A Typology of Interventionist Dynamics¹

Robert L. Bradley Jr.
Institute for Energy Research
iertx@swbell.net

The proliferation of new forms of government interference into the market is certain to present many new challenges for the analyst in the future. . . . But I believe all these will prove susceptible to the Misesian critique of interventionism and . . . [to] a general typology into which any interventionist policy can be classified.

- Don Lavoie (1982: 180)

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Twentieth-century Austrian economics identified government intervention into the market economy, not only the market economy itself, as a *process* (High, 1991). Ludwig von Mises is credited with this development (Ikeda, 1997: 1-3; Kirzner, 2001: 176-81). Mises, appreciating the natural workings of the market economy, saw interventionism as inappropriate, unstable, and likely to grow until faced with the all-or-nothing choice of either total repeal or total control ([1952], 1980). Mises' student, F.A. Hayek, similarly noted that "the close interdependence of all economic phenomena makes it difficult to stop planning just where we wish," and "beyond a certain degree, the planner will be forced to extend his controls until they become all-comprehensive" (Hayek, 1944: 105).

The *Mises interventionist thesis* was restated by Don Lavoie:

Attempts to violently manipulate the outcomes of [the market] process lead to reactions that the intervener can neither specifically predict nor effectively prevent. Efforts to make the initial intervention work as designed must take the form of ever-wider and more obtrusive interventions, which are in further conflict with the workings of the market mechanism. In the end the interventionists must either extend their activities to the point where the process has been completely sabotaged or they must abandon their quest to control the market. Any "middle way" between the extremes may, of course, be advocated but would consist in a series of haphazard shocks to the system (Lavoie, 1982: 180).

Sanford Ikeda in the Misesian tradition described the "micro-crises" of sequential endogenous intervention:

Perceived problem in a? intervention in a? problems in a & b? intervention in b? another problem in a? another intervention in a? problems in a, b, & c? more intervention in a, b, & c? crisis in a? etc. (Ikeda, 1997: 133).

The Mises interventionist thesis in the above reincarnations provides a foundation for understanding the mixed economy in theory and practice. This paper strengthens that foundation by adding a process-oriented typology of interventionism. A typology by Murray Rothbard (1962: 766-68; 1970: 11-12), dividing government actions into *autistic* (government? individual), *binary* (government? individual), and *triangular* (government? two individuals), was a static classification, not a step-by-step examination of the interventionist process. Yet Rothbard, a dynamicist, spoke of the "direct and indirect" effects of intervention and its disruption of "interconnected" markets (1970: 12; 1962: 826).

Rothbard elsewhere (1971: 205) praised Mises for his "notable" theory explaining how "an intervention generates unintended consequences and difficulties," leading to ever more difficult choices to expand or repeal the intervention. Rothbard describes Mises' "cumulative . . . logic of intervention" as "ecological" but does not develop the concept himself. Rothbard's analysis of the history of government intervention in money and banking, however, employs Mises' interventionist thesis (1963, 1990: 88-89).

Economists outside of the Austrian tradition studying real-world interventionism have independently reached the basic insight of the Mises interventionist thesis—the propensity of inappropriate government intervention to expand in the clumsy and ultimately ill-fated attempt to achieve economic rationality. Alfred Kahn (1971, vol. 2: 28-29) spoke of the "historical principle" of "one interference with competition necessitate[ing] another and yet another." James McKie (1970: 9) described the "tar baby effect" of government intervention continually reacting to the "compensating variation" of entrepreneurs. Other regulatory economists have similarly interpreted this dynamic (Bradley, 1996a: 1770-71).

A Dynamic Typology

Elsewhere, I have put forward a dynamic typology to interprete the history of interventionism into U.S. energy markets (Bradley, 1996a, 1996b, 1996c).³ This typology, which is also applicable to non-energy intervention, including the welfare state's "transfer dynamics"

(Ikeda, 1997: 40), can be employed for prediction *ex ante* or historical analysis *ex poste*. The examples herein mostly refer to energy, an active area of interventionism at all government levels for over 150 years.⁴

A. General Categories

Three classifications can capture and qualitatively describe virtually all interventions in a market: *dormant vs. causal, non-initiating vs. initiating*, and *initiating vs. consequent* (*cumulative*). The interrelationships of each are illustrated in **Figure 1**.

Dormant vs. Causal

The first classification of an interventionist dynamic identifies a regulation as being either dormant or causal to market decision-makers. A *dormant intervention* does not impact the market—either because the market would act in the manner prescribed by the regulation anyway, or because the regulation does not applying to actual or anticipated conditions. *Causal intervention*, by contrast, impacts the decision-making of market participants.

