The Future Economy:

Synthesis and Lessons Learned from Six Case Studies

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INTRODUCTION

Many see "business as usual" (BAU) economics (Schor 2010) failing us in ever more ways: Inequality of income and wealth continues to increase, financial crises and recessions are increasingly problematic, and critical ecosystems are being destabilized. But at the same time, we see more and more economic initiatives that deviate from BAU in some important ways: what they tend to share is a commitment to positive economic, social and environmental outcomes. Related campaigns and positive press have worked to increase popular awareness about these non-traditional efforts while providing needed encouragement and support. Economics for Equity and the Environment (the E3 Network) wanted to bring these developments to the attention of economists who have largely ignored them, and begin the process of studying "future economy initiatives" in a more systematic and scientific way. We sought to understand the histories of these initiatives, evaluate their impacts, and assess their potential for scaling and replication, thereby forging the foundations of a future economy.

We began by convening a group of senior economists familiar with the profession's standards to create a methodology, or "framework," suitable for analyzing and evaluating these diverse initiatives. This advisory committee for the project worked to combine methodologies with different strengths and weaknesses, broaden the traditional list of criteria for evaluating economic performance to make it relevant to efforts with a broader and more inclusive set of goals, and identify some quantifiable "metrics" for researchers to apply. Teams of researchers were then chosen to apply the framework as best they could to six very different future economy case studies. Researchers were asked to describe the innovation they were studying; briefly explain its historical origins; evaluate its impact on livelihoods, equity, empowerment, and the environment; identify keys to success and unintended consequences; and assess whether or not it could be easily increased in size or replicated elsewhere.

Each case study has its own introductory description and executive summary, which we need not repeat here. Instead, this "synthesis" article will comment on: (1) important things to be learned from each initiative, (2) lessons to be drawn from all six case studies about future economy initiatives in general, (3) what proved to be more and less useful in our methodological framework, and finally, (4) what future research needs to be done to better understand progressive attempts to transcend BAU economics.

VERDE, PORTLAND OREGON

Verde is a good place to start our examination of the cases, since it is perhaps the most "complete" of the six future economy initiatives. Verde is a nonprofit organization based in a low-income community in Portland, Oregon, whose primary mission is to build environmental wealth through social enterprise, outreach, and advocacy. Its work explicitly embraces all of the

multiple priorities we identified – economic, social, and environmental - and combines institutions across private, public, and nonprofit sectors to achieve them. Its overall mission to advance "sustainability as an anti-poverty strategy" could serve as a succinct summary of the mission of many future economy initiatives.

Impacts

While Verde's impact on outcomes in the city of Portland as a whole are small, its impact in the Cully neighborhood is significant in terms of building environmental amenities. Less significant in the aggregate, though nonetheless important, is its capacity to build local living wage jobs with benefits to underserved people.

Livelihoods: Verde programs have provided training and job placement services for about a dozen residents directly, won jobs working on city projects for several more local workers and firms, and in the process created jobs with better benefits and wages than these workers would have enjoyed otherwise. Verde programs have not been sufficiently large in scale to reduce unemployment or raise wages significantly for Cully as a whole, a large and extensive urban neighborhood with a population of over 13,000. An initiative at this small a scale cannot be expected to significantly impact joblessness, nor raise wages more than marginally even within a community, much less in a larger, municipal labor market: a citywide living wage policy would do a much better job at ensuring higher average wages. For example, while the $12-$14 wage scale for Verde first- and second-year employees is significantly higher than the average wage for comparable workers today, it would still be a violation of the proposed $15 city minimum wage, which is now under active discussion in Portland.

Equity: Because Verde programs benefit residents of a disadvantaged neighborhood, they improve equity. Verde programs provide better livelihoods for over a dozen poor residents, and access to neighborhood environmental amenities for all residents; Verde's partner organizations provide access to affordable housing for hundreds of poor residents. Verde has maintained its focus on lifting up the most disadvantaged members of the community where it works, by targeting unemployed or under-employed workers with relatively little training or formal education. Finally, Verde plays the role of advocate for social equity in municipal environmental and economic policies, highlighting racial and ethnic disparities in access to parkland, open spaces, and living wage jobs in Portland in numerous public forums. Verde's work has undoubtedly increased the profile of these issues at the municipal level.

Empowerment and social relations: There is no doubt that Verde is a source of pride and dignity for Cully residents, and that Verde has significantly empowered neighborhood residents *vis-a-vis* the city government. But perhaps more importantly, Verde has excelled at coalition building, steering clear of the squabbles among leaders and organizations that all too often compete against one another for resources and recognition in poor communities. Verde originally represented recent Latino immigrants to the neighborhood, but now extends its scope and impact far beyond the Latino community. Verde's cross-community reach is particularly commendable in a neighborhood where poor Whites, Blacks, and Native Americans have recently been joined by Latino and Asian immigrants.

Verde has not pursued worker empowerment through worker ownership, but instead concentrated on founding and running for-profit *social* enterprises. These social business ventures are subject to community accountability, not absentee owner control. The workers' individual learning plans and on-the-job trainings range from high school equivalency to irrigation installation; these plans increase workers' capacities for technical and managerial decision-making measurably. To this extent, community and employee influence over business decisions have been increased.

Environment: With regard to increasing environmental amenities such as parks, trees in public spaces, and community gardens in a neglected community, Verde has had a significant impact. Its most significant environmental impact has been the construction of Thomas Cully Park, a 25-acre landfill site in the center of the neighborhood: building the park will turn Cully from one of Portland's most park-deficient neighborhoods into a relatively park-rich one. But perhaps more importantly, Verde has championed a powerful new idea: protecting the environment need not compete with overcoming poverty. Instead, pursuing environmental sustainability can become an effective anti-poverty strategy, through creating local jobs in building parks, restoring natural areas and open spaces, installing bioswales or other green infrastructure features, and landscaping for local businesses and residential complexes. Further, by encouraging walking and biking and working towards increased neighborhood street connectivity and safety through programs such as Living Cully Walks, Verde's activities have laid the groundwork for reduced GHG emissions by residents, though the impact to date is difficult to measure.

Keys to Success

It is clear that Verde has benefited from remarkable leadership which transformed a community development and affordable housing program for recent Latino immigrants into a highly successful economic development model for the entire community around the theme of environmental sustainability. What some have called "the Verde model" is now studied by organizers in other cities.

Verde itself is a hybrid of different organizations and alliances – a grant-funded nonprofit, three mission-driven for-profit businesses, and a network of partnerships with multiple organizations across sectors. Taking advantage of different organizational forms is one of the keys to Verde's success. Notably, Verde plays a leadership role in a broader coalition called Living Cully, guided by a memorandum of understanding across four organizations. Beside Verde, Living Cully includes Hacienda, NAYA, and Habitat for Humanity, each of which takes primary responsibility for different initiatives within the agreement. Living Cully also works with the Portland City government as the Living Cully Ecodistrict. It is doubtful that Verde would be as successful as it is, had it not partnered successfully with other organizations and developed a presence at the municipal level. In short, organizational flexibility, successful outreach to non-Latino residents without abandoning its base in the Latino community, coalition building, and leading successful challenges to overcome Portland city government historical neglect for the interests of Cully residents were all keys to Verde's success.

Vulnerabilities and Unintended Consequences

Case study authors Enelow and Hesselgrave identify three vulnerabilities: (1) gentrification, (2) reliance on public sector procurement, and (3) weakness in the private job market.

(1) Gentrification

Verde and its partner Hacienda are fully aware of the threat of gentrification and have several projects aimed to prevent it, including home weatherization and energy-efficient affordable housing rehabilitation. Cully borders the Alberta Arts District in Northeast Portland, which was the most rapidly gentrifying zipcode in the entire country in 2014, and Cully is clearly the next target for rapid gentrification. In other words, there is no guarantee that Verde and the larger Living Cully Ecodistrict it helped create will prove strong enough to avoid gentrification. If gentrification is allowed to continue, most of the local residents that Verde and Living Cully have organized and empowered will find themselves priced out of Cully and displaced to more distant suburbs of Portland.

As gentrification in Portland accelerates, city programs to ameliorate gentrification are woefully underfunded and in disarray, and the state suffers from a lack of policy tools to combat it. Oregon is one of two states in the country whose constitution explicitly prohibits local governments from making use of inclusionary zoning – the major policy tool for creating affordable housing besides massive public funding. Verde can hardly be blamed for the larger economic forces driving gentrification in Portland, nor the public policy failures in the field of affordable housing development. However, these forces loom large in Verde's work, as its community development projects are at risk of having much of their "good work" undone by gentrification. One of the ironies of this work is that the more successful are Verde's projects in building neighborhood amenities and attracting public services, the higher property values rise, and thus the more attractive their neighborhood becomes to wealthier people and developers who will "build to the money." Verde is aware of all these dynamics, and works tirelessly to increase access to affordable housing and stem resident displacement, but it is not clear how successful they will ultimately be in these efforts.

(2) Public Procurement

Many of Verde's successes have hinged on public procurement policies targeting disadvantaged groups. It is hard to fault Verde for this, as municipal and regional procurement represents a significant opportunity for its social enterprises to acquire a reliable source of revenue. However, if government programs supporting energy conservation and renewables are allowed to expire, and if expanded tax breaks, subsidies, and utility reforms are not forthcoming, Verde's social enterprises and green community development strategy may be fatally undermined. Verde is perfectly cognizant of all this, and actively supports efforts at the state and national levels to launch a "green new deal", while simultaneously seeking to diversify its revenue stream by networking with private developers, homeowners' associations, and the like. Verde has demonstrated throughout its history that it knows it needs both outside help from government and philanthropy, and private business revenue to survive; Cully cannot develop through self-reliance alone.

