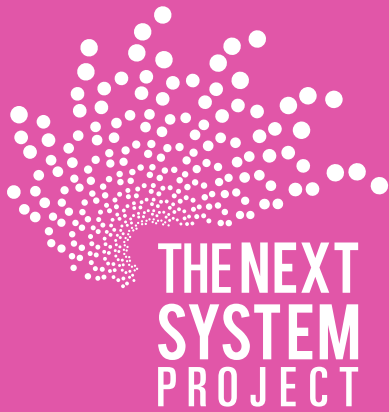


A HISTORY OF NATIONALIZATION IN THE UNITED STATES

1917-2009

Thomas M. Hanna





A HISTORY OF NATIONALIZATION IN THE UNITED STATES

1917-2009

Thomas M. Hanna



The Rich History of Nationalization in the United States

Climate change is an unprecedented global social, political, and economic crisis. Without drastic action, the United States will likely experience rising sea levels that will regularly flood major cities, more intense weather patterns that will destroy homes and businesses, longer and deeper droughts that will disrupt agricultural production, and an increase in disease that will put stress on the healthcare system. Domestic and international climate refugees will have to be resettled and the effects of increasing global strife contained. In both human and economic terms, the costs will be unlike anything the country has previously faced. Moreover, the economy is facing a significant problem of stranded assets—specifically fossil fuel reserves and infrastructure, the full value of which simply cannot be realized if the world is to avoid the most catastrophic effects of global warming.¹

“

The United States has a long and rich tradition of nationalizing private enterprise, especially during times of economic and social crisis.

”

In order to navigate these intersecting ecological and economic crises within the necessary (and shortening) time frames, we will likely need to take over and decommission the large fossil fuel extraction corporations that are both one of the leading causes of climate change and one of the primary institutional impediments to addressing it. On its face, this seems absurdly radical and improbable in the type of capitalist system that exists in the United States. However, the United States actually has a long and rich tradition of nationalizing private enterprise, especially during times of economic and social crisis. Importantly, this approach has often been deployed when private companies are hindering national efforts to address a crisis (either through obstruction, incompetence, or incapacity). This history of nationalization, along with other robust government economic interventions, suggests that far from being a non-starter, a public takeover of the fossil fuel industry should be considered an eminently plausible and viable policy option for dealing with the forthcoming climate crisis.



As does all countries around the world, the United States government regularly plays a variety of active roles in the functioning of the economy, including direct interventions on behalf of certain firms and sectors. For instance, the fossil fuel industry itself receives around \$26 billion a year in government subsidies.² The government also routinely provides financial assistance to strategically important companies that are experiencing financial difficulties. What makes these types of more regular economic interventions different from nationalization is the question of ownership and control. Nationalization is the process of bringing previously privately controlled assets (businesses, land, real estate, services, natural resources, etc.) under public authority. While a shift in control is often associated with a transfer of ownership, as will be documented in this paper, this is not always the case. In some instances, the government has taken legal and operational control of an enterprise or asset without taking an official ownership position. This results in some blurred lines when it comes to determining when a government intervention does and does not amount to nationalization. In what follows, I have attempted to only include examples where there is a clear shift in either ownership or control (or both).

I have also endeavored to only include examples of nationalizations at the federal government level. This is because, perhaps paradoxically, government seizure of private assets at the state and local is ubiquitous in American history and contemporary experience. Through the process of eminent domain, state and local governments take over private land and other assets for a variety of purposes every day. For instance, recently it was announced that the city government in Washington D.C. plans to acquire (and then knock down) a Wendy's fast food restaurant in order to conduct some much-needed traffic improvements.³ It would be simply impossible to document the millions (if not tens of millions) of instances of public takeover of private property in American history. Lastly, what follows is intended to be merely an illustrative history of nationalization in the US with a focus on the mechanisms and processes by which it was effectuated.

“

Nationalization is the process of bringing previously privately controlled assets under public authority.

”



While I do not pretend that I am not generally sympathetic to public ownership, by and large this paper attempts to avoid judgements on the merits for or against nationalization in each case, or its successes or failures.

World War I

While there are examples of the federal government nationalizing businesses and assets throughout American history (during the Civil War, for instance, the Union, under the auspices of the Railways and Telegraph Act of 1862, took over captured Confederate trains and railroads and merged them into its own federally owned United States Military Railroads system that was created in February 1862 by the War Department), this review begins with one of the first major crises of the 20th Century, World War I.⁴

By the time the United States entered the war in April 1917, railroads were a critical cornerstone of the United States economy. Two million American workers were employed in what was at that point one of the nation's largest industries, comprising around one twelfth of the whole economy.⁵ However, under private ownership, the rail system was falling into disarray. The multitude of competing companies were in financial distress but continued to prioritize returns for their shareholders over investment in tracks, trains, and stations. This led to coordination problems as well as crumbling infrastructure and poor service.

The private owners were also incredibly hostile to efforts by their workers to organize collectively for better wages and working conditions. In 1877, for instance, more than 100,000 workers participated in the Great Railroad Strike, and more than 100 people were killed when the strike was broken by railroad owners in conjunction with state governments.⁶ In March 1917, the Supreme Court upheld the constitutionality of the Adamson Act, which gave railroad workers an 8-hour workday.⁷ This further exacerbated the financial problems the companies faced given that their profit model was based on low wage labor.



Railroads were crucial to moving war materials and soldiers, and when the war began the government created the Railway War Board to attempt some degree of coordination. In some cases, however, the companies refused to work with this new entity and with the possibility of a strike by workers looming, the crisis deepened. In December 1917, President Woodrow Wilson signed an executive order taking control of all railroads (except local, city lines) under the authority given to him by the Army Appropriations Act of 1916 (although such an action was probably also legal under the Commerce Clause of the Constitution). A few months later, Congress passed legislation affirming the nationalization and setting out how the railroads would be operated, and their former private owners compensated. The legislation also allowed for the railroads to remain under federal control for up to 21 months after a peace treaty was signed, but ultimately put the transfer back to private ownership at the discretion of the president.⁸

Despite expectations that the private railroad owners would be extremely hostile to nationalization and challenge it in the courts, this did not happen. This was due, at least in part, to the relatively high amounts of compensation the government provided (equal to the “average net operating income during the three years ending June 30, 1917”). “Most railroads regarded [this amount]



Railroad yard in Washington, DC, 1917 (Photo: Library of Congress)



as a fair and even generous return since railroads and their shareholders had generated high profits during those prosperous years, despite chronic financial problems,” Samford University law professor William Ross recalls.⁹ While such compensation was derided by socialists and others given the poor shape of the railroads, it did ensure that corporate opposition to nationalization was muted.

Under government control, the rail network was integrated, badly needed repairs were made to tracks and stations, and thousands of new cars and engines were ordered. Moreover, wages were increased for workers, ensuring that organized labor fully backed the effort. However, the underlying assets technically remained owned by the private companies during the period of government control. At the time many observers, especially those with progressive or socialist leanings, assumed that the railroads would be moved into full public ownership after the war, especially given the amount of government investment that had been made.

After the war, railroad unions endorsed a plan (the Plumb Plan) to purchase all the railroads outright and run them through a multistakeholder board with equal representation from workers, officials, and the public (an early attempt at industrial democracy). The plan was vehemently opposed by business interests and their allies in the nation’s press, whose main line of attack was that it would be too costly. On the other side, a former South Dakota senator argued that nationalization should be made without compensation due to the tremendous sums of public money that were spent building the railroads in the first place. The Plumb Plan failed in Congress and the railroads were fully returned to private ownership through the Transportation Act of 1920.¹⁰

At around the same time as the railroads, the Wilson government also nationalized the telegraph and telephone networks, and specifically the operations of Western Union and AT&T respectively. Public ownership of the telegraph, and later telephone, system had been widely debated both inside and outside of government since the technologies were invented. President Ulysses Grant supported nationalizing the telegraph system, as did several Postmaster Generals, the Greenback Party, and the Union Labor Party.¹¹ Proponents of the



nationalization argued that both telephone and telegraph communication was a logical outgrowth of the postal service, and that because the Constitution specifically granted Congress the right to run post offices, it also allowed public ownership of the telecommunications industry. Prior to the war, Congress had extensively debated whether or not to “postalize” (i.e. nationalize) the telephone and telegraph system, yet with companies like AT&T lobbying heavily against such actions, these proposals were not successful.¹²

By the start of World War I, both industries were considered critical for enabling war-related communications. In early 1918, telegraph operators at Western Union were threatening to strike due to anger at the company laying off employees who joined the Commercial Telegraphers’ Union (in testimony before the Senate, Western Union’s President Newcomb Carlton actually stated that he would prefer nationalization over unionization). In July 1918, after much debate, Congress passed a resolution allowing President Wilson to take over the telegraph and telephone systems if and when he deemed “it necessary for the national security or defense.” A mere six days after signing the resolution, Wilson nationalized both industries.¹³ A few days before the war ended, the government also took control of international cables owned by the companies.

Unprepared to run national communications networks and lacking clear direction from Congress, the Post Office (which assumed responsibility for the industries at the end of July 1918) initially set up a Wire Control Board and made few operational changes. Technically, the government forced the telecommunications companies to sign contracts with the government giving the latter operational and revenue control. “Thus,” Michael Janson and Christopher Yoo write, “the takeover was more akin to a change in management, rather than a change in ownership.”¹⁴ However, significant structural changes to the industry were made during the period of government control. Most importantly, rival operations in both industries were consolidated (either physically or through regulation) to form truly national communications systems.

As with the railroads, the telecommunication companies welcomed the nationalization assuming that it would provide a windfall for shareholders. However,



unlike the railroads, the Postmaster General, Albert Burleson (a Southern Democrat who was both pro-segregation and anti-union generally), took a hard line with workers, suppressing wages and opposing collective bargaining. This led to deteriorating customer service, a strike, and ultimately organized labor turning against continued public ownership. Moreover, service quality was poor, a fact opponents of nationalization blamed on mismanagement and supporters on a dramatic rise in demand at a time when network expansion was limited due to war-related constraints.¹⁵ Despite having legislation authorizing permanent nationalization after the war ready to go, the government abandoned its plans and returned the telecommunication networks to private ownership in 1919.

A third industry nationalized during World War I was radio. A relatively new technology at the outbreak of the war (the first radio broadcast was made in 1906 and the first radio factory opened in 1912), radio was nonetheless considered to be of great military importance, especially to the Navy.¹⁶ In 1916, before the war commenced, legislation was introduced (but failed) to give the Navy total control of the radio industry. On the day the Senate ratified the declaration of war on Germany, President Wilson exercised a provision of the Radio Act of 1912 that enabled nationalization during a war.¹⁷

Unlike the railroad and telecommunications industry nationalizations, the Navy physically acquired radio companies, consolidated them, and broke patents to stimulate innovation.¹⁸ It also took over around 50 commercial radio stations and closed down all the rest (along with all amateur radio operators).¹⁹ In 1918, it purchased facilities (such as radio installations), patents, and other assets from two major companies—Federal Telegraph and American Marconi.²⁰ After the war ended, legislation was introduced (supported by both President Wilson and the Secretary of the Navy, Josephus Daniels) that would have made the nationalization permanent. However, the Navy argued with other branches of the government that also wanted to control the industry (including the Army) as well as Republicans who were angered by the acquisition of private companies. The bill failed, and after another attempt in 1919 also failed, the Navy gave up. It did, however, refuse to return the industry to its previous owners (due



to foreign connections), and instead gave it over to a new American company with close ties to General Electric: Radio Company of America (RCA).²¹

Yet another company nationalized during World War I was the arms manufacturer Smith & Wesson. The company, which had a large contract with the government, was in conflict with its workers and the National War Labor Board (NWLB) over the reinstatement of workers fired for violating yellow-dog contracts (contracts that prohibited workers from joining a union).²² President Wilson ordered the War Department to seize the company, which it did in September 1918. The company's factory was subsequently run by the Ordnance Department until early 1919 through a National Operating Corporation that was owned by the federal government and organized under the laws of Delaware.²³ While technically Smith & Wesson remained a private company, it was limited to just \$1 profit, was financed by federal funds, signed over to the government title on all property, and gave up control of basically all operational decisions. "It was a dummy corporation in every sense of the word," John Ohly (who authored a definitive government study on nationalization during World War II) writes, "a device adopted in lieu of direct government operation in order to free the employees from Civil Service restrictions and to avoid the complications of financing a direct government operation."²⁴ After reprivatization, Smith & Wesson was awarded compensation amounting to just 30 percent of their claim. (They did not appeal.)²⁵

Three other World War I nationalizations were The Federal Enameling and Stamping Company of McKees Rocks, Pennsylvania; Liberty Ordnance Company of Bridgeport, Connecticut; and Mosler Safe Company of Hamilton, Ohio.²⁶ In the case of Federal Enameling, the fuse-making company informed the government it was about to close down due to financial problems. The government then nationalized the company and turned it over to the National Operating Corporation to run. In the Liberty Ordnance and Mosler Safe cases, the companies were unwilling (or unable) to produce required war materials at a reasonable price and the government stepped in and seized the companies. Both were then operated by other private companies under contract, with the government providing any necessary capital.²⁷



Lastly, the government nationalized the US subsidiaries of several German companies. Under the auspices of the 1917 Trading with the Enemy Act, the government seized private property from German-affiliated individuals and companies alike and sold it off to pay for the war effort. The most well-known was Merck & Co., a subsidiary of the German pharmaceutical corporation E. Merck.²⁸ In 1919, after the war ended, the company was purchased at auction by a consortium led by its former owners on the condition that they fully separated from their German parent company. For this reason, to this day, there are two companies operating under the Merck name around the world.²⁹ Another pharmaceutical company that was nationalized and then later sold was the US subsidiary of Bayer.³⁰

Before moving on, it is worth pausing for a minute to highlight the quite extraordinary fact that during this crisis, the government did not hesitate to take over what was then one of the largest industries in the United States. As previously mentioned, William Ross suggests that when nationalized, the railroads accounted for around 1/12th of the entire US economy. By contrast, taking over the 25 largest publicly traded fossil fuel companies in the United States as well as all the remaining coal companies (at current, inflated, valuations of around \$1.5 trillion total) would be approximately 1/14th of the present-day US economy.³¹

The New Deal and World War II

In 1929, the United States experienced a financial meltdown leading to one of the worst economic crises in the nation's history, the Great Depression. Somewhat surprisingly given what had occurred during World War I (and what was about to occur during World War II) the government did not respond to the Great Depression with a widespread nationalization program of existing companies and industries, although it did set up several new federally owned enterprises that displaced some of the activities previously provided by the private sector. One of these was the Reconstruction Finance Corporation, a government corporation established in 1932 with bipartisan support during the Hoover Administration. The RFC lent to banks, railroads, other businesses, and



state and local governments throughout the depression and World War II.³² Another was the Federal National Mortgage Association (Fannie Mae), which was formed in 1938 to stimulate home ownership and construction during the Depression.³³ And a third was the Export-Import Bank, a government corporation set up in 1934 to finance international trade, and specifically to make loans to the Soviet Union.³⁴

