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The Rise of American Minimum Wages, 1912–1968

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Minimum wages have been among the most controversial government interventions in labor markets for more than a century. We focus on the political economy of the rise of the American minimum wage from its beginnings as state laws for women and children in the 1910s through the years when the federal minimum wage reached its peak value in real terms in the late 1960s and the coverage of the workforce became nearly complete in the early 1970s. Figure 1 documents the trend rise in the real value of the federal minimum between 1938 and 1968 as well as its subsequent decline to levels that had been reached in the early 1950s.

In the course of the discussion, we will suggest five main themes. First, states legislated the original minimum wage laws starting in 1912 and played prominent roles in raising minimum wages in the 1940s and adding coverage in the 1950s. States have again led the way in raising minimum wages in the last 25 years.

Second, the Supreme Court limited the options of minimum wage advocates until 1937. In close votes in the 1920s, the justices struck down the state minimum wage laws, weighing freedom of contract against establishing a minimum standard for health and safety of female workers. Declining income during the Depression led the states to enact new minimum wage laws for women and children. Meanwhile, Presidents Hoover and Roosevelt pressured employers to negotiate voluntarily to

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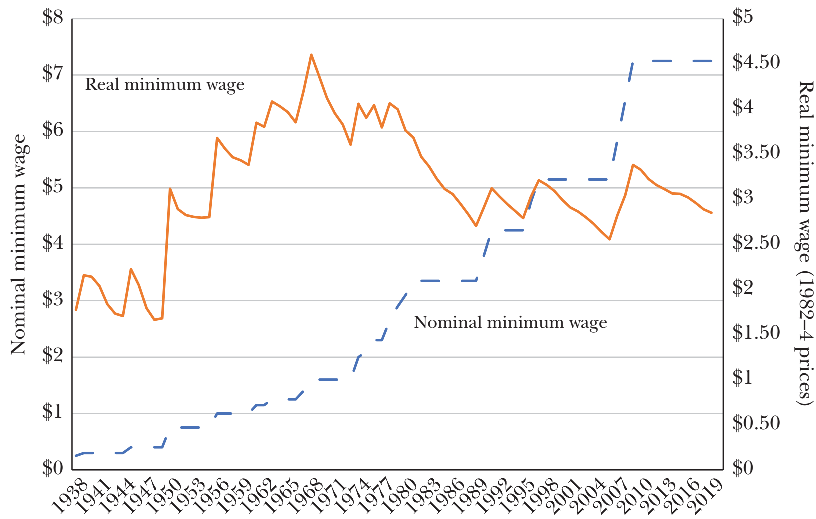
Figure 1
Nominal and Real Federal Minimum Wage, 1938–2019



Source: Minimum wage is from Carter et al. (2006, series Ba4422, pp. 2–284). The real minimum wage is in 1982–1984 prices, using the Consumer Price from Federal Reserve Bank of St. Louis (2019, series CUUR0000SA0), downloaded in August 2019.

limit hours and set wage minimums to promote employment with earnings that covered basic needs. In 1936, the Court struck down a new type of state minimum wage law along with also striking down the National Industrial Recovery Act of 1933. However, in 1937, the Court reversed these decisions and opened the door for the federal government to set minimum wages for nearly all workers.

Third, during the New Deal of the 1930s, the federal government accepted more responsibility for regulating labor markets and combatting poverty, and the struggle over the minimum wage shifted to Congress. Proponents of the minimum called for rates that would provide a decent standard of living for workers and for an end to cutthroat wage competition that endangered the health and safety of low-wage workers. Conversely, southern leaders, who held seniority in major committees, sought to defend the low wages matched to low costs of living that had promoted the development of southern industries. The ultimate compromise in the Fair Labor Standards Act (FLSA) of 1938 called for a slow rise in the minimum over time, industry-specific minimums, and coverage of only about half of the workforce.

Fourth, each post-World War II US president until Ronald Reagan both supported and presided over a rise in the minimum wage. The compromises in the 1949 and 1955 amendments raised the minimum wage without expanding coverage, while the 1961, 1966, 1974, and 1977 amendments raised the minimum and expanded coverage to nearly all of the work force. The real value of the minimum has followed the sawtooth pattern shown in Figure 1, with a jump following each nominal rise and then a decline as inflation eroded purchasing power.

Fifth, the debates among economists concerning the minimum wage came in waves and built on common themes debated since the Progressive Era while making use of evolving language that incorporated Joan Robinson's (1933) analysis of *labor monopsony* and Depression-era claims that minimum wages would lead to macroeconomic stimulus. An empirical debate in 1960 in the *Industrial and Labor Relations Review* set the stage for the empirical debates that followed. Earlier generations of the minimum wage debates anticipated many issues in the modern literature—causal inference, omitted variables, pre-trends, differences-in-differences differences, and discontinuities—but had to rely on cross-tabulations of aggregate data. Over the past 60 years, the empirical debates have had increasing access to disaggregated data and new econometric methods that make use of increasing computing power.

Early State-level Minimum Wage Laws for Women and Children

In the early 1900s, labor law was the responsibility of state and local governments. The primary argument given by supporters of the early state labor laws covering women and children was to end "sweated" labor—hard work for very low pay under poor conditions (Webb 1912; Women's Bureau 1928; Commons 1935)—which was often discussed as a health and safety issue. The US Supreme Court upheld state-level laws placing limits on men's daily hours in dangerous industries like mining and ore smelting refining as early as *Holden v. Hardy* (169 US 366 [1898]). However, the Court struck down a New York state law limiting the hours of male bakers in *Lochner v. New York* (198 US 45 [1905]) in a 5-4 decision on the grounds that the limit violated freedom of contract and that long hours in baking were not a threat to safety or public health. In contrast, the Court upheld a general limit on women's hours law in all industries in *Muller v. Oregon* (208 US 412 [1908]), reasoning that it was socially important for women to bear "vigorous" offspring, and that hours limitations for women could be justified on the grounds that "the physical well-being of woman becomes an object of public interest and care in order to preserve the strength and vigor of the race" (Fishback 2018).

Despite a surge in the discussion of the minimum wage for all workers in the major economics journals between 1909 and 1913, their experience with previous attempts to pass hours laws led reformers to find if more fruitful to devote their efforts to obtain a minimum wage only for women and children. Their efforts met with success when Massachusetts enacted the first minimum wage law in 1912. Oregon soon followed in 1913 and in the next decade Washington, DC, and 14 more states joined them. Table 1 lists the states that enacted minimum wage laws from 1912–1937, together with the coverage of the laws. A few states set flat minimum wages, while most copied earlier minimum wage laws in Australia, New Zealand, and the United Kingdom and created commissions to issue minimum wage orders by sector.

Table 1
State Minimum Wage Laws, 1911–37

State	*Date(s)*	*Coverage*	*Exceptions (1938)*
Arizona	1917–25, 1937	W, C21	A, B
Arkansas	1915–27, 1937	W	B, C, D
California	1913	W, C18	NONE
Connecticut	1933	W, C18	A, B
Colorado	1913	W, C18	NONE
District of Columbia	1918–23, 1938	W, C18	A
Illinois	1933	W, C18	A, B
Kansas	1915–27, 1938	W, C21	NONE
Kentucky	1938	W, C21	A, B, E
Louisiana	1938	W	A, B, I
Massachusetts	1912–34, 1934	W, C21	A, B
Minnesota	1913–25, 1937	W	NONE
Nebraska	1913–19	W	
Nevada	1937	W, C21	A
New Hampshire	1933	W, C21	A, B
New Jersey	1933	W, C21	A, B, F
New York	1933–36, 1937	W, C18	A, B
North Dakota	1919	W, C21	A, B
Ohio	1933	W, C21	A, B
Oklahoma	1937	All	B
Oregon	1913	W, C18	NONE
Pennsylvania	1937	W, C21	A, B, G, H
Rhode Island	1936	W, C21	A, B
South Dakota	1923	W	A, B
Texas	1919–21	W, C15	
Utah	1913–29, 1933	W, C18	NONE
Washington	1913	W, C18	NONE
Wisconsin	1913–24, 1937	W, C21	NONE

Source: United States Bureau of Labor Statistics (1933b), Phelps (1939), p. 60, and Seltzer (1994).
Note: W – women, C21 (C18) – children 21 (18) years of age or less, A – domestic service, B – agricultural labor, C – cotton factories, D – railroads covered by federal laws, E – firms regulated by the state Public Service Commission, F – hotels, G – religious or charitable organizations, H – sale and delivery of newspapers and magazines, I – municipalities with a population under 10,000.