A dormant regulation could be a dead letter still on the books that is irrelevant, non-operable, or not enforced. An example of a *superfluous* regulation is a law in San Francisco left over from the horse-and-buggy era regulating the amount of horse manure that can be deposited on street corners (Bradley and Fulmer, forthcoming). An example of a *latent* regulation is a "price gouging" law intended for times of a natural disaster that may go long periods without having an effect. But it is potentially active unlike the superfluous regulation. A example of an *ignoble* regulation is one that impinges on everyday voluntary actions but is violated with impunity such as some morality codes.

A distinction between dormant and causal intervention was recognized early in the history of economic thought by Adam Smith, who differentiated between "useless" and "hurtful" regulation regarding a protective monopoly for domestic producers against importers. If the domestic good was naturally cheaper, the intervention was "useless;" if the home product was more expensive, the monopoly grant was "hurtful" (Smith, [1776], 1981: 456).

An intervention can be causal in one direction and dormant in another. Regulation "x" may be seen as applying to area "a" but not "b." This is relevant to a regulatory process since

dormant intervention can become causal. For example, a novel interpretation of a "dormant" statute can make it effective. In 1953, for instance, a proposed natural gas pipeline interconnection between a Canadian and U.S. firm near Niagara Falls was blocked by a rival pipeline pursuant to Canada's Navigable Waters Protection Act. The private action was upheld by Canadian authorities, although it was considered frivolous and legalistic by critics. As intended, the regulation worked as a stop-gap measure for its beneficiaries until a federal license system was enacted by Parliament that formally regulated (and in this case, blocked) the planned interconnect (Kilbourn, 1970: p. 42). With broad statutory interpretation—and an activist judiciary—laws such as this lie in waiting.

Cause-and-effect in a typology of interventionism comes from the mind of the economic decision-makers, which can make dormant regulation casually effective on closer inspection. The *potential impact* of an otherwise out-of-the-market intervention is crucial. With a price gouging law, "dormant" is really causal if *expectations* incite sellers and buyers to hold less precautionary inventory. In Adam Smith's example, "useless" protectionism may actually be "hurtful" if it incites domestic merchants to be less efficient or discourages investment in the export business of the foreign country. Another example is a mandated price ceiling that is normally above the market that *could* come into play (as determined by the market) during a price spike, such as for wholesale electricity produced in California. *Potential* price constraints affect the economics for building new capacity in this example, especially "peaking plants" that operate only for the highest-priced hours of the year.

As these examples show, there is less dormant and more causal intervention than often meets the eye. The paucity of dormant regulation reflects the fact that virtually all intervention is *intended* to affect market behavior, although it often has *unintended consequences*.

Non-initiating vs. Initiating

A dormant intervention is an end in itself and not subject to dynamic analysis outside of its antecedent history. It may finally be repealed, but there is little else to be analyzed outside of any potential it has to "come alive." Causal intervention, on the other hand, has economic consequences subject to additional analysis.

A *non-initiating intervention* is one that does not engender subsequent intervention. An example would be a prohibition against smoking near gas pumps at a service station. Such

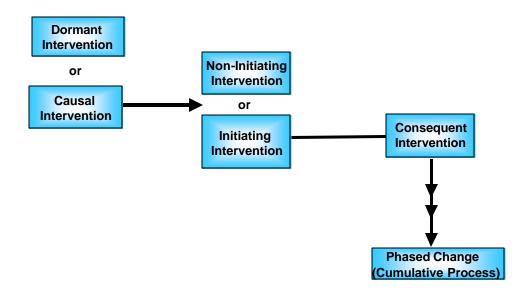
regulations might be subject to reinterpretation or could be marginally altered, but such revision would be self contained and unlikely to inspire add-on or corrective action. These stationary statutes, which may be repealed, are qualitatively different from an *initiating intervention* that inspires further government activism.

As with dormant intervention, non-initiating intervention is rarer than is first realized. A quiet-but-causal intervention is really initiating if it contributes to intervention in another jurisdiction or time period, as discussed below.⁵ There might also be an *indirect effect* whereby an otherwise non-initiating intervention inspires the political or market decision-makers to increase or reduce interventionism elsewhere. Psychologically, interventionism begets interventionism (Ikeda, 1997: 176; Higgs: 261). The converse could also be true; deregulation can drive further deregulation as seen with the U.S. transportation industries in the 1980s that was based on common economic precepts (Winston, 1998).

Initiating vs. Consequent

An initiating intervention spawns further intervention into the economy. In all cases, the ensuing intervention can be traced back to the initiating intervention, which by definition is also a causal intervention. A dormant intervention, on the other hand, cannot be initiating without first becoming causal as shown by the linkages in **Figure 1**.

