

Corporate Welfare in the Federal Budget

BY CHRIS EDWARDS

EXECUTIVE SUMMARY

The federal government runs a wide array of programs that subsidize businesses and industries. These “corporate welfare” programs burden taxpayers and undermine economic growth. Favoring some businesses over others with subsidies also contradicts the American ideal of equal treatment under the law.

Business subsidies have been debated since the nation’s early years when Alexander Hamilton advocated policies to support the manufacturing industry. Then during the 19th century, Congress aided railroads, fur trading, and other industries, but the subsidies were usually temporary and eventually repealed.

Corporate welfare became an entrenched part of the federal budget in the 1920s and 1930s with the passage of large-scale subsidies for farm businesses. In subsequent decades, Congress added subsidy programs for energy,

manufacturing, broadband, aviation, passenger rail, housing, and other industries. Recently, corporate welfare soared with the passage of the Infrastructure Investment and Jobs Act of 2021, the CHIPS and Science Act of 2022, and the Inflation Reduction Act of 2022.

This study tallies corporate welfare in the federal budget and finds that the government spends \$181 billion a year on aid to businesses. That figure is based on a broad definition of corporate welfare, which includes direct cash subsidies and indirect industry support. The study then discusses 12 reasons to cut corporate welfare, including the political corruption and economic damage it causes.

More industries are becoming dependent on the federal government and driven by politics, which is a dangerous move toward central planning in the economy. Cutting corporate welfare would free markets, boost growth, and trim alarmingly high federal budget deficits.



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LONG-RUNNING DEBATE OVER BUSINESS SUBSIDIES

The policy debate over corporate welfare is as old as the nation. In 1773, the Boston Tea Party was partly driven by anger toward the monopoly advantages given to the British East India Company at the expense of the colonists. Those advantages were “meant to be a bailout policy” to get the company out of debt.¹

After independence, some American leaders were lured by the false promise of corporate welfare, just as the British government had been. Treasury Secretary Alexander Hamilton’s *Report on the Subject of Manufactures* in 1791 favored tariffs on imported manufactured goods, prohibitions on some exports, exemptions of certain items from tariffs, infrastructure spending, and government grants to manufacturers.² The same year, Hamilton cofounded a manufacturing project in Paterson, New Jersey, that received monopoly privileges and state tax exemptions.³ Congress passed some of Hamilton’s proposed tariffs but did not follow his advice to subsidize manufacturers. Hamilton’s Paterson project failed due to mismanagement and corruption.

Hamilton was able to get his proposed financial policies passed, which included the creation of the First Bank of the United States. Many people at the time opposed these policies as cronyism and the aiding of moneyed insiders.⁴ Another point of contention was Hamilton’s 1791 excise tax on whiskey, which fell more heavily on small distillers west of the Appalachian Mountains than on large distillers in the East. That unfairness led to the Whiskey Rebellion.

The election of Thomas Jefferson to the White House in 1800 was a rebuke of Hamilton and the Federalists’ big-government policies, which were seen to aid the elites at the expense of the general public. Jefferson’s small-government views on the economy held sway for a while, but the issue of government support for industries came up repeatedly during the 1800s, as the following examples illustrate.

Fur trading.⁵ The federal government set up western fur-trading posts beginning in 1795 to compete with private traders and the British. The government-run posts were supposed to be self-supporting but ended up consuming large ongoing subsidies. Compared to private fur traders such as John Jacob Astor, the federal fur-trading bureaucracy had a bloated cost structure, stocked inferior goods, and

did not extend credit to American Indians or make trading convenient for them. The government’s fur-trading posts lost money and were hamstrung by domestic sourcing rules and inflexible worker pay. Congress battled over the wasteful fur-trading subsidies for years until finally ending them in 1821.

Canals.⁶ Many state governments began subsidizing canals following the construction of the Erie Canal in the early 19th century. The states borrowed heavily to fund the projects, but they overestimated canal demand and underestimated construction costs, and nearly all the projects ended up losing boatloads of money and causing financial stress on the states. President James Madison vetoed a bill subsidizing internal improvements in 1817, and the federal government steered clear of the canal boondoggles.⁷

Railroads.⁸ The federal government subsidized the construction of the Union Pacific (UP) and Central Pacific (CP) railroads with land grants and federal loans beginning in 1862. Construction costs were excessively high, and the structure of the subsidies favored speed over quality, such that the lines were built shoddily in places. The politicking and cronyism of UP officials in Washington included the *Crédit Mobilier* scandal, which involved overcharging for railway construction and payoffs to dozens of members of Congress. Meanwhile, the CP dominated California politics, and it gained legal protections from competition. As it turned out, subsidies were not needed to build a transcontinental railroad. In the 1880s and 1890s, entrepreneur James Hill constructed his Great Northern railroad from St. Paul, Minnesota, to Seattle, Washington, without subsidies. He chose efficient routes and kept construction quality high and costs low, and his railroad prospered.

Steamships.⁹ After Samuel Cunard received British subsidies for his Atlantic-crossing steamships in the 1840s, Congress began subsidizing US steamship lines on the Atlantic and Pacific coasts. Despite the subsidies, these lines were outcompeted by the unsubsidized fleet of Cornelius Vanderbilt, which had better management, achieved lower costs, and was more innovative. The success of Vanderbilt’s operations convinced Congress, which in a decade had spent \$11 million on steamship subsidies, to repeal them in 1858.

These 19th century business subsidies generated inefficiency, unfairness, and corruption, just as subsidies do today, as the following sections illustrate. The historical

examples show the basic illogic of business subsidies. On the one hand, they may go to projects that have poor economics and end up failing, as with the canals. On the other hand, subsidies may go to projects that have sound economics and succeed, as with the railroads. In the first case, the subsidies misallocate investment; in the second case, they are unneeded. The same is true with today's business subsidies.

MODERN ERA OF CORPORATE WELFARE

The modern era of corporate welfare began in the 1920s and 1930s under President Herbert Hoover. With a \$500 million authorization, Hoover and Congress created the Federal Farm Board in 1929 to subsidize agricultural cooperatives, which stockpiled commodities to try to raise prices even as many Americans struggled with hunger during the Depression. After wasting taxpayer money and distorting markets, the failed board was abolished in 1933. However, policymakers did not learn the lesson and launched permanent farm subsidy programs in the 1930s. Today, most of the roughly \$30 billion a year in federal farm subsidies goes to large corporate-style farms.¹⁰

Another Hoover corporate welfare boondoggle was the Reconstruction Finance Corporation (RFC), created in 1932. The agency was initially funded by \$2 billion in debt and equity from the US Treasury, and it was tasked with aiding distressed banks, railroads, and other businesses. RFC executives proceeded to subsidize their friends and business associates, and President Franklin Roosevelt used the RFC to aid businesses supporting the Democratic Party. The RFC spent billions of dollars and became "a cash cow for the party in power."¹¹

Concern over the RFC's failures and cronyism eventually prompted a congressional review led by Sen. William Fulbright (D-AR). His committee report in 1951 detailed RFC corruption, and newspapers across the nation editorialized in favor of closing the agency. The RFC was terminated in 1953 under President Dwight Eisenhower.

However, Eisenhower's administration thought that instead of subsidizing big businesses, the government should subsidize small businesses. In 1953, Congress created the Small Business Administration, which was initially "as partisan for the Republicans as the RFC had been

for Democrats."¹² This unneeded small business subsidy machine remains in operation seven decades later.

In the decades since the 1950s, Congress has put many industries on the federal dole, including energy, ethanol, automobiles, aviation, urban transit, broadband, semiconductors, housing development, and manufacturing. There has been bipartisan support for most of these expansions in corporate welfare. These subsidy efforts, along with trade protections, are often called industrial policy.

In energy, large-scale corporate welfare began in the 1970s. There was the Republican Clinch River Breeder Reactor, which was an experimental nuclear fission power plant in Oak Ridge, Tennessee. The failed scheme cost taxpayers \$1.7 billion and produced nothing. And there was Democratic President Jimmy Carter's Synthetic Fuels Corporation, launched in 1980. That government entity dumped more than \$1 billion into failed coal gasification and other projects before it was shut down after revelations of mismanagement, cost overruns, and cronyism.¹³

Both parties have supported subsidies to automakers. The Bill Clinton administration spent \$1.5 billion on the failed Partnership for a New Generation of Vehicles (PNGV). Despite these subsidies for hybrids and fuel efficiency, US automakers remained behind unsubsidized Honda and Toyota in marketing successful hybrids.¹⁴

After Clinton, the George W. Bush administration decided that PNGV had a "misguided focus," and that its own FreedomCAR scheme would have "clear goals."¹⁵ But FreedomCAR spent more than \$1 billion on hydrogen-powered vehicles and other technologies that went nowhere in the marketplace.

Then in 2007, Bush and Congress launched the Advanced Technology Vehicles Manufacturing (ATVM) program, which continued under the Barack Obama administration and loaned \$8 billion to automakers.¹⁶ The program loaned money to Tesla, which succeeded, but there were also failures. For example, Vice President Joe Biden promoted loans to Fisker Automotive, which he said would create thousands of jobs in Delaware.¹⁷ But Fisker went bankrupt and stuck taxpayers with a \$139 million loss.¹⁸

The Bush and Obama administrations lent a combined \$80 billion to bail out Chrysler and General Motors during the 2008–2009 financial crisis. The federal government ended up losing \$12 billion on those deals.¹⁹

The Obama administration gave billions of dollars to renewable energy businesses. The most famous failure was Solyndra, a maker of solar power equipment, which received a \$535 million loan guarantee in 2009. President Obama visited Solyndra in 2010 and called the company an “engine of economic growth,” but the company went bankrupt, and taxpayers got hit with a half-billion-dollar loss.²⁰

In 2011, the Obama administration loaned \$737 million to the Crescent Dunes solar power project, which included a huge array of more than 10,000 mirrors in the Nevada desert. The project was undermined by mismanagement, high costs, and paltry energy output.²¹ It also harmed the environment on over 1,600 acres of public lands. Nonetheless, the Dunes project was pushed forward by Sen. Harry Reid (D-NV), who said of the project, “I will continue leveraging my position as Majority Leader to make certain that Nevada always leads the nation in the creation of clean energy jobs.”²² Fast-forward to 2019, and the project’s only customer, NV Energy, ended purchases because of the high costs and unreliability of the power, leaving the public with a large financial loss and a giant pile of metal and mirror junk in the desert.²³

Also in 2011, the Obama administration provided a \$1.6 billion loan guarantee to the Ivanpah project in California’s Mojave Desert, which has 170,000 pairs of mirrors to concentrate solar power. The project is operating but generating less power than planned and at a higher cost. Ivanpah is not climate-friendly because it burns large amounts of natural gas each morning to heat boilers.²⁴ Furthermore, the vast array of mirrors despoils 3,500 acres of public lands and kills at least 6,000 birds a year.²⁵

President Donald Trump tried to cut back on some types of corporate welfare, including renewable energy subsidies, but embraced other types, including farm subsidies, ethanol subsidies, and protectionist trade barriers. In 2018, he raised tariffs on a range of Chinese imports, which induced China to retaliate against US farm exports.²⁶ The damage to US agriculture prompted Trump to approve a series of farm bailouts totaling \$23 billion, and then he dished out another \$31 billion for farm businesses during the 2020 COVID-19 pandemic.²⁷

Trump increased federal spending massively during the pandemic. He approved three large relief bills that included more than \$900 billion in business subsidies.²⁸

Trump’s spending splurge unfortunately set the stage for even more lavish spending and corporate welfare under President Joe Biden.

PRESIDENT BIDEN’S SUBSIDY EXPLOSION

In his 2024 State of the Union address, President Biden complained about corporate tax breaks. He looked forward to “a future where the days of trickle-down economics are over and the wealthy and the biggest corporations no longer get all the tax breaks.” He also promised to make “big corporations and the very wealthy finally begin to pay their fair share.”²⁹

Yet Biden signed into law three huge bills providing hundreds of billions of dollars of special-interest tax breaks and spending subsidies to businesses. He said, “I also want to end tax breaks for Big Pharma, Big Oil,” but he gave subsidies to Big Semiconductor, Big Wind, Big Solar, Big Battery, Big Automaker, and Big Utility.³⁰

Table 1 summarizes the costs of Biden’s three large corporate welfare bills.

The Infrastructure Investment and Jobs Act of 2021 increased infrastructure subsidies by \$550 billion over five years.³¹ About \$254 billion of the total was for corporate welfare spending, as defined below. The law subsidized electric power, rail, broadband, airports, seaports, and electric vehicle charging stations.

The CHIPS and Science Act of 2022 handed out \$54 billion in corporate welfare, including \$53 billion for the semiconductor industry and \$1 billion for wireless technology. The law also included a new tax break for the semiconductor industry worth billions of dollars a year.³² These subsidies are a sad development given the entrepreneurial history of the semiconductor industry and its traditional funding from private risk capital.

The Inflation Reduction Act (IRA) of 2022 handed out hundreds of billions of dollars in subsidies, much of it to big corporations including automakers, utilities, manufacturers, and hydrogen producers. Cost estimates for the bill have ranged from \$390 billion to \$1.2 trillion over 10 years.³³ The large variability arises because we do not know future market developments and private-sector responses to the subsidies.

The Committee for a Responsible Federal Budget estimated that over 10 years the IRA will cost \$868 billion, of which about \$540 billion is corporate welfare, as shown in Table 1.³⁴ The corporate welfare includes \$417 billion in tax breaks for energy, manufacturing, batteries, clean fuels, and other items. And it includes \$123 billion in grants, loans, and other spending for farm businesses, manufacturers, energy producers, and other businesses.

The value of special-interest corporate tax breaks has soared in recent years.³⁵ Comparing the tenures of Biden and Trump, the value of what are officially called corporate tax expenditures increased 92 percent, from \$109 billion to \$209 billion a year.³⁶ Thus, Biden almost doubled corporate breaks, despite his rhetoric about tax fairness and trickle-down economics.

Biden’s corporate welfare splurge created three troubling precedents. First, many of the IRA tax breaks were designed as “direct pay,” meaning that they are actual government spending rather than simple tax cuts. The recipients include nonprofit groups and government entities that cannot use regular income tax cuts, so the law allowed them to receive their “cuts” as cash payments from the US Treasury.

Second, many of the IRA corporate tax breaks are transferable, meaning that companies that receive them can sell them to other companies. Tax credits used to be somewhat limited because eligible companies needed to have a tax liability, but transferability removes that limit. In 2024, about \$20 billion of IRA tax breaks will be traded between companies.³⁷

Third, Biden’s corporate welfare laws created subsidies for industries that had not previously received regular federal subsidies, including semiconductors, freight rail, and electricity transmission. These industries may become dependent on subsidies and lobby to expand them, and that will encourage other industries to seek their own handouts.

