# The Resurgence of Universal Basic Income

Concerns about the effects of automation have brought an old policy proposal back into the limelight

By Kody Carmody

he idea that technology will make human workers obsolete is certainly not new. In the 1930s, John Maynard Keynes wrote, "We are being afflicted with a new disease of which some readers may not yet have heard the name, but of which they will hear a great deal in the years to come — namely, technological unemployment." Keynes thought that technology would replace workers faster than workers could find new jobs. But he optimistically believed that this process eventually would lead to an "age of leisure and of abundance."

Today, a new set of techno-optimists argue that coming advances in automation and artificial intelligence will finally fulfill Keynes' prediction, replacing most human labor. Even if machines don't cause widespread unemployment, they have caused and surely will continue to cause substantial labor market shocks in specific industries. These concerns have breathed new life into the discussion over a policy now called universal basic income, or UBI.

Many variations have been proposed, but UBI generally refers to regular cash payments that would go to individuals regardless of work status or income (that's the "universal") and would cover some minimum standard of living (that's the "basic"). Elon Musk, Mark Zuckerberg, and other figures in the tech industry have publicly announced their support for UBI as a result of their concerns about job loss from automation. As workers are replaced by machines, "we need to figure out new roles for what those people do, but it will be very disruptive and very quick," said Musk in a 2017 speech in Dubai. "I think we'll end up doing universal basic income ... it's going to be necessary."

At the same time, questions remain about how it could be done and its effects.

### **UBI Meets U.S. Politics**

It wasn't technology leaders or futurists who first brought UBI into mainstream U.S. political discourse — it was economists. Milton Friedman first proposed the negative income tax (NIT), a forerunner of UBI, in his 1962 book *Capitalism and Freedom*. The NIT and UBI are identical, except that NIT benefits would decrease as a recipient's income increases and at a certain level phase out entirely, while UBI payments would be fixed regardless of income. Economists from all over the ideological spectrum came to support NIT proposals, including Friedman's fellow Nobel laureate Friedrich Hayek as well as liberal-leaning

economists like Nobel laureates Paul Samuelson and James Tobin. In 1968, more than 1,200 economists signed a manifesto advocating for a guaranteed income.

Support from economists and policy experts eventually led to a political movement. At the urging of Sen. Daniel Patrick Moynihan (D-N.Y.), President Nixon presented the Family Assistance Plan (FAP) in 1969; the program would have provided each family in America \$1,600 per year (roughly \$10,650 in today's dollars) subject to some work requirements. Shortly after, a more generous proposal called the Human Security Plan was proposed by Sen. George McGovern (D-S.D.), part of his presidential campaign platform as the Democratic nominee in 1972. Despite economists' support for the Moynihan plan, no guaranteed income plan ever made it through Congress.

Proponents made many arguments for basic income. One was that basic income would be more efficient than the welfare system as it would require very little bureaucracy. Although lower administrative costs might be a benefit of UBI, it probably would not be a large one. According to Jason Furman, chairman of the Council of Economic Advisers during the Obama administration and now senior fellow at the Peterson Institute, eliminating the entire administration for unemployment insurance, food stamps, housing vouchers and the like would provide an annual UBI of only about \$150 per person.

One of the main concerns about UBI has been its effect on work and labor supply. In 1986, Alicia Munnell, then senior vice president and research director at the Boston Fed, said basic income schemes have been beset by "the widespread fear that a guaranteed income would reduce the work effort of poor breadwinners and, as a result, cost tax-payers a great deal of money." This objection is still shared by many today, but it was the exact opposite of what supporters expected: They thought that replacing the U.S. welfare system with a guaranteed income might actually give the poor more reason to work. "I see the work incentive for low-income families as the single biggest economic benefit of replacing the current system with a UBI," says Ed Dolan, an economist at the libertarian-leaning Niskanen Institute in Washington, D.C., and a prominent proponent of UBI.

