

Evaluating the Policy Proposals of the Food Movement

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Abstract: The rebalancing of the population from food-producer to food-consumer has played a role in public calls to reform federal policy to focus more on the consumer implications of the food supply chain. This paper critically evaluates the food and farm policy proposals recently offered by prominent members of the so-called food movement. I demonstrate that the authors offer no consistent, underlying philosophical basis for when the federal government should (and should not) intervene and offer no framework for making tradeoffs when proposed “guarantees” come into conflict. Moreover, the authors misjudge the trajectory and impacts of changes in food and agriculture and thus overstate the urgency and scope for intervention. The authors’ numerous specific policy proposals tend to represent a hodge-podge of ideas that have already been tried, are already being undertaken by the USDA, or fail to hold up under close scrutiny, although there is some common ground on a few proposals.

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1. Introduction

The mass movement of Americans from farms to cities over the past century has created a gulf between those who grow food and those who eat it. In 1900, about 40% of the total population was on the farm and 60% lived in rural areas. Today the respective figures are only about 1% and 20%. There were between six and seven million farms prior to the 1940s. Today there are only about 2 million, and only about 159,000 of these farms (the 7.5% of the farms with at least \$500,000 in sales) account for 80% of the value of agricultural output while only farming 34% of the land. This shift has contributed to increased consumer skepticism about food production practices, leading to emergence of markets for “natural” and organic food. The rebalancing of the population from food-producer to food-consumer has also played a role in public calls to reform federal policy to focus more on the consumer implications of the food supply chain.

Among the most vocal critics of modern agricultural production practices and farm policies are a group of journalists, authors, and non-profit directors who have collectively been called the “food movement.” While members of the so-called food movement have historically had much less influence on farm and food policy than, for example, farm commodity organizations, recent events suggest that power dynamic could be changing. Food movement members have been extraordinarily adept in fomenting the modern day food and farm zeitgeist, selling numerous bestselling books and garnering space in influential media outlets. For example, in 2015 the New York Times hosted a “Food for Tomorrow” conference which focused on food and farm policy issues that are centerpieces of the food movement agenda. First Lady Michelle Obama made food policy a signature issue by planting a White House garden, retooling school lunches, and including the White House chef as a policy advisor. The emergence of the local food and farm-to-table movements, as well as state ballot initiatives on labeling of

genetically modified food and farm animal housing, can also be seen as outgrowths of the impacts of the food movement.

Perhaps because members of the food movement have been so adept at affecting popular culture around food by emphasizing human health, environmental outcomes, and “fair” farming practices, many of their claims and policy proposals have gone largely uncriticized. For example, Michael Pollan, who is the author of several popular food books including the *Omnivore’s Dilemma*, frankly admitted the following in one interview:

“The media has really been on our side for the most part. I know this from writing for the New York Times where I’ve written about a lot of other topics. But when I wrote about food I never had to give equal time to the other side. I could say whatever I thought and offer my own conclusions. Say you should buy grass feed beef and organic is better, and these editors in New York didn’t realize there is anyone who disagrees with that point of view. So I felt like I got a free ride for a long time.”¹

Many popular food book authors refrain from specifically outlining policy solutions in their books, focusing instead on selected, sensational stories about working conditions, food ingredients, or environmental degradation.² However, in invited talks and on the interview circuit, the same authors frequently advocate for a host of food and farm policy changes when talking to sympathetic audiences. This has the consequence of their writing appearing more centrist and ideologically neutral than is actually the case. It also lets the authors off the hook by rarely putting them in a position of having to seriously defend their policy proposals.³ However, it would be a mistake to narrowly evaluate these authors strictly based on what they write in their books without also viewing their writing in the larger context of the policies advocated outside

¹ From an interview with John Robbins at a conference entitled Everybody Eats held in Santa Cruz, CA in October 2012. <https://www.youtube.com/watch?v=iGg7BxI6S2M>

² A few other examples of such books include *Fast Food Nation* by Eric Schlosser; *Salt Sugar Fat* by Michael Moss; *Pandora’s Lunchbox* by Melanie Warner; *The Meat Racket* by Christopher Leonard; *the American Way of Eating* by Tracie McMillan; *the Food Babe Way* by Vani Hari; and *The Third Plate* by Dan Barber, just to name a few.

³ As an anecdote, I was once interviewed by a radio show host who had also previously interviewed Pollan. When I told the host that my disagreements with Pollan were not so much about dietary choices but about policy, the host claimed that Pollan did not make food policy proposals. As the foregoing will show, that claim is patently false.

their books. The books provide the philosophical bases, making appeals to nature and denigrating trade and capitalism, that undergird subsequent policy advocacy.

