INTRODUCTION

In 2040, the American economy will be scarcely recognizable. Firms will get smaller and more specialized and many jobs will be automated, while new, more flexible, and less secure work options take their place. More and more, Americans will no longer live under the auspices of stable long-term employment, and will find themselves responsible for managing exigencies, like health insurance and retirement planning, that were once handled by employers. Some observers have seen signs of these looming changes and taken them to mean that American society is headed for ever-rising inequality and general economic disaster. Although challenges do indeed abound, we at the Next American Economy project feel this conclusion is premature.

Pessimistic predictions are understandable given the scale of the developing changes to our economy and the fraying of our New Deal-era social contract, but a pessimistic vision need not become reality. To be sure, growing pains will be significant as American government, business, and society catch up to rapid technological and economic advancement, but a bad economy is far from inevitable.

In this thought brief we map out 10 economic surprises that could confound current expectations and lead us to the next Good Economy, as well as some potential pitfalls.

Thought Brief by Bowman “Bo” Cutter

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Projections for the Economy of 2040

Productivity Will Increase with Technological Innovation

In 2015, the U.S. economy stands at the precipice of a transformation on par with the Industrial Revolution.

From the late 19th century through the first 60 years of the 20th century, the fundamental reaction of the economy to the successive steam, electricity, and combustion engine revolutions was the emergence of a new business system and economic platform. That new platform was the factory system, and it spurred a multi-decade adaptation process to lowered costs of organization, plant design, product manufacturing, distribution, and logistics, as well as all that came along with that system: a new educational system and a political response to a new socioeconomic class, which manifested in the growth of unions and the rise of the welfare state. The growth potential of this era was only fully achieved when the right societal platforms rose to support the factory system.

The same is likely happening today.

Though obscured by the Great Recession of 2008, in coming decades, the combination of enormous increases in computing power, the rise of the Internet, and the emergence of new advances like nanotech and 3D printing will reveal changes in costs and factors of production that were every bit as substantial and pervasive as the industrial revolutions of the 19th century.

Productivity growth in the U.S. economy slowed down in the mid-1970s and, with the exception of a brief jump in the late 1990s, stayed slow. By 2010, this was accepted as a boundary condition of the U.S. economy and most—if not all—respectable long-run forecasts assumed long-term productivity growth of 1.2–1.5 percent and a long-run per capita economic growth rate of 1 percent or marginally higher. Many economists, including Robert Gordon, concluded that the possibilities of economically meaningful innovation had simply declined. Though he does not contest the existence of the information technology revolution, Professor Gordon argues it will not provide the multi-decade opportunities for fundamental economic innovation—and the ensuing product and service innovation—that steam power, electricity, and the internal combustion engine provided in the 18th and 19th centuries.

But what many debates around technology miss is that the real innovation of the 19th century was the new business system. Just as they did then, new combinations of modern technologies will create a new American business system that will take hold in the second decade of the 21st century and spur enormous growth in nascent sectors.

We will return to this new system below, but it is important to note that a significant aspect of the new business system will be an increase in the rate of business formation and number of start-ups. The new technology complex will provide new services and products that entrepreneurs can exploit, as well as a new capability to form businesses more easily, more rapidly, and much less expensively. Technological change can create a new wave of positive industry disruption across much of the economy.

The Internet Will Revolutionize the Organization of Firms

With regard to firms, one major effect of the Internet will be to drive the disaggregation and decentralization of organization and management. The Internet, together with information technology, has reduced the benefits of economies of scale for a large number of production and creation processes. Soon, companies will not need massive resources to afford top-quality business management systems. Startups will flourish as key business services, from human resources to finance, are offered as information technology services by separate businesses for nominal cost.
As computing power evolves, perhaps doubling over a span of just several years, and makes telecommunication and remote working increasingly efficient, large, integrated companies driven by command-and-control management will suffer an ever-increasing relative disadvantage and be rendered too slow and expensive to compete. The advantages of “economies of scale” will diminish substantially as the Internet democratizes cutting-edge methods of communication and coordination, leveling the playing field for smaller firms.

Furthermore, the creation and management of partnerships and joint ventures through technology will be far cheaper and much more flexible than internalizing those markets by mergers and acquisitions and then managing them through command and control. Since the vast proportion of mergers and acquisitions fail, any trend that disadvantages M&A activities should improve shareholder value. This will have the added value of reducing the scale of the financial behemoths that currently characterize our financial sector.

