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As dean of the Gerald R. Ford School of Public Policy, I am pleased to support the 17th volume of the Michigan Journal of Public Affairs, a wholly student-run and peer-reviewed publication of first-rate public policy articles from graduate students, emerging scholars, and policy professionals.

Showcasing rigorous, objective policy analysis and effective communication, MJPA illuminates critical public policy issues facing our country and world, and offers substantive solutions to meet these challenges. I hope you will enjoy the breadth and excellence of the articles in this volume.

To the editorial board: Congratulations on an outstanding publication and thank you for your leadership and perseverance in the face of COVID-19. You exemplify the highest levels of professionalism, resourcefulness, and hard work.

Sincerely,

Michael S. Barr
Joan and Sanford Weill Dean of Public Policy
Frank Murphy Collegiate Professor of Public Policy
Roy F. and Jean Humphrey Proffitt Professor of Law
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Dear readers,

When we started gathering pieces for this journal last fall, we never imagined the world into which it would be published. The COVID-19 outbreak and nationwide protests against police brutality and systemic racism have had a seismic impact on the academic and personal lives of our authors and editors, while also dramatically shifting the scope of policy debates around the world. In moments of crisis, it is the role of policy researchers to reexamine basic assumptions, think expansively about the role of government and civil society, and propose forward-thinking solutions to pressing problems. This year’s Michigan Journal of Public Affairs presents a collection of excellent pieces that do exactly that.

Some of these papers explore new and radical possibilities for transforming the basis of our governance. Aloka Narayanan analyzes the merits of universal basic income guarantees – a policy idea that has been thrust to the foreground as governments across the world have suddenly found themselves debating and implementing large scale UBI projects. These policymakers would be well served to read her proposal for how UBI is not only a tool to address automation, but should also help redress historic racial injustices. On the revenue side, Jordan Kizer calls into question the very basis of our tax system, proposing a land value tax that he argues could have dramatic impacts on inequality and economic justice. Both of these papers are responding to a rapidly-expanding appetite for creative policy solutions.

Other papers deal with long-term trends that have been thrown into sharp relief by this year’s crises. Wendy Robinson analyzes China’s rapidly-expanding influence in the Western Balkans, including its recent donations of medical supplies and equipment in response to the coronavirus pandemic. Daniel Fitzgerald examines Alabama’s public school system and introduces proposals to combat issues like entrenched racial segregation. Marigny Kirschke-Schwartz discusses the repatriation of former ISIS fighters to their home countries in Europe; as national borders close, the legal limbo of foreign terrorist fighters becomes even more pronounced. None of these challenges are new, but the heightened tensions of our current moment lend them a renewed sense of urgency.

Last but certainly not least, the University of Michigan’s own Jennifer Chasseur, Michael Bachman, and Zhibin Ye analyze the costly and fractious development of the V-22 Osprey tiltrotor military aircraft. Their lessons about the failures of organizational coordination serve as a stark reminder of the importance of good institutions, and leaders from across the policy landscape can draw on their concrete recommendations for better budgeting and contracting.

We hope that you enjoy reading and learning from these excellent authors as much as we did. We would also like to thank the editorial team at MJPA, whose hard work under challenging circumstances made this journal possible. To work with them has truly been an honor and a privilege. We are leaving the journal in the hands of an incredibly capable team, and we look forward to seeing where they take this journal next.

Your Editors in Chief,

Will Sims & Katie Grover

A Letter from the Editors
The United States is undergoing a fundamental economic restructuring. Manufacturing jobs have consistently declined since the mid-1950s, contracting from about 30 percent of non-farm jobs to just eight percent.\(^1\) In recent years, the decline of manufacturing has come in tandem with a rise in contract and part-time roles, with automation gaining momentum.\(^2\) The rise of automation is reducing the number of full-time jobs available to middle-skill workers. As the supply of part-time and contract roles increases as a percentage of all jobs available, Americans are forced to take jobs with fewer hours than they would otherwise accept, increasing the rate of underemployment.

Basic income is now on the policy agenda, highlighted by former presidential candidate Andrew Yang and touted by several leaders in the technology industry as a solution to the growing discontent around the aforementioned economic shifts. Basic income, otherwise known as guaranteed income, involves periodically distributing a sum of money to individuals who meet some criteria to use however they choose. Compared to the existing U.S. social safety net, which is rife with restrictions, it offers recipients freedom to spend how they want. While some technologists, including Richard Branson, cite the necessity of basic income to address structural unemployment (i.e. the elimination of jobs due to technological change), others consider this income a supplement to alleviate financial burdens on the unemployed as they participate in job training and search for other roles.\(^3\)

Fundamental shifts in the economy pose challenges to and opportunities for rethinking the social safety net beyond just instituting a basic income. Yang’s Freedom Dividend is a universal version of basic income, funded by taxes on goods and services, which would provide a sum of money to all adults regardless of socioeconomic status but reinforce the status quo of inequality. Basic incomes have real potential, though, not only because they increase spending freedom for low-income individuals, but also because they serve as a potential redistributive tool for systematically disadvantaged populations. Policymakers must acknowledge the need to rethink government social services, as automation threatens to further reinforce systematic oppression due to disproportionate job loss. The existing social safety net alone does not provide the resources for mass retraining and replacement income for permanent worker dislocation. A guaranteed income can provide a stopgap for the unemployed; bolster lower-income families’ ability to pay for basic needs; address the unequal consequences of automation, the decline of manufacturing, and outsourcing on Black, Hispanic, and Native Americans; and right historical wrongs.

A solid basic income plan would balance equity and minimize economic distortions on the micro and macro scale. This paper evaluates the funding strategy behind Yang’s Freedom Dividend and its ability to address shifts in employment on the grounds of equity and adequacy. Ultimately, Yang’s plan is insufficient on these criteria. U.S. policymakers should instead adopt a means-tested basic income that redistributes resources and supplements the existing social safety net to address gaps in Yang’s proposal.

The Changing Economy

Outsourcing, skills mismatches, and automation have led to a sharp decline in manufacturing employment in the U.S. In 1980, more than one third of prime-age men with a high school education or less held manufacturing roles.\(^4\) The U.S. lost a net 2 million manufacturing jobs between 1980 and 2000 and another 5.5 million between 2000 and 2017.\(^5\) Workers with a high school education or less have borne the brunt of losses in manufacturing. Because manufacturing jobs tend to be spatially concentrated, some regions have suffered more than others.\(^6\) Productivity growth and low wages in countries including China and India have induced companies to outsource labor and severely undercut the U.S. competitive advantage in manufacturing.\(^7\) While manufacturing in the computer and semiconductor industries is growing in the U.S., these jobs require highly skilled workers with associate’s and/or bachelor’s degrees and are concentrated in different geographic regions than historical manufacturing centers.\(^8\) Annual work hours in manufacturing have declined across education levels, but workers with high school degrees or less have seen twice as many cuts to work hours as workers with a college education have.\(^9\) The rise of automation presents another challenge to the U.S. economy. Automation has led to job growth among workers at the top of the income distribution with advanced degrees and training, while undermining opportunities for workers in the middle of the wage distribution.\(^10\) About 36 million ex-
isting jobs are at risk of automation within the next thirty years, with 50 percent of these jobs expected to disappear by 2030.11

While workers in manufacturing are experiencing hour reductions and job loss, the share of individuals in contract roles or experiencing underemployment (i.e. involuntarily working part-time) is rising. The gig economy is characterized by a labor population with short-term and freelance work. Its size is not widely agreed upon, but estimates range from four percent to forty percent of the U.S. workforce.12 By some measures, employment in non-traditional work arrangements, including contract and freelance work, rose by 50 percent from 2005 to 2015, and almost all jobs created in that time were impermanent.13 A rise in underemployment reflects underlying shifts in U.S. economic conditions, which some economists argue lead to tepid wage growth.14

The consequences of the aforementioned economic shifts will continue to hurt already disadvantaged groups. Through discrimination and a series of deliberate and unintended policy decisions at all levels of government, Black, Hispanic, and Native Americans (including American Indians and Alaska Natives) already face lower educational outcomes and have substantively less wealth than Whites do.15 Because of systematic oppression, individuals of these racial and ethnic backgrounds are highly concentrated in low to mid-wage jobs. Black and Hispanic workers are more likely than other workers to lose their jobs to automation, and they face underemployment rates nearly twice that of White workers.16 Underemployment rates among Native Americans are also much higher than those of Whites.17 Brookings Institution scholars find that Black, Hispanic, and Native American workers will experience the “gravest disruptions from automation” in the years to come.18

History of Basic Income

Basic income is not a new idea. American economist Milton Friedman introduced a negative income tax — a basic income with a gradual phase out by pre-stipend income — in his 1962 book, Capitalism and Freedom. Friedman, a conservative libertarian, envisioned replacing social safety net programs with a guaranteed minimum income. Friedman strongly believed that the paternalism of social safety net programs prevented individuals from spending in their own best interests. Inspired by Friedman’s work, President Richard Nixon introduced an unconditional cash transfer for families with no income in 1968, which would have given a family of four $11,000 a year in 2020 dollars.19 The cash transfer would have functioned like a negative income tax, with the maximum benefit afforded to those with income between $0 and $1,500 in 1968 dollars and a phase-out after $3,000 of pre-allowance income.20 The so-called “Family Assistance Plan” died in the Senate with opposition from both parties; President Nixon was ultimately dissuaded from supporting the policy, basing his opinion on a study that showed that a 19th-century basic income experiment in the United Kingdom disincentivized work. The U.K. study has since been discredited, as much of the text was written prior to data collection, and spurious evidence came primarily from local clergy with problematic biases toward the habits of the poor.21 Friedman’s plan eventually morphed into the 1975 Earned Income Tax Credit (EITC), modified only slightly since its inception. Despite the existence of this benefit, basic income and negative income tax conversations remain relevant, as only families with earned income can receive the EITC. Since the 1960s and 1970s, the federal government and extra-governmental organizations have undertaken several basic income experiments. Only some have been rigorously implemented and evaluated, but all hold lessons for future basic income schemes. Experiments are detailed below.

Seattle and Denver Income Maintenance Experiments

From the late 1960s through the early 1970s, the U.S. federal government funded four “income maintenance” experiments, the most famous of which were implemented in Seattle and Denver (SIME/DIME). The experiments involved 5,000 families, with sets of families assigned to three or five-year durations of different treatments involving some combination of a negative income tax and job counseling/training.22 The rigorously evaluated SIME/DIME in Seattle and Denver ultimately showed that work disincentives decreased as after-tax guaranteed income decreased. In the two-parent families tested, work disincentives for part- and full-time work were higher for wives than husbands, likely reflecting the women’s roles as secondary earners during this period.23 While the work-disincentive findings may continue to hold across income levels, the lines between primary and secondary earners are much less defined now than they were in the 1970s, so the gender divide related to basic income may not manifest today. Counseling and training did not produce significantly positive results on labor supply, and results of this intervention were largely inconclusive due to omitted variables.24

Alaska Permanent Fund

Alaska implemented a variant of a universal basic income in 1982. The Alaska Permanent Fund, a state-owned investment entity, pays out an annual dividend to every Alaskan resident that increases based on rises in oil prices.25 In 2015, the dividend totaled $2,072 per person, while in 2017, it dropped to $1,100.26 In a 2018 evaluation, researchers found that the dividend does not significantly decrease aggregate employment.27
Economic Security Project Pilots
The Economic Security Project (ESP) has financed several basic income pilots across the U.S., including programs in Mississippi and California.28 In Jackson, Mississippi, the ESP-supported Springboard to Opportunities provided 20 women with $1,000 in income per month for twelve months beginning in fall 2018 through an initiative called The Magnolia Mother’s Trust. The Mississippi pilot was the first to specifically target extremely low-income families headed by African American women living in affordable housing.29 After six months, most of the women spent part or all of their stipends on healthy foods, school supplies, and healthcare. Additionally, in an area rife with payday loan exploitation, none of the women used payday loans for unforeseen expenses. The women successfully paid off nearly $10,000 in collective predatory debt during the twelve-month pilot.30 Given the perceived success of this pilot, Springboard to Opportunity commissioned a larger study of at least 75 women slated to begin in March 2020.31

Stockton Economic Empowerment Demonstration
The Stockton Economic Empowerment Demonstration, a basic income experiment in Stockton, California, began in February 2019. The program randomly selected 125 residents of neighborhoods with an area median income at or below $46,033 to receive $500 a month.32 Early results of the 18-month campaign show that recipients spent a majority of their stipends on necessary expenses, with 55 percent going to food and utilities. Future research will focus on the impacts of basic income on income volatility, psychological and physical well-being, and perceived agency over the future.33

Y Combinator Making Ends Meet Program
Silicon Valley’s Y Combinator, an early-stage startup-funding organization, is launching a basic income pilot in late 2020. The Making Ends Meet program will assign 3,000 participants to treatment and control groups across two states. One-thousand people in the treatment group will receive $1,000 monthly stipends, and 2,000 in the control group will receive $50 monthly stipends.34 Evaluators at the Michigan Survey Research Center will conduct a study at the three- and five-year marks on the impacts of basic income on a variety of outcomes, including changes in mental and physical health as well as labor supply on the intensive and extensive margins. Y Combinator is working with local nonprofits to distribute the cash transfers.

The Freedom Dividend
At the start of his presidential campaign, Andrew Yang promised to mitigate the economic impacts of automation through a major policy proposal: universal basic income. Yang’s plan would have given $1,000 a month to every American adult and would have been primarily financed by a 10-percent value-added tax (VAT) estimated to raise nearly $990 billion a year in revenue, with supplemental funding from other, less-lucrative tax revenue sources including a carbon tax and a capital gains tax.35 The plan would have simultaneously cut discretionary spending on social welfare benefits for low-income individuals who opted in to basic income over their existing benefits.

There are more equitable and adequate solutions than Yang’s Freedom Dividend. While the Dividend would have been primarily funded by a VAT, a more equitable and reasonable funding mechanism would directly target companies benefitting from automation. Additionally, since a $12,000 stipend for low-income individuals would hardly cover basic needs, especially for workers experiencing permanent dislocation, a more reasonable guaranteed income would layer on to the existing safety net rather than replace it. Ultimately, Yang’s Freedom Dividend loses, especially on the issue of equity, to the possibility of a basic income that resembles a negative income tax with a phase-out period and delivers reparations for unjust employment and economic conditions for disproportionately marginalized racial groups.

Funding Mechanism
VATs are consumption taxes placed on products at each stage of production. Essentially, a VAT taxes the value a business adds to a product from point of purchase to point of sale – typically, the tax is applied to the difference between the sale price and the purchase cost multiplied by the quantity of goods sold by each business.36 The standard VAT rate among Organisation for Economic Cooperation and Development (OECD) countries averaged about 19.2 percent in 2018 but ranged from 5 percent (Canada) to 27 percent (Hungary).37 While these tax mechanisms are used all over the world, the U.S. does not have a VAT.