(3) Private Sector Job Markets

Verde's job strategy is to prepare workers for work in the private sector: this is the primary goal for their training programs and social enterprises, with graduates moving on to the private sector leaving openings for new employees coming in. The private sector has proven slow to respond, making the strategy difficult to implement in practice. Moreover, by focusing workers' efforts on eventual transitioning to external employers, Verde indirectly discourages the workers in its social enterprises to take an interest in co-managing these businesses themselves. In any case, so far Verde has only considered entrepreneurship, self-employment, or employment at an external business as possibilities for its workers. Verde may want to think about helping graduates start their own worker-owned cooperatives if this can create more jobs and better working conditions.

Replicability

As already mentioned, the "Verde model" has already attracted attention and is being studied by others. There are similar neighborhoods in every city in the US where this model could presumably be replicated. In any case, there is a great deal to be learned from the "keys to success" discussed above. While local conditions are always important, we see no reason that Verde's success could not be replicated by activists working to launch community development initiatives in many urban neighborhoods, with "sustainability as an anti-poverty strategy" as their mission. The primary pre-condition for this strategy to work is a robust organizational infrastructure in the community to begin with: without the financially and organizationally stable presences of Hacienda and the other Living Cully organizations, the coalition-based development strategy would probably not have worked.

Transformative?

While Verde uses traditional for-profit businesses to create jobs and make revenue, this is only one part of its overall institutional and organizational strategy. In all other regards the Verde model goes far beyond BAU and is very "transformative." Sustainability as an anti-poverty strategy, heavy reliance on broad coalitions of very different community organizations, and combining local self-help with aggressive lobbying of government agencies, have clearly empowered disadvantaged populations in Cully in a number of ways that are transformative. Verde has not yet empowered participants sufficiently so they can take full control of Verde projects and be less reliant on leaders for management and designing new initiatives; currently there are no resources dedicated for Verde workers to start their own social enterprises or co-ops. But the current model certainly does not rule out such developments in the future.

ONLINE SHARING AND EXCHANGE PLATFORMS

Researcher Anders Fremstad looked at three different online platforms for exchanging and sharing goods: Craigslist, where used goods are bought and sold; Couchsurfing, where homeowners or renters allow travelers to stay in their homes for free; and NeighborGoods, where living space and household tools and equipment are shared without charge. From a traditional neoclassical economics perspective, increasing voluntary exchanges is always welfare

enhancing, unless participants are ignorant of their own utility functions, or exchanges damage third parties (negative externalities). From an environmental perspective, sharing used goods is a response to the second of the three environmental "commandments" – Reduce, Reuse, Recycle. From a future economy perspective, online "sharing" platforms are clearly the easiest initiative of those we studied to increase in size, i.e. "scale up." As a matter of fact, the key to a successful platform is reaching a critical mass: the higher the rate of participation in a population, the larger the benefits of participating (a classic "network externality"). However, increasing bilateral exchanges of goods and services is also the least "transformative" departure from BAU studied so far in this research program, although Fremstad discusses possible positive effects of secondary markets on social relations.

Impacts

Livelihoods: Online platforms for trading or sharing goods that already exist improve livelihoods by increasing the number of exchanges, each of which presumably generates a certain amount of what economists call consumer and seller "surplus." Fremstad goes to great lengths to quantify these welfare gains from exchange. He estimates that in 2013 exchanges on Craigslist may have generated as much as a billion dollars of consumer plus seller surplus; if couchsurfing is worth $94 a night on average to guests (the nightly fee to stay in a mid-range hotel), consumer surplus from couchsurfing might be in the hundreds of millions of dollars; and if goods shared on NeighborGoods are worth $15 to borrowers on average, 30% of those who use the platform may enjoy annual benefits as high as $179 each.

It is difficult to quantify the *net* welfare gains from these additional exchanges and sharing instances, since we don't know the extent to which new exchanges replace old ones. For example, if some couchsurfers previously stayed at medium priced hotels, the decrease in consumer and seller surplus from lost hotel stays should be subtracted from the increased consumer surplus generated by couchsurfing. However, we cannot calculate this increase, since do not know how many couchsurfers *would* have stayed at hotels in comparison to those who would have refrained from traveling. Further, though the price of a hotel stay places a plausible lower bound on the consumer surplus for couchsurfing, we do not know by how much the benefits of couchsurfing exceed it. Online platforms also shift the patterns of gains from trade: in the case of hotel stays, the sellers' surplus accrues to hotel owners, rather than homeowners or renters. On distributional grounds, we might prefer that such surplus accrue to owners of houses, who are on average less wealthy than owners of hotels (as any Monopoly player can attest).

Equity: On balance, online sharing platforms seem to have a positive effect on equity for the simple reason that lower income people are more likely to consume used goods than higher income people (Center for a New American Dream 2014) . So even though one must use the internet to participate, and lower income people are less likely to have internet access than higher income people, Fremstad found that lower income people have higher rates of participation, and therefore capture a disproportionate share of the welfare gains from online sharing and exchange platforms. As social disparities in internet access diminish, the beneficial effect of sharing and exchange platforms on equity should become even more pronounced.

Empowerment and Social Relations: As noted above, in the neoclassical economic view expanding opportunities for more people to participate in more bilateral voluntary exchanges empowers people by giving them more control over their economic lives. However, this treatment fails to consider whether expanding voluntary bilateral exchanges disenfranchises "third" parties who are affected, but are not parties to the exchange. It also fails to consider whether participants in the exchange process are equally informed about consequences, or would be equally affected by failure to reach an agreement. In short, it fails to analyze important, potential power imbalances that may be present in exchange procedures.

Further, the organizational structure of the platform affects who is empowered. All three of the online platforms studied by Fremstad are now private corporations. Craigslist began as an email list among friends in San Francisco, was incorporated as a for-profit business in 1999, and in 2004 Ebay became a minority owner. By charging fees Craigslist has been able to generate significant revenues to improve its sites and expand operations, although it does not appear that so far Craigslist has taken advantage of its position as the dominant platform for local secondhand goods to maximize profits. Couchsurfing was begun as a non-profit in 2004 and became a B-corp in 2011; despite having no revenues from fees, it has been able to raise $22 million from investors. NeighborGoods has lower participation rates than the other two platforms, earns no revenues from fees and so far has attracted no capital from either investors or foundations.

Environment: The impact of sharing platforms on the environment is similar to the beneficial effects of recycling. Both decrease what ecological economists call environmentally destructive "throughput" – natural resources used up when producing new goods and services, and material wastes released into the environment during their production or consumption. Fremstad reports that Craigslist may have increased used car sales in California by 7% between 1997 and 2007, and diverted 5 million tons from California landfills in 2014 alone. Clearly the beneficial environmental effects depend directly on the number of items exchanged and the types of goods whose reuse is enhanced. The fact that Craigslist has been able to expand rapidly from San Francisco to hundreds of lists in cities across the US in only a dozen years, to the point where there are now roughly 1.5 postings for every American, is responsible for its significant beneficial effect on environmental throughput. Couchsurfing is much smaller than Craigslist, and the environmental impact is more ambiguous. On the one hand, couchsurfing makes more efficient use of existing living space; Fremstad reports that it may have eliminated the need to build ten average size new hotels. On the other hand, to the extent that the program has increased the rate of travel, the negative environmental impacts of flying or driving must also be counted in determining the net benefit. NeighborGoods is a much smaller program than either of the other two, but if it expands, like Craigslist its net environmental impact is likely to be positive by reducing throughput.

Keys to Success

Reaching a critical mass is the key to survival for online platforms of any kind, due to economies of scale, positive "network" externalities, and low marginal costs of adding users. Since the magnitude of throughput reduction and increases in consumer and seller surpluses are directly proportional to the scale of activity, aggregate livelihood and environmental benefits also hinge

on the platform's scale. And as long as welfare gains are distributed disproportionately to lower income people, the same is true for beneficial effects from online platforms on equity. Unfortunately, sharing platforms that transform social relations in beneficial ways – such as encouraging gift exchanges rather than sales, for examples - face greater challenges than those that simply expand economic exchange. If these sharing platforms remain more vulnerable and operate on a smaller scale, they will generate smaller "material" welfare, environmental, and equity benefits than exchange platforms.

Vulnerabilities and Unintended Consequences

Economic theory does not suggest that the private corporations which come to enjoy a monopoly situation can be relied on to adequately serve the public interest. So this is a problem regarding online platforms that will have to be addressed at some point. What makes platforms easy to "scale up" also makes it important to address their governance. Fremstad also points out how online platforms displace older ways in which people had shared and exchanged used goods in the past. We can call these unintended consequences, or we can view this as what Joseph Schumpeter called the "creative destruction" that new technologies inevitably unleash.

Replicability

Since it is a new technology that makes online, peer-to-peer, sharing and exchange platforms possible, there is every reason to believe that people will take advantage of new possibilities until the potential of the new technology is exhausted. In this sense, it is highly likely that online platforms will be "replicated." But as Fremstad points out, since there are large economies of scale, it is probable that when replication finally exhausts this new potential, we will end up with a relatively small number of successful platforms of any particular kind. These platforms may carve out relatively stable niches while competing against one another at the margins, as do conventional corporations. This raises questions of whether regulation in the public interest, or public ownership of platforms, may be beneficial, in addition to subsidies for sharing platforms that generate positive material *and* social benefits but are unable to cover operating expenses.

Transformative?

Couchsurfing and NeighborGoods expand sharing activity without monetary compensation, whereas Craigslist creates a new marketplace where buying and selling used goods can take place. This is not to say that there is no reciprocity when people couchsurf or use a neighbor's tool; this reciprocity, however, may be indirect. As Fremstad explains, many Couchsurfing guests are also hosts, and many who borrow tools from neighbors lend tools to neighbors as well. But in the case of Craigslist there is an explicit *quid pro quo*, whereas in the case of Couchsurfing and NeighborGoods there is not. This fact makes a difference in what kind of social relations are being amplified. Clearly there is a difference between enhancing reciprocity, where solidarity is the dominant motivation, and increasing commercial relations, where personal gain is the dominant motivation, and increasing the size of one's gain necessarily comes at the expense of another.