Equity markets continue to enforce and reinforce these differences. As we have seen, large, integrated, diverse companies are almost always valued less highly by the equity markets than the sum of their component parts. Why? Because they are less valuable. Today and in the future, diversification and command and control almost always reduce or destroy value.

In parallel, new technologies such as 3D printing and highly automated logistics will reinforce the disaggregation trend. As 3D printing evolves, so will a new manufacturing system. Increasingly, small local businesses will specialize in making everyday items while larger regional and/or national companies make more complicated products.

We see the results of some of these trends already in the growing number of freelancers, in the high-tech nature of startups, and in disaggregated gig economy platforms like Uber. For many young professionals, "the startup" will become an entirely logical alternative to "the job."

THE “GIG” ECONOMY WILL REVOLUTIONIZE THE ORGANIZATION OF WORK

As the new business systems emerge, the nature of jobs, work, and careers will change substantially, but not necessarily for the worse. As we have already seen, the long-term, eight-hour day, five-day week job is becoming a relic of a time gone by, and while many millions of men and women will always continue to support themselves in this way as they have for more than 100 years, the "job" will soon no longer be the centerpiece of the "good economy."

Projecting and imagining such a fundamental change is no small conceptual hurdle, but this should not keep us from developing new institutions to balance a new set of costs and benefits. As jobs change, "work" and the necessity to earn a living will not go away.

Three forms of employment will become more and more important: part-time assignments, portfolio careers, and entrepreneurialism. To explain:

First, although many have cast doubt on its merits and capacity, the gig economy will be no small factor in the future of America’s workers. For many, "work" will increasingly consist of disparate short-term assignments facilitated through a mobile platform. Others, in order to maximize their talent and earnings, will carry a “portfolio" consisting of a number of these short-term assignments. A career, then, will be composed of thousands of such assignments spread out over a lifetime.

Second, more and more workers will become organized as freelancers, working on contracts that range from several days to multiple years. As the practice of contracting becomes more prevalent, freelancers, like factory workers before them, will organize through new online platforms (discussed below) to secure more protections and fairer
compensation. The result will be a greater degree of freedom and security among the temporarily employed.

Finally, with the previously mentioned lower barriers to entry, more and more workers will become full-time employees of their own firms, consisting of as few as a handful of employees. As is the case today, the vast majority of job growth in 2040 will come from the growth of small business.

NEW "PLATFOMRS" WILL REVOLUTIONIZE THE ORGANIZATION OF WORKERS

Changes in industry have always required changes in the organization of markets, workers, and skills: As the commercial economy of Europe began to self-organize in the early Middle Ages, trade fairs were a central institution. In the later Middle Ages, guilds were crucial to the organization of work and of skills. Labor unions and chambers of commerce grew in parallel with the rise of our industrial economy. New institutions will be no less necessary in the coming decades. America will have to find new organizations or “platforms” to help workers negotiate a new economic landscape.

In this iteration, the most pressing needs will center on security. Without one central employer to help manage health insurance, retirement planning, tax withholdings, and even workflow itself, American workers will need new methods and services to manage these exigencies. This is more than a surface-level shift; the loss of traditional employer-tied benefits and safety nets will leave millions of American workers and their families exposed to new economic risk. Platforms and institutions to help mitigate this risk will be economic essentials. Of course, we cannot predict the precise shape of the coming platforms, but we can identify some early prototypes and see the critical roles these platforms will continue to play.

New platforms have begun to meet needs in three distinct categories: First, they offer new means of marketing and selling goods and services, like Etsy has begun to do with handmade crafts. Second, they provide ways for workers at all levels to learn about new assignments, to qualify for and schedule assignments, to collect payments, and to meet such needs as health care, insurance, pensions, child care, and elderly care. Examples here range from TaskRabbit, which helps workers find work, to Kelly Services, which helps contractors manage the business aspects of their careers, so that, for example, an architect can function as such without also being an accountant. Third, they offer a pathway for workers to connect with the larger market. Examples here include online trainings and skill boot camps that allow workers to keep pace with needed skills, as well as collective action platforms like coworker.org that allow workers to petition for workplace improvements.

