

Framing the Economic Policy Debate

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Economists' current policy frame, which is organized around the concept of market failure, provides a powerful lens through which to view the world and organize one's thoughts about policy. It is not the only, or most natural, frame through which to view policy. It is a product of history, and it coevolved with the analytic technology of the time. That analytic technology is changing, and as it changes, other policy frames become slightly more likely to be adopted. This article discusses that historical evolution and how changing analytic technology is opening up the possibility for movement away from the market failure policy frame.¹

Let me be clear from the beginning: my argument is about policy frames, not about current economic theory or mainstream understanding. I am not making an argument that the current theory is wrong or that most economists do not understand or are unfamiliar with the limitations of the current market failure policy frame. One can find many insightful discussions throughout the literature exploring the nuances, caveats, and limitations of the current model. But the discussions seldom make it down to the layperson summaries of economic policy. So the issue is not knowledge or insight of the economics profession. The issue is what might be called the simplification process—what gets chosen as a standard textbook policy model, which structures laypeople's thinking about what economics has to say about economic and social policy.

Why can we arrive at a policy frame that is limiting even though the underlying economic understanding is not limiting? Because policy frames are not chosen through explicit choice. In current academic institutional structures there is little incentive for economists to reflect on policy frames.² Thus the policy frame tends to be selected by historical, institutional,

and marketing factors that reflect the needs of economic researchers, teachers, and publishers, not top economists' judgments as to what would be an ideal policy frame from a social perspective. For example, the chosen frame reflects what authors believe the textbook market wants, not their consideration of what they believe students need to learn or of how best to convey deep economic understanding to laypeople.³

The article is organized as follows. First, I summarize the current “market failure” policy frame as it is generally presented to policymakers and students. Second, I discuss how that policy frame evolved from a much looser and more inclusive classical policy frame. I conclude with a brief discussion of how recent advancements in analytic and computational technology are increasing the chances for the policy frame to change.

Economists’ Current “Market Failure” Policy Frames

The current economic policy frame has two variations—one an activist policy frame, the other a “free market” policy frame. The variant presented in most textbooks is the activist “market failure” policy frame. In this frame, an individual’s tastes are given, and the invisible hand of the market is assumed to guide the economy to desirable results. But that guidance is not perfect; for example, externalities and other market failures may exist that the market does not account for. Government policy is needed to correct for these market failures in which private costs do not equate to social costs.⁴ The goal of government policy in this policy frame is to make private costs equal to social costs in individual decisions.

The groundwork for the “market failure” frame occurred in the 1930s when multivariate calculus was introduced into economic theory. Multivariate calculus allowed economists to study the theory of optimal allocation in a much more precise manner than they could heuristically or with geometric tools. Although multivariate calculus had been around for a long time, before the

1930s and 1940s mathematical economics was seen simply as a small branch of economics, not as the core. That changed in the 1940s as economics shifted from a Marshallian partial equilibrium “one-thing at a time” approach, in which intuition and judgment guided policy discussion, to a Walrasian general equilibrium approach in which policy discussion was closely connected to theory. Structuring the economic problem within a mathematical control theory framework allowed a much clearer understanding of pure allocative rationing processes and how those processes related to markets. John Hicks’s *Value and Capital* (1939) and Paul Samuelson’s *Foundations* (1947) changed the way that economic theory was thought about, and laid the groundwork for the market failure policy frame.

The pedagogically focused market failure framework was introduced into economics in Abba Lerner’s *Economics of Control* (1944).⁵ Paul Samuelson (1948) then took that “economics of control” framework and put it at the core of his textbook presentation of microeconomic policy. Other texts followed, and, over the years, the market failure policy framework has become so built into the economist’s mind-set that few, other than historians of economic thought and heterodox economists, know that other frameworks exist.⁶

This market failure policy frame is built on a theory of costless market success that can be mathematically specified as a multiperson constrained optimization problem with government as an outside controller. It structures the economic policy problem as a LaGrangian constrained optimization problem and in doing so provides important insights into the problem of allocating scarce resources among alternative ends. This framework assumes an institutional structure within which individuals know what they want and have exogenous tastes. They can trade costlessly at equilibrium prices that are somehow determined by the market. Given these assumptions market success can be costlessly achieved through market transactions by

individuals voluntarily trading. There are no transactions costs or problems of strategic interaction. Economists' theoretical general equilibrium model demonstrates that the equilibrium achieved after these trades has certain desirable characteristics. The intuitive essence of the policy model is that if people make a voluntary trade, they do so because the trades make them better off. As individuals become better off, society tends to be better off.

