Unintended Consequences and Intended Non-Consequences*

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The idea that government policies have unintended consequences has become a fixture of political argument, indeed a cliché. One can hardly get through a day's newspaper editorials without encountering it with respect to something in the news—the TARP bailouts, the North Korea bailouts, executive pay caps, local issues such as the drinking age and the driving age. "Unintended Consequences" is the title of many recent books—by Deepak Lal on the role of culture and politics in economic performance, by Peter Galbraith on the Iraq War, others on housing policy, drug policy, military history, technological change, a novel about gun control, even a Spider Man comic book. If you go to the blogosphere you will find almost a genuine google of postings based on the idea.

The phenomenon is a curious one if you take the term literally. Virtually every action of any consequence, private as well as public, has some consequences that were not part of the purpose of the action. If you attend a lecture at the American Enterprise Institute you may make an important contact but miss an important phone call or email. The human drama is replete with best laid plans going awry. Looking at things through the other end of the telescope, virtually every event has innumerable but-for causes, all the way to that Kansas tornado whose path is affected (according to chaos theory) by the flapping of a butterfly's wings in China. The manipulation of but-for causation is a staple of time-travel science fiction. Why should it be interesting and important that a government policy had consequences that were not intended?

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I. Unintended Consequences in Government and Politics

Unintended consequences may be a cliché, but like most clichés it contains a durable truth. In intellectual history, the discovery of the ideas of complexity, system, and ecology led to the realization that when one element in a complex system changes, other elements will change as a result, and then others, sometimes with profound consequences for the system as a whole. We are now long familiar with the fact that, in biological systems, one change—a mutation, the arrival of a new predator—will generate a cascade of adaptive responses. When the change is purposive, as in the introduction of a pesticide or antibiotic, the adaptations may altogether defeat the purpose—new, more resistant and aggressive pests or viruses may appear, and the system as a whole may have been weakened by the intervention in its ability to resist them.

Further complications arise in human social and economic systems: all actions, initial and responsive, are undertaken with some degree of purpose and foresight—and we, the observers, are part of the system and have purposes of our own and interests in the results. Adam Smith introduced the then-revolutionary idea that individuals pursuing their selfish interests promote a result—the prosperity of others and of the society as a whole—which was no part of their intentions. Of course, the individuals pursuing their selfish interests may fail to achieve them, even as they advance the public good (that they will fail to achieve them entirely is certain). And when they pursue not just their material self-interest but some larger social purpose, the hurdles in their path multiply. The sociologist Robert K. Merton published a big paper in 1936 on "The Unanticipated Consequences of Purposive Social Action." He was concerned not only with the actions of government (he mentioned prohibition and measures to revive the economy) but broadly with all purposive acts of individuals and groups—entrepreneurs, labor unions and other private associations, theologians and churches, and his fellow intellectuals. His reasons for unanticipated consequences included ignorance, error, short-term thinking, and "the essential paradox of social action—[that] the 'realization' of values may lead to their renunciation." The paper had a sensational, unsettling impact on

intellectual activists—including the young Irving Kristol, who would later lead the neoconservative movement in its efforts to understand unanticipated consequences at the level of practical policy.

It is certainly a good thing that discussions of government policy should be informed by these general considerations, and aware that government is a human enterprise working within a complex social ecology. But I think there are three particular reasons why the idea of unintended consequences has come to play such a prominent role in political debate.

First, in political debate, unintended consequences almost always means unintended negative consequences. The Interstate Highway System, begun in 1956, probably had the unintended benefit of hastening the collapse of racial segregation in the south, but I have never seen the point in debates over highway policy. Sometimes "unintended" means nothing other than "unfortunate." In a recent interview, Michael Mullen, the chairman of the Joint Chiefs of Staff, said that taking military action to prevent Iran from acquiring nuclear weapons would have unintended consequences. In the next sentence he said that permitting Iran to acquire nuclear weapons would also have unintended consequences. He meant simply that this is a case where all of the options are unattractive. If he had been reading AEI publications, he might have added that negotiating with Iran over its nuclear program will also have unintended consequences.

And if policy consequences are negative, they must be unintended. It is a custom of democratic politics, certainly of American politics, to give one's adversary the benefit of the doubt regarding intentions and motivations. Unless we are dealing with an obvious crook such as Rod Blagojevich or a political leper such as David Duke, we say that the gentleman is well intended and just as dedicated to the public good as we are, but is regrettably misinformed and mistaken in his policy positions. The custom is often ignored by radicals and increasingly by workaday pundits, but it continues to be followed by think-tankers and other earnest academic reformers, by most mainstream commentators, and by essentially all politicians.

The result is to focus debate on consequences rather than intentions. I may think that the purveyors of the sugar import quota

are just lining the pockets of their rapacious corporate contributors, the public be damned. But what I say is that I admire their efforts to provide hard-working sugar farmers with market stability and to counter unfair foreign child labor. Then I say that I have discovered that the quotas have inadvertently done more harm than good. They have raised prices to consumers, induced the development of sugar substitutes that have made things worse for the sugar farmers, and caused children south of the border to turn from sugar cane to poppies and thereby to a life of crime.

A wonderful example of the convention appeared in a paper on the 2008 financial crisis by former Senator Phil Gramm, delivered at AEI in January and later published in the *Wall Street Journal*. He said that the housing bubble-and-bust that precipitated the crisis was an unintended consequence of the Federal Reserve Board's low-interest-rate policies of the early 2000s, which had had the worthy purpose of getting us out of the previous, dot-com bubble-and-bust. That was probably a polite way of passing over his true views of the policies of his friend Alan Greenspan. Of course Greenspan and the Fed had not intended to set the stage for financial catastrophe. But cheap-credit policies have time and again purchased short-term relief at the cost of deeper problems down the road. The consequences, in kind if not in degree, were hardly beyond anticipation.

The second reason is that government and politics are uniquely complex and contingent. The problematics of purposive social action identified by Robert Merton are certainly present in government action, but government is in a class by itself. The state, in Max Weber's formulation, is the monopoly of lawful violence. Its essence is the use of fearful and often harmful means—physical coercion—for purposes of achieving desirable ends—public goods, from peace to pollution control. Weber emphasized the moral dilemmas of combining violent means with idealized ends, but the practical dilemmas are equally important.