Equity
VATs tend to be regressive because poorer households consume a larger proportion of their income.38 Depending on which goods and services are taxed, and given evidence showing that producers tend to pass the VAT on to consumers in the form of higher prices, the burden of the VAT could fall more heavily on consumers rather than producers.39 If the goods and services taxed are staple goods on which low-income consumers spend a high proportion of their incomes, such as groceries and utilities, the VAT would be even more regressive.40 Instituting a basic income akin to Friedman’s negative income tax (i.e. a credit that would only go to lower-income individuals up to a phase-out threshold) would combat the regressivity of a VAT.41
Alternately, identifying basic income funding sources that directly target companies benefitting from automation could be a less regressive source of revenue. The government currently subsidizes capital investment through the tax code. Employers save on payroll taxes by replacing employees with automated systems and robots, and an accelerated depreciation allowance for capital investments allows firms to deduct the costs of automation, which speeds up the transition. Economist Daron Acemoglu warns that the accelerated depreciation subsidy may actually "induce firms to substitute capital for labor even when this is not socially cost-saving." Some researchers propose eliminating the accelerated depreciation allowance for companies beyond a certain threshold of automation investments. Doing so would slow innovation and lead to more socially optimal outcomes.

**Adequacy**
Under Yang’s universal basic income plan, every adult would receive $1,000 regardless of socioeconomic circumstance. If an eligibility income cap were added, the plan would be substantially less expensive because it would go to fewer individuals and still address the primary reasons for instituting the basic income provision (i.e. permanent job loss due to automation). This would convert Yang’s plan into a means-tested program, which would distribute resources based on income and asset levels and address income inequality to an extent. Despite evidence of benefits of means-tested programs, these are more politically controversial than government programs that directly benefit most of the individuals who pay in (e.g. Social Security) and are prone to budget volatility.

**Addressing Employment Shifts**
As noted above, sectors that have long dominated in the U.S. are evolving, and with these economic shifts, the U.S. will hemorrhage low to mid-skill jobs faster than can be replaced. One of the major aims of Yang’s Dividend is to address loss of income among individuals without providing the training to find other sources of employment in the new economy.

**Equity**
Jobs that will be rendered obsolete by automation are now disproportionately held by Black and Hispanic individuals, who are already affected by a history of economic disenfranchisement. According to Prosperity Now, the median Black household is projected to have no wealth within the next forty years, with Hispanic households on a similar trajectory. Wealth inequality is expected to rise, with wealth gains from automation going disproportionately to wealthier Americans. Yang’s universal basic income does nothing to address the disproportionality of losses from a shift to automation.

While a universal basic income allows for further wealth accumulation among Americans with higher incomes, it would likely only allow lower-income families of color to stay afloat, further exacerbating inequities between Americans of color and White Americans. Black and Hispanic workers face not only barriers to amassing wealth but also discrimination in the labor market. Black and Hispanic families are more likely to live paycheck to paycheck than other groups are.

**Unintended Economic Effects of the Freedom Dividend**
A universal basic income will have macroeconomic consequences. A $12,000 increase in disposable income for every adult, barring those who choose benefits under the existing safety net, can have different effects depending on implementation. Research has shown that monthly cash transfers stimulate spending on basic needs, including food, health care, and education, while annual payouts are more likely to be spent on items that require some saving, such as a new refrigerator or payment of a long-term debt. This suggests that Yang’s monthly income guarantee would stimulate consumption spending, inducing a growth in output and resulting in an increase in the labor supply.

Though unlikely, a basic income could also cause inflation, as companies raise prices for goods and services in response to increased demand. This result largely depends on how money is raised. If the program is primarily fund-
ed by a VAT, the basic income package could be offset by a decrease in demand related to price increases, counteracting inflation. If funded by other sources, such as corporate taxation or a wealth tax, the relative prices of goods may change — while products that taxed individuals stop buying experience price decreases, other products that are purchased in higher quantities, such as food, may increase in price. Basic income could also cause employers to depress wages, as is oft argued a negative effect of the EITC. A more likely outcome, however, is a change in the price of goods and services due to the proposed VAT, which producers could pass on to consumers in the form of higher prices. For goods with inelastic demand that consumers will buy regardless of price increases, consumers will shoulder the burden of the tax. As noted above, this has equity implications, as low-income people spend a larger proportion of their income on goods and services. The rise in prices of goods and services could also partially outweigh the basic income stipend, rendering the dollars useless for addressing financial insecurity in the rise of the new economy.

Perhaps the most meaningful concern is the potential for basic income to create work disincentives. One widely cited study on the impact of lottery winnings on wealth and labor supply in Sweden showed that larger transfers may lead to larger decreases in labor supply, with a transfer of $140,000 translating to a 2-percent reduction in employment. In studies of unconditional cash transfers in the U.S., effects on labor supply were small or nonexistent. In Alaska, evaluators found that while the dividend had negligible effects on the labor supply overall, the part-time employment rate increased by 1.8 percentage points after the introduction of the dividend. It is plausible that the dividend increased consumption, and as a result, demand for labor to keep up with consumption patterns. While the impact on labor supply overall may not be significant, it is non-trivial. Secondary earners, who provide a smaller proportion of their household income than their primary earners do, might drop out of the labor force in light of the additional income, as they have a more elastic labor supply than primary earners do. However, the reason for the decrease is also important and warrants further research. If secondary earners are dropping out of the labor force to provide childcare, for example, because they are net saving money by staying home, the labor disincentive is not immediately problematic, though it could become problematic for the reason that the individual may lose competitiveness in the labor market after a prolonged absence.

In the absence of basic income, automation, outsourcing, and the continuing decline of middle-skill manufacturing roles may have a more pernicious effect on labor force participation. Even with basic income in place, job train-

An Alternative: A Reparative Basic Income Scheme

A basic income can be an opportunity to redistribute income to historically disadvantaged communities, especially with a progressive funding mechanism such as a tax on automation. Community Change's Dorian Warren proposed Universal Basic Income +, which would couple reparations for Black Americans for centuries of injustice with a guaranteed income for all. Warren's proposal takes into account historical injustice and disproportionate impacts on Black households in the face of a changing economy and suggests a pro-rated additional amount for Black adults over a specified time frame. Warren's plan could be expanded to remedy the disproportionate losses from the rise of artificial intelligence on other racial groups as well, including Hispanic Americans and Native Americans.

A basic income scheme could employ a similar structure as that of Senator Cory Booker's American Opportunity Accounts Act (2018), which would provide “Baby Bonds” to every child at birth. The “Baby Bonds” would use a tiered system that provides a base amount of $1,000 to every family, with additional deposits each year until the child reaches adulthood. Booker's proposal, implemented through the tax code, would add up to $2,000 each year depending on family income, which may be a more politically viable option compared to a race-based allocation. On average, this translates to nearly twice the dollar amount in supplemental payments to Black and Hispanic families compared to White families. A race-based allocation would more directly provide reparations for historical disenfranchisement and consequences from automation but requires the right political moment — namely a progressive, Democratically-controlled Congress and presidency.

Of course, this proposal requires additional detail to move forward, such as how to identify which individuals fit into each racial category, for how long these tiered benefits would be adjusted for race, and how much more the base allocation must be to provide adequate resources to families rendered powerless in the face of technological change.

Conclusion

While Yang's Freedom Dividend does not adequately address the decline of the U.S. manufacturing sector, the rise of automation, and growing underemployment, some variant of his plan proves necessary. An ideal model for
a basic income would simultaneously address systematic failures in the U.S. economy and minimize negative economic consequences, including a severe drop in the labor supply.

The Y Combinator experiment promises to elucidate the effects of a universal option sans adjustments, while the Stockton experiment will provide further evidence of the effects of cash transfers to the most vulnerable. From existing evidence, it is apparent that there is a need for a cash transfer on top of the safety net that applies differently to demographic groups given the unequal effects of automation. A tiered basic income with adjustments for race and pre-guarantee income will be the most effective at addressing unequal gains from automation and delivering reparations for historical harm compared to an equal allocation of money to all households or a negative income tax schedule that treats all races similarly.

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Expensive Friendships: An Analysis of Chinese Influence in the Western Balkans

By Wendy Robinson

Executive Summary

Chinese presence in the Western Balkans has increased in recent years due to the expansion of the One Belt, One Road project, also known as The Belt and Road Initiative (BRI), a contemporary Silk Road. According to recent figures from Bloomberg, China has invested $318 billion in Europe over the past ten years — several billion dollars of which has gone into development projects in the Western Balkans. Some 360 European companies have been bought out by Chinese enterprises, provoking international criticism and growing concern by governments in Europe and the United States. These concerns touch not only on the potential for Chinese companies to monopolize the global market but also on the financial assistance that is offered to countries with smaller, weaker economies, entangling them in so-called “debt-trap diplomacy.”

At the opening of the BRI Forum in 2017, President Xi stated that the Initiative “should focus on the fundamental issue of development, release the growth potential of various countries and achieve economic integration and interconnected development and deliver benefits to all.” In other words, the project has the power to affect the relationships between China and participating (as well as skeptical) countries and shape global economic growth, unequivocally impacting China’s power position in the world order.

The southeastern region of Europe, or the Balkans, continues to serve as a key strategic point connecting Central Europe with the Mediterranean and Eurasia. As a hub in the ancient transit route for the Romans, Ottomans, and others, this tiny corner of Europe has caught the attention in recent years of larger powers who see the region as a prime zone to carve out geostrategic and economic spheres of influence.

Introduction

The Belt and Road Initiative (BRI) was projected to connect 138 countries and 4.6 billion people, totaling $29 trillion in GDP, by the end of 2019. Launched by President Xi Jinping in 2013, this colossal enterprise is intended to foster multilateral economic cooperation and partnerships between Chinese companies (or SOEs — state-owned enterprises) and local governments along the routes.

The BRI is composed of two primary components: the Belt and Road project, which refers to the overland route, and the 21st Century Maritime Silk Road, which pertains to its sea routes. The third and newest component is the Digital Silk Road, which focuses on faster telecommunications.

The BRI prioritizes the multilateral construction of railways, roads and highways, seaports, airports, telecommunications networks, oil and gas pipelines, and energy projects spanning Asia, Eurasia, Europe, and Africa. Additionally, Beijing uses these trade routes to transport Chinese goods to Europe, one of its largest trading partners.

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The southeastern region of Europe, or the Balkans, continues to serve as a key strategic point connecting Central Europe with the Mediterranean and Eurasia. As a hub in the ancient transit route for the Romans, Ottomans, and others, this tiny corner of Europe has caught the attention in recent years of larger powers who see the region as a prime zone to carve out geostrategic and economic spheres of influence.

Deeping interest in the Balkans

According to the Chinese Ministry of Foreign Affairs and National Development and Reform Commission, the official objectives of the BRI are:

- “Improving intergovernmental communication to better align high-level government policies like economic development strategies and plans for regional cooperation.”
- “Strengthening the coordination of infrastructure plans to better connect hard infrastructure networks like transportation systems and power grids.”
- “Encouraging the development of soft infrastructure such as the signing of trade deals, aligning of regulatory standards, and improving financial integration.”
- “Bolstering people-to-people connections by cultivating student, expert, and cultural exchanges and tourism.”
The Western Balkans, though a small region compared to the rest of Europe and Central Asia, presents itself as a useful “back door into Europe.” Ravaged by war during the 1990s, economically unstable and disenfranchised, plagued by rampant corruption from the local to the national levels, and characterized by unique and fraught historical connection to Communism, the countries that comprise the Western Balkans have a desire to modernize and develop their weak infrastructure and to grow their economies. Any concern over the long-term risks and costs of foreign sponsorship is muffled by financial aid that would seem to greatly improve the local economy. This makes them vulnerable to the influence of a great power like China. Albania, Montenegro, and Serbia, in particular, serve as prime examples of this vulnerability to Chinese economic influence.

While host countries benefit from Chinese investment and local involvement acquiring much-needed infrastructure and the ability to export their goods abroad, other aspects of these partnerships have been cause for concern. Beijing’s economic ventures target developing countries in need of investment and financial aid, offering financial assistance through extremely large loans. These countries already struggle to buoy their own economies and internal development, and their challenges are exacerbated by long-term debt to China. China’s strategy has been described as “debt diplomacy.”

In 2011, China launched the 16+1, a coalition of countries in Central and Eastern Europe (CEE) that partner with China. Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia are all participants (with the exception of Kosovo). All of these countries receive financial assistance from China in the form of loans for various government-backed infrastructure projects. Albania, Montenegro, and Serbia are uniquely indicative of Beijing’s heavy investment on a growing number of billion-dollar projects in those countries.

**Albania**

From the 1950s until the Sino-Albanian split of 1978, Albania held a special relationship with China. According to Ju-
lia Lovell, “Albania was a particular beneficiary” of foreign aid, with Mao supplying Tirana, “in two shipments...one-fifth of the country's grain needs,” in addition to other forms of assistance.53 This was during a time when China, though experiencing famine itself, invested heavily in the economic development of its allies.54 Then-Prime Minister Enver Hoxha was primarily interested in strengthening Albania's relations with China for the economic benefits as well as to check possible Soviet aggression,55 “[b]ut China also introduced Albania to the practices of the infamous Cultural Revolution, which wiped out the Albanian middle class, deepened the country’s isolation, and reinforced Hoxha's closing off Albania to any other kind of foreign influence.”56

Decades after the diplomatic and economic schism of the 1970s that left Albania cut-off and impoverished, the 2000s saw a reawakening of collaboration between Albania and China.57 2019 marked the 70th anniversary of the Sino-Albanian relationship: stronger than ever and ripe with activity and collaborations.58 According to a report on the Albanian Embassy in China’s official website, China is the biggest investor in Albania - especially after its purchase of Bankers Petroleum, a local oil firm, and Nena Tereza International Airport in Tirana.59 The latter is projected to be under the authority of the Chinese government until 2027.60 China has also set its sights on other endeavors related to Albania's natural resources, such as gas and oil excavation in Fier,61 reconstruction of the Arber Road connecting Albania and Macedonia, operation of a logistics center for transporting Chinese goods to Europe, and the Trans Adriatic Pipeline, which will span the county. These projects will increase Albania's foreign investment to a dramatic 50 percent of its GDP62 but have been welcomed by one of the poorest countries in Europe.63 In addition, Beijing plans to obtain the rights to Shëngjin port in the northern part of the country, which would allow ready access to the Adriatic and Mediterranean. Any potential European investors are markedly less enthusiastic than their Chinese counterparts.64

In a February 2020 conversation, Albanian Prime Minister Edi Rama discussed current and near-future business projects, such as the reception of financial support for the national defense budget and infrastructure. Conclusively, Rama added, “we have some other good things in mind, as President Trump would say, but I’m not going to tell them to you today.”65 According to the Albanian Embassy in China’s website, Sino-Albanian cooperation is largely based on agricultural, tourism, goods transportation, and “water infrastructure” projects.66 Rama could be hesitant to disclose details on these significant projects due to the controversy surrounding China’s foreign economic investments, which could negatively impact Albania’s accession into the EU through nefarious construction practices, debt, and technological security breaches.67

