## "Why Free Money for Everyone Is Silicon Valley's Next Big Idea"

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By Clay Dillow

Imagine for a moment having 1,500 extra in your bank account at the end of the month -1,500 more than you've actually earned. It's not a bank error; the money is yours, no strings attached. You can travel, pay down bills, or offer it to a relative who needs a little help. You can leave it right where it is for some later day.

Now imagine that the \$1,500 arrived every month. Would you put it toward a new car? Take a nicer-than- usual vacation? Would you go back to school, or start a business? Would you work fewer hours? Spend more time with family? Would you cease working altogether?

Sam Altman doesn't know what you would do, but he'd like to find out. The 31-year-old CEO of Silicon Valley startup accelerator Y Combinator believes that if economic trends continue on their current trajectory, that hypothetical deposit in your account may prove a critical part of your future. And he's currently paying about 50 households in Oakland up to \$1,500 a month to see what that future might look like.

To understand why, complete the thought experiment above, with some darker shadings: Imagine that a robot has stolen your job and pushed you into a lower-wage occupation, if not out of the workforce altogether. Imagine that companies, choosing between keeping costly human workers or replacing them with less expensive software and machines, have made the most profitable decision. Imagine that you feel a little desperate.

For a growing number of business leaders and economists, this future no longer seems hypothetical. A University of Oxford study from 2013 estimated that 47% of U.S. jobs may be at risk within the next two decades because of advances in artificial intelligence and automation. Last year, the White House Council of Economic Advisers estimated that workers making below \$20 an hour would have an 83% chance of losing their jobs to robots in that span. Those odds dropped as workers' education and income levels grew. But as software gets smarter, that too is subject to change: Companies will eliminate even jobs that were long considered immune from technological displacement.

That's where Altman's \$1,500 comes in. One potential means of blunting the impact of automation involves providing each person—working or not—with a minimum payment, for life, regardless of income or other mitigating factors. Universal basic income (UBI) would insulate displaced workers from poverty and quell the potential for unrest during a profound and painful economic transition. Theoretically, it might spur innovation and encourage people to take entrepreneurial risks. It would almost certainly alter the definition of "work" by attaching compensation to whatever people choose to do with their time, including absolutely nothing.

Floated by economists and political theorists for decades, the notion of basic income is enjoying new prominence today. That's particularly true in Silicon Valley, where several of the entrepreneurs developing the very technologies that fuel fears of a dystopian future—and often profiting handsomely from them—have endorsed UBI as a potential fix. Governments in developed and emerging nations alike have warmed to the concept, launching a bushel of pilot projects. And the inherently "lefty" idea has drawn growing support from libertarians and conservatives, particularly those who view traditional welfare mechanisms as bloated, wasteful, and inefficient.

Of course, the widening support by no means makes UBI politically palatable. Critics have a buffet of objections to choose from—it undermines productivity, it rewards laziness, it's socialism by another name. There's no doubt that it would be unprecedentedly, astronomically expensive. The concept also violates a core tenet of capitalism, by assuming that this technological revolution, unlike others before it, won't create better jobs tomorrow to replace the ones it erases today.

Altman, the precocious investor and new-company coach whose firm helped launch stars like Airbnb, Zenefits, and Dropbox, is using real-world experimentation to learn whether UBI can stand up to such critiques. Y Combinator's research arm has launched a pilot program in which up to 100 recipient households will get \$12,000 to \$18,000 this year, in exchange for ... nothing. They're asked to submit to occasional surveys, but there's no penalty for failing to do so. The idea is to give people money without preconditions and observe what they choose to do. If the pilot is successful, Y Combinator will launch a much larger study, likely a five-year experiment involving thousands of households in multiple states. Within a few years, Altman hopes his team will have something that has thus far proved elusive: proof of whether UBI can have a long-term positive impact.

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"It's not for me to tell policymakers what to do, and I don't know what the best policy is," Altman says. But in a time of unprecedented disruption, it's time to find out; after all, he adds, "People can smell automation on the horizon."