While reformers focused on passing minimum wages for women and children, the debates in the economics profession centered on minimums for all workers. Institutional economists associated with the American Association of Labor Legislation (AALL) played significant roles in arguing for the women's minimum wage during the Progressive Era. Notables John Andrews, John R. Commons, Richard Ely, Henry Seager, and Leo Wolman drew lessons from minimum wages set in Australia, New Zealand, and the United Kingdom, where Sidney Webb (1912) and Matthew Hammond (1915) claimed minimum wages had yielded wage increases with at worst weak negative consequences.

Prasch (2000, 2007) identifies several themes in their arguments. First, women had limited opportunities and weak bargaining power. John Bates Clark (1913,

p. 292) suggested that they might be hired for less than their "worth as measured by the productivity test." Second, minimum wages would prevent payment of less than subsistence wages to "boy labor, girl labor, married women's labor, the labor of old men, of the feeble-minded, of the decrepit and broken-down invalids, and all the other alternatives to the engagement of competent male adult workers at a full Standard Rate" (Webb 1912, p. 986). Such low wages damaged the health, training, and education of their operatives in ways that would damage future generations. Third, Sidney Webb (1912, pp. 986–88) argued that low-wage employers in "sweated trades" were "parasitic." Their payment of low wages to their operatives drove wages down for more productive workers. He recognized that a minimum wage would reduce employment among these groups, but he preferred to eliminate the hidden subsidies to the sweatshop employers and have society directly pay the cost of providing the formerly sweated workers with the education, training, health care, and temporary poor relief necessary to make them successful in the longer run. In his view, introducing minimum wages would force employers to compete by paying appropriate wages to adult workers and by increasing productivity with new machinery and more efficient organization of labor. This theme was one that often led large, unionized, and more productive employers to join reformers in supporting other progressive labor legislation as well (Fishback 1998).[1]

John Bates Clark (1913), Frank Taussig (1916), A. C. Pigou (1913), and Frank Fetter (1917) wrote about the minimum wage in the marginalist tradition, which later evolved into neoclassical economics. They warned of the negative consequences of a minimum wage for employment. Bates Clark (1913, p. 294) summarized their reasoning: "What is probable, even as the result of a more modest legal increase of pay, is as follows: Of the lowest grade of workers some would be promoted to a higher rank and some would be discharged. The output of the business would be reduced." Taussig (1916) argued against views that "parasitic" industries were a cause of low wages, instead laying the blame for low wages more on a large supply of low-skilled women that was made larger by immigration. Clark and Fetter seemed willing to experiment with minimum wages, but Clark (1913, pp. 296–7) argued that it should be accompanied by emergency relief for those left unemployed. Fetter and Taussig suggested that poverty might better be prevented through improved education, training, and housing and immigration restrictions.

These early minimum wage laws applying to women and children were under continual challenge in the court system. The constitutionality of such laws was supported by state supreme courts in Arkansas, Massachusetts, Minnesota, and Oregon, and Washington (Clark 1921, p. 33). A 4–4 tie in the US Supreme Court in the case of *Stettler v. O'Hara* (243 US 629 [1917]) left the Oregon minimum wage law in place. But in 1923, the Supreme Court declared the District of Colombia law

[1] Leonard (2005, pp. 212–15) claims that a number of progressive economists justified the minimum wage on eugenics grounds. The arguments economists made in the prominent minimum wage papers, however, made few mentions of eugenics issues. Those who held eugenic views wrote about them in other contexts outside of the minimum wage debate.

unconstitutional by a 5–3 vote in *Adkins v. Children's Hospital* (261 US 525 [1923]).[2] The majority affirmed the doctrine of "freedom of contract," and stated that "wages, unlike hours affected health only 'indirectly or remotely.'" Oliver Wendell Holmes dissented, arguing that the correct goal of a minimum wage for women and children was to remove conditions causing "ill health, immorality, and the deterioration of the race" (as quoted by Cushman 1998, pp. 67, 69)

Despite the series of court rulings, several states continued to revise their minimum wages throughout the 1920s and into the 1930s, albeit without formal sanctions (US Bureau of Labor Statistics 1933b, pp. 1344–54). The absence of enforcement was not really much of a change. As was the case for nearly all labor laws at the time, regulatory budgets were meager at best; therefore, enforcement relied on the employer's willingness to abide by the law, pressure from workers, and public opinion. Case studies of minimum wages in the 1910s and 1930s showed increased earnings and declines in hours of employment for women subject to the minimums, although there was an intense debate about whether other factors that could lead to higher wages and lower hours were actually being held constant in these analyses (as discussed in Peterson 1959, 1960; Lester 1960). More recently, Marchingiglio and Poyker (2020) find statistically significant effects on female employment in a triple-difference analysis of state minimum wage laws using the full censuses from 1880 through 1930.

By the early 1930s, minimum wage advocates had not lost hope, because the earlier votes in the minimum wage court decisions had been close and four seats on the US Supreme Court had turned over. In the early 1930s, states passed new minimum wage laws (as shown in Table 1). Most were based on a standard bill sponsored by the National Consumers' League that was designed to avoid the language used in the unconstitutional acts (US Bureau of Labor Statistics 1933a, p. 1259). The Bureau of Labor Statistics (1933b, p. 1346) supported the laws on grounds that the Depression had made it "apparent that unfair wage standards not only undermine the health and well-being of the workers but threaten the stability of industry itself." The laws protected "the public health, morals and welfare."

In 1936, the Supreme Court struck down the 1933 New York minimum wage law with a 5–4 vote in *Morehead v. New York ex. Rel. Tipaldo* (298 US 587 [1936]), even though the framers of the law had tried to differentiate it from the Washington, DC, law that had been declared unconstitutional in 1923. Chief Justice Hughes (p. 619) dissented: "I can find nothing in the Federal Constitution which denies to the state the power to protect women from being exploited by overreaching employers." In a separate dissent, Justices Stone, Brandeis, and Cardozo declared that in the prior decade, society had learned that a wage is not always the outcome of free bargaining; that it may be "forced upon employees by their economic necessities and upon employers by the most ruthless of their competitors." In their view,

[2] Only eight Supreme Court justices voted in *Stettler* and *Adkins*, because Justice Louis Brandeis recused himself after having been an advocate for these minimum wage laws in the lower courts.

insufficient wages burdened society as a whole, and the problem should be solved by the legislative branch (pp. 635–6).

In 1937, however, the Supreme Court reversed course when Justice Owen Roberts switched sides and declared the Washington minimum wage from 1913 to be constitutional in *West Coast Hotel v. Parrish* (300 US 379 [1937]). Roberts had joined the court after the 1923 *Adkins* decision and later claimed that he had voted against the New York minimum in 1936 because it was similar to the Washington, DC, law and New York's lawyers failed to challenge the *Adkins* ruling. When lawyers for Washington state directly challenged the *Adkins* decision in 1937, he chose to support their law because women were "especially liable to be overreached and exploited by unscrupulous employers," which was "not only detrimental to the health and wellbeing of the women affected, but casts a direct burden for their support upon the community."[3] A number of states quickly passed new laws for women and children and the door opened for more intense pressure for a minimum for all workers.

The Lead-up to a National Minimum Wage for All Workers

While the states focused on women's minimum wages in the early 1930s, federal government officials pressured firms to agree voluntarily to accept wage minimums and hours maximums. Between 1929 and 1931, President Hoover "jawboned" leading manufacturers to set up work-sharing arrangements with reduced weekly hours, more employment, and no reductions in hourly earnings (Rose 2010; Neumann, Taylor, and Fishback 2013). A centerpiece of President Franklin Roosevelt's New Deal was the National Industrial Recovery Act (NIRA) of 1933, which called for employers, workers, and consumers in each sector to limit excessive competition by negotiating codes that included minimum wages and maximum weekly work hours. While waiting for the codes, Roosevelt convinced thousands of firms to sign President's Reemployment Agreements (PRAs) that set maximum hours and minimum wages with the stated goal to "raise wages, create employment, and thus increase purchasing power and restore business." During the following months, over 500 sectors then set up National Recovery Administration (NRA) codes of competition that included sector-specific minimum wages (sometimes with multiple tiers) and weekly hours maximums.