CORPORATE WELFARE IN THE BUDGET: \$181 BILLION

How much does the federal government spend on corporate welfare? This section provides an answer, but measuring corporate welfare is not an exact science. My definition is broad and includes three types of federal support for businesses and industries:

Table 1

President Biden’s corporate welfare: business subsidies and tax breaks in three laws

Infrastructure Investment and Jobs Act of 2021, billions of dollars over 2022–2026	
Electric power	\$73
Passenger and freight rail	\$66
Broadband	\$65
Airports	\$25
Seaports and waterways	\$17
Electric vehicle chargers	\$8
Total	\$254
CHIPS and Science Act of 2022, billions of dollars over 2023–2027	
Semiconductor manufacturing	\$39
Semiconductor research	\$11
Semiconductor other support	\$3
Wireless supply chain	\$1
Total	\$54
Inflation Reduction Act of 2022, billions of dollars over 2022–2031	
Energy and electricity tax breaks	\$233
Manufacturing tax breaks	\$133
Spending subsidies	\$123
Carbon-capture/clean fuel tax breaks	\$51
Total	\$540

Source: Author’s calculations based on data from the Committee for a Responsible Federal Budget.

- *Direct subsidies.* Grants, loans, and other payments to businesses, such as grants to semiconductor companies, loans to lithium mining companies, and payments to farm businesses.
- *Indirect industry support.* Federal activities that should be funded by businesses, such as the government’s applied (not basic) research spending on energy and other industries.
- *Government businesses.* Subsidies for government-owned businesses such as Amtrak that should be privatized and run without subsidies.

Corporate welfare in the federal budget is spending that

the private sector should fund by itself without subsidies. My tally of this spending for 2024 is \$181 billion, as detailed in Table 2. Many agencies in the table provide both direct subsidies and indirect industry support. For example, the Department of Agriculture’s Natural Resources Conservation Service provides advice to farmers on managing their lands and also pays them for investments in their lands.

The table includes government businesses that should be privatized. Some of them receive regular spending subsidies, such as Amtrak, and some do not, such as the Tennessee Valley Authority. The US Postal Service (USPS) receives subsidies occasionally, including \$10 billion during the pandemic in 2020 and \$3 billion for purchasing electric postal vehicles in 2022.³⁸ Aside from spending subsidies, government businesses are generally exempt from taxes, which is a type of corporate welfare not tallied in the table. Tax exemption creates an unfair advantage in the marketplace, such as when tax-exempt USPS competes against package delivery firms such as Fed Ex that pay taxes.

Table 2 should be considered a rough cut. There are other federal business activities that could be privatized. Also, the table includes only agencies where the main activity is corporate welfare, but other agencies may also spend on such activities.

Finally, the primary focus of this study is spending subsidies, but there are other types of corporate welfare, including:

Tax expenditures. These are narrow tax preferences or loopholes that distort the economy. Corporate tax expenditures totaled \$154 billion in 2024, although there is disagreement about the proper measurement of these breaks.³⁹ As noted, most of the corporate welfare in Biden’s IRA was in the form of narrow corporate tax breaks.

Contracting. Federal contractors are known for cost overruns, inflated profits, and corruption. In one case, the Pentagon paid contractor TransDigm “\$1,443 for a three-inch ring called a ‘non-vehicular clutch disk’ which is used in the C-135 transport aircraft, though it cost the company just \$32 to produce.”⁴⁰ In another case, contractor Raytheon was found in 2024 to have fraudulently overcharged the Pentagon more than \$100 million for weapons systems.⁴¹ And in a particularly tawdry case from a few years ago, Leonard Glenn Francis cozied up to US Navy leaders to win hundreds of millions of dollars in contracts to resupply

ships. He wined and dined naval officers and provided them with cash, gifts, and prostitutes. The scandal exposed “a staggering degree of corruption within the Navy,” noted the *Washington Post*.⁴²

Regulations. Federal regulations are supposed to fix market failures, but they often pad the profits of favored businesses and damage the economy. Economist George Stigler argued that “regulation is acquired by the industry and is designed and operated primarily for its benefit.”⁴³ He meant that businesses influence the design of regulations to benefit themselves at the expense of the public. In *The Big Ripoff*, Tim Carney documents how businesses lobby policymakers to increase regulations in ways that give them advantages over their competitors.⁴⁴

Trade barriers. Tariffs and other trade barriers aid some businesses at the expense of other businesses and consumers.⁴⁵ Sugar import barriers, for example, benefit a small group of sugar growers at the expense of food manufacturers and consumers, who pay about \$4 billion more in higher prices per year.⁴⁶ President Trump’s trade protections against China helped some US companies, hurt many others, and cost US households an average of \$831 a year.⁴⁷

Company bailouts. In addition to annual corporate welfare spending of \$181 billion, the federal government occasionally passes one-time bailouts, as it has done for failing financial firms, automobile companies, and airlines. Bailouts undermine growth by slowing the movement of capital from poorly managed companies to well-managed companies.

12 REASONS TO CUT CORPORATE WELFARE

Corporate welfare provides benefits to the recipients but also imposes many costs on society. The funding of corporate welfare burdens taxpayers, and the spending itself distorts the economy. The following sections discuss 12 costs of corporate welfare—12 reasons why Congress should repeal it.

1. Subsidies Burden Taxpayers

When considering subsidy programs, policymakers should keep in mind the costs of funding them. That includes the loss to the private sector of the tax payments that fund the

Table 2

Federal corporate welfare spending

Millions of dollars in 2024

Department of Agriculture		Subsidy activity
Agricultural Marketing Service	\$3,101	Marketing support for farm businesses
Farm Service Agency	\$11,247	Payments to farmers of wheat, cotton, rice, corn, and other crops
Foreign Agricultural Service	\$2,269	Foreign marketing support for farm businesses
Natural Resources Conservation Service	\$8,899	Payments and support to farm businesses for improving farmlands
Risk Management Agency	\$15,241	Subsidized crop insurance for farm businesses
Rural Business-Cooperative Service	\$1,075	Subsidies for development in rural areas
Rural Utilities Service	\$3,085	Subsidies to water, electricity, and broadband businesses
Total	\$44,917	
Department of Commerce		Subsidy activity
Economic Development Administration	\$1,688	Subsidies for local infrastructure and businesses
International Trade Administration	\$573	Export promotion activities
Minority Business Development Agency	\$129	Subsidies for small businesses
National Institute of Standards and Technology	\$4,041	CHIPS Act subsidies, manufacturing aid, and other business support
Fisheries aid	\$461	Subsidies for commercial fisheries
National Telecommunications and Information Administration	\$2,915	Subsidies for broadband
Total	\$9,807	
Department of Energy		Subsidy activity
Advanced Research Projects Agency–Energy	\$457	Development of energy technologies
Office of Nuclear Energy	\$1,599	Nuclear energy research and commercial reactor support
Office of Electricity	\$635	Subsidies for the electricity grid
Office of Energy Efficiency and Renewable Energy	\$7,797	Research, development, and deployment of energy technologies
Office of Clean Energy Demonstrations	\$2,154	Deployment of energy technologies
Office of Fossil Energy and Carbon Management	\$1,784	Development of carbon-capture technologies
Carbon Dioxide Transportation Infrastructure Finance and Innovation Program	\$354	Subsidies for carbon dioxide pipeline and shipping projects
Advanced Technology Vehicles Manufacturing Loan Program	\$341	Subsidized loans to vehicle manufacturers
Innovative Technology Loan Guarantees	\$127	Subsidized loans for deploying energy projects
Power Marketing Administrations	*	Government-owned electricity companies
Total	\$15,248	

Table 2 (continued)

Federal corporate welfare spending

Millions of dollars in 2024

Department of Housing and Urban Development		Subsidy activity
Federal Housing Administration mortgage insurance	\$4,325	Subsidized insurance for mortgage lenders
Economic Development Initiative grants	\$2,982	Subsidies for local businesses, nonprofits, and infrastructure
Total	\$7,307	
Department of the Interior		Subsidy activity
Bureau of Reclamation	\$6,694	Subsidized irrigation water for farm businesses
Bureau of Land Management	\$1,717	Subsidized grazing for ranching businesses
Total	\$8,411	
Department of State		Subsidy activity
Foreign military financing	\$10,263	Subsidies for export sales of US military equipment
Total	\$10,263	
Department of Transportation		Subsidy activity
Air traffic control operations	\$3,025	Subsidies for commercial aviation
Airport grants	\$4,237	Subsidies for airport infrastructure
Essential air service and payments to air carriers	\$517	Subsidies for air carriers
Amtrak	\$3,302	Subsidies for the federal passenger rail company
Other rail subsidies	\$575	Subsidies for passenger rail and freight rail
Maritime Administration	\$612	Subsidies for ship operators, shipyards, and seaports
Total	\$12,268	
Other programs and independent agencies		Subsidy activity
US Postal Service	*	Government-owned postal company
Tennessee Valley Authority	*	Government-owned electricity company
Corporation for Public Broadcasting	\$585	Subsidies for the media
FCC Affordable Connectivity Program	\$6,451	Subsidies for broadband
International Development Finance Corporation	\$680	Subsidies for foreign business deals
National Institutes of Health: applied research	\$24,421	Applied research, not basic research
NASA: applied research	\$6,347	Applied research, not basic research
National Science Foundation: applied research	\$1,155	Applied research, not basic research
Export-Import Bank	*	Subsidies for exporting companies
Small Business Administration	\$33,188	Subsidized loans and disaster aid for small businesses
Trade and Development Agency	\$167	Subsidies for exporting companies
Total	\$72,994	
Grand total	\$181,215	

Source: Author's calculations based on estimates in *Budget of the United States Government, Fiscal Year 2025* (Government Publishing Office, 2024).

Note: Agencies with * had no positive net outlays in 2024.

subsidies, and it additionally includes the damage caused by forcibly extracting the taxes. That extraction undermines the working, investing, and entrepreneurial activities of individuals and businesses. Those negative economic effects are called deadweight losses. Studies have found that on average, the deadweight loss of raising federal income taxes by a dollar is about 40 to 50 cents.⁴⁸

If a subsidy program is paid for by borrowing, the costs are borne by future taxpayers, as are the related interest costs. Some economists argue that spending financed by debt is more harmful than spending financed by current taxation.⁴⁹

Suppose that Congress spends \$100 million on a business subsidy program. Does the program make economic sense? The program's benefits would need to be higher than \$150 million, which includes the \$100 million direct burden to the private sector plus another \$50 million or so in deadweight losses. Therefore, the question with corporate welfare programs is not whether they create some benefits, but whether they create substantially more benefits than if the resources had been left in the private sector and not extracted by the government.

2. Subsidies Misallocate Resources

For a subsidy program to make sense, policymakers would need to accurately identify a flaw in the market economy and then expertly design a program to fix it. That is a difficult task because markets use prices, profits, and other feedback mechanisms to allocate resources, whereas politicians rely on guesswork at best. Politicians have access to only a fraction of the vast information distributed across our society that markets can tap into.

Furthermore, politicians allocate resources under the influence of special-interest groups. By design, most witnesses at congressional hearings on spending programs are in favor, and hearings usually focus on the benefits, not the costs, of programs.⁵⁰ The lobbyists who swarm Capitol Hill are usually seeking special benefits, not the general public good. Politicians and political appointees in federal agencies often steer subsidies to favored businesses.

When subsidy programs become obsolete, the government is slow to repeal them, and so the federal budget accumulates more waste over time. Consider that the federal government has spent more than \$100 billion

on rural broadband hookups over the past 25 years.⁵¹ Even if that spending once made sense, it no longer does because the cost of satellite service has plunged: The “price of satellite bandwidth for data services has dropped 77% over five years after SpaceX’s Starlink constellation flooded the market with capacity.”⁵² Yet the government continues to spend billions of dollars a year subsidizing very expensive land-based broadband.⁵³

Even when subsidy programs repeatedly fail, the government persists in funding them. The government spent \$684 million on eight coal carbon-capture plants over the past 15 years, and none of them are operating.⁵⁴ The Petra Nova plant in Texas “closed its \$1 billion carbon-capture unit in 2020 after three years.”⁵⁵ The FutureGen plant in Illinois ballooned in cost; after a prolonged political struggle, it was canceled at a taxpayer loss of \$200 million.⁵⁶

It’s the same story abroad. A review of Europe’s carbon-capture and storage (CCS) projects found: “CCS costs are prohibitive. Europe’s current project pipeline could cost as much as €520 billion and require €140 billion of government support to capture and store a proportion of longer-term targets. The economic, technical, and legislative complexity of CCS is extremely high, which will likely lead to project delays, cancellations, and underperformance.”⁵⁷

The *Wall Street Journal* noted that “80% of proposed commercial carbon-capture efforts around the world have failed, primarily because the technology didn’t work as expected or the projects proved too expensive to operate.” Despite the high costs and failures, Biden’s 2021 infrastructure bill pumped another \$12 billion into carbon-capture schemes. The *Journal*’s headline was “Projects to Capture Carbon Emissions Get New Boost Despite Dismal Record.”⁵⁸ In a nutshell, that is the story of most federal subsidies.

In theory, subsidies might fix market failures, which is the idea behind the IRA subsidies to tackle climate change. But the programs that Congress actually enacts are usually rife with contradictions and inefficiencies. Consider the IRA subsidies for EVs. They promote EV usage and thus electricity demand, which undermines the goal of reducing carbon emissions because generation is carbon intensive. Almost 60 percent of the energy needed to recharge EVs comes from fossil fuels.⁵⁹ Some studies have found that EVs are slightly worse for the climate than gasoline vehicles, although the comparison varies by state given their different

mixes of generation sources.⁶⁰ Even in places where EVs do make climate sense, the IRA law undercuts itself by imposing regulations—such as domestic content rules for the vehicles—that raise EV costs.

What is true for EV subsidies is true of many other IRA subsidies.⁶¹ Generally, IRA subsidies encourage electricity consumption, not conservation. In turn, that may slightly increase carbon emissions because renewable (“green” or “clean”) energy and fossil fuel energy appear to be complements, meaning that as one increases, so does the other. A 2020 study by John Hassler and colleagues looking at the effect of green subsidies found that as a consequence, “policies that make green energy cheaper are therefore not only ineffective in mitigating global warming but, in fact, marginally worse than the complete absence of policy.”⁶²

A 2023 study by Gregory Casey and colleagues simulated the effect of the IRA’s clean energy subsidies and found that “a standard macro climate economy model suggests limited environmental and economic benefits from the clean energy subsidies in the IRA. At standard parameter values, the model predicts that the subsidies will increase emissions and decrease welfare.”⁶³ Under more optimistic assumptions, the study found that clean energy subsidies may slightly reduce emissions but that as a policy for tackling climate change would still be inferior to taxing emissions.