The state actor, whether a king or a chairman of the House Committee on Ways and Means, is much more constrained than a private actor—by the competition for power and the necessity to maintain support for the exercise of power. And when action is taken,

and force is publically deployed across a broad population, there is bound to be resistance of various kinds. Within a population of any size, there will be a spectrum of differing circumstances, interests, values, and resources among individuals and groups, and where coercion is involved the stakes will often be very large. The resistance will often have the advantage of surreptitiousness or at least privacy. In response, the state actors will be in the unique position of being able to change the rules in mid-game.

That will typically be seen as an advantage, but over time it is often a weakness. It is very difficult for government to lash itself to the mast, to foreswear short-term opportunism, to credibly pre-commit to staying a course. A constitution and an independent judiciary are only partial solutions to this problem. Today our government could not possibly make an effective commitment not to rescue large banks that fail through excessive risk-taking. That creates "moral hazard," the tendency of insurance to encourage the very behavior insured against. In private insurance markets, moral hazard is routinely policed by contract. Modern American government is essentially a gigantic insurance company, in both domestic and international affairs—but one whose ability to regulate moral hazard is disabled by its own unbridled power. And moral hazard is a prime source not only of unintended consequences but of perverse consequences, a subject I will get to in a moment.

Imagine a chess game in n dimensions, where some of the n players are known to only some of the others, some players are committees that include some other players and that decide moves by vote, and some players have budgets for exchanging the identities of their pieces as the game proceeds—knight for rook, pawn for king. But even that would not capture the full complexity of political action. In politics, the participants come and go but the game itself never ends. A player can gain advantages but never win (it is said that all political careers end in failure), and so may play for immediate advantages that disadvantage those who come later.

The extreme contingency of politics and government is the source of interest of counterfactual history, a field ploughed by Niall Ferguson, Newt Gingrich and William Forstchen, and others. The field

is a useful antidote to sweeping theories of historical determinism, but it does not yield policy advice. If Lee rather than Meade had prevailed at Gettysburg, the Union might have defeated the Confederacy sooner because the crisis might have impelled Lincoln to put Grant in charge without further delay. But it is difficult to say what the next general or president should make of this, beyond what could be gleaned from studying actual history. Strategic theory formalizes the lessons of conflict: when to hold 'em and when to fold 'em, when to advertise and when to conceal one's own constraints, how to snatch victory from defeat. But strategy is advice for participants on how to win, not advice on the right result for everyone else.

The third and most important reason for the focus on unintended policy consequences is that the term has inherited a secondary, more precise meaning from an earlier time. That meaning is that policy consequences are not merely unintended but perverse—counterproductive and self-defeating—and to some extent are *systematically* perverse. The harder-edged proposition was forged by economists and neoconservatives during the period of great social, political, and intellectual ferment in the 1960s and 1970s. A pointed bold assertion has now evolved into a pervasive mild cliché. This may reflect the passage of time from a revolutionary moment to one of relative stability, as background radiation is the faint remainder of the cosmic Big Bang. But it also reflects a certain fudging, the result of uncertainty over the parameters and generality of the stronger proposition. So let us see what that proposition was, and is, made of.

II. Perverse Consequences—The Neoconservatives

The argument for perverse policy consequences had two branches, neoconservative and economic. The neoconservative branch was concerned primarily with social welfare policies—some of them going back to the New Deal, but most undertaken through the Great Society programs of the mid- and late-1960s, and later including the racial affirmative action policies begun in the early 1970s. The line of argument was heralded in two seminal books, Jane Jacobs's *The Death and Life of Great American Cities* (1961) and Martin Anderson's *The Federal Bulldozer: A Critical Analysis of Urban Renewal, 1942–1962* (1964)

(but Anderson is a libertarian economist, not a neoconservative). The works argued that government efforts to improve the conditions of urban life—city planning in the case of Jacobs, federal urban renewal in the case of Anderson—had instead made those conditions much worse. The urban neighborhood was a dense living ecology of social relationships; patterns of daily living and working; norms of public behavior; and implicit understandings about the uses of sidewalks, shops, and other public spaces. Efforts to improve housing and public spaces, imposed from the outside according to abstract notions of good design, uprooted the organic connections between society and physical environment. "Urban blight" is the term planners used to describe lively but ramshackle city neighborhoods. They left worse blight in their paths.

Arguments of this form then appeared in profusion during the next two decades, especially in the pages of *The Public Interest*, founded in 1965 by Irving Kristol and Daniel Bell. It was a time of great social turmoil—urban crime and riots, family breakdown, growing illegitimacy, worsening race relations, deteriorating municipal finance, and menacing developments in major cities such as the appearance of pornography "combat zones" and large numbers of homeless vagrants. The government's response was LBJ's Great Society—the War on Poverty, community action, and Model Cities programs and others concerned with education, job training, and transportation. The theme of the neoconservative critique was that these liberal interventions were making matters worse. They were heedless of the cultural underpinnings of the problems they addressed. By substituting government provision for the obligations and opportunities of civil society, they were pouring gasoline on the cultural fires. When Kristol said that a neoconservative was a liberal who had been mugged by reality, the reality he had in mind was the incorrigibility of human nature and social institutions.

It was an astonishing argument, altogether different from the traditional conservative complaints about the costs and waste and abuse of welfare spending and departures from constitutional tradition. Welfare programs were not only bad for taxpayers but even worse for recipients. Urban aid programs were not only costly for the

federal government but even worse for city governments. In a later extension of the argument, racial affirmative action programs were not only bad for whites but even worse for blacks.

The neoconservative apotheosis came in 1984 with the publication of Charles Murray's *Losing Ground: American Social Policy 1950–1980.* It analyzed a wide range of welfare programs with great subtlety and depth, but became best know for its proposition that AFDC (Aid for Families with Dependent Children, first established in 1935 during the New Deal) was making poverty worse by fostering long-term welfare dependency, discouraging workforce participation, and encouraging illegitimacy and family breakdown. To the welfare reformers in the Ronald Reagan White House, this appeared as a bizarre and incomprehensible thesis—in California and Washington, their efforts had been aimed at getting the cheats and welfare queens off the rolls so as to leave more money for the deserving poor. But by the end of his second term, President Reagan himself had come around; many good liberals did too, and a decade later the Murray argument was embraced in the Welfare Reform Act of 1996.