Fortunately, at least for the sake of critical discussion, more integrative food policy discussions from the food movement have emerged. Writing in the *Washington Post*, Mark Bittman, Michael Pollan, Ricardo Salvador, and Olivier De Schutter (2014) proposed a whole suite of policies that guarantee, among other things, “access to healthy food”, “fair wages” for food workers, lower carbon emissions, high animal welfare, and farm policies that “support our public health and environmental objectives.” The irony is that such an all-encompassing food policy is one that is, in many ways, already confronting the U.S. Department of Agriculture (Lusk, 2016). In fact, after a protracted and contentious debate, the 2014 Farm Bill is a policy that attempted to give something to many of the competing interest groups resulting in a bill that President Obama called a “Swiss army knife” that “multitasks” (Jackson, 2014).

The same authors, hereafter referred to as BPSS, released a longer report in October 2015 entitled “A National Food Policy for the 21st Century”, in which, among other things, they recommended renaming the U.S. Department of Agriculture and consolidating its activities with that of several other agencies under a new Department of Food, Health, and Well-being, which would focus more on the fork than the farm.⁴ They’ve received some support for their proposal. For example, Ikerd (2015) commended the authors writing, “I think elimination of the U.S. Department of Agriculture should be the cornerstone demand of the consumer, tax-payer revolt.”

BPSS indicate the purpose of their document is to “advance a conversation” and they encourage readers to “join that conversation.” The purpose of this paper is to just that. This

⁴The policy proposals aren’t entirely new. Penning a letter entitled “Farmer in Chief” to the then newly elected President Obama in 2008, Pollan (2008) called for federal policies to, among other things, support food diversity, promote regional food economies across the world, enact environmental standards, revamp school lunch programs, forgive loans to culinary students, and renew the 1960’s era policies requiring government purchases of grain.

paper critically evaluates the food and farm policy proposals offered by BPSS (2015). The next section offers a general critique and suggests the authors offer no consistent, underlying philosophical basis for when the federal government should (and should not) intervene. The section also argues that BPSS (2015) misjudge the trajectory of health, environmental, and productivity changes in food and agriculture and thus overstate the urgency and scope for intervention. The following section takes BPSS's numerous specific proposals and offers brief commentary on each. The last section concludes.

2. Justification for Intervention

2.1 Philosophical basis for intervention

BPSS begin with some "broad principles" and "guarantees" motivating and unifying their work.

In particular, they argue that a national food policy should:

"reorganize the resources of government to guarantee that:

- All Americans have access to healthful food;
- Farm policies are designed to support our public health and environmental objectives;
- Our food supply is free of toxic bacteria, chemicals, and drugs;
- Production and marketing of our food are done transparently;
- The food industry pays a fair wage to those it employs;
- Food marketing sets children up for healthful lives by instilling in them a habit of eating real food;
- Animals are treated with compassion and attention to their well-being;
- The food system's carbon footprint is reduced, and the amount of carbon sequestered on farmland is increased;
- The food system is sufficiently resilient to withstand the effects of climate change."

Notably absent are guarantees of affordable food or of food security - issues which are top priorities for consumers (Lusk and Murray, 2014). BPSS offer what is essentially a list of platitudes. There is no mention of costs or tradeoffs. While benefits of specific policies are sometimes mentioned subsequently in the document, discussion of costs is practically non-existent.

Dig a little deeper into the guiding principles and guarantees, and it is readily apparent than the issues are far more complex than it might initially appear. For example, no government can ever guarantee the absolute absence of pathogens, and the cost of trying to achieve absolute zero tolerance would be substantial (Mead et al., 2010). To guarantee foods be free of “chemicals” is absurd –dihydrogen oxide (water), sodium chloride (salt), or acetic acid (vinegar) are all chemicals. Perhaps the word “chemicals” is meant to refer to pesticides. Yet a ban on (or requiring foods to be free of) all pesticides (organic and synthetic alike), would surely undermine the first objective of providing access to healthy food because fruits and vegetables are relatively heavy users of pesticides.⁵ Moreover, most of the toxins and pesticides we eat are naturally occurring in food and are relatively more toxic than synthetic compounds (Ames et al., 1990a,b).