Government subsidy policies are often wild guesswork, and the IRA is a good example. Estimates of the legislation’s costs over 10 years range from \$390 billion to \$1.2 trillion.⁶⁴ That is a huge range, and figuring out the costs is easy compared to figuring out the possible climate effects of the legislation.

A 2024 study by Annika Stechemesser et al. took a comprehensive look at climate change policies across 41 countries to see which types of policies actually reduce carbon emissions. They noted, “Despite more than two decades of experience with thousands of diverse climate policy measures gained around the world, there is consensus in neither science nor policy on this question.”⁶⁵ Governments are throwing a lot of money and regulations around without really knowing the effects.

The study authors performed a statistical analysis of 1,500 climate policies across the 41 countries and found that just 63 of the policies substantially reduced carbon emissions.⁶⁶ Changing carbon prices through taxes did work, but most

climate-change policies—including subsidies—did not have substantial effects. Study coauthor Nicolas Koch said, “We see a lot of policy packages built around [subsidies and regulations], and we find that it’s very rare that they really work in reducing emissions.”⁶⁷

Government subsidies and other interventions are hit-or-miss, and in the case of climate change, it appears there are far more misses than hits. This problem is compounded because the misses get entrenched and are difficult to change. Businesses do not want to give up their subsidies even if they are shown to be ineffective.

Are there less costly ways to tackle climate change than new subsidies? Yes, governments should repeal existing subsidies that encourage bad environmental choices. Federal subsidies for infrastructure and flood insurance encourage people to live in flood-prone areas. Federal subsidies for irrigation encourage excess water consumption in Western regions threatened by drought. Federal subsidies for farm businesses encourage farming on marginal lands that should be left as wetlands. Congress should repeal these and other anti-environmental subsidies rather than enacting more subsidies that burden taxpayers and create new distortions.

3. Subsidies Cause Collateral Damage

In launching new programs, policymakers have an optimism bias. They assume that programs will work as envisioned because the government is powerful and programs are well-intentioned. But most interventions, including subsidies, fall short of expectations. As one example, when policymakers fund urban transit projects, they routinely overestimate ridership and underestimate costs.⁶⁸

Policymakers have optimism bias in another way. They focus narrowly on the hoped-for benefits of programs and ignore harmful side effects. The side effects, or collateral damage, may not be fully clear until programs are in place, and by then they are entrenched and difficult to reform.

Virtually all subsidies create collateral damage. Ethanol subsidies induce farmers to switch from food production to fuel production, which raises food prices. Farm subsidies raise the price of land, which makes it harder for young farmers to get into the business. Subsidized sugar cane farming has caused environmental damage to the Florida

Everglades. Social Security discourages private savings for retirement. Federal disability benefits induce people who could work to drop out of the labor force. Traditional welfare benefits discourage recipients from working. Foreign aid empowers bureaucracies in poor countries, which stalls economic reforms. Subsidies for home purchases induce borrowing by uncreditworthy recipients, which destabilizes housing markets.

In favoring a scale-down of her state's aggressive renewable energy push, New York's Gov. Kathy Hochul said, "The goals are still worthy, but we have to think about the collateral damage of all of our major decisions."⁶⁹ Indeed, the collateral damage of renewable energy subsidies is often overlooked in the pursuit of carbon reductions. The manufacturing of solar and wind power systems, EVs, and lithium batteries produces carbon emissions, and these technologies also create many negative side effects, as outlined here.

Solar photovoltaic (PV) panels must cover far more land to produce a certain amount of power than equivalent-capacity nuclear or natural gas plants.⁷⁰ In 2024, the Biden administration proposed covering 700,000 acres of public lands in 11 Western states with solar PV installations.⁷¹ Such vast installations could affect animal habitats and migration routes, as well as violate the multiple-use rules of public lands.⁷² In addition, the aesthetic value of open public lands would be undermined if covered by metal and glass infrastructure.⁷³

Another issue is PV trash. Solar panels have a 25-to-30-year lifespan, but many panels could be replaced earlier for economic reasons. By the late 2020s, we will start having to dispose of vast amounts of solar panel junk that contains glass, silicon, copper, aluminum, plastic, silver, and other materials.⁷⁴ Currently, 90 percent of used solar panels are landfilled rather than recycled.⁷⁵

Fossil fuel power requires mining for resources, but solar power requires mining for the materials used to make solar panels, including silicon, aluminum, copper, silver, and zinc. More than one-third of the world's supply of a key part of solar panels—polysilicon—comes from an area in China known for human rights abuses.⁷⁶ Polysilicon is a highly purified form of silicon, and its manufacturing process is energy-intensive and creates hazardous wastes.

Wind power creates an even larger land footprint than

solar power. For a wind farm to generate the same power as a nuclear plant, you need a plot of land about 200 times larger.⁷⁷ Also, large amounts of land are needed for transmission lines to get rural wind power into the cities where it is consumed. To achieve net-zero carbon emissions by 2050 would require tripling the amount of high-voltage transmission lines in the nation.⁷⁸

Wind turbines kill roughly one million birds annually in the United States and more than one million bats.⁷⁹ The Department of Energy is projecting that US wind power capacity will increase two and a half times by 2050, thus raising the bird and bat kills to millions a year.⁸⁰

Offshore wind power may disrupt marine life by disturbing habitats with turbine structures and cables, increasing vessel traffic, introducing electromagnetic fields, and creating noise from the construction and operation of the turbines.⁸¹ Offshore turbines garner opposition for aesthetic reasons, and they harm tourism in coastal communities.⁸² In July 2024, a 351-foot blade splintered into pieces and washed up in Nantucket, which had to close its beaches.⁸³

Wind turbines have a lifespan of about 20 years, and they can fail early, so there will be increasing amounts of windmill scrap to deal with. Turbine blades are generally made of fiberglass, are nondegradable, and are not easy to recycle. So used blades are starting to pile up, such as in two junkyards covering 40 acres in Sweetwater, Texas.⁸⁴ There is also a mountain of junked blades in Grand Meadows, Minnesota, angering town residents.⁸⁵

Electric vehicles produce no tailpipe emissions, but as noted above almost 60 percent of the electricity they consume in the United States is produced by natural gas and coal-fired power plants. Further environmental problems are created because EVs are at least 20 percent heavier than similar gas-powered vehicles. Because of the extra weight, EVs emit greater particulate matter from tire wear, which is an important pollution concern.⁸⁶ EV tires wear out about 20 percent faster than tires on gas vehicles.⁸⁷ Finally, because of the extra weight, EVs cause more wear on local roads than gas vehicles.⁸⁸

The extra weight of EVs results in more damage and death from accidents. EVs create 20 percent or more increased energy during crashes.⁸⁹ One study found that "heavier vehicles are safer for their own occupants but more hazardous

for the occupants of other vehicles. . . . Controlling for own-vehicle weight, being hit by a vehicle that is 1,000 pounds heavier results in a 47% increase in the baseline fatality probability.”⁹⁰ The EV versions of car models often weigh about 800 pounds more than the gas versions. Also, because they are so heavy, EV trucks can seriously damage highway guardrails and concrete barriers in accidents.⁹¹

EVs currently rely on lithium batteries, as do power-grid storage systems. Demand for the batteries is spurring a large increase in lithium mining, a process that requires billions of gallons of water. That is a problem because water is in short supply in the lithium mining areas of Nevada, South America, and elsewhere.⁹² In Nevada, rivers are already tapped out and aquifers are being depleted, so it’s hard to see where extra water for lithium mining will come from.⁹³

The Biden administration has pushed ahead with a vast open-pit lithium mining project on federal lands at Thacker Pass, Nevada, to which it is providing a \$2.2 billion loan.⁹⁴ The mine will generate substantial carbon emissions and may affect habitats for sagebrush, eagles, antelopes, and other species. It will also consume billions of gallons of groundwater and create a risk of water contamination with heavy metals, thus affecting the water rights of nearby farmers and ranchers. Reporting on the Thacker Pass mine, the *New York Times* noted that “the fight over the Nevada mine is emblematic of a fundamental tension surfacing around the world: Electric cars and renewable energy may not be as green as they appear. Production of raw materials like lithium, cobalt, and nickel that are essential to these technologies are often ruinous to land, water, wildlife, and people.”⁹⁵

EV batteries also have a problematic supply chain with regard to human rights. Most of one crucial battery component, cobalt, is sourced from the Democratic Republic of the Congo, where mining companies have very poor conditions and employ children.⁹⁶ One recent analysis found that “75% of lithium-ion battery supply chain [is] linked to human rights abuses.”⁹⁷

Lithium batteries in EVs catch fire, and the fires are difficult to extinguish and can emit toxic fumes.⁹⁸ EV batteries are difficult to recycle, and when landfilled they risk contaminating soil and groundwater with heavy metals. Landfills are experiencing fires stemming from the disposal of lithium batteries.⁹⁹

These are some of the downsides to subsidizing nominally clean or green energy technologies. Perhaps all this collateral damage is not enough to outweigh the benefits of transitioning to renewables. However, policymakers should investigate these collateral damage issues thoroughly. Too often they ignore the negative side effects of subsidies in a rush to “do something,” and then the subsidies become entrenched and hard to reform.

4. Subsidies Lead Companies Astray

Subsidies help recipient companies in the near term, but over time they erode the competitive edge companies need for marketplace success. Companies that get hooked on subsidies let their costs bloat and become distracted from serving their customers. They shift their focus to lobbying and away from market-based innovation.

That was the story of solar panel maker Solyndra. It had uncompetitive products, and a \$535 million federal loan guarantee in 2009 incentivized the company’s spendthrift management. Rather than focusing on cost reduction as solar markets were rapidly changing, Solyndra cozied up to the Obama White House and spent millions of dollars on lobbyists.¹⁰⁰ Solyndra went bankrupt in 2011, and taxpayers footed the bill for the failed loan.

Southern Company was led astray by the lure of \$387 million in federal subsidies for construction of the Kemper “clean coal” power plant in Mississippi in 2010.¹⁰¹ Prominent politicians pushed the project and steered money to the company. The project’s estimated costs ballooned from \$2.9 billion to \$7.5 billion, which created huge losses for Southern Company.¹⁰² In 2017, they threw in the towel and converted the plant to natural gas. Many other subsidized clean coal projects have failed in recent decades.

Subsidies can induce companies to take excessive risks. Federal subsidies induced Enron Corporation to pursue dubious projects in the Dominican Republic, India, Nigeria, Sudan, Turkey, and Venezuela, and these projects helped bankrupt the company in 2001.¹⁰³ Enron received at least \$4 billion in financing for its risky foreign schemes from multiple federal agencies, including the Export-Import Bank and the Overseas Private Investment Corporation.¹⁰⁴ Enron came crashing down as a result of its accounting frauds and failed foreign projects.

Subsidies divorce business leaders from their customers, as we see with federal EV subsidies. Demand growth for EVs is slowing as consumers are switching to hybrids.¹⁰⁵ Rivian lost more than \$4 billion in 2024 on EV sales, but nonetheless received a \$6 billion loan from the Biden administration.¹⁰⁶ Ford Motor lost about \$5 billion on EVs in 2024, and many automakers are now pulling back from their overinvestment in the vehicles.¹⁰⁷ Volvo's CEO said the shift is "about adjusting to reality."¹⁰⁸ Companies must eventually do that, but subsidies tempt them in the wrong direction, away from reality.

The CHIPS Act subsidies for semiconductors have not fixed Intel's poor competitive situation. Intel's CEO, Pat Gelsinger, lobbied for the subsidies, but nonetheless, as Fox Business reported, "Intel said it is cutting 15% of its workforce, which translates to around 15,000 jobs, as the federal government is expected to give the company \$8.5 billion in grants."¹⁰⁹ Gelsinger admitted that Intel misjudged markets, conceding that "we must align our cost structure with our new operating model and fundamentally change the way we operate."¹¹⁰

Gelsinger's public comments reflect the lure of dependency. After receiving the \$8.5 billion award, he said Congress should pass more semiconductor subsidies: "It took us three-plus decades to lose this industry. It's not going to come back in three to five years," so "we'll need at least a CHIPS 2 to finish that job."¹¹¹ But he should know, "that job" of technology companies is never finished. If Intel becomes dependent on subsidies, it may never regain its edge compared to market leaders such as Nvidia. (In December 2024 Gelsinger announced his retirement.)

Companies that receive subsidies like to tout how many jobs they have created. But one solar industry executive testified that "businesses are not made more successful by more jobs," and "giving companies money to set up manufacturing in the U.S. may doom them to failure by financing them into a strategically uncompetitive position."¹¹² In other words, if subsidies induce firms to add high-cost jobs in places chosen for politics, not efficiency, those firms will be at a disadvantage in the marketplace. Intel's new subsidized facility in Ohio will be located where there "isn't much of a semiconductor ecosystem," and Micron is building chip facilities in New York State because that is Sen. Chuck Schumer's state.¹¹³

It would be unfortunate if the US semiconductor industry were to follow the path of the US steel industry. That industry has received billions of dollars in subsidies and gained protection by way of import barriers and domestic content rules. Numerous reviews of the industry have found that decades of government support have not made it more globally competitive.¹¹⁴

However, it is also true that the steel industry has suffered from government regulations that have raised costs and reduced competitiveness. Those regulations include labor union laws, environmental rules, government permitting delays, and high taxes. Governments should not subsidize, but they should cut tax and regulatory burdens imposed on companies.

Market-based success in any industry depends on lean operations. Intel's CEO was right when he said, "We must align our cost structure."¹¹⁵ But subsidies take the pressure off companies to reduce costs, and they weaken profit-and-loss signals that steer companies toward growth. America needs companies that continually improve productivity, not ones that limp along dependent on subsidies.