Interventionist Typology

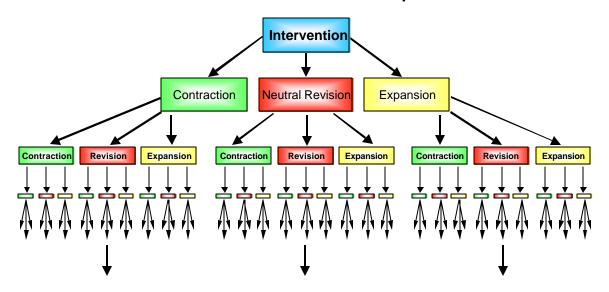


The complexity of the cumulative process⁶ makes it the most consequential to the economy and challenging for the analyst to trace and describe.

B. Cumulative Process

An interventionist statute or administrative regulation therefrom can be *expansionary*, *contractionary*, or *both* at any point in the cumulative process (**Figure 2**). Alternatively, a consequent intervention can endure in its original form or be revised in a neutral (non-contractionary or expansionary) way.

Cumulative Interventionist Dynamics Possibilities Map



Expansionary

Consequent intervention can be divided into *phases* with the first general expansion being Phase I, the second Phase II, and so on. The chronological sequence can occur over a short or long time sequence and involve new jurisdictions. Public utility regulation of manufactured gas distribution in the last century, for example, was a cumulative process to "plug regulatory gaps" that would spread from localities to states and finally to the federal level—federally, first to regulate interstate natural gas transmission and then regulate natural gas production dedicated to interstate commerce (Bradley, 1996b). Federal wellhead regulation itself would go through

multiple phases—a cumulative process within a cumulative process.⁷ While commodity prices were finally deregulated in the early 1990s, a new phase of public utility regulation began for interstate transmission firms—mandatory access at "non-discriminatory" rates and terms of service (Bradley, 1996b: 16-19). The cumulative interventionist process that began with manufactured (coal) gas in the 19th century continues with natural gas into the 21st century.

Accounting and related managerial regulation was a cumulative process within public - utility-regulated industries. Initial regulation in the late 19th and early 20th century at the local and state level inspired opportunistic business strategies to maximize profits and accounting strategies while avoiding public scrutiny. Authorities, in response, implemented new accounting and reporting requirements, which inspired new business strategies, further regulation, and so on. ⁸ C.O. Ruggles, professor of public utility management at Harvard University, described the march of managerial oversight by public authorities:

There has been a steady growth in commission jurisdiction over more types of utilities, and greater authority over the managerial affairs of the utilities. This latter tendency was apparent as early as 1890 ... but it is doubtful if anyone at that time could have anticipated the extent to which internal operations of utilities would be made subject to actual regulation by utility commissions. . . . Increased attention was focused especially on such matters as the power to change contract rates, to issue terminable or indeterminate permits, to control depreciation rates, to approve consolidation and mergers, and to authorize the construction of electric transmission lines (Ruggles, 1937: 56).

The step-by-step dynamics of regulation and utility accounting practices, many unsound (May, 1943: 297), is a fertile area of process analysis.

Contractionary

Deregulation or *dis-intervention* (Ikeda, 1997: 139) is an unwinding process that can occur *incrementally* with the removal of cumulative expansions or *totally* with the repeal of the initiating intervention upon which the cumulative intervention rests. Contraction can begin immediately after the intervention takes effect or occur after a prolonged expansionary process.

Incremental dis-intervention is unlikely to "play the tape in reverse." Decision-makers would likely remember the expansionary phase as unstable and prone to revision. Economic circumstances and political constituencies would have changed. More likely, the dis-interventionist path will occur in fewer steps than the expansion did—and maybe in just one step.

Phased wellhead deregulation of natural gas prices between 1978 and 1993 followed a different (although intricate) course than did the jurisdictional buildup of price controls between 1940 and 1954 and administrative revision from 1954 to 1978 (Bradley, 1996b: 12-18). Petroleum deregulation in 1981 instantaneously eliminated many programs for producers, refiners, and distributors that had been introduced and extensively revised between 1973 and 1980—the Maximum Petroleum Price Regulation, Old Oil [Refinery] Entitlements Program, Small Refiner Bias, Supplier-Purchaser Rule, Buy-Sell Program, and Crude Oil and Petroleum Product Reseller Rules (Bradley, 1996a: 508-10, 1689-90, 1786-89, 1861).

The contractionary progress can begin from isolated liberalization in a centrally planned economy. *Perestroika* in the former Soviet Union is an example of creeping liberalism, although later developments proved how unstable the progress was (Boettke, 1993).

Mixed Expansionary/Contractionary

Cumulative intervention, as mentioned, can contain expansionary and contractionary parts. "Managed deregulation" under the Natural Gas Policy Act of 1978 extended interstate price controls to intrastate wellhead gas for the first time. This expansion of intervention was joined by price decontrol, immediate and phased, for certain gas categories (Bradley, 1996b: 15). The most recent phase of public utility regulation concerning natural gas, as mentioned, included commodity deregulation coupled with mandatory open-access requirements on interstate pipelines.