In 1988, Nathan Glazer, Irving Kristol's coeditor at *The Public Interest* since 1973, published a book titled *The Limits of Social Policy*, which summarized the neoconservative argument as follows:

> *1. In our social policies we are trying to deal with the breakdown of traditional ways of handling distress. These traditional ways are located in the family primarily, but also in the ethnic group, the neighborhood, the church.*
> *2. In our efforts to deal with the breakdown of these traditional structures, our policies are weakening them further and making matters in some important respects worse. We are making no steady headway against a sea of misery. Our efforts to deal with distress are themselves increasing distress.*

Glazer did not, however, believe that the neocons had discovered any general theory or immutable law of policy perversity. The deterioration of social institutions had been a manifestation of profound cultural developments. Even where the government policies had predated the social problems, as in the case of AFDC, the empirical record was ambiguous regarding causation. Government

had simply proven inadequate to the problems it confronted; it might do better next time .

Murray acknowledged that the empirical record was not itself decisive but pressed harder for a systematic theory. Government, even one without political or resource constraints, had but two things to offer: rules and money. "Any compulsory transfer," he wrote, "unavoidably puts a terrific burden on the rule-maker to be 'right' in decisions that call for very subjective, difficult judgments about who has a greater need of what, and about long-term versus short-term outcomes." Murray then worked through a relatively easy case, having nothing to do with the social pathologies of the sixties and seventies, to determine when rules and money transfers might be expected to do more good than harm. We have a billion dollars to spend in any way we like to encourage cigarette smokers to quit. After analyzing the parameters of the problem, we decide to pay a substantial lump sum, $10,000, and to focus on heavy smokers at greatest health risk. Eligibility is limited to people who have smoked at least a pack a day for five years; quitting is remaining smoke-free for one year, and no one may reenlist after quitting.

Under reasonable assumptions, our program is a debacle. Of those who qualify at the outset, some would have quit anyway, but others are indeed pulled over the line by the reward. Over time, however, the program easily induces more smoking than quitting. There are many marginal smokers—those who smoke less than a pack a day, or have smoked for less than five years, and were going to quit on their own—for whom $10,000 is a powerful inducement to extend their habit a bit. After they smoke more or longer, their addictions deepen and quitting rates decline. Everything we do to fix the program—targeting lighter, newer, or younger smokers—raises additional complications. The result is robust across assumptions about smoking populations and degrees of addiction, although if we assume that it is really easy to quit we can achieve results that are not perverse but merely wasteful and ineffective. The only program that generates net benefits is a one-time, never-to-be-repeated reward to current heavy smokers. But then Murray removes the stipulation of political autonomy. Our program has been a big success, editorial

writers insist that it be continued, and Congress instructs us to stay at it and gives us a bigger budget! Which destroys the one program element—the element of surprise—that had been essential to success. Democracy plus success equals moral hazard and failure.

III. Perverse Consequences—The Economists

The second, economic branch of the perverse-consequences school was centered at the University of Chicago, American Enterprise Institute, and Brookings Institution; it made a few appearances in *The Public Interest* but published mainly in academic journals such as the *Journal of Law & Economics* and *Journal of Political Economy* and in AEI's *Regulation* magazine. The focus was not social welfare programs but regulation and antitrust—policies that are all rules and no money, and that aim to improve the operation of markets. Here the arguments were not so new as those of the neoconservatives. Economists had been demonstrating the ineffectiveness of price regulation for a very long time. That the minimum wage produced unemployment among some of the intended beneficiaries—those whose labor was worth less than the legal wage and would have been willing to work for a lower wage—was a staple of economics courses. But now economists turned to the work of the regulatory agencies—the Progressive Era and New Deal agencies such as the Interstate Commerce Commission (ICC), Food and Drug Administration (FDA), Federal Trade Commission (FTC), Securities and Exchange Commission (SEC), Federal Communications Commission (FCC), Federal Power Commission (FPC), Civil Aeronautics Board (CAB), and those regulating public utilities, banking, and insurance; the newer, 1970s programs of "social regulation" such as those of the Environmental Protection Agency (EPA), National Highway Traffic Safety Administration (NHTSA), Consumer Product Safety Commission (CPSC), Equal Employment Opportunity Commission (EEOC), and Occupational Safety and Health Administration (OSHA); and the 1970s programs of economy-wide wage-and-price controls and energy regulation.

The economists found that these programs were almost invariably ineffective. Sometimes they produced social benefits, but less than expected and at very high cost, as in many studies of EPA

rules. Sometimes they seemed to have no discernable effect at all, as in a famous study by George J. Stigler of SEC financial-disclosure requirements. But in a remarkable number of cases they found that the programs worsened the very problems they were supposed to ameliorate. One simple study, really just a price survey, showed that airline fares within California, which were entirely unregulated, were lower than CAB-regulated interstate fares on the East Coast; this was an important weapon in the battle for airline deregulation. But the most important contributions—the regulatory equivalents of Murray's *Losing Ground*—were two studies by Sam Peltzman in the early 1970s that appeared first in the *Journal of Political Economy* and were later expanded into AEI monographs.

The first study showed that the FDA requirement that new pharmaceutical drugs be proven effective before they could be marketed had been a public health disaster. Before the requirement was introduced in the early 1960s (adding to the long-time requirement that drugs be proven safe), ineffective new drugs had quickly flopped in clinical practice—so there was little the regulatory requirement had to add to market performance. But the considerable costs and time delays of demonstrating efficacy through clinical trials had done tremendous health damage. First, they had delayed the introduction of many effective new drugs, typically by several years during which, under the previous regime, the drugs would have been saving lives and ameliorating disease. Second, by shortening the effective patent life of new drugs, the delays had reduced returns on investment in pharmaceutical research and development and thereby suppressed such investment. The damage greatly outweighed the benefits of averting the occasional ineffective drug.