Behind Fannie Mae, perhaps one of the most well-known new government enterprises set up during the New Deal was the Tennessee Valley Authority (TVA). Designed to provide electricity, economic development, river management, and other services to a desperately poor area of the country, the federally-owned TVA, which was formed in 1933, has endured to this day as one of the nation's largest publicly owned enterprises.³⁵ Through the creation of the TVA, the federal government did, however, nationalize an existing privately owned corporation. The Tennessee Electric Power Company (TEPCO) was the largest privately owned power monopoly in the state, having been formed through a series of mergers and acquisitions of smaller companies.³⁶ TEPCO opposed the creation of the TVA, and especially its ability to use eminent domain to seize privately owned hydroelectric dams in the area. It sued the TVA, but ultimately lost when the Supreme Court refused to hear the case in 1939.³⁷ Subsequently, the TVA bought most of TEPCO's power generation facilities (for some \$78 million), while smaller cooperatives and cities bought its transmission systems.³⁸ The company ceased independent operations as an energy company on August 15, 1939.³⁹

Another New Deal nationalization concerned gold. The Roosevelt Administration realized that in order to escape the Depression, it needed to devalue the US dollar and spark some inflation.⁴⁰ This was difficult to accomplish because the dollar was linked to gold at the value of \$20.67 per ounce (set by the Gold Act of 1900).⁴¹ Through an executive order (6102) and then the Gold Reserve Act of 1934, the federal government essentially nationalized the nation's gold reserves.⁴² All gold owned by individuals and institutions (including the Federal Reserve) had to be handed over to the Treasury Department at an exchange rate of \$35 (which devalued the currency) and the president was given the



authority to establish the gold to dollar conversion rate. The Treasury Department was also prohibited from redeeming paper money for gold and heavy restrictions were placed on the buying, selling, transporting, and import/export of gold.⁴³ Using profits from the nationalization, the Treasury Department set up a \$2 billion Exchange Stabilization Fund (ESF), which was used to buy and sell gold, foreign currency, and other financial instruments to change the value of the dollar (essentially taking monetary policy out of the hands of the Federal Reserve, which was controlled by private bankers, until 1951). The ESF was also used during World War II to transfer funds to US allies.⁴⁴ In August 1934, Roosevelt issued another executive order (6814)—based on authority given to him by the Silver Purchase Act of 1934—ordering the nationalization of all silver (with several exceptions, including coins) in the continental United States.⁴⁵

When war broke out in Europe in 1939, the government was forced to rapidly ramp up production of war materials in anticipation of the US eventually becoming involved (and to supply US allies). Just as during World War I, a key concern of the government was ensuring that labor conflicts did not threaten production. In May 1941, with war looming, Roosevelt declared an “unlimited national emergency,” stating “this Government is determined to use all of its power to express the will of its people, and to prevent interference with the production of materials essential to our Nation’s security.”⁴⁶ Within a month, this resolve was tested when a labor dispute and strike began at North American Aviation Inc., a California-based producer of military airplanes. In June 1941 Roosevelt issued an executive order (8773) authorizing the Secretary of War to nationalize the facility, citing the May emergency declaration.⁴⁷

In early 1942, President Roosevelt resurrected the National War Labor Board (NWLB) as an arbiter of management-labor conflicts.⁴⁸ The NWLB was immediately tested when a Massachusetts-based arms manufacturer (S.A. Woods Machine Company) refused to accept the board’s order approving the recommendations of a management-labor arbitration process.⁴⁹ The case was referred to President Roosevelt, who issued an executive order (9225) nationalizing the company’s facilities.⁵⁰ Early in the war, there was some confusion as to the exact legal authority enabling such nationalizations. There was a general



assumption that the wartime powers accorded to the president by the Constitution were sufficient; however, there was also discussion about the relevance of Section 120 of the National Defense Act and Section 9 of the Selective Training and Service Act.⁵¹ Because of this confusion, several bills and amendments were considered in 1941 and 1942, leading to Congress passing the War Labor Disputes Act (over the veto of President Roosevelt) in June 1943.⁵² The Act gave the government authority to nationalize any facilities that could be used for war production. Although the Act is often remembered as being anti-labor (although it applied to strikes by both labor and ownership/management), one of the benefits, Ohly writes, is that it “put plant seizures beyond the probability of successful legal attack.”⁵³

One of the events that precipitated passage of the War Labor Disputes Act was labor conflict in the nation’s bituminous coal mines. In the Spring of 1943, contract negotiations began between coal mine companies and the United Mine Workers (UMW). The workers were seeking regular work hours, a pay increase, and pay for the time they spent traveling from the surface to the underground pits.⁵⁴ The companies refused and around 500,000 miners went on strike. Because coal was so important to the war effort, on May 1, 1943 President Roosevelt signed an executive order (9340) placing any mine that had experienced a strike or work stoppage under government control.⁵⁵ In his order announcing the takeovers of around 3,300 mines, Secretary of the Interior Harold Ickes wrote that he would hereby “take possession of each such mine including any and all real and personal property, franchises, rights, facilities, funds, and other assets used in connection with the operation of such mine and the distribution and sale of its products, for operation by the United States in furtherance of the prosecution of the war.”⁵⁶

The day after the nationalizations, President Roosevelt addressed the miners and stated, “I believe now, as I have all my life, in the right of workers to join unions and to protect their unions. I want to make it absolutely clear that this Government is not going to do anything now to weaken those rights in the coal fields.”⁵⁷ However, less than a month later the NWLB rejected most of the UMW’s demands, and strikes resumed (despite legislation passed on May 6



prohibiting strikes in government-run mines). In November 1943, Roosevelt again ordered the nationalization of certain mines (many of which had been returned to private ownership by late October) to deal with the strikes (EO 9393). However, a provisional agreement was soon signed in all the mines under government control and it was ratified by the NWLB in May 1944.⁵⁸ In May 1945, President Truman, Roosevelt's successor, conducted further nationalizations in the industry, seizing anthracite mines (EO 9548) during another labor dispute, and a year later (after the war had ended) bituminous mines (EO 9728 and EO 9758).⁵⁹

For similar reasons, the United States government also nationalized elements of the Montgomery Ward department store chain, one of the largest retailers in the country. The company's anti-labor, free-marketeer chairman, Sewell L. Avery, refused to abide by contracts negotiated with unions and orders to do so from the NWLB and was personally leading a crusade against the authority of the NWLB.⁶⁰ In April 1944, President Roosevelt ordered (EO 9438) the Commerce Department to seize the company's main factory in Chicago, and federal troops forcibly removed Avery from his office.⁶¹ [See the photograph on the cover for this remarkable historical moment.] The initial takeover was quickly reversed when an NLRB-backed union election was held at the Chicago facility. However, Sewell continued to defy the NWLB's authority and in May, Roosevelt ordered the nationalization of a Montgomery Ward facility (the Hummer Manufacturing Division) in Springfield, Illinois (EO 9443).⁶² By December, NWLB orders were being defied at several Montgomery Ward facilities and the government stepped in to nationalize (EO 9508) Montgomery Ward's property and facilities in several states.⁶³ Sewell sued the government, but lost at the appellate court level (by the time the case reached the Supreme Court, the war had ended and the company had been reprivatized, leading the Court to dismiss the case).⁶⁴ In announcing the nationalization in December 1944, President Roosevelt stated "strikes in wartime cannot be condoned, whether they are strikes by workers against their employers or strikes by employers against their Government."⁶⁵ In 1945, the department store chain was returned to private ownership by President Truman.⁶⁶



Roosevelt also very briefly nationalized the railroads during a labor conflict in late 1943.⁶⁷ With the possibility of a strike being called on December 30, FDR personally mediated between labor and management, and then ordered a government takeover (EO 9412).⁶⁸ “Unlike the World War I situation in which the government seized and operated the railroads,” Roger Daniels writes, “the current seizure was planned to be temporary.” Existing railroad presidents were commissioned as colonels and then put in charge of seven different regions. Two union representatives were also brought in as consultants. Wages were increased and everything else remained relatively the same. With the threat of a strike averted, on January 18, 1944 the railroads were handed back to their private owners (after just 19 days of government control).⁶⁹

Another brief nationalization in the transportation sector concerned the Philadelphia transit system. The privately-owned Philadelphia Transportation Company operated train, subway, tram, and bus networks in the city. It had around 11,000 employees and moved as many as 1.5 million people around the city each day.⁷⁰ The company was racially segregated, with black employees consigned only to shop work.⁷¹ In 1943, the Fair Employment Practices Committee (FEPC)—which had been established to implement President Roosevelt’s 1941 order (8802) prohibiting racial and ethnic discrimination in the defense industry and government (an action demanded by A. Philip Randolph and other civil rights leaders)—ordered the company to stop discriminating against black workers and applicants.⁷² The company refused to adhere to the order until 1944 when the War Manpower Commission (which allocated workers during the war) threatened to cut off any company that was in noncompliance with a FEPC order on discrimination. The company capitulated, but the independent Philadelphia Rapid Transit Employees Union (PRT), which was in conflict with the CIO-affiliated Transport Workers Union for control of the company’s bargaining unit, began agitating white workers against desegregation.⁷³

On August 1, 1944, when the first black operators were scheduled to begin work, many of the white workers went on strike.⁷⁴ Over the course of the day, the strike spread to war plants and downtown office buildings. With transportation at a standstill, war production halted, and growing fears of a white



supremist race riot, local leaders and the NWLB tried to mediate the dispute. But the white workers announced their intention to continue the strike, and efforts by the CIO to get the transit system working again failed. On August 2, the NWLB referred the matter to President Roosevelt and an order was drafted for the War Department to nationalize the company (EO 9459, signed August 3, 1944).⁷⁵ This, however, failed to solve the underlying issue and strikes continued for several days. The impasse was broken through the deployment of federal troops, the threat of firing striking workers (and prevention from placement elsewhere through the War Manpower Commission), and the arrest of the striking union's leaders under the War Labor Disputes Act.⁷⁶ The deployment of trained federal transportation troops and requisitioned buses from outside the city also helped end the conflict.

“

Under government operation, desegregation of the system was resumed through the training of black operators.

”

Under government operation, desegregation of the system was resumed through the training of black operators. The CIO-affiliated union was strengthened through a quick, worker supported contract negotiation (under the supervision of an NWLB mediator), and the company was forced to undertake a number of reforms (including modernization of the system facilities).⁷⁷ Satisfied that the crisis was over, the War Department returned the system to private ownership on August 17 (where it remained until 1968 when it was taken into public ownership by the state of Pennsylvania via purchase by the Southeastern Pennsylvania Transportation Authority—SEPTA).⁷⁸

The full scale of government nationalization during World War II is often underappreciated (and underreported). According to Ohly, “seizing plants developed into a major government business...In the three months before V-J Day the government was taking over approximately one plant a week, and in a score of other situations seizures were averted only at the last minute or because the war ended.”⁷⁹



Table 1: List of World War II Nationalizations⁸⁰

Company/Facility	Location	Date	Department
North American Aviation	CA	1941	War Department
Air Associates	NJ, IL, TX, MO, CA	1941	War Department
Federal Shipbuilding and Drydock Co.	NJ	1941	Navy
Three ships	N/A	1941	Maritime Commission
S.A. Woods Machine Co.	MA	1942	War Department
Fairport, Painesville, and Eastern Railroad	OH	1942	War Department
Brewster Aeronautical Corp.	NY, NJ, PA	1942	Navy
General Cable Corp.	NJ	1942	Navy
Triumph Explosives	MD, DE	1942	Navy
Toledo, Peoria, and Western Railroad Co.	IL	1942	Office of Defense Transportation
13 leather manufacturing facilities	MA	1943	War Department
3,300 coal mines	Various	1943	Interior Department
American Railroad Company of Puerto Rico	Puerto Rico	1943	Office of Defense Transportation
Howarth Pivoted Bearings Co.	PA	1943	Navy
Los Angeles Shipbuilding and Drydock Corp.	CA	1943	Navy
Remington Rand	NY	1943	Navy
Atlantic Basin Iron Works	NY	1943	War Shipping Administration
Western Electric Co.	MD	1943-1944	War Department
565 railroads	Various	1943-1944	War Department
Montgomery Ward and Co.	IL	1944	Commerce Department
Seven Textile Mills	MA	1944	War Department
Department of Water and Power of the City of Los Angeles	CA	1944	War Department
Ken-Rad Tube and Lamp Corp.	KY, IN	1944	War Department
Midwest Motor Carrier Systems	Various	1944	Office of Defense Transportation
Mines and Collieries of Philadelphia and Reading Coal and Iron Co.	PA	1944	Interior Department
Coal mines	Various	1944	Interior Department
Hummer Manufacturing Div., Montgomery Ward and Co.	IL	1944-1945	War Department
Philadelphia Transportation Corp.	PA	1944	War Department
York Safe and Lock Co.	PA	1944	Navy
San Francisco machine shops	CA	1944	Navy
International Nickel Co.	WV	1944	War Department
Cleveland Graphite Bronze Co.	OH	1944	War Department
Jenkins Brothers	CT	1944	Navy
Lord Manufacturing Co.	PA	1944	Navy
Hughes Tool Co.	TX	1944-1945	War Department
Twentieth Century Brass Co.	MN	1944-1945	War Department

Farrell-Cheek Steel Co.	OH	1944-1945	War Department
Eight companies involved in the Mechanics Educational Society of America (MESA) strike	OH	1944	War Department
Cudahy Brothers Co.	WI	1944-1945	War Department
Montgomery Ward and Co.	IL, MI, OR, CO, NY, CA, MN	1944-1945	War Department
Cleveland Electric Illuminating Co.	OH	1945	War Department
Bingham and Garfield Railway Co.	UT	1945	War Department
American Enka Corp.	NC	1945	War Department
Cocker Machine and Foundry Co.	NC	1945	War Department
Gaffney Manufacturing Co.	SC	1945	War Department
Mary-Leila Cotton Mills	GA	1945	War Department
Diamond Alkali Co.	OH	1945	War Department
Springfield Plywood Corp.	OR	1945	War Department
U.S. Rubber Co.	MI	1945	War Department
Cartage Exchange of Chicago	IL	1945	Office of Defense Transportation
Scranton Transit Co.	PA	1945	Office of Defense Transportation
Bituminous coal mines	Various	1945	Interior Department
Anthracite coal mines	Various	1945	Interior Department
United Engineering Co.	CA	1945	Navy
Goodyear Tire and Rubber Co.	OH	1945	Navy
Cities Service Refining Co.	LA	1945	Petroleum Administration for War
Humble Oil and Refining Co.	TX	1945	Petroleum Administration for War
Pure Oil Co. (Cabin Creek Oil Field)	WV	1945	Petroleum Administration for War
Sinclair Rubber	TX	1945	Petroleum Administration for War
Texas Co.	TX	1945	Petroleum Administration for War
Illinois Central Railroad	IL	1945	Office of Defense Transportation
Capital Transit Co.	DC	1945	Office of Defense Transportation
Great Lakes Towing Co.	OH	1945	Office of Defense Transportation
Oil companies	Various	1945	Navy