Subsidies distract business leaders and waste their time. Semiconductor companies have had to negotiate with the government for years before receiving CHIPS Act subsidies. The CEO of Microchip Technology told *Politico* in 2024, "The journey to receive grants has taken much longer and been more complicated than we expected," adding that multiple federal agencies are "all driving their own agendas."¹¹⁶

During the Obama administration, more than 100 manufacturing firms that applied for the Department of Energy (DOE)'s ATVM subsidies were turned down, some after waiting more than two years. Carbon Motors of Indiana was angry:

Carbon Motors spokesman Stacy Stephens tells FoxNews.com that the company was blindsided by the decision after being engaged in positive discussions with the government agency for the past 30 months. . . . Stephens says that the company has sourced over \$200 million in private matching funds as part of the loan requirements and began constructing a new headquarters building in Connersville, Ind. . . . The automaker's CEO, William Santana Li, says his company is outraged by what it

calls a “political decision in a highly charged, election-year environment.” . . . “We were hit right square in the nose from the federal government and need to dust off and regroup.”¹¹⁷

Perhaps it is good that this firm was turned down, but it should not have wasted its time in Washington to begin with. The *Wall Street Journal* reported in 2024 that the DOE subsidy process is still “cumbersome and lengthy, often taking years”; a lithium company executive who waited more than two years for a subsidy called the process “brutal.”¹¹⁸

The more the government subsidizes, the more entrepreneurs will get brutalized by the federal bureaucratic morass. America’s entrepreneurs should not be waiting in line with their hands out to the bureaucrats. They should be moving quickly to place their own investment bets on the future of markets and technology.

5. Subsidies Raise Costs and Cause Delays

Business subsidy programs are not simple transfers of money. They usually include complex regulations and bureaucratic procedures that raise costs and cause delays. Subsidies are a conduit for the federal government to impose burdensome rules on American industry.

Consider federal subsidies for highway construction. They come paired with Davis–Bacon labor rules, which raise highway construction costs an average of about 20 percent.¹¹⁹ Or consider how federal environmental rules cause project delays. Preparing an environmental impact statement (EIS) for federally funded highway projects took an average of 2.5 years in the 1970s but takes 6.5 years today.¹²⁰ The average EIS document runs more than 600 pages in length.¹²¹ The complex EIS process has become a springboard for litigation, which causes further delays in projects.¹²²

As the federal government has expanded the scope of its subsidies, such costs and delays are spreading beyond highway projects into more industries. With federal subsidies now going to housing, broadband, manufacturing, energy, utilities, and many other industries, large swaths of the economy are being subjected to federal regulatory burdens.

Affordable housing construction has become intensely bureaucratic as a result of the Low-Income Housing Tax Credit (LIHTC). The federal government gives \$13 billion of the credits each year to the states, which hand them out to apartment building developers. The developers must follow a web of rules in constructing and operating the units. The LIHTC has spawned more than 2,000 pages of federal laws and regulations, which has increased affordable housing costs by 20 percent or more.¹²³

The Infrastructure Investment and Jobs Act (IIJA) of 2021 spread costly federal rules deeper into the economy, such as with Buy American or domestic content rules.¹²⁴ These rules now cover all types of federally funded infrastructure, including dams, buildings, and energy facilities.¹²⁵ The IIJA also expanded the range of items that must be sourced domestically, from a few items such as steel and iron to a much longer list that includes plastics, glass, lumber, and drywall.

Buy American rules essentially mandate inefficiency. Contrary to the intent of the rules, studies have found that they reduce gross domestic product and shrink the number of US jobs.¹²⁶ Also, Buy American rules raise government procurement costs by almost \$100 billion a year.¹²⁷ A 2024 study found that there is “scant evidence of the use of Buy American rules as an effective industrial policy.”¹²⁸

Urban transit illustrates the cost impact of Buy American rules. American cities are paying one-third more for rail cars than European or Asian cities.¹²⁹ The Buy American rules cheat the public because the public gets less transit and other infrastructure for each dollar in taxes they pay. In addition, the rules delay projects because it can be difficult for companies to find inputs with sufficient domestic content.¹³⁰

The delays for IIJA-funded projects do not stem solely from the Buy American rules. The law allocated \$42 billion for broadband investment in the Broadband Equity, Access, and Deployment (BEAD) Program, yet as of September 2024, “not one person has been connected to the Internet with those dollars—not one home, not one business,” noted Brendan Carr, a member of the Federal Communications Commission. He blamed Biden administration bureaucracy related to the “climate change agenda, DEI requirements, technology biases, price controls, preferences for government-run networks, and

rules that will undoubtedly lead to wasteful overbuilding.” Furthermore, he said, “Too much regulation from Washington is needlessly driving up the cost of building broadband. That is why you are seeing so many of the Internet providers that would ordinarily participate in a program like BEAD sounding the alarm and saying that the red tape is simply too much to cut through.”¹³¹

The situation is similar for EV charging station subsidies under the IRA. The *Washington Post* reported in March 2024, “Biden’s \$7.5 billion investment in EV charging has only produced 7 stations in two years.”¹³² The story pointed to the slow federal bureaucracy and slow local permitting processes. Diversity and equity requirements are also causing delays. The government requires, for example, that grantees must “demonstrate how meaningful public involvement, inclusive of disadvantaged communities, will occur throughout a project’s life cycle.”¹³³ In addition, “the beneficiaries of 40 percent of all federal climate and environmental programs should come from ‘underserved communities.’”¹³⁴

The CHIPS Act was loaded with regulations that raise costs and cause delays.¹³⁵ For the first time, semiconductor facilities are covered by the costly Davis–Bacon labor rules.¹³⁶ Companies receiving subsidies must also follow federal rules for diversity, environment, and even employee childcare.¹³⁷ The government says that diversity is “critical to strengthening the US semiconductor ecosystem,” but what is really critical to that industry is speed, and federal rules slow projects down.¹³⁸

The *Wall Street Journal* compared two large semiconductor plants—one in Japan and one in Phoenix, Arizona. Both are being built by Taiwan Semiconductor Manufacturing Company (TSMC). The Japanese plant was completed rapidly, while the Phoenix plant has been delayed. The problem? The federal government “is laying down more conditions that can slow the process, say people involved in the projects. . . . Negotiations between TSMC and the US government over subsidies have dragged on for more than 18 months since the 2022 Chips and Science Act.”¹³⁹ However, an October story noted that while the project was “initially dogged by delays and worker strife,” the quality of the facility’s early output is excellent.¹⁴⁰

The CHIPS Act rules are layered on top of other hurdles to US investment. The TSMC article pointed to US labor union disputes and resistance to bringing in Taiwanese experts

on the Phoenix project. There are similar problems with attracting US investment in battery production, which was subsidized by the IRA. The chairman of the world’s largest EV battery maker, CATL, says that he would not build a battery plant in America because it is “much more expensive and less efficient” than producing in China.¹⁴¹

US policymakers should tackle the root causes of America’s expensive and inefficient production rather than put a subsidy Band-Aid on the problems. They should not only repeal subsidies but should also cut the government’s tax and regulatory burdens on businesses.

6. Subsidies Displace Markets

Federal business subsidies displace markets and duplicate activities that are provided by the private sector. The Department of Agriculture, for example, provides farm businesses with loans, insurance, research, and marketing support, but businesses in most other industries buy those services themselves in the marketplace.

The Department of Energy is handing out billions of dollars in loans to energy companies, battery makers, lithium mining companies, and other businesses. The *Wall Street Journal* says that the loans are for “businesses that are unable to borrow from traditional lenders, often because their technology is seen as too risky or because the terms are onerous.”¹⁴² But that is not a good reason for a government program; equity markets finance risky companies all the time, and venture capital markets finance exceptionally risky companies.

The federal government displaces markets when it runs its own companies. Examples include Amtrak, the US Postal Service, the Tennessee Valley Authority, and the air traffic control system. These activities can be, and should be, privatized and run without subsidies. Federal companies receive a varied assortment of spending subsidies, tax exemptions, monopoly privileges, subsidized borrowing, and other special benefits.

Why privatize? To put these companies on an equal footing with other companies in the economy, and to foster efficiency and innovation. Governments around the world have privatized thousands of companies since the 1980s, and many studies have documented the economic benefits of the reforms.¹⁴³ Privatization also reduces political corruption by separating economic decisions from politics.

The US air traffic control system is run by the Federal Aviation Administration and subsidized by taxpayers. But Canada has shown a better way. It privatized its system in 1996 in the form of a self-funded nonprofit corporation, Nav Canada.¹⁴⁴ The company's revenues come from charges for flying through Canadian airspace and for terminal services at airports, not from subsidies. The Canadian system, more innovative than the stagnant government-run system in the United States, is regarded as one of the best in the world.

Congress should stop subsidizing business services such as loans that can be provided in the marketplace. And Congress should privatize business activities such as air traffic control that can be operated in the marketplace and supported by customer revenues.

7. Subsidies Spawn Overkill

The growth in federal subsidies for energy, semiconductors, broadband, and other industries in recent years has paralleled the growth in state business subsidies, often called incentives. By one count, there are 2,420 state business incentive programs, more than double the number in 2000.¹⁴⁵

The federal government often subsidizes the same industries that the states do. An Intel semiconductor plant in Ohio is receiving an \$8.5 billion federal grant, an \$11 billion federal loan, and a 25 percent federal income tax credit.¹⁴⁶ In addition, the State of Ohio is giving Intel a \$600 million grant, \$691 million in infrastructure improvements, \$150 million in economic development aid, and \$650 million over 30 years in income tax breaks. The local government where the new facility is located is providing a 30-year property tax abatement on Intel's buildings.

That is a huge overkill on subsidies. Most businesses in Ohio do not receive subsidies and pay the full load of taxes. To avoid such overkill, the federal government should end its business subsidies. State business subsidies are also bad policy, but at least state policymakers must make trade-offs because they are required to balance their annual budgets. By contrast, the federal urge to subsidize is unconstrained because federal borrowing seems limitless to policymakers.

In agriculture, the federal government showers farm businesses with subsidies for insurance, research, marketing, and other activities. State governments also subsidize farm businesses with loans, research aid,

marketing aid, income tax credits, and property tax breaks. Virginia aids wineries, Wisconsin aids cheese producers, Vermont aids maple syrup producers, and so on.

In broadband, the federal government spent more than \$100 billion on subsidies between 1996 and 2020, and then the infrastructure bill of 2021 added another \$65 billion.¹⁴⁷ In 2022, the GAO reported, "federal broadband efforts are fragmented and overlapping, with more than 100 programs administered by 15 agencies."¹⁴⁸ One hundred programs!

Renewable energy businesses receive subsidies at both the federal and state levels. The federal government began subsidizing renewables in 1972 and launched tax credits for renewables in 1978.¹⁴⁹ Federal aid has flowed ever since, including grants, loans, and research spending, as well as tax breaks for investment, production, and purchases.

State governments have their own grants, loans, and tax credits for renewables. In addition, about 30 states have imposed "renewable portfolio standards," which are mandates on utilities to increase purchases of renewables.¹⁵⁰ Some utilities use feed-in tariffs to pay solar, wind, and other renewables companies artificially high rates for generation. A 2016 analysis found that among 30 renewable energy projects that received federal loans, 21 also had guaranteed revenues from utilities.¹⁵¹

During the Obama administration, the *New York Times* described the plethora of renewable energy programs as a "banquet of government subsidies" and wondered whether governments "went too far in their support of solar and wind power projects, some of which would have been built anyway, according to the companies involved."¹⁵² The *Times* stressed the overkill of subsidies:

The government support—which includes loan guarantees, cash grants, and contracts that require electric customers to pay higher rates—largely eliminated the risk to the private investors and almost guaranteed them large profits for years to come. The beneficiaries include financial firms like Goldman Sachs and Morgan Stanley, conglomerates like General Electric, utilities like Exelon and NRG—even Google.¹⁵³

Today's subsidies for renewables are even larger than during Obama's tenure, and the big corporate owners of renewable energy projects continue to gain at taxpayer expense. The

federal government has been subsidizing renewable energy businesses for five decades, broadband businesses for more than two decades, and farm businesses for almost a century. It's time for change as the government cannot afford such giveaways anymore.

8. Subsidies Expand Bureaucracy

The regulations for corporate welfare programs are complex, and they require public- and private-sector bureaucracies to administer. These bureaucracies of lawyers and accountants are an overhead cost of corporate welfare.

To get a sense of the bureaucracy, consider the complexity of the energy tax breaks in the IRA. The IRA statute (Pub. L. No. 117-169) was 270 pages of text and more than 100,000 words in length, but that is merely the tip of the iceberg. To flesh out the law, the US Treasury has published dozens of regulations, procedures, notices, and other rules for the breaks. Here is a sampling:

- Treasury Directive 9998 provides rules for the wage and apprenticeship requirements for the IRA tax credits. It is 99,000 words long.
- Treasury Directive 9993 provides rules for transferring IRA tax credits to other businesses. It is 53,000 words long.
- Treasury Directive 10010 provides rules for the Advanced Manufacturing Production Credit. It is 52,000 words long.
- Regulation 117631-23 provides rules for the clean hydrogen production tax credit. It is 39,000 words long.
- Revenue Procedure 2024-26 provides the reporting rules for businesses claiming the clean vehicle credit. It is 5,800 words long.
- Notice 2024-49 provides the registration requirements for the clean fuel production credit. It is 5,700 words long.

Specifying who qualifies for billions of dollars in business subsidies is not a simple task. The IRA requires an army of high-paid workers to decipher and exploit thousands of pages of rules. In turn, the rules will generate disputes between businesses and the government, which will generate layers of court-created rules on top.

In addition, the private sector has created legal structures to help exploit the energy tax breaks. “Tax equity partnerships” spread the risks and profits of the energy tax breaks, and there are new structures to facilitate the trading of tax credits. The trades will total about \$20 billion this year and rising amounts thereafter.¹⁵⁴ Wall Street has created mechanisms to facilitate these trades, such as forward commitment deals to buy tax credits in the future and bridge loans against those commitments.

Yet another layer of bureaucracy is “tax credit insurance.” Lawyers have disassembled tax credit deals into discrete pieces and then created insurance products to cover each of the risks. For example, companies can buy insurance against the Internal Revenue Service (IRS) disallowing their use of IRA credits, and also against technical risks, such as a carbon sequester project not working as planned.¹⁵⁵

The IRA has created a gold rush in the legal industry. Bloomberg reported, “Large law firms have experienced a boom in renewable energy work,” with experienced attorneys at big firms earning at least \$300,000 a year.¹⁵⁶ Bloomberg described the current climate:

Big Law is a follow-the-money business. And there is a flood of cash flowing into solar power. . . . Demand for solar and other renewable projects has spiked so dramatically since the 2022 passage of the Inflation Reduction Act, which piled subsidies into the market, that many law firms feel they can't keep up with all the work.

“We just don't have enough lawyers to do it all,” said Eli Katz, global vice chair of the energy and infrastructure industry group at Latham & Watkins. More than 650 lawyers at the firm globally, including around 400 in the US, work on the energy transition and routinely bill above 100% of productivity targets. The group's headcount has grown at least fivefold in roughly the past decade, Katz said.