Why the disconnect? It's rooted in opposing beliefs about how workers would respond to the payments — and how they respond right now to welfare programs.

If you suddenly start receiving an extra check in the

mail every month, such as a UBI, you can suddenly consume more for any given amount of leisure, and you can afford to work less. This — what economists call an "income effect" — is what many skeptics have in mind when they worry that UBI would cause people to work less or stop working altogether.

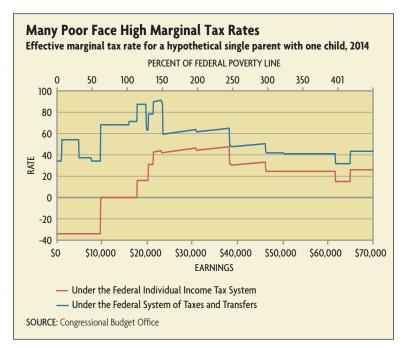
But if that check comes as part of a means-tested program, like a traditional welfare program, then the payment goes down as you earn more. From your perspective, the declining welfare payment is equivalent to an increase in marginal tax rates. The more you work, the less you get to keep of each dollar earned, and you might rationally choose to work less. This is a substitution effect: As work becomes relatively less profitable, you substitute toward leisure.

The substitution effect is a major concern that many economists have with the current U.S. welfare system: Many poor people face high effective marginal tax rates. Data from the Congressional Budget Office show that the effective marginal tax rate for a single parent with one child changed with their earned income in 2014. When including federal transfer payments, this effective marginal tax rate nears 100 percent at low incomes — a hypothetical family nearing 150 percent (about \$23,000) of the federal poverty line would keep less than 10 cents of each extra dollar they earned. (See chart.) There are also other large cliffs in effective marginal tax rates, which vary widely by state and almost always fall below 150 percent of the poverty line: losing eligibility for Medicaid, the Children's Health Insurance Program (CHIP), the Supplemental Nutrition Assistance Program (SNAP, formerly "food stamps"), Temporary Assistance to Needy Families (TANF), and state transfers.

Thus, a poor family might be faced with the situation of working longer hours for an extra \$100 of income while losing \$90 in benefits. A UBI to replace this system might have an income effect, depending on how generous the benefit is, but it would almost definitely have a positive substitution effect through lowering and smoothing the effective marginal tax rates that poor families face. Theory alone, however, can't predict whether the income effect from a UBI would be larger than the substitution effect from welfare. That's where experiments have come in.

### The NIT Experiments

To test the net effects on labor and costs relative to welfare, the Nixon administration launched four NIT experiments in urban and rural areas across the United States — the very first large-scale randomized control trials conducted in economics. At the same time, Canada launched a similar experiment called Mincome in the province of Manitoba. The five experiments lasted about three to five years each, providing monthly payments to families with children. The programs also varied in generosity; in 2013 dollars, a family of four would get anywhere between \$17,445 and \$48,446 per year, with effective marginal tax rates between 30 percent and 80 percent.



Ioana Marinescu, an economist at the University of Pennsylvania, recently reviewed evidence on the 1970s NIT experiments as part of a larger project on unconditional cash transfers. She found that "the labor supply effects are uniformly small to nonexistent, depending on the study." Only the Seattle/Denver program, the largest and most generous of the five, saw a statistically significant decline in the percentage of people with jobs (by about 4 percentage points). More significant was the reduction in hours worked — between two and four weeks of full-time employment over a year.

But Marinescu contends that there were two major implementation issues. For one, participants would underreport their earnings to qualify for more income. Additionally, participants who did not reduce their hours of work, and therefore didn't get as much benefit, tended to drop out of the study. Both of these problems exaggerated the labor supply effect, making it seem more negative than it actually was.