Some more detailed examples of areas where platforms will enable continued growth and development follow:

LABOR UNIONS

Currently, the unionization rate in the private sector workforce is 6.6 percent. The major public companies with thousands of workers and major unions representing those workers were significant elements of 20th century union membership, and, while often antagonists, they each depended on the other. But major companies have changed substantially and will continue to do so. Unions, of course, will have to change with them. To be successful, unions will have to find pathways to connect workers of various employment statuses, from disparate firms, and within disaggregated supply chains. These new “digital employee networks” will have to go beyond bargaining and tackle a litany of issues that will be raised and championed through various peer-to-peer forums. They will help temporary, part-time, and contracts workers secure rights previously reserved for only the most stable employees at large established firms.
TEMPORARY WORK COMPANIES

These are natural facets of the good economy. Their specific focus is already what the new economy is becoming, their natural business model allows for substantial broadening of their mission, and the changes required precisely parallel their existing strategies. As a result, companies like Kelly Services will become pivotal actors in the next economy.

BUSINESS AND TECHNOLOGY CONSULTING FIRMS

Like temporary work companies, business and tech consultants are already working from a disaggregated model that blends perfectly with the 2040 economy. By helping to manage disparate, skilled people and promising firms, they will capitalize on the disaggregation of major companies and the manufacturing sector and become significant parts of the way the gig economy functions.

TALENT AGENCIES

Today, talent agencies mostly manage the careers of performing artists and athletes. But as skilled workers move towards elf-employment, talent agencies, along with public relations and head hunting firms, will start to manage the careers of high fliers in law, consulting, and senior corporate management. This trend will spread downward, taking on a more prominent role in the lives of even rank-and-file professionals looking to further their careers.

There is not a single model or clear linear path along which the platforms of the new economy will evolve, but it is evident that the profoundly different nature of jobs and work in the emerging new economy will require profoundly different platforms for organizing work and careers.

THE NEW ECONOMY WILL REQUIRE A REVOLUTION IN EDUCATION

Another important reason for the collapse of productivity growth after the mid-1970s was a flattening out of educational attainment. As Claudia Goldin and Larry Katz showed in The Race Between Education and Technology, profound changes in education—most notably the "high school movement," which occurred continuously from the mid-1870s to the 1970s—enabled labor productivity to increase. But educational attainment seemed to stagnate along with productivity thereafter. There has been endless analysis of this phenomenon, and it is clear that many aspects of the American education system need to change along with the economy, and that significant benefits to economic performance and mobility await if they do.

Luckily (or perhaps, finally) a number of educational initiatives—especially surrounding childhood investment—have begun to gain fairly widespread support and seem poised to revolutionize the American education system. It is clear that targeted early childhood interventions, beginning with improved prenatal care and lasting up until kindergarten, offer enormous potential benefits.

A 2015 study by the St. Louis Fed demonstrated that the elderly as a category were not even close to the poorest and most vulnerable segment of our population:

There has been a historic shift in favor of today’s elderly…[T]he long-term gains of the elderly and losses of the young are astonishing. From 1989 to 2010, median income increased 60 percent for those aged 62 to 69 while falling 6 percent for those under 40 and 2 percent for those 40 to 61… From 1989 to 2010, the median inflation-adjusted net worth of those 70 and over rose 48 percent to $209,290. During the same years, the net worth of those under 40 fell 31 percent.
In his book *Dead Men Ruling*, Gene Steuerle shows that we are shortchanging kids: "In 2017, Washington will start spending more on interest payments than children...In per-person terms in 2008, the federal government spent $3,822 on children and $26,355 on the elderly (in 2011 dollars)." It is quite clear that if the nation wants to increase educational attainment, labor productivity, and equity, then kids have to be a major focus.

Young adult and adult education is the other avenue of educational improvements to be explored. The high school system remains a facsimile of 19th century assumptions, which can be summarized as: You will leave high school, you will find—mostly on your own—an entry level job, you will stay in that job or one very much like it your entire working life, and the content of your job will change incrementally at a pace you can absorb on your own.

But this future no longer exists for every high school graduate and is increasingly untenable for most.

The content of all jobs—manufacturing, service, even manual labor—has changed rapidly and continues to do so. We must develop an education system that allows all employees and workers to keep up successfully with these changes throughout their entire careers.