It sounds nice for the food industry to be required to pay a “fair wage.” But, what is fair? A higher minimum wage for food workers would increase the incomes of those who are able to keep their jobs but it will increase the share of people (particularly young and low skill workers) who cannot get a job (and thus those who earn nothing) (Clemens, 2015; Clemens and Wither, 2014). Such a policy would also increase incentives for automation, and there are many harvesting and food ordering technologies that already exist, which would become profitable if wages increased (Autor, 2015; Schmitz and Moss, 2015). Moreover, increasing the cost of producing food domestically will encourage food imports, which may undermine the authors’ other objective of perceived transparency.

The authors never suggest that the various government guarantees might come into conflict, and they offer no suggestion on how to trade off the competing “guarantees” when they

⁵ For example, data from the National Pesticide Use Database suggests okra, cabbage, cauliflower, tomatoes, and melons growers use about 62 times the amount of pesticides wheat or soybeans and about 10 times that of corn growers. Lettuce and strawberry farmers use more than 100 times the pesticides as wheat and soybean farmers on a per-acre basis; citrus growers who use over 2,500 times the pesticides.

conflict. Moreover, BPSS never articulate the rationale for government versus private intervention. What is the market failure that exists, and what are the barriers that prevent individual action from producing efficient outcomes? The reader can only guess.⁶

Even if the authors had articulated a legitimate market failure justifying a particular “guarantee”, it is unclear how real-life, flesh-and-blood politicians and bureaucrats might carry out the policy. The authors are apparently aware of public-choice issues. They write:

“Of course, reforming the food system will ultimately depend on a Congress that has for decades been beholden to agribusiness, one of the most powerful lobbies on Capitol Hill. As long as food-related issues are treated as discrete rather than systemic problems, congressional committees in thrall to special interests will be able to block change. But there is something the next president can do to break that deadlock: In the first State of the Union address, announce an executive order establishing a national policy for food, health, and well-being.”

BPSS correctly raise an important point about impediments to productive change, but apparently fail to recognize the lobbyists and congressmen and women will not disappear once their preferred new agency emerges. And the very same incentives to create complicated legislation that favors special interests and redistributes resources toward small, politically organized groups remains (de Gorter and Swinnen 2003; Gardner, 1987; Olson, 1965), and if anything the incentives would likely be greater with a new agency given a larger budget and numerous new tasks to administer.

2.2 Trajectory of Food and Agriculture

A new and expanded National Food Policy would lack justification absent significant problems. BPSS paint a worrisome and pessimistic picture about the state of food and agriculture, which serves as the underlying motivation for the various food policies:

“Because of unhealthy diets, 100 years of progress in improving public health and extending lifespan has been reversed. Today’s children are expected to live shorter lives

⁶ The authors’ other writings suggest concerns about externalities, but the issue is not discussed in a meaningful way that properly grapples with the difficult economic issues involved (see Lusk, 2013a).

than their parents. In large part, this is because a third of these children will develop Type 2 diabetes, formerly rare in children and a preventable disease that reduces life expectancy by several years. At the same time, our fossil fuel-dependent food and agriculture system is responsible for more greenhouse gas emissions than any other sector of the economy but energy. And the exploitative labor practices of the farming and fast-food industries are responsible for much of the rise in income inequality in America.”⁷

To be sure, there are some pressing problems in food and agriculture. We do not live in a utopia. But, how dire is the situation? Are we really headed in the wrong direction? A broader inspection of trends is warranted.

- Data from the Bureau of Labor Statistics, Current Employment Statistics indicates average hourly earnings of all employees working in food services and drinking places was \$13.26/hour in 2016, up 31% since 2006. Temporal trends in inequality and wages are highly sensitive to whether government transfers and non-wage benefits paid by employers are included (Armour et al., 2013) and whether one looks at income or consumption inequality (Meyer and Sullivan, 2013a,b).
- According to the Environmental Protection Agency (2015), agriculture only accounts for 9% of greenhouse gas emissions in the United States.
- Improvements in agricultural technologies and production practices have substantially lowered the energy use, water use, and greenhouse gas impacts of food production per unit of output over time (Capper, 2011; Cavigelli et al., 2012; Field to Market, 2012).

⁷ To support these claims, the authors’ hyperlinks point to: 1) Oshansky et al. (2005) in the *New England Journal of Medicine* – an 11 year old study which forecasts future changes in life expectancy, 2) Jia, Zack, and Thompson (2013) in the journal *Value in Health* – a study that calculates quality-adjusted life years for diabetes (without reference to type of diabetes), 3) a report by the Food Chain Workers Alliance about wages and food security, and 4) a 2013 blog post on inequality by Drew Silver at the PewResearch Center.