As had happened during World War I, the government also moved to nationalize the American subsidiaries of German and Japanese companies. The Office of the Alien Property Custodian (APC) was reestablished in March 1942 (EO 9095) and subsequently took effective control of 17 companies worth around \$195 million (around \$3 billion in today's currency).⁸¹

Table 2: Subsidiaries of Foreign Companies Nationalized During World War II⁸²

Company	Product	Ownership Percentage	Date Disposed of by Govt
American Bemberg/ N.A. Rayon	Rayon (manufactured fiber)	62%	December 1948
American Bosch	Car magnetos	77%	July 1948
American Felsol	Asthma remedies	49%	December 1954
American Potash	Industrial chemicals	91%	March 1946
American Wine	Champagne	52%	February 1944
Buffalo Electro-Chemical	Hydrogen Peroxide	57%	June 1951
Central American Plantations	Quinine	53%	June 1943
General Aniline & Film	Chemicals	98%	March 1965
General Dyestuff	Dyes	100%	October 1953
Harvard Brewing	Beer	61%	April 1956
Hugo Stinnes Corp.	Coal and Real Estate	54%	June 1957
Luscombe Airplane	Aircraft	100%	June 1944
Pilot Reinsurance	Reinsurance	94%	June 1946
Rohm & Haas	Plexiglas	35%	January 1949
Schering	Drugs	100%	March 1952
Yamanaka & Co.	Art	100%	January 1946
Carl Zeiss, Inc.	Eyeglasses	100%	September 1960



Workers engaged in war production at Goodyear Tire and Rubber in Akron, OH, nationalized in 1945 (Photo: Library of Congress)



In all but two of the companies, the government took a majority ownership position (more than 50% of the shares). In the two exceptions (American Felsol, 49% and Rohm & Haas, 35%) the government share was still substantial. Moreover, the government owned and operated many of these companies for significant lengths of time after the conclusion of the war. For instance, Carl Zeiss, Inc. wasn't reprivatized until 1960 and General Aniline & Film until 1965. (The median government ownership length was seven years.)

Beyond the duration, the nationalization of these subsidiary companies during and after World War II is interesting for another reason. Even using conventional, financial measurements, these companies by and large performed quite well under government ownership. Moreover, this was despite relatively strong interventions by the government into the management structure (many of the companies had the majority of their boards replaced and five had their president replaced).⁸³

Surprisingly, the nationalization of plants and other facilities continued after the conclusion of the war. The takeovers of Illinois Central Railroad, Capital Transit Company, Great Lakes Towing, and various oil companies all occurred after V-J Day.⁸⁴ In 1946, President Truman authorized the nationalization of meatpacking and transportation facilities (EO 9685 and EO 9690), various transportation and towing facilities in New York harbor (EO 9693), a number of coal mines (EO 9728 and EO 9758), and the Monongahela Railroad Company (EO 9736).⁸⁵ Moreover, as will be discussed below, in addition to individual railroads (such as Illinois Central and Monongahela) President Truman nationalized hundreds of railroads three times during his presidency (1946, 1948, and 1950).

Truman and Eisenhower

No sooner had the United States emerged from the twin crises of the Great Depression and World War II, it was confronted with another. The Korean War, which raged from 1950 to 1953, was one of the first flashpoints in the larger conflict between the US and the Soviet Union now called the Cold War. It also



gave occasion to perhaps what is one of the best studied attempted nationalizations in 20th century US history.

When North Korean troops pushed into South Korea in June 1950 in an attempt to reunify the peninsula (which had been partitioned following World War II), President Truman took the then quite unusual (but now conventional) approach of committing US forces without a formal declaration of war from Congress (instead, he assembled a combined United Nations force under the leadership of US General Douglas MacArthur).⁸⁶

Initially, Truman tried to mobilize resources for this “police action” through the National Security Resources Board (NSRB), which had been created by the 1947 National Security Act (which had, among other things, also created the Central Intelligence Agency, the National Security Council, and the Department of Defense).⁸⁷ The NSRB implemented wage and price controls in an attempt to stop rising prices and also stockpiled raw materials. However, it was insufficient, prompting Congress to pass the Defense Production Act (DPA) in September 1950. Much like in World War I and II, the DPA gave the President broad authority to intervene in the domestic economy to further the war effort.⁸⁸ The DPA has since been reauthorized by Congress more than 50 times and remains in force to this day (the next renewal vote will be around September 2025). Specifically, the DPA states that “the security of the United States is dependent on the ability of the domestic industrial base to supply materials and services for the national defense and to prepare for and respond to military conflicts, natural or man-caused disasters, or acts of terrorism within the United States.”⁸⁹ In recent years, the Trump Administration has raised the possibility of using the DPA to bailout and prop up ailing coal and nuclear facilities.⁹⁰

Even prior to the DPA, however, Truman conducted the first large-scale nationalization of the crisis. By August 1950, conflict between rail unions and management had escalated despite the appointment of an emergency board to mediate. With a strike on the horizon, Truman issued an executive order seizing 195 railroads and putting them under the jurisdiction of the US Army—which lasted until 1952.⁹¹ This was, actually, the third time Truman had



nationalized large numbers of railroads during his time in office. In 1946, he nationalized 337 railroad companies and put them under the control of the Office of Defense Transportation (EO 9727).⁹² And in 1948, he again nationalized railroads in the midst of labor conflicts (EO 9957).⁹³

In October 1950, China unexpectedly entered the war on the side of North Korea, leading to concern from the public and government officials alike that the beginning of World War III was near. On December 16, 1950, Truman declared a national emergency and created the Office of Defense Mobilization (ODM).⁹⁴ Headed by Charles Wilson, president of General Electric, ODM continued with wage and price controls, but also de facto nationalized all of the nation's raw materials and rationed them to the private sector.⁹⁵ Amid general labor discontent on a number of issues, Truman reestablished the Wage Stabilization Board (WSB) as part of the new Economic Stabilization Agency, and gave it expanded powers to rule on labor disputes.⁹⁶

The steel industry was of critical importance to the war effort, with Truman stating in 1951 that “steel is a key material in our entire defense effort.”⁹⁷ The industry was turning record profits in the early days of the war. In the fall of 1951, contract negotiations began between the United Steelworkers of America, the CIO, and the major steel companies (with existing contracts set to expire in December).⁹⁸ However, the companies were extremely hostile to many of the union's demands, with U.S. Steel Company President Benjamin Fairless stating “whether our workers are to get a raise, and how much it will be if they do, is a matter which probably cannot be determined by collective bargaining, and will apparently have to be decided finally in Washington.”⁹⁹ The companies were unwilling to give the workers any raise unless they had assurances from the Truman Administration that they could also raise prices accordingly. Such assurances were not forthcoming (with the Administration demanding that a wage agreement had to be struck before price controls could be discussed), and the negotiations went nowhere. With workers threatening to strike, the matter was referred to the Wage Stabilization Board (and workers postponed their strike action after personal appeals from Truman).¹⁰⁰



In March 1952, after much debate (and a massive anti-union public relations campaign by the steel companies), the WSB released a recommendation that was largely favorable to the unions (although not completely). The steel industry (as well as Republicans in Congress, who subsequently launched an investigation of the WSB) was incensed and demanded large increases in steel prices to offset the wage increases.¹⁰¹ On the basis of the WSB ruling, negotiations between the steelworkers and the companies resumed, but soon collapsed again. At the beginning of April, the steelworkers informed the companies that they planned to strike, and on April 8 President Truman addressed the nation and announced he would be ordering Secretary of the Commerce Charles Sawyer to nationalize the steel mills (EO 10340).¹⁰² In the speech, Truman laid the blame for the conflict squarely at the feet of the companies, stating “these [stabilization] rules have been applied in this steel case. They have been applied to the union, and they have been applied to the companies. The union has accepted these rules. The companies have not accepted them.”¹⁰³

The steel companies were furious, and immediately sued to prevent the seizure. Unlike in World War I and World War II, much of the nation’s media and Congress also opposed the nationalization. This was partly due to the nature of the conflict. Given that war had never been officially declared, the seizure technically took place during peacetime without any explicit congressional legislation authorizing it.¹⁰⁴ However, it was also due to the intense, coordinated lobbying and public relations efforts of the steel companies and Truman’s relative political weakness at the time (including political fallout from the firing of General Douglas MacArthur in April 1951).¹⁰⁵ In court, government attorneys suggested that during an emergency the president could act in such a manner unilaterally and that such actions were not subject to judicial oversight. That argument was immediately rejected by the District Court, which ruled in favor of the steel companies.

However, with the unions again threatening an imminent strike, the Appeals Court stayed the lower court ruling and the companies remained under government control as the court case continued. The Supreme Court agreed to hear the case (*Youngstown Sheet & Tube v. Sawyer*) on an expedited basis and on



June 2, 1952 ruled (6-3) that the seizure was unconstitutional. Two of the six justices in the majority (Black and Douglas) stated that the seizing of private property required congressional authorization (under its lawmaking responsibilities) and as such Truman's action was a violation of the separation of powers.¹⁰⁶ The other four did not go so far, and believed that such presidential action could be permissible in certain circumstances, but the facts of the case and the current emergency that Truman had declared did not reach the necessary standard.¹⁰⁷

Truman was displeased but observed the Court's ruling and returned the companies to private ownership. Still with no contract in place, 600,000 steelworkers went on strike for the next seven weeks. As the strike wore on, some smaller companies began settling with their workers. Moreover, Truman began contemplating a second attempt at nationalization using Section 18 of the Selective Service Act (which likely would have given him the Congressional authorization necessary to make the nationalizations legal).¹⁰⁸ These factors, combined with Truman's direct intervention and the escalating economic impacts of the strike, led to an agreement being signed. Workers received essentially the same pay rise and benefit package as had been suggested by the WSB.¹⁰⁹ Moreover, they were allowed to form a union shop (which had been fervently opposed by the companies). The unions considered the strike to be a major victory. For their part, the companies received a hefty price increase (which outraged Truman).¹¹⁰

The important lesson from Truman's attempt to take control of the steel mills isn't that nationalization is illegal or unconstitutional; far from it. Rather, it's that there are restrictions on the president's right to nationalize private property or companies unilaterally. The declaration of a national emergency does not, by itself, negate the need to work with Congress (although depending on the severity of the crisis, this could change). The relatively short duration of the Korean War (an armistice was signed a little more than a year after the Supreme Court decision) and the containment of the crisis ensured that the "severity" of the emergency wasn't truly tested, and further nationalization attempts were not necessary.



Following the war, Truman's successor, President Eisenhower, made the construction of an interstate highway system a central part of his domestic agenda. During his military service, Eisenhower had experienced both the poor state of US roads and the military advantages of Germany's highway system.¹¹¹ Worried about the need to move military equipment and people quickly in the event of a war with the Soviet Union, in 1956 Congress passed, and Eisenhower signed, the Federal-Aid Highway Act, which set the goal of 41,000 miles of interstate highway construction.¹¹²

The construction process required state transportation officials to seize massive amounts of private property (homes, farms, businesses, etc.) through eminent domain. Eminent domain is the primary way in which the government, at all levels, takes control of private property for public purpose. Its use goes back to the founding of the nation, and specifically the Fifth Amendment to the Constitution, which states "nor shall private property be taken for public use, without just compensation."¹¹³ The Supreme Court has repeatedly upheld the legality of eminent domain for various purposes.¹¹⁴ During World War II, the federal government alone took over more than 20 million acres of land, including warehouses and other buildings owned by private companies, to construct military and civilian facilities.¹¹⁵ Construction of the interstate highway system in the 1950s and 1960s involved around 750,000 uses of eminent domain by various government entities under the auspices of the federal program.¹¹⁶

Railroads (again) and Chrysler

By the early 1970s, the US political economic landscape had change dramatically. Labor unions, which had been purged of most of their communist and socialist members and had their power radically constrained by the 1947 Taft-Hartley Act, were beginning their slow decline.¹¹⁷ The AFL-CIO (which was formed out of the merger of the AFL and the more radical CIO in 1955), took a decidedly anti-Communist line under the leadership of George Meany, leading it to largely support the US war effort in Vietnam and prevent the type of major labor disruptions that had led to nationalizations during past wars.¹¹⁸



There was also growing relationships between big business (and specifically corporations) and the government. This was especially true with the development of the military-industrial complex that President Eisenhower had warned about during his 1961 farewell address.¹¹⁹ The large defense contractors that supported US efforts in Vietnam were intricately interwoven with government and were heavily reliant on government contracts, research and development, and subsidies. As John Kenneth Galbraith wrote in a 1969 article advocating for full nationalization of this sector, “by no known definition of private enterprise can these specialized firms or subsidiaries be classified as private corporations.”¹²⁰

In 1971, the financial difficulties of one of these defense contractors, Lockheed—along with Federal Reserve support of major banks the preceding year when Penn Central Railroad went bankrupt—launched what could be termed the “bailout era” of modern government economic intervention.¹²¹ Lockheed argued that if it did not receive additional government support (it had already received one substantial bailout from the Defense Department to reimburse the company for cost overruns) and had to face bankruptcy, there would be a negative impact on jobs and production.¹²² The company’s arguments were supported by labor unions and major banks, both of which had an interest in the company’s financial success. Despite significant controversy and debate, the government eventually authorized a bailout package consisting of nearly \$250 million in loan guarantees.¹²³

These initial bailouts opened the floodgates, so to speak. William Simon lamented that during his time as Treasury Secretary in the mid-1970s, “I watched with incredulity as businessmen ran to the government in every crisis, whining for handouts or protection from the very competition that has made this system so productive.... And always, such gentlemen proclaimed their devotion to free enterprise and their opposition to the arbitrary intervention into our economic life by the state. Except, of course, for their own case, which was always unique and which was justified by their immense concern for the public interest.”¹²⁴ Additional prominent bailouts during the decade included Franklin National Bank in 1974 and Chrysler in 1979-80 (discussed further later).