The President's Reemployment Agreements and the codes differed from a statutory minimum wage because they were voluntary. Employers agreed to the constraints by signing the PRA in August 1933 or by later signing onto one of the industry codes. If firms/employers did not sign the code or agreement, however, they were not subject to the minimum wage or the maximum hours. Thus, the PRA

[3] Some claim that Roberts switched sides to dissuade President Roosevelt from his scheme to add justices to the Supreme Court. Cushman (1998) and Frankfurter (1955) disagree, noting that the vote was in December well before the scheme was announced.

and NRA minimums were based on bargaining, unlike statutory minimum wages. So why did firms sign up? The major gain came from being seen as patriotic, because the firm could prominently display the NRA's Blue Eagle. The federal government marketed the connection between patriotism and the Blue Eagle through parades and house-to-house drives, garnering signatures on pledges from over 20 million householders that they would favor Blue Eagle firms (Taylor 2011). Taylor (2019, chapter 4) and Meeker (1933, pp. 467–8) both suggested an undercurrent of coercion as well. The administration sought to make firms believe that noncompliance would cost them dearly with unspoken threats of boycotts. In August 1933, the mercurial NIRA head General Hugh Johnson announced, "the time is coming when someone is going to take one of those Blue Eagles off of someone's window in a clear cut case and that is going to be a sentence of economic death" (*Detroit Free Press* 1933).

Blue Eagle displays in newspaper ads and compliance with the labor restrictions declined after November 1933, and the National Recovery Administration faced a major compliance crisis in the spring of 1934 (Taylor 2019, Chapters 6 and 7, Figure 4; Bowden 1937). Meanwhile, the NRA codes were soon challenged in court. On May 27, 1935, in *L. A. Schechter Poultry Corp. v. United States* (295 US 495 [1935]), the Supreme Court unanimously struck down all of the NRA codes on grounds that the National Industrial Recovery Act of 1933 delegated the authority to make regulations to market participants and such delegation of power was unconstitutional (Taylor 2011).

In 1937, two Supreme Court decisions opened the door for a constitutional federal minimum wage law. The *West Coast Hotel* decision (mentioned earlier) established that the courts were prepared to accept arguments for a minimum wage. The case *National Labor Relations Board v Jones & Laughlin Steel Corporation* (301 US 1, 1937) established the "interstate commerce clause" as the constitutional basis for federal labor legislation. In 1937, the Roosevelt administration introduced the Fair Labor Standards Act, drafted by Secretary of Labor Frances Perkins. The original bill specified a 40-cent hourly minimum wage but appointed Industry Committees—comprising industry insiders and members of the public—who would set industry-specific rates as high as 80 cents per hour, well above both estimates of a living wage and prevailing wage rates (Congressional Record 1937, p. 439).[4]

The heated arguments in Congress for and against the Fair Labor Standards Act encompassed a broad array of reasoning. Advocates restated the arguments made by progressive economists circa 1912, which gained more power from the drops in worker income from 1929 to 1933 and again in 1937–38. Northern Democrats and some Republicans claimed a moral imperative was needed to end sweated labor. President Roosevelt spoke of the need to end "starvation wages." Senator William Borah (R-ID) proclaimed people worthy of hire are "entitled to sufficient compensation to maintain a decent standard of living" (Congressional Record 1938, p. 7793).

[4] Seltzer (1995, 1997) describes the Fair Labor Standards Act controversy in depth and is the source for this three-paragraph discussion.

In the January 1938 *Monthly Labor Review*, the Department of Labor described the criteria for a minimum wage: "Certain basic standards of adequacy are generally recognized as inherent in the concept of a minimum wage based on the cost of living" (Stitt and Smith 1938, p. 201). One new argument raised during the 1937–38 recession was that minimum wages would promote national recovery by increasing aggregate demand (Grossman 1978; Congressional Record 1937, p. 7745).

The US Senate passed the bill in July 1937, but when it reached the House of Representatives, the debate took on a strong North vs. South aspect. High-wage producers of shoes and textiles in New England and lumber in the Northwest supported the minimum wages in order to eliminate "excessive," "unfair" competition from the low-wage South (Congressional Record 1937, pp. 439, 505–6, 517). Most southern senators fought the bill because nearly half of all southern manufacturing workers, and higher shares in textiles and lumber, earned less than 40 cents per hour in 1937 (Seltzer 1995; Wright 1987). They opposed Industry Committees because they expected northern interests to capture them and set minimum hourly wages near 80 cents and disallow regional differentials. Some northern Republicans joined the opposition because they considered the policy to be an unwarranted federal government intrusion into private contracts. Union leaders also objected because they believed that wage bargaining was their exclusive domain.

The regional issue was likely intertwined with race, although the issue rarely was discussed in the 1937 and 1938 Congressional debates. The agriculture and domestic service sectors, which employed large numbers of Black workers, were explicitly exempted from the Fair Labor Standards Act. These exemptions were also part of the Social Security pension program, Unemployment Insurance, state workers' compensation laws, and the earlier state minimum wage laws. They also arose for other reasons: 1) considerations that farmers, small employers, and households could not afford the costs of coverage, 2) inherent problems with enforcing the law for those groups, and 3) and judicial uncertainty for federal programs about whether the sectors could be covered under the "interstate commerce clause" of the US Constitution.

After months of political wrangling, the minimum wage bill looked set to die in committee, in part because southern Democrats held outsized representation and more seniority on the key committees. The tide turned in May 1938 when ardent minimum wage supporters Senator Claude Pepper (D-FL) and Representative Lister Hill (D-AL) overwhelmingly beat opponents of the bill in Democratic primaries. The House then passed a substantially rewritten bill in late May 1938. The final Act phased in the minimum wage at 25 cents in October 1938, rising to 30 cents in October 1939, and then gave Industry Committees the discretion to raise it to 40 cents between October 1940 and October 1945. It was confined to employees who were "engaged in interstate commerce or the production of goods for interstate commerce." The entire public sector, agriculture, retail establishments, local services, domestic service, and small businesses were excluded from coverage. The constitutionality of the Fair Labor Standards Act was upheld in 1941 by a 9–0 Supreme Court vote in *United States v. Darby* (312 US 100 [1941]).

Public opinion at this time generally favored minimum wages. In May 1938, the Gallup organization asked: "Should Congress pass a law regulating wages and hours before ending this session?" A majority of 59 percent said "yes," although an August 1938 poll indicated that opposition to the law was stronger than for almost all other New Deal Legislation (American Institute of Public Opinion 1939). By January 1939, 71 percent expressed support of the newly passed act, while a 62 percent majority supported regional differences in a June 1938 poll. Support for a single national minimum would not reach as high as 46 percent until a Gallup poll in September 1948.[5]

The effects of the minimum wage in the late 1930s varied across industries and regions. Virtually all jobs in which minimum wages are binding today were exempted from coverage under the original act. A very large majority of manufacturing employees in northern and western states earned well above the prevailing minimum rates. In southern industries, like lumber and tobacco processing, which employed a significant number of Blacks, around 70 percent of workers were earning the 30-cent minimum or one penny more in 1939 and 1940–41, respectively. In 1940 in the seamless hosiery industry, which employed few Blacks, about one-third of firms paid average hourly wages within 2.5 cents of the then-prevailing minimum rate of 32.5 cents.[6]

The binding nature of the minimum wage rates established under the 1938 Act, however, were short-lived. The last Industry Committee was established in January 1942, and by July 1944, all 71 Committees had established the $0.40 minimum rate for their industry. War-driven increases in labor demand caused prevailing wages to exceed the federal minimum by the middle of the war, and federal policy shifted to setting wage ceilings. A 1947 survey in the *Monthly Labor Review* showed that at least 95 percent of sawmill workers in every state earned at least $0.45 per hour, $0.05 over the minimum.

One goal of the minimum wage was to help low-income people obtain an adequate standard of living. Budgets required to meet that fairly vague standard have been estimated by American observers and government agencies since as early as 1870 (Barrington and Fisher 2006, pp. 2–629 to 2–647; Lamale and Stotz 1960, p. 789). Prior to 1946, the US Bureau of Labor Statistics relied upon a Works Progress Administration consumption bundle for a family led by a working "unskilled manual worker," his nonworking wife, an 8-year old girl, and a 13-year old boy. The budget did not reach the level "the skilled worker hoped to attain, but [afforded] more than a 'minimum subsistence' living" (Stecker 1937, pp. xiii–xiv). Full-time work at the minimum wage in 1940 would have covered between 41 and 53 percent of the budget estimate for a four-person family, and roughly

[5] Gallup poll results from Roper Center (2020). Gallup Poll ID numbers that start with USGALLUP:060138. RA05A and 48070F. R25A.

[6] See Seltzer (1997, 2002). Wright (1987) suggests that the minimum wage played a role in integrating southern labor markets with the rest of the country, but we would put more weight on his discussion of the World War II war boom, which raised wages and generated substantial internal migration.

80 to 104 percent for a single person (as shown later in Table 3 for the cities listed).