Montenegro
Montenegro was one of the first Balkan countries to receive financial assistance from the BRI in the form of a super-highway connecting the seaside city of Bar with Belgrade, Serbia, at the request of the Montenegrin government.68 The Export-Import Bank of China (EXIM), a key player in lending money to developing countries, lent Montenegro an estimated $500 million for the highway. Podgorica has reportedly not yet been able to pay back this sum.69 Nevertheless, the China Pacific Construction Group has already started constructing an expensive expressway between Montenegro and Albania — exponentially increasing Montenegro’s loan default.70 Despite these financial setbacks, Montenegro plans to become an EU member by 2025.71

Serbia
Serbia has proven to be one of the most enthusiastic recipients of Chinese investment in the Balkans. In 2016, on an official visit to Belgrade, the Chinese president declared that “China would bring more jobs, improve living standards, and lift the country’s economic growth.”72 Some of the largest projects to date include a freight train line from Beijing to Belgrade in October 2019, a 350-kilometer high-speed railway between Belgrade and Budapest,73 a $160 million bridge over the Danube River in Belgrade (using 50-percent Chinese materials),74 an $800 million investment in mines in Serbia as of November 2019,75 and a $750 million electrical-capacity-building project, among others. According to an article by The Globalist, China has already financed approximately $2.5 billion worth of infrastructure in Serbia.76

In addition to its lavish economic involvement, China has also begun strengthening its involvement in Serbia’s security apparatus.77 In late November 2019, Serbia held a joint exercise with Chinese police officers focused on counterterrorism tactics and hostage handling. Serbian Interior Minister Nebojsa Stefanovic said Serbia was “learning from those who are bigger and stronger” during a joint police exercise with China and announced that Serbian police officers will go to China soon.78

As with Albania, China's overtures to Serbia are nothing new; the countries have been on friendly terms since at least the 1970s.79 However, in recent years, they have become particularly close. October 2019 saw the Chinese Communist Party and the Serbian Progressive Party (SNS) pledging to strengthen their partnership both politically and economically.80

Serbia is also the first country in Southeast Europe to readily execute a venture with Chinese technology giant Huawei. The Safe Cities plan, signed in 2014,81 “includes installing 1,000 high-definition cameras, which
use facial and license plate recognition software, in 800 locations across the Serbian capital over the next two years.\textsuperscript{82} The Chinese company and the Serbian government also intend to build out this plan across other cities in Serbia.\textsuperscript{83} Other countries along the BRI routes are also using Huawei’s 5G cell network and equipment due to the efficiency and cost-effectiveness of the technology.\textsuperscript{84}

Finally, with the onslaught of the COVID-19 pandemic in the beginning of 2020, China has been sending medical aid and supplies to Serbia.\textsuperscript{85} According to a March article by Reuters, President Vučić responded to Beijing’s offer of doctors and experts with, “[W]e will listen to whatever they say.”\textsuperscript{86} In a declaration on the state of emergency, the Serbian president stated that, “European solidarity does not exist. That was a fairy tale on paper,” implying a perceived lack of EU support in a time of dire need and stressing that Serbia’s well-being rested in China’s hands alone.\textsuperscript{87} In response, Brussels proposed request-based deliveries system to EU candidate states and noted that assistance for the Western Balkans in fighting the spread of the disease was ongoing.\textsuperscript{88} However, the chances to actually get anywhere with this kind of process seem slim. China has already come to Serbia’s aid with masks and ventilators, cutting out the extra paperwork and red tape and deepening Serbia’s lack of faith in the EU as a support system and ally.\textsuperscript{89}

**Implications**

Beijing finds the Balkans an optimal space to invest due to lax trade and public procurement regulations, which have facilitated the commencement of many projects across the region.\textsuperscript{90} According to China analyst Frans-Paul van Der Putten in a 2018 NPR article, China focuses on smaller, less conspicuous locations that it can build up.\textsuperscript{91}

The China-Balkan partnerships have also taken on a new shape, as in Serbia. According to Philippe Le Corre and Vuk Vuksanovic’s analysis in The Diplomat: “Perhaps out of frustration over past specific Western policies, many Serbs have become somewhat anti-Western, favoring closer links with powers like Russia and China. Although it is hard to detail China’s influence on Serbian political elites, there is undoubtedly a shift in a society still recovering from its long period of war.”\textsuperscript{92} President Aleksandar Vučić has stated that Serbia is “grateful for its [China’s] leadership” and for standing by Serbia throughout its historical challenges.\textsuperscript{93} Serbia also aligns itself more closely with China’s state-run, centralized system, “rejecting the EU’s model of open and transparent bidding procedures.”\textsuperscript{94}

Beijing is adamant that the focus of its mega-project is to expand international cooperation, yet evidence points to the venture also being politically strategic and self-interested.

China analysts at CSIS have noted that “[t]he BRI may also win China political gains. Beijing may be able to exploit its financial largesse to influence partner country policies to align with its own interests, particularly in certain countries [that] lack good governance and robust rule of law.”\textsuperscript{95} The challenge is that China will never admit to reasons other than building diplomatic and economic ties, prefacing all cooperation as a loyal and mutualistic partnership.\textsuperscript{96}

China has a distinct advantage when it comes to looking at the Balkans, since it is a small region on the peripheries of Europe and off the radar of larger, preoccupied Western neighbors.\textsuperscript{97} China is operating with a long-term strategy that seeks to fill a vacuum within easy reach to Europe, Eurasia, and the Middle East.\textsuperscript{98} Beijing also understands the power of a strong economic force with global access, and can offer deals that no other country can to people that need the assistance.\textsuperscript{99} Finally, China knows that if it exerts soft power at the right pressure points — economic partnerships, diplomacy, education programs, and grants and loans — it can also begin to impart its politics in a way that creates a connection with its partner country and brings it in a more pro-China agenda.

Countries such as Serbia may be attracted to the Chinese political system that favors a “lack of media freedom, increasing autocratic tendencies, threats to the rule of law, and high corruption levels,” Bojan Stojkovski observes regarding Serbia’s shaky relationship with democratic values.\textsuperscript{100} Serbia’s recent adoption of facial recognition software, lack of an integrated and transparent process, and the potential misuse of Serbians’ biometric data for state spying raise concerns about an encroachment on citizen rights.\textsuperscript{101} Huawei says it is abiding by regulations and has not and will not misuse its equipment unlawfully.\textsuperscript{102} However, “[i]n recent years, the U.S. and several other countries have asserted that the company threatens their national security, saying it has violated international sanctions and stolen intellectual property, and that it could commit cyber espionage.”\textsuperscript{103} Having a weakened technological network that is still within Europe’s regional sphere creates greater risk, especially with EU accession in sight within the next couple of decades for the Western Balkan states. Even without the security risk, Huawei and other Chinese technology firms dominate the industry both in Europe and across the globe, which adds another layer of controversy to foreign company operations in core areas of European tech networks.

On a societal level, Republika Srpska, Albania, and other areas across the Balkans have plans to launch Chinese language schools with teachers sent from China (connected to the Confucius Institute in Beijing and funded by the
Embassy of China) based on the notion of joint partnership. Chinese language education started first as an option but is now an integral component of the Balkan education, even at the university level. Local school curricula seem to have little to do with Chinese economic investments, yet the political implications of Chinese cultural centers cannot be denied.

**Policy Analysis**

Chinese influence fills a vacuum in the Western Balkans created by internal challenges and a lack of Western powers’ involvement in the region. Beyond this, there are three primary roadblocks for the EU and the U.S. to balance geopolitical competition:

1) The U.S. and the EU, historically key supporters and allies of the Balkan states, are heavily involved in the Middle East politically, militarily, and economically and are thus less willing to take on other geopolitical issues.

2) Balkan countries have become less interested in pushing China away because of their needs for short-term economic development and capital. Chinese investors offer more money and cheaply compared to the grants that the EU distributes. “The Brussels grants come with strings, rules often unwelcome by the political elites of the Balkans,” according to Le Corre and Vuksanovic. Not to mention that the red tape involved in order to implement these EU grants is slow and laborious. According to Derek Scissors, a China researcher at the American Enterprise Institute: “The money will flow to where it is most welcome.” Maintaining that the short- and long-term benefits greatly outweigh the costs, the regional state governments choose to accept the potential consequences of substantially unregulated external funding.

3) Several Western countries have become apprehensive with other aspects of how the BRI’s infrastructure and regulations are being executed — perpetuating corruption, lack of transparency, and misgovernance. This can hinder and lead to the breakdown of legitimate and lawful efforts led by the EU and its allies in the region.

Further examination of Beijing’s economic strategies reveals Chinese policies that are less concerned about the economic growth of the Balkan states and more interested in creating a political-economic bloc of pro-Chinese countries in Europe, seeking out the most vulnerable states to leverage its position. Beijing’s regulations are largely at odds with the newer strict EU regulations, and by perpetuating corruption in already fragile institutions, this conflict could delay the Balkan states’ integration into the EU. According to Dmitri Trenin and Alexander Gabuev, China and Russia experts at the Carnegie Moscow Center, “Beijing has stressed time and again that there are no geopolitical calculations behind the BRI. Yet the initiative’s massive scale means that it will necessarily have geopolitical ramifications.” Unfortunately, the EU and the U.S. have created a void that foreign competitors in the region can fill, and they have also heavily misjudged Chinese capabilities.

**Figure 2: EU member states and candidate countries in the Western Balkans**


“There’s a phrase, ‘pre-emptive obedience,’ that’s often used to discuss relations with the Chinese,” says Theresa Fallon, a China analyst in Brussels. “It means making decisions with the idea of not upsetting China. That’s already happening, and it’s worrying if you consider the stakes. If you think of China’s growth strategy [in maritime ports], they’ve invested all along the peripheries of Europe. So it’s like an anaconda strategy: Surround it and squeeze it.” Europeans’ apprehension about China’s developments in the space continue to grow. “China’s industrial policies
are no longer just stymying European business in China; they are now beginning to pose a threat to European business in third party countries… [For example] China’s government might extend a loan to a developing country to, say, build a highway, that is directly linked to giving business to Chinese firms. Second, Europe has become more competition-minded, according to a study by the Carnegie-Tsinghua Center for Global Policy. China is the EU’s second most important trading partner, which explains the EU’s current push-and-and pull response of restricting specific Chinese investments while simultaneously developing business plans with Chinese firms.

European Commission President Jean-Claude Juncker stated in 2017 that greater screening measures should be established to counter strong Chinese influence. Juncker explained that, “[if] a foreign state-owned company wants to purchase a European harbor, part of our energy infrastructure or a defense technology firm, this should only happen with transparency.” However, enforcement of these screening measures has been slow. As economic and technological developments in the region progress, local authorities will become further entwined with foreign capabilities, and protecting European sovereignty, civil liberties and the security and economic infrastructure of EU and EU-candidate states will become increasingly difficult.

If the EU is unwilling to unite to mitigate Chinese influence by structuring more competitive financial aid packages, building technological networks that work with already-present Chinese firms to create safe and secure systems, and strengthening anti-corruption and transparency practices in the Balkans, China will likely use the region as a stepping stone to enlarge its sphere of influence. China analysts at CSIS note a salient aspect of this strategy, as exhibited by the BRI, in their report:

“[It] is important to recognize that BRI is a long-term plan. Many of its projects are still in their planning phases and will not be completed for years to come. While offers of Chinese investment have been met with mixed responses, should China successfully complete a few keystone projects the reception could become much warmer. This makes the success of the first wave of projects all the more crucial. While it may be many years before the success of the BRI can be properly judged, it certainly has the potential to forge stronger economic and political bonds throughout the region. This deeper integration may grant China more influence over other countries and a stronger hand in guiding development of the international economic system.”

The EU-China Strategic Outlook outlined by the European Commission to the European Council in March 2019 highlighted the importance of transparency in accepting responsibility “for upholding the rules-based international order, as well as greater reciprocity, non-discrimination, and openness of its system.” The document’s firmer stance and its guidelines for stricter countermeasures regarding foreign investment in the region may be the impetus for the EU to better enforce certain conditions and reforms to which Chinese private firms, SOEs, and Beijing must adhere. The countermeasures will be instituted in late 2020 and have already seen some results; Beijing has made good on some of the stipulations.

However, holes in the plan remain: states still have relative autonomy in how they fulfill (or do not fulfill) these measures. Varying degrees of screening mechanisms across the region characterize a disjointed approach and create challenges in enforcing these procedures. In addition, the EU-China Strategic Outlook reflects the polarized incoherence of these differences. “[…] a key sentence referred to China as a ‘negotiating partner with whom the EU needs to find a balance of interests, an economic competitor in the pursuit of technological leadership and a systemic rival promoting alternative models of governance,” note Europe experts Eric Brattberg and Philippe Le Corre. For instance, even as Brussels demanded reforms from Beijing, Italy recently signed on to the BRI despite concerns over the project.

The only way the EU can effectively counter foreign influence in the region is to focus on long-term strategies that incorporate an understanding of both China’s goals and the Western Balkans’ continued desire for a higher quality of life by becoming EU members. Having focused, consolidated coordination with EU regulations will also give the region a chance to stabilize its internal challenges with corruption and economic growth and establish greater resilience in its partnerships with other countries. The EU can also involve third-party countries, such as the U.S. and Japan, who share like-minded economic and political goals. Such involvement will also send a clearer message to China about an integrated approach toward foreign investments and financial assistance. Otherwise, as Chinese activity becomes more integrated in Europe, it will become increasingly difficult to separate the malignant influence from lucrative investments.

Conclusion

China’s globalized economic advances have worried European countries, particularly Germany, France, and Italy, who are appealing for a unified response to the foreign influence. China has not yet indicated that it is willing to move the needle forward on “transparency, fairness, and sustainability,” only having partly responded to a more as-
The BRI, among other Chinese ventures abroad, poses a critical question of how lasting political cohesion, equity, and resilience can be either reinforced or corroded. From an EU perspective, increased Chinese involvement means a weakening of the EU’s position — economically, technologically, and potentially militarily. The EU needs to strengthen the gaps in its security regulations without getting mired in its internal divisions, or it will risk losing ground to the competition.

References

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Policy Options to Repair Alabama’s Broken Public Education System

By Daniel Fitzgerald

Introduction

The Alabama public education system faces several distinct problems, which all negatively impact student achievement. Among the many challenges are the state’s unwillingness to explore new sources of education funding, school-district secession, and a statewide teacher shortage. As a result, the state consistently ranks near the bottom in student performance; Alabama ranked 48th in math and 45th in reading as of 2019. This article explores the education system’s three aforementioned obstacles and recommends state policies to improve education funding levels and equity in distribution to schools and teachers.

First, Alabama should introduce new funds for education by setting a 0.5% statewide property tax minimum with part of this revenue directed toward Alabama’s Education Trust Fund. While tax hikes are often unpopular, the proposed increase would keep Alabama’s property taxes comparatively low while simultaneously directing needed revenue into Alabama’s schools. Second, the state should limit school-district secession by requiring unanimous school board support, voter approval, and a proposal delivered to the state for such a measure. These new requirements would allow districts to secede only if they can demonstrate the fundamental challenges that make secession their best option. Third, Alabama should alleviate the teacher shortage by shortening the pension vesting period for teachers and raising employer contributions. Although starting teacher salaries have slightly increased in Alabama recently, more work should be done to encourage qualified teachers to enter and stay and to remove barriers that hinder student achievement. Each of these solutions address fundamental problems in the current Alabama education system and are likely to positively impact student achievement.