Comprehensive, industry-wide legislation can contain many threads of intervention and dis-intervention. The 373-page Energy Policy Act of 1992, "a constellation of energy and environmental regulatory minutiae and pork for all energy sources and technologies" (Bradley, 1993: 1), concurrently relaxed regulation for certain energy activities. Judgment is necessary amid the myriad regulatory, subsidy, and tax provisions to determine whether the *overall effect* represents less or more intervention than before—and whether the package creates more or less momentum toward (de)regulation in the future.

Macroeconomic

The cumulative process has a *macroeconomic* dimension if the interventions are causal enough to materially move the aggregate statistics of employment, output, and income. An example is an economy-wide initiating intervention such as a central-bank credit expansion

triggering a wave of government action and reaction. If inflation creates an unsustainable boom, the intervention inspired by the ensuing contraction (public works, wage edicts, tariffs, securities regulation, etc.) is cumulative intervention that can have a macroeconomic impact. The policy activism surrounding America's Great Depression, first under Hoover and then FDR, is a classic example (Rothbard, 1963, 2000).

The microeconomic has touched on the macroeconomic with petroleum regulation in the United States. During World War I and World War II, and again in the 1970s, rising prices from expansionary monetary policy led to price and allocation controls on petroleum (along with many other goods), a classic cumulative scenario (Bradley, 1996a: 466-86, 1786-87).

Interventions with key energy inputs have caused macroeconomic dislocations. Shortages of natural gas and gasoline in major metropolitan areas in the 1970s closed factories and disrupted transportation with ripple effects on major parts of the structure of production. In 2000/2001, electricity shortages occurred in major metropolitan areas of California, the world's fifth largest economy.

Simultaneous advanced cumulative processes in different industries can be analyzed together to gauge their overall economic effects. Such "macro" intervention can have "macroeconomic" effects.

Jurisdictional/Geographical

Many regulations have traveled from state to state and then been federalized to expand coverage and promote uniformity. Examples include rate and entry regulation for railroads, trucks, securities, oil pipelines, manufactured/natural gas distribution, and electricity distribution (Bradley 1996a: 1722-89). Each represented an expansion of the cumulative process. However, the net effect can be contractionary if the federal one-size approach eases compliance or is less interventionist than the state regulation it replaced.

The cumulative process can link domestic to international policy. The U.S. Mandatory Oil Import Program of 1959, which set effective quotas on crude oil and oil product imports, particularly hurt Venezuela, the leading exporter to the United States. In response, Venezuela led the negotiations that resulted in the formation of the Organization of Petroleum Exporting Countries (OPEC) in 1960 (Bradley, 1989: 67-68). Parochial intervention by the U.S. that

created, in effect, a domestic producer cartel led to the creation of an international oil-state producer cartel. *Retaliatory* action is a not uncommon cumulative process given an initiating international trade restriction.

Intermittent (Non-sequential)

The cumulative process is temporally sequential in the large majority of cases as one intervention gives impetus to the next. But there can be instances of interventions being related after an interim noninterventionist period. Energy planning is an example. World War I provided a precedent for New Deal planning, and both episodes inspired World War II planning. Bureaucratic planning during the brief Korean conflict occurred for little other reason than it was done in World War II (Bradley, 1989: 29-30; Bradley: 1996a: 234, 248, 1780-81).

Another example of psychologically related, intermittent intervention oncerns pro industry regulation that turned into anti-industry regulation. Wellhead oil regulation and taxation benefited the southwest oil states at the expense of the northeast consuming states from the 1920s through the 1960s due to the political balance of power. With energy price spikes and shortages in the 1970s, the Northeast exacted political revenge by obtaining legislation that imposed price ceilings and other unfavorable regulation on major parts of the oil industry (Bradley, 1996a: 1855, 1860). To some extent, the political ill-will generated by pro-industry interventionism made subsequent anti-industry intervention cumulative.

C. A Methodological Note

The range of possibilities and special cases outlined above mirrors the panoply of subjective, causal motivations driving the interventionist process. Accordingly, the different categories of this dynamic typology are *qualitative*, making historical judgment necessary to identify initial categories and evaluate linkages as strong or weak, direct or indirect, sequential or intermittent, microeconomic or also macroeconomic, and regional, national or international.

There cannot be a *quantitative* typology because interventionist dynamics, like the entrepreneurial process elsewhere, is purposeful human action. *Scale* is not a determining factor. Local nondescript regulation that is initiating can be considered part of a cumulative process just as the major revision of a national price control program. The historian, however, may sharply differentiate between the two.