Firms that haven't developed strong energy transition practices are poaching lawyers from other firms “pretty ruthlessly,” said Anna Kimbrell, who leads Husch Blackwell's Energy & Natural Resources team. “It is very niche, very boutique, and it commands very high rates,” Kimbrell said. “So every law firm wants a renewable energy group even if they don't have one.” . . .

“Trying to figure out all of the legal rights, from a regulatory, real estate, corporate structuring, and finance perspective, is a lot of work,” said Kimbrell, who is part of a roughly 90-lawyer team that spends 95% of its time on renewable projects. “You can’t come into the industry as a lawyer and fake it.” . . .

One main driver of bespoke legal work is the ability to transfer tax credits generated from solar power, a new concept introduced by the Inflation Reduction Act. That has led to an “explosion” of interest from large corporate clients, either interested in building their own solar capabilities or engaging in the tax credit market.¹⁵⁷

The IRS estimated that it will spend more than \$4 billion administering the IRA breaks over the first 10 years.¹⁵⁸ But those costs will be outweighed by the private-sector costs for tax filing, trading, planning, and manipulating the IRA tax breaks. These costs are all burdens on the economy that should be counted against any benefits the subsidies may provide.

9. Subsidies Attract Fraud and Abuse

All subsidy programs suffer from fraud and abuse, and business subsidy programs are no exception. Farm subsidies are a good example. At least \$800 million of the farm subsidies passed during President Trump’s trade battle with China were claimed improperly.¹⁵⁹ Regular farm subsidies are also rife with abuse. For example, the “prevented planting” program, which aids farm businesses when they can’t plant certain fields, suffers large-scale cheating because farmer loss claims are difficult to verify.¹⁶⁰

During the COVID-19 pandemic, governments forced businesses to close, but then the federal government showered them with subsidies that became targets for criminals. The Employee Retention Tax Credit (ERTC) gave businesses up to \$26,000 per employee to retain their workforce during the pandemic. The credit was refundable, which allowed businesses to get cash payouts from the IRS.

The program triggered a rush of false claims. In one scam, a California prison inmate and friends submitted hundreds of false claims for the ERTC and received \$550 million in payouts from the IRS.¹⁶¹ After examining \$86 billion of the

credits, the IRS found that between 10 and 20 percent were in the “highest-risk group, which show clear signs of being erroneous claims,” and that between 60 and 70 percent of the claims showed “an unacceptable level of risk.”¹⁶² This suggests that tens of billions of dollars in ERTC subsidies were stolen.

Meanwhile, the Small Business Administration (SBA) handed out \$1.2 trillion in Economic Injury Disaster Loans (EIDLs) and Paycheck Protection Program (PPP) loans to businesses during the pandemic. The programs had easy online applications and little monitoring, and they suffered from massive abuse. Billions of dollars were stolen—by businesses breaking the rules and by criminals making claims for fake businesses.

The SBA Inspector General found that about \$200 billion appears to have been stolen, including \$136 billion from the EIDL and \$64 billion from the PPP. The IG found that the “agency weakened or removed the controls necessary to prevent fraudsters from easily gaining access to these programs,” and estimated that “at least 17 percent of all COVID-19 EIDL and PPP funds were disbursed to potentially fraudulent actors.”¹⁶³

The *Miami Herald* reported that the PPP “attracted hordes of thieves,” and that is often the case with subsidy programs.¹⁶⁴ The improper payment rates in the Medicaid, Supplemental Security Income, unemployment insurance, and food stamp programs are about 10 percent or more, while the improper payment rates in the premium assistance tax credit and earned income tax credit programs are more than 20 percent.¹⁶⁵

In sum, a downside to all federal subsidy programs is that a substantial share of the benefits are lost through error, fraud, and abuse. This problem persists year after year despite politicians claiming they are going to crack down. Economist Milton Friedman said, “Nobody spends somebody else’s money as carefully as he spends his own,” and that is certainly true of Congress.¹⁶⁶

10. Subsidies Are Unfair

Emblazoned on the US Supreme Court’s façade is the promise of “equal justice under law.” But with corporate welfare, Congress picks winner and loser companies, industries, and communities. Corporate welfare violates a bedrock promise of American justice.

Subsidies to some businesses disadvantage other businesses that make similar products. They also disadvantage businesses that source inputs in the same markets. For example, when a big company receives subsidies to boost hiring, it puts upward wage pressure on other nearby businesses.

In some cases, subsidies for one industry hurt businesses in other industries. For example, the US Export-Import Bank has subsidized the purchase of US jets by foreign airlines, but that has given the foreign airlines an unfair advantage over US airlines.¹⁶⁷ Another example is that intercity bus companies were put at a disadvantage by the subsidies to the passenger rail and aviation industries in the pandemic relief laws of 2020 and the infrastructure law of 2021.

Subsidies often help big companies over small ones. Subsidies for farm businesses are a good example: About 60 percent of subsidies from the three largest farm programs go to the largest 10 percent of farm businesses.¹⁶⁸ The largest farms gain more subsidies per acre than smaller farms.¹⁶⁹

The unfairness of federal subsidies is often compounded by the layering of state subsidies. The Intel semiconductor project in Ohio garnered billions of dollars in federal, state, and local subsidies, as noted.¹⁷⁰ Intel received a local property tax exemption, for example, but most manufacturing, retail, and other companies owning property must pay property taxes.

Another dimension of unfairness is geographic. Congress is increasingly choosing some neighborhoods over others across the country when handing out business subsidies and tax breaks. The federal government is balkanizing the nation.

For example, the Republican Tax Cuts and Jobs Act of 2017 created 8,700 “opportunity zones” within which investors receive capital gains tax breaks. The law has turned American cities and towns into patchworks of winner and loser zones. Opportunity zones are supposed to reduce poverty, but the main beneficiaries are the businesses that own development sites within the favored zones.¹⁷¹

The Democrats adopted a similar divisive idea in the IRA with “energy communities.” The IRA provided a tax credit bonus for projects in areas that fit certain criteria regarding unemployment rates and industry structure.¹⁷² A national map of energy communities shows a jigsaw puzzle with just under half the country in the politically favored areas.¹⁷³

A final dimension of unfairness arises when other countries respond to US business subsidies with subsidies for their own companies. The flood of global subsidies makes it harder for unsubsidized companies to compete. Further harm is done when other governments respond to Buy American rules with their own domestic content rules that freeze out US exporters from foreign markets.

The US CHIPS Act prodded governments in Europe and Asia to spend billions of dollars on their own semiconductor subsidies.¹⁷⁴ And the IRA prompted the European Union to launch its own “Green Deal Industrial Plan” with protections for European businesses and about half a trillion dollars in subsidies.¹⁷⁵ The *Financial Times* observed:

Ever since the Biden administration passed the Inflation Reduction Act and the Chips and Science Act for clean energy and tech last year, there has been a mutinous mood among some American allies in both Europe and Asia at the scale of the new subsidies . . . yet as the dust has settled in recent months, the reaction has shifted from anger to a search for ways to catch up. The EU, Japan, and South Korea have all introduced subsidies for their tech and clean energy sectors, in order to attract new investment or prevent more companies from shifting to the US.¹⁷⁶

Unfortunately, Biden’s business subsidies fueled a global subsidy arms race. US businesses seeking foreign export markets are the losers, and so are taxpayers everywhere.

11. Subsidies Breed Corruption

Corporate welfare creates ties between the government and business leaders—ties that are often the source of corruption scandals. Politicians and agency officials hand out subsidies to businesses in return for campaign support and other benefits. For example, politicians and officials know that steering money to industries will open the door for lucrative post-government careers.

Business subsidies have long spawned corruption, and the corruption has been bipartisan, as the following examples illustrate.

President Ronald Reagan’s Department of Housing and Urban Development (HUD) overflowed with corruption in the

1980s under Secretary Sam Pierce.¹⁷⁷ Pierce routinely dished out grants, loans, and other sorts of subsidies to friends and personal business associates. HUD handed out subsidies to mortgage lenders, developers, and other businesses, with Republican Party contributors as frequent beneficiaries.

President Bill Clinton's commerce secretary, Ron Brown, used federal business subsidies as a fundraising tool for the Democratic Party in the 1990s. Corporate executives who supported the administration were given access to export promotion trips and loans from the federal Overseas Private Investment Corporation.¹⁷⁸ US District Judge Royce Lamberth found that Commerce officials concealed and destroyed documents relating to the scandal, and he compared the officials to "con artists."¹⁷⁹

Top officials in the Clinton and George W. Bush administrations had close ties with Enron Corporation, helping the company gain more than \$4 billion in subsidies from the Export-Import Bank, the Overseas Private Investment Corporation, the US Trade and Development Agency, the US Maritime Administration, the Commerce Department, and the World Bank.¹⁸⁰ Federal officials went to great lengths, for example, to aid Enron on a failed power plant deal in India. The *Washington Post* reported, "President Bush's National Security Council led a 'working group' with officials from various cabinet agencies to resolve Enron's troubles over [the Indian] power plant venture."¹⁸¹ Enron CEO Ken Lay was one of George W. Bush's largest campaign donors.¹⁸²

President Barack Obama directed billions of dollars in green energy subsidies to politically favored businesses. The *Washington Post* found that "Obama's green-technology program was infused with politics at every level," and reported that "\$3.9 billion in federal [energy] grants and financing flowed to 21 companies backed by firms with connections to five Obama administration staffers and advisers."¹⁸³

The Obama White House pressured the Department of Energy to approve the \$535 million loan to Solyndra in 2009.¹⁸⁴ A major Democratic fundraiser and frequent visitor to the White House held a one-third stake in Solyndra. The *Washington Post* noted that the "main players in the Solyndra saga were interconnected in many ways, as investors enjoyed access to the White House and the Energy Department."¹⁸⁵ The *New York Times* found that the company

"spent nearly \$1.8 million on Washington lobbyists, employing six firms with ties to members of Congress and officials of the Obama White House."¹⁸⁶

President Joe Biden's business subsidy programs were also tainted with cronyism. Here is a report from the Associated Press in June 2024:

[When the IRA passed,] one of the largest players in the solar industry was ready. Officials, board members, and major investors in First Solar, the largest domestic maker of solar panels, donated at least \$1.5 million to Biden's successful 2020 bid for the White House. After he won, the company spent \$2.8 million more lobbying his administration and Congress, records show—an effort that included high-level meetings with top administration officials. . . .

First Solar became perhaps the biggest beneficiary from \$1 trillion in environmental spending enacted under the Inflation Reduction Act, which Biden signed into law in 2022 after it cleared Congress solely with Democratic votes. Since then, First Solar's stock price has doubled and its profits have soared thanks to new federal subsidies that could be worth up to \$10 billion over a decade. The success has delivered a massive windfall to a small group of Democratic donors who invested heavily in the company. . . .

First Solar offers an example of how that legislation, shaped by lobbyists and potentially influenced by a flood of campaign cash, can yield mammoth returns to the well-connected. . . .

Company officials cultivated a constituency with Democrats during President Barack Obama's administration, which in turn subsidized them through billions of dollars in government-backed loans. When the Biden administration started writing rules to implement the Democrats' new law, First Solar executives and lobbyists met at least four times in late 2022 and 2023 with administration officials, including John Podesta, who oversaw the measure's environmental provisions. . . .

The company will benefit from billions of dollars in lucrative tax credits for domestic clean energy manufacturers. . . . Last December, First Solar agreed to sell roughly \$650 million of these credits to a

tech company—providing a massive influx of cash, courtesy of the US government. . . .

Farhad “Fred” Ebrahimi was added to Forbes billionaires list in 2023 thanks to the skyrocketing value of his roughly 5% stake in First Solar, financial disclosures show. Ebrahimi, along with his wife and family, contributed at least \$1 million to Biden’s election effort, according to campaign finance disclosures.¹⁸⁷

Businesses have a right to lobby the federal government. But when Congress enacts business subsidies, it fuels the flames of corruption. As such, “attempts to limit the influence of big money in politics or to curb the power of lobbyists will fail as long as Congress keeps up the practice of handing out billions of dollars” in corporate welfare, noted corruption expert Tim Carney.¹⁸⁸

Cross-country studies confirm that governments that intervene more in economies with business subsidies and protections tend to be more corrupt.¹⁸⁹ Even if some business subsidy programs do make sense in theory, the practical reality is that they get manipulated by politically connected businesses taking undue advantage.

12. Subsidies Generate Distrust

Corporate welfare is not just about economics, but also about trust in government. President Andrew Jackson expressed the moral problem of corporate welfare in vetoing the Maysville Road bill in 1830. Roads at the time were generally funded privately or locally, not federally. Jackson said he vetoed funding because it would “shift upon the government the losses of unsuccessful private speculation,” which would “sap the foundations of public virtue and taint the administration of the government with a demoralizing influence.”¹⁹⁰

Today, many Americans feel demoralized by the government handing out corporate welfare. In a recent interview, former Republican President George W. Bush discussed how federal bailouts of Wall Street in 2008 helped stimulate the rise in political populism: “You wonder why populism is on the rise. It starts with taking taxpayers’ money and giving it to the powerful.”¹⁹¹

Democratic Sen. Bernie Sanders (D-VT) would likely agree.

During the debate over the CHIPS Act in 2022, Sanders noted with disgust that the proposed semiconductor subsidies would go to profitable corporations with high-paid CEOs.¹⁹² No wonder, he said, that Congress had such dismal approval ratings in polls.

Indeed, polls show low public approval levels for both Congress and big business. A recent Gallup poll found that just 9 percent of Americans have “a great deal” or “quite a lot” of confidence in Congress, and just 16 percent do so in big business.¹⁹³

A Partnership for Public Service poll in 2024 found that the share of Americans who “do not trust” the federal government is 63 percent, compared to only 23 percent who trust it. The poll found that people view the federal government as “corrupt” (74 percent), “wasteful” (85 percent), and “incompetent” (66 percent).¹⁹⁴

Corporate welfare spending fuels these negative views of government and big business. A 2024 Rasmussen poll found that 64 percent of likely US voters favor ending “corporate welfare” and not giving “handouts to businesses,” and only 20 percent disagreed.¹⁹⁵

How can the government and big business regain the trust of the American people? By Congress ending corporate welfare and opening markets to allow competition on a level playing field in every industry.

