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Solutions to the Negative Consequences of AI on American Jobs and Tax Policy

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I. Introduction

Stephen Hawking once said that the "development of full artificial intelligence could spell the end of the human race."[1] Many other people have a similar, pessimistic view of the new and rapidly changing technology of artificial intelligence ("AI"). This is likely a result of the many action movies set in dystopian societies, like in *I, Robot*, where characters fight for their lives against human-like robots who try to take over the world for themselves. However, AI consists of robots far less sophisticated than the ones depicted in *I, Robot*.

There are two types of AI: Artificial General Intelligence and narrow AI. Artificial General Intelligence has not yet been achieved and alludes to systems that behave like humans cognitively, emotionally, and socially.[2] Narrow AI, on the other hand, is all around us and is designed to perform a single task. Examples of narrow AI include Google search, Alexa by Amazon, Siri by Apple, facial recognition software, etc.[3]

Some predict that AI will soon take over many jobs once worked by humans, or that AI will partially automate human jobs so that humans have less work to do.[4] This will be a big issue if jobs for humans are not re-created in other sectors of the economy. The tax revenue collected by the government from income and payroll taxes will dramatically decrease if less people are working, which will affect the amount of money the government has to spend on social safety

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[1] Anmar Frangoul, *Artificical Intelligence will create more jobs than it destroys? That's what PwC says*, CNBC (July 17, 2018, 7:10 AM), https://www.cnbc.com/2018/07/17/artificial-intelligence-to-create-more-jobs-than-it-destroys-pwc-says.html.

[2] INTERNATIONAL TECHNOLOGY LAW ASSOCIATION, RESPONSIBLE AI: A GLOBAL POLICY FRAMEWORK 18 (Charles Morgan, 1st ed. 2019)

[3] Brodie O'Carroll, *What are the 3 types of AI? A guide to narrow, general, and super artificial intelligence*, CODEBOTS (Oct. 24, 2017), https://codebots.com/artificial-intelligence/the-3-types-of-ai-is-the-third-even-possible.

[4] Eduardo Porter, *Don't Fight the Robots. Tax Them.*, THE NEW YORK TIMES (Feb. 23, 2019), https://www.nytimes.com/2019/02/23/sunday-review/tax-artificial-intelligence.html.

net programs that assist the poor, the elderly, and those who are out of work. The government will no longer be able to fund these programs unless they are financed in another way.

Solutions to this issue are currently being debated and include a robot tax, Universal Basic Income (UBI), and the reskilling of workers. A robot tax would disincentivize firms from using AI and automation, help save human jobs, and provide the government with the money it needs to keep social safety net programs afloat. However, a robot tax could negatively affect the United States' economy and drive businesses that utilize AI and automation to flee to countries with no robot tax. UBI is another viable solution that would provide a fixed amount of money to families in the United States per a specified period of time, but it would come at a high cost. The reskilling of workers refers to teaching employee's how to perform new tasks. Reskilling will be a good solution if more jobs are created by AI and automation, but it will come at a cost to employers.

a. Automation versus AI

Sometimes AI and automation are terms that are used interchangeably. However, they are not one and the same. Automation substitutes human labor in tasks that are predictable and routine, like assembly line jobs, machine operators, and food preparation.[5] The purpose of automation is to is to allow machines to engage in repetitive and mind-numbing tasks so that humans don't have to. Automation of the hiring process in workplaces is one example of how automation can be used. Human Resource managers for large corporations that once had to sift through hundreds, or even thousands, of applications and resumes are finally getting the much-needed break that they deserve. There are several automated hiring tools including BreezyHR,

[5] Michael Gaynor, *Automation and AI sound similar, but may have vastly different impacts on the future of work*, BROOKINGS (Jan. 29, 2020), https://www.brookings.edu/blog/the-avenue/2020/01/29/automation-and-artificial-intelligence-sound-similar-but-may-have-vastly-different-impacts-on-the-future-of-work/.

Smashfly, and Mya, that reduce the once timely screening process of applicants.[6] These tools can sift through applications with incredible speed and, by using keywords, they can pinpoint the best applicants out of thousands of different applications.[7]

AI, on the other hand, acts as a substitute for intelligence including interpersonal duties like planning and problem solving.[8] AI aims to create technologies that mimic humans by identifying patterns, learning from past experiences, and choosing their own responses to external stimuli.

Although AI and automation are separate and distinct from each other, they are sometimes intertwined when it comes to robotics and when automation utilizes AI to complete tasks.[9] Some robots and automation are used only to perform specific, repetitive tasks, and do not learn from their mistakes. But others are equipped with AI and machine learning technology that allows them to be taught a specific task.[10] If they fail the task, they can perform the task again and continue to learn how to perform the task better after each failed attempt.[11] Some robots and automation algorithms can measure their own performance and accuracy and signal when they need repairs or maintenance.[12]

b. AI's Impact on the Workforce

When people think about AI and automation taking over an industry, they usually think of blue-collar jobs such as those in a factory. Assembly lines once lined with human workers are

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[6] Brittany Ryan, *9 real-world examples of automation in the workplace*, ATSPOKE, https://www.atspoke.com/blog/support/examples-automation-workplace/ (last visited Apr. 14, 2021).
[7] Ryan, *supra* note 6.
[8] Gaynor, *supra* note 5.
[9] Robotics Online Marketing Team, *Artificial Intelligence and Machine Learning in Your Industrial Robotics Application*, ROBOTIC INDUSTRIES ASSOCIATION (Feb. 13, 2018), https://www.robotics.org/blog-article.cfm/Artificial-Intelligence-and-Machine-Learning-in-Your-Industrial-Robotics-Application/83.
[10] Robotics Online Marketing Team, *supra* note 9.
[11] Robotics Online Marketing Team, *supra* note 9.
[12] Robotics Online Marketing Team, *supra* note 9.

being replaced with robotic arms that do the same job more efficiently and for longer periods of time. However, AI will also have an effect on white-collar jobs, widening the scope of concern that policy makers should have.[13] AI guru Kai-Fu Lee predicts that 50% of all jobs will be automated by AI within 15 years.[14] This includes those who perform white-collar jobs, such as accountants and lawyers, in addition to factory workers, truckers, and radiologists.