“
In 1971, the financial difficulties of one of these defense contractors launched what could be termed the ‘bailout era’ of modern government economic intervention.
”



However, even during this era of bailouts, nationalizations continued to occur when necessary. In the 1970s, this once again concerned the nation's railways. Unlike many other countries that had permanently nationalized their railroads, US railroads had mostly been operated by private companies that, in many cases, offered both passenger and freight rail services (except during periods of temporary nationalization, as previously discussed). By the late 1960s, however, the private railroads were once again in disarray, with many facing bankruptcy. Among other factors, the creation of the interstate highway system and the emergence of air travel had reduced passenger numbers: from around 20,000 passenger trains in 1929, there were only about 500 left (with many slated for discontinuation).¹²⁵

In 1970, Penn Central Railroad, one of the largest corporations in the country at the time with over 100,000 employees, collapsed.¹²⁶ According to Philip Longman "Penn Central's feuding top managers disagreed on just about everything except one point: they wanted in the worst way to get out of the railroad business. So they neglected maintenance of track and equipment, cooked the company's books, and used what capital they could raise trying to become a modish, 1970s-style conglomerate."¹²⁷

Following the collapse of Penn Central, Congress passed the National Railroad Passenger Service Act (signed by President Nixon), which formed the National Railroad Passenger Corporation (now known as Amtrak). The publicly owned corporation began operation on May 1, 1971.¹²⁸ Privately owned railroads were given the option to transfer their passenger service to Amtrak or not (essentially, a voluntary nationalization). If they chose to do so, they would pay Amtrak certain amounts in either cash, rolling stock, or infrastructure in exchange for common stock in Amtrak if they wanted it or a tax deduction—as well as the right to discontinue their passenger rail service (which for almost all the railroads was a monetary drain). If railroads chose not to transfer their service, they would be required to continue operating basic passenger service until 1974.¹²⁹ Out of the 26 eligible railroads, 20 voluntarily chose to transfer their service to Amtrak.

Table 3. Railroads Transferring Assets and Services to Amtrak¹³⁰

Railroad	Value of contribution
Penn Central	\$52,382,109
Burlington Northern	\$33,447,191
Santa Fe	\$21,053,773
Union Pacific	\$18,770,738
Seaboard Coast Line	\$16,091,306
Southern Pacific	\$9,259,225
Illinois Central	\$8,666,420
Louisville & Nashville	\$5,975,176
Milwaukee Road	\$5,943,074
Norfolk & Western	\$5,825,348
Chesapeake & Ohio	\$4,652,651
Baltimore & Ohio	\$4,840,061
Missouri Pacific	\$2,492,477
Gulf, Mobile & Ohio	\$2,243,750
Grand Trunk Western	\$2,084,564
Richmond, Fredericksburg & Potomac	\$1,689,674
Central of Georgia	\$1,194,026
Delaware & Hudson	\$325,064
Chicago & North Western	\$126,638
Northwestern Pacific	\$31,896





Of these, four railroads chose to receive common stock in Amtrak: Burlington Northern, Grand Trunk Western, Chicago, Milwaukee Road, and Penn Central.¹³¹ Given the severely degraded state of the rail infrastructure Amtrak inherited—old locomotives and cars and crumbling stations—together with waning ridership numbers, most observers at the time, including politicians, saw the creation of Amtrak as a temporary experiment that would be quickly phased out along with passenger rail service altogether. However, as Amtrak upgraded infrastructure, addressed deferred maintenance issues, and centralized operations, ridership and popularity increased and it is now a critical part of the transportation system, especially in the well-traveled “Northeast Corridor” between Washington, D.C. and Boston, Massachusetts.¹³²

The nationalization of passenger rail service, however, only solved one part of the problem. Some of the railroads, especially in the northeast, were still not financially viable as private entities. In 1974, Congress passed the Regional Rail Reorganization Act that, among other things, created the Consolidated Rail Corporation (Conrail) as a government-owned corporation. The Act authorized the United States Railway Association (another new government enterprise) to establish a “final system plan” to decide which lines and other assets Conrail should acquire from the bankrupt private railroads (other lines were sold to Amtrak and state and local governments).¹³³ That plan was adopted by Congress in 1976 as part of the Regulatory Reform Act, and Conrail began operations the same year across the Northeast and Midwest.¹³⁴

By the mid-1980s, Conrail had repaired the terrible state of the infrastructure and rolling stock it inherited from the private corporations, freed itself from price controls and other regulations, and streamlined its operations and management.¹³⁵ In 1986-87, the profitable and efficient company was privatized by the Reagan administration in what was then the largest IPO (initial public offering) in US history. In 1998, Conrail was purchased jointly by Norfolk Southern Corporation and CSX Corporation, which split up its assets.¹³⁶

“

Most observers at the time, including politicians, saw the creation of Amtrak as a temporary experiment that would be quickly phased out along with passenger rail service altogether.

”

Table 4. Companies Transferring Assets and Services to Conrail¹³⁷

Railroad	Bankruptcy Estate	Real Property conveyed
Allentown Terminal Railroad Company	Central Railroad of New Jersey	Yes
American Contract Company	Penn Central	No
Ann Arbor Railroad Company	Ann Arbor Railroad	Yes
Baltimore & Eastern Railroad Company	Penn Central	Yes
Bay Shore Connecting Railroad Company	Central Railroad of New Jersey/ Lehigh Valley Railroad	Yes
Beech Creek Railroad Company	Penn Central	Yes
Central Indiana Railway Company	Central Railroad of New Jersey	Yes
Central Railroad Company of New Jersey	Central Railroad of New Jersey	Yes
Central Railroad Company of Pennsylvania	Central Railroad of New Jersey	No
Chicago, Kalamazoo and Saginaw Railway Company	Penn Central	Yes
Chicago Rover and Indiana Railroad Company	Penn Central	Yes
Cleveland & Pittsburgh Railroad Company	Penn Central	Yes
Cleveland, Cincinnati, Chicago & St. Louis Railway Company	Penn Central	Yes
Communiapaw Central Land Company	Central Railroad of New Jersey	Yes
Connecting Railway Company	Penn Central	Yes
Consolidated Real Estate Company	Lehigh Valley Railroad	Yes
Dayton Union Railway Company	Penn Central	Yes
Delaware & Bound Brook Railroad Company	Reading Company	Yes
Delaware Railroad Company	Penn Central	Yes
Despatch Shops, Inc.	Penn Central	Yes
Detroit Manufacturers' Railroad	Penn Central	Yes
Dover and Rockaway Railroad Company	Central Railroad of New Jersey	Yes
Eastern Real Estate Company	Reading Company	Yes
East Pennsylvania Railroad Company	Reading Company	Yes
Erie & Kalamazoo Railroad Company	Penn Central	Yes
Erie & Pittsburgh Railroad Company	Penn Central	Yes
Erie Lackawanna Railway Company	Erie Lackawanna Railway	Yes
Erie and Improvement Company	Erie Lackawanna Railway	Yes
Erie Land and Improvement Company of Pennsylvania	Erie Lackawanna Railway	Yes

Fort Wayne & Jackson Railroad Company	Penn Central	Yes
Hoboken Ferry Company	Erie Lackawanna Railway	Yes
Holyoke & Westfield Railroad Company	Penn Central	Yes
Hudson Realty Company	Erie Lackawanna Railway	Yes
Hudson River Bridge Company at Albany	Penn Central	Yes
Indianapolis Union Railway Company	Penn Central	Yes
Ironton Railroad Company	Lehigh Valley Railroad	Yes
Joliet & Northern Indiana Railroad Company	Penn Central	Yes
Kalamazoo, Allegan & Grand Rapids Railroad Company	Penn Central	Yes
Lackawanna and Wyoming Valley Railroad Company	Erie Lackawanna Railway	Yes
Lawroy Land Company	Erie Lackawanna Railway	Yes
Lehigh & Hudson River Railway Company	Lehigh & Hudson River Railway	Yes
Lehigh & New England Railway Company	Central Railroad of New Jersey	Yes
Lehigh Valley Railroad Company	Lehigh Valley Railroad	Yes
Little Miami Railroad Company	Penn Central	Yes
Mahoning and Shenango Valley Company	Penn Central	Yes
Mahoning Coal Railroad Company	Penn Central	Yes
Manor Real Estate Company	Penn Central	Yes
Michigan Central Railroad Company	Penn Central	Yes
Mount Hope Mineral Railroad Company	Central Railroad of New Jersey	Yes
New York & Long Branch Railroad Company	Penn Central/Central Railroad of New Jersey	Yes
New York Central Development Corporation	Penn Central	Yes
New York Connecting Railroad Company	Penn Central	Yes
Niagra Junction Railway Company	Erie Lackawanna Railway/Lehigh Valley Railroad	Yes
North Brookfield Railroad Company	Penn Central	Yes
Northern Central Railway Company	Penn Central	Yes
North Pennsylvania Railroad Company	Reading Company	Yes
Norwich & Worcester Railroad Company	Penn Central	Yes
Penn Central Transportation Company	Penn Central	Yes
Penndel Company	Penn Central	Yes
Penndiana Improvement Corporation	Penn Central	Yes
Pennsylvania & Atlantic Railroad Company	Penn Central	Yes
Pennsylvania-Reding Seashore Lines	Penn Central/Reading Company	Yes
Pennsylvania Tunnel and Terminal Railroad Company	Penn Central	Yes

Peoria & Eastern Railway Company	Penn Central	Yes
Philadelphia & Trenton Rail Road Company	Penn Central	Yes
Philadelphia, Baltimore & Washington Railroad Company	Penn Central	Yes
Philadelphia, Germantown & Norristown Railroad Company	Reading Company	Yes
Pittsburgh, Fort Wayne & Chicago Railway Company	Penn Central	Yes
Pittsburgh, Youngstown & Ashtabula Railway Company	Penn Central	Yes
Plymouth Railroad Company	Reading Company	Yes
Port Reading Railroad Company	Reading Company	Yes
Providence Produce Warehouse Company	Penn Central	Yes
Reading Company	Reading Company	Yes
Rochester & Genesee Valley Railroad	Erie Lackawanna Railway	Yes
Shamokin Valley & Pottsville Railroad Company	Penn Central	Yes
South Manchester Railroad Company	Penn Central	Yes
Trenton-Princeton Railroad Company	Reading Company	Yes
Troy & Greenbush Railroad Association	Penn Central	Yes
Union Depot Company	Penn Central	Yes
Union Railroad Company of Baltimore	Penn Central	Yes
United New Jersey Railroad and Canal Company	Penn Central	Yes
United Real Estate Company	Lehigh Valley Railroad	Yes
Waynesburg Southern Railroad Company	Penn Central	Yes
Waynesburg & Washington Railroad Company	Penn Central	Yes
West Jersey & Seashore Railroad Company	Penn Central/Reading Company	Yes
Wharton & Northern Railroad Company	Central Railroad of New Jersey	Yes
Wilmington & Northern Railroad Company	Reading Company	Yes



Around the same time that Conrail was established, the US automaker Chrysler was also experiencing financial difficulty. The company, which was at that point the 10th largest manufacturing business in the United States with 134,000 employees, had been unable to keep up with both its domestic (Ford and GM) and international rivals and was under pressure from rising energy prices and new environmental regulations.¹³⁸ Facing massive losses, the company appealed to the government for a bailout, warning of large-scale job losses if aid was not provided. In response, Congress passed the Chrysler Corporation Loan Guarantee Act of 1979 (signed into law in January 1980).

The Act established the Chrysler Corporation Loan Guarantee Board, which guaranteed \$1.2 billion in loans to the company. In exchange Chrysler provided the government with warrants to purchase 14.4 million of the company's shares at \$13 per share. This represented around a 12 percent ownership stake had the warrants been exercised.¹³⁹ By 1983, Chrysler's performance had improved (due, in part, to government-imposed "voluntary" import quotas on Japanese cars) and with a share price at around \$30, the government auctioned off the warrants (Chrysler ended up re-purchasing them) for a profit to the government of



**1979 Chrysler New Yorker
(Photo: Wikipedia Commons)**



\$311 million.¹⁴⁰ What makes the government’s intervention in the Chrysler case more than just a bailout (and verging on a nationalization) was that the Chrysler Corporation Loan Guarantee Act also required that Chrysler relinquish some operational control of the company to the government in exchange for the loan guarantees (the Act also required the company to set up an Employee Stock Ownership Plan to give workers an ownership stake in the company). The Loan Guarantee Board was given the authority to inspect all of the company’s books, accounts, documents, and correspondence as well as “extensive oversight authority,” including final approval on the sale of assets over \$5 million and labor contracts worth more than \$10 million.¹⁴¹

Continental Illinois and the S&L Crisis

In the 1970s and 1980s, the United States’ economy was becoming increasingly financialized. One of the banking darlings of this time was Continental Illinois National Bank and Trust Company, which had become the nation’s seventh largest bank through aggressive (and at times risky) commercial and industrial lending.¹⁴² By 1984, however, the bank was in severe financial difficulty and depositors around the world began to withdraw their money. Worried about contagion that could bring down the banking system, the Federal Reserve and the Federal Deposit Insurance Corporation (FDIC) attempted to bailout Continental Illinois by providing a \$2 billion assistance package, promising to meet the bank’s liquidity needs, and trying to engineer a merger with another bank.¹⁴³ Bailouts of this kind had been tried or contemplated before, notably with Bank of the Commonwealth in 1972, Franklin National Bank in 1974, First Pennsylvania Bank in 1980, and Seafirst Bank in 1983.¹⁴⁴

However, these efforts were insufficient with Continental Illinois, and in July 1984 a more radical solution was introduced. “The Bank would,” former FDIC Chairman Irvine Sprague recalled in 1986, “have to be, in effect, nationalized.”¹⁴⁵ The FDIC—which was created by the 1933 Banking Act to deal with bank failures—assumed \$4.5 billion of bad loans (minus a \$1 billion dollar charge-off, but plus a \$1 billion capital infusion) from the bank in exchange for an 80 percent



ownership stake (given the bank's depressed share value).¹⁴⁶ As part of the nationalization, the company's top management and board of directors were all replaced.¹⁴⁷ Over the next several years, the FDIC slowly sold off its ownership stake in the bank, which was fully reprivatized in 1991. However, the government took a loss of \$1.8 billion on the total amount of their investment in the privatization process.¹⁴⁸ In 1994, Continental Illinois was bought by Bank of America.

It is worth pointing out that the government actually takes temporary control of failing banks all the time through the operations of the FDIC. When a bank is in imminent danger of failure, the FDIC is informed and initiates the resolution process. In most cases this involves selling the assets (along with some of the liabilities) of the failed bank to a healthy bank—a so-called purchase and assumption transaction. However, in order to facilitate this transaction, the FDIC reviews all of the bank's financial information, develops a marketing plan, solicits bids from other companies, approves a buyer and, crucially, acts as the failed bank's receiver in order to transfer various assets and liabilities to the new buyer. According to the FDIC, the first action it takes as receiver is to “take custody of the failed institution's premises and all its records.”¹⁴⁹

In the second half of the 1980s, the financial sector was rocked again by what is now known as the “S&L crisis.” In the United States, savings and loan associations (S&Ls) were essentially small banks that incentivized savings and home mortgages (among other things) for their members. By 1980, there were around 4,000 of these institutions operating across the country.¹⁵⁰ They were traditionally considered a safe and conservative part of the banking ecosystem. However, economic conditions in the late 1970s and early 1980s caused many S&Ls to experience financial difficulty. The government, then under President Reagan, responded by recklessly deregulating the S&L sector through a series of acts—allowing them to make consumer and commercial loans and offer depository accounts and credit cards.¹⁵¹ This led many S&Ls to

“

It is worth pointing out that the government actually takes temporary control of failing banks all the time through the operations of the FDIC.