COSTS AND BENEFITS OF SUBSIDIES

The funding of business subsidies imposes a burden on taxpayers, and the spending itself suffers from many inefficiencies, as discussed. The result is a “leaky bucket,” as described by former Council of Economic Advisers Chair Michael Boskin:¹⁹⁶

The cost to the economy of each additional tax dollar is about \$1.40 to \$1.50. Now that tax dollar . . . is put into a bucket. Some of it leaks out in overhead, waste, and so on. In a well-managed program, the government may spend 80 or 90 cents of that dollar on achieving its goals. Inefficient programs would be much lower, \$.30 or \$.40 on the dollar.¹⁹⁷

Thus, the taxes to fund a program might cost the private economy \$1.50, and the program might produce benefits

of \$0.50. That creates a cost-benefit ratio of about 3-to-1. Economics professor Edgar Browning came to similar conclusions in his book on the economics of government, *Stealing from Each Other*. Looking at the effects of federal taxing and spending, he estimated that “it costs taxpayers \$3 to provide a benefit worth \$1 to recipients.”¹⁹⁸

Figure 1 illustrates a hypothetical business subsidy program. Extracting taxes to fund the \$100 million program costs the private economy \$150 million. The government bureaucracy consumes \$10 million, and then the \$90 million in subsidies creates net benefits of just \$50 million. What happens to the other \$40 million? Perhaps \$5 million is lost on private-sector paperwork, \$10 million is lost in fraud and errors, \$10 million is lost in costly regulations, and \$15 million is lost from political misallocations. Since the program costs three times more than the benefits, it should be repealed.

New York State spent \$959 million to build a massive solar panel manufacturing plant for Tesla in Buffalo. They misjudged the demand for the panels, and since 2015 the plant has been only partly filled. The project is a boondoggle. The *Wall Street Journal* reported, “A state comptroller’s audit found just 54 cents of economic benefit for every subsidy dollar spent on the factory.”¹⁹⁹ That 54 cents of benefits combined with the tax damage from funding the plant results in a cost-benefit ratio of about 3-to-1.

We do not know exactly how leaky the bucket is for each federal program, but we do know that the overall bucket gets leakier as the government grows larger.²⁰⁰ One reason is that deadweight losses from taxation rise more than proportionally as tax rates rise. A second reason is that the marginal value of spending declines as the government grows larger. A third reason is that as the government grows larger, policymakers have less time to oversee programs and prune the least efficient ones. Given that government spending in the United States already consumes more than one-third of gross domestic product, new programs are likely to cost far more than the benefits created.

CONCLUSION

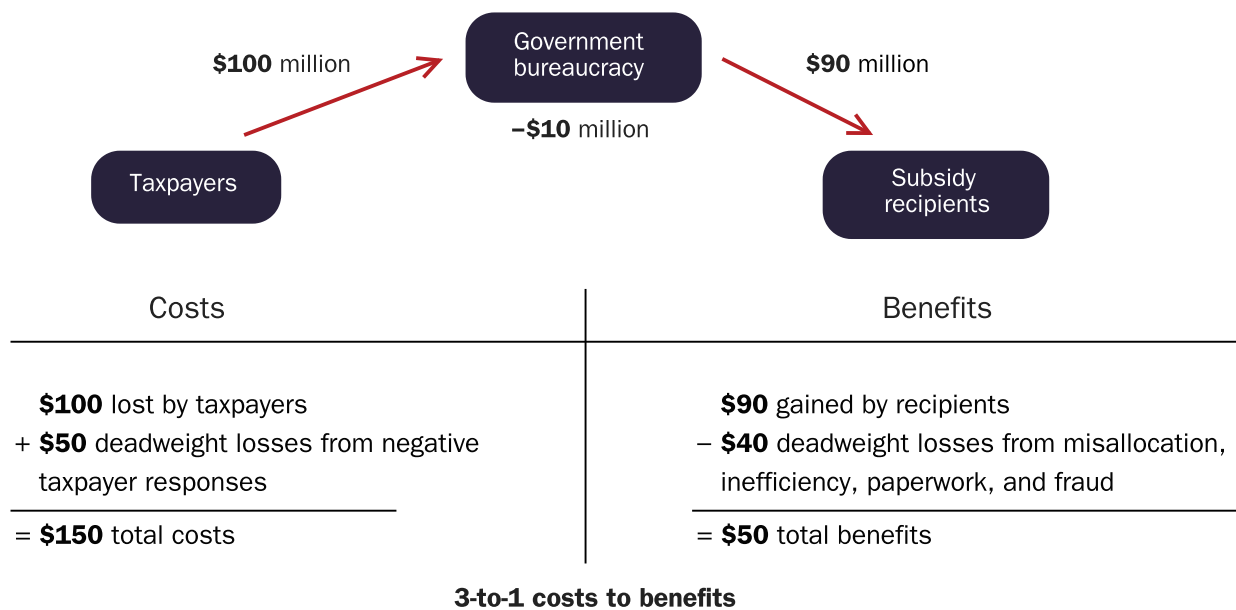
Congress has been handing out business subsidies since the founding of the nation, but the size and scope of subsidies has grown sharply in recent years. The federal budget includes \$181 billion of annual corporate welfare spending. It also includes billions of dollars of special-interest tax breaks for businesses. These subsidies should be repealed to boost economic growth and reduce federal budget deficits.

Business subsidies create near-term benefits for the recipients. But those benefits are generally outweighed by the costs of taxation and the costs of spending misallocations,

Figure 1

Costs and benefits of business subsidies

A hypothetical \$100 million program



inefficiencies, bureaucracy, and fraud. Businesses in markets make mistakes and are forced to change direction, but government mistakes tend to get entrenched and become a permanent drag on the economy. As such, it is important not to launch new business subsidy programs.

Some policymakers think business subsidies are needed to win a global race in industries such as renewable energy and semiconductors, but subsidies can never win anything permanently because technologies and markets are always changing. The only way for America to stay at the leading edge is to create the best environment for investment and entrepreneurial start-ups in all industries by minimizing taxes and regulations.²⁰¹

Other policymakers think business subsidies are needed where markets seem to fail, such as in tackling climate change. But programs are usually twisted by politics, and they create collateral damage that offsets the benefits. The IRA's energy subsidies produce a range of negative environmental effects, and the regulations attached to the subsidies raise costs and cause investment delays.

For climate change, a better approach than new subsidies would be to repeal existing subsidies that induce bad environmental choices, and also to repeal taxes and

regulations that hinder innovation. In competitive markets, businesses innovate to reduce costs and minimize resource use, which benefits the environment.

Corporate welfare erodes trust in the government and the business sector. It is seen as unfair, and it creates corrupting ties between politicians and business leaders. The government should referee the economy in a neutral manner, not intervene to create winners and losers.

Repealing corporate welfare will be a challenge. One reform would be for the incoming administration to publish a detailed cross-agency listing of all subsidies and amounts received by each company. Another reform would be for an expert congressional agency to publish cost-benefit estimates—including collateral damage—of proposed subsidy programs before Congress votes on them. The more information the general public has, the better it can push back against the special interests that currently dominate policymaking in Washington.

Rising federal deficits should make spending cuts a high priority for the new president and Congress. Policymakers should start by cutting corporate welfare, which undermines economic growth and runs counter to the American ideal of equality under the law.

NOTES

1. "The Tea Act: The Catalyst of the Boston Tea Party," Boston Tea Party Ships and Museum.

2. James T. Bennett, *Corporate Welfare: Crony Capitalism That Enriches the Rich*, foreword by Ralph Nader (Transaction Publishers, 2015), p. 22.

3. This was the Society for Establishing Useful Manufactures, which harnessed the power of the Passaic Falls. The project was given monopoly power and exempted from New Jersey taxes but did not receive federal support. See Russell Roberts, "The Society for Establishing Useful Manufactures," in *Financial History* 65, no. 1 (1999); and "The Society for Establishing Useful Manufactures (S.U.M.)," original records, Passaic County Historical Society.

4. Patrick Newman, *Cronyism: Liberty Versus Power in Early America, 1607–1849* (Ludwig von Mises Institute, 2021).

5. I am generally following Burton W. Folsom Jr. and Anita Folsom, *Uncle Sam Can't Count: A History of Failed Government Investments, from Beaver Pelts to Green Energy* (Broadside

Books, 2014), chap. 1.

6. I am generally following Burton W. Folsom Jr. and Anita Folsom, *Uncle Sam Can't Count: A History of Failed Government Investments, from Beaver Pelts to Green Energy* (Broadside Books, 2014), chap. 3.

7. This was the Bonus Bill, vetoed by Madison on his last day in office.

8. I am generally following Burton W. Folsom Jr. and Anita Folsom, *Uncle Sam Can't Count: A History of Failed Government Investments, from Beaver Pelts to Green Energy* (Broadside Books, 2014), chap. 4.

9. I am generally following Burton W. Folsom Jr. and Anita Folsom, *Uncle Sam Can't Count: A History of Failed Government Investments, from Beaver Pelts to Green Energy* (Broadside Books, 2014), chap. 2.

10. Chris Edwards, "Cutting Federal Farm Subsidies," Cato Institute Briefing Paper no. 162, August 31, 2023.

11. Burton W. Folsom Jr. and Anita Folsom, *Uncle Sam Can't Count: A History of Failed Government Investments, from Beaver Pelts to Green Energy* (Broadside Books, 2014), pp. 143, 144.
12. Burton W. Folsom Jr. and Anita Folsom, *Uncle Sam Can't Count: A History of Failed Government Investments, from Beaver Pelts to Green Energy* (Broadside Books, 2014), p. 150.
13. Chris Edwards, "Energy Subsidies," Downsizing the Federal Government, Cato Institute, December 15, 2016.
14. Hiroko Tabuchi, "New Honda Takes on the Prius," *New York Times*, March 20, 2009.
15. Chris Edwards, "Energy Subsidies," Downsizing the Federal Government, Cato Institute, December 15, 2016.
16. Bill Canis and Brent D. Yacobucci, "The Advanced Technology Vehicles Manufacturing (ATVM) Loan Program: Status and Issues," Congressional Research Service, January 15, 2015.
17. Aamer Madhani, "GOP, White House Clash over Loan to Troubled Car Maker," *USA Today*, April 24, 2013.
18. Matthew Daly, "Government Loses \$139M on Loan to Electric Car Maker," NBC News, November 22, 2013.
19. "Troubled Asset Relief Program: Lifetime Cost," GAO-24-107033, Government Accountability Office, December 2023.
20. Carol D. Leonnig and Joe Stephens, "White House Officials Were Warned About Solyndra's Prospects," *Washington Post*, October 3, 2011.
21. Chris Edwards, "Crescent Dunes: Another Green Flop," *Cato at Liberty* (blog), Cato Institute, January 7, 2020.
22. Karoun Demirjian, "Reid: Solar Thermal Project near Tonopah to Create More than 500 New Jobs in Nevada," *Las Vegas Sun*, December 20, 2010.
23. Chris Martin and Nic Querolo, "A \$1 Billion Solar Plant Was Obsolete Before It Ever Went Online," Bloomberg, January 6, 2020.
24. Chris Clarke, "Ivanpah Solar Plant Owners Want to Burn a Lot More Natural Gas," PBS SoCal, March 27, 2014. See also Cassandra Sweet, "Ivanpah Solar Plant May Be Forced to Shut Down," *Wall Street Journal*, March 16, 2016.
25. Eric Zerkel, "New Solar Power Plants Are Incinerating Birds," Weather Channel, August 18, 2014; and Cassandra Sweet, "High-Tech Solar Projects Fail to Deliver," *Wall Street Journal*, June 12, 2015.
26. Ryan McCrimmon, "'Here's Your Check': Trump's Massive Payouts to Farmers Will Be Hard to Pull Back," *Politico*, July 14, 2020.
27. Steve Morris, "Billions in COVID-19 and Trade Relief for Farmers—How Was It Distributed?," Government Accountability Office, October 4, 2022.
28. "Breaking Down \$3.4 Trillion in COVID Relief," *Bottom Line* (blog), Committee for a Responsible Federal Budget, January 7, 2021.
29. "Transcript of President Joe Biden's State of the Union Address," Associated Press, March 8, 2024.
30. "Transcript of President Joe Biden's State of the Union Address," Associated Press, March 8, 2024.
31. "What's in the Bipartisan Infrastructure Investment and Jobs Act?," *Bottom Line* (blog), Committee for a Responsible Federal Budget, July 29, 2021.
32. This is the Advanced Manufacturing Investment Credit. See Emily G. Blevins et al., "Frequently Asked Questions: CHIPS Act of 2022 Provisions and Implementation," Congressional Research Service, April 25, 2023.
33. Editorial Board, "The Real Cost of the Inflation Reduction Act Subsidies: \$1.2 Trillion," Opinion, *Wall Street Journal*, March 24, 2023.
34. "IRA Energy Provisions Cost Could Double with New Emissions Rule," *Bottom Line* (blog), Committee for a Responsible Federal Budget, February 13, 2024.
35. Chris Edwards, "Tax Expenditures and Tax Reform," Cato Institute Policy Analysis no. 954, July 25, 2023.
36. Chris Edwards, "Biden Hikes Corporate Tax Expenditures 92%," *Cato at Liberty* (blog), Cato Institute, April 1, 2024.
37. Mary Katherine Browne, "Transferability Leads to Big Boon for Clean Energy Tax Credits," *Tax Notes*, August 8, 2024.
38. Jacob Bogage, "USPS Got Billions in Financial Aid, and Now Says It Needs More," *Washington Post*, April 15, 2024.
39. Chris Edwards, "Tax Expenditures and Tax Reform," Cato Institute Policy Analysis no. 954, July 25, 2023.
40. Joe Gould, "Defense Firm's 'Excess Profits' Land in

Congress's Crosshairs," *Defense News*, May 15, 2019.

41. "Raytheon Company to Pay over \$950M in Connection with Defective Pricing, Foreign Bribery, and Export Control Schemes," Office of Public Affairs, US Department of Justice, October 16, 2024.

42. Craig Whitlock, "The Man Who Seduced the 7th Fleet," *Washington Post*, May 27, 2016.

43. George J. Stigler, "The Theory of Economic Regulation," in *Chicago Studies in Political Economy*, ed. George J. Stigler (University of Chicago Press, 1988), p. 209.

44. Timothy P. Carney, *The Big Ripoff: How Big Business and Big Government Steal Your Money* (John Wiley and Sons, 2006).

45. Phillip W. Magness, "The Problem of the Tariff in American Economic History, 1787–1934," Cato Institute, September 26, 2023.

46. John C. Beghin and Amani Elobeid, "Analysis of the US Sugar Program," American Enterprise Institute, November 2017.

47. Mary Amity et al., "New China Tariffs Increase Costs to US Households," *Liberty Street Economics* (blog), Federal Reserve Bank of New York, May 23, 2019.