As previously mentioned, the difference between automation and AI is that automation performs repetitive tasks while the goal of AI is to mimic human thinking and actions.[15] Some believe that white-collar jobs will be more affected by AI than blue-collar jobs.[16] AI is less likely to impact those jobs that involve human interaction, like a teacher, and more likely to impact or replace jobs that involve learning from past experiences, optimization, judgment, and performing specific tasks.[17]

AI has already made its debut in the white-collar field of law. ROSS, created by IBM, is the first AI virtual attorney.[18] ROSS saves attorneys many hours of time they would have otherwise spent on legal research.[19] Automation of legal research could potentially reduce the cost of hiring an attorney because less time would be spent on legal research, arguably the most time-consuming aspect of an attorney's career, making the job quicker and easier. The legal research position ROSS has been assigned is a position usually filled by lawyers who have just started

[13] Sheelah Kolhatkar, Could New Research on A.I. and White-Collar Jobs Finally Bring About A Strong Policy Response?, The New Yorker (Jan. 14, 2020), https://www.newyorker.com/business/currency/could-new-research-on-ai-and-white-collar-jobs-finally-bring-about-a-strong-policy-response.
[14] Mike Thomas, *Artificial Intelligence's Impact on the Future of Jobs*, BUILT IN (Aug. 27, 2019), https://builtin.com/artificial-intelligence/ai-replacing-jobs-creating-jobs.
[15] Melissa Hellmann, *White collar workers will be most affected by AI in the new economy, study suggests*, THE SEATTLE TIMES (Nov. 19, 2019, 9:01 PM), https://www.seattletimes.com/business/technology/study-suggests-white-collar-workers-will-be-most-affected-in-the-new-economy/.
[16] Hellmann, *supra* note 15.
[17] Hellmann, *supra* note 15.
[18] Karen Turner, *Meet 'Ross,' the newly hired legal robot*, THE WASHINGTON POST (May 16, 2016, 6:00 AM), https://www.washingtonpost.com/news/innovations/wp/2016/05/16/meet-ross-the-newly-hired-legal-robot/.
[19] Turner, *supra* note 18.

their career out of law school.[20] Although ROSS may seem like a great tool for experienced attorneys to utilize, new attorneys fresh out of school may have fewer hiring opportunities because of it.

David Autor, MIT economics professor, suggested that middle management positions in fields like finance and inventory management are also in danger of encroachment by AI.[21] People in these positions have a duty to convert large quantities of data into conclusive business decisions, which is something that AI is perfectly capable of doing. AI could also displace the jobs of many in the medical profession. An AI algorithm created by a group of researchers recently outperformed human radiologists in detecting breast cancer in mammograms—reducing the amount of both false positives and false negatives.[22]

In 2018, PricewaterhouseCoopers (PwC) released a report summarizing their key findings on the potential impact of AI, robotics, and other forms of "smart automation" on different industries such as transportation, financial services, and healthcare.[23] Some of the findings do not come as much of a surprise, for instance, that by the mid-2030's 50% of transportation jobs will potentially be automated.[24] This is not much of a shock considering the major recent improvements in self driving cars, including Tesla's autopilot feature.[25] More surprising is PwC's prediction that by the mid-2030s about 30% of financial service jobs will be automated.[26]

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[20] Turner, *supra* note 18.
[21] Alejandro De La Garza, *AI is About to Spark a Radical Shift in White Collar Work. But There's Still 'Plenty of Work for People to Do'*, TIME (Jan. 23, 2020, 1:27 PM), https://time.com/5769005/ai-white-collar-work/.
[22] De La Garza, *supra* note 21.
[23] JOHN HAWKSWORTH ET AL., WILL ROBOTS REALLY STEAL OUR JOBS? AN INTERNATIONAL ANALYSIS OF THE POTENTIAL LONG TERM IMPACT OF AUTOMATION 20 (2018).
[24] Hawksworth, *supra* note 23.
[25] TESLA, https://www.tesla.com/autopilot (last visited Apr. 14, 2021).
[26] Hawksworth, *supra* note 23.

PwC also predicts that workers in the education industry have the least jobs at high risk for potential automation, with human health and social work jobs following closely behind.[27]

Many factors are contributing to the increased adoption of automation in jobs across the country, including the COVID-19 pandemic. According to *Time Magazine*, forty million jobs were lost at the peak of the pandemic.[28] One group of economists estimated that approximately 42% of the jobs lost are gone forever.[29] Daniel Susskind, a fellow in economics at Balliol College, suggested that the pandemic has created an incentive for employers to automate the work of humans because, unlike humans, machines don't not get sick, they don't need to "social distance," and they will never need to take time off from work or take breaks.[30] For example, Covid-19 has led to the decline in toll booth operators in San Francisco.[31] To allegedly "protect the health of drivers and toll booth collectors," the city implemented FasTrak tags mounted on windshields so people could pay toll booths automatically, and if they did not have one of these tags, bills were sent to the address linked to their license plate.[32] There is no doubt that the FasTrak tags protect the health of the drivers and toll booth collectors, but they also save the city a great deal of money.

c. Importance of Social Safety Nets

The Center on Budget and Policy Priorities, a nonpartisan research and policy institute, broke down the federal budget allocations in 2019.[33] Spending categories were divided into

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[27] Hawksworth, *supra* note 23.
[28] Alana Semuels, *Millions of Americans Have Lost Jobs in the Pandemic—And Robots and AI Are Replacing Them Faster Than Ever*, TIME (Aug. 6, 2020, 6:22 AM), https://time.com/5876604/machines-jobs-coronavirus/.
[29] Semuels, *supra* note 28.
[30] Semuels, *supra* note 28.
[31] Semuels, *supra* note 28.
[32] Semuels, *supra* note 28.
[33] *Policy Basics: Where Do Out Federal Tax Dollars Go?*, CENTER ON BUDGET AND POLICY PRIORITIES, https://www.cbpp.org/research/federal-budget/where-do-our-federal-tax-dollars-go (last updated Apr. 9, 2020) [hereinafter *Policy Basics*].

sections, including, but not limited to, the following: defense and international security assistance; Social Security; Medicare, Medicaid, Children's Health Insurance Program, and marketplace subsidies; safety net programs; and interest on debt.[34] Eight percent, or $361 billion, of the federal budget supported safety net programs, which included the Earned Income Tax Credit, the Child Tax Credit, the Supplemental Nutrition Assistance Program (SNAP), various forms of in-kind assistance for the elderly and disabled, and others.[35] In the United States, these programs are funded by taxation and are very significant because they offer protection to those who are unemployed or do not make enough money to support themselves. If there were no safety net programs in the United States, the poverty rate would have been 24% in 2019.[36] However, since safety net programs were in place, the poverty rate was about 12.8%.[37]

d. AI's Impact on Government Programs Funded by Taxpayer Dollars

If or when AI has a dramatic impact on more American jobs, the government may need to expand the social safety net. In the United States, the Internal Revenue Service has collected over $3 trillion every year since 2014.[38] Income taxes account for half of this amount, while payroll taxes account for a third of it.[39] Federal income taxes are the largest source of revenue for the American government.[40] Federal income taxes are taxes on the annual earnings of individuals, corporations, trusts, and other legal entities.[41] Federal payroll taxes are deducted