Fremstad also points out that the quantity and quality of information shared in the case of the two sharing platforms is considerably greater and more conducive to promoting friendships and solidarity than the information available on the Craigslist exchange platform. Whereas Couchsurfing and NeighborGoods both arguably have transformative effects on social relations for their participants, it is stretching matters considerably to argue that Craigslist goes much beyond BAU in this regard.

A LOCAL FOOD ECONOMY IN HARDWICK, VERMONT

Local food economies in the United States are expanding. As researcher Kathryn Olson recounts, farmers markets in the US have increased from less than 2,000 in 1994 to more than 8,000 in 2014. The local food movement is particularly strong in Vermont, in particular surrounding Hardwick, a small town of 3,000 on the edge of a fertile agriculture region. Over the past fifteen years a handful of enterprising individuals have worked to revitalize a depressed area where jobs in traditional dairy farming and granite quarrying have disappeared. Through supporting local farms, food-related businesses, a producer and consumer cooperative and a nonprofit, they have developed a local food economy to keep land in agricultural use and provide better livelihoods for community residents.

Impacts

Livelihoods: Olson was able to compare trends in unemployment and income since 2000 in Hardwick to the nearby town of Glover where no surge in future agricultural activity took place, as well as to averages for the state of Vermont as a whole. Her data suggested that the growth of future agriculture in Hardwick had affected both employment and income significantly and positively – specifically, an 18% increase in mean household income since 2000, against the backdrop of statewide income decline. Olson counts 156 new jobs created directly by identifiable farm and farm-related businesses and nonprofits, since 2000. But since establishing a cluster of successful businesses of any kind in a small town will make it compare favorably to other towns, this evidence begs the question of whether a similar developmental push in a different sector would have had a comparable impact.

Equity: Hardwick did not compare favorably to Glover and Vermont as a whole with regard to the percentage living below the poverty line and the percentage relying on SNAP, the supplemental nutrition assistance program. Between 2000 and 2012 there were mild improvements in Vermont in both these regards, but less improvement in Hardwick than elsewhere. It is likely, however, that poor residents in Hardwick do have better access to healthy food than elsewhere. The Hardwick Food Pantry exists for this purpose; other communities with less vibrant agriculture sectors may not provide the same access to a nutritious diet. Likewise, the Center for an Agricultural Economy coordinates local schools' purchases of seconds (blemished produce) from local farms. Though there is not enough data to prove it conclusively, this coordinated institutional procurement probably increases the access of low-income people to healthy foods.

Empowerment and Social Relations: The core businesses in Hardwick, High Mowing Organics Seeds, Pete's Greens, Jasper Hill Farm, and Vermont Soy, are all privately owned. Olson describes a high degree of coordination and cooperation, rather than competition among these businesses. There are also over 200 farms and homesteads -- of different sizes, growing different crops, with different philosophies – which sell to local restaurants, at farmer markets, and at roadside stands. These are also mostly private businesses, with the exception of Buffalo Mountain Cooperative which sells directly to consumers through CSAs. Finally, there is the nonprofit Center for an Agricultural Economy, which provides access to food processing equipment to small-scale local businesses through its Vermont Food Venture Center.

Olson presents evidence that residents have achieved more control over their economic lives and built more cooperative relations. Empowerment has primarily been the result of enlightened business practices such as: collaborative business planning and open-book management by core businesses, significant training provided for growing new crops, increased access to food processing equipment, and old-fashioned "neighborly" support among farmers. Food businesses also work with local producer cooperatives for co-packing and distribution. All of these practices make entrepreneurship and business decision-making more accessible to farmers and food business employees. But none of these activities are directed primarily towards the most disadvantaged people, those without sufficient formal education or assets to participate in the food system to begin with. So while there is clear evidence of a buildup of "social capital" in Hardwick, and its positive impact on productivity, it is not clear that greater empowerment has reached down to the most disadvantaged.

Environment: A great deal of research supports the conclusion that the kind of future Ag economy developed in Hardwick is much more protective of the environment in a number of ways. So there is no need to review that literature here. However Olson does point out that contrary to popular opinion, greenhouse gas emissions from agriculture are affected more by how production is carried out than by how many miles food is transported. This is relevant because while the Hardwick future Ag "model" is seen as building a *local* food economy, Olson argues that its success may well rely on a significant amount of exporting outside the region, as discussed below. If the beneficial environmental effects of keeping food local have been exaggerated, there is every reason to believe that the Hardwick "model" is of great benefit to the environment even though exports are important, as long as Hardwickians continue to employ "best practices" in growing and processing food.

Keys to Success

The most surprising key to the success of the Hardwick "local" food economy model that Olson identifies is that important parts of it are not local at all. Olson argues that significant exports of agricultural products by its core future Ag businesses outside the area, including outside Vermont, may be integral to the model's success. The success of the Hardwick food economy has involved increasing concentration on high-value, gourmet artisanal foods for export to major metropolitan areas. Sales from these exports by core businesses are major contributors to their revenues, enabling them to hire more people and pay better salaries than would otherwise be possible. In short, Olson argues that the Hardwick model challenges the ideal of many environmentalists that the future agricultural economy should be predominantly local. Instead

she suggests that excessive emphasis on localism foregoes local spillover effects from outside sales which may prove integral to a successful transformation.

Olson cites the high levels of collaboration and cooperation, and dedication to a mission statement that unifies the community around shared goals, as additional vital keys to success. Analogous to Verde's role in Cully, there is a non-profit in Hardwick, the Center for an Agricultural Economy, which orchestrates collaboration among food processing businesses and hundreds of small growers. Olson also argues that because the Hardwick development model has made agriculture in the area much more diversified it makes the economy less vulnerable to negative shocks and more resilient. Finally, she points out that Hardwick has benefited from supportive legislation, especially at the state level (Farm to Plate, Working Lands Initiative), but at the federal level as well (REAP Zone).

Vulnerabilities and Unintended Consequences

Olson cites two major vulnerabilities of the Hardwick model. First, local food activists express concerns that the loss of two or three of the key food businesses in Hardwick could cripple the local economy. More generally, if farm policy continues to favor corporate-led Big Ag over community-led future Ag as it does presently, it will prove very hard for future Ag initiatives to flourish and expand. (This is discussed at greater length in the section below on lessons learned.) Second, as Olson points out, a small group of high value companies thrive on revenues from exporting relatively expensive products. One unintended and unfortunate consequence of this tendency is that it reduces the proportion of benefits of local food that may "trickle down" to the disadvantaged in Hardwick, as either employees or food consumers. Despite the activities of the food pantry and nonprofit working to supply the local schools and hospitals with healthy food, it is clear that many households in Hardwick remain food insecure; the local food economy has not reached them.

Replicability

Olson cites many reasons to believe the Hardwick "model" could be replicated in rural communities across the US: a base of local farms, agriculture-supporting institutions, and successful local businesses are all that is needed. However, widespread success of local food clusters may hinge on changes in *national* agricultural policy to support agriculture with positive environmental and social externalities instead of the present emphasis on large-scale, chemical-intensive monoculture. The fact that Hardwick has done as well as it has with limited policy support demonstrates this potential *a fortiori*. But achieving the necessary changes in agricultural policy to enable future community Ag to triumph over Big Ag at the national or even regional level is hardly a local organizing project. These changes must be won in the larger political arena, and victory is by no means guaranteed, no matter how compelling the logic for a new agricultural policy may be. Further, the Hardwick model relies on a base of urban, high income consumers to purchase the high-value gourmet food exported from the region. There are inherent limits to the size of the gourmet food market that constrain the replicability of this model.

Transformative?

How different is Hardwick than Glover? It seems clear that in some ways Hardwick has undergone a significant transformation. Hardwick is a town with a surrounding area that is on the way up, where people feel energized and hopeful: the word "renaissance" is often used to describe Hardwick. Though Olson's paper does not analyze current conditions in Glover, one suspects that Glover is not enjoying such a renaissance. The transformation in what is being grown and how it is being grown is probably even more significant. Like Verde, where the strategy is to fight poverty *through* sustainable development, the mission in Hardwick is to improve people's livelihoods *through* sustainable agriculture – and that is certainly "transformative." However, also like Verde, most of the individual organizations and institutions in Hardwick are not all that unusual. Instead, what is different is the combination of a mixture of organizational forms each suited to carrying out different tasks, a new vision of what it is all about, and a great deal of successful collaboration, coordination, mutual support, and local planning.

COMMUNITY SUPPORTED AGRICULTURE IN THE PIONEER VALLEY OF MASSACHUSETTS

Inspired by community supported agriculture in Switzerland and Germany, one of the first documented cases of community supported agriculture in the US was in the Pioneer Valley of Massachusetts in 1986. So studying the CSA phenomenon there is appropriate. At first glance it appears that CSA makes food consumers effective owners of the farms that grow their food by having them pre-pay for a share of the crop. But as Mark Paul explains, in practice CSA is actually a less dramatic and more subtle institutional transformation. Its major effects are to change who finances farming activity (consumer, not farmer or bank), to shift the risk of crop failure (from farmer to consumer), to eliminate the middle man between farmer and consumer (since the produce goes directly from farmer to consumer), and to dramatically reduce barriers to entry to farming for those with little capital (since farmers no longer need capital for seed, fertilizer, etc. and their own consumption before harvest). CSAs also tend to be diversified farming systems (DFS), in sharp contrast to industrial farms that tend to be monoculture operations. CSA represents, for many, a more authentic expression of the values that gave rise to the organic farming movement in the 1960s and 70s, which were subsequently co-opted by large-scale, industrial agriculture.