- There is 26% less land being used for agriculture today than in 1950 despite the fact that US farms are now generating 180% more output (USDA, Economic Research Service, 2016).
- Agriculture has one of the highest rates of productivity growth of any sector of the U.S. economy (Jorgenson et al., 1987; 2005). Globally, increases in agricultural output have increasingly come from improvements in productivity rather than added land or input intensification (USDA, ERS, 2015).
- Herbicide use has remained relatively steady for the past 35 years and use of insecticides has fallen 77% since 1970, all while average pesticide toxicity has dramatically fallen (Fernandez-Cornejo et al., 2014a).
- Soil erosion has declined substantially since the 1980s, falling more than 40% (USDA, Natural Resource Conservation Service, 2007).
- Farms today are increasingly using cover crops and practice more no-till farming, thanks in part to biotechnology (Fernandez-Cornejo et al., 2014b; Horowitz, et al., 2010; Perry et al., 2016) and nearly all corn, wheat, and soybean farmers avoid monocultures by practicing crop rotation (USDA-ERS, 2016).
- The rise in prevalence of obesity has slowed and even reversed among some subgroups in the U.S. population (Flegal et al., 2012; Ogden et al., 2014).
- While the prevalence and new incidences of diabetes rose from 1990 to 2008, there has been no significant change from 2008 to 2012, and if anything new incidences appear to be falling; only 0.71% of the adult population was newly diagnosed with type 1 or type 2 diabetes in 2012 (Geiss et al., 2014).

- Age adjusted cancer deaths and incidence rates have been falling in recent decades (National Cancer Institute, 2016; Ryerson et al., 2016).
- Death rates attributable to cardiovascular disease declined more than 30% from 1998 to 2008 (Roger et al., 2012).
- Data from the Centers for Disease Control indicate U.S. life expectancy overall continues to increase (Xu et al., 2015); small declines observe in some sub-groups (e.g., white women) are primarily explained by issues related to drug and substance abuse, which are largely unrelated to food and agriculture (Arias, 2016).
- The quality of diets in the U.S. significantly improved from 1989 to 2008 (Beatty et al., 2014).
- Globally, the percent of the world population living in absolute poverty declined from 44% in 1981 to under 10% today (Roser, 2016). The share of the world population that is undernourished fell by half since 1990, and reductions in hunger are strongly, positively correlated with agricultural industrialization as measured by agricultural labor productivity (United Nations, Food and Agricultural Organization, 2015).

BPSS correctly point to some problems in food and agriculture, but their diagnosis that “100 years of progress . . . has been reversed” is mistaken. Throughout the 1960s and 1970s, Malthusian concerns were commonly expressed (e.g., Ehrlich, 1968) and there were deep worries about global hunger. Thanks to increases in agricultural productivity, the apocalyptic forecasts never materialized. While it is not the case that every food and agricultural trend is heading in a desirable direction, a broad, overarching look at the food and agricultural sector over the past 50 to 100 years suggests success and progress.

3. Evaluation of Specific Proposals

BPSS offer numerous specific policy proposals under three main headings related to production, marketplace, and food culture. What follows are many of of BPSS's proposals, repeated in italics, followed by a brief response in non-italics.

3.1 Production

BPSS's overarching proposal in this section is to "resolarize" the food system, by which they primarily seem to mean avoidance of synthetic fertilizers, pesticides, and fossil fuels. There is no attempt to calculate the costs of such a conversion, and even if such a cost could be borne by relatively wealthy U.S. citizens, there is no discussion of impacts on food security for the developing world. The following quote by Hager (2008) is a particularly apt response:

"As a species we long ago passed the natural ability of the planet to support us with food. Even using the best organic farming practices available, even cutting back our diets to minimal, vegetarian levels, only about four billion of us could live on what the earth and traditional farming supply. Yet we now number more than six billion, and growing, and around the world we are eating more calories on average than people did in [the late 1800s]."

The main innovation that supports today's population was the discovery of a process (which typically uses fossil fuel) to make synthetic fertilizer. It has been argued that this development has been "of greater fundamental importance to the modern world than the invention of the airplane, nuclear energy, space flight, or television" and that much of the world's population owes their very existence to the discovery of "unnatural" synthetic fertilizers (Smil, 2004).

Proposal 1: "*direct USDA research and extension programs to investigate, develop, promote and support regionally appropriate, regenerative, diversified farming systems*" and "*Support and*

reorient the Land Grant University system so that it serves local and regional constituencies and their needs.”