[34] *Policy Basics*, *supra* note 33.
[35] *Policy Basics*, *supra* note 33.
[36] *Policy Basics*, *supra* note 33.
[37] *Policy Basics*, *supra* note 33.
[38] Porter, *supra* note 4.
[39] Porter, *supra* note 4.
[40] Julia Kagan, *Federal Income Tax*, INVESTOPEDIA, https://www.investopedia.com/terms/f/federal_income_tax.asp (last updated Apr. 13, 2021).
[41] Kagan, *supra* note 40.

from the employee's salary and paid to the Internal Revenue Service.[42] Federal taxes fund social programs like Social Security, Medicare, and unemployment programs.[43]

According to an estimate by the McKinsey Global Institute, 50% of work tasks around the globe are automatable and as many as 30% of work activities could be automated by 2030.[44] This automation could result in humans working much less if we assume that automation will be rapidly adopted, which will cause a decline in tax revenue.[45] This is because humans pay taxes on the money they make at work. If robots take over human jobs, robots and machines are not required to pay taxes on their labor because they don't make a paycheck—they just save the company money. With the rise of automation and the use of AI in both blue-collar and white-collar jobs, the government may need to further expand the social safety net. A rise in unemployment will cause a rise in the need for social programs for people out of work to temporarily "fall back on." Funding of this rise in the need for social programs will be difficult for the government to implement because the large increase in the number of people in need of social programs will not be contributing to the taxes that fund them. Solutions to this potentially large problem are currently being debated.

Although the United States has adapted to previous technological advances, there are concerns that that after AI and automation become more prominent in the workforce it will be more difficult to adapt than in the past.[46] According to a report from Oxford University in 2013,

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[42] Carol Kopp, *Payroll Tax*, INVESTOPEDIA, https://www.investopedia.com/terms/p/payrolltax.asp (last updated Apr. 3, 2021).
[43] Kopp, *supra* note 42.
[44] James Manyika et al., *What the Future of Work Will Mean for Jobs, Skills and Wages*, MCKINSEY GLOBAL INSTITUTE (Nov. 28, 2017), https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages.
[45] Et Megan L. Jones, Bradford S. Cohen, *Can Ai Be Taxed? In South Dakota v. Wayfair, the U.S. Supreme Court Noted That "Substantial Virtual Connections" Should Not Be Ignored*, 36 L.A. LAW. 30, 30, 32 (2020).
[46] Rich Haridy*, EU move to bring in AI laws, but reject robot tax proposal*, NEW ATLAS (Feb. 17, 2017), https://newatlas.com/eu-robot-law-proposal-passes-parliament/47971/.

approximately 47% of the United States' workforce was at risk for becoming no longer needed as a result of AI and automation.[47] The United States is at such a high risk for rapid automation because firms are encouraged to automate by the difference in tax treatment of labor and capital.[48] The average tax rate of labor has been about 25% for the past forty years, while other things classified as capital such as software, equipment, and buildings have been taxed at a lower rate— now around 5%.[49] This means that businesses that employ humans have to pay an extra 25 cents in taxes for every dollar a human worker receives, making the cost of employee labor 25% higher.[50] This shows why so many businesses may choose to utilize automation or AI over human labor. Corporations with business models that are centered on automation could also lead to rapid automation in the United States, especially if the corporation is a large one that dominates many sectors of the economy.[51]

II. Robot Tax

a. Robot Tax Proponents

A robot tax is one solution to the potential decrease in available jobs if AI and automation are rapidly adopted in the workplace. Many different ideas are floating around about what a robot tax should look like, but there is currently no agreed upon definition for what exactly constitutes a robot tax. Several robot tax proponents have created their own ideas of how they think a robot tax should operate. Bill Gates proposed that the government should tax robots in a similar way to how the government taxes human workers.[52] For instance, assume that a human is

[47] Haridy, *supra* note 46.
[48] Garrett Watson, *Increasing the Tax Burden on Capital Investment and Automation Hurts Workers*, TAX FOUNDATION (Nov. 12, 2020), https://taxfoundation.org/increasing-the-tax-burden-on-automation-hurts-workers/.
[49] DARON ACEMOGLU ET AL., TAXES, AUTOMATION, AND THE FUTURE OF LABOR 5 (2020).
[50] Acemoglu, *supra* note 49.
[51] Acemoglu, *supra* note 49.
[52] Tim Dunlop, *What is a robot exactly, and how do we make it pay tax?*, THE GUARDIAN (Mar. 12, 2017, 5:13 PM), https://www.theguardian.com/sustainable-business/2017/mar/13/what-is-a-robot-exactly-and-how-do-we-make-it-pay-tax.

working a job where they earn $50,000 annually and the federal government takes out 18%, or $9,000, for federal taxes. If a robot replaces that human, the robot (or more realistically the employer) will still have to pay that $9,000 in taxes to the federal government.[53] Gates proposed that the money from the taxed robots could be used to finance the employment of more people in jobs that require a human-to-human connection—like caring for the elderly and youth educators.[54]

Ryan Abbott, professor of law and health sciences at the University of Surrey, referred to a robot tax as meaning that capital should be taxed more than labor should be taxed—or that capital and labor should be taxed at the same rate.[55] He also proposed a robot tax where the government would raise taxes for high profit companies that rely significantly on automation.[56] Abbott's reasoning is that 50% of the revenue from the federal government comes from income taxes.[57] If the human workforce is replaced by robots, this funding will disappear, and the government will lose tax revenue.[58] If given the choice between employing robots over humans, and there is no robot tax, companies will likely choose a robot or machine over a human even if the human is better suited for the job because it will save the company money (companies pay 6.2% in payroll taxes).[59] So, if there is no robot tax, firms will have an incentive to automate and not employ humans because they will essentially get a tax break.