The second Peltzman study found that NHTSA automobile safety regulation, in particular the initial seat-belt requirement, had increased the frequency and severity of automobile accidents. Belted drivers were certainly much better protected when accidents occurred, but their greater safety led them to drive more aggressively—which led to more accidents that injured unbelted passengers and, in particular, pedestrians.

The "Peltzman Effect" has since been demonstrated in a variety of regulatory settings. Two instances, mentioned by Peltzman himself in his 2004 Distinguished Lecture at the AEI-Brookings Joint Center for Regulatory Studies, concern the Americans with Disabilities Act (ADA) and the Endangered Species Act (ESA). The ADA forbids discrimination in employment against disabled people and requires "reasonable accommodation" of their disabilities. In practice, this has increased the risks and costs of hiring and employing the disabled, especially during initial periods when a new hire's on-the-job proficiency is being assessed. As a result, employment rates for the disabled have fallen noticeably. Under the ESA, owners of land where endangered species dwell may not alter the land in any way that harms the species. The program's record of recovering species that it identifies as endangered is practically zero. One apparent reason, documented in case studies, is that once a species is added to the endangered list, owners of land *adjacent* to current dwelling places accelerate and intensify development plans, so their land becomes inhospitable before the species grow in numbers and migrate there.

A glance at the AEI website will reveal many plausible suggestions of the Peltzman Effect in current regulation. The financial bailout drama of 2008—saving firm A on Monday, letting similar firm B fail on Tuesday, arranging a shotgun merger of firms C and D on Wednesday, all without any explanation of the grounds of decision or of how the next case would be judged—probably worsened the collapse by introducing massive uncertainty into credit markets. In a recent AEI lecture, Alan Greenspan lamented and puzzled over the lack of creation of new banks—free of toxic assets and ready for lending. The reason, according to Alex Pollock, is that the regulatory authorities are actively discouraging new banks so as to channel capital into the incumbent troubled banks, many of them now holding substantial government investments.

Regulation is so frequently counterproductive as to raise the questions raised by Glazer and Murray in the context of money transfers: Are perverse consequences inherent in the regulatory enterprise, and if so to what extent? There are some answers to be had in the nature of regulatory politics and program structure. For one

thing, the purposes of regulatory programs are often highly ambiguous. If the true purpose of the minimum wage is not to aid marginal workers as a whole, but instead to benefit some marginal workers at the expense of others, then the fact that the program increases unemployment is not really perverse or unintended. Despite political niceties, everyone knows that the real purpose of sugar import quotas is to restrict supply for the benefit of domestic farmers—and higher prices are inherent to this purpose. Even when regulatory commissions are established with the genuine purpose of protecting consumers against the economic power of large suppliers, it is the suppliers who will attend most closely to programs' administration over time—so it is not surprising that the Interstate Commerce Commission and similar agencies evolved into price-fixing cartels. Pre-1980s antitrust policy, which the Obama Administration is hoping to resurrect, protected some firms from more efficient rivals and thereby perverted the purpose of protecting market competition and consumer welfare. Some of this was simply economic mistake and misguided populism, but an important cause was that most antitrust complaints are filed by disgruntled competitors, not consumers.

Interest-group politics aside, the very act of substituting administrative procedures for market procedures can defeat regulatory purposes. The insurance business is unconcentrated, with lots of competing firms of varying sizes, and it is subject to strict and often highly populist regulation in some states and very little regulation in other states. Insurance rates are generally higher in the populist, highly regulated states. The culprit is the requirement that rate changes be publicly filed in advance, followed by (at a minimum) a waiting period. That suppresses normal price competition and gives each firm detailed advance knowledge of what his competitors are up to. Recently enacted credit card legislation, hailed by President Obama as a stroke for consumer protection, imposes a similar procedure on changes in interest rates; it will have a similarly perverse result.

It is also possible that the sheer size and ambition of modern government have become dysfunctional. Friedrich Hayek's great teaching—that diverse and particular economic knowledge cannot be concentrated in one place sufficiently to permit intelligent decisions

about production and distribution—is highly apropos the work of regulators. Although the rationale of the mission-specific regulatory agency was that it would permit policies based on expertise (a French word adopted in the United States during the New Deal), no one who has observed the workings of the agencies will think that they know remotely as much as individual market participants, let alone the collective wisdom of the whole crowd. Going beyond Hayek, Ronald Coase, who edited the *Journal of Law & Economics* through most of the 1960s and 1970s, suggested that the problem of centralized decision-making had become one of organization as well as information. Although he (curiously) chose a spending rather than regulatory example, his sally is worth quoting:

> *I have come to the tentative conclusion that government at the present time is so large that it has reached the stage of negative marginal productivity, which means that any additional function it takes on will probably result in more harm than good. . . . If a federal program were established to give financial assistance to Boy Scouts to enable them to help old ladies cross busy intersections, we could be sure that not all the money would go to Boy Scouts, that some of those they helped would be neither old nor ladies, that part of the program would be devoted to preventing old ladies from crossing busy intersections, and that many of them would be killed because they would now cross at places where, unsupervised, they were at least permitted to cross.*

IV. Perverse Consequences of Regulation— An Alternative Explanation

I want to suggest an alternative reason for thinking that regulation is systematically ineffective and often perverse. The problem is inherent in the nature of regulation itself and is more fundamental than the problems of politics, program design, information, and organization that I have mentioned.

Regulation is characteristically discussed in terms of broad purposes—correcting market failures, internalizing externalities, protecting consumers, averting financial bubbles, smoothing off the rough edges of capitalism. But what it comes down to in practice is the promulgation of rules, usually very narrow and specific rules,

applicable to otherwise private conduct. The rules may specify or limit prices, product designs, production methods, the uses of land or other property, the information firms provide to investors or consumers, the forms of financial or operating arrangements among firms, or who may provide goods or services in certain markets. Functionally, a rule may be thought of as a government-mandated term inserted into an otherwise private contract that has many terms. The government specifies or limits a price, a feature of product design, a disclosure statement, a method of production. Before the regulatory intervention, the contract terms reflected purposes that were wholly private—consumers' varying preferences, and producers' varying efforts to satisfy those preferences at minimum cost and maximum profit. Then the government adjusts a single term in an effort to achieve a public purpose. But myriad contract terms remain unregulated—and they naturally adjust, in response to the change in the regulated term, as consumers and producers continue to pursue their private purposes, which are independent of the public purpose.