”



take on riskier projects and incentivized rampant fraud among S&L managers.¹⁵² The S&L sector responded to deregulation by growing at breakneck pace, but increasing numbers of failures began to put pressure on the sector's insurance fund (the Federal Savings and Loan Corporation—FSLIC). By 1987, FSLIC was bankrupt, and the sector was in crisis.¹⁵³

Congress responded by passing the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA). Among other things (such as a raft of new regulations), the Act established a new government entity, the Resolution Trust Corporation (RTC), to take over and close insolvent S&Ls and sell off their assets. RTC was, in turn, financed by another new government-backed enterprise, the Resolution Funding Corporation. In all, the RTC took over and shut down 747 failed financial institutions that had assets of more than \$400 billion.¹⁵⁴ The RTC's mission was to “contain, manage, and sell failed savings institutions and recover taxpayer funds through the management and sale of the institutions' assets.”¹⁵⁵ “The RTC became,” Julia Kagan writes, “a massive property-management company, cleaning up what was, at the time, the largest collapse of US financial institutions since the Great Depression.”¹⁵⁶ Over the next several years, the RTC slowly sold off these assets before shutting down in 1995. The total cost of the crisis is estimated at around \$160 billion, with \$132 billion of that shouldered by taxpayers.¹⁵⁷

Airlines and Airport Security

In the wake of the 2001 terrorist attacks on New York City and Washington, D.C., the government made two large-scale interventions into the airline industry. The first was a bailout of the major airlines. In addition to providing \$5 billion in direct, “no-strings-attached” aid to recompense airlines for their losses during the shutdown of air traffic following the attacks (as well as insurance subsidies), the Air Transportation Safety and System Stabilization Act (ATSSA) created the Air Transportation Stabilization Board to distribute up to \$10 billion in direct loans and loan guarantees to economically distressed airlines.¹⁵⁸



A condition of the loan guarantees—due to an amendment authored by Senators Jon Corzine (D-N.J.) and Peter Fitzgerald (R-Ill.)—was that the Air Transportation Stabilization Board (ATSB) had to negotiate warrants allowing the government to purchase company stock at a certain price (just like during the Chrysler bailout in 1980).¹⁵⁹ US Airways received the biggest slice of the bailout fund, a \$900 million guarantee on a \$1 billion loan. In exchange, US Airways gave the government warrants to buy 7.64 million shares. America West Airlines gave the ATSB warrants to buy 18.75 million shares, around one-third of the company's entire common stock. Others included Frontier Airlines (3.45 million shares), American TransAir (1.47 million shares), and World Airways (2.38 million shares).¹⁶⁰ It is estimated that the government made around \$130 million from subsequently reselling warrants in America West, Frontier, and World Airways.¹⁶¹

Writing at the time of the bank bailouts seven years later (discussed further later), Fitzgerald stated “if the taxpayers are taking the risk, then they should be able to participate in the upside when the bank returns to health.”¹⁶² Unlike the Chrysler bailout 20 years earlier, however, the government by and large did not exercise any direct control over the airlines to go along with their ownership options. Therefore, this episode is more of a classic bailout (rather than nationalization), although with the option for ownership.¹⁶³ One exception was when US Airways declared bankruptcy in 2004. Given the financial support the government had given to the airline, it took a more assertive stance. Steven Truxal writes that “the [ATSB] became more intensely involved in the airline's restructuring and with the bankruptcy court to ‘ensure that the taxpayers’ interests [were] protected.’”¹⁶⁴

Around the same time, a more straightforward nationalization occurred with regards to airport security. Before 2001, airport security had been handled by private security companies. These companies, many of which were foreign-owned, utilized low-cost (often immigrant) labor, had incredibly high turnover rates, and often had numerous regulatory violations.¹⁶⁵ After the 9/11 attacks, when hijackers seemingly breezed through lax security checkpoints, there was bipartisan agreement that the government needed to play a more



active role in airport security. There were two options on the table. Democrats and some moderate Republicans favored outright nationalization of the industry. More conservative Republicans, who were mostly concerned about the prospect of tens of thousands of new, unionized federal employees, suggested keeping private companies but dramatically increasing federal government oversight and regulations.¹⁶⁶

In November 2001, President George W. Bush signed the Aviation and Transportation Security Act which nationalized airport security by creating the Transportation Security Agency. That agency was then moved to the new Department of Homeland Security and became the Transportation Security Administration (TSA). Under pressure to have the new nationalized system up and running as soon as possible, TSA recruited and trained around 60,000 employees within its first year of operation. This, TSA historian Michael P. C. Smith writes, was “the largest mobilization of the federal government since WWII.”¹⁶⁷ Originally, those employees were prevented from unionizing, but after a lawsuit by the American Federation of Government Employees (AFGE) this changed as part of the Homeland Security Act. Still, however, TSA employees do not have the same labor rights and protections as other government employees.¹⁶⁸ Some of the private companies that were affected by the nationalization of airport security included Huntleigh USA, Globe Aviation, and Argenbright Holdings.¹⁶⁹

2008-2009 Financial Crisis

It is perhaps ironic that the presidency of Republican George W. Bush was bookmarked by two large-scale government interventions into the economy. In 2008, shortly before he was due to leave office, the bursting of a housing bubble caused the United States’ overly financialized, deregulated, and interconnected financial system to collapse. Speaking in December 2008 after he helped engineer an unprecedented government rescue of the banks, Bush remarked “I’m a free market guy. But I’m not gonna let this economy crater in order to preserve the free market system.”¹⁷⁰



It is often forgotten that the government intervention to save the financial sector (and by extension the entire capitalist economic system) in 2008 and 2009 actually took various forms, including both bailouts and nationalizations. On the first, the government provided large amounts of capital to hundreds of banks without demanding much in return (leading it to be termed a “bailout” by almost every media outlet, commentator, and expert). For instance, through the Capital Purchase Program (CPP)—part of the Troubled Asset Relief Program (TARP)—707 banks received capital injections. In return, the government (through the Treasury Department) received preferred securities (a hybrid of

stocks and bonds that confer an ownership share, but often have no voting rights) with a dividend rate of five percent for five years and nine percent after five years, as well as warrants to buy common stock equal to just 15 percent of the value of the government’s investment.¹⁷¹ Outside of unusual circumstances, the preferred securities were nonvoting, the government could not appoint directors unless an institution missed six dividend payments (and then only two), and half the warrants could be cancelled if they were redeemed by the companies before December 31, 2009.¹⁷²

“

It is often forgotten that the government intervention to save the financial sector in 2008 and 2009 actually took various forms, including both bailouts and nationalizations.

”

However, more extensive action that reaches the threshold of nationalization was taken in several cases. In early September 2008, before the collapse of Lehman Brothers, the Bush administration nationalized the giant mortgage companies Freddie Mac (the Federal Home Loan Mortgage Corporation) and Fannie Mae. Freddie and Fannie, as they are colloquially known, were quasi-public entities known as government sponsored enterprises created to purchase and securitize mortgages (thus allowing banks and other lenders to offer better terms to customers). They were privately organized and listed on the stock market (Fannie Mae starting in 1968 and Freddie Mac starting in 1989).¹⁷³ By 2008, they owned or guaranteed around 40 percent of all mortgages in the United States and were heavily exposed to the collapse of the real estate bubble.¹⁷⁴ As the crisis began to unfold, both were on the verge of collapse, and the government stepped in.



However, for various reasons, the government chose an unusual (and legally questionable) method to take control of these companies. It received a warrant to purchase 80 percent of their common stock and put the companies into conservatorship (giving the government control). Despite not exercising the warrant, the government has been taking any profits generated by the company ever since.¹⁷⁵ “The reasons were political,” Steven Davidoff Solomon explains. “The government did not want to look as if it owned these two entities, and nationalizing Fannie and Freddie would also have added trillions of dollars in debt to the government’s balance sheet, blowing up the national debt ceiling.”¹⁷⁶ However, most observers, including the Congressional Budget Office, acknowledge that the government is “the effective owner” of both companies.¹⁷⁷

Over the next several months, the government took a 77.9 percent share of insurance giant AIG, a 36 percent stake in Citigroup, one of Wall Street’s largest financial institutions, and a 73.8 percent ownership interest in GMAC (the former financing affiliate of General Motors).¹⁷⁸ In the AIG case, the government’s 77.9 percent ownership stake came in the form of preferred securities (convertible to common stock) that were placed into an irrevocable trust (with the Treasury Department as beneficiary) administered by three trustees recruited from private sector finance appointed by the Federal Reserve. “The trust instrument provided the trustees with complete power to vote and dispose of the government’s shares,” Davidoff Solomon reveals.¹⁷⁹

In the case of Citigroup, the government decided to contractually limit its ownership rights, agreeing to “vote its shares in proportion to all other shares cast except for certain designated matters.”¹⁸⁰ One of these was the election or removal of directors, but even here the government never exercised its rights by nominating or demanding the removal of a director. With GMAC, the government was entitled to appoint six of the company’s 11 directors. However, as Davidoff Solomon explains, “the true control rights the government asserted over GMAC are unknown and the Congressional Oversight Panel (COP) has been particularly critical of the Treasury Department’s management of this investment.”¹⁸¹



In late 2008, the automakers General Motors (GM) and Chrysler also sought assistance from the government. They suggested that absent this support, the companies would fail, triggering a domino effect among suppliers that could cost as many as a million jobs. While GM's CEO Rick Wagoner blamed the financial crisis for the company's problems, many observers identified longer-term structural problems. The company's accounting, data management, and strategic planning mechanisms were in shambles and its upper management (secluded by an "antique, closed corporate culture") were in a complete state of denial.¹⁸² Not only did they refuse to make any contingency plans for bankruptcy as they were hemorrhaging money, but their presentations to government officials contained no historical or comparative data. It was, as bailout architect Steven Rattner recalls, as "if there were no such thing as Ford, Honda, or Toyota."¹⁸³

After being rejected in their first attempt to secure bailout funds when they arrived in Washington D.C. on separate private jets, the automakers' CEOs tried again in December 2008.¹⁸⁴ After frantic negotiations between the administration, Congress, the automakers, and the United Autoworkers union (UAW), the Bush administration agreed to provide \$13.4 billion of TARP funding to GM and \$4 billion to Chrysler (in exchange for warrants to buy company stock as in the earlier Chrysler bailout and the airline bailouts).¹⁸⁵ However, this was insufficient and with GM and Chrysler continuing to hemorrhage money and ask for additional assistance the Obama administration (which replaced the Bush administration in January 2009) was forced to come up with a new plan. In late March 2009, the Obama administration announced that it would be providing GM and Chrysler financial and technical assistance to restructure their businesses—and that a condition of this support was the resignation of GM Chairman Rick Wagoner.¹⁸⁶

The centerpiece of the Obama administration's plan to save GM and Chrysler was nationalization via the bankruptcy court. On June 1, 2009, General Motors—one of the largest and most historically iconic manufacturing companies in the United States—filed for bankruptcy in New York (and was subsequently delisted from the New York Stock Exchange). The Treasury Department



provided \$30.1 billion in “debtor-in-possession financing” to fund the company as it went through the bankruptcy process (in order to avoid a complete liquidation of its assets).¹⁸⁷ As part of this process, the government established a new company (NGMCO, Inc. or New GM colloquially) that was 60.8 percent owned by the US federal government, 11.7 percent owned by the governments of Canada and Ontario, and 17.5 percent owned by the UAW through their retiree healthcare fund (VEBA). Old GM (Motors Liquidation Company) then transferred various assets to New GM via a “363 sale” (an asset sale under section 363 of the bankruptcy code) while others were sold off, and New GM assumed the name (and trademark) of General Motors Company—thus completing the transfer to government ownership.¹⁸⁸ In 2010, new GM conducted an IPO that reduced the government’s ownership stake to 33 percent and by the end of 2013 the government had sold off the remainder of its shares.¹⁸⁹ Given that the government took an overall loss of around \$10 billion-\$11 billion on the auto bailout, there was criticism that it was too hasty to sell its shares in GM, and should have held on to them for longer in order to fully recoup public funds.¹⁹⁰

A similar, but slightly modified, plan was developed for Chrysler. On April 30, 2009 the company declared bankruptcy. A new company (Chrysler Group LLC) was formed with the Italian automaker Fiat owning 20 percent of its shares, the UAW’s VEBA owning 67 percent, and the US and Canadian governments 13 percent.¹⁹¹ The US government provided \$1.9 billion in debtor-in-possession financing and up to \$6.6 billion in working capital funding for the new company.¹⁹² Although the US government was only a minority shareholder in the new Chrysler, by almost every measure it was the entity in control of the transition process—without the direct involvement of the Obama administration’s Auto Task Force in everything from negotiating the deal with Fiat to providing funding, Chrysler would not exist today. Over the next several years, Fiat slowly increased its ownership stake in the new company (Fiat Chrysler Auto Company after an IPO in 2014), buying the last of its shares back from the UAW in late 2014 and early 2015.¹⁹³



Conclusion

More than 10 years on, and in the midst of one of the longest periods of economic expansion in the nation's modern history, it is sometimes difficult to remember how serious the 2008-09 financial crisis was. Pundits and politicians alike openly speculated as to whether or not the end of capitalism was at hand (and without massive and decisive government intervention, including nationalizations, it would have been). Similarly, we forget how wars in first half of the 20th century promised death and destruction for tens of millions of people and threatened to wipe entire nation states off the map; and how in the latter half of the century, the threat of mutually assured nuclear destruction hung over every military and economic conflict.

In such times of political and economic crisis, policymakers of all ideological persuasions in the United States have never been hesitant to use one of the most powerful tools at their disposal: nationalization of private enterprises and assets. This included the Democrat Woodrow Wilson, who nationalized railroads, and the telephone, telegraph, and radio industries (among others), and the Republican Ronald Reagan, who nationalized a major national bank; the Democrat Franklin D. Roosevelt, who nationalized dozens of mining and manufacturing facilities, and the Republican George W. Bush, who nationalized airport security and various major financial institutions; the Democrat Barack Obama, who nationalized auto manufacturers, and the Republican Richard Nixon, who nationalized all passenger rail service.

As the climate crisis continues to escalate, and the time frames for avoiding catastrophic economic, social, and ecological effects shrink, it is worth remembering President Roosevelt's famous injunction in the Montgomery Ward case: in times of crisis, strikes by employers against their government cannot be tolerated. Fossil fuel corporations are one of the primary political and economic impediments to adequately addressing the climate crisis. Any

“

Fossil fuel corporations are one of the primary political and economic impediments to adequately addressing the climate crisis.