In 2019, Bill de Blasio, New York City Mayor, ran in the Democratic primaries for the presidential election of 2020. He dropped out of the race on September 20, 2019, but some of his

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[53] Richard Waters, *Bill Gates calls for an income tax on robots*, FINANCIAL TIMES (Feb. 19, 2017), https://www.ft.com/content/d04a89c2-f6c8-11e6-9516-2d969e0d3b65.
[54] Dunlop, *supra* note 52.
[55] MEREDITH SOMERS, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, THE CASE FOR TAXING ROBOTS – OR NOT (2019).
[56] Somers, *supra* note 55.
[57] Somers, *supra* note 55.
[58] Somers, *supra* note 55.
[59] Somers, *supra* note 55.

campaign ideas gained a lot of attention.[60] While he was still in the presidential race, he proposed his own version of a robot tax.[61] He wanted the federal government to adopt a robot tax that would require companies who propose labor-saving automation to reimburse the federal government for five years' worth of payroll taxes that otherwise would have been paid by human workers if their job was not automated.[62] The employer may have also been required to pay the displaced employee severance or find them another job that paid the same salary as the previous employer.[63] De Blasio's proposal would have also created a federal agency named the Federal Automation and Worker Protection Agency. The agency would have regulated the growth of automation and managed its effect on employment.[64] He was also pushing for Washington to eradicate all tax incentives for automation.[65] Although his proposal never panned out, De Blasio's proposal shows that a robot tax is something that politicians in the United States are currently thinking about to combat the automation of human jobs.

In 2018, South Korea passed what is being referred to as the first robot tax—although, it is not really a robot tax, per se.[66] South Korea has had the highest robot density in manufacturing since 2010.[67] In 2016, South Korea's robot density was 631 industrial robots per 10,000 employees in the manufacturing industry, while the United States' robot density was 189.[68] In order to slow down the rapid automation of entire industries in South Korea, the Moon Jae-In

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[60] Jeffery C. Mays, *De Blasio Quits Presidential Race; Trump Gloats*, THE NEW YORK TIMES (Sept. 20, 2019), https://www.nytimes.com/2019/09/20/nyregion/de-blasio-2020-drops-out.html.
[61] Annie McDonough, *Is de Blasio's "robot tax" a good idea?*, CITY & STATE NEW YORK (Sept. 8, 2019), https://www.cityandstateny.com/articles/policy/technology/de-blasios-robot-tax-a-good-idea.html.
[62] McDonough, *supra* note 61.
[63] McDonough, *supra* note 61.
[64] Rachel Frazin, *De Blasio proposes 'robot tax' to counter job losses from automation*, THE HILL (Sept. 5, 2019, 5:07 PM), https://thehill.com/homenews/campaign/460162-de-blasio-proposes-robot-tax-to-counter-automation-job-losses.
[65] McDonough, *supra* note 61.
[66] Porter, *supra* note 4.
[67] Steve Crowe, *10 Most Automated Countries in the World*, THE ROBOT REPORT (Feb. 7, 2018), https://www.therobotreport.com/10-automated-countries-in-the-world/.
[68] Crowe, *supra* note 67.

administration downsized the tax deduction benefits that were originally provided to companies for infrastructure investment aimed at increasing productivity through automation.[69]

b. Robot Tax Opposition

Although the robot tax has some strong proponents, it has its fair share of opponents. The European Parliament has already rejected the proposal of a robot tax that would have imposed a tax on robot owners in order to finance the retraining of human workers whose jobs were taken by robots.[70] There was concern that a robot tax would harm the newly booming field of AI, restrict innovation, and stifle competitiveness.[71]

The International Federation of Robotics similarly argued that taxing production tools, such as robots and other AI machines, would negatively impact competitiveness and employment.[72] The International Federation of Robotics reasoned that robots have resulted in the increase of productivity in the most advanced industrial nations, including in the United States.[73] Between 2010 and 2015, the United states installed over 60,000 industrial robots.[74] During those five years, the number of employees in the United States automotive industry increased by 230,000.[75] Moreover, the Organization for Economic Co-operation and Development recently found that companies are ten times more productive when they employ technological innovation, than companies that do not.[76] Therefore, technology innovation and the use of AI and automation can actually increase the number of jobs available rather than decrease them.

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[69] Sung-won, *Korea takes first step to introduce 'robot tax',* THE KOREA TIMES (Aug. 7, 2017, 4:13 PM), http://www.koreatimes.co.kr/www/news/tech/2017/08/133_234312.html.
[70] Haridy*, supra* note 46.
[71] Haridy*, supra* note 46.
[72] *World Robotics Federation IFR: Why Bill Gates' robot tax is wrong*, INTERNATIONAL FEDERATION OF ROBOTICS, https://ifr.org/news/world-robotics-federation-ifr-why-bill-gates-robot-tax-is-wrong [hereinafter *World Robotics Federation*].
[73] *World Robotics Federation*, *supra* note 72.
[74] *World Robotics Federation*, *supra* note 72.
[75] *World Robotics Federation*, *supra* note 72.
[76] *World Robotics Federation*, *supra* note 72.

Economics columnist for *The Economist*, Ryan Avent, also argued against a robot tax.[77] In his view, a robot tax is not needed because jobs are not being lost to robots at the rate expected.[78] In countries like Germany and Japan that utilize robots more than in the United States, employment percentages are very high and there are plenty of human jobs.[79] Most importantly, a robot tax could stifle positive change and would restrain the use of new technologies.[80] If a robot tax is enacted in the United States, companies utilizing robots could move their businesses offshore to countries where there are no robot taxes.[81]

c. Issues with Implementing a Robot Tax

At first glance a robot tax may seem like the quick and easy solution that the United States' needs, however, it is not without its faults. If a robot tax were enacted in the United States, how would we define "robot"? Is a robot defined as any form of automation that displaces human workers? Or is a robot any machine or system that utilizes narrow AI or automation to perform a task? The possibilities of what a "robot" is are endless.