On top of implementation, Marinescu points to several conceptual problems with the NIT experiments. "First, these experiments lasted for only about three years," she says. "That makes it hard to extrapolate to what would happen in the long term." Some participants might not have quit their jobs, knowing that the NIT would only be temporary. On the other hand, participants might have taken more time off, treating the experiments as a "sale on leisure," where the cost of working less was temporarily reduced. The second is that, because they were experiments, not everyone in the areas who qualified for the NIT received it — researchers needed control groups living in same areas to compare against. Yet there might be effects that only come from everyone in an area being part of the program, such as macro-level effects on labor demand or effects arising from social networks. Overall, Marinescu says, "it is unclear on theoretical grounds which way those effects would go."

A 2017 analysis by two sociologists attempted to evaluate

the social effects. David Calnitsky at the University of Manitoba and Jonathan Latner, then of the University of Bremen, took advantage of the fact that Mincome, though mostly randomized throughout the province of Manitoba, was provided universally in the town of Dauphin. Calnitsky and Latner compared the effect in Dauphin to the rest of Manitoba and were able to attribute about 30 percent of the labor force reduction to "social interaction" effects, occurring only when the benefit was truly universal. For example, some individuals reducing their work effort might have made doing so more socially acceptable for everyone.

Also relevant is that the tax rate and level of the guaranteed income are adjustable aspects of a NIT. The experimental programs of the 1970s often had generous benefit levels but also had high implicit tax rates — that is, benefits fell sharply as income rose. Economists have attempted to estimate the benefit and tax levels that would leave work incentives intact, but it's a hard task without widespread experimental evidence. Most modern UBI proposals leave benefits constant as income rises.

### What About Automation?

The tremendous increases in automation seen in the past two centuries largely validate Keynes' prediction: The "age of leisure and abundance" arguably is here. Per capita real wages are more than 16 times greater than 200 years ago, while the average workweek has fallen by half and the share of one's life spent working is far shorter. Meanwhile, the average unemployment rate that has prevailed over time has not increased. Economic theory suggests that technology and productivity are the key to sustained improvements in our standard of living.

But it can require some adjustment in the short term. Dolan sees a role for UBI in smoothing out present and future labor market shocks from automation and trade. He argues that UBI would improve labor market flexibility: People might be more likely to take risks like moving between states if they have an unconditional, reliable safety net. Along similar lines, he reasons that UBI would help smooth consumption for workers in the gig economy, who generally have more variable income.

Whether machines cause widespread unemployment or just shocks to certain markets, Marinescu doesn't see UBI as a long-term solution: "Any realistic UBI is going to be so small, that, when someone loses any decent job, it's not going to make up for it. It would be better than nothing, but it's not going to do all that much for people who are left out due to technological shocks."

Indeed, the overall cost of a UBI remains one of its opponents' main concerns. In principle, a UBI could be revenue neutral if it were funded by scrapping the welfare state – but then it might not be large enough to meet households' "basic" needs or be what some would consider a true safety net. A UBI with loftier goals, like lifting families out of poverty, could require additional funding and public support. A 2017 study by researchers

at the American Enterprise Institute, for example, found that a UBI funded by cutting virtually all welfare and transfer programs, including Social Security and Medicare, would provide a UBI of \$13,788 for adults and \$6,894 for children, with varying winners and losers across income and age groups. Hillary Clinton recently stated that she considered proposing a UBI program during her 2016 presidential campaign but didn't think she could provide a meaningful enough dividend with a realistic set of new taxes.

Regarding UBI's role in buffering adjustment to technological change, Marinescu points out that jobs play an important non-pecuniary role in our lives: People get value from the identity and social recognition that come from a job. "I recently talked with two of my economist colleagues — one from the left, one from the right — and they both agreed that UBI is fine, that they weren't against it," Marinescu says. "But at the same time, they thought that investing in skills and generally finding ways for people to be socially integrated was more urgent to think about — that just having some small extra income wasn't going to solve that problem."