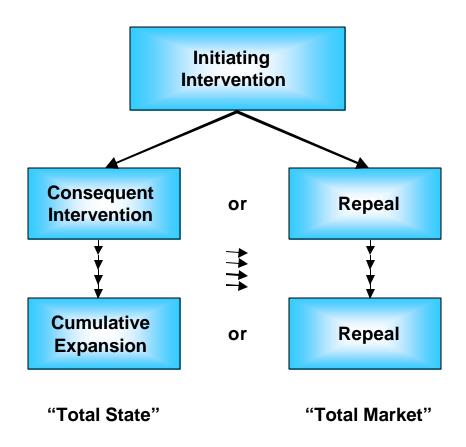
D. Mises Interventionist Thesis

Ludwig von Mises saw interventionism as a powerful, inexorable force in the market economy. In Mises' words ([1952] 1980: 28):

Intervention cannot be considered as an economic system destined to stay. It is a method for the transformation of capitalism into socialism by a series of successive steps.

The Mises interventionist thesis can be viewed as a subset of our typology. It is the initiating/consequent case that results in total intervention in a sector (micro case) or general economy (macro case)—or a crisis-inspired repeal of the government action at any stage to establish, or reestablish, a free market situation as seen in **Figure 3**.

Mises Interventionist Thesis



The Mises formulation has partial, not total, empirical applicability. ¹⁰ Intervention can be relatively innocuous and stable whereby the government action endures without significant

expansion or contraction. Mises' "slippery slope" argument that leads interventionism to socialism (Kirzner, 2001: 178) is inconsistent with some, or many, real-world examples of interventionism (Butler, 1988: 86-88).

A fertile example concerns public -utility regulation of different industries over the last century in all the states of the union. Some electric utilities were municipalized in response to problematic regulation—a localized example of Mises' thesis. Some electric municipalities were privatized—another all-or-nothing example congruent with the Misesian framework (Bradley, 1996c: 67-68; 72-73). But in many states cost-based regulation has marched on for decades without crisis and with limited revision.

Industry-wide, the breakdown of U.S. federal railroad regulation led to a presidential nationalization order in 1917 (Bradley, 1996a: 977). Similarly, growing government intervention in the coal industry of the United Kingdom led to performance problems and nationalization in 1917 and 1946 (Haynes, 1953; Dintenfass, 1992). The nationalizations were later followed by denationalization and regulation, rather than total decontrol as the Mises' interventionist thesis might suggest. Mises' logic of interventionism again comes into play, but as prominent examples, not an iron law.

The Mises interventionist thesis can be employed to identify a *critical mass* whereby a crossroad is reached between total regulation and total decontrol. But short of an iron law, a crisis can lead to new halfway measures. In California, for example, rules governing mandatory transmission access and spot market sales for electricity have been redesigned in response to a performance crisis. Emergency measures increased intervention in 2001 after elements of deregulation within a regulatory framework were introduced in 1998 (Sweeney, 2002).

Socialists themselves who originally saw interventionism as "a step toward socialism" discovered that the middle-way, however unstable in its parts, was well ensconced between capitalism and socialism. Noticed Gabriel Kolko (1970: 203):

Socialists everywhere failed to understand the [U.S.] political-economic process they were living through ... was pragmatic, haphazard and hardly comprehended by even its most sophisticated advocates. Nothing in socialist theory, much less *laissez faire* and marginal economic theory, prepared socialists for the possibility that a class-oriented integration of the state and the economy in many key areas would rationalize and strengthen capitalism.

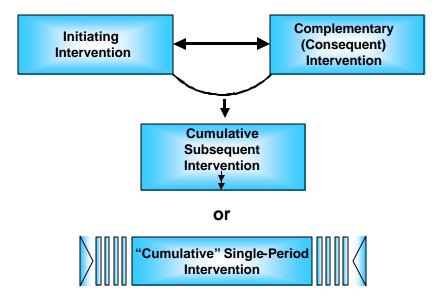
E. Interventionist Learning

Mises' formulation emphasized intervention as a series of steps with the unintended consequences of each intervention leading to a decision for complementary intervention or total repeal. This general description, while accurate in some or many instances, does not account for *interventionist learning* where the initiating intervention can include *complementary intervention* and become, incrementally at least, a more stable regime. A price control statute, for example, can include allocation controls given an anticipated need to address shortages created by the (causal) price ceiling. Since "to every government action the private sector reacts or accommodates, and the government further reacts as the private sector 'talks back' to the government" (Shultz and Dam, 1977: 8), there is opportunity for intervention to anticipate and "capture" at the outset at least part of the "gaming" to come.

Complementary intervention can bypass some of the would-be cumulative process by front-loading intervention. In the limit, "perfect" regulation would anticipate and eliminate all the trial and error of a cumulative process. The economic results would be less desirable than a free market situation, but from the viewpoint of regulators it might be the most desirable (or least undesirable) outcome. This theoretical limit is not for the real world, however. Front-loaded intervention is likely to simply create a new base for a cumulative process given omnipresent error, surprises, and plan revision.

Figure 4 illustrates two scenarios where intervention is front loaded, one with a reduced cumulative process and one where the (would-be) process is comprehensively implemented in the opening period.