Defining what a "robot" is could turn into a never-ending legal battle between the government and companies that utilize AI or automation. A situation analogous to the potential feud over what constitutes a "robot" for purposes of a robot tax, is the decade long legal fight over whether Marvel superheroes, including the X-Men superheroes, constituted "dolls" or "toys."[82] The U.S. government classified several large shipments of Marvel action figures as "dolls" instead of "toys" in 1991.[83] Since they were classified as "dolls" they faced a 12% tax,

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[77] Tom Davenport, *Advancing the Debate on Taxing Robots*, FORBES (Jun. 13, 2019, 11:16 AM) https://www.forbes.com/sites/tomdavenport/2019/06/13/advancing-the-debate-on-taxing-robots/?sh=4c40640225a4.
[78] Davenport, *supra* note 77.
[79] Davenport, *supra* note 77.
[80] Davenport, *supra* note 77.
[81] Davenport, *supra* note 77.
[82] Garrett Tenney, *Sorry, Avengers: US gov't says mutants aren't human*, FOX (Jan. 30, 2012), https://www.foxnews.com/science/sorry-avengers-us-govt-says-mutants-arent-human.
[83] Tenney, *supra* note 82.

rather than the 6.8% tax imposed on "toys."[84] Two clever international trade lawyers realized that Marvel could be saving a large sum of money if the X-Men action figures, and other similar action figures, were reclassified as "toys."[85] The lawyers argued that a "doll" represented human beings only, and that the Marvel superheroes were not human.[86] The government argued that these figures represented characters that were essentially human, even though they had supernatural features and powers.[87] The judge sided with the international trade lawyers and held that the Marvel superhero action figures were "toys," reasoning that the superheroes' supernatural features made them more than mere mortals.[88] Therefore, they could not be classified as humans beings.

The Marvel dispute was complicated because the lawyers had to argue that more than sixty individual action figures did not depict human beings. Imagine how much more complicated the situation would be if, instead of Marvel, it were a technology company arguing that the systems or machines it utilizes are not a "robot" for purposes of a robot tax. This situation is more than likely to occur if a robot tax is enacted. A dispute over whether an action figure is a "doll" or a "toy" was a lengthy dispute that lasted a decade. Determining what a "robot" is for robot tax purposes is likely to be more complicated and therefore take multiple decades and numerous lawsuits to sort out!

Regardless of how "robot" is defined, there are other issues, such as loopholes that companies could jump through in order to avoid a robot tax. However a "robot" is defined for purposes for a robot tax, a company could tweak the design or function of their AI or automation

[84] Tenney, *supra* note 82.
[85] Tenney, *supra* note 82.
[86] Tenney, *supra* note 82.
[87] Tenney, *supra* note 82.
[88] Tenney, *supra* note 82.

to ensure that the government will not count their system as a "robot." Another issue is where would we draw the line? Mark Herschberg, venture capitalist and executive, made the point that "Farming equipment reduced the need for farm labor. Should we tax every tractor?" Herschberg's point is that many jobs have been streamlined and automated throughout the years and he questions whether or not it makes sense for a tax to be placed on every machine or invention that makes a job more efficient.

A robot tax could drive businesses overseas to places where there is no robot tax.[89] Currently, no country has implemented a robot tax.[90] If the United States enacts a robot tax, businesses who want to automate would leave the United States and go to any other country to avoid the tax. This would cause development to occur elsewhere, and the United States would lose out on the crucial development of automation while the rest of the world gets ahead in the technology sector.

Since the economy is currently in a productivity slump it needs is something to revive it, not something that will slow it down.[91] Labor productivity in the United States has been increasing at a pace of 1.2% per year since 2008—half the rate of the previous thirteen years.[92] This means that the United States needs a boost to kick-start newfound productivity, and automation could be the key. The McKinsey Global Institute estimated that automation could increase productivity growth globally by .8 to 1.4% annually.[93] However, this estimate assumes

[89] Jon Walker, *Robot Tax – A Summary of Arguments "For" and "Against"*, EMERJ (Feb. 2, 2019), https://emerj.com/ai-sector-overviews/robot-tax-summary-arguments/.
[90] Walker, *supra* note 89.
[91] Robert D. Atkinson, *The Case Against Taxing Robots*, INFORMATION TECHNOLOGY AND INNOVATION FOUNDATION (Apr. 8, 2019), https://itif.org/publications/2019/04/08/case-against-taxing-robots.
[92] Atkinson, *supra* note 91.
[93] James Manyika et al., *Harnessing automation for a future that works*, MCKINSEY GLOBAL INSTITUTE (Jan. 12, 2017), https://www.mckinsey.com/featured-insights/digital-disruption/harnessing-automation-for-a-future-that-works#.

that workers displaced by automation will find employment elsewhere.[94] If a robot tax is implemented, firms will be disincentivized to automate, and productivity could continue to barely increase each year, or it may stagnate altogether.

Robots, AI, and automation have made it possible for certain jobs to be performed quicker and more efficiently than humans could have performed them. A robot tax could disincentivize companies from using robots, incentivize them to employ humans, and jobs may get down significantly slower. This could lead to sharp inflation of costs to consumers. For instance, if a company wants to automate but is incentivized not to do so because of a robot tax, the company may be less productive, and therefore less profitable. How could the company make up this extra money you may be wondering? By increasing prices, of course.

Robot tax proponents who argue that robots must be taxed to make up the money lost from automation or AI displacing human jobs overlook a fatal flaw in their argument. They assume that workers who lose their jobs due to automation will never find work with a similar wage as their old job. Sometimes labor-saving technology creates more jobs than it destroys. In the 1990's automated teller machines (ATM) started to become more popular in banks.[95] This led to a decrease in the number of bank tellers' that banks needed to employ per branch.[96] However, since the ATM machines led to a decrease in tellers needed per branch, branches were cheaper to operate.[97] Since banks were cheaper to operate more bank branches were opened, and the total number of tellers employed by the bank actually increased.[98]

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[94] Manyika, *supra* note 93.
[95] James Pethokoukis, *What the story of ATMs and bank tellers reveals about the 'rise of robots' and jobs*, AMERICAN ENTERPRISE INSTITUTE (June 6, 2016), https://www.aei.org/economics/what-atms-bank-tellers-rise-robots-and-jobs/.
[96] Pethokoukis, *supra* note 95.
[97] Pethokoukis, *supra* note 95.
[98] Pethokoukis, *supra* note 95.

According to a PwC study, job loss from automation will likely be offset by new jobs created as the result of a larger and wealthier economy.[99] Over the last 250 years the United States has seen major technological advances from steam power, electricity, and the telephone to more recent advances like the internet.[100] During this lengthy period of time, technology has continuously progressed and unemployment in the United States has stayed between five to ten percent for almost the whole time.[101] Some say that the past is the best predictor of the future, and if they're right, we may not have to worry about AI and automation destroying more jobs than it creates. Even if rapid adoption of automation or AI in the workplace destroys a significant number of jobs, the destruction is unlikely to be absolute. According to the World Economic Forum, machines and algorithms will likely displace 75 million jobs by 2022, but these new technologies are expected to create 133 million new jobs.[102]

Since AI and automation are likely to create millions of new jobs, a robot tax that disincentivizes the use of AI and automation could potentially hurt the economy. According to the PwC, global GDP will be increased by up to 14% between now and 2030 as a result of AI technologies and applications.[103] Also, McKinsey Global Institute predicted that AI could potentially add $13 trillion to global economic output by 2030.[104] If countries introduce robot taxes or legislation aimed at disincentivizing firms from investing or utilizing AI, the global economy may not reap the potential benefits that AI and automation could bring.