Of course the regulator may specify more than one contract term—utility commissions typically regulate both price and service quality. But even the simplest of contractual arrangements involve innumerable terms, many of them subtle and implicit and therefore difficult to observe and control from the outside. Consider that price is itself a many-faceted thing, much more than a single number and some of the facets unobservable. Price may include financing from the seller, which may be explicit, as in the case of automobiles, or implicit, as in the case of payment terms (cash or thirty days, past-due fees, more or less patience with past-due accounts). Price may include volume discounts or loyalty discounts, may vary by time and method of payment and delivery, and may interact with the prices of complementary goods or services from the same supplier or others. And suppliers may charge a lump sum to become a customer in the first place, a device doctors are now using to maintain their practices in the face of Medicare price controls on individual medical services. To the extent that unregulated price elements adjust to compensate for regulated ones, regulation will be simply ineffective in raising or lowering price. The revised pricing regime may benefit some

consumers at the expense of others (similarly as the minimum wage), but it will typically be less advantageous on the whole, else it would have been adopted without the government's requiring it.

Rules may also regulate quality—specifying the design or features of products and services, disclosure and advertising, or production methods. These rules also present opportunities for offsetting adjustments within the activity being regulated, especially in information provision. The recent additions to corporate accounting and financial-disclosure obligations, under the Sarbanes-Oxley Act and other laws, have prompted a marked reduction in other, less formal and more qualitative forms of corporate reporting—annual reports have grown mum and opaque. Consumer product labeling requirements, as for food ingredients and nutrition, have prompted many clever revisions in packaging and quality claims. The FDA's campaign to prevent drug manufacturers from informing doctors about "off label" uses of approved drugs (that is, uses that have be found effective in clinical practice but that the FDA has yet to add to the label) have prompted alternative, albeit inferior, methods for keeping doctors up to date. But quality regulation frequently consists of requiring some additional product feature or more costly method of production, and the potential for offsetting adjustments in features or production is limited.

Where quality regulation is effective, the next line of adjustment is price—and where price regulation is effective, the next line of adjustment is quality. The price of today's automobiles includes thousands of dollars for safety and pollution-control equipment. When the CAB effectively held airline fares above competitive levels, airlines competed in service quality more than they do today—many of the first 747s featured piano bars. When banks were forbidden to pay interest on savings and checking accounts, banks gave their depositors consumer goods as premiums (that is the source of the current joke: "Buy a Toaster, Get a Free Bank!"). Conversely, the quality of transfused blood is lower where payment for blood is restricted or prohibited. One area where it is reasonably clear that price-reducing controls have prompted quality adjustments that have increased total expenditures is physician and hospital services under

Medicare. Here, it has been relatively straightforward to adjust the composition of supply (substituting clinical tests for physical exams, for instance) in response to the higher demand that the price controls have generated.

The final form of adjustment is the behavior of the parties to the regulated contract and of others who are not party to the contract. This is the Peltzman Effect—extra-contractual behavioral responses, which are difficult or impossible to control through rules and are probably the most important source of regulatory ineffectiveness and perversity. I have said that the contracts regulators are attempting to revise reflect the private purposes of consumers and producers. But the contract itself is not their purpose, but only a means—and only one of many possible means—to the pursuit of larger purposes. The regulated parties have been pursuing their purposes subject to resource constraints (that is the definition of human choice). All the regulator has done is to add an additional constraint. When the price or quality of a good or service is changed, the quantity demanded by consumers and supplied by producers will change, consumers and producers will substitute other activities in pursuit of their private purposes, and third parties will accommodate to the new activities. Here are a few examples of how this works:

In the price reduction arena, price controls on natural gas, oil, and other energy sources have regularly produced shortages and queues, such as the famous gas station lines of the late 1970s. At a minimum, these responses eliminate some of the intended cost savings of the price controls; they may eliminate all of them or more—increasing total costs.

In the price increase arena, inflated sugar prices have accelerated the introduction of sugar substitutes, and inflated telephone rates have accelerated the introduction of Internet telephony. These are instances of the general tendency of price-fixing cartels to sow the seeds of their own destruction.

In the quality change arena, the addition of pollution-control and safety devices to new cars has led to price increases that have induced many people to continue driving older cars, which are less safe and produce more pollution, longer than they would have.

Similarly, industrial pollution controls, which are much stricter for new plants than existing plants, have slowed the pace of retirement of older, dirtier plants. The reductions in the rate of introduction of new pharmaceuticals, in the employment of disabled people, and in the habitats for endangered species are similar responses. In these cases, the behavioral adjustments compromise the achievement of the regulatory purposes. They may go so far as to altogether defeat the regulatory purposes or to exacerbate the problems addressed.

Let me conclude this discussion with six propositions. The first three summarize the argument so far; four, five, and six then extend the argument and lay the groundwork for the final section.

First, the regulator, in attempting to achieve some public purpose, faces a powerful headwind of private purposes that are independent of the public purpose and operate directly or indirectly against its achievement.

Second, the regulator's means of achieving the public purpose consist of issuing and enforcing explicit rules. Explicit rules are a small subset of the multifarious means by which producers and consumers pursue their private purposes.

Third, private contractual and extra-contractual responses to government rules will always compromise the achievement of the rules' purposes to some degree, and will sometimes altogether defeat those purposes or produce opposite results. One can escape this conclusion only by assuming that the government rules will themselves nudge private behavior in the direction of the purposes behind the rules. That is not impossible, but experience suggests that private purposes, especially in economic markets, are extremely durable in the face of adjustments to specific rules.

Fourth, the greater the divergence between public and private purposes, the greater will be the tendency for private responses to nullify government rules. This is the regulatory analogue to Charles Murray's demonstration that paying people to quit smoking produces more smoking when it is hard to quit but is merely ineffective when it is easy to quit. In the limit, a government rule that replicates a private rule will be perfectly ineffective—there will be no private adjustments, and only dead-weight costs of rule-making and enforcement. Thus, if

the FDA judged the effectiveness of new drugs by permitting their introduction for a two-year trial period, it would largely replicate private behavior and eliminate the suppression of effective new drugs. A government price or product-quality rule that departs only modestly from the market rule may be easy to adjust to within the contract, nullifying but not perverting the public purpose. Larger departures will be increasingly difficult to adjust to within contracts, leading to behavioral responses: partial or complete withdrawal from the contract market and the pursuit of private purposes by alternative, less desirable means. The alternative means can easily produce results opposed to the regulatory purpose.