The Land Grant system relies, to varying extents across states, on funding from state governments, which already play a role in ensuring local relevance. As just one example, only about 10% of the budget of the Division of Agricultural Sciences and Natural Resources at Oklahoma State University is comprised of federal appropriations; around 17% is grants and contracts (some of which are federal); over 40% is state appropriations. Satisfying local constituency needs also requires basic research in crop and animal sciences, which are broadly applicable across location. Moreover, any changes in current funding structures should consider opportunity costs. There is a large body of evidence showing that federal and state funding for agricultural research and extension have produced large societal benefits (e.g., Alston et al., 2011; Jin and Huffman, 2016) and there is evidence that extension funding has stemmed the farmer exits (Goetz and Davlasheridze, 2016).

Proposal 2: *“Launch a ‘Farmer Corps’ to “increase the number of farmers”*

The USDA already has a number of activities aimed at this objective. Just to offer one example, since 2013, the USDA’s Farm Service Agency’s (FSA) has maintained a microloan program aiming to better reach small farms, beginning farmers, niche farmers, and farmers from historically socially disadvantaged groups.” This is on top of a FSA’s other loan programs which offer competitive rates to beginning farmers. More broadly, why should the government spend tax dollars to try to increase the number of farmers, and favor this particular occupation over the other multitude of occupations? Productivity improvements have made labor less necessary in agriculture than was the case in the past.

Proposal 3: *“ending federal subsidies and regulatory indulgence for confined animal feed operations (CAFOs)”*

What subsidies and regulatory indulgences? There are no direct subsidies for cattle feedlots, broiler chicken growers, or farrow-to-finish operations for swine. If the reference is to subsidies for animal feed (e.g., corn and soybean), then such a proposal could certainly be supported on economic efficiency grounds, though it is unlikely that their removal will have much effect on the prevalence of CAFOs (e.g., Lusk, forthcoming). CAFOs are already formally regulated by the EPA in addition to state laws and local zoning restrictions, and informally various CAFO impacts are checked by numerous local, state, and federal lawsuits related to odor and animal waste. Just one example is the suit filed by the attorney general of Oklahoma against Arkansas poultry producers over chicken waste and phosphorus in the Illinois River. For a dated but informative account of the layers of formal and informal regulation faced by hog producers in North Carolina see Vukina et al. (1996).

Proposal 4: *“Eliminate the routine non-medical use of antibiotics in animal agriculture”*

The FDA has already taken steps to de-label use of antibiotics for growth promotion purpose and to require the veterinary oversight when antibiotics are used for disease prevention or treatment.

Proposal 5: *“Support the Environmental Protection Agency in its recent rethinking of the Renewable Fuel Standard.”* and *“If biofuels are to be supported at all, such support should be reserved for sustainable cellulosic biofuels, particularly those made from perennial grasses that*

reduce fossil fuel dependence while playing a complementary role in diverse, modern multifunctional agricultural systems.”

The Renewable Fuel Standard has likely had deleterious economic and environmental effects and should be “rethought”. Efforts to encourage cellulosic biofuels have been largely unsuccessful; the process is costly, requires large amounts of land, and could pull marginal lands into production (Schnepf and Yacobucci, 2013).

Proposal 6: *“Promote greater production of actual food, especially seasonal fruits and vegetables for regional markets, by providing equitable access to farm credit and loan guarantees for all farmers, particularly for young, beginning, and organic farmers who have historically encountered barriers to access to government programs.”*

What is “actual food”? In addition to the aforementioned microloan program, the USDA already has a number of programs spending hundreds of millions of dollars aimed at increasing fruit and vegetable production and performance of small and beginning farmers. Examples include the Specialty Crop Research Initiative (SCRI), the Specialty Crop Block Grant Program (SCBG), the Beginning Farmer and Rancher Development Program (BFRDP), the Family and Small Farm Program, the Small and Medium-Sized Farms AFRI program, and the Organic Research and Extension Initiative (OREI), among others.

Proposal 7: *“Take a firm stance to reform agricultural subsidies in the next Farm Bill, and ensure that public investment supports beginning farmers and those who produce actual food using sustainable practices” and “The president should work with Congress and all relevant agencies to fully fund and implement programs that encourage diversified farming, rewarding*

food production and diversification rather than monocultures of industrial and export crops; ecological services (including carbon sequestration) rather than overproduction; and quality rather than quantity of production.”