Impacts

Livelihoods earned by CSA farmers exceed averages for conventional farmers, but are rarely enough to provide a living wage by contemporary standards. Paul summarizes as follows: "(CSA) farms generally failed to provide adequate income to farmers and workers… [but] when CSA farmers are compared to USDA averages, they provided superior income and employment, (though) still far from a living wage." His own interviews of 16 CSA farmers in the Pioneer Valley confirmed other studies reporting that non-monetary benefits from the "CSA lifestyle" were highly valued. One reason the advisory committee expanded from traditional monetary measures of economic wellbeing to a broader conception of "livelihood" was precisely to take

this kind of benefit into account. But non-monetary "lifestyle" benefits can only compensate for so much loss of income, and there is little doubt that low incomes for farmers are a significant obstacle to CSA expansion.

Because CSA farming is quite labor intensive there is no doubt that it provides more jobs than corporate Big Ag farming not only per acre but per dollar of agricultural output as well. And because it attracts younger people, CSA is also helps to address the aging of US farmers. But since less than 1% of the workforce in the US any longer gets its primary income from agricultural activities there is no way CSA can substantially reduce overall unemployment nationally.

Equity: Despite often failing to provide a living wage, CSA agriculture reduces inequality in several ways. By reducing capital barriers to entry it allows people who otherwise would not have been able to farm at all to do so. Of course how this affects income inequality depends on what these CSA farmers would have done otherwise. If they would have earned less elsewhere, reducing barriers to farming reduces inequality. However, if they would have earned a living wage or better elsewhere, employment in sub-living wage CSA agriculture increases income inequality.

Some CSAs have attempted to increase access to CSA food for the poor by selling memberships on a sliding scale based on income. However there seems to be precious little margin to play with, since there is a limit to how much higher income shareholders are willing to pay for food that tends to be costly already, and the CSA "principle" of pricing shares to include paying farmers a living hourly wage proves increasingly difficult to translate into practice. As Paul reports, many CSA farmers admit the food they are growing is not affordable to poor households.

Paul also reports that women are far more likely to become active in CSA agriculture than they are in other forms of agriculture. Reducing gender imbalances in agricultural employment is a worthy accomplishment, although winning access to male dominated occupations does not necessarily reduce gender wage gaps within those occupations (Blau and Kahn 2006) . Given how difficult it seems to be for CSAs to pay their farmers living wages, it is doubtful that employment in CSA agriculture will raise women's wages relative to men's in agriculture as a whole. Paul notes that while women participate actively in CSA farms, the leadership of these farms still tends to be overwhelmingly male. Finally, Paul reports on an active debate going on in the CSA movement about apprenticeships, which were originally regarded as beneficial training programs, but some now worry may have inadvertently turned into a mechanism for exploitation.

Empowerment and Social Relations: While simply referred to as a better CSA "lifestyle," no doubt this translates into significant improvements in empowerment and social relations. Clearly CSAs empower growers to make decisions about what they produce and how they produce it, and consumers to make informed and healthy food choices. Paul recounts examples where CSA consumers rush to aid CSA farmers in emergencies, and comments on how often consumers do *not* drop out of a CSA after a disappointing harvest, thereby demonstrating solidarity with the farmers. You-pick gardens also increase personal contact between CSA growers and consumers, as do the occasional meet-your-farmer events and gatherings.

Environment: There is every reason to believe that CSA agriculture is far better for the environment than corporate Big Ag: it tends to grow crops in a rotational polyculture that preserves the topsoil, and generally uses far less pesticides and chemical fertilizers than its conventional counterpart. It is quite possible that CSA is better than certified organic because consumer monitoring is more active; many CSA farmers declare themselves to be beyond organic and cite their use of agro-ecological farming techniques to defend the claim. The environmental benefits of the diversified farming systems the majority of CSA farmers use are well known and well documented (Kremen 2012).

Keys to Success

The lure of a productive life, in a wholesome environment, growing healthy food in environmentally sustainable ways, for consumers one comes to know personally is clearly the driving force behind CSA farmers. If BAU economics continues to fail to provide opportunities for more and more young people to find meaningful and fulfilling lives in the "old" economy, there is every reason to believe there will be more willing CSA farmers.

Being able to know for sure that one's food is healthy and grown in sustainable ways is clearly the driving force behind CSA consumers. As long as corporate Big Ag, national supermarket chains, inadequate or misleading government labeling, and regulation subservient to corporate interests erode people's confidence in the nutrition and ecology of their food, there is every reason to believe there will be more willing CSA consumers. The key issue is clearly whether CSAs will find ways to pay farmers a living wage in addition to CSA non-monetary "lifestyle" benefits, as well as overcoming "vulnerabilities" regarding access to land and crop failure insurance.

Vulnerabilities and Unintended Consequences

While CSAs shift part of the burden of risk of crop failure from farmers to consumers, it would be a mistake to assume that CSA farmers are fully protected from risk. Attrition is a constant threat to CSAs: as Paul reports, CSA consumers often drop out in response to the unpleasant experience of having borne the risk of a poor crop in the previous year, negatively impacting the farmer the following year. In this light, the failure of government crop insurance programs to reduce risks in CSA agriculture is a serious obstacle to CSA expansion. Paul reports that there are currently no viable crop insurance programs for the type of farmer that offers CSA because while crop insurance targets individual crops at large scale, CSA farming grows multiple crops at small scale. Working to make the Whole Farm Revenue Risk Management program initiated in 2014 more helpful to CSA farmers is clearly important.

Similarly, while CSAs do reduce barriers to entry into farming somewhat since farmers receive payment for their crop in advance, it would be a mistake to assume serious barriers do not remain. CSA farmers list land tenure problems and high land prices in areas close to consumers high on their list of problems.

However, while organizing a CSA can be achieved by a few energetic individuals locally, reforming federal crop insurance and solving land use problems in areas bordering large populations can only be achieved through successful political activism and legislation at the regional and national levels. Failure to achieve political reforms at the regional and national levels is more likely to hamper CSA growth than a slowdown of new CSA startups. Finally, at the end of his section on "replicability" Paul provides a useful list of nine concerns expressed by CSA farmers. Beside "vulnerabilities" already discussed above, many of these nine problems are common to all who farm on a small scale.

An unintended consequence of reforming federal crop insurance programs is that it will reduce the relative risk advantages of CSA agriculture compared to other forms of community future agriculture, precisely because CSA entails shared risk between farmers and consumers. However, crop insurance reform would mean risk reductions for all forms of community future Ag, including CSAs. The difference would be that for CSAs, better federal insurance would decrease the risk for farmers and consumers jointly.

Replicability

CSAs are highly replicable provided that land use problems are resolved sensibly, agricultural policy is reformed to favor practices with positive environmental and social externalities, and living wages in agriculture become the norm. These conditions are stringent but attainable: as Paul notes, the number of CSAs has grown from just over 1,000 in 1999 to 6,200 in 2014. As noted above, the more BAU economics struggles the stronger the stimulus for new CSA startups will be. It is not clear where the limit of demand for CSA produce, or the supply of available land and willing farmers to start CSAs, will be: this limit will depend on numerous factors including the land use policies and wage issues mentioned above. In the years to come, CSAs will probably continue to grow in crop categories such as fruits and vegetables, poultry and eggs, and possibly beef, where diversified farming systems improve the quality of the produce while reducing environmental impacts. In staple crops such as corn, wheat, and soybeans, where economies of scale are significant and prices are very low, it is unlikely CSAs will make a significant impact.

Transformative?

There is little doubt that CSAs are among the most individually and socially "transformative" of various kinds of future economy initiatives, for reasons outlined above describing their impacts on empowerment and social relations. CSAs bring together farmers and consumers, grow food substantially more ecologically than conventional agriculture, spread the burden of risk between farmers and consumers, and increase the nutritional quality of food available. If the living wage problem is solved these institutions are capable of playing a foundational role in a transformed food system.

A NEIGHBORHOOD ENERGY UTILITY, VANCOUVER, BRITISH COLOMBIA

It is unlikely that a low carbon energy utility would be heating space and water in commercial and residential buildings in a redeveloped industrial neighborhood in Vancouver BC today if it were not for a unique event unlikely to be "replicated" elsewhere. If the city government had not faced the problem of quickly providing a state of the art source of energy for the Athletes' Village for the 2010 Winter Olympic Games, this remarkable low-carbon district energy utility, the New Energy Utility (NEU) would probably not exist. Yet replicating this future economy initiative may be easier than replicating any of the others we studied. It is hard to imagine why the 6000 district energy systems currently using fossil fuels in the US – two thirds of which serve hospitals and universities – would not want to explore the possibility of converting to sewage heat recovery and biomass fuels instead. Indeed, the city of Vancouver, and several adjacent municipalities already have plans in place to build low carbon NEUs in more neighborhoods.

Impacts

Livelihoods: As Mark Lee explains, a single NEU provides only a few permanent jobs and no more temporary jobs than any infrastructure construction project of similar size. On the other hand, a successful response to climate change will require converting *most* utilities from fossil to non-fossil fuels over the next two decades. Since a "green new deal" is the only solution for overcoming high rates of unemployment plaguing advanced economies in the foreseeable future, building NEUs could be a big part of solving our unemployment problems. Moreover, large infrastructure construction jobs tend to be high paying. An additional economic benefit would be more stable, and eventually lower rates for customers.

Equity: There are few equity issues raised by NEUs. Lee notes that in Vancouver there is concern that the False Creek NEU has mainly benefited developers and wealthy buyers of high priced condominiums that have gone up in the neighborhood served by the NEU. While this is regrettable – and Lee reports that there is now a belated effort in Vancouver to use inclusionary zoning to reach the goal of making 20% of new units affordable – it has nothing to do with NEUs *per se*, and everything to do with housing policy.