Key Challenges in Alabama’s Public Education System

One unique element of Alabama education policy is that the state does not use property taxes to fund education. Instead, its schools are funded by the Education Trust Fund, 89 percent of which is derived from income and sales taxes. This stands in contrast to the majority of the U.S., where an average of 36 percent of public education funds come from local property taxes.

Alabama politics is and has long been dominated by the Republican party, which tends to be averse to both taxes and government intervention. The state was once at the center of Jim Crow-era conflict over segregated schools, and the Selma to Montgomery March was a pivotal moment for the African American civil rights movement, which included a fight for school integration. Currently, Alabama’s public education system faces the challenge of school “secession,” where groups of schools attempt to leave an existing district to form a new one, which can allow newly formed districts to concentrate financial resources on a smaller population of students. The practice has been called a “political mechanism for disproportionately white communities to maintain relative advantage in terms of student composition and...financial resources.” For instance, in 2017, a federal judge overturned Gardendale’s attempt to form its own school district citing the community’s motive to exclude black students. Still, Alabama law continues to allow for the creation of new school districts by affording communities with at least 5,000 people the ability to secede from an existing district. Ten districts in Alabama have seceded since 2000, representing more than 20 percent of nationwide secessions.10 Alabama’s seceded districts tend to spend much more on students than other districts do — $3000 more per pupil, according to one estimate.11 As such, lax district formation laws allow funds to be concentrated in wealthy communities, while poorer communities continue to lack resources and suffer worse student outcomes as a result.

Another key challenge facing Alabama’s public education system is a severe teacher shortage. Between 2009 and 2015, the number of students pursuing education degrees in Alabama dropped by 19 percent. The state recently graduated just 500 educators, and more than 1,700 educators currently teach subjects that they are not fully certified to teach. Almost all of the state’s districts employ teachers who hold only provisional or emergency certificates, a tactic employed when there are not enough fully-certified teachers...
to fill the positions.\textsuperscript{14} To address the shortage, the state convened a task force that has proposed, among other options, increases to salaries and retirement benefits. Although the Alabama legislature raised teacher starting salaries to just above $40,000 in 2019, it failed to raise retirement benefits.\textsuperscript{15} Inflation-adjusted teacher salaries in Alabama have dropped by 8.5 percent over the last decade.\textsuperscript{16} 

**Policy Recommendations**

I. Create a minimum 0.5% statewide property tax in Alabama and invest new funds in the Education Trust Fund

As previously mentioned, Alabama chooses not to allocate a significant amount of property-tax revenue (or ad valorem tax, more generally) to fund public education. Interestingly, many of the top-performing states for education rely heavily on local taxes, which are often composed primarily of property taxes: 57 percent of Massachusetts’ education is funded by local taxes, as is 53.4 percent in Virginia and 52 percent in Illinois.\textsuperscript{17} Southern states that are outperforming Alabama in public education also rely on local taxes: the sources comprise 45 percent of Georgia’s education funding, 42 percent of Tennessee’s, and 54 percent of Texas.\textsuperscript{18} While this correlation alone does not demonstrate a causal link between property taxes as a proportion of overall education funding and student outcomes, it highlights the fact that Alabama has designed its education funding mechanisms quite differently than its successful regional and national neighbors have. A prudent examination of policy options to address Alabama’s education challenges, then, should involve an analysis of the role of tax revenue.

Not only do property taxes play an insignificant role in Alabama education but they play an insignificant role in the Alabama economy in general; Alabama has the third-lowest median property-tax rate in the country at just 0.33 percent of property value.\textsuperscript{19} Neighboring states have higher average rates: Mississippi’s property-tax rate is 0.52 percent of property value, Georgia’s is 0.83 percent, and Florida’s is 0.97 percent.\textsuperscript{20} Imposing an increase in property taxes thus appears particularly reasonable in Alabama, where current rates are so comparatively low that even a new 0.5-percent minimum tax rate would be lower than the tax rate averages in similar nearby states.

Even a modest increase in property taxes could generate sizable revenues while still preserving the fundamental character of Alabama as a low-tax state. One way to accomplish this is to enact a 0.5-percent minimum property tax across the state, allowing localities to set their own rates as long as they remain at or above 0.5 percent of property value. Based on net property-tax collections in Alabama in FY2017,\textsuperscript{21} this 51-percent increase in the property-tax rate (i.e. from 0.33 percent to 0.5 percent) could bring in an additional $1.4 billion in tax revenue. The state could then require that at least 15 percent of the revenues from property taxes be invested in the Alabama Education Trust Fund. That would amount to roughly $210 million more per year to fund Alabama education.

Diverting 15 percent of property tax funds to the Education Trust Fund makes sense for two key reasons. First, it guarantees that a set proportion of new revenues from property taxes will finance the Education Trust Fund while also ensuring that the remaining property-tax revenue continues to be appropriated for its current purposes. Second, it is a more equitable way of investing in state education. If new property-tax revenues were only invested in education on a local level, then poorer communities would continue to have less funds to invest into their schools than wealthier communities would. By diverting 15 percent of property taxes to the state-level Education Trust Fund, Alabama can then equitably allocate the new funds based on need rather than simply location. That redistribution is crucial to statewide performance, since evidence from several states in recent years suggests that increases in the amount and distribution of public education funds leads to noticeable “improvements in the level and distribution” of outcomes like graduation rates, wages, and educational attainment.\textsuperscript{22}

Property taxes are also a comparatively reliable source of funding. Both income and sales taxes — the latter of which is highly regressive — tend to be more volatile revenue sources, as they can fluctuate drastically as the economy changes.\textsuperscript{23} Since 89 percent of the Education Trust Fund’s revenue is currently derived from income and sales taxes, Alabama’s public education system is particularly vulnerable to economic shifts that impact income and consumer spending.

Though one may argue for an increase in income taxes to fund education due to its generally progressive nature, Alabama’s income-tax code is actually regressive in practice; wealthy individuals tend to pay a significantly lower percentage of state-income tax than less-wealthy individuals do, due in large part to the fact that Alabama allows all federal taxes to be deducted from state-taxable income.\textsuperscript{24} As a result, an increase to Alabama’s income taxes may ultimately exacerbate the existing challenges facing low-income individuals and communities, an outcome counterproductive to the goal of assisting schools. Property-tax rates in Alabama, conversely, tend to be either flat or slightly progressive, meaning that a slight increase via a state-imposed minimum tax rate would raise the revenue available for education without disproportionately benefiting the wealthy. In short, Alabama would need to overhaul
its entire approach to income taxes in order to make the revenue source a viable avenue for new education funds. The state may find it more expeditious and productive to impose a small increase on a property-tax structure that is already better built to handle rate increases.

There are some obvious challenges to raising the property tax. For one, substantial effort is required to introduce new taxation in any state, especially one with historically low tax rates. It may prove politically difficult to advance tax legislation in Alabama’s Republican-controlled legislature, given Republicans’ aversion to tax increases. To combat this aversion, any property-tax hike should therefore be framed as a necessary means of helping Alabama youth succeed, and proposals should emphasize the fact that the 0.5-percent minimum is still notably lower than rates in similar neighboring states and represents just a small increase from the prior average of 0.33 percent.

**II. Mitigate Alabama’s school district secession problem**

School district secession is a problem in more states than Alabama, but Alabama’s law facilitates secession far more easily than most other states do. Despite legislative attempts to allow for secession in recent years, Georgia and Florida prohibit the formation of new districts. New districts can be formed in Mississippi but must first gain the approval of the school board in the existing community and the support of a majority of voters in the new district. In Alabama, the only requirement to form a new district is that the community has at least 5,000 residents. No board approval or voter support is legally necessary. Importantly, communities of at least 300 residents can register as municipalities (with 15-percent voter approval) and, through a census technicality, can be legally considered cities with more than 5,000 people. Thus, in practice, small and ethnically homogenous communities can create new school districts in Alabama with few legal roadblocks.

The consequences of school secession are stark. School secession and racial segregation are inextricably linked; a recent study notes that counties where secession occurs are “increasingly stratified by race.” Secession can also narrow the definition of “public” education if new, artificial economic and demographic borders are imposed around a set of schools.

Policymakers should strike down the rule that allows for secession in communities with more than 5,000 residents. This would close the community-size loophole, address the racial component of secession, and ensure that state funds are allocated toward truly public education. Secession, then, would only be allowed in the event of unanimous school board approval, approval from voters in both the new and existing communities, and legislative approval of the “new” district’s detailed proposal. This is not a radical idea; neighboring states even outlaw the practice entirely. But, since legislators may feel strongly that some districts could benefit from breaking into smaller (and potentially more manageable) districts, it is likely more feasible to make secession more difficult rather than to completely ban it. By requiring unanimous school board approval and the approval of voters in both the new and existing communities, the state can be sure that the concerns of individuals and communities affected by school secession are not being ignored. By requiring a detailed proposal that lays out how the district breakup will benefit all impacted students and communities — with particular regard to racial and socioeconomic impacts of a secession — the state can clearly evaluate the motives behind the secession and determine if it is justified. As a whole, the policy would directly address a process that, some argue, allows one’s economic status or racial background to determine where and how they are educated.

Critics may contend that this legislation fails to address the deeper problems in public education that cause some districts to desire secession in the first place, such as funding, access to school supplies, transportation, and the availability of teachers. However, these are the types of arguments that school districts can put forward in their proposals for district secession. After all, the problem is not secession, itself, but the fact that secession is not regulated tightly enough to prevent negative consequences for involved communities. The point of policy that requires districts to make a compelling case for secession is to ensure that their justification for break-up is fundamentally reasonable, and that a possible secession would indeed benefit the whole community.

Some conservative lawmakers may be hesitant to support any legislation that transfers power from communities to the state, potentially arguing on the grounds of school choice and freedom from state interference more generally. However, this freedom argument may indeed be short-sighted, since public education becomes inherently less free when districts are able to exploit loopholes to rearrange public resources in a way that can help some students but hurt others. Additionally, communities have power through their vote, as the state legislature must consider the decision on secession made by voters in the old and new districts when evaluating a secession proposal.

**III. Increase teacher retirement benefits to address statewide teacher shortage**

Policymakers should improve retirement benefits to narrow Alabama’s teacher shortage by drawing teachers to the
profession and incentivizing them to stay. While recent increases to teacher starting salary certainly represent progress, they have not resolved the shortage. More must be done to attract and retain teachers in Alabama.

Alabama’s 18:1 student-to-teacher ratio is above the national average of 16:1, meaning Alabama’s teachers are responsible for roughly 12.5 percent more students than their counterparts across the country. Research suggests that even small decreases in class size (i.e. from twenty-three students to twenty) can reduce teacher attrition by as much as 4.2 percentage points, a substantial decrease. Measures to prevent attrition in Alabama are badly needed: the National Council on Teacher Quality awarded the state an “F” grade for teacher retention. On the student side, various studies suggest that smaller class sizes increase the likelihood of students entering into honors programs, contribute to higher graduation rates, and increase the chance of attending college. Thus, it is possible that making teacher compensation more attractive would not only reduce teacher turnover but also improve student outcomes.

One often-cited way of simultaneously recruiting teachers and discouraging attrition is to increase retirement benefits. Currently, Alabama teachers must stay at a school for ten years to qualify for a minimum pension. As a result, only 39 percent of teachers will qualify to actually receive employer retirement benefits. Only 29 percent of Alabama teachers who qualify for retirement benefits receive at least as much as they have contributed to their pension over their careers through required salary contributions deducted from each paycheck. Part of the reason is that schools in Alabama only match 1 percent of teachers’ salary contributions toward pension plans, compared to 5 percent in Tennessee and 7 percent in Georgia. In addition, Alabama’s regional neighbors, Florida and Mississippi, have eight-year vesting periods, and Tennessee has a five-year vesting period.

Thus, one solution to Alabama’s ails is to increase retirement benefits to attract and retain teachers. To do this, policymakers should shorten the vesting period from ten years to six years. As part of this legislation, employers should be required to contribute a greater percentage of teachers’ salary to retirement plans to be more nationally competitive: 3 percent instead of 1 percent. By reducing the vesting period, prospective teachers will know that retirement benefits are accessible, and by increasing employer contributions to pension plans, payouts to teachers will be larger.

Some may argue that a shorter vesting period will encourage teachers to leave earlier, thus exacerbating the retention problem in Alabama. Reality paints a different picture: well over two-thirds of those who exit a teaching position in Alabama are “movers,” meaning they remain teachers but simply seek a position elsewhere — sometimes staying in-state, sometimes moving out entirely. Under the current pension scheme, Alabama’s turnover rate sits at roughly 14 percent, and very few are leaving due to retirement. Thus, the threat of retention in Alabama is not that teachers no longer wish to teach but that they wish to teach under better conditions. Further, it appears that no U.S. state actually assumes in its pension modeling that long vesting periods will improve teacher retention in the first place. Longer vesting is a policy used primarily to cut costs, and it is thus not tailored to address the unique challenge of a teacher shortage.

Research shows that extended vesting periods can negatively impact retention; one study suggests that increasing vesting from five to ten years slightly increases early-career attrition and may only help retain more senior teachers. Access to retirement benefits clearly factors into the decision to continue teaching. According to national polling, 68 percent of teachers who had previously quit cited the “ability to maintain retirement benefits” as a key reason they eventually returned to the classroom. And since low teacher retention is consistently shown to hurt student achievement and even negatively impact the teachers who remain, measures that can encourage more teachers to remain — like a shorter vesting period — should be pursued as a way to remove barriers to student achievement.

This recommendation will make teaching more attractive while remaining relatively conservative in both employer contributions and vesting-period length. These minimal changes are likely to be politically feasible, as they do not require the state to exert more control over schools or implement an entirely new pension design but simply call for adjustments to features that are already in place (i.e. employer contribution rate and vesting length). These measures also directly address the teacher shortage, a key challenge for Alabama, especially considering that education policy and its impacts are particularly visible in the lives of citizens. Whereas the other two recommendations may cause citizen backlash, challenges to this measure may come more from legislators, who may believe that the recent teacher starting salary increases constitute sufficient legislative action to combat the teacher shortage or that further measures should not be implemented until the state can assess the impact of these higher salaries on teacher recruitment and retention. While it may indeed be the case that increased salaries will help boost teacher numbers, teacher salaries in Alabama have gone down in real value over the past decade, and it is unlikely that a small bump in starting salary alone will do enough to fix the problem of teacher compensation — and the teacher shortage that results.
Conclusion

The aforementioned policy recommendations each address distinct challenges facing public education in Alabama. They are united in their ability to improve student outcomes and by their inherent recognition that funding concerns are a primary root cause of these challenges, both in terms of how much is dispersed and how equitably it is distributed to teachers and schools. By implementing these policies, Alabama can begin to repair key flaws in its education system, ensuring that it better serves the teachers, students, and communities it impacts.