With such realities in mind, states quickly took the lead after the passage of the Fair Labor Standards Act of 1938 in setting minimum wages above the federal minimum and also in expanding the occupations covered. In 1939, 18 states set at least one minimum higher than the 30-cent federal minimum (Women's Bureau 1939). In addition, roughly half of the states soon filled some of the large gaps in coverage under by the Fair Labor Standards Act by setting minimum wages, mostly for women, in industries such as retail stores, laundries, offices, hospitals, beauty shops, hotels, recreation, and in some cases manufacturing. Most of the state laws established boards that set minimums that varied by occupation, hours of work, age, gender, and experience. Over time, many of the states added men and covered more occupations (Women's Bureau 1942, 1951, 1953, 1958).

Post World-War II Minimum Wage Increases: The Climb to the Peak

Between 1945 and 1967, Presidents Truman, Eisenhower, Kennedy, and Johnson all supported increases in the minimum wage and expansions of coverage. The term "minimum wage" appeared in 16 presidential State of the Union addresses between 1937 and 1967 (*Complete State of the Union Addresses)* and each president signed a minimum wage bill, as shown in Table 2.

While the federal minimum did not change from its passage until 1950, the states again took the lead in raising minimums after the war. Between 1942 and 1950, when the federal minimum wage was 40 cents, state boards issued 77 orders; there were three above 70 cents, 29 between 60 and 69 cents, 25 from 50 to 59 cents, and 11 from 40 to 49 cents. Only nine were below 40 cents (Women's Bureau 1951, p. 2). The higher state minimums were almost entirely for female workers who typically earned much less than males.

The federal government finally retook the lead again when it raised the minimum to 75 cents in 1950 and $1 in 1956. In his 1955 State of the Union Address, Republican President Eisenhower (1955) cited strong economic growth over the previous five years as a reason to raise the minimum wage to 90 cents from 75 cents and to extend the coverage to more classes of workers. Liberal Democrats sought a much higher minimum of $1.25. During debates over an amendment to the minimum wage bill on June 8, 1955, Senate Leader Lyndon Johnson noticed that most of the strongest advocates from both sides had left the Senate floor and jammed a minimum wage of $1 per hour with no expansion of coverage through the Senate on a voice vote.[7] After passage in the House and adjustments in conference, Eisenhower signed the bill into law on August 12 (*New York Times* 1955).

[7] See Caro (2002, pp. 609–612). Caro claims that Johnson had opposed raising the minimum wage the previous time the issue came up before the Senate.

Table 2
The Fair Labor Standards Act and Amendments

Year	*Minimum Wage*	*Coverage*	*Notes*
1938	$0.25 (1938) $0.30 (1939) $0.40 (1945)	≈50% of private sector employees (1938)	Establishes minimum wage. Exemptions for small firms, firms outside interstate commerce, retail and service establishments, restaurants, government employees, agricultural workers, domestic service.
1939–1943	$0.40 for all by July 1944.		Under FLSA 1938 Act 71 Industry Committees, with economics professors composing about half of the members, set industry-specific minimum wages for industries with approximately 21 million workers. The goal was to establish a minimum wage that would not lead to "substantial curtailment of employment." By July 1944 all 71 had minimum rates at 40 cents.
1947			Portal to Portal Act: limits claims to back pay to 2 years, restricts definition of working time, no liquidated damages if employers made a good faith effort to comply with FSLA.
1949	$0.75	55% of private sector employees (1950)	Coverage extended to employees if they are "directly essential" to production of goods for interstate commerce, extends coverage to air transport industry, eliminates Industry Committees.
1955	$1.00	55% of private sector employees (1956)	
1961	$1.00, $1.15 (1961) $1.25 (1963)	63% of private sector employees	Coverage extended to retail and service establishments, with sales exceeding $1 million annually. Students could be employed at these establishments at 15% less than the minimum wage. Minimum for newly covered employees was $1.00.
1966	$1.40, $1.00 (1967) $1.60, $1.15 (1968) $1.60, $1.30 (1969) $1.60, $1.45 (1970)	77% of private sector employees, 40% of government employees	Coverage extended to most farm workers (with a lower minimum wage). Coverage extended to enterprises with revenue greater than $500,000 per year (1966) then $250,000 per year (1969). Automatic coverage for construction workers and employees of schools, hospitals, nursing homes, or other residential care facilities.
1974	$2.00 (1974) $2.10 (1975) $2.30 (1976)	83% of private sector employees. After 1974 coverage varies between 83% and 87%. 100% of public sector employees in 1974. Supreme Court decisions reduce public sector coverage reduced to 28% in 1976 and restore it to 100% in 1990.	Coverage extended to domestic workers and state and local government employees that were not previously covered. Minimum wage for farm workers raised to $1.60 in 1974.
1977	$2.65 (1978) $2.90 (1979) $3.10 (1980) $3.35 (1981)		Sub-minimum wage for agricultural workers eliminated. Restrictions on subminimum wage for students relaxed. Coverage test for retail trade and service enterprises increased in stages to $362,500.
1983			Migrant and Seasonal Agricultural Worker Protection Act — increases coverage for some farm workers.
1986			Allows sub-minimum wages for employees whose earning or productive capacity is impaired by age, physical or mental deficiency, or injury.
1989	$3.80 (1990) $4.25 (1991)		Enterprise coverage limit for retail and non-retail businesses increased to $500,000.
1996	$4.75 (1996) $5.15 (1997)		Established a youth sub-minimum wage of $4.25 an hour for newly hired employees under age 20 during their first 90 consecutive calendar days after being hired by their employer; revised the tip credit provisions to allow employers to pay qualifying tipped employees no less than $2.13 per hour if they received the remainder of the statutory minimum wage in tips.
2007	$ 5.85 (2007) $ 6.55 (2008) $ 7.25 (2009)		

Source: US Department of Labor (2020), *Columbia Law Review* (1948), Neumark and Wascher (2008).

Coverage under the Fair Labor Standards Act was finally extended in 1961, with newly covered employees receiving a minimum wage of $1.00. However, 14 states had a $1.00 or higher minimum rate for at least some of these workers by 1959 (Women's Bureau 1958). By the late 1960s, the federal minimum rate reached its peak in real terms and gaps in coverage were successively closed and state laws became less binding. In 1970, only Alaska ($2.10) and the District of Columbia ($2.00) had minimum wages above the federal rate of $1.60.

Congressional supporters of a higher minimum wage were typically liberal Democrats, including Senator Paul Douglas (1972, pp. 374–80), a former University of Chicago professor and president of the American Economic Association. The opposition was comprised largely of southern Democrats and some, but not all, Republicans. The primary public arguments about the minimum wage shifted again in the 1950s and 1960s. Because the federal minimum covered males, earlier Progressive arguments about the need to protect the health of prospective mothers diminished. The post-World War II boom also contributed to less emphasis on the Depression-era arguments about stimulating aggregate demand. The argument that the minimum wage reduced "unfair competition" never vanished completely, but it receded in importance because regional wage differences narrowed and gaps in coverage (mainly affecting the untraded sector) were successively closed.

The main argument for the minimum wage expressed during this period in the *Congressional Record* became the moral imperative to protect the most vulnerable workers. Indeed, the purposes as stated in the amendments themselves were the establishment of wage levels "necessary for health and welfare," or sufficient for "decent maintenance" and "adequate living." In 1960 John F. Kennedy (1960) called for expanded minimum wage coverage: "To pass them by . . . shocks the conscience of those who care."

Congressional opponents of minimum wages were careful to state their support for the overall objective of helping the working poor and reducing poverty, while arguing that minimum wages were the wrong way to achieve these goals. From 1937 through 1966, the most frequently raised objections to amendments to the Fair Labor Standards Act in the *Congressional Record* concerned: 1) the direct cost to employers and 2) the indirect costs created by the administrative requirements of complying with the law. Some opponents argued that raising business's costs would reduce employment of less skilled workers, but this argument was not central to the public case against minimum wages until the late 1960s and early 1970s, when a growing number of academic studies found negative employment effects.

The emphasis in the minimum wage debates about insuring health and safety led Congress in 1946–47 to ask the US Bureau of Labor Statistics to develop its own consumption bundle when pricing the basic standard of living for working families. The resulting budget covered "the dollar amount required to maintain the family at a level of adequate living, according to prevailing standards of what is needed for health, efficiency, the nurture of children, and for participation in social and community activities at a level of living described as 'modest but adequate'" (Lamale and Stotz 1960, p. 1). After 1954, the budgets began appearing in the legislative debates reported in the *Congressional Record* (1955, p. 7871; 1961, pp. 5987–89; 1974, p. 7313) as did the much lower standard of the official poverty level in the 1970s (1974, pp. 7312–13; 1977, p. 32715).

Table 3 shows the income from earning the national minimum wage for 40 hours per week over 52 weeks as a percentage of the adequate budget for a four-person family as calculated by the US Bureau of Labor Statistics in various cities and years. The minimum wage covered at most 55.7 percent of the adequate budget for a four-person family in any of the years. As in 1940, the minimum only came close to covering an adequate budget for a single individual under 65.