While a costless market success model underlies this policy frame, the policy focus of the frame is on market failures. It directs attention to situations in which voluntary trades will not make society better off even though the trades are costless. Much of the policy discussion centers on the possible existence of externalities that occur when there are third parties not explicitly part of the trade who are positively or negatively affected by the trade. When externalities exist, there is a market failure associated with voluntary trade, since all the costs of the trade are not being taken into account by the voluntary traders. In such cases, assumed costless government intervention can bring private costs and social costs into equilibrium, increasing social welfare.

Government's role in this policy frame is not only to internalize externalities. It is also to adjust the income distribution to maximize social welfare. The reason is that private optimization does not necessarily achieve a social optimum; it simply allows improvements from an initial position. Whether a social optimum is achieved depends on the distribution at the initial starting point. The market failure policy frame integrates distributional issues into the analysis through the use of a social welfare function that embodies outside-specified normative judgments into the analysis.⁷ The government is assumed to know this social welfare function and to have the desire and ability to undertake the appropriate redistributive policies to achieve the optimal social welfare.⁸

Recognition of Limits of the Standard Policy Frame

As I emphasized at the beginning of the article, my focus is on policy frames, not economists' understanding of the issues. The limitations and problems of the market failure policy frame are well known to economists and specialists in public policy. The literature has an extensive discussion of just about any aspect of the policy frame's limitations, and did from early on. As an example of early developers of the frame recognizing its limitations, in this section I briefly consider some of the qualifications included in early seminal work by Abram Bergson (1938) on social welfare functions and Francis Bator (1958) in developing the market failure policy frame. Let me start with Bergson.

In his seminal 1938 article, Bergson carefully distinguished between a social welfare function, W , and an economic welfare function, E . The difference between the two was a set of variables, $r, s, t \dots$, which were catch-all variables that included all the other elements that affected social welfare. These were allowed to vary in the social welfare function, but were taken as given in the economic welfare function. By distinguishing a *social* welfare function from an *economic* welfare function, he was making the point that any consideration of economic policy needed to be seen as an input into a broader social consideration of policy before it is applied. It could not be applied directly.

By including $r, s, t \dots$'s in the analysis, market failure is no longer the only way in which the market can fail. There can also be failures of market outcomes (Colander 2003). Failures of market outcomes occur when the market is doing everything it is supposed to in terms of the economic welfare function, but the indirect effects of economic actors on social welfare through the $r, s, t \dots$'s are overwhelming the direct effects. In Bergson's approach, any application of the social welfare version of the market failure policy frame to real-world

problems would have to explicitly explore whether these additional elements were important. He writes:

The symbols r, s, t, \dots , denote elements other than the amounts of commodities, the amounts of work of each type, and the amounts of the non-labor factors in each of the production units, affecting the welfare of the community.

Some of the elements r, s, t, \dots , may affect welfare, not only directly, but indirectly through their effect on (say) the amounts of X and Y produced with any given amount of resources, e.g., the effects of a change in the weather. On the other hand, it is conceivable that variations in the amounts of commodities, the amounts of work of each type, and the amounts of non-labor factors in each of the production units also will have a direct and indirect effect on welfare; e.g., a sufficient diminution of x_i and y_i may be accompanied by an overturn of the government. But for relatively small changes in these variables, other elements in welfare, I believe **{Au: Is there a comma here in the original?}** will not be affected. To the degree that this is so **{Au: Is there a comma here in the original?}** a partial analysis is feasible.