Of course, UBI is not mutually exclusive to investing in skills, and some have sought to justify UBI on grounds other than automation. Foremost among these is reducing poverty. One possible benefit of UBI as a poverty-reduction measure is that many welfare programs have surprisingly high non-take-up rates — that is, many people qualify for welfare but don't take advantage of it. There is a range of possible reasons for this, including lack of awareness, the social stigma of welfare, and administrative hassle. By virtue of being universal and unconditional, UBI likely would decrease these issues.

Dolan contends that a revenue-neutral UBI that reduces poverty is possible; his proposed plan would replace the current welfare state as well as other transfers such as tax deductions, which primarily benefit the relatively affluent. Marinescu sees this as a political advantage for UBI: The flat, universal nature of UBI might make it a more palatable form of redistribution. "It gets around some political issues that have recently been documented in the economics literature — for example, people seem less and less supportive of redistribution."

That same feature could also be a political liability. Even though certain UBI proposals might be more progressive than the current system of taxes and transfers, UBI schemes are also more transparent about giving money to the rich. For example, many of the tax deductions that some UBI proposals would replace are regressive and distortionary but are also very popular. A 2011 Gallup poll found that strong majorities of the public opposed cutting these deductions either to lower taxes or reduce the federal deficit. Liberal and libertarian critics of UBI argue that the policy would be wasteful and that government shouldn't be giving money to the rich at all. Furman, in a debate in March, put it this way: "If you give

somebody a dollar, that dollar has to come from somewhere. It has to come from cutting benefits that someone is getting or raising taxes on someone."

## What's Next?

Several new UBI trials have just been launched around the world. One experiment, run by a nonprofit called GiveDirectly, will continue for at least 12 years and provide some villages in Kenya with a truly universal benefit. This might uncover some of the long-term and macro-level effects that the NIT experiments couldn't measure, but it is unclear how applicable any results would be to the United States. Closer to home, Y Combinator, a Silicon Valley startup accelerator, is giving 100 Oakland families a UBI for up to one year as part of a five-year study. These projects, however, are for the most part small and short term, revisiting the NIT experiments of the past, and focused on labor supply and other micro-level statistics.

Marinescu argues that the next step should be to implement something larger, maybe at the state level, in the United States so that researchers can evaluate macro-level effects and interactions with other policies. A state-level UBI isn't totally without precedent: In 1976, Alaska used revenue from oil extraction on state-owned land to

establish the Alaska Permanent Fund. This fund, popular with Alaskan voters, provides all residents of the state with \$1,000 to \$2,000 per year. Marinescu's own research has shown that the fund's payments have had no effect on the state's employment rate and only a minor decrease in hours worked; the income effect, Marinescu concludes, might have been cancelled out by stimulation of labor demand. But the amount of the payments is small compared to typical UBI proposals, so the effects of that program might not be a good predictor for a full-scale UBI.

In short, the practical questions surrounding a UBI especially its effect on work incentives and how large a revenue-neutral payment could actually be - don't yet have clear answers. While empirical evidence seems to suggest that concerns over work incentives may be less serious than some have argued, it is largely drawn from the NIT experiments of the 1970s, when the labor market and economy looked radically different from today. Current trials may provide better evidence of UBI's labor supply effects, especially how it would interact with recent economic phenomena like low male labor force participation, while future large-scale projects might be able to shed light on macroeconomic and social effects that research so far has left open. EF

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that a varying or higher target would have made much difference during and after the recession, as well as concern that the Fed's commitment to stable inflation could come into question if it changed the target "opportunistically."

Beyond the relatively narrow question of the nominal target, however, economists inside and outside the Fed are giving fresh attention to understanding the relationship between inflation and inflation expectations and to whether the anchoring process has changed. "Extreme economic events have often challenged existing views of how the economy works and exposed shortcomings in the collective knowledge of economists," noted Yellen in her speech last fall, citing the Great Depression of the 1930s and Great Inflation of the 1970s. "The financial crisis and its aftermath might well prove to be a similar sort of turning point."

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