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Repatriation of Foreign Terrorist Fighters in Europe: A New Challenge to the European Union

By Marigny Kirschke-Schwartz

Introduction

Distressed by the stagnant repatriation of foreign terrorist fighters (FTFs) by her home government in Morocco, a mother known as “Mariam” travels frequently to the capital in Tangier to petition officials at the Foreign Ministry to bring her son home. Morocco’s unofficial policy is similar to that of European countries that are unwilling to repatriate their citizens from the overcrowded prison camps in northeast Syria. The camps hold thousands of individuals who left their home countries to join the Islamic State in Iraq and Syria (ISIS), the terrorist group that devastated the region for the better part of a decade. The United Nations maintains that repatriation is a moral and legal duty, but countries have been slow to answer the call. Compounding the problem further, some European countries have rescinded citizenship for FTFs who were dual citizens with countries in the Middle East and North Africa. A Moroccan intelligence officer has heard countless stories like Mariam’s from parents who plead for their children to be exfiltrated from the Kurdish-held stronghold that faces threats from all sides. With limited options, the intelligence officer sometimes tells parents: “I am sure your son was once a nice person, but now he is a terrorist.”

FTFs are defined by the United Nations as “individuals who travel to a State other than their State of residence or nationality for the purpose of the perpetration, planning or preparation of, or participation in, terrorist acts or the providing or receiving of terrorist training, including in connection with armed conflict.” It is not surprising that bringing suspected terrorists back to their home countries is widely unpopular. European states have many fears and concerns regarding FTFs, as they are unsure of how to gauge an individual’s allegiance. It is easy to imagine defeated terrorist fighters masquerading as fighters for the other side. The European Union (EU) is increasingly divided over how to address the problem of European FTFs detained in Syria, with many states fearful of the political and security ramifications of bringing trained terrorist fighters home. However, the risks do not disappear by leaving FTFs in Syria, and rescinding citizenship is an unsustainable answer to the problem of deciding how, if at all, to approach the repatriation of FTFs and their families. This study focuses on the repatriation of FTFs in Europe and the complications that arise from repatriation in Schengen countries. This study also seeks to address the implications of the current and fractured repatriation policy for EU member states and the possible courses of action for those involved.

FTFs in Syria and Iraq: A New Guantanamo?

ISIS lost its last pocket of Syrian territory in March 2019 with the seizure of Baghouz by the Syrian Democratic Forces (SDF), an alliance of Kurdish, Syriac, and Arab militias backed by American military support. After nearly six years of reclaiming territory seized by ISIS, eight years of civil war, and a refugee crisis that shook the region, the seizure of Baghouz was lauded by many as the group’s defeat. The conflict involved a demographically diverse group of FTFs; estimates suggest at least 41,000 foreign nationals left their home countries to join the terrorist group between 2013 and 2018, and at least a third of them died in conflict. Figure 1 shows the breakdown of the nationalities of the FTFs who joined between 2013 and 2018.

The FTFs often brought their families with them to Syria, as reflected in data suggesting that at least 70,000 FTFs, non-FTF women, and children from 54 countries were left in detention camps in northeast Syria as of late 2019. Ambiguity remains over how many prisoners were indeed fighters, as many claim to have been fleeing the conflict. Of the estimated 6,000 Europeans who joined the group between 2013 and 2018, it is believed that between 800 and 2,000 — not including their families — survived and are being held in the camps.

The conditions in the prison camps are desperate, with reports of disease, sexual abuse, tribal justice systems, and a lack of food and water. Still, European countries have resisted repatriating FTFs and their families, apart from those who independently returned to and were reluctantly received in their home countries before the fall
### European resistance to repatriating FTFs stems from security concerns and political pressure.

Bringing home suspected terrorists with military training is understandably politically unpopular. There is currently no collective EU policy on repatriating FTFs, as member states classify the issue as a national security concern that lies outside the governance of the European Commission. States use their own discretion when deciding to take back FTFs and their families, which is problematic because of the nature of the Schengen Agreement. The Schengen Agreement allows free travel across international borders within the Schengen area, meaning that repatriation of FTFs to one Schengen country can impact all the others. The lack of a cohesive repatriation policy has inspired critiques that frame the EU stance as a “policy of denial” and equate the prison camps in Syria and Iraq to Guantanamo Bay. Fear of political backlash and a lack of confidence in civilian courts to properly prosecute terrorists are notable similarities between Guantanamo and the FTF prison camps.

The urgency of the FTF situation intensified when the U.S. began pulling troops out of northeast Syria in October 2019, decreasing its troop presence in the region by half of the original 1,000. U.S. President Donald Trump said he believed the EU was freeloading off the U.S. presence in the region and recently attacked French President Macron for his refusal to accept FTFs back into France. Turkey’s incursion into the region left the prison camps understaffed as Kurdish forces rushed to defend their border, and reports emerged of prisoners escaping or being freed. Analysts believe that the window for repatriation of FTFs could be closing, as security in the camps wanes and the fragile balance of power in the region shifts between Turkey, Kurdish forces, and the Assad regime.

Turkey’s troops now maintain a buffer zone in the northeast, as tensions in the northwest province of Idlib come to a head. In December 2019, the forces of Syrian President Bashar al-Assad started a military campaign in the province supported by Russian air power. Although a ceasefire was brokered on March 5, 2020, it is unlikely to last. Assad’s attempts to retake the country leave the Kurdish-controlled northeast increasingly vulnerable. As a result of wavering U.S. support, the SDF’s decision in October to broker a “costly” deal with Assad for protection from Turkey could provide Assad’s forces an opportunity to reestablish control over the region.

The complexity of actors vying for control in Syria makes the establishment of a clear repatriation policy all the more pressing. Since the Turkish incursion into Kurdish-controlled Syria, there have been reports of escaped prisoners and an increase of ISIS-related attacks. Although ISIS no longer holds territory, the group has reformed as an invisible insurgency, penetrating local communities and using clandestine networks to communicate. Local residents have attributed the resurgence to several factors, including the Turkish incursion, the lack of sufficient SDF forces, and the partial U.S. withdrawal. Divided between the offensive in Idlib and efforts to maintain stability in the northwest, SDF forces are not equipped to guarantee the security of the prison camps. Complicating matters further is the possibility that the COVID-19 pandemic could inspire riots in the camps due to the lack of resources and sanitation. Adverse conditions, officials fear, are stimuli for terrorism recruitment. Western leaders have been reluctant to address the reality of an ISIS resurgence and what it means for the future of the FTFs — “an inconvenient truth,” as analysts call it.

### Policy Options for the Repatriation of FTFs in Europe

Policymakers, academics, and foreign governments have suggested several solutions to the problem of repatriating FTFs in Europe. Comprehensive repatriation policy, an international tribunal, and a “wait-and-see” approach in which states keep pursuing their own paths for repatriation are the most popular options.
Comprehensive, EU-Wide Repatriation Policy

Comprehensive EU policy that mandates the repatriation of European FTFs would help prevent a humanitarian crisis if Turkey continues its incursion into northeast Syria or if Assad extends his campaign. A war would leave the detention camps unguarded and put thousands of people in the middle of a battlefield. The possibility of the Syrian government taking control of the detention camps is problematic for both humanitarian and judicial reasons.31 Leaving FTFs in the hands of the Assad regime implies that European governments are confident that the Syrian government will carry out just trials and due process. It is arguably safer to detain FTFs in Europe rather than keep them in overpopulated and underfunded Kurdish detention facilities, which are at risk of large-scale escapes, mutiny, and radicalization of detainees.32

Repatriations could be coordinated through organizations such as the Red Cross to avoid the diplomatic problem of either recognizing Kurdish rule or legitimating the Assad regime. In previous crises, organizations like Doctors Without Borders and the Red Cross have helped facilitate repatriations, but only for those voluntarily seeking to return.33 One problem with this scenario is that the condition of “voluntary” may not be met in every case; that is, some FTFs may not want to leave. Furthermore, the Red Cross’s official policy states that “repatriation has to be fully accepted before the Red Cross can get directly involved in practical actions leading to the actual return movement.”34 Indeed, the burden seems to lie on home governments to establish clear policies before outside organizations can get involved.

Comprehensive repatriation policy could help strengthen the role of the EU as an intergovernmental organization and reinforce its capabilities and influence over member states. Several countries are already facing repatriation lawsuits initiated by family members of FTFs. Legal decisions in Belgium, the Netherlands, and Germany have ruled in favor of the repatriation of children and, in some cases, their parents.35 Comprehensive repatriation policy circumvents the need for state-level decisions that likely serve as precedents for other member states. The UK’s decision to leave the EU, coupled with the calls of states such as France and Denmark for revisions of the Schengen Agreement and increased border protections, raises the possibility that the EU’s pooled-sovereignty authority over member states might be unraveling. Comprehensive policies adopted by all member states would reinforce the EU’s legitimacy and help countries synchronize security policy that ultimately benefits all member states.

Additionally, repatriating detainees would help countries gain intelligence about ISIS’s methods and activities.36 Terrorism researcher Brian Jenkins asserts that returnees could be turned into intelligence assets and surveilled if they are not imprisoned.37 For surveillance to be effective, the EU would need to standardize security measures to help governments coordinate. While such measures would be expensive and time-consuming, Jenkins argues that the costs would be much less than the costs of maintaining prison camps in Syria or funding trials in Iraq. Research also shows that surveillance might only be required after the first year of return — the most likely time for re-radicalization and attempted terrorist plots. In conclusion, Jenkins asserts that it is easier to surveil FTFs who have returned to their home countries than those who might escape from the prison camps or join jihadist groups.38

The apprehension associated with standardizing repatriation policies between member states stems from fear of short sentences and the problem of evidence. In Sweden, for example, traveling to Syria to join ISIS was never criminalized.39 The Swedish government has taken back several orphans but is resistant to repatriating adults, especially because several Swedish returnees were involved in the Paris and Brussels terrorist attacks.40 In several European jurisdictions such as Germany and Belgium, the average sentence for individuals convicted of joining terrorist organizations is only five years (compared to twenty years in the U.S.).41 Longer sentences are possible for FTFs prosecuted for crimes such as killing civilians or enslavement, but convincing evidence would be required to justify longer sentences.42 Battlefield evidence is often difficult to acquire, and several states prohibit the use of evidence gained through intelligence intercepts. Germany even prohibits several types of social media posts as evidence.43 While countries such as the U.S. have criticized European leaders for their inaction, many European countries do not have strong terrorism-related laws that would enable prosecutors to put FTFs in domestic prison.

An International or Iraqi Tribunal

Several states have shown interest in sending FTFs to Iraq for prosecution. The UK, Germany, Belgium, France, the Netherlands, Sweden, and Denmark are reported to be in talks with the Iraqi government to organize the transfer of European FTFs to Iraq for their trials.44 The Iraqi government is amenable to this arrangement because of the damage ISIS caused in its country. The agreement, however, is costly, allegedly including payment of several million Euros per FTF.45 Iraq has purportedly proposed a base payment of $2 billion (USD) based on U.S. detention costs at Guantanamo Bay.46 Opponents of an Iraqi tribunal, including the U.S., have also argued that a tribunal could take years and further burden the Iraqi government, which is already dealing with 30,000 of its own FTFs while working to rebuild the country.47
Although seemingly a preferable choice for European governments, an Iraqi tribunal also poses legal and ethical issues. All EU member countries oppose the death penalty, but Iraq still allows and implements it. The European Convention on Human Rights (ECHR) prohibits states from transferring their citizens to countries where they can be subject to the death penalty.\textsuperscript{48} France has already faced criticism after eleven French citizens were transferred to Iraqi prisons and received death sentences. Although the French government denies any involvement in the transfer and has urged the Iraqi government to change the sentences, it has also stated that it will not infringe on Iraqi sovereignty.\textsuperscript{49} Without guarantees that the death penalty will be waived, European countries will violate their legal obligations under the ECHR.\textsuperscript{50}

An international tribunal also poses legal questions and could threaten Syrian sovereignty. Kurdish forces have suggested the creation of an international tribunal in Kurdish territory, but the effort would need substantial international assistance.\textsuperscript{51} Despite international pushback, the SDF has also indicated that it would like to try ISIS fighters in its local judicial system.\textsuperscript{52} However, a tribunal could not be set up in Syria without the permission of the Assad regime, and such an effort would require a substantial time commitment and resources from foreign governments to build up prison infrastructure. This solution would also likely provoke Turkish hostility, as Turkey would oppose any international agreements with Kurdish forces.\textsuperscript{53} Moreover, given Assad’s gradual success in retaking territory, a Kurdish tribunal could provoke Syrian forces to advance into the region. Establishing the scope of jurisdiction, mitigating sovereignty issues, and determining how and who to prosecute are several of the complications associated with setting up a tribunal in Syria.

While there is certainly a precedent for special tribunals, including Yugoslavia, Nuremburg, and Iraq, these tribunals have mainly dealt with serious war crimes such as genocide and crimes against humanity, not membership to a terrorist organization.\textsuperscript{54} Some scholars have suggested using the International Criminal Court (ICC) to prosecute FTFs, but the ICC does not typically handle large-scale prosecutions, and trials often last several years.\textsuperscript{55} Additionally, the problem of admissible evidence is still present in the question of an international or Iraqi tribunal. The limited availability of battlefield evidence could complicate convictions and actually lead to further repatriations.

‘Wait and See’: Piecemeal and State-Oriented Repatriation

The last policy option is to continue to allow states to repatriate citizens on their own. Some may strip FTFs of citizenship, others may attempt to prosecute or enforce attendance for rehabilitation programs, and some may ignore the problem.\textsuperscript{56} States continuing to follow their own policies could also take a new census of the camps to better understand the severity of the problem and determine the best course of action. This might be difficult to conduct given the precarious security situation in northeast Syria, but it is important to know the exact numbers of European FTFs and their nationalities. Perhaps certain countries could elect to take other countries’ FTFs, but that does not eliminate the issue of open borders and neighboring states’ security. While Kurdish forces have stated that they are unable to hold the detainees indefinitely, European countries could also continue to fund the camps, replacing the funding that the U.S. is no longer supplying.\textsuperscript{57}

Improving the camps would likely be a popular option for EU member states. Yet this solution does not guarantee that the camps will remain secure, as power dynamics in Syria are constantly changing. Syrian intelligence officials were recently seen at the largest of the three detainee camps, al-Hol, which has sparked rumors that the regime is interested in taking control of the camps.\textsuperscript{58} (Al-Hol was built to hold 10,000 detainees, but now holds over 70,000.) There is speculation that, if the Assad regime gained control over European FTFs and their family members, the regime could use them as “bargaining chips” to gain recognition from European countries in exchange for their citizens.\textsuperscript{59} FTFs in the hands of the Syrian government is just one security concern associated with the potential collapse of the camps. As the U.S. pulls out of northern Syria and the region becomes more unstable, detainees could escape from Kurdish control and rejoin ISIS. This could help the terrorist group rebuild and possibly conduct more attacks in the Middle East or Europe.\textsuperscript{60} There is also the pressing humanitarian problem, especially of the women and children who are trapped in the region.