What is “actual food” and what are “sustainable practices”? As already cited, the vast majority of farmers already practice crop rotation and an increasing percentage practice low or no till farming and use cover crops. Much of this is because it is in their long-run economic incentive to do so not because of government subsidies or policy. Farm policies already require compliance with various conservation requirements to gain edibility for subsidies. There are currently more than 23 million acres enrolled in the USDA Conservation Reserve Program (CRP). Reforming current farm subsidies is a good idea, however, if the idea is to initiate subsidies for fruit and vegetable production, it is unclear what effects this has on ecology (e.g., fruit and nut production is typically a monoculture; see footnote 5 on pesticide impacts), and is unlikely to have much effect on final consumer health or weight (Alston, Sumner, and Vosti, 2008; Okrent and Alston, 2012)

Proposal 8: *“make municipal and institutional composting of food and yard waste mandatory, and give the compost to farmers and ranchers.”*

A mandate makes no attempt to address the root causes of what it is that makes waste today unused. What is the cost of the mandate? Are there implications for food safety? Could such a mandate promote and spread crop insects and diseases?

Proposal 9: *“Ensure that wages for farm labor are fair and sufficient to permit workers who harvest, process, prepare, and serve our food to have access to the food they have helped to produce and deliver.”*

Wage issues were already discussed in section 2.1. The Supplemental Nutritional Assistance Program (SNAP) is already the USDA’s largest budgetary outlay by far, and it provides food access to more than 45 million Americans in 2016.

3.2 Marketplace

Proposal 10: *“Enforce anti-trust laws currently on the books to restore competition to food markets at every level: seeds, grain trading, animal feeding, meatpacking, and supermarkets.”*

The Grain Inspection, Packers and Stockyards Administration (GIPSA), and in particular the Packers and Stockyards Program (PS&P), is the USDA agency most directly tasked with regulating anticompetitive practices. There have been various studies and investigations by GIPSA and the agency routinely monitors market outcomes and intervenes. In 2013, the PS&P charged \$106,387 in fines for violations of the Packers and Stockyards Act and won almost \$3 million in litigation (up from \$1.5 million in 2012 and \$0.7 million in 2011) mainly through rulings of a USDA Administrative Law Judge (GIPSA, 2014). There are a variety of federal laws that exist under which the victims of uncompetitive practices can sue in court for redress, and indeed many such lawsuits have occurred with varying degrees of success depending on the merits of the individual cases.

More generally, there is a large body of research attempting to estimate the degree of market power in the agricultural sector, and the general findings tend to suggest less power and

more benefits from concentration than is often presumed (see Wohlgenant, 2013 for one review related to meat industries). Recent research by Sexton (2013) suggests that the high levels of concentration seen in agriculture may not be a result of market power per se but rather represent an attempt by firms to secure a high volume of quality input required to run plants at cost-lowering, full capacity. Typical statistics used to claim the presence market power, such as the farm-to-retail price spread or concentration ratios, are often uninformative as a measure of imperfect competition (e.g., see Brester, Marsh, and Atwood, 2009).

Proposal 11: *“Establish a federal grain reserve, modeled on the Strategic Petroleum Reserve, to cushion destructive swings in commodity prices.”*

Government grain storage is an anachronistic policy that has been largely phased out in modern Farm Bills. In the presence of private storage, which responds to government policy, government storage can actually reduce agricultural prices and destabilize producer revenue (Miranda and Helmerger, 1988). Prior attempts at establishing strategic grain reserves have proved costly and are typically short lived (Wright, 2009). Global trade in agricultural commodities, and private incentives to store in anticipation of higher future prices, already serve to cushion against price swings.

Proposal 12: *“Provide grants to towns and cities to build year-round, indoor/outdoor farmers markets, especially in underserved urban neighborhoods, under an enhanced Farmers Market Promotion Program.”*

What are the costs and benefits? Where is the market failure preventing private efforts to create such markets? The USDA already runs a Local Food Promotion Program (LFPP), which grants

matching support for local or regional food enterprises. The existing Farmers Market Promotion Program has \$13 million available for grant funding in 2016 alone. There is also a USDA Community Food Project grant program and the AMS Federal-State Marketing Improvement Program. It has been argued that such resources often go to politically influential locations rather than being efficiently allocated (Boys and Donovan, 2014), and there is some evidence that farmers' markets are actually overbuilt in several areas and there is "excess" public investment (Stephenson, Lev, and Brewer, 2006).