Front Loaded Interventionism



These two illustrations assume that the regulatory process can be known before its time, a debatable postulate. But the general point is valid—mature intervention can incorporate up front what less mature intervention would grope to embody over time.

Consequences: Intended and Unintended

Ikeda (1991: 291) has identified three different aspects of an interventionist dynamic. One aspect is the general economic process, presented above. A second is the political motivation, the "why" behind interventionism, which is examined in the next section of this paper. A third area is the intended and unintended consequences of intervention, the subject of this section.

The *intended consequences* of an intervention are not of particular interest to the social scientist except to understand the causal relationship between intention and result. A match of intention and result equates to success for the involved political entrepreneurs.

Unintended consequences have been a hallmark of interventionism due to complexity of policymaking where "everything is related to everything else" (Shultz and Dam, 1977: 7). Yet interventionist learning can be expected to increase from greater experience and knowledge by the many stakeholders in the process—regulators, politicians, lobbyists, entrepreneurs, social scientists, and public. The "unintended" would increasingly turn into the "collateral," leaving the desired and intended consequences, the *political* side, of interventionism.

Three categories within unintended consequences can be distinguished: *predictable*, *unpredicted*, and *unpredictable* (Bradley, 1996a: pp. 1790-92).

The predicable consequences of an intervention are those that can be reasonably foreseen from an understanding of interventionism—such as the implementation of allocation regulation following price regulation. Even if the price controllers profess surprise at the resulting shortages and the need to manage them, the social scientist can claim to know that this should have been a reasonable expectation.

Other unintended consequences may be less predictable *ex ante* but understandable *ex post*. "We should have known" might characterize the examples as the unpredicted. Oil protectionism by the United States, as mentioned, inspired the formation of OPEC. Wellhead price controls on crude oil during the 1970s created an oil trading boom in which price-controlled oil was sold back and forth, driving its price up to "monopolistic" world price. Such "gaming" defeated the aims of regulators despite their best efforts to prevent it (Bradley, 1996a: 1803-04). Shortages of natural gas in the 1970s caused by price regulation shifted electricity generation toward coal—and higher air emissions (Bradley, 1996a: 1267). The rise of regulatory accounting in the public utility-regulated industries led to unsound accounting practices in non-regulated industries as well (May, 1943: 296-97). All of these examples create potential for interventionist learning to "do better" next time in analogous situations.

The deeper the cumulative process, the more unintended and unforeseen the regulatory process becomes. At some point the unforeseen turns into the unforeseeable; the total surprise that is so unique that it is beyond what could have learned through past experience. An example was a major outbreak of Legionnaires' disease in 1983 from bacteria that survived in water that was not heated sufficiently in response to a federal energy conservation mandate (Plouffe, 1983: 769). This suggests that market norms are a spontaneous order with tacit, not only explicit, knowledge that can be interrupted by the interjection of external mandates.

Political Motivation

The primary impetus for an intervention into the market economy may be external or internal. An *external intervention* is one that is imposed on a firm, firms, or industry from political-sector reformers.¹¹ The intervention may have some industry support, but such support is secondary to the purely political momentum for the intervention. The political impetus could be from general voter sentiment, academic research, or lobbying by influential groups so long as the effort is not primarily associated with industry.

An *internal intervention* is driven by vested business lobbying. Such interventions would not have been enacted by reformers alone without such well-defined support (Kolko, 1963). ¹² In the U.S. energy industry, the large majority of interventions have been internally solicited rather than externally imposed (Bradley, 1989, 1996a, 1996b, 1996c). Six categories of internal

intervention can be presented in order of their frequency in the oil and gas market (Bradley, 1996a: 1820-51).

- 1. *Self-horizontal intervention* where a regulation or subsidy is obtained by the firm(s) for all members in its industry for its (their) competitive advantage. Public utility regulation of electricity and manufactured/natural gas is an example. In both cases, certain leaders persuaded a majority of their industry brethren that the benefits of franchise protection would outweigh the costs of rate regulation. The industry activists also persuaded the public and political authorities that natural monopoly regulation was in the social good (Bradley, 1996a: 851-58; 1996b: 3-4; 1996c: 61-72).
- 2. Vertical intervention in which the firm(s) obtain(s) regulation of upstream suppliers or downstream customers for competitive advantage. An example is mandatory access to oil or gas pipelines instigated by producers, marketers, and/or end users.
- 3. *Horizontal intervention* where a regulation is secured by the instigating firm(s) for competitive advantage over rival firms. An example is import restrictions sought by domestic producers against importing companies, some of which are domestic producers also such as was the case in the 1930s with oil tariffs and the 1950s with oil import quotas (Bradley, 1989: 37-57).
- 4. *Inter-industry intervention* where a regulation or subsidy is obtained by the firm(s) in one industry for a firm or firms in another industry for competitive advantage. An example is inter-modal regulation when railroads successfully lobbied for federal trucking regulation to reduce the competitive advantage of less regulated trucking (Bradley, 1996a: 1779). Another example of interventionist "trespassing" was a natural gas pipeline company working on behalf of its gas-using copper smelter customers to obtain a tariff on imported copper. The resulting tariff reduced imports, increased domestic smelter utilization, and aided gas demand to benefit the instigating parties (Mangan, 1977: 86).
- 5. *Self-intervention* where a regulation or subsidy is obtained by the instigating firm(s) for itself (themselves) but not its competitors. The 1979-80 federal bailout of Chrysler Corporation, at the expense of relatively healthy Ford and General Motors, is such an example. A private antitrust suit by the firm(s) on competitors or suppliers is another example.