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[99] Mohamed Kande et al., *Don't fear AI. It will lead to long-term job growth*., WORLD ECONOMIC FORUM (Oct. 26, 2020), https://www.weforum.org/agenda/2020/10/dont-fear-ai-it-will-lead-to-long-term-job-growth/.
[100] Byron Reese, *AI Will Create Millions More Jobs Than It Will Destroy. Here's How*, SINGULARITYHUB (Jan. 1, 2019), https://singularityhub.com/2019/01/01/ai-will-create-millions-more-jobs-than-it-will-destroy-heres-how/.
[101] Reese, *supra* note 100.
[102] Krishna Kumar, *AI to create more jobs than it destroys*, DECCAN HERALD (Sept. 12, 2019 1:09 PM), https://www.deccanherald.com/opinion/panorama/ai-to-create-more-jobs-than-it-destroys-761031.html.
[103] Irving Wladawsky-Berger, *The Impact of Artificial Intelligence on the World Economy*, THE WALL STREET JOURNAL (Nov. 16, 2018, 3:09 PM), https://www.wsj.com/articles/the-impact-of-artificial-intelligence-on-the-world-economy-1542398991.
[104] Wladawsky-Berger, *supra* note 103.

The proponents of a robot tax also assume that any job taken over by a robot or displaced through automation will completely eradicate the need for a human to help assist, or work alongside with, the new technology. Robots and automation of jobs will not completely displace human workers. Some jobs will be taken over by robots, but sometimes "cobots" will assist workers instead of stealing their job.[105] Cobots are "collaborative robots" that assist and complement workers in their daily tasks.[106] Cobot's range from virtual assistants and chatbots for online services to soft exosuits used to help assist the elderly and disabled.[107] Moreover, automation of tasks for a certain job will not likely remove the need for a human to continue performing some of the tasks the company was not able to automate—as shown by Amazon's "Hands off the Wheel" program.[108]

The "Hands off the Wheel" program automated, among other things, the determination of what items to stock in Amazon's warehouses, how many items to stock, and for what price—a timely task that was once performed by Amazon's retail management division.[109] Amazon made this happen by utilizing two decades of data to streamline the process of keeping their warehouses fully stocked through machine learning.[110] The purpose of "Hands off the Wheel" was not to eliminate jobs, but to automate tasks so that employees could spend more time on other tasks that need a human to perform them, like building new products.[111] "Hands off the

[105] Atkinson, *supra* note 91.
[106] Atkinson, *supra* note 91.
[107] Robin Fearon*, Cobots: Robots with a Human Twist*, DISCOVERY (last visited Apr. 15, 2020), https://www.discovery.com/technology/cobots-robots-human-twist.
[108] Alex Kantrowitz, *How Amazon Automated Work and Put Its People to Better Use*, HARVARD BUSINESS REVIEW (Sept. 16, 2020), https://hbr.org/2020/09/how-amazon-automated-work-and-put-its-people-to-better-use.
[109] Kantrowitz, *supra* note 108.
[110] Kantrowitz, *supra* note 108.
[111] Kantrowitz, *supra* note 108.

Wheel" paid off for Amazon because the company increased productivity and profit without letting employees go.[112]

AI and automation have not yet proven to be a "job killers," so a robot tax that disincentivizes AI and automation may not be needed to prevent job loss. Countries that adopt robotics to a greater extent have been shown to maintain more of their manufacturing base than countries that do not.[113] Between 1993 and 2017, the robot density per 10,000 manufacturing workers was calculated for several countries, including Germany, the United States, and United Kingdom.[114] Germany had a robot density of 308 and lost 19% of manufacturing employment.[115] The United States had a robot density of 196 and lost 33% of manufacturing employment.[116] The United Kingdom lagged behind the United States and Germany with a robot density of 70 and lost over 50% of manufacturing employment.[117] Researchers have demonstrated that there is not an appreciable correlation between robot deployment and job losses, and this data supports that assertion.[118]

Although the idea of a robot tax has many flaws that would need to be worked out if implemented, it could serve some useful purposes. If AI and automation are rapidly adopted in the workplace and displace human jobs at startling rates, a robot tax would assist the government in funding social safety net programs that are financed through taxpayer dollars. A robot tax could also be a temporary solution to slow down AI and automation advancements until humans can learn the necessary skills to compete or work alongside with AI and automation. As humans

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[112] Kantrowitz, *supra* note 108.
[113] Rian Whitton, *Robot tax will only impede national competitiveness*, THE ROBOT REPORT (Sept. 17, 2018), https://www.therobotreport.com/robot-tax-impede-competitiveness/.
[114] Whitton, *supra* note 113.
[115] Whitton, *supra* note 113.
[116] Whitton, *supra* note 113.
[117] Whitton, *supra* note 113.
[118] Whitton, *supra* note 113.

develop the necessary skills to compete with new technology, they will become more valuable to employers, they will be called back into work, and the need for a robot tax will diminish because humans will be paying the taxes needed to fund crucial government programs. However, before a robot tax is enacted, if ever, it will be important to weigh the pros and cons and to make sure that the cons do not far outweigh the pros.

III. Robot Tax Alternatives

UBI is another solution to the potential decrease in human jobs due to AI and automation. One of UBI's proponents is Elon Musk, who believes that it is a simpler solution than a robot tax.[119] Musk predicted that we will not have a choice in the matter and that UBI will be absolutely necessary because of the rate that AI and automation will take over human jobs.[120] If the United States decided to adopt UBI, the government would provide citizens with a fixed amount of money per a specified period of time: either weekly, monthly, quarterly, or annually.[121] There are currently no countries that have UBI in place, but some countries have utilized UBI in the past and there have been some small scale UBI trials for research purposes.[122]

In the mid-1970's, economists and civil servants collaborated to create a basic income scheme for the residents of Dauphin, Manitoba in Canada.[123] The rural town consisted of about 10,000 people at the time, 2,128 of which were involved in the experiment.[124] The scheme lasted for more than four years and during that time the average family in Dauphin was guaranteed a