Empowerment and Social Relations: The NEU's empowerment impact is negligible, though the planning process did involve the local neighborhood association. As Lee remarks, "there were no explicit social objectives built into the original NEU plan." Moreover, the initiative came entirely from within the city government -- in fact from engineers in the city planning department tasked with solving the problem of providing energy for the Olympic Athletes' Village! In other words, this is not like the other case studies where initiative came from citizen activists or enterprising individuals pressing for ways to empower themselves and others, or establish new kinds of social relations along with whatever other goals they might have. This is an example of what Gar Alperovitz calls "enterprising municipal government" -- although it does not seem like this government was self-consciously trying to be innovative at all. While all of the major planning was done by the city government, city planners, and energy consultants they hired, the False Creek Neighborhood Association was eventually consulted regarding choice of neighborhood

amenities, and the neighborhood association also played a role in rejecting the biomass option for fear of higher levels of local pollutants it might bring.

Environment: The impact on the environment is straightforward: GHG emissions were reduced substantially. Reductions varied between 44% and 77% over the first two years of operation, and would have been higher if the backup to sewer heat recovery chosen had been biomass instead of natural gas.

Keys to Success

Although the False Creek NEU had little to do with the kind of grassroots activism responsible for many future economy initiatives, that does not mean there were not keys to its success. Lee emphasizes one in particular: The city amended its own charter to allow it to impose mandatory connection to buildings in the NEU district. In a rapidly expanding redevelopment district – on its way from an original 1.2 million square feet of total redeveloped residential, retail, office, and commercial space to an eventual 7.4 million square feet – mandatory connection to the NEU is set to make a significant impact in the years to come. Lee makes a compelling case that in neighborhoods with many different building owners NEUs become much more financially risky and therefore difficult to pull off absent mandatory connection. Lee also cites Vancouver's early and continuing leadership on climate change issues among cities globally, a federal government grant of $10 million, a $5 million loan from the Federation of Canadian Municipalities, a $30 per metric ton tax on carbon emissions in British Columbia, and a provincial carbon neutral government initiative *all* as clearly helpful.

Vulnerabilities and Unintended Consequences

Lee provides an extensive analysis of rate structures and financials, explaining how and why the False Creek facility is already on a sound financial footing. In the long-run low-carbon NEUs should have no trouble being cost competitive. However, because NEUs require significant upfront capital expenditures, financing must be done with care, and obviously low-carbon energy will always be vulnerable to fluctuations in prices of competing energy sources such as natural gas.

Replicability

The False Creek NEU is owned entirely by the city of Vancouver, managed by the city's department of engineering, and subject to city council oversight. While there are significant advantages to public ownership of municipal utilities, Lee explains that the choice to go public in the case of False Creek was not driven by a conviction that public was always preferable to private ownership. Because the provincial utilities commission would have had to review and approve an application from a private developer, and because this would have taken too much time to have the facility operational in time for the 2010 Winter Olympics, municipal ownership was the only viable option. However, Lee emphasizes that privately owned NEUs are an option, as are community owned NEUs. As a matter of fact, he explains that converting the False Creek NEU to private or community ownership at some point in the future could easily be done. This is relevant to whether or not the False Creek NEU is replicable in other cities where municipal

ownership may be difficult for a host of reasons. Lee's point is that municipal ownership is not necessary, and in fact, in the case of False Creek was not chosen for what we might call "ideological" reasons, and still might be changed.

Lee does emphasize that wherever there are many different building owners mandatory connection may be necessary for low carbon NEUs to be viable. He also emphasizes that a government program creating "green bonds" to make money available to finance high upfront capital costs would make NEUs much easier to replicate. And of course the best way to induce cities to adopt low carbon NEUs is to put a price on carbon emissions through either a tax (as BC has done), or a cap and trade program (as California has done, and Oregon and Washington states are considering) – and then commit to raising the price on carbon over time.

Lee also describes in considerable detail similar projects in the works in other Vancouver neighborhoods, as well as projects underway in nearby municipalities that speak to NEUs' "replicability." In sum, he makes a strong case that the prospects for replicating what he calls the "low carbon, district energy model 2.0" are very promising. But whether or not an NEU is municipally owned, privately owned, or community owned, it seems clear that unless municipal governments become more "enterprising," it is unlikely to happen.

Transformative?

The NEU could be transformative, if it were widely replicated. *If* widely replicated, low carbon NEUs could make our energy system far more environmentally sustainable than it is today*; if* widely replicated they could also make a substantial contribution toward "transforming" stagnant labor markets and putting many people back to work at good paying jobs. In the case of False Creek it does not appear that social or power relations were greatly affected. Presumably campaigns for *community* owned low carbon NEUs would be more transformative. But who's to say that if US municipal governments overcame their lethargy and simply became as enterprising as one Canadian city, this would not be shockingly "transformative" in and of itself?

GREATER UNIVERSITY CIRCLE INITIATIVE, CLEVELAND, OHIO

The Greater University Circle Initiative, GUCI, is the most widely known "green" urban anti-poverty initiative in the US. It is also known as a leading example of the "multi anchor institution" community development model, in which multiple large, local institutions, such as universities and hospitals, commit to purchasing necessary goods, and hiring necessary labor, from the communities surrounding their facilities. Anchor institutions have the key property of being rooted in the cities or towns where they exist: unlike corporations or individual households, a major university or hospital is not likely to pull stakes and move to another state where taxes and labor costs are lower, or incomes and profits are higher. Anchor institutions thus stand as potentially vital resources in the redevelopment of struggling urban areas. The GUCI, as the largest and most extensive multi-anchor redevelopment initiative, is perhaps the most important case study in the United States today to examine this model.

Impacts

Livelihoods: A GUCI slogan -- "Hire local, buy local, live local" -- speaks to how GUCI expects to improve the livelihoods of those who live in the five poverty stricken neighborhoods surrounding Case Western Reserve University (CWRU), University Hospital (UH), and the Cleveland Clinic (CC) in Cleveland's inner city. Poverty rates in these neighborhoods range from 30% to a shocking 70% in the Central neighborhood.

In terms of job creation, Poznik *et. al.* report that due to GUCI, these anchor institutions have dramatically increased hiring from GUCI neighborhoods. In 2013 alone UH and CC hired 500 people from GUCI neighborhoods. As of 2014, all three anchors have established formal hiring programs with ambitious goals for local hires. Between 2011 and 2014 NewBridge trained 108 adults, 62 of whom graduated, 68% of whom accepted job offers. Towards Employment is also training GUCI residents for jobs at UH. Primarily because the anchor institutions are very large employers, GUCI has been able to find jobs for a significant number of low income area residents, with wages and benefits in most cases superior to what they would have received elsewhere. Moreover, by encouraging these large anchor institutions to buy local they have contributed to employment in other businesses in GUCI neighborhoods.

Worker cooperatives have also played an important role in the GUCI. There are three Evergreen Cooperatives – Evergreen Cooperative Laundries, Evergreen Energy Solutions, and Green City Growers. Of the 81 new low skilled hires in these cooperatives, 17 came from GUCI neighborhoods and 15 live within two miles of GUCI neighborhoods. Finally, in terms of small business creation, the city's Economic Community Development Institute has helped create three new businesses in the GUCI area -- a restaurant, a café, and a composting company -- who have hired a small number of GUCI residents, and also launched a training culinary training program that has helped 75 people find jobs with new startups.

In the realm of housing, programs help local residents maintain and buy homes in GUCI neighborhoods, including a program that gives employees at anchor institutions zero interest forgivable loans to buy homes in GUCI neighborhoods all of which have large numbers of abandoned properties.

Equity: All of the above programs and business – workforce training, worker cooperatives, small businesses, and affordable housing - add up to a significant contribution toward bettering the economic conditions of very low income people of color in some of Cleveland's most destitute neighborhoods.

Empowerment and Social Relations: GUCI includes three large anchor institutions, CWRU, UH, and CC, two large philanthropic organizations, Cleveland Foundation and Living Cities Initiative, and dozens of community organizations working with residents in the five low income neighborhoods. The research team was able to collect data allowing them to analyze relationships within GUCI using a "social network analysis" methodology. Their key finding was that over time, the degree of connectedness of the community organizations increased, and became more equal with that of the philanthropic organizations and anchor institutions. They

took this as a sign that the communities were becoming better connected, and more empowered, over time. While the Cleveland Foundation, the key philanthropic organization funding a large amount of the work, remained the best connected actor in the network, community organizations such as Neighborhood Progress and Midtown Cleveland were able to increase their connections to other actors in the network dramatically over the study period.

The Evergreen Cooperatives provide another example of empowerment. With the help of facilitators from the Democracy Collaborative and Ohio Employee Ownership Center, all three Evergreen cooperatives developed cooperative business models designed to empower workers and transform traditional social relations. Unfortunately, our research team was not able to gather data shedding light on those experiments. However, unlike Verde which has not to this point added cooperatives to its overall development strategy, it is worth noting that employee ownership and management has been part of the Cleveland initiative from early on.

GUCI has both a leadership team and management team, which has three subcommittees, one for each goal – hire local, buy local, and live local. Three different social network analyses were done: One tracing relationships between individuals serving on the leadership and management teams and various GUCI organizations; one tracing the flow of funds from donor organizations to recipient organizations; and one studying the number of employees of GUCI actors who serve on the boards of other GUCI actors. Together the three social network analyses provide an in depth picture of power relationships among actors in a complex social initiative. Quoting from the case study authors' conclusion:

> Despite being a multi-anchor model, the GUCI is heavily reliant on one central player [the Cleveland Foundation] for funds, expertise, and its ability to bring different organizations together on the same platform, to meet a common set of goals. On one hand, it makes way for empowerment and social change as it brings community organizations in close connection with the anchors, foundations and financial institutions. It builds connections between stakeholders who work directly with GUC residents and the powerful institutions that hold sway in Cleveland. On the other hand, there is still a pattern of hierarchy in which community organizations are only on management and not on leadership committees and have a lower degree centrality of connectedness on average. Between 2012 and 2013 the EIMC [GUCI management team] was expanded to increase representation of community organizations. However, there is still no representation from Evergreen. Representatives from Cuyahoga County also have a lower level of connectedness than anchors, the Cleveland Foundation and some of the larger public sector organizations.