Proposal 13: *"distribute farmer's market vouchers for healthy fruits, vegetables, and lean meat to Women, Infants and Children (W.I.C.), and Food Stamp (SNAP) recipients" and "Increase the SNAP program's objectives and effectiveness by reforming the system so that its subsidies are directed toward the purchase and consumption of healthy foods, in harmony with recommendations from leading health authorities (cf., footnote 6), thereby protecting against both hunger and obesity."*

If the objective is to increase healthy eating, it is unclear why that objective need be tied to farmer's markets, particularly given the fact that this purchasing outlet is among the least desirable among low income households (Taylor and Villas-Bas, 2016). While pilot projects have shown subsidies on fruit and vegetables can increase purchases of these items by SNAP participants (Klerman, Bartlett, and Wilde 2014), it is less clear that the policy passes a cost-benefit test. Generally, these sorts of policies are paternalistic and potentially ineffective.

Economists have generally favored un-restricted transfers over restricted or in-kind transfers based on the premise that the recipient is in the best position to know how the money should best be spent (e.g., Thurow, 1974). Yet, even when transfers are made in-kind (e.g., only for food or

certain kinds of food), it has long been known that respondents can “get around” the restriction by re-allocating their budgets thus nullifying the intention of the restriction (Southworth, 1945; Weaver and Lusk, 2016).

Proposal 14: *“Direct the USDA to support regional slaughterhouses and meat processing facilities. Establish a local meat inspection corps to nurture burgeoning local meat production”*

While federally-funded slaughterhouses are bad idea, there are probably some rule changes that could lessen the barriers to entry for meat processors (though it should be noted that some are based on food safety regulations). Mobile abattoirs have been one private innovation that has helped smaller producers gain access to meat production facilities.

Proposal 15: *“Mandate that federal food procurement (in the military, national parks, schools, prisons, etc.) prioritize the purchase of food from regional producers. Pattern on the successful work of the National Farm to School Network and School Food Focus, organizations that have created working business models to connect regional supply with institutional demand for healthful food.”*

There is no compelling market failure that would justify such procurement requirements.

Moreover, the mandates are wasteful in that they take a certain types of relatively high value food and given them to people (children, prisoners, soldiers) who are likely to place relatively little value on the provenance of their foodstuffs. If the goal is to increase the dietary quality of meals eaten by school children, soldiers, or prisoners, this can almost certainly be done at a lower cost and with greater dietary diversity than through local/regional food mandates (Desrochers and Shimizu, 2012; Lusk, 2013b; Lusk and Norwood, 2011).

Proposal 16: *“Create a federal definition of good food, based on health and nutrition, and apply it to all federal nutrition programs. Encourage states to adopt it for sales tax purposes.”*

The current trend in the nutritional literature appears to be a move away from the concept of “good” and “bad” foods and ingredients and toward a more holistic view of dietary patterns. This also underscores the point that nutritional science is far from settled, and there is ample disagreement about the role of, say, fats versus carbohydrates in a healthy diet. Generally speaking, food taxes are regressive because the poor spend a larger proportion of their income on food than the non-poor, and “fat taxes” can be in effectual due to substitution effects, among other factors (Lusk, 2014). One study of nutrient price policies found that they can further exaggerate nutritional disparities between the poor and non-poor. Muller et al. (2016) found that unhealthy food taxes increase prices paid more for low than higher income women and that healthy food subsidies reduce the prices paid more for higher than lower income women; the outcomes arise because the poor are already consuming less healthy diets and because they were less responsive to the price policies. In general, BPSS have, again, failed to establish the market failure justifying these price policies (the presence of Medicare/Medicaid is not a market failure per se as discussed by Bhattacharya and Sood, 2011).

3.3. Food Culture

Proposal 17: *“Build gardens in schools, patterned after the White House garden and programs such as Edible Schoolyard, which can be used to infuse food and health throughout the*

curriculum.” And “Introduce cooking lessons in schools, including cooking of vegetarian dishes, and explicitly targeted to both boys and girls.”

What are the opportunity costs? School gardens and cooking classes sound good, but do these come at the expense of extra playground areas or math classes? Most schools already face budgetary and space constraints and are subject to a whole host of state regulations requiring compliance with reading, writing, math, and science curricula and standards. While some students would no doubt enjoy a garden or cooking class, presumably others might enjoy the same space be used to create an observatory or a biology lab or who might learn more from an experiential engineering or robotics course. The authors make no mention of the largest food and agricultural youth organizations already working in schools: 4-H and FFA.