You know an idea has gone mainstream when one of the world's best-known CEOs invokes it in an Ivy League commencement speech. In May, speaking to Harvard's graduating class, Facebook founder Mark Zuckerberg made a case for UBI as a means to mitigate automation's downsides and as a catalyst for entrepreneurship. "We should have a society that measures progress not just by economic metrics like GDP, but by how many of us have a role we find meaningful," Zuckerberg said. "We should explore ideas like universal basic income, to make sure that everyone has a cushion to try new ideas."

That idea is gaining currency among tech leaders. In November, Tesla and SpaceX CEO Elon Musk told CNBC "there's a pretty good chance we end up with a universal basic income ... due to automation." Facebook cofounder Chris Hughes helped launch the Economic Security Project last year to fund UBI research. And in February, eBay founder Pierre Omidyar donated nearly half a million dollars through his philanthropic organization to support a basic-income experiment in Kenya. The tech elite's burgeoning concern could be described as part moral obligation, part enlightened self-interest. Many of them share the view that technologies that have generated huge amounts of concentrated wealth will soon be responsible for devastating labor market upheavals. The fact that a middle class gutted by unemployment doesn't bode well for gadget sales likely isn't lost on them either.

That said, the concept of UBI is hardly new. Sometimes called a "guaranteed minimum income" or simply "basic income," the notion has cycled through the political consciousness for centuries, rising during times of technological and economic revolution. The idea was floated by Sir Thomas More (in his 1516 Utopia) and Founding Father Thomas Paine (in his 1797 pamphlet Agrarian Justice). In the 20th century, the concept got a boost from the political right: Conservative economists Milton Friedman and Friedrich Hayek endorsed it as a more efficient alternative to sprawling social service bureaucracies. In the 1960s, even as liberal thinkers like Martin Luther King Jr. championed a minimum income for moral reasons, conservatives like Richard Nixon considered it on practical grounds. Led by director of the Office of Economic Opportunity Donald Rumsfeld (and his special assistant, Dick Cheney), the Nixon administration even conducted basic income experiments in several U.S. states.

What's different about the current moment is this: In technological revolutions past, rapid and irreversible changes caused massive dislocation, but over time those revolutions created new and often better kinds of work. The automation revolution, however, could break that pattern, says Martin Ford, software entrepreneur and author of Rise of the Robots. Workers won't be able to shift to new kinds of predictable, routine work, because it's exactly that kind of work that's being automated, not just in agriculture or manufacturing or service industries but across all of them simultaneously. "This time around, maybe we can't educate our way out of this," Ford says.

Indeed, many commentators agree that the education system and policy environment are not keeping up with the disruption at hand, increasing the odds of dark days ahead. "As technology takes away more and more good-paying jobs, we are going to have more and more people that are working but are very poor," says Robert Reich, who served as labor secretary to President Clinton.

Many who fear this scenario believe it's already playing out. They see it manifested in the widening income gap in the U.S., and in the economic mood of the middle class, which is anxious even though unemployment is historically low—an anxiety that became unignorable during last year's elections. Between 1979 and 2013, the income of America's top 1% grew 192%, while income for the bottom 20% expanded only 46%. The effects have been felt acutely in coastal cities, where the creation of vast wealth has driven costs of living to levels that strain all but the top earners.

If the core problem in a robotics-led world is the average worker's lack of income, the thinking goes, then UBI could—theoretically—mitigate it by providing a financial floor below which people cannot fall. It's the rare kind of societal problem for which the solution may be to simply throw money at it.

Of course, how much to throw, and to whom, is a point of enormous contention. In the U.S., a number oft-cited by critics is \$3.2 trillion—the cost of giving \$10,000 a year to each and every citizen. (That's about 19% of GDP; for perspective, the federal government will spend about \$4 trillion in fiscal 2017 on all of its programs and obligations combined.) Advocates of UBI counter that much of that money could be recovered by rolling up existing social programs like welfare and Social Security, by excluding children, and so on. Even so, new costs could be measured in trillions for any program that could earn the label "universal."