All of those involved in the process of setting a national minimum wage realized that the cost of living varied substantially across the country, and these differences evolved over time. In 1940, workers in Mobile, Alabama—the lowest-cost city—had 28.5 percent more purchasing power than workers in New York City, the highest-cost city. The distribution of purchasing power appears to have been reduced during the 1940s war decade to a 13.9 percent gap between the lowest-cost and highest-cost cities, possibly as a consequence of war-time rent controls (Fetter 2016). Then it rose to 21.3 percent in 1959 and 38.7 percent in 1967 (25.7 percent, leaving out Honolulu). Generally, the minimum wage covered more of the budget in southern and midwestern cities and less in northeastern cities in most years. The rankings, however, did not hold steady throughout. The positions of New York and Atlanta, for example, shifted substantially across the years in Table 3.

From the 1940s through the 1970s, widespread popular support for minimum wages was expressed in Gallup polls. Gallup pollsters defined the minimum wage and highlighted the group most likely to be affected in asking a standardized question (with updated numbers each time). One version of the standard question read: "At the present time the minimum wage that can be paid to workers in every state in most businesses and industries is 40 cents an hour. This means that all persons working in such businesses, in every state, including young people who have never worked before, cannot be paid less than 40 cents an hour. Would you approve or disapprove of raising this minimum to 60 cents an hour?" The polls showed that between 61 and 78 percent supported increases from 40 to 65 or 75 cents before the 1950 change, from 75 cents to $1 in 1953 or to $1.25 in 1954, and from $1 to $1.25 in 1957. The only poll without majority support called for a raise from 40 cents to $1 in 1948.[8]

Faced with popular and presidential support for minimum wages, opponents were only able to impose some short delays in raising the minimum. However, they were more successful in delaying the expansion of coverage of the minimum wage. For example, Senator Douglas (1972, pp. 377–78) reported disappointment

[8] Gallup poll results from Roper Center (2020). Gallup Poll ID numbers that start with USGALLUP: 081945. QK06B, 45-356. QT06B, 040746. RT08B, 061447. RK12B, 021448. RK05B, 48-422. QK11B, 48-422. QT11B, .011249. R08B, 433T. QT08B, 062949. R08, 442T. QT08, 49-446. QKT09A, 53-520. Q18, 54-540. QK13A, and 57-577. Q025.

Table 3

Full-Time Earnings on the National Minimum Wage as a Percentage of the BLS Adequate Cost of Living Budget: 4-Person Family by Year and Location

Area	*1940*	*Area*	*1950*	*Area*	*1959*	*Area*	*1967*
						South urban nonmetro	55.7
						Austin	55.6
						Baton Rouge	53.9
						Orlando	53.7
		New Orleans	45.2			Nashville	52.8
Mobile	53.2	Mobile	44.5			Houston	52.5
Kansas City, MO	49.8	Kansas City, MO	44.3			Durham	52.3
New Orleans	49.3	Savannah	43.9			Atlanta	52.0
Birmingham	48.7	Scranton	43.4			Dallas	51.9
Indianapolis	48.4	Indianapolis	43.3			Cincinnati	51.1
Memphis	48.2	Portland, ME	43.1			Green Bay	50.6
Denver	48.1	Cleveland	43.0	Houston	51.7	Bakersfield	50.4
Houston	48.1	St. Louis	42.9	Scranton	49.5	Dayton	50.2
Jacksonville	48.0	New York City	42.8	Atlanta	49.4	Baltimore	50.0
Buffalo	47.7	Manchester, NH	42.6	Baltimore	49.3	Lancaster	50.0
Portland, OR	47.5	Buffalo	42.5	Philadelphia	48.1	Midwest urban nonmetro	50.0
Los Angeles	47.4	Portland, OR	42.3	New York City	47.4	Pittsburgh	49.9
Baltimore	47.2	Philadelphia	42.2	Kansas City, MO	47.0	Detroit	49.6
Atlanta	47.1	Norfolk	42.0	Cincinnati	46.3	Philadelphia	49.4
Cincinnati	47.1	Minneapolis	42.0	Minneapolis	46.3	Denver	49.3
Norfolk	47.0	Birmingham	41.9	Portland, OR	46.1	Cleveland	49.2
Richmond	46.9	Cincinnati	41.8	Washington, DC	46.0	Portland, ME	48.9
Philadelphia	46.7	Denver	41.7	Detroit	46.0	Kansas City, MO	48.9
Portland, ME	46.0	Chicago	41.7	Pittsburgh	45.4	Wichita	48.7
Scranton	45.6	Detroit	41.6	St. Louis	45.4	St. Louis	48.5
Pittsburgh	45.4	Baltimore	41.3	Cleveland	45.1	San Diego	48.5
Seattle	45.4	Jacksonville, FL	41.3	Los Angeles	44.9	New York City	48.4
St. Louis	45.1	Pittsburgh	41.3	Boston	44.8	Minneapolis	48.1
Cleveland	44.9	Memphis	41.2	San Francisco	44.8	Buffalo	47.9
Minneapolis	44.3	Los Angeles	41.2	Seattle	42.7	West urban nonmetro	47.9
Detroit	43.7	Boston	41.0	Chicago	42.6	Chicago	47.7
Boston	43.5	Seattle	41.0			Milwaukee	47.7
San Francisco	43.1	San Francisco	41.0			Indianapolis	47.6
Chicago	42.9	Atlanta	40.7			Washington, DC	47.5
Washington, DC	41.9	Houston	40.3			Cedar Rapids	46.8
New York City	41.4	Richmond	40.1			Boston	46.6
		Washington, DC	39.7			Champaign-Urbana	46.5
		Milwaukee	39.7			Los Angeles	46.2
						Hartford	45.3
						Seattle	44.7
						San Francisco	44.3
						Honolulu	40.2

Summary Statistics	1940	1950	1959	1967
Median	47.0	41.9	46.1	49.1
Maximum	53.2	45.2	51.7	55.7
Minimum	41.4	39.7	42.6	40.2
Max/Min Ratio	1.285	1.139	1.213	1.387
Percentage of Family Budget in Median City Covered by the National Minimum Wage				
Median 1-person	92.9	82.7	91.1	97.0
Median 2-person	71.6	63.8	70.2	74.8
Median 3-person	60.1	53.6	58.9	62.8

Source: The minimum wage comes from series Ba4422 in Carter et. al (2006, p. 2-284). Budget figures are from *Monthly Labor Review*(1940, p. 1041), US Bureau of Labor Statistics (1951, p. 2), Lamale and Stotz (1960, p. 4), and Bracket (1969, p. 8).

Note: The budgets included costs of goods, rents and services, payment of personal taxes, Social Security deductions and nominal allowances for occupational expenses and life insurance. (BLS 1959, p. 1).

that the compromises in 1949 and 1955 traded away expansions of coverage for a higher minimum. The 1961 amendment finally raised the coverage of private sector employees from 55 to 63 percent by including employees in large retail and service enterprises, local transit, construction, and gasoline service (as shown in Table 2). To overcome opposition, the minimum for newly covered workers was set below the minimum for previously covered workers until 1965. Coverage was expanded to 77 percent of private workers and 40 percent of government workers with the 1966 amendments that provided lower minimum rates for government employees in hospitals, nursing homes, and schools, and also for private sector employment in agriculture, laundries, dry cleaners, large hotels, motels, and restaurants (Willis 1972). The minimum rates were not equalized for all covered workers until 1978, when roughly 87 percent of private employees were covered.

For economists, the initial passage and subsequent amendment of a federal minimum wage renewed old debates. After the experience of the Great Depression, the discussions in the 1940s often assumed less than full employment and imperfections in commodity and input markets. In addition, the language used by economists when discussing these issues had become more precise over the previous several decades. Among economists at this time, the main arguments for the minimum wage were: 1) setting minimum wages in Joan Robinson's (1933) monopsonistic labor markets would move wages closer to the marginal revenue product, raising both wages and employment; 2) a minimum wage would improve workers' health and productivity enough that the consequent increase in labor demand could more than offset the negative employment effect of the higher wage; 3) higher minimum wages would induce inventions and improvements in managerial efficiency that would raise labor productivity and increase the demand for labor (Bronfenbrenner 1943); and 4) an economy-wide minimum wage could shift income from entrepreneurs with lower propensities to consume to low-income workers who would spend their full incomes, leading to demand increases for consumer goods and services that promoted more output and employment (Brown 1940).

