions when entrants are discouraged or the information available to one or more parties is poor.

In such cases, government may impose price controls in an effort to protect citizens from exploitation. This might occur if patients had to choose drugs without the help of physicians, for example. In such a case, patients might need government protection from high prices for the wrong medicine. Our modern healthcare system largely removes this concern by employing informed physicians, pharmacists, and formulary committees who affect drug choice.

Early Puritan communities, described in Hugh Rockoff’s book *Drastic Measures: A History of Wage and Price Controls in the United States*, abandoned detailed wage and price controls shortly after imposing them in 1630 and 1633 because they were ineffectual. Subsequent laws against “excessive” prices were more vague and, according to Rockoff, aimed to prevent “sales influenced by fraud, ignorance, or short-run monopolies... rather than lowering the equilibrium price in a particular market.” His interpretation is that the Puritans faced underdeveloped colonial markets and so “competition could not be relied upon to regulate prices and protect consumers.”

A market failure, such as lack of entry, can be mitigated with the right price control, at least in theory. The difficulty lies in the execution. Typically, no entity is well informed enough to be able to exactly identify the imperfection, choose the correct price to rectify the situation, and then provide ongoing adjustment and enforcement. Competition is a better tool than price controls for protecting consumers; the Puritans appear to have realized that and gradually ceased using them. As Rockoff writes, “One would expect that as markets grew, producing a smoother flow of information... the need for regulation would have decreased. Indeed, that seems to have happened.”

More typically, governments try to fix the bad effects of price controls with subsidies to the discouraged activity. In the case of the pharmaceutical industry, these subsidies go to research and development. A subsidy could restore the free market outcome by lowering the cost of research. Again, however, the difficulty arises in choosing the level of the subsidy, deciding whether and how to award it to for-profit corporations, and avoiding inefficient lobbying and corruption. In practice, these are very difficult issues to manage in a way that benefits consumers.

LOWERING PRICES THROUGH THE MARKET

THE PRIVATE SECTOR HAS FOUND SEVERAL SUCCESSFUL methods for reducing the price paid by a buyer. In most cases, government can use similar techniques to get a low price for prescription drugs without disrupting the competitive market.

Buying in bulk The most common approach is to take advantage of scale. A buyer representing a large volume of market transactions can negotiate for a better price by threatening to backward integrate or to move its business to a competing supplier (if the product is not patent-protected). Moreover, a large buyer provides efficiencies to the seller. Lower transaction costs (one invoice, one negotiation, one shipment), guaranteed volume, and economies of scale create cost savings for the supplier that the two parties can share. The private sector provides countless examples of this approach; for example, big supermarket chains pay lower prices for packaged goods than corner stores because of large-scale central purchasing.

A slightly more subtle point of relevance to the pharmaceutical industry is that a buyer with significant volume can often get an even lower price by helping its supplier increase market share. Insurance organizations can agree to educate or encourage physicians to prescribe a certain drug. In return for altering market share in the provider network, the drug manufacturer offers the provider a lower price.

Foster Competition A buyer can explicitly foster competition where none exists. For example, several large corporations in the Detroit area recently began funding a small, low-cost airline named Pro Air that operates out of that airport. The Detroit airport is otherwise dominated by Northwest Airlines, which charges relatively high prices due to the lack of competition. General Motors, Masco, and Daimler-Chrysler each pay Pro Air a fixed sum of money per month in exchange for a certain number of flights for their employees. This gives the start-up airline stability and causes its competitors to realize that it cannot be driven out of business. By encouraging the entry and survival of a low-cost competitor to Northwest Airlines, the companies save both on the flights their employees take on Pro Air and also through any price reduction Northwest undertakes in response to the competition.

Information Another way to obtain lower prices through the market is for an independent organization to provide information on the competing alternatives to individual buyers. Using this information, an informed consumer can identify the product that best fits her needs and can demand a discounted price when purchasing a different product. Many large corporations take this approach with health plans for employees; the employee may choose among a set of approved plans and the corporation provides ratings or a scorecard to help employees compare the plans. The ratings cause plans to compete for customers on the price and quality dimensions.

CONCLUSION

THE IMPOSITION OF PRICE CONTROLS ON A WELL-functioning, competitive market harms society by reducing the amount of trade in the economy and creating incentives to waste resources. Many researchers have found that price controls reduce entry and investment in the long run. The controls can also reduce quality, create black markets, and stimulate costly rationing. In the case of phar-

maceuticals, the most damaging area is likely to be the reduction in innovation, which will harm all future generations of patients.

Although policymakers know that price controls can be very harmful, they continue to have strong incentives to legislate low prices for themselves. This often leads to the adoption of more sophisticated price controls. The government pegs its price to some reference price in the economy rather than choosing a fixed number, or sets its price a fixed amount below that of other customers. These schemes destroy welfare by inserting a new incentive into what would otherwise be a well-functioning market; either the price to non-government customers is higher or the price to poorer customers rises. More generally, the reference price chosen by the government rises because of the price control, not because of a change in the underlying forces of demand or supply.

The overwhelming evidence against price controls naturally leads to consideration of other methods of lowering purchasing costs. The private sector uses a number of methods that are both effective and consonant with a market economy. Such approaches, when used by the private market, are much less damaging to economic welfare than a government price control. **R**

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