State disagreements are likely to occur if countries continue to pursue their own repatriation policies. Turkey announced that it will send back FTFs that have fallen into state custody during its incursion into the Kurdish region of Syria; it has since deported seventy-five EU nationals to their home countries.\textsuperscript{61} Regarding the decision, Turkish Interior Minister Suleyman Soylu stated: “[European] Countries can’t just revoke the citizenship of such ex-terrorists and expect Turkey to take care of them; this is unacceptable to us and it is also irresponsible.”\textsuperscript{62} In sum, Turkey will deport FTFs to their home countries whether recipients like it or not. If comprehensive security measures are not in place and terrorist attacks occur, states like Denmark and France could push to amend or perhaps even dissolve the Schengen Agreement.\textsuperscript{63} Reintroduction of border controls could lead to increased state-centered security measures that have far-reaching economic and
political consequences within the EU. Indeed, such actions could change the very nature of the EU framework.

Conclusion

The repatriation of FTFs in Europe is controversial for many reasons but requires urgent evaluation. The ever-changing situation in Syria, exacerbated by the partial U.S. withdrawal from the region, the unreliability of the SDF to secure the prison camps, and the possibility of an ISIS resurgence are the most immediate concerns. With the memory of the Iraq War in mind, European governments should recognize that the situation in Syria is conducive to a fallout of similar proportions. Leaving European citizens in desolate conditions in Syria is kindling for a large-scale ISIS resurgence and a prologue to a humanitarian disaster that could not easily be undone.

European policymakers have several options for moving forward. The EU could enact a comprehensive repatriation policy that requires states to bring home their FTFs and standardize security measures between states. States could also help create an international tribunal or send their citizens to Iraq to stand trial. Lastly, states could continue to pursue their individual repatriation policies, which could include improving the detention camps in Syria or piecemeal repatriation of women and children. Even though comprehensive repatriation policy is controversial between member states, a united EU front could make the situation more conducive for cooperation with other actors. Further research could evaluate the potential strength of policy diffusion in regard to repatriation or assess viable third-party avenues to facilitate repatriation without threatening state sovereignty.

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The V-22 Osprey Program: Challenges in Design and Implementation

By Jennifer Chasseur, Michael Bachman & Zhibin Ye

Executive Summary

Initially, the V-22 Osprey’s innovative tiltrotor technology inspired hope for a new era in military aviation. Combining the functionality of a helicopter with the performance and range of a fixed-wing aircraft, the V-22 promised superior range, flight speed, and lift capacity compared to existing U.S. military medium-lift helicopters. Early proponents saw the potential for tiltrotor technology to spread beyond the military and revolutionize civilian air travel. Today, the V-22 serves the U.S. Marine Corps, Navy, and Air Force, but its impact on aviation, broadly, is lackluster. A legacy of cost overruns, poor reliability, and deadly crashes continue to tarnish the aircraft’s reputation.

The V-22’s present-day problems derive from a tumultuous first decade in the aircraft’s 37-year history. Between 1983 and 1992, the Osprey development program faced contract issues, design challenges, and cancelation before the U.S. Congress intervened to resurrect the program. The chaos surrounding the V-22’s first years made addressing its complex design requirements difficult. Inability to correct engineering issues early and efficiently created problems that festered for decades. The V-22 crash at Marana Airport in 2000, discussed in detail later, exemplifies the program’s tendency to identify but inadequately rectify critical flight issues. After examining the V-22’s early history, the Marana Airport crash, and organizational and policy factors influencing the V-22 program, we recommend three public policy interventions to address the disorder surrounding the V-22’s development:

1. Alter the initial Full-Scale-Development (FSD) contract from fixed-price to cost-plus format;
2. Address the design contract’s non-competitive bidding outcome; and
3. Incorporate non-cost-based incentives into the FSD contract that improve contractor adherence to production deadlines and platform capabilities.

Early History

The V-22 Osprey program originated from efforts to identify a replacement for the U.S. military’s aging transport helicopter fleet. The 1980 failure of Operation Eagle Claw, a clandestine effort to rescue American hostages held captive at the U.S. embassy in Iran, highlighted the inadequacy of existing military helicopters. Operational constraints necessitated helicopter use, but no helicopter could reach the embassy without landing to refuel midway. During execution, environmental and maintenance issues disrupted helicopter operations. Only five of eight assigned helicopters reached the forward refueling area in working order, forcing the ground commander to abort the mission.4 In the ensuing withdrawal, a helicopter collided with a parked aircraft, killing eight service members and cementing the mission as a failure. Following Operation Eagle Claw, the Department of Defense (DoD) identified a need for aircraft that could travel far and fast while maintaining the mobility of a helicopter.

The U.S. military experimented with tiltrotor technology beginning in the mid-1950s. By 1979, a joint Army and National Aeronautics and Space Administration (NASA) program produced the XV-15 tiltrotor built by Bell Helicopters.5 Low-cost and capable, the XV-15 served as a tiltrotor proof-of-concept. Navy Secretary John Lehman observed the XV-15’s first public demonstration at the 1981 Paris Air Show and became convinced that a tiltrotor should replace the Navy and Marine Corps’ existing medium-lift helicopters.6 The Army and Air Force soon arrived at similar conclusions, and in 1982, all branches allocated funding for external development of a joint tiltrotor aircraft based on the XV-15.7

Procurement Practices

Under a teaming agreement, Bell Helicopters and Boeing Aircraft submitted a joint proposal for the joint tiltrotor contract. It was the only bid the Navy received.8 Other companies like Sikorsky and Grumman Aerospace did not bid due to concerns that the contract did not allow adequate time to evaluate the technical risks associated with tiltrotor technology.9 The Navy awarded Bell-Boeing the joint design contract in April 1983.10 One year later, Bell-Boeing submitted an FSD contract proposal anticipating delivery of flight-tested tiltrotors to military units beginning in December 1991.11
development costs onto Bell-Boeing for the procurement of the program.\textsuperscript{12} Fixed-price contracts establish a specific cost that the DoD would be willing to spend on a defense program. The project contractor is responsible for covering any cost overruns or additional expenses. Such contracts therefore shift the financial risk of development back onto the contractor. In the tiltrotor case, using a fixed-price contract would prevent Bell-Boeing from testing for technological errors in the V-22’s design without incurring additional costs. The decision to use such a contract came amidst media criticism that defense industries were taking advantage of loose military contracts to drive up costs.\textsuperscript{13} Further, Secretary Lehman felt that, since the Bell-Boeing proposal would use advanced, mature technology from the XV-15, the program was low-risk and suitable for a fixed-price contract.\textsuperscript{14} The Navy awarded Bell-Boeing an FSD contract to produce the newly designated V-22 Osprey in May 1986.\textsuperscript{15} The resulting contract was a financial gamble for Bell-Boeing. Its price ceiling was below the DoD and Bell-Boeing estimate for aircraft development costs, and Bell-Boeing’s break-even point occurred nine years after production started.\textsuperscript{16}

The FSD effort presented a new challenge. The initial V-22 design had weight, software, and vibration issues complicating efforts to reach DoD’s performance standards.\textsuperscript{17} The Army withdrew from the V-22 program in February 1988 citing cost concerns.\textsuperscript{18} With the Army’s departure, the DoD cut its V-22 production request by 25 percent, driving up the cost per aircraft.\textsuperscript{19} By the V-22’s maiden flight in May 1988, the program’s cost effectiveness and viability were in question.\textsuperscript{20} In January 1989, the Osprey program manager delayed the program one year due to unanticipated testing issues.\textsuperscript{21} Three months later, the Defense Resource Board canceled all contracts related to long-lead procurement for the V-22, effectively killing the Osprey program.\textsuperscript{22}

Conflicting Political Interests
The DoD’s decision to cancel the Osprey program was multifaceted. Cost per aircraft had more than doubled from initial projections, rising from $14 million per aircraft in 1983 to more than $40 million.\textsuperscript{23} Defense Secretary Dick Cheney felt that the aircraft’s narrow mission set could not justify its exorbitant cost.\textsuperscript{24} Further, the Cold War breakdown coincided with decreased military spending, forcing the DoD to shrink its budget. Secretary Cheney needed to cut $10 billion from the FY1990 defense budget, and canceling the V-22 program would save $9 billion.\textsuperscript{25} The DoD asserted that more conventional helicopters could match the V-22’s expected capability at a lower cost.\textsuperscript{26}

Congress disagreed with the DoD’s assessment, leading to a multi-year fight to restore Osprey funding. From the beginning, the V-22 had considerable Congressional support from a group known as the Tiltrotor Technology Coalition (TTC), which advocated for tiltrotor technology in military and civilian applications. Composed of industry leaders with more than 125 House members and 20 Senators, the TTC effectively rallied support for continued V-22 development.\textsuperscript{27} Shortly after the DoD’s cancellation decision, Congress directed the Institute for Defense Analysis (IDA) to conduct a Cost and Operational Effectiveness Analysis (COEA) report comparing the V-22 to existing military helicopters.\textsuperscript{28} The House Armed Services Committee voted in November 1989 to allocate $255 million in funding for the V-22 through FY1990, allowing Bell-Boeing to keep the Osprey program running at least until IDA released its report.\textsuperscript{29}

Despite Congress’ action, Secretary Cheney cut additional V-22 advanced procurement contracts in December 1989.\textsuperscript{30} The action defied Congress’ efforts to preserve the V-22 program and marked the first in a series of moves and countermoves between Congress and the Defense Secretary. Over the next two years, Congress continued to allocate funding for the V-22 while Secretary Cheney either refused to release the program funds to Bell-Boeing or made additional program cuts. Curt Weldon, a Congressman from Pennsylvania and TTC leader, accused Secretary Cheney of “subvert[ing] the defense budget process” to kill the Osprey program.\textsuperscript{31}

The IDA report released in June 1990 concluded that the V-22 was the tactically superior and cost-effective choice.\textsuperscript{32} The General Accounting Office (GAO) and DoD questioned the report’s findings, believing that IDA made testing assumptions that systematically favored the V-22.\textsuperscript{33} Subsequent Congressional testimony sought to further stress the DoD’s issue with the report and the V-22 program, but inertia was shifting in favor of Congress.\textsuperscript{34} Congress embraced the IDA report, and the House Defense Appropriations Subcommittee expressed unanimous support for the program’s continued funding.\textsuperscript{35} The GAO ruled against DoD’s efforts to stymie Congress’ funding efforts.\textsuperscript{36} Running out of options, Secretary Cheney relented. Congress authorized $710 million for the V-22 in November 1991, and in October 1992, the Navy and Bell-Boeing agreed on a new, cost-plus development contract to restate the program.\textsuperscript{37}

Major Osprey Accidents
As the DoD and Congress fought over the V-22 program, Osprey development struggled. Funding instability at Bell-Boeing led to personnel turnover and intermittent production halts.\textsuperscript{38} The Osprey’s first crash occurred in June 1991 due to an incorrectly wired flight controller.\textsuperscript{39} Roughly a year later, a second crash killed seven personnel
after gearbox fluid pooled in the engine nacelle and caught fire. An investigation led by the Navy following the 1991 crash blamed the incident on production disruptions and poor safety standards at Bell-Boeing, as Bell-Boeing employees had identified and repaired the mis-wired flight controller prior to the crash but did not document the change. Following a multi-month work stoppage, new employees found an open work-order for the controller and accidentally undid the fix.

The incident encapsulated difficulties seen across the Osprey program. Tumult surrounding the Osprey’s early development made the complex task of designing an operational tiltrotor harder, leading to mistakes and oversights thattormented the program for years to come. At the close of the Osprey’s first decade, the program was alive and funded, but its problems were just beginning. Key and costly design challenges persisted — some known, others lurking undetected within the V-22’s complex flight systems. After the product advanced to training exercises, additional testing revealed aerodynamic challenges specific to tiltrotor technology that resulted in two additional fatal training accidents.

The first fatal training accident occurred in April 2000 at Marana Airport, Arizona, during a nighttime simulated remote landing exercise. To complete the exercise, a formation of two V-22s were preparing to land at a specified location on the Marana Airfield. When executing the landing, the lead pilot in the first V-22 inadvertently descended faster than normal and failed to signal to the second V-22 that he had initiated the aircraft to prepare for landing. As a result, the second V-22 was 11 seconds behind in initiating landing procedures. Matching the rate of descent undertaken by the first V-22 caused the second aircraft to gain altitude at a rate of 800 feet per minute and climb upward before descending at a rate of 3,900 feet per minute, resulting in asymmetric loss of lift for the second aircraft and causing it to roll in midair. Due to the pace of the rapid descent, the second pilot did not have the altitude to recover lift, and the Osprey crashed nose-down, killing nineteen Marines on board.

Eight months after the Marana accident, a second nighttime training accident at New River Base, North Carolina, resulted in the death of four Marines aboard the Osprey. In this case, chafed wires resulted in a hydraulic line failure within one of the nacelles, causing the proprotor on that side of the aircraft to react more slowly to control inputs compared to the proprotor on the other side. To address the failure, the pilot reset the V-22 flight control system, an action meant to activate a backup hydraulic actuation system. However, the hydraulic leak occurred in a location that prevented the flight control system from switching to the secondary system and inhibited pilots from visually confirming the primary hydraulic system’s condition. After the secondary hydraulic system failed to activate, the pilot attempted to reset the system at least eight more times. Each time the pilot reset the system, a software glitch caused the aircraft to decelerate and lose airspeed, control, and altitude until the aircraft crashed.

Analysis of Technical Factors

Although the Osprey accidents of the early 1990s provided an opportunity for the Bell-Boeing team to design a safer aircraft, the team failed to account for the complex interaction of systems that led to the fatal training accidents at Marana Airport and New River Base. Additionally, the New River Base accident demonstrated that the engineers failed to account for the physical interaction between hardware systems that resulted in the hydraulic line chafing as well as the critical interaction between the hydraulic hardware system and the software system.

Failure to account for conditions that would cause loss of lift can be considered a normal accident. Due to the Osprey’s unique design and a lack of historical flight data for tiltrotors, project engineers may have struggled to conceptualize the specific circumstances that could create loss of lift conditions until the first accident occurred. However, an analogous aerodynamic phenomenon called power settling had long been incorporated into military flight training for operating helicopters. Since this phenomenon was well-understood by the helicopter industry, it should have been a point of consideration for testing the Osprey under low-speed conditions. Unfortunately, 70 out of 103 originally planned flight tests were eliminated due to contract time constraints, including the performance of a rapid descent during the transport of a full load, similar to the fight maneuver that caused the Marana accident. Without testing this phenomenon, it would have been impossible for the V-22 pilots to understand the specific conditions that could induce loss of lift.