Among prominent economists who took the other side were Martin Bronfenbrenner (1943) and George Stigler (1946), who argued against all four points. For example, Stigler (1946, p. 358) sought to shift the focus of the debate, claiming that everybody agreed on the goal of eliminating extreme poverty. The important questions were: 1) do minimum wages diminish poverty? and 2) are there better alternatives? Stigler said "no" to the first question because the likely result of a minimum wage would be the discharge of "workers whose services are worth less than the minimum wage." After conceding that employment, wages, and output could be increased when employers have wage-setting power with "a skillfully set minimum wage," he was skeptical that policymakers possessed a "tolerably accurate method" of determining the optimum wages over time for each occupation, firm, and quality of worker. Hours worked and many other factors made the connection between the hourly wage and family income "remote and fuzzy." Like the earlier marginalists of the 1910s, Stigler believed that alternative policies would be more effective at helping the poor and added the idea of what we would now call a negative income tax (similar in form to the modern Earned Income Tax Credit) to the list of policy options for helping low-wage workers offered in the 1910s by Fetter, Taussig, Bates Clark, and others.

In response, Richard Lester (1946, 1947) castigated Stigler and other marginalist thinkers for an inadequate understanding of the operation of labor markets and how employers made decisions. His surveys of southern entrepreneurs showed that they focused primarily on demand changes when choosing employment, did not think in terms of marginal analysis, and did not adjust their capital-labor ratios in response to North-South wage differentials. They responded to the minimum wage shock by improving management practices and increasing sales efforts. Fewer than 10 percent of those responding to his surveys mentioned reducing output. His own studies of wage determination had not found the single wage predicted by marginalists. Instead, he found diversity in pay for equally productive workers.

At the start of the 1960s, professional opinion about economists about the lessons to be drawn from empirical work on the minimum wage was strongly divided. At various times between 1910 and 1951, state labor departments and the US Department of Labor collected data on earnings and employment just prior to and after the adoption of a minimum wage. Most studies by government departments reported weak or no effects of the minimum wage on employment. Peterson (1957) argued that many of these reports had failed to dig very deeply into the data. In reexamining the data in a more disaggregated fashion, he found support for the "hypothesis that employment changes will be inversely related to wage increase imposed by a minimum" (p. 430). In a similar fashion, the initial Department of Labor reports on the increase in the minimum wage to $1 showed small employment effects, while later academic studies found larger effects (Macesich and Stewart Jr. 1960; Douty 1960).

The differences came to a head in a debate between Lester and Peterson in a 1960 issue of the *Industrial and Labor Relations Review.* As they criticized each other nearly line by line, the debate centered on empirical issues familiar to modern empirical economists. Both discussed "causal inference" and focused heavily on issues related to ceteris paribus conditions. As in the modern debates, they used difference-in-difference comparisons and sometimes difference-in-difference-in-difference comparisons to compare outcomes pre- and post-minimum wage in treatment and control areas. Their debate over ceteris paribus conditions examined simultaneous events and prior trends. In a study of the 70-cent minimum wage, Peterson mimicked a regression discontinuity design by showing cross-tabulations before and after the minimum wage for firms in several wage categories ascending from well below the minimum to well above, prior to the increase. Peterson also compared covered and uncovered firms within the same town and the same industry. These studies faced the problem that they had to rely on cross-tabulated aggregates and there were not enough observations for them to control effectively for multiple confounds with regression analysis. Peterson, citing the rough nature of the data, declared victory when the results showed negative effects on hours or employment in more than half of the comparisons. Lester remained unconvinced.

In the aftermath of this debate, the neoclassical view of negative employment consequences gained the upper hand, when most of the empirical papers in the late

1960s, and especially into the 1970s, found negative employment effects, particularly for the less-skilled, teens, African Americans, and the disadvantaged. In two prominent examples from this more extensive literature, Benewitz and Weintraub (1964) found employment effects from the 1962 New York City increase in the minimum wage to $1.50, and Campbell and Campbell (1969) found higher unemployment in cities with state minimum wage rates. For summaries of this empirical minimum wage literature up to about 1980, see Brown, Gilroy, and Kohen (1982) and Neumark and Wascher (2008).

In the 1960s, Milton Friedman became the most prominent public face of neoclassical economic opposition to minimum wages. In an oft-quoted 1966 *Newsweek* opinion column, Friedman (1966) noted that Congress had just raised the minimum wage, which would "add to the ranks of the unemployed." But Friedman was far from alone in this view. Prominent Keynesians like James Tobin wrote: "People who lack the capacity to earn a decent living need to be helped, but they will not be helped by minimum-wage laws. . . . The more likely outcome of such regulations is that the intended beneficiaries are not employed at all" (*Congressional Record* 1966, p. 11270). By the late 1960s, the view that high minimum wages reduced employment of low skilled workers featured widely in the *Congressional Record* (1966, p. 11301; 1974, p. 5719; and 1977, p. 29186).

As the real minimum increased and gaps in coverage were closed, the minimum wage became binding for more workers. Friedman argued that this would promote discrimination, arguing, "I am convinced that the minimum-wage law is the most anti-Negro law on our statute books—in its effect not its intent." Studies such as Adie (1973), Mincer 1976, and Ragan (1977) found negative employment effects for African American workers. The prospect of minimum wages resulting in labor market discrimination was frequently mentioned in the *Congressional Record* (1974, pp. 5720–30 and 1977, pp. 29186–87, 29455, 29463, 297303, 32707). In contrast, most Black leaders favored minimum wage increases as a way of increasing wages and reducing inequality. They also strongly resisted separate and lower minimum rates for African American workers, which they regard as implying inferiority (Schulman 1991, p. 56).

Epilogue

The real value of federal minimum wages, as shown in Figure 1, never again reached the same real level as in 1968. Through 2020, there have been seven additional amendments to the original Fair Labor Standards Act that increased the minimum wage in 14 different years. Inflation has eroded the real value of these increases and since the 1980s the minimum wage has bounced around an average real value similar to that of the 1950s.

Between 1968 and 1990, the minimum wage received relatively little attention in the political arena. The term "minimum wage" appeared only once in a presidential State of the Union address (by Jimmy Carter in 1981). In 1973, President

Nixon vetoed a proposed increase in the minimum wage that did not include a youth subminimum rate, because he believed the new minimum would harm teenage employment (*Congressional Record* 1974, p. 4706). While supporting the 1974 amendment, Nixon cautioned against raising it too high (*Congressional Record* 1974, p. 4706). The stagflationary years of the 1970s, with slow productivity and high unemployment spikes, may have seemed like an unwise time to keep raising the value of the federal minimum wage. The first federal version of the Earned Income Tax Credit became law in 1975, offering an alternative policy tool for increasing the take-home pay of low-wage workers with children—and arguably with less concern over potential negative effects on employment.

In 1981, Ronald Reagan became the first president to actively oppose minimum wage increases. During his time in office, no minimum wage increases were enacted, but a sub-minimum wage was introduced. A broad swath of expert opinion agreed with him. In January 1987, the *New York Times* published an editorial titled "The Right Minimum Wage: $0.00," which argued for the Earned Income Tax Credit and other mechanisms to be used in its place.

It seems likely that a substantial part of the shift against the minimum wage was a result of the shifting consensus in economic research that negative employment effects of a minimum wage were a real concern. By the mid-1970s, minimum wage opponents were entering the negative findings from academic studies by Adie (1973), Mincer (1976), Gramlich, Flanagan, and Wachter (1976), Welch (1974), Ragan (1977), and Cotterill and Wadycki (1976) into the *Congressional Record*. The newer studies had access to more data (in particular, a longer time series since the implementation of minimum wages) and increasingly sophisticated econometric methodology.[9] A survey by Brown, Gilroy, and Kohen (1982) reported a widely cited consensus that "time series studies typically find that a 10 percent increase in the minimum wage reduces teenage employment by one to three percent," while cross-sectional studies produced smaller and less precise estimates of 0 to 0.75 percentage points. A 1992 survey of economists found that 57 percent agreed and 21 percent disagreed that "a minimum wage increases unemployment among young and unskilled workers" (reported in Whaples 1996). The survey also found (p. 729) that 87 percent of labor economists agreed that minimum wages increased unemployment for teens and the unskilled. Their median estimate of the impact of a 10-percent rise in the minimum was 2 percent, similar to the earlier consensus.