Fifth, regulatory ineffectiveness depends critically on the rate of technological change or other "natural" (i.e., unregulated) social change. Newer products and production methods are more efficient than those they replace. Efficiency improvements will typically include lower cost; more complete use of inputs; less pollution and other uncompensated by-products; and quality improvements that include attributes, such as safety, that consumers value independently of regulatory purposes. When price-increasing quality regulations slow the rate of replacement of older industrial plants, automobiles, and consumer products subject to safety, environmental, or energy-conservation mandates, this will typically compromise the achievement of the regulatory purpose. Similarly, when private social norms—for example, the propensity to hire and accommodate disabled people—are changing on their own, regulation may slow the rate of change.

This is not to say that private social and technological change always moves in the direction of regulatory purposes—although I will suggest in the next section a reason for thinking that this will usually be the case. For now, the important point is that the greater the rate of change, the greater the potential for regulation to be self-defeating. At the same time, a higher rate of unregulated progress will complicate the demonstration of regulatory ineffectiveness or perversity. The clearest demonstrations come from looking at the effects of new regulation at the time of imposition—the Americans with Disabilities Act in 1990, the FDA drug-efficacy requirement in 1962. But over time,

it will become increasingly difficult to sort out the effects of government rules from those of private developments. A regulatory program may have highly perverse consequences, but those consequences may be swamped in the aggregate by other developments, and the proof will depend on assumptions about the other developments, or comparisons with the experience of other nations with different policies; these are subject to greater disagreement than a before-and-after study covering a brief period of time. The highway fatality rate has been falling constantly since the onset of automobile safety regulation in 1966—at about the same rate as before 1966, but that was a long time ago. Workplace safety has been improving since OSHA was established in 1970, but a big part of the story is probably the maturing of the baby boomers who were fresh to the workplace back then; plant safety directors will tell you that OSHA rules are more often a hindrance than a help. In 1984, the economist Paul W. MacAvoy published a study finding that most of the reduction in industrial air pollution in the decade following the establishment of EPA in 1970 could be attributed to rising energy prices. No one would assert that EPA has been ineffective in reducing pollution in the aggregate over the past thirty-nine years, although there are many instances in which individual rules have been counterproductive at the margin.

Sixth, the self-limiting and possibly self-defeating character of externally imposed rules is independent of the problems of interest-group politics, administrative procedures, incomplete information, and excessive centralization that have been mentioned as sources of regulatory ineffectiveness. Even a regulator who is pristinely devoted to the public interest and in possession of perfect information will have limited ability to control, through issuing and enforcing rules, all of the private behaviors that affect the achievement of his policy goals. But in practice the rule-making problem will interact with the others. Producer and consumer groups that are politically well-situated and in possession of superior information may influence the structure of rules and program administration so as to provide opportunities for contractual and behavioral adjustments, even to the point of obtaining explicit exemptions. More generally, the official nature of government

rules will involve both disadvantages and advantages as compared to those of private contracts: the government rules will carry stronger sanctions for their violation, but will be clumsier—slower to adjust in response to changing circumstances and the behavior of other participants, and more prone to sudden revision or abrogation for extraneous political reasons. Centralization of rule-making may create problems of its own (information deficiencies, per Hayek, and diseconomies of scale, per Coase), but will have the advantage of reducing opportunities for behavioral adjustments through out-migration of people, plant, and capital: it is easier for markets to subvert New York City rent controls than a program of national rent controls. The policy-monopoly advantages of centralization are probably an important source of the problems of over-centralization.

V. Intended Non-Consequences

The currently popular formulation of unintended policy consequences is a useful reminder that government actions usually set off complex courses of events with results the proponents had not anticipated. But a more precise formulation is available in many circumstances. At least where narrow-purpose money-transfer and regulatory policies are concerned, we can be confident that the results will fall short of the advertised purposes and will frequently defeat those purposes, making the problems addressed worse than they would have been. The stronger formulation merits greater investigation and assertion in policy debate—especially by philosophical conservatives now in exile in the political wilderness. Conservatives place a high value on individual liberty and think that the economy is generally more productive, and that society solves problems more successfully, when government is much more limited, decentralized, and restrained than it is today. But conservative principles are seriously out of official favor for the time being. What is not out of favor is the American spirit of pragmatism and problem-solving, which is embraced across the political spectrum. To show that specific policies are failing to advance their own purposes, or are making matters worse, seems like a promising line of argument in current circumstances. And such showings are components of larger limited-government propositions

that need to be kept alive intellectually until policy developments summon their return to practical political debate.

But I want to push the argument a step further, because it seems puzzling that the government should be doing such a great number of things that are pointless or self-defeating. We have, to be sure, seen some genuine progress. *Losing Ground* precipitated welfare reforms whose benefits are well-documented, and the FDA critiques by Peltzman and others led to modest but useful improvements in the regulation of new drugs. The CAB and ICC were abolished. Today's information economy would have been throttled in the crib by pre-1980 antitrust and FCC policies. And where the government does things itself, rather than giving orders to others, conspicuous perverse consequences have produced impressive improvement. In 1976, the government's extravagant swine flu inoculation campaign, based on a single influenza outbreak that had sickened several hundred people and killed one, itself killed several hundred people; this year's U.S. response to the Mexican swine flu has been vastly more intelligent and fine-tuned, even though this flu has been as surprising in its features as that of 1976. Nevertheless, the general pattern is persistence in failure. Even in the absence of a brilliant academic study, political officials and program administrators often have a keen sense that they are standing still or losing ground. Where is that can-do spirit I alluded to, and the natural process of improving by doing?