”



government that takes this crisis seriously will at some point have to reckon with the reality that the actions of these companies (and their mere existence) fatally undermine any possibility of mitigating the crisis. When that happens, nationalizing and decommissioning the fossil fuel industry is likely to increasingly become a viable and popular policy option. Fortunately, US history provides ample evidence of the ways in which this could be accomplished.



Endnotes

- 1 “Stranded Assets,” Carbon Tracker, August 23, 2017, accessed June 20, 2019, <https://www.carbontracker.org/terms/stranded-assets/>.
- 2 Han Chen and Danielle Droitsch, “Time for the US to End Fossil Fuel Subsidies,” NRDC, June 3, 2018, accessed 6/19/19, <https://www.nrdc.org/experts/danielle-droitsch/time-us-end-fossil-fuel-subsidies>.
- 3 Adam Tuss, “DC Plans to Buy Wendy’s, Reconfigure Dave Thomas Circle,” NBC Washington, April 18, 2019, accessed July 10, 2019, <https://www.nbcwashington.com/news/local/DC-Plans-to-Buy-Wendys-Reconfigure-Dave-Thomas-Circle-508779171.html>.
- 4 Margaret E. Wagner, et. al., eds., *The Library of Congress Civil War Desk Reference* (New York: Simon & Schuster, 2002), p. 350.
- 5 William G. Ross, *World War I and the American Constitution* (Cambridge, UK: Cambridge University Press, 2017), p. 81; Anne Cipriano Venzon, *The United States in the First World War: An Encyclopedia* (New York: Garland Publishing, 1995), p. 761.
- 6 Joseph Adamczyk, “Great Railroad Strike of 1877,” *Encyclopedia Britannica*, accessed June 3, 2019, <https://www.britannica.com/topic/Great-Railroad-Strike-of-1877>
- 7 Rudolph Daniels, *Trains Across the Continent* (Bloomington, IN: Indiana University Press, 2000), p. 100.
- 8 William G. Ross, *World War I and the American Constitution* (Cambridge, UK: Cambridge University Press, 2017), pp. 79-81.
- 9 William G. Ross, *World War I and the American Constitution* (Cambridge, UK: Cambridge University Press, 2017), p. 79
- 10 William G. Ross, *World War I and the American Constitution* (Cambridge, UK: Cambridge University Press, 2017), pp. 85-87; Eric Arnesen, ed., *Encyclopedia of U.S. Labor and Working Class History*, vol. 1 (New York: Routledge, 2007), pp. 1091-1092.
- 11 Michael A. Janson and Christopher S. Yoo, “The Wires Go to War: The U.S. Experiment with Government Ownership of the Telephone System During World War I,” Faculty Scholarship, Paper 467 (2013), accessed June 3, 2019, https://scholarship.law.upenn.edu/cj/viewcontent.cgi?article=1466&context=faculty_scholarship.
- 12 Michael A. Janson and Christopher S. Yoo, “The Wires Go to War: The U.S. Experiment with Government Ownership of the Telephone System During World War I,” Faculty Scholarship, Paper 467 (2013), accessed June 3, 2019, https://scholarship.law.upenn.edu/cj/viewcontent.cgi?article=1466&context=faculty_scholarship.
- 13 Michael A. Janson and Christopher S. Yoo, “The Wires Go to War: The U.S. Experiment with Government Ownership of the Telephone System During World War I,” Faculty Scholarship, Paper 467 (2013), accessed June 3, 2019, https://scholarship.law.upenn.edu/cj/viewcontent.cgi?article=1466&context=faculty_scholarship; David Hochfelder, *The Telegraph in America, 1832-1920* (Baltimore, MD: The Johns Hopkins University Press, 2012).
- 14 Michael A. Janson and Christopher S. Yoo, “The Wires Go to War: The U.S. Experiment with Government Ownership of the Telephone System During World War I,” Faculty Scholarship, Paper 467 (2013), accessed June 3, 2019, https://scholarship.law.upenn.edu/cj/viewcontent.cgi?article=1466&context=faculty_scholarship.
- 15 William G. Ross, *World War I and the American Constitution* (Cambridge, UK: Cambridge University Press, 2017), pp. 87-93.
- 16 Bob Berman, *Zapped: From Infrared to X-rays, the Curious History of Invisible Light* (New York: Little, Brown, and Company, 2017), pp. 90-91.
- 17 Michael A. Janson and Christopher S. Yoo, “The Wires Go to War: The U.S. Experiment with Government Ownership of the Telephone System During World War I,” Faculty Scholarship, Paper 467 (2013), accessed June 3, 2019, https://scholarship.law.upenn.edu/cj/viewcontent.cgi?article=1466&context=faculty_scholarship.
- 18 James Schwoch, *The American Radio Industry and Its Latin American Activities, 1900-1939* (Urbana, IL: University of Illinois Press, 1990), pp. 41-42.
- 19 Michael A. Janson and Christopher S. Yoo, “The Wires Go to War: The U.S. Experiment with Government Ownership of the Telephone System During World War I,” Faculty Scholarship, Paper 467 (2013), accessed June 3, 2019, https://scholarship.law.upenn.edu/cj/viewcontent.cgi?article=1466&context=faculty_scholarship.
- 20 Stephen B. Adams, “Arc of Empire: The Federal Telegraph Company, the U.S. Navy, and the Beginnings of Silicon Valley,” *Business History Review*, vo. 91 (2017).
- 21 Stephen B. Adams, “Arc of Empire: The Federal Telegraph Company, the U.S. Navy, and the Beginnings of Silicon Valley,” *Business History Review*, vo. 91 (2017).
- 22 Mark R. Wilson, *Destructive Creation: American Business and the Winning of World War II* (Philadelphia, PA: University of Pennsylvania Press, 2016), p. 11.
- 23 Clayton D. Laurie and Ronald H. Cole, *The Role of Federal Military Forces in Domestic Disorders, 1877-1945* (Washington, D.C.: Center of Military History, United States Army, 1997), p. 393.
- 24 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), p. 11.
- 25 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), p. 11.
- 26 While not technically a nationalization, during World War I the US government also engineered a massive intervention into the shipping industry. Over the initial objections of both J.P. Morgan (who owned a private shipping company) and the Chamber of Commerce, the government created the publicly owned Emergency Fleet Corporation (managed by the U.S. Shipping Board) to coordinate a massive expansion of government owned ships and shipyards. See: Mark R. Wilson, *Destructive Creation: American Business and the Winning of World War II* (Philadelphia, PA: University of Pennsylvania Press, 2016), pp. 12-13.
- 27 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), pp. 11-12.
- 28 Kirk W.M. Tyson, *Competition in the 21st Century* (New York: St. Lucie Press, 1997), p. 237.
- 29 Tom Meek, “This Month in 1917: A Tale of Two Mercks,” PMLive, April 14, 2014, accessed June 3, 2019, http://www.pmlive.com/pharma_news/this_month_in_1917_a_tale_of_two_mercks_560187.
- 30 Daniel A. Gross, “The U.S. Confiscated Half a Billion Dollars in Private Property During WWI,” *Smithsonian*, July 28, 2014, accessed June 3, 2019, <https://www.smithsonianmag.com/history/us-confiscated-half-billion-dollars-private-property-during-wwi-180952144/#ZTsp0OILKlBmWcs.99>.



- 31 GDP at the time of writing is around \$21 trillion. See: "Gross Domestic Product," FRED, accessed July 22, 2019, <https://fred.stlouisfed.org/series/GDP>.
- 32 James Stuart Olson, *Saving Capitalism: The Reconstruction Finance Corporation and the New Deal, 1933-1940* (Princeton: Princeton University Press, 1988).
- 33 David Kennedy, *The American People in the Great Depression: Freedom from Fear, Part One* (Oxford, UK: Oxford University Press, 1999), p. 369.
- 34 James Stuart Olson, *Saving Capitalism: The Reconstruction Finance Corporation and the New Deal, 1933-1940* (Princeton: Princeton University Press, 1988), p. 152.
- 35 "Our History," Tennessee Valley Authority, accessed July 25, 2019, <https://www.tva.gov/About-TVA/Our-History>.
- 36 James B. Jones, Jr., "TEPCO," Tennessee Encyclopedia, October 8, 2017, accessed June 19, 2019, <https://tennesseencyclopedia.net/entries/tepc/>.
- 37 "Tennessee Elec. Power Co. v. Tennessee Val. Authority," United States Supreme Court, No. 27. Accessed July 25, 2019, <https://caselaw.findlaw.com/us-supreme-court/306/118.html>.
- 38 Aaron D. Purcell, *Arthur Morgan: A Progressive Vision for American Reform* (Knoxville: University of Tennessee Press, 2014), p. 207.
- 39 Harmon Jolley, "What did that Building Used to Be? TEPCO," *The Chattanooga*, November 5, 2006, accessed June 19, 2019, <https://www.chattanooga.com/2006/11/5/96151/What-Did-That-Building-Used-to-Be.aspx>.
- 40 Eric Rauchway, *The Money Makers: How Roosevelt and Keynes Ended the Depression, Defeated Fascism, and Secured a Prosperous Peace* (New York: Basic Books, 2015), p. 80.
- 41 Gary Richardson, et al., "Gold Reserve Act of 1934," Federal Reserve History, January 30, 1934, accessed June 4, 2019, https://www.federalreservehistory.org/essays/gold_reserve_act.
- 42 Gerhard Peters and John T. Woolley, "Franklin D. Roosevelt, Executive Order 6102—Requiring Gold Coin, Gold Bullion and Gold Certificates to Be Delivered to the Government," The American Presidency Project, accessed 7/31/19, <https://www.presidency.ucsb.edu/documents/executive-order-6102-requiring-gold-coin-gold-bullion-and-gold-certificates-be-delivered>; "Gold Reserve Act of 1934," United States Congress, January 30, 1934, accessed July 31, 2019, <https://fraser.stlouisfed.org/title/1085>, accessed on July 31, 2019.
- 43 Gary Richardson, et al., "Gold Reserve Act of 1934," Federal Reserve History, January 30, 1934, accessed June 4, 2019, https://www.federalreservehistory.org/essays/gold_reserve_act.
- 44 Gary Richardson, et al., "Gold Reserve Act of 1934," Federal Reserve History, January 30, 1934, accessed June 4, 2019, https://www.federalreservehistory.org/essays/gold_reserve_act.
- 45 Gerhard Peters and John T. Woolley, "Franklin D. Roosevelt, Executive Order 6814—Requiring the Delivery of All Silver to the United States for Coinage," The American Presidency Project, accessed 7/31/19, <https://www.presidency.ucsb.edu/documents/executive-order-6814-requiring-the-delivery-all-silver-the-united-states-for-coinage>. See also: William L. Silber, *The Story of Silver: How the White Metal Shaped America and the Modern World* (Princeton, NJ: Princeton University Press, 2019).
- 46 Franklin D. Roosevelt, "Fireside Chat 17: On An Unlimited National Emergency, May 27, 1941," UVA Miller Center, accessed July 31, 2019, <https://millercenter.org/the-presidency/presidential-speeches/may-27-1941-fireside-chat-17-unlimited-national-emergency>.
- 47 "Executive Orders Disposition Tables, 1941," National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1941.html>.
- 48 "Records of the National War Labor Board (RG 202), 1942-1947," National Archives, accessed 7/31/19, <https://www.archives.gov/chicago/finding-aids/nwlb>.
- 49 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), pp. 67-69.
- 50 "Executive Orders Disposition Tables, 1942," National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1941.html>.
- 51 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), p. 12.
- 52 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), pp. 93-99.
- 53 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), p. 98.
- 54 Russell D. Buhite and David W. Levy, eds., *FDR's Fireside Chats* (Norman, OK: University of Oklahoma Press, 1992), p. 249.
- 55 "Executive Orders Disposition Tables, 1943," National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1943.html>.
- 56 "Order for Taking Possession" poster, ca. 1943. (National Archives Identifier: 640355); For the number of mines seized, see: Mark R. Wilson, *Destructive Creation: American Business and the Winning of World War II* (Philadelphia, PA: University of Pennsylvania Press, 2016), p. 215.
- 57 "The President of the United States on May 2, 1943..." poster, ca. 1943. (National Archives Identifier: 640355).
- 58 Michael Hancock, "'You Can't Dig Coal with Bayonets,'" National Archives Blog, July 11, 2018, accessed June 4, 2019, <https://prologue.blogs.archives.gov/2018/07/11/you-cant-dig-coal-with-bayonets/>; "Executive Orders Disposition Tables, 1943," National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1943.html>; Mark R. Wilson, *Destructive Creation: American Business and the Winning of World War II* (Philadelphia, PA: University of Pennsylvania Press, 2016), p. 215.
- 59 Peter Kihss, "Seizure of Mines," *New York Times*, March 6, 1978, accessed June 4, 2019, <https://www.nytimes.com/1978/03/06/archives/seizure-of-mines-seizure-by-truman-steel-plants-returned.html>; "Executive Orders Disposition Tables, 1945," National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1945-truman.html>; "Executive Orders Disposition Tables, 1946," National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1946.html>.
- 60 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), p. 195.
- 61 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), p. 199; Alonzo L. Hamby, *Man of Destiny: FDR and the Making of the American Century* (New York: Basic Books, 2015), p. 364; "Executive Orders Disposition Tables, 1944," National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1944.html>.
- 62 "Executive Orders Disposition Tables, 1944," National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1944.html>.