Altman believes robots are likely to solve the cost problem, even as they eliminate jobs, by creating unprecedented productivity and wealth—perhaps even doubling GDP. "If we need it, we'll be able to afford it," he says of UBI. But cost isn't where he's focusing now:

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The Y Combinator team is far more concerned with collecting conclusive data about whether UBI can create the stability to allow people to find meaning in new kinds of work—the kind of data that could persuade policymakers to make a trillion- dollar bet.

They're not the only ones looking. Experiments are in the works in at least a dozen countries, including Spain, the Netherlands, Kenya, Uganda, and India. The city of Glasgow in Scotland has undertaken a feasibility study for the first UBI pilot in the U.K. In January, the Finnish social services agency Kela launched a program that selected 2,000 citizens who were already receiving unemployment benefits and offered them an extra 560 euros monthly. This summer the Canadian province of Ontario will begin a basic income trial involving up to 4,000 families. And Switzerland last year voted on the idea of a national basic income in a referendum. (It lost.)

This is all vindication for economists like Guy Standing. In 1986 the U.K. native cofounded the Basic Income Earth Network with what he describes as "a very young, radical group of philosophers and economists." It turns out they were a few decades early. "We were regarded as mad, bad, and dangerous to know," says Standing, a professorial research associate at SOAS University of London and author of Basic Income: And How We Can Make It Happen."But in the last five years we've gained a huge increase in respectability."

That respectability has been boosted by pilot projects in communities where baseline living standards are low—and where basic income's impact looks correspondingly impressive. A 2011 pilot administered in part by UNICEF selected about 1,100 households, more than 6,000 adults and children altogether, spread across eight villages in rural India. Each received the equivalent of 20% to 30% of an average household's income—not a full ride, but a notable bump in spending power. Researchers, including Standing, surveyed recipients throughout the two-year experiment, comparing the results with a dozen similar villages that served as a control group.

The study found that people who used the money to curtail their working hours were rare. Most saved it for major improvements to their lives or livelihoods, things like building materials for a new house or new tools with which to ply a trade. Some pooled their grants with family or neighbors and launched new businesses. Across the board, money spent on education in the recipient villages rose, alongside school performance. "The only group for which it resulted in a reduction in labor was among children, because they were spending more time in school," Standing explains.

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A similar pilot—the one funded in large part by Omidyar of eBay—began in October in Kenya. It will give 6,000 people across 40 villages 2,280 shillings per month—about \$22 —for a full 12 years (another 11,500 people across an additional 80 villages will participate in a shorter trial). The Kenya effort aims to be the largest, most extensive basic income trial to date. While it's too new to have produced conclusions, there's already evidence that recipients, formerly impoverished, have used the cash to buy motorbikes, livestock, fishing nets, and other vehicles of economic empowerment.

There's far less UBI data available from European and North American nations with complex social welfare systems. Those systems themselves offer little insight into how UBI might impact their economies. That's largely because they're hedged with restrictions, requirements, and "incentive traps" that can penalize recipients financially if they earn more money through work—the way Americans, for example, can be disqualified from food stamp programs if their income crosses a minimum threshold. (This is what makes the "no strings attached" aspect of UBI so important to advocates.)

There's a notable exception to this data drought—though it's a program that has been defunct for about 40 years. In the 1970s, reformist Canadian Prime Minister Pierre Trudeau (father of current premier Justin) experimented with a project called Mincome, short for "minimum income." As proof of concept, Mincome provided a guaranteed income to over 1,000 lower-net-worth families scattered across the province of Manitoba. And one town, Dauphin (approximate metro population in 1974: 12,400), was chosen as a "full saturation site" where any resident could receive the benefit, regardless of income—a move designed to test what could happen in a context where everyone received the same cash benefit.