Furthermore, the Bell-Boeing engineers did not consider tight coupling risks between Osprey’s hardware systems as well as between hardware and software systems. The V-22’s complex tiltrotor technology required different hardware systems to be in close proximity. The movement and vibration from flight conditions combined with the exposure of components to highly corrosive materials caused the hydraulic system to fail. Moreover, the section of the hydraulic line that failed in the New River Base accident was located in an area that was inaccessible for inspections due to the positioning of the inspection panels on the nacelles, so it would not have been possible to evaluate the condition of the hydraulic line before the training exercise. The V-22 operability requirement for flight resulted
in the incorporation of a backup hydraulic system, but the location of the hydraulic system failure in the New River Base accident is considered a critical part that is included in a list of 70 single-point failure points in the proprotor.57

Because the Bell-Boeing team had not tested the interaction between the software system and hardware system under conditions where the backup hydraulic system could not be accessed, it likely did not realize that its software program contained a bug that caused the Osprey to decelerate whenever the system was reset. Additionally, though its facility can run hydraulic, flight load, and software tests, the team ran these tests without a pilot operating the aircraft. During the New River Base accident, the pilot’s efforts to engage the backup hydraulic system by repeatedly resetting the flight control system caused the aircraft’s deceleration and eventual crash. Had Boeing tested this critical part failure with a human pilot, the New River Base accident may have been avoided.

Analysis of Organizational Factors
To better understand the role that organizational factors played in the V-22’s major accidents, we can look to an analogous aerospace engineering failure, the Challenger disaster at NASA, and explore its underlying organizational challenges. As Vaughan58 concludes in her analysis of organizational failures behind the Challenger disaster, individual errors or single technological failures cannot be fully understood without taking the organizational context into account. In the V-22 project, the Bell-Boeing team systematically deviated from the absolute priority of safety in aerospace engineering as a result of external production pressures and budget constraints. As Vaughan argues, when group members within an organization become accustomed to specific deviations from safety protocol, they eventually stop considering the deviations anomalous even though they continuously cross the line for safety standards.59 Over time, more rampant violations of standard rules may become normalized, and as a result, group members adjust the safety and technology standards to reconstruct legitimacy, compliance, and invulnerability in the program.

Normalization of deviance occurred not only as a result of an organizational failure but also as a result of the culture of scientific research. Vaughan acknowledges that people outside the scientific community have preconceived notions about scientific research and often view it as “precise, objective, and rule-following,” while in reality, scientific research is full of “ambiguity, disagreement, and deviation from pre-designed specifications and safety standards.”60 In any publicly-funded research project, the management team is responsible for decision-making and therefore controls the interpretation of scientific facts gleaned from scientists and engineers. Under the circumstances of the V-22 Program, scientists and engineers accepted and endorsed the project-management regime’s bureaucratic authority in the production of research and conformed to the deadline pressures and funding constraints that characterized the program. In this way, the culture of scientific research compromised the institutionalized requirement of safety for aerospace engineering in the V-22 Program, which contributed to the normalization of deviations from safety standards.

Policy and Regulatory Considerations
The organizational and cultural factors that may have contributed to the accidents can be further traced back to the planning and development stages of the program in the 1980s. At the beginning of the program, several regulatory issues surfaced and became the focus of debate over the fate of the program. The contract issue and tension between the executive and legislative branches, in particular, contributed to the funding instability identified in the previous section as a major driver for normalization of deviance in the V-22 Program.

One-Bidding Manufacturing Team and the Fixed-Price Contract
In May 1982, anticipating that the Pentagon would request proposals for the design and development of the tiltrotor concept, Bell Helicopter and Boeing announced a teaming arrangement to enter the bidding process for the tiltrotor program.61 Both companies had started research into tiltrotor technology in the 1950s.62 In April 1983, the Pentagon awarded the contract to the Bell-Boeing team, whose proposal was the only one submitted.63 The then-commander of the Naval Air Systems addressed the question of why only one proposal was received:
“Other industry management may have perceived that the Bell-Boeing’s lead and prior experience with tilt rotors was insurmountable. The Bell-Boeing team had put their company sources at risk and formed working teams while the program was still in the formative stages. No one else made a comparable commitment.”

The Pentagon further justified its decision to select the Bell-Boeing proposal in the non-competitive bidding process using the following rationale. First, the request for contract proposals did not specifically preclude the use of alternative technologies. Second, full access to the government’s research data on tiltrotor technology was provided to major contractors. Third, pilots from competing firms were allowed to fly the government-funded XV-15 demonstrator aircraft. Fourth, the draft request for proposals was sent to the contractors twice for their review and comment.66 However, having only one team bid for the contract led to no technology alternatives for the development of the program. When controversies emerged in the following years, the government had no back-up group to bring in when restructuring the program. The stakes of the program were so high for Bell and Boeing, who both risked losing the contract, that they heavily invested in lobbying Congress to prevent the program’s cancellation.67

In addition to Bell-Boeing’s unchallenged team bid, the contract of the program was not the standard “cost-plus” format in which the contractor would be reimbursed for any expenses accrued over the agreed upon amount of the contract plus a specified percentage of any profits. Several military acquisition scandals at the time had concerned the executive branch that defense industries were taking advantage of military contracts.68 Secretary of the Navy Lehman therefore insisted on using fixed-price contracts for the procurement of the program.69 This shifted the financial risk of development onto the contractor but prevented Bell-Boeing from testing for potential errors in the technological risks of the V-22’s design without incurring additional costs. Technological development difficulties, coupled with ever-changing review deadlines and funding arrangements, caused the estimated cost of each tiltrotor aircraft to rise significantly. By 2007, the procurement cost for every V-22 had increased from 1986 estimates by 148 percent.70 Research, development, testing, and evaluation costs increased more than 200 percent in the same period. The original good intention of controlling the cost of the program by using a fixed-cost contract heralded the unintended consequence of the V-22 acquisition becoming a fiscal disaster.

Additionally, the Navy introduced a production competition clause in the contract, which required the two companies to set up separate production lines to compete on quality and cost. Its aim was to provide greater incentives for each firm to enter into a fixed-cost contract structure compared to having only one team bid, even if this would lead to splitting up the Bell-Boeing team.71 Navy researchers later suggested that the introduction of the competition clause further obstructed the development of the program by leading to “distrust and paralysis after the contract slowed the development effort significantly.”72 This contract issue further exacerbated the organizational dysfunction regarding communication in the program.73

The Tiltrotor Coalition and the Pentagon-Congress Conflict

In April 1989, Secretary of Defense Cheney was considering cancelling the V-22 due to the congressionally mandated Gramm-Rudman deficit ceilings for FY1990.74 Several stakeholders opposed cancellation. The first opposition group was the Marine Corps. Although it could not publicly voice its opposition, it passed information to fellow supporters of the V-22 Program within the legislative branch.75 The second was the “tiltrotor coalition,” whose membership included congressional representatives and corporate leadership from the aerospace industry.

The defense industry started building this tiltrotor coalition long before any funding complications arose. Bell Helicopter initiated its tiltrotor prototype program in 1981, at the same time the DoD was conducting detailed discussions about the mission requirements of the potential tiltrotor program. Bell invited several legislators and public officials to fly in its XV-15 tiltrotor, and Senator Barry Goldwater was in the first group of passengers aboard the aircraft. This passenger group eventually became the core advocates of tiltrotor technology in Washington.76 Bell planned to produce components of the V-22 in 45 states, with two main manufacturing plants in Texas and Pennsylvania. Cancelling the program would have cost host congressional districts thousands of jobs. For congressional representatives, cancellation could have meant a high price at the ballot box. Congress immediately passed a resolution supporting the restoration of the V-22 program.77 This initiated the decade-long conflict about the survival of the program between the executive branch and Congress. In the following years, when problems regarding technology and costs surfaced, the Pentagon tried to abandon the project multiple times, but Congress reversed the decision each time in order to support special interests in the coalition of politicians and industry leadership.78

Policy Recommendations

To address the technical, organizational, and environmental factors that could influence the development of future military equipment and other government-contracted
projects, we recommend implementing the following three policies:

1. **Change the Full-Scale-Development (FSD) contract from a fixed-price to a cost-plus format.**

   For top-priority military contracts like the V-22 Osprey, the DoD should format FSD contracts under a cost-plus model that allows unexpected cost overruns. Reducing financial restrictions in FSD, particularly those covering the initial flight-testing period that validates an aircraft’s design or identifies necessary modifications, enables product development that reliably meets performance standards. When transitioning to a bulk production contract, the DoD should shift to fixed-price contracting as needed to mitigate further contractor overspending. Oversight from the military program manager and the contractor’s desire to secure a full production contract should prevent excessive development spending. While cost-plus contracts will increase initial program costs and likely drive up the overall per-aircraft price, the increased expense is a hedge against programs that turn out like the V-22: over budget, behind schedule, and underperforming.

   Navy Secretary Lehman’s justification for the initial V-22 fixed-price FSD contract was flawed from the beginning. The DoD uses fixed-price contracts only when program costs and performance are reasonably certain. Secretary Lehman’s belief that exploiting technology based on the XV-15 mitigated development risks for the V-22 was myopic. While the XV-15 design, wind tunnel, and flight test data were invaluable in the creation of the V-22, the Osprey’s performance expectations were significantly different from those of the XV-15. The XV-15 was a research aircraft — the first of its kind. Conversely, the V-22 is a joint-duty medium-lift aircraft. The V-22’s joint-designation means that it serves many masters, with each military branch seeking an aircraft that meets specific mission capabilities. The Marine Corps’ desire to carry heavy payloads contrasts with the Navy and Air Force’s push for greater range. Establishing Joint Service Operational Requirements (JSOR) for the V-22 forced the branches to compromise on performance, but the resulting standards were more diverse and ambitious than what the XV-15 demonstrated.

   Achieving the V-22’s JSOR required extensive engineering and product development from Bell-Boeing, inevitably leading to unforeseeable problems that would take time and money to correct. However, the fixed-price contract left Bell-Boeing little room to address design issues without bearing a financial burden. Due to a tight delivery schedule, Bell-Boeing’s incentive to develop comprehensive solutions for problems identified in items like the V-22’s flight control software or de-icing system was minimal. Instead, Bell-Boeing and the DoD V-22 program manager became convinced that problems found in developmental aircraft could be fixed later in production after more funding was secured. Not correcting problems early in product development compounded the extent of the issue because the aircraft’s systems were highly interconnected. Changes to one system affected others, so design bugs and later fixes altered the performance of unrelated components, often in unanticipated ways.

   Problems experienced during the V-22’s design and initial development continue to adversely impact the aircraft’s performance and reliability. Other major government projects incorporating innovative technology may face similar challenges. Failure to explore engineering solutions in the initial design phase may lead to protracted and incomplete rectification processes, contributing to cost overruns, project delays, and maintenance concerns that have the potential to plague any government-sponsored research and development project.

2. **Address the design contract’s non-competitive bidding outcome.**

   Although it was intended to control costs of the program, the fixed-cost contract created rigidity when the price-setting and cost-controlling structures needed to be adjusted in response to program delays and difficulties. We suggest that the DoD or Congress establish multiple review points in project timelines. This enables either the DoD or Congress not only to oversee the progress of project development, but also to focus attention on emerging contractual issues and adjust the contract to better address financial and legal challenges appearing during the development process. If the oversight of technology development and operational capability is considered primary oversight, the general oversight of the contract and the regulatory regime of the project could be considered secondary oversight.

   As previously discussed, the contracting process in early stages of the V-22 program had several design flaws that led to serious dysfunction in program management. These flaws originated from good intentions but led to a large loss of public resources. Among the most serious issues were the fact that only one team bid for the contract, the use of a fixed-cost contract, and the introduction of a production competition clause.

   To address the problem of non-competitive bidding, it is important to acknowledge that Bell and Boeing both started their tiltrotor research decades ahead of other competitors. It was reasonable for the two industry leaders to
this technology to build a partnership for the massive tiltrotor program contract. On the other hand, because the DoD was the program's client and Congress was providing regulatory oversight, these two groups should not have been allowed to form a partnership to bid for the contract, particularly after the discovery that there were no other bidders for the program. Having only one team enter the bidding process also meant there were no alternative contractors once the program encountered major technological and budget challenges.

The non-competitive bidding process also led to the later introduction of the production competition clause. The DoD wanted to use this clause to generate competition between the two companies to decrease the cost of the V-22 Program. However, this severely split the Bell-Boeing team and caused deep dysfunction in program communications, which directly contributed to the organizational failures and management failures leading up to the accidents. Because the organizational cultures of Bell and Boeing were vastly different, when the two firms disagreed, there was no arbitration mechanism to resolve the issue, which led to wasted time and resources. The executive branch or Congress should have implemented or insisted on incorporating a third-party decision-making mechanism into the program to address potential conflicts between the two firms. Applying this mechanism to other team-led research and design projects may ameliorate similar concerns as they arise.

3. **Incorporate non-cost-based incentives into the FSD contract that improve contractor adherence to production deadlines and platform capabilities.**

Including non-cost-based incentives that rewarded Bell-Boeing for meeting defined performance objectives or demonstrating product functionality may have improved program outcomes. Specifically, incentives that encouraged technical ingenuity, schedule adherence, and contractor responsiveness to DoD-defined problem areas would have helped correct Bell-Boeing’s observed deficiencies in producing the V-22. Such non-cost-based incentives are common under the DoD’s “award-fee” contract format, which allows contractors that perform well in defined areas to earn portions of an award-fee pool established at contract inception. Incorporating incentive and award-fee elements together under a structure known as a multiple-incentive fee contract could enable the DoD to encourage optimal contract outcomes by rewarding cost efficiency and unit performance.

The initial V-22 FSD contract included an incentive-fee arrangement intended to encourage efficiency by shifting cost liabilities onto the contractor. However, this incentive structure lacked effective mechanisms to address Bell-Boeing’s propensity to miss program deadlines and deliver unsatisfactory platform performance. Short of total contract cancellation, which the V-22’s widespread political support made impossible, the DoD had few options to rectify Bell-Boeing’s inability to meet contract expectations. Moreover, the contract incentives did not motivate Bell-Boeing to ensure product functionality or maximize value for all involved parties. Instead, the contract established perverse incentives for Bell-Boeing to prioritize cost cutting above performance standards. As design challenges emerged and the program timeline slipped, the DoD had little power to bring Bell-Boeing back on track and ensure the V-22 operated as intended.

One concern with multiple-incentive contracts is that the award and incentive-fee rewards may counteract one another. If a contractor values cost efficiency above unit performance, and the incentive fee’s economic benefit outweighs that of the award, similar unintended consequences as those seen in the original V-22 FSD contract are likely to occur. The DoD and other agencies can avoid these issues by retaining the ability to periodically revise reward allocations. Based on periodic assessments of cost and non-cost interest areas, project managers can modify the award and incentive-fee rewards to direct contractor priorities. Using a multiple-incentive fee contract therefore provides regulators more options to improve contractor accountability for production deadlines and platform capabilities and empowers them to regain control of over-budget and behind-schedule contracts.