Such a system would combine three elements: First, with mini-courses made available by approaches linking "high-tech and some touch," adults could continuously update their skills throughout their working lives, at times and locations of their choosing. Second, a new system of accreditation—mini-credentials and authentication—would allow anyone to demonstrate that she had the necessary skills for a given job. Third, new kinds of platforms would enable students to track the mini-courses they take, and to maintain their own library and history of credentials.

Though they offer great promise, the barriers to enacting these reforms remain significant. Below, I address two likely pathways through which we could muster the political will to enact these programs.

**GOVERNMENT WILL START WORKING AGAIN**

Today, a state of complete disagreement exists between the cores of the Republican and Democratic parties over spending, taxes, deficits, and debt. Short of complete one-party hegemony, it seems that the likelihood of passing any major program involving funds is near zero. But, as desperate as the situation appears, it seems unlikely to persist indefinitely.

In the coming decades, legislators will come to fully understand the fiscal disaster looming over the American budget and will be forced to do something they have long avoided: act rationally. With entitlement programs and corporate tax expenditures set on growing, predetermined paths, more and more choice and flexibility will be removed from the budget process, eroding both parties' ability to govern. Without a broad compromise, Congress will not only be unable to *increase* spending but will also be unable to *change* spending.

As Steuerle writes in *Dead Men Ruling*, by 2020 we will reach a point where all anticipated federal revenue for the next 10 years will be fully allocated to existing commitments. Steuerle argues that both parties have conspired to put in place programs and tax breaks that were structured to increase, creating a "squeeze that deprives current and future generations of the leeway to choose their own priorities, allocate their own resources, and reach for their own stars." He concludes, "we are left with a budget for a declining nation, that invests ever less in our future, particularly our children, and a broken government that presides over archaic, inefficient, and inequitable spending and tax programs."

Slowly, the rising new constituencies and the politicians who represent them will realize the choices they are being deprived of, and will begin to put aside the existential debate over deficits, taxes, and spending and instead work to create that choice.

Democrats could agree to limit the automatic
spending growth of all entitlement programs, in effect forcing all future growth of such programs into an annual budget process, and Republicans could agree to parallel limits on all tax expenditures. Some combination of the additional funds could be spent on investment and deficit reduction, broadly reopening a constructive debate on budget priorities.

CITY GOVERNMENTS WILL BOOST INNOVATION

By the early aughts, the importance of cities as platforms for the new economy was clear. Both the more agile and responsive nature of city governments and the natural ability of a dense metropolitan environment to function as an incubator for business make cities a natural ground zero for innovation.

Much, maybe most, knowledge crucial to the functioning of any business is informal and uncodified, existing in the minds of workers and the processes and cultures of specific companies. And while this is true of individual companies, it is even truer of competitor groups and companies within the same value chains. To give the simplest possible example, the relationship between a manufacturer and a crucial component supplier is almost always characterized by an intensive flow of information going both ways, most of which is never written down.

These knowledge-intensive specialization complexes work best when the players are near each other and suppliers, designers, marketers, salespeople, logistics specialists, and information system designers can meet often and informally. These complexes, inevitably, are located in metropolitan areas. Our cities, therefore, are now the basic platforms for the emerging complexes of specialization.

To some degree, of course, this has always been true. But the platform role of cities has grown even more central because, to an important degree, competitive advantage now stems fundamentally from the quality of the specialization complex and platform as a whole. The quality of very local governance, infrastructure, and education and the capacity of cities to choose their own ways of being distinctive are crucial determinants of competitive advantage or disadvantage.12

Furthermore, relative to the previously discussed federal gridlock, city legislators move freely. What will soon become clear across the landscape is that cities are the only political units combining scale, proximity to real life, and functioning authorities. Cities and mayors are all that work.

As Bruce Katz of the Brookings Institute, author of The Metropolitan Revolution, argues, “in metropolitan areas that produce 91 percent of GDP, economic and political conditions vary enormously…Cities need the flexibility to devise their own approaches to problems…The federal government needs to allow cities and metropolitan areas to consolidate funding streams and use them to address problems in ways they see fit.”13

This sort of innovation will be key to achieving some measure of the good economy.

THE MIDDLE CLASS WILL EARN INCOME FROM MORE THAN WAGES

Of course, classic wages will not go away. Many who remain in traditional employment may not experience significant workplace changes in this regard, but for many operating in the gig economy or as independent contractors, wages – in the traditional sense – will be of declining relevance.