[119] Haridy, *supra* note 46.
[120] Haridy, *supra* note 46.
[121] Kriste Houser, *Experts Think UBI Is the Solution to Automation. This Year, We'll Find Out.*, FUTURISM (Mar. 17, 2017), https://futurism.com/experts-think-ubi-is-the-solution-to-automation-this-year-well-find-out
[122] *Exploring Universal Basic Income: A Guide to Navigating Concepts, Evidence, and Practices*, THE WORLD BANK (Feb. 4, 2020), https://www.worldbank.org/en/topic/socialprotection/publication/exploring-universal-basic-income-a-guide-to-navigating-concepts-evidence-and practices#:~:text=Currently%2C%20no%20country%20has%20a,a% 20short%20period%20of%20time.
[123] David Cox, *Canada's forgotten universal basic income experiment*, BBC (June 24, 2020), https://www.bbc.com/worklife/article/20200624-canadas-forgotten-universal-basic-income-experiment.
[124] Cox, *supra* note 123.

yearly income equal to $11,700 dollars.[125] If a family only made $9,000 annually, they would be given $2,700—the difference between $11,700 and $9,000.[126] The purpose of the experiment was to address rural poverty and to investigate whether UBI would disincentivize people from working.[127] A study of the results revealed that the guaranteed income resulted in an 8.5% decline in hospitalizations and a reduction in visits to family physicians.[128] This was explained by the fact that there were less alcohol-related incidents and mental health hospitalizations, likely because of the new found security and financial stability in the Dauphin residents' everyday lives.[129] The number of children completing high school also increased.[130] Most importantly, the employment rate in Dauphin remained the same throughout the experiment, dispelling many of the predictions that the money handed out to the residents would discourage them from working.[131]

A UBI pilot project in India provided a monthly grant to every person in selected villages, including both adults and children.[132] The project took place from June 2011 to November 2012 in the Indian state of Madhya Pradesh.[133] The project was designed to be a controlled trial, so data was collected before, during, and after the project began.[134] Prior to the start of the project the organizers separated participants into two separate groups based on the villages they lived in.[135] Nine villages consisting of 6,000 people received UBI in the form of

[125] Cox, *supra* note 123.
[126] Cox, *supra* note 123.
[127] Cox, *supra* note 123.
[128] Cox, *supra* note 123.
[129] Cox, *supra* note 123.
[130] Cox, *supra* note 123.
[131] Cox, *supra* note 123.
[132] Rasmus Schjoedt, *India's Basic Income Experiment*, DEVELOPMENT PATHWAYS (Apr. 2016), https://socialprotection-humanrights.org/wp-content/uploads/2016/04/Indias-Basic-Income-Experiment-PP21.pdf.
[133] Schjoedt, *supra* note 132.
[134] Schjoedt, *supra* note 132.
[135] Schjoedt, *supra* note 132.

cash transfers, while twelve similar villages were included in the project as control villages, who did not receive cash transfers.[136] The goal of the project was to provide participants with "enough to make a difference to living standards, but not enough to improve them considerably."[137] In 2013, researchers released several findings from the project.[138] Cash grants from the UBI program were associated with an increase in labor and work and reduction in indebtedness.[139] People were using the money to purchase small items for production, like sewing machines, seeds, and fertilizer.[140] People were also using the money to either reduce their debt or to prevent themselves from going further into debt.[141] Cash grants were also associated with increased regular school attendance and improved school performance.[142] This experiment of UBI also did not appear to discourage the participants from working.[143]

Although these UBI pilots and projects were successful and showed that the people receiving the guaranteed income benefited greatly from the extra financial help, there are doubts that UBI is an affordable solution for an entire country. In 2017, an economist name Luke Martinelli attempted to estimate how much UBI would cost in the United Kingdom. His cheapest estimate amounted to €140 billion per year, in addition to welfare state costs. Estimates of how much a UBI scheme could cost in the United States are similarly startling.

[136] Schjoedt, *supra* note 132.
[137] Schjoedt, *supra* note 132.
[138] Yannick Vanderborght, *INDIA: Basic Income Pilot Project releases an impressive list of findings*, BASIC INCOME (Aug. 19, 2013), https://basicincome.org/news/2013/08/india-basic-income-pilot-project-releases-an-impressive-list-of-findings/.
[139] Vanderborght, *supra* note 138.
[140] Vanderborght, *supra* note 138.
[141] Vanderborght, *supra* note 138.
[142] Vanderborght, *supra* note 138.
[143] Cox, *supra* note 123.

Andrew Yang, presidential candidate in the 2020 presidential election, used his platform to get Americans thinking about the potential of UBI in the United States.[144] One estimate of Yang's proposal would have given an estimated 236 million adults $12,000 per year—or $2.8 trillion dollars per year total.[145] To pay for this incredibly expensive scheme, Yang proposed a value-added tax of 10% on the production of goods or services, increasing the capital gains tax, and doing away with the Social Security tax cap.[146] Economists were skeptical of this plan, and claimed that Yang's numbers did not add up. Economist Kyle Pomerleau argued that taxes would need to be raised higher than what Yang proposed, and the amount of money given out per year would also need to be lowered.[147]

Although Yang's proposal may have been too expensive, UBI can be implemented without breaking the bank, according to some economists. A theoretical budget neutral UBI plan was released by the American Enterprise Institute that would give payments of $15,845 per year to United States' residents ages eighteen and older.[148] United States' citizens under the age of eighteen would receive $7,923 per year.[149] Although the plan would allegedly not cost the government anything, it would come at a cost to many people because of the benefits that would have to be given up in order to fund the program. Benefit programs including Medicare, Social Security, veterans' benefits, refugee assistance, housing benefits, disaster relief, and many others would all have to be repealed to fund the program.[150]

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[144] Catherine Clifford, *This free cash plan would pay you $1,320 per month and wouldn't cost the government a cent*, CNBC (Jan. 15, 2020, 10:00 AM), https://www.cnbc.com/2020/01/14/budget-neutral-universal-basic-income-plan-would-pay-1320-per-month.html.
[145] Clifford, *supra* note 144.
[146] Clifford, *supra* note 144.
[147] Clifford, *supra* note 144.
[148] Clifford, *supra* note 144.
[149] Clifford, *supra* note 144.
[150] Clifford, *supra* note 144.