**Conclusion**

The V-22’s first combat deployment was to Iraq in 2007, where it performed its normal duties well. However, low readiness rates and high maintenance costs plagued the V-22’s operational effectiveness. During initial combat deployments, the V-22’s cost per flight hour was more than double the target rate initially set in 1986. The discrepancy was largely a result of extensive maintenance costs. Between 2007 and 2009, deployed V-22 squadrons made 50 percent more supply-driven maintenance requests than the average Marine aviation squadrons serving at the time in Iraq. Reliability issues persist today, with V-22 readiness rates lagging below the 82-percent minimum acceptable threshold set by the DoD. Throughout 2018, V-22 mission capable rates hovered around 60 percent.

Lessons learned from the V-22 can be broadly applied across government-sponsored contracts to better maximize their public value. Given the significant investments in the V-22’s production, the aircraft’s performance should have met its mission capability requirements years ago. Although the DoD did not initially support the project,
regulatory reforms could have made the process more efficient and less costly at various points throughout the timeline. Today, the DoD is finally able to use the aircraft it set out to build, but robust oversight and thoughtful project management could have yielded the high-performance aircraft with more judicious spending of taxpayer dollars.

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As the industrial revolution brought about massive increases in efficiency and productivity, many people expected the resulting increases in wealth to be distributed evenly throughout society.\textsuperscript{1} It was thought that the common laborer would work less and earn more, and poverty would be eliminated.\textsuperscript{2} However, this was not the case, and instead, poverty and inequality persisted through this period.

Henry George, an American political economist, was preoccupied with reconciling the promise of the industrial revolution with the reality of the late nineteenth century. He realized that land rent imposes social costs that can destabilize economies and increase both poverty and inequality.\textsuperscript{3} However, taxes that governments use to ameliorate these problems inherently shrink the market, reducing economic growth.\textsuperscript{4} The implication is that governments must tolerate a certain amount of economic dampening to mitigate these negative externalities.

States can encourage economic growth through the funding of welfare, public works, and land development, and through other economic tools.\textsuperscript{5} The question then becomes how to fund such projects. Many taxes that fund economic growth policies also impose further negative externalities by disincentivizing transactions. This creates a Catch-22: governments must tolerate certain negative externalities if they wish to stimulate economic growth.

The land value tax that George proposed resolves both conundrums.\textsuperscript{6} It mitigates many of the social costs and negative externalities of rent by increasing economic stability while decreasing poverty and inequality. At the same time, it provides a stream of public revenue without the harmful distortions created by most forms of taxation. With land value taxes, governments can use the revenue from mitigating the negative externalities of rent to stimulate economic growth.

**The Problem with Rent**

According to Henry George, rent is "the part of the produce that accrues to the owners of land (or other natural capabilities) by virtue of ownership."\textsuperscript{7} In other words, rent is when a resource owner, such as a landowner, extracts value from the resource that exceeds its initial cost. Because of this potential for profit, landowners often engage in rent-seeking behavior, where they charge tenants more over time than the purchase price or current resale value of the land. Because land rent is determined by the difference in productive value of two plots of land, a plot close to a community's central business district will command higher rent due to a tenant's shortened commute.\textsuperscript{8} Further, the proximity of schools, hospitals, parks, and other public amenities can also drive an increase in rent. For Georgists, this rent-seeking behavior can have a negative impact on broader society, increasing inequality, instability, and poverty.

**Inequality: Land Rent as a Club Good**

The fact that land increases in value is seen by many today as a given. However, land itself cannot become more productive without the application of labor or capital. This increase in value can largely be attributed to improvements to the community.\textsuperscript{9} When roads are built, schools erected, parks created, and police and fire departments funded, the land nearby increases in value relative to a similar piece of land that does not benefit from these community improvements. This concept is reflected in the oft-repeated real estate adage that the three most important factors in determining the value of a home are “location, location, location.” Thus, while all persons are the social beneficiaries of public goods within a given community, the economic benefits are generally limited to landowners in the form of rent.

Land rent is a club good: it is non-rivalrous in that one plot of land increasing in value does not preclude another from doing the same, but it is excludable in that only landowners see the profits. This arrangement would be equitable if community development were funded entirely by landowners, but that is not the case. Taxpayer funding is responsible for a substantial portion of community development, but many taxpayers do not own land, so they do not receive the economic benefits of the resulting increases in land values. Likewise, some landowners may pay lower taxes due to being unemployed or consuming comparatively little, but they still receive the economic benefits of community development and increasing land values.\textsuperscript{10} This system, in which some people pay without benefit and others receive benefits without paying, con-
stipulates a system wherein renters subsidize landowners. Because a greater proportion of renters are of a relatively lower socio-economic status while landowners are more often of a higher socio-economic status, this system of taxpayer-funded rent only serves to increase inequality.

Instability: Land as a Speculative Investment
It has historically been assumed that land appreciates in value over time at a rate exceeding inflation. In the long run, this has generally held true. However, it has created a subtle negative market externality: the use of land as a speculative investment. Investment, itself, is not inherently bad. Because speculation is a form of calculated gambling, however, it can have serious and unintended consequences. When families use their homes simultaneously as a shelter and an investment, they are quite literally gambling with their homes.

The 2008 subprime mortgage crisis and resulting economic recession serves as proof of concept for this analysis. The housing market crash was a direct result of speculation on the part of homeowners and banks, and when the market collapsed, millions of families lost their homes because their home values could not keep pace with their mortgage payments. The 2008 crisis is merely the most visible example of an economic contraction resulting from land speculation. Some economists believe that land speculation is the sole cause of boom and bust cycles within the market.

Poverty: Land as a Natural Monopoly
In a competitive market, competing firms drive prices down to meet market demand at an equilibrium where the market is performing optimally. By contrast, in a monopolistic market, a firm with no competition will artificially inflate the price of a good, resulting in deadweight loss. To curtail this behavior, antitrust laws in the U.S. disallow monopolistic behavior and collusion in competitive markets. However, some monopolies cannot be banned. Natural monopolies occur in industries with high fixed costs, like roads, electricity, water, and other necessary public goods “in which multi-firm production is more costly than production by a monopoly.” Thus natural monopolies are inherently inefficient: artificially introducing competition will incur higher costs, so deadweight loss becomes unavoidable.

Within a Georgist economic framework, land is considered a natural monopoly. The only cost for land is fixed, as improvement costs are attributed to capital. The supply of land is fixed; no shifts in demand can cause the land to grow or shrink. Furthermore, two tracts of land cannot occupy the same space, so competition in one location is impossible. Because any given location can have only one seller, land is a natural monopoly, and its market creates deadweight loss.

This is where Henry George found the answer to his question of how the Industrial Revolution failed to bring universal economic prosperity. While abundant labor and capital drive the prices for those factors of production down in a competitive market, the inherent scarcity of land prevents competition from driving its price down the same way. The gains from increased economic efficiency introduced by the industrial revolution — and indeed, by any new technology — must go somewhere. Because competition drives wages and interest down, land rent can and must absorb the excess. This is the principle behind George’s “all-devouring rent” thesis.

Thus, while the efficiency of labor increases, the profits from that efficiency go to land and landowners, not the laborers whose efficiency is creating that profit. Poverty is not reduced because any financial gains in the labor market are accompanied by land owners’ rent-seeking behavior, which absorbs those gains — not because the land has become more productive, but because a monopoly will charge the highest rent that it is able.

Land Value Taxes Solve Rent
A properly levied land value tax can mitigate or even eliminate the negative effects of rent on society at large. This section will outline how a land value tax can serve to increase equality, improve social stability, and reduce poverty.

Greater Equality
That rent is a club good is not inherently problematic; the problem is that those who receive the economic benefits of rent are not those whose taxes pay for it. The solution is clear: shift the effective tax burden to its financial beneficiaries. Government spending in a community through the creation of schools, roads, parks, and other public infrastructure leads to economic development. This economic development in turn raises land values. Those who benefit from rising land values as a result of government spending ought to be the ones funding said government spending. Land value taxes facilitate this arrangement.

Thomas Piketty attributes the rise in inequality globally to the increase in capital’s share of wealth. Other authors have pointed out that the increase in capital wealth can actually be attributed entirely to an increase in the value of land, not an increase in productive capital. Thus, the increase in inequality seen over the past century can be largely attributed to price increases in land. Joseph Stiglitz uses this fact to advocate for land value taxation. If inequality has risen as a result of an increase in the value of land, then it stands to reason that a land value tax would arrest this process and prevent further rises in inequality.
**Greater Stability**
The fact that land is seen as an investment tool is a result of the common expectation that land will reliably appreciate in value over time. When some or all of this appreciation is absorbed through land value taxes and reinvested into the community, land becomes less appealing as a speculative tool. Some economists believe that the boom and bust cycle of economies would be heavily dampened—if not eliminated altogether—in the absence of land speculation. This would result in a more stable economy and society.

**Reduced Poverty**
Land as a speculative tool also contributes to the affordable housing crisis in America. By assuming that housing will appreciate faster than inflation, the concept of housing as an investment assumes that each successive owner must be wealthier than the one before. Thus, if a land value tax can reduce the use of land as a speculative tool, housing will become more affordable.

Furthermore, land value taxes reduce the monopolistic surplus that accrues to landowners. Rather than allowing landowners to devour all economic increases from new technologies and market efficiencies, land value taxes utilize the mechanisms of rent to capture excess returns in the market and redirect them back into the community so that they can be shared and enjoyed by laborers, capitalists, and landowners equally. While unchecked rent siphons income away from economically disadvantaged individuals, a properly implemented land-value tax can siphon that same income back from landowners and return it to the poor.

**Principles for Good Taxation**
Like monopolies, all taxes introduce some form of economic distortion. Adam Smith and Henry George each outlined principles for good taxation, as have other modern authors. These principles can be categorized into four overarching goals: (1) ease of administration, (2) transparency, (3) fairness, and (4) non-distortion.

**Ease of Administration**
Good taxes minimize bureaucratic overhead and impose little compliance burden on those being taxed. Income taxes, for instance, impose a high burden on taxpayers during tax season in the U.S., when taxpayers spend a collective total of six billion hours and $168 billion on tax code compliance. This is particularly pernicious, as it pulls time and money out of an economy while returning nothing. Whereas the taxes, themselves, can be returned to the economy in the form of public works, transfers, and benefits, this expenditure on tax compliance is totally lost.

**Transparency**
Taxpayers should know what they are being taxed for, and taxes should be both expected and predictable. This is necessary so that taxpayers can make adequate decisions regarding taxable activities. Abstruse taxes appear random and arbitrary to taxpayers. Transparency reduces evasion risks.

**Fairness**
Taxes should not bear arbitrarily upon different segments of the population but should be both horizontally and vertically equitable. Horizontal equity implies that, if two individuals have equal ability to bear the tax burden, their tax should be equal; vertical equity means the tax burden should increase with an individual’s ability to pay. Progressive income taxes can be horizontally and vertically equitable in regard to income without being horizontally and vertically equitable relative to wealth. In fact, many individuals with low incomes in the U.S. have great wealth, such as retirees and heirs to family fortunes. Alternatively, some economists have suggested that a fair tax system should adhere to the benefit principle: individuals’ tax burden should correspond to the level of benefit that they receive from public services.

**Low Risk of Distortion**
Many taxes harm the economy by introducing deadweight loss. According to Ramsey’s Rule, tax policies can reduce economic distortion by taxing goods and services with relatively inelastic demand so that consumption is not affected by the change in price. This principle allows a tax regime to minimize deadweight loss.

**Land Value Taxes are Good Taxes**
Land value taxes are subtly yet substantially different than property taxes. While property taxes are levied upon the value of a person’s property, land value taxes are levied only on the land, itself. Property taxes typically include land and the added value from development and structures. By only taxing the land and excluding economically productive capital and labor that go into development, land value taxes separate the factors of production, allowing for each to be treated in the most efficient manner. A land tax ensures that labor and capital are not impacted by taxes best suited for land, and taxes designed for labor and capital do not promote detrimental land use.
Land-value taxes encourage landowners to increase the use of raw land with the hopes of selling it later for profit. However, this inelasticity resulting from land rent creates a deadweight loss, shrinking the economy. Land-value taxes counteract this deadweight loss, directly it toward public benefit. Property taxes and increasing land values discourage development and incentivize unproductive "land squatting," or sitting on raw land with the hopes of selling it later for profit. Land-value taxes encourage landowners to increase the productive value of their land by developing it into some profitable use or selling it to someone who will.

**Recommendations**

Implementing a land value tax in the U.S. would require minimal infrastructure changes. Most states and municipalities already have some form of property tax in place, and these structures could be relied upon to administer a land value tax through similar systems. Foldvary laid out a detailed ten-step plan for implementing a land value tax in such a fashion. By first splitting the property valuations into separate taxes on the land and the improvements on the land, the government can slowly shift the tax burden from the latter to the former at a rate that minimizes market shocks. With this mechanism, the federal government could collect its tax revenue through local taxing units. One challenge, however, is how to accurately assess the value of land. The current system of property assessors is inaccurate, and there are few checks and balances to prevent bias or corruption. Furthermore, while property valuations can be, at least partially, based on market values, land values cannot be so judged, as it is impossible to buy the land from under a structure without buying the structure itself.

Eric Posner and E. Glen Weyl posed a potential solution through which all land is always for sale. Landowners must declare the price for which they would be willing to sell their land, and that is the value that is taxed. The caveat, however, is that if someone offers to buy at that price, the landowner must sell. This system provides a clever workaround for the problems proposed, in that it incentivizes landowners to find the exact value of their own land — too high and they pay more taxes than are necessary; too low and they risk losing the land to a seller for less than what it is actually worth.

However, this system has some major flaws as well. Few landowners are properly equipped to accurately assess the value of their land and will invariably fall into the traps on either side of the assessment balancing act simply due to inexperience. Additionally, some landowners may assign sentimental values to land that their families have owned for generations and be forced to choose between paying an exorbitant tax or risk having to sell their land.

For this reason, Peter Franklin (2018) provides a subversion of Posner and Weyl's recommendation. Rather than having landowners provide a selling price, local assessors provide purchase prices. This way, rather than all land being for sale at all times, the government makes perpetual open offers on all land, and landowners always have the option to sell at the assessed price to the government.
The same mechanism is at play: the government has an incentive to assess high to maximize tax revenue, but not so high that it will be forced to buy. According to Franklin, this relieves the burden on taxpayers by “putting the onus of accurate valuation on the state and without placing ordinary property owners under a general threat of compulsory purchase.”

Conclusion

Land value taxes are maligned from the left for being too conservative and from the right for being too liberal. Land value taxation is not a feel-good policy; it is a “think-good” policy. It uses a non-distortive Pigovian tax to correct the negative externalities of land rent, mitigating its negative social outcomes. Only through an integrated approach to taxation and economics can policymakers employ these tools in an elegant solution.

In order to reap these benefits, a shift in the conversation is needed. It is necessary to focus on inequality in terms of wealth rather than just income, to recognize land as a distinctive factor of production, and to understand the role that rent plays in an inefficient economy. The question of taxation is often framed as how to tax enough to provide necessary government services while minimizing the negative aspects of taxation. It does not need to be this way. Land value taxes generate revenue as a byproduct of resolving market inefficiencies, so the question becomes what to do with the proceeds of correcting the market.

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