The political winds in Ottawa shifted a few years later, and Mincome lost its funding before it could yield definitive conclusions. But Evelyn Forget, an economics professor at the University of Manitoba, recently revisited the Dauphin data, publishing a report that extracted some wider insights. Forget found that in households that collected Mincome, primary earners on average didn't see a significant reduction in hours worked. "Secondary" and "tertiary" earners did work less, but in ways that were potentially beneficial. Working mothers took more time off around childbirth, "essentially using the stipend to buy themselves longer parental leave," she says. Working adolescents were more likely to finish school, Forget says, pointing to a "nice little bubble in high school completion rates" that coincided with the experiment. Hospital, doctor, and mental-health visits all declined. A healthier, better-educated workforce would presumably be better armed than a control group to handle future economic disruption. Forget's study, alas, doesn't address what became of the Mincome families after the pilot ended. But Guy Standing isn't discouraged by the lack of firmer conclusions. And he's bullish on what existing research shows about the relationship between UBI and work habits, regardless of what kind of economy recipients are immersed in. "Critics say that if you provide a basic income people will ... become lazy and surf on Malibu beach or something," Standing says. "In actual fact we've found very strong positive effects on the amount of work people were doing. It energized people [and] it increased entrepreneurial-type activities."

To be sure, examples of entrepreneurialism in a Ugandan village may not be replicable in a more advanced economy: It takes far more capital to open a fish-and-chips place than it takes to buy a fishing net. Still, many UBI advocates believe that the opportunism they've seen in Kenya or India could translate to developed economies. As Natalie Foster, cochair of the Economic Security Project, puts it, "Really interesting things start to happen when everyone has a bit more cash."

That range of "interesting things" may not include anything we currently recognize as a job. It's a certainty that some individuals would choose not to work, yet it's unclear how much that matters—in a labor market where good-paying jobs are scarce and unemployment is high, it's not necessarily a bad thing if some people opt out of the workforce. And policies like paid parental leave already recognize the value of tasks that fall outside the conventional definition of labor. UBI isn't money for nothing if "work" expands to include caring for an elderly parent, volunteering at a local school, or engaging in civic organizations and political life.

If such an expansion is worth paying for, UBI supporters say, it doesn't have to be unaffordable. Current social welfare programs spend vast sums extremely inefficiently money that could be retasked to UBI. Though funding basic income involves the unpopular act of raising taxes, governments could avoid burdening individual taxpayers by taxing technology itself. Earlier this year Bill Gates suggested doing exactly that by placing a tax on companies' use of robots and directing the proceeds to fund worker retraining and other priorities.

Other would-be reformers are advocating policies that could amount to UBI by other names. A bill currently in play in California would create a progressive tax on carbon emissions, with revenue to be paid back out in equal installments to all Californians. In February, a paper authored by (among others) James Baker, Henry Paulson, and George Schultz—who variously served as cabinet secretaries for Presidents named Nixon, Reagan, and Bush—laid out a "conservative case for carbon dividends" calling for a similar scheme at the federal level. (Among its stated aims: curbing populism by boosting the incomes of frustrated working-class Americans.) And Democratic Congressman Ro Khanna—who represents much of Silicon Valley—has proposed an expansion of the earned income tax credit that would provide as much as \$12,000 per year to working families.

With none of those proposals anywhere near fruition, the Y Combinator team is exploring what \$1,500 per month can buy in Oakland. For most, it doesn't buy a free ride. The rising cost of living in the Bay Area has spilled over into what was until recently one of its rare affordable enclaves: Median rents in Oakland have crept toward \$3,000 a month, ranking it among the nation's most expensive markets. But the money can still help residents cope with stagnant wage growth. And for Altman and his allies, it buys data-driven insight into human behavior. Will Oaklanders be more likely to become couch potatoes, or self-taught coders? To retrain, or tune out? The answers might help buy legitimacy for UBI—serious consideration of an idea long dismissed as practically unfeasible, politically untenable, or both.

Autonomous vehicles on the streets, automated traders on the floor, and factories where people are a distant memory. The benefits could be enormous, but this future—with artificial intelligence performing the business functions once reserved to us—is where basic income might make sense. "A lot of people, politicians especially, they'll lie and say they're going to stop jobs from going away," Altman says. "That's not going to happen. Technology is going to come. Jobs are going to change. I want to figure out how to make this new world work for everybody."