The market failure policy frame that economists use today does not distinguish between a social welfare function and an economic welfare function. Hence, it does not direct students and policymakers to think of the limitations of focusing their analysis of welfare on material goods rather than on broader social welfare, as it would have had the distinction between social and economic welfare been emphasized.⁹

A second example of the early work recognizing the limitations in the market failure policy frame can be found in Francis Bator's seminal "Anatomy of Market Failure." Bator (1958, 378–79) writes:

More important, at this level of discourse—though perhaps it hardly need be said—is that statical market efficiency is neither sufficient nor necessary for market institutions to be the “preferred” mode of social organization. Quite apart from institutional considerations, Pareto efficiency as such may not be necessary for bliss. If, e.g., people are sensitive not only to their own jobs but to other people’s as well, or more generally, if such things as relative status, power, and the like, matter, the injunction to maximize output, to hug the production-possibility frontier, can hardly be assumed “neutral,” and points on the utility frontier may associate with points inside the production frontier. Furthermore, there is nothing preordained about welfare functions which are sensitive only to individual consumer’s preferences. As a matter of fact, few people would take such preferences seriously enough to argue against any and all protection of individuals against their own mistakes (though no external effects be involved).

All this is true even when maximization is subject only to technological and resource limitations. Once we admit other side relations, which link input-output variables with “noneconomic” political and organizational values, matters become much more complicated. If markets be ends as well as means, their nonefficiency is hardly sufficient ground for rejection. On the other hand, efficient markets may not do, even though Pareto-efficiency is necessary for bliss. Even with utopian lump-sum redistribution, efficiency of the “invisible hand” does not preclude preference for other efficient modes of organization, if there be any.


In a footnote he adds:

This is too crude a formulation. It is not necessary that markets as such be an “ultimate” value. Political and social (non-output) values relating to the configuration of power,

initiative, opportunity, etc., may be so much better served by some form of nonefficient market institutions than by possible alternative modes of more efficient organization as to warrant choice of the former. The analytical point, in all this, is that the outcome of a maximization process and the significance of “efficiency” are as sensitive to the choice of side-conditions as to the welfare-function and that these need be “given” to the economist in the same sense that a welfare function has to be given. (378n4)

Throughout his article, one can find such nuanced discussion of the strengths and weaknesses of the market failure policy frame he is developing. Few texts, including graduate texts such as Mas-Colell, Whinston, and Green 1995, today include such nuanced discussions so that that nuance found in the early specification of the market failure policy frame has not become associated with laypeople’s, politicians’, and students’ conceptions of what economics has to say about policy. Given the lack of discussion of nuance, laypeople are led to see *as the* policy frame to use when thinking about economic policy, not as a useful, but limited, policy frame, which needs to be applied carefully with many addenda, as Bator presented it.

The Stigler-Coase Promarket Policy Frame Variant: The Market Success Policy Frame

While the above market failure policy frame was being explored and built into the textbooks, there was a general concern about its use by many economists who had a promarket orientation. Their concern was that the market failure policy frame seemed to justify government intervention because it downplayed many of the reasons that they opposed government interventions. For example, some opposed government intervention because of ethical considerations; laissez-faire advocates argued that freedom of choice found in markets was desirable in its own right independent of whether it maximized economics  fare or not.

Others such as James Buchanan and Gordon Tullock (1962) argued that the standard market failure policy frame obscured the public choice problems with government intervention. They argued that politics, not altruism, guided government, and so there should be no presumption that the government would maximize social welfare even if it could specify it. Their work led to the development of a concept of government failure that paralleled the concept of market failure. Government failure occurs when government does not act in the way assumed by the model. This idea of government failure has become part of the standard textbook market failure policy frame, and policy is now often presented in a more ideologically neutral setting than previously. It now involves determining the least-worst option: market failure or government failure.