Environment: The three Evergreen Cooperatives were designed to meet the needs of GUCI anchor institutions in an environmentally conscientious way. Evergreen Laundry is a LEED certified commercial laundry facility using green technology to reduce water and energy use with contracts with nearby hotels, elder care facilities, the Veterans Hospital, and UH. Green City Growers is a 3.25 acre urban greenhouse growing leafy greens for restaurants and food service companies. Collected rainwater and melted snow are used to grow fancy leafy vegetables year round using hydroponic techniques for sale at a local farmers market as well as each of the anchors. Evergreen Energy Solutions has installed solar panels on the rooftops of all three

anchors, as well as provided solar installations for a one MW solar array for the Medical Center Company.

A “greening initiative” at one anchor institution, UH, led to lighting and water retrofits to reduce consumption, solar panel installations, creative waste disposal including composting and recycling, and storm water management. GUCI has also lobbied successfully for improvements in public transit and new parks serving the area -- two RTA station upgrades, and the Lucia Greens Pathway Park.

Keys to Success

It would be a great surprise if enthusiastic participation of anchor institutions were not one key to the success of the poster child “anchor institution community development model.” And it is clear that without its three anchor institutions GUCI/Evergreen would not have been able to provide many new jobs, or accomplish as much as it has in other areas.

However, it is noteworthy that major financial support for GUCI projects and the Evergreen cooperatives did not come from its anchor institutions, but rather from philanthropic organizations – the Cleveland Foundation in particular, which has provided over 20% of funding for GUCI/Evergreen programs. It is hard to imagine GUCI/Evergreen without the Cleveland Foundation. And unfortunately, not every large American city is fortunate enough to have a philanthropic organization with $1.8 billion in assets devoted entirely to its improvement.

Although the city and county governments were not prime movers, they were friendly toward GUCI and cooperated in a number of ways noted by our researchers. For instance, the Regional Transit Authority, which governs mass transit in Cleveland, has been involved in improving transit access in the GUCI area.

Vulnerabilities and Unintended Consequences

Involving large, powerful organizations with access to substantial resources in social change initiatives can greatly increase impacts on material outcomes. However, when such organizations partner with small community organizations who are expected to serve as the channel through which poor residents exercise influence over outcomes, increasing democratic decision making and empowering traditionally disenfranchised people can become difficult to achieve. The point is not to give up in cases where it is very difficult to maximize material and social impacts simultaneously. Nonetheless, it is important to be aware of tradeoffs when they are present, as they clearly are in the case of GUCI.

It is also worth noting that initiatives like GUCI - and Verde - with a heavy emphasis on “hire local” predictably run into conflicts with the private employers or government agencies they pressure. Our researchers reported conflicts with GUCI anchor institution human resource departments which have their own guidelines, analogous to the way Verde and its partners (see above) run into frequent difficulties with hiring guidelines for various city, county, and state agency programs. There can be legal obstacles as well.

While our team was not able to study Evergreen thoroughly, what little they did report about the Evergreen experience suggests that extreme poverty and education deficits can amplify difficulties that prevent employee ownership and self-management from working effectively – which would not be surprising.

Replicability

Before discussing if GUCI/Evergreen can be replicated in other cities, it is worth noting that GUCI itself was conceived, founded, and implemented at "large scale" compared to other neighborhood initiatives, such as Verde, for example. Purchasing, hiring, training, and producing goods for the anchors at scale is the key to GUCI's impact on livelihoods and the environment. Also, the special role played by the Cleveland Foundation, and its unique characteristics, was discussed above.

However, as the authors of the GUCI case study note, there are already "anchor based models" in other US cities with problems similar to Cleveland. Most of them are initiatives associated with old medical or educational anchors – the "meds and eds" - attempting to reinvent their identity as positive leaders in the indigent communities they now find themselves surrounded by: University of Pennsylvania in Philadelphia, Harvard University in Allston (Boston), Henry Ford Hospital in Detroit, and the Metro Clinic in Rochester, Minnesota. GUCI differs from these and other anchor based initiatives in being multi-anchor, which presumably can be advantageous in three ways. First, having more anchors can bring more resources and therefore have greater material impact on the livelihoods of community residents. Second, multiple anchors disperses anchor power, and can accelerate growing community power as a result. Third, multiple anchors makes the system more resilient; if a single anchor drops out of the initiative or reduces purchasing due to a funding crisis, for example, the initiative will survive due to the presence of the other anchors.

Transformative?

The mixed effects on power and social relations described above might be thought of as a "long march." While the anchors remain the primary source of employment opportunities and purchasing power that some GUCI programs rely on, and the Cleveland Foundation still pulls many strings, the results of the network analysis suggest that influence is slowly spreading to community organizations and residents. GUCI has also provided crucial support for various community art and storytelling projects, community mapping and "barn-raising" activities -- where neighbors help one another with home repairs – as well as organizations like Neighborhood Voice, Neighbor Up, and Community Connections – which organizes around relationships rather than single issues. In sum, there is little doubt that GUCI/Evergreen has provided residents of some of the most downtrodden and destitute urban neighborhoods in the United States with a role model other than "victim."

GENERAL LESSONS FROM ALL CASE STUDIES

Among our six case studies, two were studies about future economy agriculture, two were studies of place-based, community economic development in poor urban areas, and two

concerned projects taking advantage of a new technology. It is helpful to begin by considering each area separately.

Future Economy Agriculture

Future economy initiatives are probably most visible in agriculture, where a social movement to oppose corporate Big Ag and create concrete alternatives to industrial agriculture has begun in earnest. This movement has grown dramatically in the United States over the last two decades, and the successes of the Hardwick model and the CSAs of the Pioneer Valley are testaments to this robust growth. But the movement will continue to face an uphill battle until government policy is changed to create a level playing field between the subsidized, chemically intensive industrial model of agriculture, and the unsubsidized alternative models that include CSAs, local food clusters, and farmers' markets. If future economy agricultural initiatives are to survive and expand work at the national level to change US agricultural policy may prove necessary.

U.S. government subsidies for large, chemically intensive monoculture farms constrains the expansion of CSAs and local food clusters into regions where they are not already popular. The USDA's refusal to reward farmers for genetic diversity, topsoil protection, greenhouse gas emission reduction, and balanced nutrition, leaves CSAs and other ecologically responsible farming practices in a position of competitive disadvantage. Lowering the prices of CSA products to reach out to more customers—low income consumers in particular—only reduces farmers' incomes further below living-wage levels. Shifting additional risk burden of crop failures from farmers to shareholders would likely increase attrition. Finally, the lack of effective farmland preservation policies in most metropolitan areas contributes to rising land prices, making farming in peri-urban areas more difficult.

Future Economy Community Economic Development

Our future community development case studies both offer lessons about the importance of cross-sector collaboration and networking, though at different scales. Verde is a neighborhood-scale scale community economic development initiative creating a dozen or so jobs while building amenities such as parks and community gardens; GUCI covers eight contiguous urban neighborhoods and includes community organizing, enterprise development, job training, and institutional procurement on a much larger scale. Both initiatives prioritize impacts in the areas of training, jobs, and housing. Both are pioneering attempts to turn environmental sustainability into an anti-poverty, economic development strategy. Both engage in elaborate coalition building among existing organizations that vary greatly in nature and size, and also found new organizations of their own of different kinds. Both value empowering poor residents in their communities and pursue this goal in a variety of ways.

In both cases success hinges on uniting diverse organizations around an environmentally sustainable anti-poverty strategy. Which organizations to involve, how to organize a division of labor among them, what kind of governance structures to create, how to keep key players satisfied while also increasing the ability of the "target population" to influence outcomes themselves – are questions they both continue to work towards answering through careful

management of networks and identification and assessment of opportunities for private sector revenue, public sector funding, and philanthropic grants.

Beside their very different "scales" the two initiatives differ in important ways. The initiative to start Verde came from a seasoned professional at a mid-sized, local nonprofit, Hacienda, devoted to building affordable housing and community amenities. The initiative to start GUCI, by contrast, came from a giant philanthropic organization, three large and influential anchor institutions, and two national organizations, not based in Cleveland, dedicated to promoting "transformational" social models. The Cully neighborhood is under serious gentrification pressure with rising prices for older homes that real estate developers want to demolish and replace with far more expensive houses. By contrast, the five neighborhoods in Cleveland are plagued by abandoned homes and falling prices with little threat of displacement. These and other differences create different vulnerabilities that the organizations struggle to overcome.

As noted already, in both of these cases, fully empowering their "target populations" not only *vis-a-vis* the world at large, but within their own social networks as well, has been a slow and difficult process. While this is not surprising, a tradeoff is apparent between greater material impact—in the short run at least—and a more rapid transformation of social relationships within both Verde and GUCI, and when one compares the two initiatives as well.

Future Economy Technologies

Our technology case studies demonstrate that technological change has a role to play in the future economy - as if anyone doubted it. Online platforms are technologically superior to classified advertisements in newspapers and word of mouth for putting people who want to exchange or share things in touch with one another. Low carbon neighborhood energy utilities are technologically superior to heating space and water by burning fossil fuels and distributing the electricity generated through a centralized power grid. But these advantages do not mean that such innovations will necessarily spread quickly, much less give rise to desirable changes in social relations. If they threaten entrenched interests, if new institutions must replace old ones, and if they require new behavior patterns, they may fail to flourish. And in every case some adventurous innovators must take initiative. The fact that it was necessary to discuss vulnerabilities, scalability, and replicability when studying Craigslist, Couchsurfing, NeighborGoods, and the False Creek NEU in Vancouver BC is testimony to the fact that Schumpeterian "creative destruction" is far from automatic.

And when social obstacles are overcome, and a new technology does spread, its impacts on livelihoods, equity, the environment, and social relations must all be analyzed. There is no need to repeat here what was already discussed when reviewing each "new technology" case study. The most intriguing question regarding both NEUs and exchange and sharing platforms is to what extent they will, or will not generate desirable changes in power and social relations – because either is possible. And one might speculate that society-wide trends in one direction or the other will have much to do with the answer.