Proposal 18. *“Boost the Child Nutrition Act so that school lunch spending increases by \$1 a day per pupil to underwrite healthy, sustainably grown food, a sizable portion of which should be purchased locally (a model successfully implemented by the Province of Ontario in 2013). and “Rebuild cafeterias, many of which are equipped only to microwave processed food, by funding programs to upgrade kitchens and dining areas. And “Increase funding for USDA competitive grants targeted to build Farm to Cafeteria value chains.”*

The issue of mandated local foods for school children has already been addressed. It is not sufficient to simply require schools plate certain foods. Children must eat them if they are to have an impact. Increases in waste and reduced participation have accompanied prior changes in school lunch policies (e.g., Hanks et al., 2014), suggesting the need for research in understanding children’s choice behaviors prior to passing such restrictions (Hanks et al., 2013).

Proposal 19: *“raise the eligibility threshold for free and reduced school meals to 200 percent of the poverty rate.”*

This is an issue of societal/political choices regarding the size of the “safety net.” Economics is relatively silent on the desirability of such transfers.

Proposal 20: *“place college graduates in schools to support teachers’ efforts to include food in curricula and promoting health through programs such as school gardens and healthier cafeteria choices.”* and *“Forgive federal student loans in exchange for two years of service in the program, and provide a path to formal institutionalization of the program in schools and within the Department of Agriculture.”*

Opportunity costs? Why should students majoring in agriculture or food studies be treated differently than students majoring in journalism, engineering, or mathematics? Should the federal government forgive student loans for elementary education students who go to work in the Department of Education, for ecology students who work in the EPA, for engineering students who work for the Department of Transportation, for mathematicians who work for the National Institute of Standards and Technology, or for business majors who go to work for the Department of Commerce? Is adding a college graduate in a school to focus on food curricula more valuable than adding a college graduate in a school to work on reading, writing, science, math, or critical thinking skills?

Proposal 21: *“providing maximum transparency in food labeling. Make it simple to determine that food is healthful, fair, and sustainable through re-conceived labels conveying what we now know to be important about our food.”*

The FDA already requires nutrition labels and regulates other labeling claims; related meat product labeling falls under the purview of the USDA. To the extent that consumer research can yield insights into which labels are more informative and understandable to consumers, presuming such labels are justified on some market failure grounds, then there seems little reason not to put such research to good use. The question of what information should be contained on labels should be guided by some overarching view about the relative roles of voluntary vs. mandatory labels and the government's role in information provision relative to the costs of provision (e.g., see Lusk, 2012). No such integrative thinking is offered here.

Proposal 22: "To prevent the taste preferences of children being shaped by the advertising campaigns of food companies, tax advertising for junk food and soda and use the revenue to fund public campaigns on healthy foods."

There is significant academic debate over the extent to which advertising is informative vs. persuasive and whether it increases overall sales of a category (e.g., fast food) or rather whether it simply re-allocates market shares to one firm vs. another (e.g., McDonalds vs. Burger King). Under social pressure, some food companies have already voluntarily chosen to refrain from marketing aimed at children. Justifying a policy by promising to earmark funds for some other purpose is disingenuous. The policy should pass or fail a cost benefit analysis on its own merits. Moreover, promised ear-marks are rarely ear-marked. For example, the supposed federal "lock box" for social security funds is a pure fiction; social security taxes are treated as general revenue and social security payments are paid out irrespective of whether inflows match out flows.

Summary and Conclusion

This paper has offered a critical evaluation of Bittman, Pollan, Salvador, and De Schutter's (2015) proposal to create "The U.S. Department of Food, Health and Well-being" and "appoint a National Food Policy Advisor." In many cases, they have proposed to offer the programs that the USDA already offers. Other specific policies are on shaky economic grounds and would likely fail a thorough cost benefit analysis. There are some points of agreement related to the need to reform current farm subsidies and the need to alter existing government policies that act as barriers to entry. However, the authors spend virtually no time discussing those policies that are likely to have the biggest bang for the buck for present farmers responsible for producing the bulk of the nation's food supply or for the average food consumer. These include activities and policies that expand the size of the pie, rather than redistributing the pieces to favored groups. For example, research on productivity-enhancing technology improves both farmer and consumer well-being and lessens impacts on the environment. In addition, American farmers are more prosperous when they have access to consumers all over the world by having open borders and freer trade unhindered by non-tariff trade barriers based on specious food safety claims; consumers benefit from trade as well by gaining access to more diversified foodstuffs (quinoa anyone?) and more affordable food.

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