These, and other concerns, were all important, but the alternative promarket policy frame that provides a theoretical promarket alternative to the market failure policy frame is what might be called the Stigler-Coase “market success” policy frame. The difference between the standard market failure policy frame and the Stigler-Coase market success policy frame is that the standard “market failure” policy frame assumes externalities are pervasive in the economy; thus it focuses on the need for government policy to deal with them. The Stigler-Coase alternative sees externalities as almost nonexistent because of the private market’s ability to internalize externalities on its own.

The reason externalities are nonexistent is to be found in the assumption of the standard model. If there are no transactions and negotiations costs, as there are not in the formal specification of the market failure model, then why should any externalities exist? Individuals affected by any trade can enter into negotiations with anyone affected to see that their interests are protected. Since trades are assumed to take place only after all negotiations are complete, and

there are no negotiations costs, the end result of voluntary activity is that all beneficial voluntary trades are undertaken.¹⁰ Any externalities are internalized by private traders. There is no need for government; given the assumptions of costless negotiations and zero transactions costs, the private market comes to the ideal solution.¹¹

From a Classical Policy Frame to the Current Policy Frame

As I have discussed in other papers (Colander 2005, 2011; Colander and Friedman 2011; Colander and Kupers 2014), the movement to the current market failure policy frames occurred from the 1930s through the 1960s as economics was moving away from a classical economics methodology, which strictly separated economic theory from economic policy, to a Walrasian neoclassical methodology, which did not. Instead, the Walrasian neoclassical methodology, which underlies the market failure policy frame, blended theory and policy in a formal mathematical model, directly drawing policy results from theoretical models.

I specifically do not call the current policy frames “neoclassical,” because doing so makes it seem as if all neoclassical economists would accept them. This is definitely not the case. Many early neoclassical economists, such as Alfred Marshall, Lionel Robbins, and J. M. Keynes, did not use a Walrasian methodology or a mathematical model. Instead, they continued to use a classical methodology that blended the market failure frame into the classical policy frame, making it much more ambiguous as to the policy implications of economic theory. In the classical policy frame, in order to decide policy implications, one had to explore the nuances as well as the formal theory. Thus Marshall saw economic theory as an engine of analysis; it was only one of the tools to be used by economists in developing policy. Theory had to be combined with judgment and other insights. Those following a Walrasian neoclassical methodology saw economic theory differently; they saw it as providing direct guidance for policy.

This Walrasian market failure frame of government policy is quite different from the “sophisticated Classical policy frame” found in John Stuart Mill (1848) and some early neoclassical non-Walrasians such as Marshall, Robbins, or even A. C. Pigou. While these non-Walrasians might discuss market failure, that discussion was closely tied to the limitations and nuances of the analysis. The sophisticated classical policy frame presents policy as much more complicated than anything that could be presented in a formal model; it involved numerous noneconomic, philosophical, and normative issues, all of which had to be integrated into the analysis before one could move from theoretical conclusions of models to policy conclusions. Classical economists saw this policy integration as belonging in a different branch of economics than pure theoretical scientific economics.¹² Within this classical policy frame, policy was built on the insights of economic science, but was not based directly on economic science.

The classical justification for laissez-faire was not a theoretical justification that the market was efficient. Laissez-faire was supported by classical economists as a precept, not a theorem. A “precept” is a reasoned judgment based on **{Au: Word missing here}** **“based on taking a consideration of ... into account”?** a consideration of all real-world issues ~~into account~~ ~~account~~—not just problems highlighted by economic theory. Classical economists’ support for laissez-faire was not a theoretical support for an abstract market; it was a practical support for dealing with the problems outside the state because, in their judgment, the state generally could not be relied on to arrive at better solutions. In making that judgment, they incorporated problems of government failure and ethical judgments with economic theory.

Laissez-faire was justified not by science or theory but by appeal to Adam Smith’s impartial spectator’s judgment. It is a policy position that they felt an educated economist whose ethical judgments reflected the general ethical and moral views of existing society would hold.¹³

Laissez-faire held that, while highly imperfect, real-world free markets were the least-worst option in many cases. But not in all cases. The policy frame came to no noncontextual conclusions; and judgments would have to be continually made—there was no blanket proposition that the market was the best option or that government should or should not intervene in the market.