I want to suggest that policies that are flaccid and porous, with lots of room for maneuver on all sides and ample opportunities for unobservable avoidance, are a central feature of modern democracy. So far I have not used the word "incentives." But an alternative way to explain the failure of welfare and regulatory policies is that they fail to create private incentives for the pursuit of their public purposes. Indeed they do the opposite: they create incentives for avoidance and for behavior that compromises or defeats their purposes. Perverse incentives are pervasive in the policies we adopt, but those policies are not the only ones at government's disposal. Government has the means, through properly structured taxes and subsidies, to powerfully redirect private incentives toward intended ends. It doesn't use them: it leaves the best arrows in its quiver.

In 2006, Charles Murray essentially solved the problems of perverse incentives and perverse results that he had identified in *Losing Ground*. His book *In Our Hands: A Plan to Replace the Welfare State* laid out a broad income-transfer program that would immediately eliminate much of the problem of strictly material poverty that has eluded poverty warriors for a half century, and create profound incentives for family and community regeneration. The book has not been a big success. Indeed the Murray Plan seems to be a political non-starter. Unconditional money transfers, and creating incentives for right conduct unmediated by rules and supervision, seem to be obnoxious ideas to many in the policy community of all political persuasions.

Similarly, in 1975, in the midst of the previous oil-price shock, Congress determined that something had to be done to wean Americans from big, gasoline-guzzling automobiles and reduce our dependence on oil, especially foreign oil. The policy it chose was the Corporate Average Fuel Economy program—CAFE—which established minimum average fuel consumption standards for each manufacturer's car and truck fleets of various categories. The program was described by all concerned as a landmark victory for energy conservation, and the claims have been repeated each time the standards have been tightened, most recently by the Obama Administration. But after a third of a century of CAFE, American drivers are consuming more fuel per capita than they did in 1975.

Part of the reason is that the program has tried to push auto design only slightly ahead of what it would have been anyway under the influence of prevailing gasoline prices. Part is that, to the extent the car standards were binding, a big loophole was maintained for what became popular new forms of vehicles—family vans and SUVs. And an important part has been behavioral responses—Peltzman Effects—that no regulatory redesign could counter. Cars that are lighter, less powerful, and more expensive per capacity measure are less attractive to many people, and this has led to a substantial lengthening of the life-spans of older, less fuel-efficient vehicles. And drivers of new cars with higher miles-per-gallon have responded to

the lower per-mile cost by driving more and thereby eating up some of the conservation gains.

None of this was foreordained in the nature of government action. If Congress had instead imposed a substantial gasoline tax, say several dollars per gallon, the conservation effects would have been immediate, pronounced, and inescapable and would have been realized in all vehicles of every size, both old and new. Private incentives would have been aligned with rather than against the avowed public purpose. But there would have been another response that would have been even more immediate: there would have been rioting in the streets, and every legislator who voted for the tax would have been retired at the earliest opportunity. Americans do not want their driving incentives realigned. Instead, in the same statute that established CAFE—the misnamed Energy Policy and Conservation Act of 1975—Congress *lowered* gasoline prices through price controls on domestically produced crude oil. That would have led to more rather than less fuel consumption—except that the cost savings were themselves consumed by the time-costs of the gas station lines of the late 1970s.

Let me generalize from these examples and a few additional ones. When it is proposed that the government solve a problem, that means, by definition, altering some prevailing course of events in the society, and that means altering the behavior of some individuals and groups. The bigger the problem, the more numerous are the people who will have to change their ways, the more they will have to change, or both. But people do not like to be forced to change their ways, even when they acknowledge that it would be desirable for everyone to do so. And political representatives and government officials are their agents—they must be responsive to the very people who need reforming. These circumstances create powerful incentives for crafting programs that have the *public goal or purpose* of correcting a problem, and seem plausibly related to correcting it, but in fact permit wide latitude for responsive adjustments. The adjustments are not without costs, but the costs and social disruptions will be radically less than a serious, full-throttled pursuit of the announced purpose would have entailed. Furthermore, in the case of regulation, the adjustments

will characteristically be undertaken in the first instance by producers rather than consumers. The resulting changes in price or quality that consumers observe will be difficult or impossible to differentiate from changes that would have occurred anyway (because of changes in market demand or production technology), and thereby to ascribe to government policy.

I am not saying that political leaders intentionally devise do-nothing policies. It is the process rather than anyone's intent that is important. For every incipient government program, there will be committed legislative advocates, committed opponents, and many followers who are indifferent or uncertain and primarily concerned with maintaining their seats. Once a consensus has emerged sufficient to make some action likely, the advocates begin negotiating and compromising with the opponents and bystander-followers to gain the needed legislative majorities. That involves both popular politics—avoiding action that would energize the opposition of large numbers of unorganized voters—and interest-group politics—the distribution of exemptions to those in a position to block the program, which compromises the program's purpose (but not so much as to unduly weaken the support of proponents). Most of all, it involves crafting a program that a sufficient number of participants are "willing to live with." That means a program that many people can see their way around. The possibilities, if not the precise nature, of behavioral adjustments will be implicitly anticipated in the fashioning of the legislative coalition; they will be insurance against the possibility of manifest disruptions once the program gets going.

The current development of a cap-and-trade program for controlling emissions of greenhouse gasses is a striking instance of this phenomenon. It is a reprise of the politics of CAFE standards on a vastly larger scale. AEI scholars and many others have shown that a tax on the carbon content of fossil fuels could achieve a substantial reduction in carbon dioxide emissions in short order. Such a policy, however, would make the fabulous economic costs and dislocations of short-term reductions in ubiquitous CO_2 emissions apparent for all to see: it would force immediate wrenching changes in production and consumption, and is therefore of no interest to practicing politicians.

One can design a cap-and-trade program (setting a cap on either total carbon content in fuels or total CO_2 emissions, and creating tradable permits totaling the amount of the cap) with the same economic and emission effects as a carbon tax of any given rate. But emissions cap-and-trade presents decisive political advantages. Unlike a carbon tax (or carbon cap-and-trade), emissions cap-and-trade requires monitoring tens of thousands of sources for a profuse, hard-to-measure substance, which necessitates modeling and estimation procedures with wide latitudes for adjustment and fudging. Moreover, while emissions permits could be auctioned—yielding government revenues equivalent to a carbon tax—they can also be distributed for free—so that the value of the new resource constraint goes to those who receive the permits rather than to the government. That is the approach of the Waxman-Markey bill now under development in the House of Representatives.