In the 1990s, the minimum wage debate was reignited when Card and Krueger (1994, 1995, 2000) published a series of studies using firm-level panel data techniques and found weak to zero employment effects of higher minimum wages. Neumark and Wascher (2000, 2008) challenged their findings with alternative

[9] Researchers increasingly adopted time series techniques that used the real minimum wage or the Kaitz Index (the ratio of the minimum wage to average hourly earnings, multiplied by the rate of coverage) as the measure of the minimum. Looking back at this literature, Kennan (1995) noted that most of the primary variation in the Kaitz index did not come from the wage minimum or coverage; therefore, using it to estimate the effect of minimum wages was akin to "looking for a needle in a haystack."

methods and data sources. Waves of research (discussed in the other papers in this symposium) have followed. More recent polls of economists show much less certainty about negative employment effects of a minimum wage. One 2015 poll asked leading academic economists whether increasing the minimum wage to $15 (from the current level of $7.25) by 2020 would substantially reduce employment of low-skilled workers (IGM Forum 2020): 26 percent agreed or strongly agreed, 24 percent disagreed, 38 percent were uncertain, and the remainder did not answer.

Meanwhile, higher minimum wages continue to have popular support. A 2013 Gallup poll indicated that about three-quarters of Americans supported a minimum wage increase from the prevailing rate of $7.25 per hour. In a 2019 NPR/PBS News-Hour/Marist Poll, 56 percent responded that they believed a national minimum wage of $15 per hour would be a good idea (Polling Report 2020). The states have responded. In 1989, 15 states had minimums above the national level. The number fell back to four states after the national minimum wage increases in 1990 and 1991 but then had risen to 32 in 2007 just before the last national amendments (Neumark 2019). At present, the Congressional Budget Office (2019) reported that 60 percent of US workers live in a state where the minimum exceeds the federal minimum of $7.25 per hour. By 2025, about 30 percent of workers will live in states with a minimum wage of $15 or higher. The United States has returned to an era of substantial minimum wage differences across states, and the future course of the federal minimum wage may be determined by the influence of the state and local minimums on labor market outcomes in these areas.

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References

Adie, Douglas K. 1973. "Teen-Age Unemployment and Real Federal Minimum Wages." *Journal of Political Economy* 81 (2): 435–41.

American Institute of Public Opinion. 1939. "American Institute of Public Opinion-Surveys, 1938–1939." *The Public Opinion Quarterly* 3 (4): 581–607.

Barrington, Linda, and Gordon M. Fisher. 2006. "Poverty." In *Historical Statistics of the United States: Earliest Times to the Present,* Vol. 2., edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright. Cambridge, UK: Cambridge University Press.

Benewitz, Maurice, and Robert E. Weintraub. 1964. "Employment Effects of a Local Minimum Wage."

Industrial and Labor Relations Review 17 (2): 276–88.

Bowden, Witt. 1937. "Hours and Earnings Before and After the N.R.A." *Monthly Labor Review* 44 (1): 13–36.

Brackett, Jean C. 1969. "New BLS Budgets Provide Yardsticks for Measuring Family Living Costs." *Monthly Labor Review* 92 (4): 3–16.

Bronfenbrenner, Martin. 1943. "Minimum Wages, Unemployability, and Relief: A Theoretical Note." *Southern Economic Journal* 10 (1): 52–59.

Brown, Charles, Curtis Gilroy, and Andrew Kohen. 1982. "The Effect of the Minimum Wage on Employment and Unemployment." *Journal of Economic Literature* 20 (2): 487–528.

Brown, Weir M. 1940. "Some Effects of a Minimum Wage upon the Economy as a Whole." *American Economic Review* 30 (1): 98–107.

Campbell, Colin D., and Rosemary G. Campbell. 1969. "State Minimum Wage Laws as a Cause of Unemployment." *Southern Economic Journal* 35 (4): 323–32.

Card, David, and Alan B. Krueger. 1994. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *American Economic Review* 84 (4): 772–93.

Card, David, and Alan B. Krueger. 1995. *Myth and Measurement: The New Economics of the Minimum Wage.* Princeton: Princeton University Press.

Card, David and Alan B. Krueger. 2000. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Reply." *American Economic Review* 90 (5): 1397–1420.

Caro, Robert. 2002. *Master of the Senate: The Years of Lyndon Johnson*. New York: Alfred A. Knopf.

Carter Susan B., Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright, Eds. 2006. *Historical Statistics of the United States: Earliest Times to the Present,* Vol. 2. Cambridge, UK: Cambridge University Press.

Clark, John Bates. 1913. "The Minimum Wage." *Atlantic Monthly* 112 (9): 289–97.

Clark, Lindley D. 1921. *Minimum-Wage Laws of the United States: Construction and Operation*. Washington, D.C.: US Government Printing Office.

Columbia Law Review. 1948. "Portal to Portal Act. Good Faith Provisions," 48 (3): 443–50.

Commons, John R. 1935. *History of Labour in the United States.* New York: The Macmillan Company.

Complete State of the Union Addresses, from 1790 to 2006. 1790–2006. http://www.gutenberg.org/files/5050/5050-h/5050-h.htm (accessed October 1, 2020).

Congressional Budget Office. 2019. *The Effects on Employment and Family Income of Increasing the Federal Minimum Wage.* Washington, D.C.: Congressional Budget Office.

Congressional Record. Various years. Washington, D. C.: United States Government Publishing Office.

Cotterill, Philip G., and Walter J. Wadycki. 1976. "Teenagers and the Minimum Wage in Retail Trade." *Journal of Human Resources* 11 (1): 69–85.

Cushman, Barry. 1998. *Rethinking the New Deal Court: The Structure of a Constitutional Revolution*. Oxford: Oxford University Press.

Detroit Free Press. 1933. "Johnson Gives New Warning," August 12.

Douglas, Paul H. 1972. *In the Fullness of Time: The Memoirs of Paul H. Douglas.* New York: Harcourt Brace Jovanovich.

Douty, H. M. 1960. "Some Effects of the $1.00 Minimum Wage in the United States." *Economica* 27 (106): 137–47.

Eisenhower, Dwight D. 1955. "State of the Union Address." Speech, January 6, 1955. https://www.ontheissues.org/Archive/SOTU_Ike_Dwight_Eisenhower.htm (accessed November 4, 2020).

Federal Reserve Bank of St. Louis. 2019. FRED website. https://fred.stlouisfed.org/ (accessed October 1, 2020).

Fetter, Daniel K. 2016. "The Home Front: Rent Control and the Rapid Wartime Increase in Home Ownership." *Journal of Economic History* 76 (4): 1001–43.

Fetter, Frank. 1917. "A Doubtful Remedy: Statement of Frank Fetter Published in the Fourth Report of the New York Factor Commission in 1915." In *Selected Articles on Minimum Wage*, edited by Mary Katherine Reely, 149–50. New York: H.W. Wilson Company.

Fishback, Price V. 1998. "Operations of 'Unfettered' Labor Markets: Exit and Voice in American Labor Markets at the Turn of the Century." *Journal of Economic Literature* 36 (2): 722–65.

Fishback, Price V. 2018. "Rule of Law in Labor Relations, 1898–1940." Unpublished.

Frankfurter, Felix. 1955. "Mr. Justice John Roberts." *University of Pennsylvania Law Review* 104 (3): 311–17.

Friedman, Milton. 1966. "Minimum Wage Rates and Unemployment." *Newsweek*, September 11. https://miltonfriedman.hoover.org/objects/57909/minimumwage-rates.

Gramlich, Edward M., Robert J. Flanagan and Michael L. Wachter. 1976. "Impact of Minimum Wages on Other Wages, Employment, and Family Incomes." *Brookings Papers on Economic Activity* 7 (2): 409–61.

Grossman, Jonathan. 1978. "Fair Labor Standards Act of 1938: Maximum Struggle for a Minimum Wage." *Monthly Labor Review* 101 (6): 22–30.

Hammond, Matthew B. 1915. "Wages Boards in Australia: IV. Social and Economic Results of Wages Boards." *Quarterly Journal of Economics* 29 (3): 563–630.

IGM Forum. 2020. "$15 Minimum Wage." University of Chicago. http://www.igmchicago.org/surveys/15-minimum-wage [accessed 1/2/2020].

Kennan, John. 1995. "The Elusive Effects of Minimum Wages." *Journal of Economic Literature* 33 (4): 1950–65.

Kennedy, John F. 1960. "Remarks of Senator John F. Kennedy in the Senate, Washington, D. C. August 10, 1960." Speech, John F. Kennedy Presidential Library and Museum, August 10, 1960. https://www.jfklibrary.org/archives/other-resources/john-f-kennedy-speeches/united-states-senate-labor-standards-amendments-19600810 (accessed October 1, 2020).

Lamale, Helen H., and Margaret S. Stotz. 1960. "The Interim City Worker's Family Budget." *Monthly Labor Review* 83 (8): 785–808.

Leonard, Thomas C. 2005. "Retrospectives: Eugenics and Economics in the Progressive Era." *Journal of Economic Perspectives* 19 (4): 207–24.

Lester, Richard A. 1946. "Shortcomings of Marginal Analysis for Wage-Employment Problems." *American Economic Review* 36 (1): 63–82.