6. Self-vertical intervention where a regulation or subsidy is obtained for competitive advantage by a firm(s) for itself (themselves) and for upstream suppliers or downstream customers for competitive advantage. I have not identified a specific example in this category—a peculiar one—but include it to complete the possibility frontier.

Interventions that were originally driven externally may come to be internally supported. For example, wellhead price ceilings on crude oil were imposed during President Nixon's price control program in 1973 from a governmental desire for lower oil product prices. Oil refiners then came to support the ceilings to control the cost of their key raw material (Bradley, 1996a: 1841).

A *dynamic* analysis of political entrepreneurship can uncover new reasons for interventionist support during a cumulative process. An internal intervention could become unpopular with the industry that put it into place and continue on the strength of other industry support or become wholly an external (reformer-driven) intervention. Not only the original motivation but *later motivation* is crucial for a dynamic understanding of the political considerations behind interventionism.

An intervention can have *both* internal and external roots and/or current support. The analyst must weigh each of the two to understand which one predominates or, in some cases, understand how both are equally important.

Administrative regulation is a vital part of the dynamics of external and internal interventionism in a cumulative process. Regulators by the force of their personality and skill can propel the cumulative process toward more or less interventionism. A typology of *regulatory personalities* based on oil and gas interventionism has been forwarded (Bradley, 1996a: 1864-66). Six categories are identified:

- *Professional regulator*, who welcomes activism as a way of life and public calling;
- *Naïve idealist*, whose good intentions toward the powers at hand may be marred by negative experiences and even disillusionment, but he or she soldiers on;

- Opportunist, who sees interventionism as a means to greater ends of power, income and prestige;
- Pro-industry regulator, who combines a propensity to regulate with a bias for the regulated industry;
- Anti-industry regulator, who combines a preference for regulation with a bias against the regulated industry; and
- *Pragmatic regulator*, who unlike the opportunist is not wed to the powers at hand but becomes indoctrinated toward regulatory activism.

One category that is missing from the list is one that has come into own in recent decades—the *pro-market regulator* who works to minimize his or her authority and permitted responsibilities to allow greater scope for market forces.

These classifications can change over time with any particular individual. A regulator could be a blend of the above "ideal types." A dynamic analysis must also account for regulatory learning among and between individuals or agencies to understand how, for example, intervention in another industry (or industries) or country (countries) influences "home" regulation.

It is the job of the applied economist or historian to best describe the regulatory personality at work in a particular situation and add categories of description as new information develops.

A Research Agenda

The economics and politics of interventionism is a fertile field for social science research. Great swaths of regulation, taxation, and subsidization remain to be analyzed using the above typology—or a more refined one. Such research could map the myriad interventions and identify the weak and strong links among them. With a sufficient data base, descriptive generalizations can be made. How much intervention in an economy at any point is initiating versus cumulative? Restated, how *mature* is the interventionist process in an industry, across industries, or economywide? How might an interventionist process in one industry affect another industry either deliberately or accidentally?

What is the pattern of cumulative intervention between self revision, expansion, and contraction? What interventionist learning has taken place over time within and between sectors and industries? How might forthcoming intervention be different based on prior experience?

This paper has focused on regulation. How does the cumulative process differ between regulation, taxation (including monetary inflation), and subsidization? What interaction can be identified between the same?

How does government grow? Is the growth of government the result of cumulative intervention in normal times, or is it driven more by "crisis" intervention that creates a wartime-peacetime dynamic as posited by Robert Higgs (1987: 18)? What similarities and differences are there between emergency and non-emergency interventionist dynamics?

Why are some interventions relatively stable and others not? Is it inherent in the type of intervention, akin to the regulatory personalities at work with their private-sector counterparts, or the result of exogenous factors?