General Conclusions

One should not be overconfident when generalizing from six case studies. However, our research does suggest: (1) There are successful, innovative economic initiatives that offer concrete alternatives to BAU. (2) Some initiatives create measurable improvements in living and working conditions for disadvantaged or marginalized people relative to the *status quo*. (3) Many initiatives aim explicitly to protect or restore the natural environment and succeed in doing so to some extent. And (4) it seems possible that initiatives might be increased in size or replicated if the right conditions are met.

The ability of future economy innovations to create jobs sufficient to transform struggling neighborhoods, cities, and regions obviously depends on their scale relative to the size of the region. While Verde has been extraordinarily successful in building environmental amenities in an underserved neighborhood in Portland, and creating living wage jobs for the 12-18 workers at its social enterprises, its work has not yet made a dent in unemployment rates at the district level. Cleveland's GUCI, operating at a scale several times that of Verde, has been more successful, with 528 new hires within the district by the two largest anchor institutions alone, and 156 additional jobs created through the initiative's small business creation, worker cooperative development, and workforce training programs. However, these 684 jobs represent less than 1% of the population of the Greater University Circle District. The food cluster in Hardwick, VT has created 141 full-time and 41 part-time jobs in four adjoining towns with a total population of less than 7,000; this cluster now supplies jobs to about 2.5% of the population of those towns. The newly created jobs in the food cluster are likely largely responsible for the reduction in Hardwick's unemployment rate from 4.4% in 2000 to 2.9% in 2012 even as state unemployment rates increased. On the other hand, no future economy innovation we studied has created jobs on the same order of magnitude as, say, community solar power in Germany—which benefits substantially from supportive government policies in the form of feed-in tariffs. Ultimately, the question of job creation – as well as the size of beneficial future economy impacts on the environment -- is one of scalability and replicability.

Whether or not these initiatives actually *will* scale-up or be replicated to the point where they make serious inroads in any sector of the economy, much less transform the current economic order, remains an open question. Many sceptics dismiss the future economy by asserting that it is neither scalable nor replicable, and can thus only function in the margins of the larger economy in small-scale, "boutique" niches. Our research – based on only six case studies -- does not offer conclusive evidence either to support or refute this claim. The picture that our research reveals is one of BAU failures prodding people to *attempt* new initiatives, and many times getting them off the ground. Our research suggests that the keys to success of these future economy initiatives lie in careful networking, partnership and coalition building across public, private, philanthropic, and nonprofit sectors, and/or creative use of new or emerging technologies for social purposes. But six case studies are insufficient to determine whether a clear trend has emerged regarding the resilience, scalability, or replicability of future economy initiatives over the medium to long term. More research is needed to address this important issue.

Some of our future economy initiatives depended directly on overcoming the inertia created by vested interests. For example, the future success of district renewable energy systems such as

Vancouver's NEU depends on whether city governments can overcome bureaucratic inertia and entrenched interests of the fossil fuel industry and traditional utilities, to embrace the obvious technological advantages of NEU-style neighborhood-level heat capture and biomass utilities.

In the case of online exchange and sharing platforms it seems clear that the internet can be relied on to generate a significant amount of "creative destruction" -- replacing old technologies used for exchange and sharing with new ones that are technologically superior. Moreover, we can expect online platforms to generate meaningful reductions in environmental throughput -- since "reuse" can be as productive as "recycle" -- and distribute the welfare gains from additional exchanges disproportionately to lower income people – since they are more inclined to consume used goods. What is unclear is in what direction this new technology, which dramatically lowers the cost of individuals connecting with one another, will push economic behavior and social relations more generally. Do the adoptions of online exchange and sharing technologies have a positive influence on propensities to share and cooperate? Or does online behavior mirror overall trends in the economy, whatever those trends may be?

In general, we find that collaboration, networking, and partnership-building across public, private, philanthropic, and nonprofit sectors is associated with the success of future economy initiatives. Cleveland's GUCI has demonstrated exceptional skill at orchestrating agreements among anchor institutions such as hospitals and medical schools, community organizations, small business and cooperative developers, workforce training providers, and foundations. Verde, a small nonprofit in Portland, Oregon, has skillfully woven connections across nonprofits of various sizes, private sector businesses in landscape construction, ecological restoration, and green infrastructure, and public sector entities such as the City of Portland and Multnomah County. The food cluster in Hardwick, Vermont, has experienced a renaissance due to the intensive, long-term collaboration among farms, seed providers, food businesses, nonprofits, and co-ops. It seems clear that a collaborative spirit is a key ingredient in future economy place-based efforts at sustainable and equitable economic development.

The stimulus for innovation comes not only from new technological opportunities, and not only from small groups of people motivated to try different ways of doing things, but also from significant failures of BAU economics and political gridlock and dysfunction at the national level of government. If BAU failures increase over time we should expect the stimulus to launch future economy initiatives to increase. However, the ultimate success of future economy initiatives – whether they are capable of deeper penetration of major sectors of the economy, and/or lead to broader economic transformations – may depend on whether or not there are changes in the policy environment.

For instance, whether future economy agriculture can compete successfully in price-sensitive consumer markets against industrial Big Ag may depend on whether the federal government does or does not change current agricultural policies to create a level playing field. Whether urban community development initiatives seeking to provide people in poor communities with decent jobs and affordable housing can protect these communities from displacement due to gentrification may depend on the trajectory of municipal, state, and federal employment, wage, zoning, and housing policies. In other words, it remains to be seen not only whether the kind of bottom-up initiatives profiled in our studies can increase in scale and replicate, but also whether

successful expansion will require changes in current agriculture, food, energy, and housing policies. And if policy change does prove necessary for future economy expansion, it remains to be seen if a movement which up to now consists of small groups of people starting individual initiatives will prove able to mount successful political campaigns to win changes in government policies they need in order to flourish.

EVALUATING THE METHODOLOGICAL FRAMEWORK

Designing a framework for studying economic phenomena whose participants explicitly reject traditional measures of success was not easy. While the project advisory committee was unwilling to simply allow innovators to define their own criteria for success and procedures for measurement, we sympathized with their conviction that traditional economic methodologies and measures were too limited to understand and evaluate their initiatives properly.

After considerable discussion the advisory committee settled on asking analysts of case studies to: (1) describe their initiative, and in the process answer specific questions about its origins, purpose, and distinctive properties; (2) assess its impact in four distinct areas -- livelihoods, equity, empowerment, and the environment using appropriate quantitative measures when possible; (3) identify and discuss any keys to its success; (4) comment on any vulnerabilities and unintended consequences; (5) evaluate its potential to be replicated elsewhere; and (6) evaluate whether the initiative is transformative, i.e. deviates from business as usual economics. What worked well and what did not when six teams of researchers tried to follow this procedure? What improvements in methodology should be considered for future studies?

Strengths to be Retained

The advisory team decided to avoid a question that concerns many who begin to study the future economy. Namely, what are the defining characteristics of the future economy so that any initiative can be classified as part of the future economy or not? After grappling with this question ourselves, the advisory team came to the conclusion that any answer would prove problematic, but fortunately, there was no need for an answer. Simply asking researchers to follow the six steps listed above to study any initiative seems a far better alternative.

Rather than beginning with a perfunctory description of the innovation, researchers were asked to answer seven probing questions about their initiative before beginning any evaluation, including a brief history of its origins, a comparison to similar innovations, and its formal or informal structure. We believe this helped produce studies that are more informative for most readers who are interested in the future economy. It also proved the easiest task for researchers to fulfill, and we believe it is a valuable first step that should be retained for future work.

Identifying multiple goals for assessing impacts, not only on people's livelihoods, but on equity, empowerment, social relations, and the environment as well, also proved to be crucial. Future economy initiatives are quite diverse in the needs they respond to, and a particular initiative often does not prioritize improving outcomes in all these areas. Identifying these goals involved broadening the definition of commonly understood economic concepts. For example, the

advisory committee defined "livelihoods" to include not only formal employment opportunities, money wages, and benefits, but also non-wage income, access to healthy food, healthcare, childcare, education, and cultural services.

Weaknesses to be Addressed

Researchers were instructed to try to evaluate their initiative in every area the framework identified, even when this proved difficult. This task proved unrealistic for most researchers and unhelpful in some cases. Economic initiatives ought not to be evaluated by criteria that play no part in their mission or reason for being. Each of the initiatives our researchers studied arose in response to different challenges facing communities, and thus emphasized different goals. The advisory team had envisioned constructing a kind of matrix where impacts in four different areas for each of the six studies could be displayed, and possibly some kind of overall measure of relative success could be devised. This was a mistake. Summary metrics that evaluate total impact across multiple goals are very difficult to devise and virtually always contain an element of arbitrariness. Future versions of this framework will make clear that researchers need only focus on the most relevant impacts of the initiatives they have chosen to study.

The advisory committee emphasized that researchers should be no more reluctant to point out when initiatives failed to improve outcomes than when they succeeded. However the advisory committee did not consider soliciting and selecting case studies of future economy initiative *failures*. If a primary goal of studying future economy initiatives is to identify factors that contribute to their relative success or failure, studying failures can be just as important as studying successes. The success of the research program on common-pool resource (CPR) management gives a prime example of the importance of studying failures. In the book that kicked off this large and growing research program, *Governing the Commons*, Nobel laureate Elinor Ostrom analyzed twelve case studies in total: six long-enduring success stories, and six institutional failures. From this broad base of studies, Ostrom's research team has been able to elucidate a robust set of *design principles* for successful CPRs. While it is premature to think of a research program for future economy initiatives as elaborate as the IAD program for CPRs, the value of studying failures as well as successes is important to consider.