48. Chris Conover surveyed the literature and reported an average of 50 cents for deadweight losses of increased federal income taxes. Christopher J. Conover, "Congress Should Account for the Excess Burden of Taxation," Cato Institute Policy Analysis no. 669, October 13, 2010. Edgar Browning puts the average of deadweight-loss estimates at 40 cents plus another 10 cents for tax compliance costs. Edgar K. Browning, *Stealing from Each Other: How the Welfare State Robs Americans of Money and Spirit* (Praeger Publishers, 2008), p. 156. The Congressional Budget Office found that "typical estimates of the economic cost of a dollar of tax revenue range from 20 cents to 60 cents over and above the revenue raised." "Budget Options," Congressional Budget Office, February 2001, p. 381.

49. Edgar K. Browning, *Stealing from Each Other: How the Welfare State Robs Americans of Money and Spirit* (Praeger Publishers, 2008), p. 165.

50. James L. Payne, "Budgeting in Neverland: Irrational Policymaking in the US Congress and What Can Be Done About It," Cato Institute Policy Analysis no. 574, July 26, 2006.

51. Author estimate based on various Government Accountability Office reports.

52. Jason Rainbow, "Global Satellite Capacity Prices Tumble in Starlink's Wake," *SpaceNews*, February 12, 2024.

53. Ryan Tracy, "The \$53,000 Connection: The High Cost of High-Speed Internet for Everyone," *Wall Street Journal*, September 5, 2023.

54. Jennifer Hiller and Collin Eaton, "Projects to Capture Carbon Emissions Get New Boost Despite Dismal Record," *Wall Street Journal*, February 7, 2022.

55. Eric Niiler, "Carbon Capture Is Hard. This Plant Shows Why," *Wall Street Journal*, May 12, 2023.

56. Ari Natter, "DOE Suspends \$1 Billion in FutureGen Funds, Killing Carbon Capture Demonstration Project," Bloomberg Law, February 5, 2015.

57. Andrew Reid, "Carbon Capture and Storage: Europe's Climate Gamble," Institute for Energy Economics and Financial Analysis, October 10, 2024.

58. Jennifer Hiller and Collin Eaton, "Projects to Capture Carbon Emissions Get New Boost Despite Dismal Record," *Wall Street Journal*, February 7, 2022.

59. This is the share of coal and natural gas in electricity generation in the United States.

60. Stephen P. Holland et al., "Environmental Benefits from Driving Electric Vehicles?," National Bureau of Economic Research Working Paper no. 21291, June 2015.

61. Jeffrey Miron, "Clean Energy Subsidies vs. a Carbon Tax," *Cato at Liberty* (blog), Cato Institute, January 22, 2024; and Richard York, "Do Alternative Energy Sources Displace Fossil Fuels?," *Nature Climate Change* 2 (2012): 441–43.

62. John Hassler et al., "On the Effectiveness of Climate Policies," MacCaLM, February 24, 2020.

63. Gregory Casey et al., "The Macroeconomics of Clean Energy Subsidies," CESifo Working Paper no. 10828, December 15, 2023.

64. Editorial Board, "The Real Cost of the Inflation Reduction Act Subsidies: \$1.2 Trillion," Opinion, *Wall Street Journal*, March 24, 2023.

65. Annika Stechemesser et al., "Climate Policies That Achieved Major Emission Reductions: Global Evidence from Two Decades," *Science* 385 (2024): 884–92.

66. Annika Stechemesser et al., "Climate Policies That

Achieved Major Emission Reductions: Global Evidence from Two Decades,” *Science* 385 (2024): 884–92.

67. Eric Nisler, “Most Climate Policies Don’t Work. Here’s What Science Says Does Reduce Emissions,” *Wall Street Journal*, August 22, 2024.

68. Randal O’Toole, “Cost Overruns and Ridership Shortfalls,” Antiplanner Policy Brief no. 111, July 27, 2021.

69. Ed Ballard and Amrith Ramkumar, “America’s Ambitious Climate Plan Is Faltering,” *Wall Street Journal*, September 23, 2024.

70. Hannah Ritchie, “How Does the Land Use of Different Electricity Sources Compare?,” Our World in Data, June 16, 2022.

71. Erin X. Wong, “Biden Plan Will Earmark Millions of Acres of Public Land for Solar Development,” *High Country News*, January 29, 2024.

72. Anastasia Hufham, “Feds Want to Open 1/10th of Utah for Solar Energy Development. The State and Environmentalists Aren’t So Sure,” *Salt Lake Tribune*, September 18, 2024; and Stephen Sorace, “BLM’s Western Solar Plan Is ‘Fantasy World,’ Relies Heavily on Taxpayer Dollars: GOP Congressman,” Fox News, October 17, 2024.

73. Oliver Wainwright, “How Solar Farms Took Over the California Desert: ‘An Oasis Has Become a Dead Sea,’” *The Guardian*, May 21, 2023.

74. Atalay Atasu et al., “The Dark Side of Solar Power,” *Harvard Business Review*, June 18, 2021.

75. Bob Woods, “Recycling ‘End-of-Life’ Solar Panels, Wind Turbines, Is About to Be Climate Tech’s Big Waste Business,” CNBC, November 27, 2023.

76. Joseph Negrine, “Unshackling Workers in China’s Solar Supply Chain,” *East Asia Forum*, March 14, 2024.

77. Alki Delichatsios, “The Land Footprint of PV Solar (and Nuclear and Wind Power),” *Medium*, March 4, 2022; and Hannah Ritchie, “How Does the Land Use of Different Electricity Sources Compare?,” Our World in Data, June 16, 2022.

78. Editorial Board, “Schumer’s \$2.4 Trillion Tax Increase,” Opinion, *Wall Street Journal*, July 26, 2023.

79. I have calculated current bird and bat figures based on various past studies adjusted for the growth in wind turbines

in recent years. Joel Merriman, “How Many Birds Are Killed by Wind Turbines?,” *Bird Calls Blog*, American Bird Conservancy, January 26, 2021; K. Shawn Smallwood, “Comparing Bird and Bat Fatality-Rate Estimates Among North American Wind-Energy Projects,” *Wildlife Society Bulletin* 37, no. 1 (March 2013): 19–33; and J. Ryan Zimmerling and Charles M. Francis, “Bat Mortality Due to Wind Turbines in Canada,” *Journal of Wildlife Management* 80, no. 8 (November 2016): 1360–69.

80. “Map: Projected Growth of the Wind Industry from Now Until 2050,” Department of Energy.

81. A review of scientific studies of offshore wind farms found that 72 percent of the findings were of negative environmental effects and 13 percent were of positive effects. Ibon Galparsoro et al., “Reviewing the Ecological Impacts of Offshore Wind Farms,” *npj Ocean Sustainability* 1 (2022): 3–5.

82. Matt Shipman, “Study: Near-Shore Wind Farms Would Have Big Impact on Coastal Tourism,” North Carolina State University, April 4, 2016; and Tom Broekel and Christoph Alfken, “Gone with the Wind? The Impact of Wind Turbines on Tourism Demand,” *Energy Policy* 86 (2015): 506–19.

83. Jennifer Hiller, “A Lot Was Riding on This Wind Farm. Then Giant Shards Washed Up in Nantucket,” *Wall Street Journal*, August 9, 2024.

84. Sana Ameer, “West Texas City Becomes Dumping Ground for Used Wind Turbine Blades,” *Midland Reporter-Telegram*, September 15, 2023.

85. Walker Orenstein, “‘Seriously, This Sucks’: How a Small Minnesota Town Was Left with a Giant Pile of Wind Turbine Blades,” *Minnesota Star Tribune*, August 9, 2024.

86. David Zipper, “EVs Are Sending Toxic Tire Particles into the Water, Soil, and Air,” *The Atlantic*, July 19, 2023; Caroline Brogan, “Prioritise Tackling Toxic Emissions from Tyres, Urge Imperial Experts,” *Imperial News*, Imperial College London, February 23, 2023; and Michael Buschbacher and Taylor Myers, “Electric Cars Emit More Particulate Pollution,” Opinion, *Wall Street Journal*, March 3, 2024.

87. Jake Lingeman, “More Range, More Tires: Electric Vehicle Tire Myths and Truths,” *Newsweek*, April 27, 2023.

88. Jack Simpson and Alex Clark, “Pothole Damage from Electric Cars Is Double That of Petrol, Telegraph Data Show,” *The Telegraph*, June 26, 2023.

89. Aaron Westling, “American Roads Are Not Ready for Massive Electric Vehicles,” State Smart Transportation Initiative, February 12, 2024.

90. Michael Anderson and Maximilian Auffhammer, “Pounds That Kill: The External Costs of Vehicle Weight,” National Bureau of Economic Research Working Paper no. 17170, June 2011.
91. Kris Van Cleave and Analisa Novak, “Electric Vehicles Raise Concerns About Whether Safety Infrastructure Can Handle Their Weight in a Crash,” CBS News, September 18, 2024.
92. Amit Katwala, “The Spiralling Environmental Cost of Our Lithium Battery Addiction,” *Wired*, August 5, 2018; Fred Pearce, “Why the Rush to Mine Lithium Could Dry Up the High Andes,” *Yale Environment 360*, September 19, 2022; and Alan Halaly, “Not Just Nevada—Lithium Is Draining Water Across the World, Study Reveals,” *Las Vegas Review-Journal*, July 27, 2024.
93. Alex Appel et al., “Lithium Liabilities: The Untold Threat to Water in the Rush to Mine American Lithium,” Howard Center for Investigative Journalism at Walter Cronkite School of Journalism and Mass Communication, Arizona State University, January 25, 2024.
94. Scott Sonner, “Energy Department Conditionally Approves \$2.26 Billion Loan for Huge Lithium Mine in Nevada,” Associated Press, March 15, 2024; and Elyse Hauser, “Billions in US Funding Boosts Lithium Mining, Stressing Water Supplies,” Energy News Network, July 18, 2024.
95. Ivan Penn and Eric Lipton, “The Lithium Gold Rush: Inside the Race to Power Electric Vehicles,” *New York Times*, May 6, 2021.
96. Terry Gross, “How ‘Modern-Day Slavery’ in the Congo Powers the Rechargeable Battery Economy,” *Fresh Air*, NPR, February 1, 2023.
97. Ioanna Lykiardopoulou, “75% of Lithium-Ion Battery Supply Chain Linked to Human Rights Abuses,” *Next Web*, September 16, 2024.
98. Bryan Pietsch, “2 Killed in Driverless Tesla Car Crash, Officials Say,” *New York Times*, April 18, 2021; and Steve Goreham, “If Green Energy Is the Future, Bring a Fire Extinguisher,” *Wall Street Journal*, September 25, 2024.
99. “Environmental Impacts of Lithium-Ion Batteries,” Institute for Energy Research, May 11, 2023.
100. Eric Lipton and John M. Broder, “In Rush to Assist a Solar Company, US Missed Signs,” *New York Times*, September 22, 2011.
101. Jennifer Hiller and Collin Eaton, “Projects to Capture Carbon Emissions Get New Boost Despite Dismal Record,” *Wall Street Journal*, February 7, 2022.
102. Amanda M. Grossman et al., “A Saga of Clean-Coal Electric Power: The Multibillion-Dollar Southern Company Fraud,” *Journal of Forensic and Investigative Accounting* 15, no. 1 (January–June 2023): 54–63.
103. Timothy P. Carney, *The Big Ripoff: How Big Business and Big Government Steal Your Money* (John Wiley and Sons, 2006), pp. 212–16.
104. Jim Vallette and Daphne Wysham, “Enron’s Pawns: How Public Institutions Bankrolled Enron’s Globalization Game,” Institute for Policy Studies, March 22, 2002.
105. Lawrence Ulrich, “Hybrid Cars Enjoy a Renaissance as All-Electric Sales Slow,” *New York Times*, January 17, 2024.
106. Editorial Board, “Biden Tosses Rivian a \$6 Billion Lifeline,” Opinion, *Wall Street Journal*, November 28, 2024.
107. Nora Eckert and Nathan Gomes, “Automaker Ford Weakens Profit Outlook amid Price War, Shares Fall,” Reuters, October 28, 2024.
108. “Volvo Adjusts Electric Car Targets Due to Declining Global Demand,” Eulerpool, September 5, 2024.
109. Brie Stimson, “Intel’s Massive Job Cuts Come After It’s Expected to Receive \$8.5 Billion in Taxpayer Money,” Fox Business, August 3, 2024.
110. Brie Stimson, “Intel’s Massive Job Cuts Come After It’s Expected to Receive \$8.5 Billion in Taxpayer Money,” Fox Business, August 3, 2024.
111. Asa Fitch and Annie Linskey, “Intel Gets \$8.5 Billion Award for US Chip-Plant Construction,” *Wall Street Journal*, March 20, 2024; and Editorial Board, “Intel and Industrial Policy in Action,” Opinion, *Wall Street Journal*, April 3, 2024.
112. *The Obama Administration’s Green Energy Gamble: What Have All the Taxpayer Subsidies Achieved?*, Hearing Before the House Committee on Oversight and Government Reform, Subcommittee on Regulatory Affairs, Stimulus Oversight, and Government Spending, 112th Cong., 2nd sess. (May 16, 2012) (statement of Jim Nelson, President and CEO of Solar3D).
113. Mackenzie Hawkins, “With US Chips Act Money Mostly Divvied Up, the Real Test Begins,” Bloomberg, August 9, 2024.
114. Gary Clyde Hufbauer and Euijin Jung, “Scoring 50 Years of US Industrial Policy, 1970–2020,” Peterson Institute for

International Economics Briefing Paper 21-5, November 2021; and Scott Lincicome, “US Steel and the Ubiquitous ‘Market Failure,’” Cato Institute, May 5, 2021.

115. Brie Stimson, “Intel’s Massive Job Cuts Come After It’s Expected to Receive \$8.5 Billion in Taxpayer Money,” Fox Business, August 3, 2024.

116. Christine Mui and Brendan Bordelon, “Biden’s High-Tech Legacy Fraying Even Before Election Day,” *Politico*, November 2, 2024.

117. “Department of Energy Says ‘No’ to Carbon Motors’ Loan Request for Police Car,” Fox News, March 7, 2012; and “Advanced Technology Vehicles Manufacturing Loan Program,” *Wikipedia*, last edited on November 9, 2024, at 22:52 (UTC).

118. Scott Patterson and Amrith Ramkumar, “White House Races to Lend Billions in Climate Funds Before Election,” *Wall Street Journal*, August 31, 2024.

119. James Sherk, “Repealing the Davis–Bacon Act Would Save Taxpayers \$10.9 Billion,” Heritage Foundation, February 14, 2011.

120. This is under the National Environmental Policy Act. “Johnson, Lummis, Stanton, Kelly Introduce Bipartisan, Bicameral Highway Permitting Reform Legislation,” press release, Office of Congressman Dusty Johnson, July 14, 2023.