- 63 “Executive Orders Disposition Tables, 1944,” National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1944.html>.
- 64 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), pp. 212-218.
- 65 “FDR Seizes Control of Montgomery Ward,” History, June 7, 2019, accessed June 19, 2019, <https://www.history.com/this-day-in-history/fdr-seizes-control-of-montgomery-ward>.
- 66 Carl J. Schneider and Dorothy Schneider, *An Eyewitness History: World War II* (New York: Infobase Publishing, 2003), p. 56.
- 67 Jeffrey W. Corker, *Franklin D. Roosevelt: A Biography* (Westport, CT: Greenwood Press, 2005), p. 143.
- 68 “Executive Orders Disposition Tables, 1943,” National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1943.html>.
- 69 Roger Daniels, *Franklin D. Roosevelt: The War Years, 1939-1944* (University of Illinois Press, 2016), p. 376.
- 70 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), p. 181.
- 71 Herbert Hill, *Black Labor and the American Legal System: Race, Work, and the Law* (Madison, WI: University of Wisconsin Press, 1977), p. 278.
- 72 Gerald D. Jaynes, ed., *Encyclopedia of African American Society*, vol. 2 (Thousand Oaks, CA: Sage Publications, 2005), p. 301; “Executive Orders Disposition Tables, 1941,” National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1941.html>.
- 73 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), pp. 181-182.
- 74 Philip A. Klinker and Rogers M. Smith, *The Unsteady March: The Rise and Decline of Racial Equality in America* (Chicago, IL: University of Chicago Press, 1999), p. 191.
- 75 “Executive Orders Disposition Tables, 1944,” National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1944.html>.
- 76 Clayton D. Laurie and Ronald H. Cole, *The Role of Federal Military Forces in Domestic Disorders 1877-1945* (Washington, D.C.: Center of Military History, 1997), pp. 404-405.
- 77 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), pp. 181-191.
- 78 Under a 1907 agreement, the city of Philadelphia had the right to purchase the company. The city then transferred this right to SEPTA (a state level enterprise). In 1965, amidst deteriorating service quality in the privately-run system, SEPTA negotiated a purchase of the company. However, company stockholders rejected the deal and a lawsuit was filed. Ultimately, the Pennsylvania Supreme Court rejected the company’s appeal and confirmed SEPTA’s right to buy the system. The Court also prevented the company from issuing a one-dollar per share dividend, which James Wolfinger describes as “one last effort to extract as many assets as possible.” See: James Wolfinger, *Running the Rails: Capital and Labor in the Philadelphia Transit Industry* (Ithaca, NY: Cornell University Press, 2016), p. 220.
- 79 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), pp. 3-4.
- 80 Adapted from the lists provided in: John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), pp. 313-319.
- 81 “Executive Orders Disposition Tables, 1942,” National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1942.html>.
- 82 Adapted from Tables 1 & 2 in: Stacey R. Kole and J. Harold Mulherin, “The Government as Shareholder: A Case from the United States,” *Journal of Law and Economics*, vol. 40, no. 1 (1997).
- 83 Stacey Kole and J. Harold Mulherin theorize that this was because the government was not actively involved in the investment decisions of the nationalized firms and that “while the APC did alter the boards of vested firms, the tenure of the firms’ actual managers did not differ discernibly from comparable private-sector firms.” See: Stacey R. Kole and J. Harold Mulherin, “The Government as Shareholder: A Case from the United States,” *Journal of Law and Economics*, vol. 40, no. 1 (1997).
- 84 John H. Ohly, *Industrialists in Olive Drab: The Emergency Operation of Private Industries During World War II*, edited by Clayton D. Laurie (Washington, D.C.: Center of Military History, United States Army, 2000), p. 319.
- 85 “Executive Orders Disposition Tables, 1946,” National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1946.html>.
- 86 “US Enters the Korean Conflict,” National Archives, September 7, 2016, accessed June 20, 2019, <https://www.archives.gov/education/lessons/korean-conflict>.
- 87 Spencer C. Tucker, ed., *The Encyclopedia of the Korean War: A Political, Social, and Military History, Second Edition*, Volume I (Santa Barbara, CA: ABC-CLIO, 2010), p. 619.
- 88 Jared T. Brown and Moshe Schwartz, *The Defense Production Act of 1950: History, Authorities, and Considerations for Congress* (Washington, D.C.: Congressional Research Service, 2018), accessed August 2, 2019, <https://fas.org/sgp/crs/natsec/R43767.pdf>.
- 89 Jared T. Brown and Moshe Schwartz, *The Defense Production Act of 1950: History, Authorities, and Considerations for Congress* (Washington, D.C.: Congressional Research Service, 2018), accessed August 2, 2019, <https://fas.org/sgp/crs/natsec/R43767.pdf>.
- 90 Philip Bump, “Trump’s Plan to Use a Cold War-era Law to Bolster the Coal Industry, Explained,” *Washington Post*, June 1, 2018, accessed August 2, 2019, https://www.washingtonpost.com/news/politics/wp/2018/06/01/trumps-plan-to-use-a-cold-war-era-law-to-bolster-the-coal-industry-explained/?utm_term=.34853bea0dde.
- 91 Graham D. Dodds, *Take Up Your Pen: Unilateral Presidential Directives in American Politics* (Philadelphia: University of Pennsylvania Press, 2013), p. 195.
- 92 “Executive Orders Disposition Tables, 1946,” National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1946.html>.
- 93 “Executive Orders Disposition Tables, 1948,” National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1948.html>; Graham D. Dodds, *Take Up Your Pen: Unilateral Presidential Directives in American Politics* (Philadelphia: University of Pennsylvania Press, 2013), p. 195.
- 94 Paul G. Pierpaoli, *Truman and Korea: The Political Culture of the Early Cold War* (Columbia, MO: University of Missouri Press, 1999), p. 44.
- 95 Jonathan J. Bean, *Beyond the Broker State: Federal Policies toward Small Business, 1936-1961* (Chapel Hill, NC: University of North Carolina Press, 1996), p. 128.
- 96 Maeva Marcus, *Truman and the Steel Seizure Case: The Limits of Presidential Power* (Durham: Duke University Press, 1994), pp. 9-10; Gerhard Peters and John T. Woolley, “Executive Order



- 10161—Delegating Certain Functions of the President Under the Defense Production Act of 1950,” The American Presidency Project, <https://www.presidency.ucsb.edu/documents/executive-order-10161-delegating-certain-functions-the-president-under-the-defense>.
- 97 Robert Bruno, “Steel on Strike: From 1936 to the Present,” in Aaron Brenner, et al., eds., *The Encyclopedia of Strikes in American History* (Armonk, NY: M.E. Sharpe, 2009), p. 367.
- 98 David L. Stebenne, *Arthur J. Goldberg: New Deal Liberal* (New York: Oxford University Press, 1996), p. 88; Spencer C. Tucker, ed., *The Encyclopedia of the Korean War: A Political, Social, and Military History*, Second Edition, Volume I (Santa Barbara, CA: ABC-CLIO, 2010), p. 808.
- 99 Maeva Marcus, *Truman and the Steel Seizure Case: The Limits of Presidential Power* (Durham: Duke University Press, 1994), p. 58.
- 100 Maeva Marcus, *Truman and the Steel Seizure Case: The Limits of Presidential Power* (Durham: Duke University Press, 1994), pp. 59–60.
- 101 Paul G. Pierpaoli, *Truman and Korea: The Political Culture of the Early Cold War* (Columbia, MO: University of Missouri Press, 1999), pp. 165–166; Maeva Marcus, *Truman and the Steel Seizure Case: The Limits of Presidential Power* (Durham: Duke University Press, 1994), pp. 65–66.
- 102 Harry Truman, “Radio and Television Address to the American People on the Need for Government Operation of the Steel Mills, April 8, 1952,” in *Public Papers of the Presidents of the United States: Harry S. Truman* (Washington, D.C.: United States Government Printing Office, 1966), p. 246; “Executive Orders Disposition Tables, 1952,” National Archives, accessed July 31, 2019, <https://www.archives.gov/federal-register/executive-orders/1952.html>.
- 103 Maeva Marcus, *Truman and the Steel Seizure Case: The Limits of Presidential Power* (Durham: Duke University Press, 1994), p. 81; Harry Truman, “Radio and Television Address to the American People on the Need for Government Operation of the Steel Mills, April 8, 1952,” in *Public Papers of the Presidents of the United States: Harry S. Truman* (Washington, D.C.: United States Government Printing Office, 1966), p. 247.
- 104 The Taft-Hartley Act, signed in 1947 over President Truman’s veto, played a prominent role in the steel crisis. The act, which was despised by labor unions, gave the president the authority to intervene in strikes during times of national emergency and impose an 80-day cooling off period. During debate on the law, Congress voted down an amendment that would have allowed the president to seize companies in order to strike a labor agreement. Truman was reluctant to use the Taft-Hartley Act during the steel crisis for several reasons, but company lawyers used this as a line of attack in their legal arguments. See: Isaac Unah, *The Supreme Court in American Politics* (New York: Palgrave, 2009), p. 18.
- 105 Maeva Marcus, *Truman and the Steel Seizure Case: The Limits of Presidential Power* (Durham: Duke University Press, 1994), pp. 93–94.
- 106 Melvin I. Urofsky, *Dissent and the Supreme Court: Its Role in the Court’s History and the Nation’s Constitutional Dialogue* (New York: Vintage Books, 2017), p. 254.
- 107 “Seizure! Truman Takes the Steel Mills,” Constitutional Rights Foundation, accessed June 10, 2019, <http://www.crf-usa.org/bill-of-rights-in-action/bria-4-4-b-seizure-truman-takes-the-steel-mills.html>
- 108 Charles E. Egan, “Truman Expected to Take Some Mills for Combat Steel; Defense Chiefs’ Anxiety Spurs Decision for Seizure Under Selective Service Act,” *New York Times*, July 19, 1952.
- 109 David McCullough, *Truman* (New York: Simon and Schuster, 1992), p. 1072.
- 110 Paul G. Pierpaoli, *Truman and Korea: The Political Culture of the Early Cold War* (Columbia, MO: University of Missouri Press, 1999), p. 171.
- 111 William I. Hitchcock, *The Age of Eisenhower: American and the World in the 1950s* (New York: Simon and Schuster, 2018), p. 262.
- 112 “National Interstate and Defense Highways Act (1956), *Ourdocuments.gov*, accessed June 10, 2019, <https://www.ourdocuments.gov/doc.php?flash=false&doc=88>.
- 113 “U.S. Constitution,” Legal Information Institute, accessed June 10, 2019, <https://www.law.cornell.edu/constitution/index.html#>.
- 114 The Fourteenth amendment extended the “just compensation” provision to state uses of eminent domain as well. See: “National Eminent Domain Power,” Legal Information Institute, accessed June 10, 2019, <https://www.law.cornell.edu/constitution-conan/amendment-5/national-eminent-domain-power>.
- 115 “History of the Federal Use of Eminent Domain,” United States Department of Justice, May 15, 2015, accessed June 10, 2019, <https://www.justice.gov/enrd/history-federal-use-eminent-domain>; “General Motors Corporation v. United States, 140 F.2d 873 (7th Cir. 1944),” *Justia*, accessed August 2, 2019, <https://law.justia.com/cases/federal/appellate-courts/F2/140/873/1566992/>.
- 116 “Josh Stephens, “Reclaiming the Interstates from Ike,” *California Planning & Development Report*, December 8, 2011, accessed June 10, 2019, <http://www.cp-dr.com/articles/node-3072>.
- 117 Eric Arnesen, ed., *Encyclopedia of U.S. Labor and Working-Class History*, Vol 1 (New York: Routledge, 2007), p. 1246.
- 118 However, as the war continued, labor militancy—especially among rank-and-file workers—grew. By the end of the 1960s, strikes were occurring with increasing frequency. See: Frank Koscielski, *Divided Loyalties: American Unions and the Vietnam War* (New York: Garland Publishing, 1999).
- 119 “Transcript of President Dwight D. Eisenhower’s Farewell Address (1961),” *ourdocuments.gov*, accessed August 2, 2019, <https://www.ourdocuments.gov/doc.php?flash=false&doc=90&page=transcript>.
- 120 John Kenneth Galbraith, “The Big Defense Firms Are Really Public Firms and Should be Nationalized,” *New York Times*, November 16, 1969.
- 121 In *Bailouts: Public Money, Private Profit*, Robert Wright identifies ten possible government reactions to a crisis ranging from doing nothing to full nationalization. In four of the reactions, risks are not socialized and profits are private (1. Do nothing—won’t; 2. Do nothing—can’t; 3. Broker a private rescue; 4. Favoritism). In three of the reactions, risks are socialized and profits are mostly private depending on the circumstances (1. Cash grants; 2. Loan guarantees; 3. Lender of last resort—modern central bank rule). And in five reactions, risks are socialized and profits are usually public depending on the circumstances (1. Lender of last resort—Hamilton nee Bagehot’s Rule; 2. Troubled asset purchase; 3. Equity investor of last resort [part nationalization]; 4. Conservatorship; 5. Full nationalization). See: Robert E. Wright, “Hybrid Failures and Bailouts: Social Costs, Private Profits” in Robert E. Wright, ed., *Bailouts: Public Money, Private Profit* (New York: Columbia University Press, 2009), p. 21.
- 122 William D. Hartung, *Prophets of War: Lockheed Martin and the Making of the Military-Industrial Complex* (New York: Nation Books, 2011), p. 97.
- 123 Eric A. Posner and Anthony Casey, “A Framework for Bailout Regulation,” *Notre Dame Law Review*, vol. 91 (2015), accessed June 10, 2019, https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=12151&context=journal_articles.
- 124 William E. Simon, *A Time for Truth* (New York: McGraw-Hill, 1978), p. 196.
- 125 Department of Transportation and Related Agencies Appropriations for 1971, Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, Ninety-first Congress, Second Session, Part 3 (Washington, D.C.: Government Printing Office, 1970), p. 412.
- 126 Robert Gallamore and John R. Meyer, *American Railroads: Decline and Renaissance in the Twentieth Century* (Cambridge: Harvard University Press, 2014), p. 147.
- 127 Phillip Longman, “Washington’s Turnaround Artists,” *Washington Monthly*, March/April 2009, accessed April 4, 2017, www.unz.org/Pub/WashingtonMonthly-2009mar-00014.