Although UBI has many proponents who argue that it will reduce poverty and reduce income equality, as of right now it does not seem realistic. If a budget neutral UBI plan like the one proposed by the American Enterprise Institute is adopted, there are many issues that would need to be worked out—some of which could be proven to be unworkable. For instance, a budget neutral UBI scheme would place all of the financial burdens on the American consumers. Those at the top of the tax bracket earning more than $1 million annually could pay, on average, $101,249 per year in income taxes (according to the American Enterprise Institute's theoretical plan). This theoretical plan assumes that people at the top of the tax bracket would be willing to participate in UBI. If they did not want to participate, they could move out of the country to somewhere where they could keep their extra $101,249 per year in income taxes that otherwise would have gone towards UBI. Also, it is difficult to picture a world in which people would be willing to give up so much in order to receive so little. Those at the bottom of tax brackets would no doubt enjoy the steady stream of income coming in through UBI, but those who are lower to upper middle class may have some issues with their benefits, such as social security and veterans' benefits, being taken away. The UBI plan may only have a net benefit to a few people, so it is hard to see how a majority of the American people could be supportive of it.

Apart from UBI, the reskilling of employees is another solution to increased AI and automation in the workplace. Reskilling is the process of teaching employees how to accomplish a completely new set of tasks.[151] The creation of technology platforms and tools that allow people to learn new skills is one way to accomplish reskilling. One tool already being utilized by

[151] Lynda Gratton, *What Employees Tell Us About Automation and Re-skilling*, MIT SLOAN MANAGEMENT REVIEW (Dec. 18, 2019), https://sloanreview.mit.edu/article/what-employees-tell-us-about-automation-and-re-skilling/.

teachers and students to learn about the changing world of technology is a platform called Kahoot, which makes learning fun and easy through games.[152]

Unlike UBI, the reskilling of employees does not require immense government involvement, nor does it place the burden on the American people, but the burden is placed on employers and corporations. Unlike a robot tax, the reskilling of workers would not stifle productivity or drive businesses overseas—it would do just the opposite. By providing employees with new skills so that they can work with AI and automation, employees will likely increase their productivity levels and are less likely to be displaced by the new technology. Businesses will not be driven overseas because they will have no reason to relocate since they are not be taxed extra with a robot tax.

According to Jim Wilson, AI and humans perform better when they work together to complete a job.[153] For instance, at BMW's Spartanburg, South Carolina plant, workers on the assembly line consist of both AI robots and humans.[154] From a study performed by Jim Wilson and Accenture Research, they found that human and machine teams are 85% more productive than humans or robots working alone.[155] Jim Wilson is the Managing Director of Information Technology and Business Research at Accenture Research.[156] He believes that as AI becomes more prominent in the workplace, there will be a greater need for humans in three crucial roles: training, explaining, and sustaining.[157] Humans will be needed to train machines and AI systems to be able to perform certain tasks, explain the outcomes of those tasks, and to sustain the

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[152] Sameer Maskey*, Retraining And Reskilling Your Workforce In The Wake Of AI*, FORBES (Jun. 7, 2019, 8:30 AM), https://www.forbes.com/sites/forbestechcouncil/2019/06/07/retraining-and-re-skilling-your-workforce-in-the-wake-of-ai/?sh=31b07edd5484.
[153] Nick Johnson*, Humans Are Underrated: How Collaborating With AI Will Minimize Workforce Disruption*, THE 360 BLOG (Mar. 11, 2019), https://www.salesforce.com/blog/collaborate-with-ai-minimize-workforce-disruption/.
[154] Johnson, *supra* note 153.
[155] Johnson, *supra* note 153.
[156] Johnson, *supra* note 153.
[157] Johnson, *supra* note 153.

responsible use of machines.[158] To smooth the transition of displaced workers into these soon-to-be roles where they will collaborate with AI, workers need to learn the new skills needed to be able to work with AI through reskilling.

A study by Accenture Researchers found that "only about 26% of senior executives believe their people are ready to work with intelligent technologies."[159] Many companies do not currently have the funds to invest in the reskilling of their workers. Other issues are that companies may not have the time to set aside to reskill their workers, or there is a lack of training technology.[160] If companies do not reskill their workers before rapid adoption of AI and automation catches on, there may be skills shortages.[161] In fact, AI is already "talent scarce" and there is shortage of employees knowledgeable in the field of AI-powered tools.[162]

IV. Conclusion

A robot tax could potentially slow down or disincentivize firms from becoming more productive and innovating because people are afraid of the potential effects of AI and automation. However, a robot tax may be needed to make up for a decrease in tax revenues used to fund government programs. A robot tax could also push corporations to think more carefully about replacing human workers with AI. This is because corporations will still have to pay taxes on the robots they use after a robot tax is enacted, instead of receiving a tax break by firing human workers and employing robots for free if there were no robot tax. UBI is a costly solution to the decrease in human jobs that could be funded by a robot tax, but a robot tax may not be enough to cover the decrease in tax revenues due to less humans working and a UBI scheme. For

[158] Johnson, *supra* note 153.
[159] Johnson, *supra* note 153.
[160] Johnson, *supra* note 153.
[161] Johnson, *supra* note 153.
[162] Maskey, *supra* note 152.

instance, in 2019 the federal budget allocated $361 billion to safety net programs.[163] A UBI scheme is likely to cost over one trillion dollars. To cover both safety net programs and UBI, a robot tax would have to tax businesses that utilize AI and automation at an incredibly high rate, and this would create its own set of issues.

The reskilling of workers is a way to get a step ahead of AI and automation by preparing workers with the skills needed to be valuable employees to work with new technologies. If corporations and employers took the time and money to invest in their employees through reskilling, both the employer and employee will benefit in the long run. The employer will benefit because when AI and employees work together, they are more productive, and the employer will be able to bring in more profits. The employee will benefit because reskilling will prevent them from losing their job. For reskilling to be successful, however, AI and automation will need to create more jobs than they destroy so that humans can use their newly acquired skills in the workplace. If AI and automation destroy more jobs than they create, it won't matter that workers have been reskilled because what they have been reskilled to do may become automated by AI or there may not be enough jobs to employ eligible workers.

Each solution to the issue of increased automation and AI in the United States is going to have its fair share of negative and positive effects, but something will need to be done to counteract the negative consequences of our new technology-filled world. If the government and employers do not start planning on how to prepare for this new wave of technology, our country could be facing massive unemployment and widespread chaos. Job loss will lead to less tax revenue being collected by the government. This will result in less funds to pay for safety net programs and poverty will increase significantly. The need for UBI will skyrocket but there will

[163] *Policy Basics*, *supra* note 33.

be no funds to even provide for a basic scheme—which could cost trillions of dollars per year. AI and automation are new advancements that this country should no doubt be excited about, but we need to be strategic with how we, as a country, move forward into this AI land of the unknown.