121. “Length of Environmental Impact Statements (2013–2018),” Council on Environmental Quality, June 12, 2020.

122. Richard F. Weingroff, “Addressing the Quiet Crisis: Origins of the National Environmental Policy Act of 1969,” Highway History, Federal Highway Administration, June 27, 2017.

123. Chris Edwards, “Federal Housing Tax Credit: 2,060 Pages of Brutal Complexity,” *Cato at Liberty* (blog), Cato Institute, March 19, 2024; Chris Edwards and Vanessa Brown Calder, “Low-Income Housing Tax Credit: Costly, Complex, and Corruption-Prone,” Cato Institute Tax and Budget Bulletin no. 79, November 13, 2017; “Federal Housing Assistance: Comparing the Characteristics and Costs of Housing Programs,” Government Accountability Office, January 31, 2002; and Michael D. Eriksen, “The Market Price of Low-Income Housing Tax Credits,” *Journal of Urban Economics* 66, no. 2 (September 2009): 141–49.

124. Judge Glock, “Buy American, Build Nothing,” Opinion, *Wall Street Journal*, March 25, 2024.

125. Scott Lincicome, “Bye, America,” Cato Institute, February 15, 2023.

126. Peter B. Dixon et al., “Macro, Industry and Regional Effects of Buy America(n) Programs: USAGE Simulations,” CoPS Working Paper no. G-271, April 2017; and Scott Lincicome, “Bye, America,” Cato Institute, February 15, 2023.

127. Gary Clyde Hufbauer and Euijin Jung, “The High Taxpayer Cost of ‘Saving’ US Jobs Through ‘Made in America,’” Peterson Institute for International Economics, August 5, 2020.

128. Matilde Bombardini et al., “The Increasing Cost of Buying American,” National Bureau of Economic Research Working Paper no. 32953, September 2024.

129. Philip Rossetti et al., “Buy America Regulations May Raise Cost of Subsidized Infrastructure,” American Action Forum, July 7, 2017; and Alon Levy, “Why Buy America Is Bad Law,” Niskanen Center, June 16, 2021.

130. Colin Grabow, “New Study Finds High Costs and Few Benefits from Protectionist Buy American Act,” *Cato at Liberty* (blog), Cato Institute, September 27, 2024.

131. *A Legacy of Incompetence: Consequences of the Biden-Harris Administration’s Policy Failures, Hearing Before the House Committee on Oversight and Accountability*, 118th Cong., 2nd sess. (September 19, 2024) (statement of Brendan Carr, Commissioner, Federal Communications Commission).

132. Shannon Osaka, “Biden’s \$7.5 Billion Investment in EV Charging Has Only Produced 7 Stations in Two Years,” *Washington Post*, March 29, 2024.

133. Joseph Simonson, “White House ‘Equity’ Requirements Holding Back EV Charging Station Construction, Internal Docs Show,” *Washington Free Beacon*, June 12, 2024.

134. Joseph Simonson, “White House ‘Equity’ Requirements Holding Back EV Charging Station Construction, Internal Docs Show,” *Washington Free Beacon*, June 12, 2024.

135. Matt Cole and Chris Nicholson, “DEI Killed the CHIPS Act,” Opinion, *The Hill*, March 7, 2024.

136. Mackenzie Hawkins, “With US Chips Act Money Mostly Divvied Up, the Real Test Begins,” Bloomberg, August 9, 2024.

137. Mark Feuerborn, “Billions in CHIPS Act Funding Were Supposed to Help Intel in Ohio. Where’s the Money?,” NBC4i.com, September 12, 2024.

138. Matt Cole and Chris Nicholson, “DEI Killed the CHIPS Act,” Opinion, *The Hill*, March 7, 2024.
139. Peter Landers and Yang Jie, “A Tale of Two Chip Plants: Delayed in US, on Time in Japan,” *Wall Street Journal*, March 14, 2024.
140. “TSMC’s Arizona Chip Plant Outperforms Taiwan’s, Boosting US Drive,” Bloomberg, October 25, 2024.
141. Liza Lin and Rachel Liang, “China’s Battery Champion Says Geopolitical Tensions Won’t Derail US Expansion,” *Wall Street Journal*, March 26, 2024. I am quoting the *Journal*’s paraphrasing of his comment.
142. Scott Patterson, “Biden Jump-Starts Electric-Vehicle Push with Massive Lithium Loan,” *Wall Street Journal*, March 14, 2024.
143. Chris Edwards, “Options for Federal Privatization and Reform Lessons from Abroad,” Cato Institute Policy Analysis no. 794, June 28, 2016.
144. Chris Edwards, “Privatizing Air Traffic Control,” Downsizing the Federal Government, Cato Institute, April 8, 2016.
145. State Business Incentives Database, Council for Community and Economic Research; and Sarah Gutschow, “State of State Business Incentives 2015,” Council for Community and Economic Research, November 10, 2015.
146. Mark Williams, “Intel Ohio Investment up to \$28 Billion—Here Are the Tax Breaks the Chip Maker Will Get,” *Columbus Dispatch*, March 22, 2024. The \$8.5 billion federal grant will be shared with Intel’s facilities outside Ohio.
147. The 1996 to 2020 figure is the author’s estimate based on various Government Accountability Office reports.
148. “Broadband: National Strategy Needed to Guide Federal Efforts to Reduce Digital Divide,” Government Accountability Office, May 2022.
149. Gary Clyde Hufbauer and Euijin Jung, “Scoring 50 Years of US Industrial Policy, 1970–2020,” Peterson Institute for International Economics Briefing Paper 21-5, November 2021.
150. “State Renewable Portfolio Standards and Goals,” National Conference of State Legislatures, August 13, 2021.
151. “DOE Loan Programs: Information on Implementation of GAO Recommendations and Program Costs,” in *Department of Energy Oversight: The DOE Loan Guarantee Program, Hearing Before the House Committee on Science, Space, and Technology, Subcommittees on Energy and Oversight*, 114th Cong., 2nd sess. (March 3, 2016) (statement of Frank Rusco, Director, Natural Resources and Environment).
152. Eric Lipton and Clifford Krauss, “A Gold Rush of Subsidies in Clean Energy Search,” *New York Times*, November 11, 2011.
153. Eric Lipton and Clifford Krauss, “A Gold Rush of Subsidies in Clean Energy Search,” *New York Times*, November 11, 2011.
154. “2024 Mid-Year Market Intelligence Report,” Crux Climate, 2024.
155. “2024 Mid-Year Market Intelligence Report,” Crux Climate, 2024.
156. Roy Strom, “‘Mission-Driven’ Firm Eschews Big Oil and Embraces Lower Hours,” Bloomberg Law, July 18, 2024. The article mentions that \$185,000 is 60 percent of what is typically earned, thus \$308,000 is typical.
157. Roy Strom, “Big Law Bulks Up in Race to Harness the Power of the Sun,” Bloomberg Law, June 27, 2024.
158. “Internal Revenue Service Inflation Reduction Act Strategic Operating Plan FY2023–2031,” Internal Revenue Service, April 5, 2023, p. 130.
159. Madison McVan et al., “Secret Subsidies: Program Meant to Help Farmers in Trade War Overspent, Lacked Transparency and Compliance Checks,” *WDAM7*, October 24, 2022.
160. Craig Cox et al., “Boondoggle: ‘Prevented Planting’ Insurance Plows Up Wetlands, Wastes \$Billions,” Environmental Working Group, April 28, 2015.
161. Dan Mangan, “Prison Inmate Led Scheme Swindling US out of \$550 Million in COVID Tax Credits, Feds Say,” CNBC, February 27, 2024.
162. “IRS Enters Next Stage of Employee Retention Credit Work; Review Indicates Vast Majority Show Risk of Being Improper,” Internal Revenue Service, June 20, 2024.
163. “COVID-19 Pandemic EIDL and PPP Loan Fraud Landscape,” US Small Business Administration, Office of Inspector General, June 27, 2023.
164. Jay Weaver, “Lambos. Jewels. How ‘Easy Money’ from Uncle Sam Made Miami a Feast for PPP Fraudsters,” *Miami Herald*, March 26, 2024.

165. “Payment Integrity: Significant Improvements Are Needed to Address Improper Payments and Fraud,” in *Where Do We Go from Here? Examining a Path Forward to Assess Agencies’ Efforts to Prevent Improper Payments and Fraud, Hearing Before the House Committee on Oversight and Accountability, Subcommittee on Government Operations and the Federal Workforce*, 118th Cong., 2nd sess. (September 10, 2024) (statement of Orice Williams Brown, Chief Operating Officer, Government Accountability Office); and “Improper Payments: Information on Agencies’ Fiscal Year 2023 Estimates,” Government Accountability Office, March 26, 2024.
166. Milton Friedman, Interview for *Commanding Heights: The Battle for the World Economy*, PBS, October 1, 2000.
167. Timothy P. Carney, “Who at the Export-Import Bank Warned Boeing About a Delta FOIA?,” American Enterprise Institute, March 23, 2015.
168. Anton Bekkerman et al., “Where the Money Goes: The Distribution of Crop Insurance and Other Farm Subsidy Payments,” American Enterprise Institute, January 9, 2018.
169. Anton Bekkerman et al., “Where the Money Goes: The Distribution of Crop Insurance and Other Farm Subsidy Payments,” American Enterprise Institute, January 9, 2018.
170. Billy Hamilton, “The ‘Silicon Heartland’,” *Tax Notes State*, August 19, 2024.
171. Chris Edwards, “Opportunity Zones Enrich Lucky Landowners,” *Cato at Liberty* (blog), Cato Institute, November 9, 2018.
172. “Energy Community Tax Credit Bonus,” Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization.
173. Daniel Raimi and Sophie Pesek, “What Is an ‘Energy Community’? Alternative Approaches for Geographically Targeted Energy Policy,” *Resources for the Future*, November 1, 2022.
174. Scott Lincicome, “A Reality Check on US Industrial Policy and the Manufacturing ‘Boom’,” *Cato at Liberty* (blog), Cato Institute, June 14, 2024.
175. Veronika Grimm et al., “The Inflation Reduction Act: Is the New US Industrial Policy a Threat to Europe?,” German Council of Economic Experts, July 2023, p. 2.
176. Guy Chazan et al., “A Global Subsidy War? Keeping Up with the Americans,” *Financial Times*, July 13, 2023.
177. Tad DeHaven, “HUD Scandals,” Downsizing the Federal Government, Cato Institute, June 1, 2009.
178. For example, see Bob Hohler, “Trade-Trip Firms Netted \$5.5b in Aid; Donated \$2.3m to Democrats,” *Boston Globe*, March 30, 1997.
179. Bill Miller, “Judge Assails Shredding in Commerce Case,” *Washington Post*, December 22, 1998; and Neil A. Lewis, “After Judge’s Rebuke, Commerce Secretary Widens Inquiry into Mishandling of Papers,” *New York Times*, January 3, 1999.
180. Jim Vallette and Daphne Wysham, “Enron’s Pawns: How Public Institutions Bankrolled Enron’s Globalization Game,” Institute for Policy Studies, March 22, 2002, p. 4; and Timothy P. Carney, *The Big Ripoff: How Big Business and Big Government Steal Your Money* (John Wiley and Sons, 2006).
181. Dana Milbank and Paul Blustein, “White House Aided Enron in Dispute,” *Washington Post*, January 20, 2002.
182. Richard A. Opiel Jr. and Don van Natta Jr., “Enron’s Collapse: The Relationships; Bush and Democrats Disputing Ties to Enron,” *New York Times*, January 12, 2002.
183. Joe Stephens and Carol D. Leonnig, “Solyndra: Politics Infused Obama Energy Programs,” *Washington Post*, December 25, 2011; and Carol D. Leonnig and Joe Stephens, “Venture Capitalists Play Key Role in Obama’s Energy Department,” *Washington Post*, February 14, 2012.
184. Joe Stephens and Carol D. Leonnig, “White House Pushed \$500 Million Loan to Solar Company Now Under Investigation,” *Washington Post*, September 13, 2011.
185. “Greenlighting Solyndra,” *Washington Post*, December 2011.
186. Eric Lipton and John M. Broder, “In Rush to Assist a Solar Company, US Missed Signs,” *New York Times*, September 22, 2011.
187. Brian Slodysko, “Biden’s Inflation Reduction Act Aimed to Boost Renewable Energy. Subsidies Could Help One Company Reap Billions,” Associated Press, June 26, 2024. Accessed on PBS.org.
188. Timothy P. Carney, *The Big Ripoff: How Big Business and Big Government Steal Your Money* (John Wiley and Sons, 2006), p. 55.
189. Scott Lincicome, “Industrial Policy’s Corruption

Problem Is Hiding in Plain Sight,” Cato Institute, January 24, 2024.

190. Andrew Jackson, “May 27, 1830: Veto Message Regarding Funding of Infrastructure Development,” Presidential Speeches, Miller Center, University of Virginia.

191. Ben Smith, “Q&A: David Rubenstein on the Presidents, and George W. Bush’s Theory of Populism,” Semafor, September 10, 2024.

192. Bernie Sanders, “Sanders Slams Corporate Giveaways in Microchip Legislation,” press release, Senator Bernie Sanders website, July 13, 2022.

193. “Confidence in Institutions,” Gallup, 2024.

194. “The State of Public Trust in Government,” Partnership for Public Service, 2024.

195. “Nearly Two-Thirds Favor Ending ‘Corporate Welfare,’” Rasmussen Reports, January 26, 2024.

196. Economist Arthur Okun first suggested the metaphor in 1975. For a discussion, see Edgar K. Browning, *Stealing from Each Other: How the Welfare State Robs Americans of Money and Spirit* (Praeger Publishers, 2008), p. 178.

197. Michael J. Boskin, “A Framework for the Tax Reform Debate,” in *Frontiers of Tax Reform*, ed. Michael J. Boskin (Hoover Institution, 1996), p. 14.

198. Edgar K. Browning, *Stealing from Each Other: How the Welfare State Robs Americans of Money and Spirit* (Praeger Publishers, 2008), p. 179.

199. Julie Bykowicz and Ted Mann, “New York State Built Elon Musk a \$1 Billion Factory. ‘It Was a Bad Deal,’” *Wall Street Journal*, July 6, 2023.

200. Chris Edwards, “Why the Federal Government Fails,” Cato Institute Policy Analysis no. 777, July 27, 2015.

201. Adam N. Michel and Scott Lincicome, “Charting Some of Industrial Policy’s Opportunity Costs,” *Cato at Liberty* (blog), Cato Institute, June 8, 2023.

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