Another important issue with our framework regards quantification. Future economy researchers were urged to search for ways to quantify their evaluations of impacts. Not surprisingly, they often struggled to do so. In the future it is important to provide more concrete suggestions about various ways to carry out quantitative analyses. The framework should include discussion of metrics commonly used, other possible metrics for situations likely to arise in future economy research, and data sources. Given the expense involved in data collection, more concrete guidance about how researchers might make use of existing data and would be helpful.

Future work in this area should cover regions not conventionally thought of as "progressive." Five of the six initiatives studied in this round of research took place where progressive activist traditions are particularly strong. This is hardly surprising, since we were searching for *initiatives* with *progressive* values. Nonetheless, Vermont, the Pioneer Valley of Massachusetts, Portland Oregon, Vancouver (British Columbia), and inner-city Cleveland are hardly representative of America as a whole. Case studies from "red" states and regions should be studied as well.

Finally, there was one delightful surprise. The researchers studying GUCI carried out an elaborate, quantitative, network relations analysis as part of their study of power relations and empowerment in GUCI. Since all of us on the advisory committee are economists it is not surprising that it did not occur to us to mention this methodology primarily used by sociologists as a potentially useful way to study governance in multi-organizational coalitions and networks, and how decision making power is distributed. We hope that the increasing adoption of network analysis by the economics profession makes the dynamics of future economy initiatives more comprehensible to the profession.

Often future economy initiatives involve a number of different kinds of organizations – community organizations, private businesses, non-profits, government agencies, anchor institutions (e.g. universities and hospitals), philanthropic foundations, or worker-owned cooperatives. Often "partner" organizations in an initiative vary greatly in size and command over financial, material, and human resources. In this situation a future economy initiative often will change power and social relations among participants to some extent, but also preserve, or even reproduce old imbalances. Among our six case studies GUCI, Verde, and the Hardwick local food economy most typify this kind of future economy initiative. To move beyond anecdotal stories, participant testimony, and vague remarks about "greater cooperation" by analysts, more rigorous approaches to study power and social relations are needed. At a minimum the kind of quantitative network analysis our researchers were able to carry out when studying GUCI -- including calculation of degrees of connectedness for various actors -- provide an excellent starting point. A special thank in owed to Julia Poznik, Jonathan Ramse, and Ruchira Sen for adding this tool to our methodological tool kit for studying future economy initiatives.

FUTURE RESEARCH PRIORITIES

Economics for Equity and the Environment wanted to begin a process of studying "future economy initiatives" in a more systematic and scientific way. Taking a first stab at establishing an appropriate methodological framework and testing it out on six diverse case studies certainly proved to be a good start. Frankly, we think it was more than a good start. The results were beyond our expectations and establish a strong case for continuing onto a second phase of research. This section describes eight ideas that might be incorporated into future research. The first three points touch on the need for a revised approach to future economy research, building on the lessons learned from the first round of research. The last five points focus on areas of research that our work to date has not yet emphasized.

(1) Objectivity

Maintaining an objective stance when studying future economy initiatives is quite important. It is easy for researchers familiar with the negative effects of BAU economics, and sympathetic with the aspirations of future economy initiatives, to lose objectivity and become cheerleaders for their favorite alternative. It is important to define objective criteria for judging whether or not future economy initiatives do, or do not improve on BAU outcomes. And it is important to insist

on quantitative measures and best practice statistical procedures for drawing conclusions about the significance of any differences in outcomes. Future research should strive to strengthen scientific practices further in ways discussed below. However, for the research to be as useful as possible, its findings also need to reach the attention of people who have an active interest in pursuing or promoting future economy initiatives. It will also have to engage the general public who may not have heard of any of these initiatives before. Reaching these multiple audiences poses a challenge.

To meet the challenge of reaching multiple audiences, creating a more clear-cut "division of labor" across organizations might help. The E3 Network could concentrate on deepening scientific study, which requires being as comfortable with negative as positive results. Meanwhile, other organizations or networks with a more "storytelling" bent could concentrate on publicizing our results and using them to promote greater interest in future economy initiatives. Perhaps it would be better to collaborate with other organizations in an explicit division of labor in the future. Joint proposals for further funding by E3 partnered with another such organization would make sense, since conducting the initiative as a partnership would increase both credibility and outreach.

(2) Distinct Research Areas

It is now apparent that we can distinguish between different areas of the economy where future economy initiatives are springing up: agriculture, energy, services, consumption, urban community development, etc. If we are moving toward building a "library" of future economy case studies – akin to the collection of CPR case studies housed at Indiana University – we should think of organizing our future economy case studies by sector. Also, none of our first six case studies looked at the manufacturing sector. Even if there have been fewer future economy initiatives in manufacturing than in other sectors, it is important to study why. This shortfall should be addressed by commissioning one or two case studies of future economy initiatives in manufacturing which might include a failed initiative. Finally, future economy approaches to *developing* new technologies in any sector, such as peer production, deserve to be studied.

(3) Increased Use of Senior Researchers

In the phase of research just completed, veteran researchers served on the advisory committee tasked with developing an appropriate methodology, but research on the case studies was carried out entirely by younger researchers, many of them still graduate students working toward their PhDs. To strengthen our science in the next phase, it seems advisable to involve senior researchers to a greater extent.

Senior researchers can make key contributions to future economy research in several ways. For example, senior researchers could tackle the task of identifying existing databases with quantitative and/or qualitative information relevant to future economy innovations. Analyzing existing data will reduce researchers' reliance on new surveys and interviews, and facilitate more robust quantitative results while potentially saving time and money. Senior researchers would also be better suited to extrapolating from individual case studies to an analysis of overall impacts of future economy initiatives in different areas of the economy, as well as comparative

analyses between two or more separate initiatives in the same area. As we seek to assess how much the future economy has penetrated different areas of the economy, and identify barriers and enablers of further penetration, comparative analyses will be critical. The quality of junior researcher work could also be enhanced by guidance and supervision from more senior researchers. Finally, researchers with deep experience working in particular areas of the economy (e.g. agricultural economists, energy economists) could also help refine our methodology to be more appropriate for their area. Increased funding to pay for more senior research time would be very helpful in a variety of ways.

(4) Cooperatives and Employee Ownership

The first round of research did not focus on cooperatives, but these organizations are essential to the future economy discussion and should be studied in subsequent rounds of research. We did not prioritize cooperatives in the first phase because they have already been studied by many economists. But expansion of cooperatives is an important response to the failures of BAU, and cooperatives self-consciously pursue many of the future economy goals we identified. In fact, cooperatives' importance is part of the reason "future economy" is a more appropriate name than "new economy," since cooperatives are not new institutions. (We also anticipated that the GUCI case study would have access to data on the three Evergreen cooperatives, which turned out not to be possible.) In any case, it is particularly important to study *new* worker and consumer cooperatives that sprang up over the past 20 years in response to the failures of BAU. An important question begging to be answered is why more cooperatives did not appear during the Great Recession when so many people were unable to find jobs working for private industry or government. Applying our methodology to one or two case studies of cooperatives is one way to start. But we might take advantage of research that has already been done on cooperatives by having an economist familiar with this research use it to try to answer the different questions posed by our methodological framework for studying any future economy initiative.

The dividing line between firms owned by absentee shareholders and firms owned by their employees is often not clear cut. There are far more firms where employees own a portion of its shares than there are firms owned entirely by their employees. ESOPs create an ownership continuum which can be explored using standard econometric procedures to measure whether the degree of employee ownership has a significant effect on how well a firm performs on the various goals identified by our methodology. Some work has been done on ESOPs but much more could be done by an experienced researcher using our framework.

(5) New Business Models

Finally, an important theme in the future economy is "new business models," which we also need to bring into the discussion. New business models include both private certifications of for-profit companies such as B-Corps, or new legal vehicles such as L3Cs or "benefit corporations." There are also an increasing number of what we might call "mission driven businesses" which claim to pursue a social or environmental mission and treat financial viability as merely a constraint, which fall somewhere between standard and non-standard incorporation. Some business schools and law schools are taking an interest in new business models and related transformations of business practices, and have begun incorporating them into their curricula and

research areas. A promising future economy research program in this area could start with one or two case studies of B-Corps, benefit corporations, L3Cs, or a "mission driven business" undertaken directly or advised by an economist experienced in this field. An econometric study comparing the performance of different "new business models" as compared to standard businesses of the same size in the same industries on the various metrics in our framework would be quite useful. An economist familiar with new business models could become an advisor to E3 in either using the framework as is, or updating it to reflect the concerns posed by these new business models. In any case, taking explicit account of new legal structures, institutions, and incentive structures created and promoted by new business models will be an important avenue for future economy research.

(6) Non-traditional finance

Development and Feminist economists have been studying *microfinance* for some time as an alternative way to extend credit to small businesses, and particularly women in developing countries. Stimulated by the financial crisis of 2008 and new communication possibilities created by the Internet, new approaches to financing, such as crowdsourcing, have now appeared in developed economies as well. Like employee ownership and new business models, this is an important part of the future economy that needs to be explored. Again, an economist experienced in studying financial innovation could profitably apply our methodological framework to compare non-traditional and traditional financial practices.

(7) Energy

One of our six case studies concerned a low carbon neighborhood energy utility. But there are many other kinds of future economy initiatives taking place in both renewable energy production and energy conservation. An experienced energy economist could supervise others, organize the use of existing data to compare the performance of future economy initiatives regarding multiple priorities to that of traditional businesses in the energy sector, and help us modify our methodology to be more appropriate to the energy sector.

(8) Policy environment

Our research suggests that the prospects for increasing the scale and replicability of future economy initiatives may sometimes depend on the policy environment. For example, leveling the playing field between chemically intensive, industrial agriculture, and alternative models that include CSAs, local food clusters, and farmers' markets may have a great impact on the ability of future economy agriculture to grow. Similarly, government policies are likely to impact the success of future economy energy initiatives. Variation in state and local policies provide an opportunity to study how much difference policy environment does or does not make regarding the expansion of future economy initiatives.

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