- 128 “National Railroad Passenger Service Act,” U.S. Department of Transportation, accessed August 5, 2019, <https://www.transportation.gov/content/national-railroad-passenger-service-act>.
- 129 James Burns, *Railroads and the Language of Unification* (Westport, CT: Quorum Books, 1998), p. 46.
- 130 Adapted from the lists provided in: Craig Sanders, *Amtrak in the Heartland* (Bloomington, IN: Indiana University Press, 2006), pp. 7-8.
- 131 Craig Sanders, *Amtrak in the Heartland* (Bloomington, IN: Indiana University Press, 2006), pp. 7-8.
- 132 “The Northeast Corridor: Critical Infrastructure for the Northeast,” Amtrak, accessed April 8, 2017, https://nec.amtrak.com/sites/default/files/NEC%20Fact%20Sheet%202017_Final.pdf.
- 133 *Final System Plan for Restructuring Railroads in the Northeast and Midwest Region Pursuant to the Regional Rail Reorganization Act of 1973: Supplemental Report* (Washington, D.C.: United States Railway Association, September 1975)
- 134 “Brief History of Consolidated Rail Corporation,” Conrail, accessed June 11, 2019, <http://www.conrail.com/history/>.
- 135 Phillip Longman, “Washington’s Turnaround Artists,” *Washington Monthly*, March/April 2009, accessed April 4, 2017, www.unz.org/Pub/WashingtonMonthly-2009mar-00014.
- 136 “Brief History of Consolidated Rail Corporation,” Conrail, accessed June 11, 2019, <http://www.conrail.com/history/>.
- 137 Adapted from the lists provided in: “Attachment B: List of Transferors, Sheets 1-3,” in *The Conveyance Process: A Supplement to the Final Report of the United States Railway Association* (Washington, D.C.: USRA 1986).
- 138 Benton E. Gup, ed., *Too Big to Fail: Policies and Practices in Government Bailouts* (Westport, CT: Praeger, 2004), p. 36.
- 139 Thomas J. Lueck, “Chrysler Top Bids to Buy Back Stock Rights,” *New York Times*, September 13, 2003, accessed June 11, 2019, <https://www.nytimes.com/1983/09/13/business/chrysler-top-bids-to-buy-back-stock-rights.html>
- 140 Benton E. Gup, ed., *Too Big to Fail: Policies and Practices in Government Bailouts* (Westport, CT: Praeger, 2004), p. 36.
- 141 James M. Bickley, *Chrysler Corporation Loan Guarantee Act of 1979: Background, Provisions, and Cost* (Washington, D.C.: Congressional Research Service, 2008), accessed June 11, 2019, https://digitalcommons.ilr.cornell.edu/cqj/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1575&context=key_workplace.
- 142 Tamim A. Bayoumi, *Unfinished Business: The Unexplored Causes of the Financial Crisis and the Lessons Yet to be Learned* (New Haven, CT: Yale University Press, 2017), p. 51.
- 143 Lee Davison, “Continental Illinois and ‘Too Big to Fail,’” in Federal Deposit Insurance Corporation, *History of the Eighties: Lessons for the Future. Vol. 1, An Examination of the Banking Crises of the 1980s and Early 1990s* (Washington, D.C.: FDIC, 1997), p. 244, accessed June 11, 2019, https://www.fdic.gov/bank/historical/history/235_258.pdf.
- 144 George Nurisso and Edward S. Prescott, “The 1970s Origins of Too Big to Fail,” Federal Reserve Bank of Cleveland, October 18, 2017, accessed June 12, 2019, <https://www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/2017-economic-commentaries/ec-201717-origins-of-too-big-to-fail.aspx>.
- 145 Irvine H. Sprague, *Bailout: An Insider’s Account of Bank Failures and Rescues* (Washington, D.C.: Beard Books, 2000), p. 182.
- 146 Nathaniel C. Nash, “Continental Illinois Stock Sale,” *New York Times*, October 17, 1986, accessed August 5, 2019, <https://www.nytimes.com/1986/10/17/business/continental-illinois-stock-sale.html>.
- 147 Lee Davison, “Continental Illinois and ‘Too Big to Fail,’” in Federal Deposit Insurance Corporation, *History of the Eighties: Lessons for the Future. Vol. 1, An Examination of the Banking Crises of the 1980s and Early 1990s* (Washington, DC: FDIC, 1997), accessed June 11, 2019, https://www.fdic.gov/bank/historical/history/235_258.pdf.
- 148 Krista Kjellman Schmidt, “Bailout Aftermaths,” Propublica, September 25, 2008, accessed June 12, 2019, <https://www.propublica.org/article/bailout-aftermaths>.
- 149 “Resolutions Handbook,” FDIC, December 23, 2014, accessed April 11, 2018, https://www.fdic.gov/about/freedom/drr_handbook.pdf.
- 150 Kenneth J. Robinson, “Savings and Loan Crisis,” Federal Reserve History, November 22, 2013, accessed June 12, 2019, https://www.federalreservehistory.org/essays/savings_and_loan_crisis.
- 151 Paul Krugman, “Reagan Did It,” *New York Times*, May 31, 2009, accessed August 6, 2019, <https://www.nytimes.com/2009/06/01/opinion/01krugman.html>.
- 152 William K. Black, *The Best Way to Rob a Bank is to Own One: How Corporate Executives and Politicians Looted the S&L Industry* (Austin, TX: University of Texas Press, 2005), pp. 1-2.
- 153 David L. Mason, *From Buildings and Loans to Bail-Outs: A History of the American Savings and Loan Industry, 1831-1995* (Cambridge, UK: Cambridge University Press, 2004), p. 213.
- 154 Kenneth J. Robinson, “Savings and Loan Crisis,” Federal Reserve History, November 22, 2013, accessed June 12, 2019, https://www.federalreservehistory.org/essays/savings_and_loan_crisis.
- 155 Resolution Trust Company, *1991 Annual Report* (Washington, D.C. RTC, 1991), accessed June 12, 2019, https://fraser.stlouisfed.org/files/docs/publications/rtc/ar_rtc_1991.pdf.
- 156 Julia Kagan, “Resolution Trust Corporation,” Investopedia, May 6, 2019, accessed June 12, 2019, <https://www.investopedia.com/terms/r/resolution-trust-corporation.asp>.
- 157 Alan Moysich, “The Savings and Loan Crisis and Its Relationship to Banking,” in Federal Deposit Insurance Corporation, *History of the Eighties: Lessons for the Future. Vol. 1, An Examination of the Banking Crises of the 1980s and Early 1990s* (Washington, D.C.: FDIC, 1997), accessed June 11, 2019, https://www.fdic.gov/bank/historical/history/167_188.pdf.
- 158 Margaret M. Blair, “The Economics of Post-September 11 Financial Aid to Airlines,” *Indiana Law Review*, vol. 35 (2002), p.1.
- 159 Jon Birger, “How the U.S. Could Make Money off the Bailout,” *Fortune*, September 24, 2008, accessed June 12, 2019, http://archive.fortune.com/2008/09/24/news/economy/birger_bailout.fortune/index.htm.
- 160 Daniel Gross, “Bailing for Dollars,” *Slate*, May 7, 2004, accessed June 12, 2019, <https://slate.com/business/2004/05/at-last-a-government-program-that-makes-a-profit.html>.
- 161 Jon Birger, “How the U.S. Could Make Money off the Bailout,” *Fortune*, September 24, 2008, accessed June 12, 2019, http://archive.fortune.com/2008/09/24/news/economy/birger_bailout.fortune/index.htm.
- 162 Jon Birger, “How the U.S. Could Make Money off the Bailout,” *Fortune*, September 24, 2008, accessed June 12, 2019, http://archive.fortune.com/2008/09/24/news/economy/birger_bailout.fortune/index.htm.
- 163 In Robert Wright’s spectrum of bailouts, the airline industry in 2001 would be a mix of cash grants (risk socialized, profit private) and loan guarantees (risk socialized, profit mixed between public and



- private). See: Robert E. Wright, “Hybrid Failures and Bailouts: Social Costs, Private Profits” in Robert E. Wright, ed., *Bailouts: Public Money, Private Profit* (New York: Columbia University Press, 2009), p. 21.
- 164 Steven Truxal, *Competition and Regulation in the Airline Industry: Puppets in Chaos* (London: Routledge, 2012), p. 112.
- 165 “Review of Airport Security Firm Shows Security Breaches Continue,” CNN, October 17, 2001, accessed June 12, 2019, <http://edition.cnn.com/2001/US/10/17/inv.airport.security.audit/>.
- 166 Peter W. Singer, “Arguments Against Federalization Flimsy,” Brookings, November 7, 2001, accessed August 7, 2019, <https://www.brookings.edu/opinions/arguments-against-federalization-flimsy/>; Molly Selzer, “Federalization of Airport Security Workers: A Study of the Practical Impact of the Aviation and Transportation Security Act from a Labor Law Perspective,” *University of Pennsylvania Journal of Labor and Employment Law*, vol. 5, no. 2 (2001).
- 167 Michael P.C. Smith, “September 11 and the Transportation Security Administration,” National Museum of American History, September 1, 2011, accessed June 12, 2019, <https://americanhistory.si.edu/blog/2011/09/september-11-and-the-transportation-security-administration.html>
- 168 “Legislation Re-Introduced to Grant TSA Officers the Same Workplace Protections as Other Federal Employees, AFGE, February 13, 2019, accessed June 12, 2019, <https://www.afge.org/publication/legislation-re-introduced-to-grant-tsa-officers-the-same-workplace-protections-as-other-federal-employees/>; Eric Schewe, “Why Can’t the TSA Just Go on Strike?” JSTOR Daily, January 24, 2019, accessed August 7, 2019, <https://daily.jstor.org/why-cant-tsa-just-go-strike/>.
- 169 Michael A. Hiltzik, et al., “How Did Hijackers Get Past Airport Security?” *Los Angeles Times*, September 23, 2001, accessed August 7, 2019, <https://www.latimes.com/archives/la-xpm-2001-sep-23-mn-48940-story.html>.
- 170 “Transcript: Bret Baier Interviews President Bush,” Fox News, December 17, 2008, accessed August 7, 2019, <https://www.foxnews.com/politics/transcript-bret-baier-interviews-president-bush>.
- 171 Gary S. Corner, “The Troubled Asset Relief Program—Five Years Later,” Federal Reserve Bank of St. Louis, Fall 2013, accessed December 12, 2017, <https://www.stlouisfed.org/publications/central-banker/fall-2013/the-troubled-asset-relief-program-five-years-later>; Steven M. Davidoff, “Uncomfortable Embrace: Federal Corporate Ownership in the Midst of the Financial Crisis,” *Minnesota Law Review*, vol. 95 (2011).
- 172 Steven M. Davidoff, “Uncomfortable Embrace: Federal Corporate Ownership in the Midst of the Financial Crisis,” *Minnesota Law Review*, vol. 95 (2011).
- 173 Lawrence J. White, “Fannie Mae, Freddie Mac, and Housing: Good Intentions Gone Awry,” in Randall G. Holcombe and Benjamin Powell, eds., *Housing America: Building Out of a Crisis* (New York: Routledge, 2017), p. 264.
- 174 Kimberly Amadeo, “What Was the Fannie Mae and Freddie Mac Bailout?” The Balance, December 30, 2017, accessed December 31, 2017, <https://www.thebalance.com/what-was-the-fannie-mae-and-freddie-mac-bailout-3305658>.
- 175 Stacey Vanek Smith, “Who Owns Fannie Mae and Freddie Mac?” NPR, April 21, 2015, accessed December 12, 2017, <https://www.npr.org/sections/money/2015/04/21/401259676/who-owns-fannie-mae-and-freddie-mac>.
- 176 Steven Davidoff Solomon, “Decade After Crisis, No Resolution for Fannie and Freddie,” *New York Times*, February 7, 2017, accessed December 12, 2017, <https://www.nytimes.com/2017/02/07/business/dealbook/decade-after-crisis-no-resolution-for-fannie-and-freddie.html>.
- 177 Stacey Vanek Smith, “Who Owns Fannie Mae and Freddie Mac?” NPR, April 21, 2015, accessed December 12, 2017, <http://www.npr.org/sections/money/2015/04/21/401259676/who-owns-fannie-mae-and-freddie-mac>.
- 178 For Citigroup, see: Nomi Prins, *It Takes a Pillage: Behind the Bailouts, Bonuses and Backroom Deals from Washington to Wall Street* (Hoboken, NJ: Wiley, 2009), 40. For AIG, see: “January Oversight Report: Exiting TARP and Unwinding Its Impact on the Financial Markets,” Congressional Oversight Panel, January 13, 2010, accessed April 11, 2018, 66; For GMAC, see: Steven Davidoff Solomon, “Profits in G.M.A.C Bailout to Benefit Financiers, Not U.S.,” *New York Times*, August 21, 2012, accessed April 11, 2018, <https://dealbook.nytimes.com/2012/08/21/profits-in-g-m-a-c-bailout-to-benefit-financiers-not-u-s/>.
- 179 Steven M. Davidoff, “Uncomfortable Embrace: Federal Corporate Ownership in the Midst of the Financial Crisis,” *Minnesota Law Review*, vol. 95 (2011).
- 180 Steven M. Davidoff, “Uncomfortable Embrace: Federal Corporate Ownership in the Midst of the Financial Crisis,” *Minnesota Law Review*, vol. 95 (2011).
- 181 Steven M. Davidoff, “Uncomfortable Embrace: Federal Corporate Ownership in the Midst of the Financial Crisis,” *Minnesota Law Review*, vol. 95 (2011).
- 182 Steven Rattner, *Overhaul: An Insider’s Account of the Obama Administration’s Emergency Rescue of the Auto Industry* (New York, NY: Houghton Mifflin Harcourt Publishing Company, 2010), p. 183.
- 183 Steven Rattner, *Overhaul: An Insider’s Account of the Obama Administration’s Emergency Rescue of the Auto Industry* (New York, NY: Houghton Mifflin Harcourt Publishing Company, 2010), p. 187.
- 184 Chris Isidore, “Big Three plead for \$34B from Congress,” CNN Money, December 5, 2008, accessed August 7, 2019, https://money.cnn.com/2008/12/04/news/companies/senate_hearing/.
- 185 *Auto Industry: Summary of Government Efforts and Automakers’ Restructuring to Date* (Washington, D.C: United States Government Accountability Office, April 2009), accessed August 7, 2019, <https://www.gao.gov/new.items/d09553.pdf>.
- 186 Brian Montopoli, “Remarks: Obama on Future of Automakers,” CBS News, March 30, 2009, accessed June 13, 2019, <https://www.cbsnews.com/news/remarks-obama-on-future-of-automakers/>.
- 187 “GM Timeline,” U.S. Treasury Department Office of Public Affairs, accessed June 13, 2019, <https://www.treasury.gov/press-center/press-releases/Documents/GM%20Timeline.pdf>.
- 188 “GM Bankruptcy Reorganization Plan Approved,” Kelly Blue Book, July 8, 2009, accessed June 13, 2019, <https://www.kbb.com/car-news/gm-bankruptcy-reorganization-plan-approved/200004295/>.
- 189 “GM Timeline,” U.S. Treasury Department Office of Public Affairs, accessed June 13, 2019, <https://www.treasury.gov/press-center/press-releases/Documents/GM%20Timeline.pdf>.
- 190 Scott Neuman, “Government Sells Last Shares in GM, Loses \$10 Billion,” NPR, December 9, 2013, accessed June 13, 2019, <https://www.npr.org/sections/thetwo-way/2013/12/09/249815202/government-sells-last-shares-in-gm-loses-10-billion>.
- 191 “Chrysler Sold to Fiat-led ‘New Chrysler’ After Historic Court Proceedings,” Jones Day, August 2009, accessed June 13, 2019, <https://www.jonesday.com/chrysler-sells-assets-to-fiat-led-new-chrysler-after-unprecedented-court-proceedings/>.
- 192 “2009 Financial Report of the United States Government,” Government Accountability Office, p. 20, accessed June 13, 2019, https://www.gao.gov/financial_pdfs/fy2009/09frusg.pdf.
- 193 “Fiat Agrees to Buy Remaining Chrysler Stake in \$4.35 Billion Deal,” Autonews, January 1, 2014, accessed June 13, 2019, <https://www.autonews.com/article/20140101/OEM/140109997/fiat-agrees-to-buy-remaining-chrysler-stake-in-4-35-billion-deal>.

Thomas M. Hanna is Director of Research at The Democracy Collaborative, and the author of *Our Common Wealth: The Return of Public Ownership in the United States*.

The Next System Project explores systemic solutions to systemic crisis. It is a project of The Democracy Collaborative, a research and development lab for the democratic economy.

Learn more at democracycollaborative.org and thenextsystem.org.