Lester, Richard A. 1947. "Marginalism, Minimum Wages, and Labor Markets." *American Economic Review* 37 (1): 135–48.

Lester, Richard A. 1960. "Employment Effects of Minimum Wages." *Industrial and Labor Relations Review* 13 (2): 254–64.

Macesich, George, and Charles T. Stewart, Jr. 1960. "Recent Department of Labor Studies of Minimum Wage Effects." *Southern Economic Journal* 26 (4): 281–90.

Marchingiglio, Riccardo, and Michael Poyker. 2020. "The Economics of Gender-Specific Minimum Wage Legislation." Unpublished.

Meeker, Royal. 1933. "The Great American Adventure." *The American Scholar* 2 (4): 463–70.

Mincer, Jacob. 1976. "Unemployment Effects of Minimum Wages." *Journal of Political Economy* 84 (4): 87–104.

Monthly Labor Review. 1940. "Costs and Standards of Living." *Monthly Labor Review*, 51(4): 1008–23.

Neumark, David. 2019, "The Econometrics and Economics of the Employment Effects of Minimum Wages: Getting from Known Unknowns to Known Knowns." *German Economic Review* 20 (3): 293–329.

Neumark, David, and William Wascher. 2000. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Comment." *American Economic Review* 90 (5): 1362–96.

Neumark, David, and William L. Wascher. 2008. *Minimum Wages.* Cambridge, MA: MIT Press.

Neumann, Todd C., Jason E. Taylor, and Fishback, Price V. 2013. "Comparisons of Weekly Hours Over the Past Century and the Importance of Work Sharing Policies in the 1930s." *American Economic Review* 103 (3): 105–10.

New York Times. 1955. "Eisenhower Signs $1 Minimum Pay," August 13.

New York Times. 1987. "The Right Minimum Wage: $0.00." January 14. https://www.nytimes.com/1987/01/14/opinion/the-right-minimum-wage-0.00.html.

Peterson, John M. 1957. "Employment Effects of Minimum Wages, 1938–50." *Journal of Political Economy* 65 (5): 412–30.

Peterson, John M. 1959. "Employment Effects of State Minimum Wages for Women: Three Historical Cases Re-Examined." *Industrial and Labor Relations Review* 12 (3): 406–22.

Peterson, John M. 1960. "Employment Effects of Minimum Wages: Reply." *Industrial and Labor Relations Review* 13 (2): 264-73.

Phelps, Orme W. 1939. *The Legislative Background of the Fair Labor Standards Act.* Chicago: University of Chicago Press.

Pigou, Arthur Cecil. 1913. "A Minimum Wage for Agriculture." *The Nineteenth Century*, (74): 1167–84.

Polling Report. 2020. Polling Report Inc. https://www.pollingreport.com/work.htm (accessed October 1, 2020).

Prasch, Robert E. 2000. "John Bates Clark's Defense of Mandatory Arbitration and Minimum Wage Legislation." *Journal of the History of Economic Thought* 22 (2): 251–63.

Prasch, Robert E. 2007. "Professor Lester and the Neoclassicals: The 'Marginalist Controversy' and the Postwar Academic Debate Over Minimum Wage Legislation: 1945–1950." *Journal of Economic Issues* 41 (3): 809–25.

Ragan, James F., Jr. 1977. "Minimum Wages and the Youth Labor Market." *Review of Economics and Statistics* 59 (2): 129–36.

Robinson, Joan. 1933. *The Economics of Imperfect Competition*. London: Macmillan. EQ: year

Roper Center. 2020. Results of Search for Minimum Wage Polling Between 1935 and 1970. https://ropercenter.cornell.edu/CFIDE/cf/action/ipoll/ipollResult.cfm?keyword=minimum+wage&exclude=&topic=Any&organization=Any&fromDate=1935&toDate=1970&questionViewId=&label=&studyId=&sortBy=BEG_DATE_DESC&search=submit (accessed July, 1 2020).

Rose, Jonathan D. 2010. "Hoover's Truce: Wage Rigidity in the Onset of the Great Depression." *Journal of Economic History* 70 (4): 843–70.

Schulman, Bruce J. 1991. *From Cotton Belt to Sunbelt: Federal Policy, Economic, Development, and the Transformation of the South, 1938–1980*. Oxford: Oxford University Press.

Seltzer, Andrew. 1994. "Causes and Consequences of American Minimum Wage Legislation, 1911–1947." PhD diss. University of Illinois.

Seltzer, Andrew. 1995. "The Political Economy of the Fair Labor Standards Act of 1938." *Journal of Political Economy* 103 (6): 1302–44.

Seltzer, Andrew J. 1997. "The Effects of the Fair Labor Standards Act of 1938 on the Southern Seamless Hosiery and Lumber Industries." *Journal of Economic History* 57 (2): 396–415.

Seltzer, Andrew. 2002. "Monopsony and Minimum Wages: Evidence from the Tobacco Leaf-Processing Industry." *Essays in Economic and Business History* 20 (1): 167–82.

Stecker, Margaret Loomis. 1937. *Intercity Differences in Costs of Living in March, 1935, 59 Cities*. Washington, D.C.: US Government Printing Office.

Stigler, George J. 1946. "The Economics of Minimum Wage Legislation." *American Economic Review* 36 (3): 358–65.

Stitt, Louise, and Florence P. Smith. 1938. "Minimum Wages and Maximum Hours." *Monthly Labor Review* 46 (1): 191–204.

Taussig, Frank. 1916. "Minimum Wages for Women." *Quarterly Journal of Economics* 30 (3): 411–42.

Taylor, Jason E. 2011. "Work-Sharing During the Great Depression: Did the 'President's Reemployment Agreement' Promote Reemployment?" *Economica* 78 (309): 133–58.

Taylor, Jason E. 2019. *Deconstructing the Monolith: The Microeconomics of the National Industrial Recovery Act*. Chicago: University of Chicago Press.

US Bureau of Labor Statistics. 1933a. "Minimum Wage." *Monthly Labor Review* 36 (6): 1259–75.

US Bureau of Labor Statistics. 1933b. "Minimum Wage Legislation in the United States." *Monthly Labor Review* 37 (6): 1344–54.

US Bureau of Labor Statistics. 1951. "Family Budget of City Worker, October 1950." *US Bureau of Labor Statistics Bulletin No. 1021*. Washington, D.C.: Government Printing Office.

US Department of Labor. 2020. *History of Federal Minimum Wage Rates Under the Fair Labor Standards Act, 1938–2009*. Washington, D.C.: US Department of Labor.

US Supreme Court 1754–2020. *United States Reports*. Washington, D. C.: United States Government Publishing Office.

Webb, Sidney. 1912. "The Economic Theory of a Legal Minimum Wage." *Journal of Political Economy* 20 (10): 973–98.

Welch, Finis. 1974. "Minimum Wage Legislation in the United States." *Economic Inquiry* 12 (3): 285–318.

Whaples, Robert. 1996. "Is There Consensus among American Labor Economists? Survey Results on Forty Propositions." *Journal of Labor Research* 17 (4): 725–34.

Willis, Robert N. 1972. "The Evolution of The Fair Labor Standards Act." *University of Miami Law Review* 26 (3): 607–34.

Women's Bureau. US Department of Labor. 1928. *The Development of Minimum-Wage Laws in the United States, 1912 to 1927*. Washington, D.C.: US Government Printing Office.

Women's Bureau. US Department of Labor. 1939. *State Minimum-Wage Laws and Orders: An Analysis: Women's Bureau Bulletin No. 167*. Washington, D.C.: US Government Printing Office.

Women's Bureau. US Department of Labor. 1942. *State Minimum-Wage Laws and Orders: 1942: Bulletin of the Women's Bureau, 191*. Washington, D.C.: US Government Printing Office.

Women's Bureau. US Department of Labor. 1951. *State Minimum-Wage Laws and Orders: July 1, 1942 to July 1, 1950, Revised Supplement to Bulletin 191. Bulletin of the Women's Bureau, 227*, Revised. Washington, D.C.: US Government Printing Office.

Women's Bureau. US Department of Labor. 1953. *State Minimum Wage Laws and Orders: July 1, 1942–March 1, 1953: Women's Bureau Bulletin, No. 247*. Washington, D.C.: US Government Printing Office.

Women's Bureau. U. S. Department of Labor. 1958. *State Minimum Wage Laws and Orders: July 1, 1942 – July 1, 1958. Part II. Analysis of Rates and Coverage. Bulletin of the Women's Bureau, 267*, Washington, D.C.: US Government Printing Office.

Wright, Gavin. 1987. "The Economic Revolution in the American South." *Journal of Economic Perspectives* 1 (1): 161–78.