Why the Classical Policy Frame Was Replaced

The explanation for why the profession moved from the classical policy frame to the market failure policy frame is complicated and deeply integrated with the institutional structure of the profession. My short story goes as follows.¹⁴ In the 1930s economists were discovering how useful multivariate calculus was for thinking about multiple market resource allocation problems. As they did, cutting-edge theorists began moving away from the Marshallian generalized partial equilibrium analysis in which the model's limitations were emphasized, replacing it with a Walrasian general equilibrium approach in which the limitations received less emphasis. Because they were trained in a classical methodological tradition, most initial developers such as Hicks, Samuelson, and Bergson used the market failure policy frame in a nuanced manner. But as their students, and their students' students, moved away from that literary tradition, and economics became more of a mathematical science, the nuance faded. As a shorthand, economists starting thinking about economic policy as closely connected to the Walrasian model and the market failure policy frame. As that happened, the nuanced classical policy frame gave way to the less-nuanced market failure policy frame.

The classical policy frame was replaced not because economists felt that the classical approach to policy was wrong or because they believed that the market failure frame was a better frame. Instead it was replaced because the market failure policy frame fit better with the


mathematical specification of theory that they were developing. Given the analytic technology, it was more teachable; it better fit the evolving pedagogical needs of the economics profession at the time. Specifically, the market failure policy frame nicely fit the technological and analytic developments of the time that were focused on analyzing efficient allocation problems rather than other aspects of economic policy. The policy frame provided elegant simple mathematical models through which these ideas about allocative efficiency could be taught.

Changing Analytic Technology and the Future of the Market Failure Policy Frame


As I have emphasized above, the “market failure” policy frame is closely tied to the Walrasian general equilibrium model. An implication of that close tie-in is that as analytic technology diverges from the analytics association with Walrasian general equilibrium, the market failure policy frame will come more and more into question. There are some indications that that is happening. Specifically, new work in behavioral economics, encouraged by a blossoming empirical experimentation technology, is allowing economics to explore models in which individuals do not exhibit the strong rationality needed for the Walrasian model. As that happens, new policy proposals such as nudges (Thaler and Sunstein 2008) are developing that do not fit the market failure policy frame. With nudges, economists are suggesting policies to guide individuals in a certain way; they are not designed to internalize an externality.

Similarly, new analytic technologies are allowing economists to explore multiple equilibria models, in which the policy issues involve a consideration of which basin of attraction the economy will gravitate to and how government policy might influence that gravitation. Such equilibrium selection mechanism problems involve a quite separate set of issues and models that

go far beyond single equilibrium Walrasian models. An analysis of tipping points becomes the policy focus, not an analysis of externalities or market failures.

Similarly, new computational technology is allowing economists to explore pattern-matching data models, agent-based models, network models, and epistemic game-theoretical models in which multiple social dimensions can be analyzed simultaneously. Culture and norms no longer need to be taken as given; they can become endogenized and part of the policy discussion.¹⁵ As this new work develops, the evolutionary story used to support markets becomes a broader evolutionary story in which, in a single equilibrium model, all we can say about efficiency is that which is, is efficient. Government and the market coevolve, undermining any “I Pencil” evolutionary justifications of the market. **{Au: A  reference to Read 1958 here in parentheses?}**

None of these analytic and computational approaches fit nicely with the “market failure” policy frame; they go beyond it and raise questions that cannot be easily addressed as market failures. Thus, just as changes in analytic and computational technology encouraged the movement from the classical policy frame to the market failure policy frame, today changes in analytic and computational technology are creating pressures for a change in the existing market failure policy frame to a policy frame broad enough to incorporate these new models and insights. That, at least, is my hypothesis.

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¹ This article summarizes and further develops arguments made in Colander and Kupers 2014.