Free permit distribution is not itself a weakness from the standpoint of achieving a given emissions reduction. The permits will find their way, through trading, into the hands of those who can use them most efficiently, and the effects on prices of carbon-intensive products and services will be the same as if they had been auctioned. Indeed free distribution is a powerful advantage for the committed proponent of greenhouse gas reduction—because the permits can be given to political favorites, in particular to those who could effectively block legislation in the absence of payment. For the sincere proponent, giving opponents money rather than exemptions is vastly preferable, as Harvard's Robert Stavins has argued.

The problem is a different one. Under emissions cap-and-trade with free political distribution of permits, it becomes possible to set the cap, and distribute the permits, in such a way as to avoid the need for painful changes in production and consumption, and to conceal the ineffectiveness of the resulting regulatory scheme. In practice, free distribution promotes rather than displaces the distribution of exemptions. A large part of the legislative drafting has been devoted to ensuring that electricity consumers do not see price increases, and coal miners do not lose their jobs, at least not in the lifetimes of the drafters. But coal is such a large source of CO_2 emissions that without

large reductions in coal use the program has no hope of succeeding. Disproportionate burdens can be shifted to the petroleum sector, but we know what American's think of gasoline taxes, and the price of heating oil is a sensitive political subject in New England; so special dispensations can be expected here as well. There are several sources of such dispensation. In place of reducing emissions or purchasing emissions permits, firms will be allowed to purchase offsets—such as paying for planting trees or reducing emissions in foreign countries. Such transactions are hard to monitor and essentially impossible to assess for their real contribution (beyond what would have happened anyway) to greenhouse-gas reduction. A scheme for adjusting permit allocations over time according to reported current output and emissions seems designed to introduce subjectivity into the program and forestall price-increasing adjustments in production.

And the greatest variable of all is the level of the cap, at the outset and down the road. A very low carbon tax, or a permit auction that generated a very low price, would immediately reveal that the program would be ineffective. The trading prices of freely distributed permits will be revealing, too, but much more complex and open to interpretation because of the varying obligations the program will place on different sectors. In the end, it will be possible to say that it is best to get the system in place now and tighten the screws later, as program experience accumulates and production technology improves. That is an excellent argument. It is also a confession of ineffectiveness—global warming proponents emphasize the urgency of immediate emissions reductions—and a means for postponing hard decisions to another day. The Waxman-Markey bill is profuse with special regulatory provisions—renewable-energy mandates, product-efficiency standards, even a program for national building codes—that would be superfluous under an effective cap-and-trade program.

The gulf between even a moderately effective greenhouse-gas program and a politically feasible program is so great that that it may be impossible to legislate anything beyond a symbolic bill justified as a first step on a long road. A final backstop is to leave the matter to the EPA: this would also guarantee a porous, ineffective program, because the Clean Air Act is designed to abate low levels of specific pollutants,

not a byproduct of all combustion. We shall see. The important points for the present discussion are these:

First, it is extraordinarily difficult for a government that is as responsive to outside influence as ours is to enact policies that require genuine, substantial changes in private behavior.

Second, rule-based regulation, combining ambitious formal purposes with ample room for escape from the rules themselves, will often present an attractive solution to the dilemma of highly responsive government.

Third, highly responsive government will typically regulate in the direction of, rather than in opposition to, changes in technology and private behavior. Doing so is an aspect of responsiveness in the first place, and over time it will tend to produce results that appear successful and that mask the ineffectiveness or perverse consequences of rule-based regulation. The health, safety, and environmental regulatory programs of the past forty years have been prompted by increased public demand for the goods the programs seek to provide, and boosted by the fact that production technology and market demand were to some degree providing the goods independently. Greenhouse gas reduction is the hardest possible case: an effective program would require very large changes in private behavior, it appears that only an ineffective program is politically feasible for the time being, and the prospect that technological change will ameliorate the problem independently (e.g., through the development of low-cost, non-carbon energy generation) remains highly uncertain.

It remains to be said—recalling the proposition at the end of the previous section—that the coincidence of regulatory purposes and technological change does not reduce, and in fact increases, the potential for counterproductive regulation. When I was myself a government regulatory official in the early 1980s, it seemed obvious to me that the proposal to require new cars to be equipped with airbags (which inflate on collision) had delayed the introduction of this life-saving technology for many years. Airbags are a conventional good—their benefits redound to the purchaser, not to third-parties (following the logic of the Peltzman study, they may provide disproportionate benefits to purchasers at the expense of third parties). The basic airbag

technology existed and automobile manufacturers had produced and sold a few prototype versions in the 1970s. But the rate of market diffusion was critical, as in the case of other innovations such sun roofs and GPS navigation. A first-of-its-kind airbag—expensive, bulky, less proven than it would be—might be attractive to an affluent family living in a big city with two teenage sons, but worse than useless to a single woman of modest means who always buckled her seatbelt. With time and experience, quality would improve, price would fall, and the devices would become standard equipment. It was the regulatory proposal that all cars be equipped with airbags at once—at very high price and before the accumulation of practical experience and improvements—that shifted the calculus of manufacturers and led to an all-or-nothing political imbroglio that lasted nearly a decade. I know of no rigorous study of this thesis, but it is certainly plausible and was accepted by some NHTSA officials and automobile safety experts. If it is correct, the costs in highway deaths and injuries were very large. But those costs were masked by aggregate improvements in highway safety caused by other changes in technology, highway design, and driving behavior. And they are now dissolved in regulatory history: if NHTSA abolished the airbag rule today, the airbags would remain and continue to improve.

Temporizing rather than solving problems is an important attribute of modern politics. That is not all bad: problems solve themselves in many cases. But when government comes along for the ride, and pretends to be at the head of the parade, it can do substantial damage along the way. A government that was more autonomous than ours—better able to give directions and less prone to take directions—would be in a stronger position to solve genuine public problems but liable to other sorts of abuses. For better and worse, the government we have is characterized by big political talk and anemic policy action. In these circumstances, calling attention to the chasm between talk and action, and the collateral damage it can inflict, is a worthy task for political criticism and liberal reform.

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