For those who start their own businesses, income will be a blend of "wage" income they pay themselves and distributions from the profits of their enterprises. For gig economy workers, wages—the amount paid per task—may matter less than efficiency and workflow management—the ability to perform a certain number of paid tasks efficiently and perhaps concurrently.

As such, Americans will be freed of the burden of suffering at the hands of one underpaying employer
and will be less apt to get stuck in a cycle of insufficient compensation. Furthermore, the new model will reward strategic job-seekers and enhance wage competition among platforms and employers, which will need to offer competitive compensation in order to attract the best pool of highly mobile workers.

GROWING LABOR SCARCITY WILL RAISE WAGES

Between the 1970s and 2010 we experienced a low-growth economy, a falling startup rate, technological change that eliminated a large number of middle-income jobs, and no employment growth—indeed, substantial employment reduction—across the entire large company sector. This has led to a pervasive sense of pessimism that, though not unreasonable, is destructive and unfounded. Economic growth, as well as shifting demographics, will actually make labor scarcer, thus boosting wages.

In the medium term, technological unemployment due to automation will lead to middling job growth, but as that innovation leads to aforementioned economic gains, America’s labor market is likely to rebound.

Rising startup rates and very high growth of self-employment are likely to boost the premium on labor as demand increases. Concurrently, a large aging population nearing retirement and a birthrate below replacement will lessen the labor supply, boosting wages and participation even further. Immigration reform can help meet this new demand but is unlikely to stall this wage growth.

INCOME INEQUALITY AND MOBILITY TRENDS WILL SLOWLY BEGIN TO REVERSE COURSE

Although it can be hard to imagine from the doldrums of inequality’s current heyday, shifting economics and better government policy described here could quite possibly improve the income and wealth distribution in America. No one factor would achieve this, but the combination of overall economic growth, high labor demand, lower barriers to entry for new businesses, strong supportive institutions including modernized unions pushing for a larger labor share of productivity—and heavy investment in children would do a lot to raise productivity, mobility, and equity.

Also, once Congress is able to compromise on budgetary conflicts, it will become clear that small marginal changes could be made and that they would add up to a lot over a decade. So other small incremental changes will begin to occur: for example, Congress will shift retirement and health benefits to focus on lower-income households and increase annual spending on infrastructure.

AMID NEW OPTIMISM, DRAWBACKS ABOUND

We would be remiss, of course, to flaunt all of the opportunities for growth and improvement over the next few decades without acknowledging the natural drawbacks that will accompany them. Many jobs will be automated, while labor will become highly stratified between high- and low-skill positions. Furthermore, as entrepreneurialism and personal responsibility become a more central aspect of all work, the burden of personal management placed on all Americans will increase greatly. Living in the 2040 economy will be significantly more complicated than it was in 1940, or even 1980.

Americans will have to learn to plan for work that is neither rote nor predictable. This means that everyone will have to be much more responsible for their own careers. In particular, workers will be forced to think constantly about their next assignment, the skills required for that assignment, and the education and credentials required to gain those skills.

Furthermore, if the platforms and education improvements described here do not manifest, many who do not possess the intellectual and monetary resources necessary to operate in such an environment will face a stark economic reality.
But if the downside is that individuals have to be more entrepreneurial in planning their lives, the upside will be many more possibilities for defining one’s own work, even in careers currently considered low-wage and low-value-added. Specifically, in the vast sector of individual and household services, we have seen individuals combine human skills and new technology in innovative ways that create great value and increase income.

"Work" in the new economy could become at least as lucrative and maybe more fulfilling for most men and women than it was in the factory heyday of the 20th century. But of course the challenges to attaining and maintaining the good economy should not be understated.

Moreover, neither this brief nor this series as a whole are exhaustive. Numerous pitfalls await the American economy and society, even if the recommendations and positive ruminations herein come to fruition. Structural discrimination still locks up enormous swaths of our workforce, and global warming threatens economic ramifications to the tune of several major cities if we do not act swiftly to soften its blow. But setting grave dangers aside for a moment, observers should, at the very least, not feel that America’s economic fate is sealed.
END NOTES

4 Horowitz, Sara, and Fabio Rosati. 2014. “53 million Americans are freelancing, new survey finds.” Freelancers Union.