Turning to the private sector, could a dynamic typology be constructed for entrepreneurial error and plan revision to better understand market processes? And could initiating and consequent/cumulative intervention apply to non-economic self-evolving (undesigned) orders that are subject to major change ("intervention")? For example, a factor in the bankruptcy of Enron in 2001 can be traced back to a decision by the company's board of directors to waive a company-wide conflict-of-interest provision for their chief financial officer (Fusaro and Miller, 2002: 135). Can this entrepreneurial error be understood as either an initiating intervention or part of a cumulative process from prior management or board actions that also perverted norms? Or is there a qualitative difference between coercive intervention into the marketplace by government and "intervention" into voluntary social orders.¹³

Interventionism in predominantly market economies is ripe for analysis since government-engineered processes can be compared and contrasted to market ones. The above typology can also be used in reverse to understand the dynamics within planned economies where basis-point entry of market entrepreneurship can create cumulative deregulation (disintervention).

Conclusion

The dynamics of interventionism presented herein is firmly within the Austrian School tradition. Its causality is anchored on the subjective evaluations of economic actors as interpreted by the social scientist. The categories prominently account for future change and *expectations* of future change, not just current relationships.

The typology recognizes *regulation as a process* rather than a state of affairs outside of a few limiting cases (dormant intervention, non-initiating intervention). It recognizes a *learning process* where intervention can become more sophisticated (albeit perhaps no more beneficial) over time. A typology inspired by Mises' (incomplete) interventionist thesis can capture and simplify some important elements of interventionism for greater historical understanding—and predictive power going forward. And with a greater appreciation of dynamic interventionism in its intended and unintended variants, the public policy process can become better informed—not so much for greater front-loaded intervention but for greater reliance on voluntarism, market order, and civil society, a conclusion that Don Lavoie's enduring work points toward.

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Robert L. Bradley Jr. is president of the Institute for Energy Research and senior research fellow at the University of Houston. He wishes to thank Jerry Ellig, Richard Fulmer, Robert Higgs, Jack High, and Sanford Ikeda for helpful comments.

² See the critical evaluations of Rothbard's typology in Lavoie (1982: 177-80) and Ikeda (1997: 245-47). As Ikeda states (1997: 31), "Interventionism, as a system, is more than a set of relations between the market and government, it is a social process."

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¹ While this essay focuses on regulation, the typology can apply to all forms of intervention including taxation (including inflationary monetary policy) and subsidization.

³ Some terminological changes have been adopted in this essay versus my earlier work. The new (old) terms are: dormant (superfluous) intervention; causal (effective) intervention, non-initiating (dormant) intervention, initiating (malignant) intervention, and consequent (cumulative) intervention. Cumulative intervention is now used to cover the entire range of active intervention from initiating to consequent and phased consequent. I am indebted to Sanford Ikeda for his input with these revisions.

⁴ Don Lavoie, a member of my dissertation committee with the manuscript that resulted in Bradley 1996a, noted the perverse and sometimes unintended consequences of energy regulation (Lavoie, 1985: 134, 166).

⁵ WILL FILL-IN WITH FINAL PAGINATION

⁶ The institutional economist Thorstein Veblen used the term *cumulative* in a parallel sense to my usage above. Substituting "intervention" for "individual" and "agent," the following statement by Veblen (1919: 74-75) can apply to interventionism: "The economic life history of the individual is a cumulative process of adaptation of means to ends that cumulatively change as the process goes on, both the agent and his environment being at any point the outcome of the last process." W.J. Baumol (1972: 380), as another

example, has stated, "a number of cumulative processes serve to compound the problems of the city; perhaps these dynamic relationships constitute the critical component of those difficulties."

In such cases, *cumulative initiating interventions* appear where a self-contained series of revisions, expansions, or both flow from a previous expansion of intervention. Again, analytical judgment, not a rigid formula, determines what these categories and time periods are.

⁸ Discretionary accounting strategies could be used to reduce stated profitability or enlarge the capital account (rate base) on which an allowed rate of return was allowed. Mergers and internal contracting could shift profits from the regulated side to the unregulated side. A lack of reporting requirements could hamper the ability of regulators to effectively regulate (Bradley, 1996b: 5; Bradley, 1996c: 79-87).

⁹ Historian William Appleman Williams (1961: 21) has stated, "It should be obvious that ideas persist for a long time after their immediate relevance is gone, and therefore may act as independent variables in later

circumstances."

10 The fact that the Mises' formulation has been "lost in the wilderness" (Ikeda, 1997: 2) was due to a lack of empirical investigation by Mises and his follows. Other economists, as mentioned above, advanced Mises' insight of interventionist dynamics than his followers—at least until the 1990s. An exception is Robert Higgs (1987: 258) who critically surveyed the literature on government growth theory to find that "each fails to depict the *process* whereby the United States developed its Big Government."

¹¹ Intervention from the public sector could come from the legislative, judicial, or executive branches of government. A government municipality would also be considered part of the public sector.

12 Intervention from the private sector would be instigated by a firm (firms) or industry (industries).

¹³ The "intervention" in Enron's case was non-coercive but later led to fraudulent activity, a separate but related issue.