² I do not discuss the evolution of policy frames here; I have discussed it elsewhere, and my argument is that institutional incentives lead economists to convey a policy frame to laypeople that is nonoptimal. One could argue that a frame is just a frame, and that with appropriate nuances and caveats that one can find in the existing literature, the existing frame, or any well-specified policy frame, can be consistent with the same policies I am advocating be explored. So frames are not necessarily limiting. People familiar with the technical literature surrounding any policy frame should be able to go beyond any specific policy frame and recognize its assumptions and limitations. Thus policy frames are generally considered a pedagogical issue, not a limiting issue for policy. I disagree with that way of seeing policy frames. I see frames as highly limiting. Most laypeople, and many economists, do not have the time and have not explored the technical literature, noting nuances and assumptions of the frame they are using. For that reason, the nuances and caveats necessary to move from the existing policy frame to the one I am advocating, while they were part of the development of ideas, tend to be lost and have not become part of most laypeople's and policymakers' policy frames.

³ An example of this process can be seen in the reviewer pool for economic principles books. This pool is drawn from potential adopters who generally are not cutting-edge economists, deep theorists, or specialists in the area being taught. This group of economists seldom teaches principles and thus, unless one of them decides to write a book, has little to do with the principles course. Those who do write a text quickly learn that the focus groups guiding the edition are not specialists in areas but nonspecialist teachers who are more interested in pedagogy than in nuanced content. They want a better, more teachable, presentation of the existing frame than a consideration of broader issues that are not part of the existing frame.

⁴ This sense of it as an activist frame can be seen in its introduction into economics. It was introduced by economists such as Abba Lerner and Paul Samuelson who favored an active role for government and was opposed by many of the more laissez-faire economists such as Lionel Robbins, Friedrich Hayek, and Frank Knight. For a discussion of how this came about, see Colander and Freedman 2011.

⁵ I discuss this history in more detail in Colander 2005 and 2011 and Colander and Kupers 2014.

⁶ Malcolm Rutherford (this volume) nicely discusses the institutionalist alternative.

⁷ Usually the social welfare function that the government is assumed to use is an equality-preferring social welfare function that weights low-income people's utility higher than high-income people's utility. If costless redistribution is assumed, as it generally is, then by redistributing income appropriately, the government can achieve a social optimum.

⁸ How government accomplishes its task is unspecified. Government is assumed to be an outside controller, which allows the model underlying the framework to be specified as an optimal control theory model.

⁹ The distinction between social and economic welfare was lost rather quickly, as Samuelson (1947) did not distinguish Bergson's economic welfare function from a social welfare function.

¹⁰ The social welfare addition is much more difficult to add to this model, but advocates of this market success frame usually take the position that government should have no role in redistribution or any other aspect of social welfare that the economic welfare function does not include.

¹¹ An excellent discussion of how this development occurred can be found in Medema 2010. In Colander and Freedman 2011, we explore the development of these ideas and how they related to policy.

¹² J. N. Keynes (1890) called the policy branch of economics “the art of economics.” Lionel Robbins (1981) called it “political economy.”


¹³ Classical economists’ support for laissez-faire had important ethical elements—classical economists favored individuals having as much freedom as possible. Thus freedom was seen as an end in itself. It was also a means to an end. Freedom allowed individuals to try out new ways of doing things, and generated economic growth.

¹⁴ I develop this explanation more in Colander and Rothschild 2010 and Colander 2011.

¹⁵ An example of how the type of issues considered in pure theory go far beyond the Walrasian framework to consider the following abstract of a recent paper (Hedges et al. 2014): “We introduce a new unified framework for modelling both decision problems and finite games based on quantifiers and selection functions. We show that the canonical utility maximisation is one special case of a quantifier and that our more abstract framework provides several additional degrees of freedom in modelling. In particular, incomplete preferences, non-maximising heuristics, and context-dependent motives can be taken into account when describing an agent’s goal. We introduce a suitable generalisation of Nash equilibrium for games in terms of quantifiers and selection functions. Moreover, we introduce a refinement of Nash that captures context-dependency of goals. Modelling in our framework is compositional as the parts of the game are modular and can be easily exchanged. We provide an extended example where we illustrate concepts and highlight the benefits of our alternative modelling approach.”

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