By Our Bootstraps: Origins And Effects of the High-Wage Doctrine and the Minimum Wage

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The behavior of real wage rates during the Great Depression is considered one of the more intriguing mysteries of that episode. Never before had the economy experienced such persistently high wage rates during a time of high unemployment. A better understanding of the high-wage doctrine, which claims that high wage rates stimulate demand, production, and employment, and its role in public policy may help explain this behavior. In addition to tracing the origins and gradual acceptance of the high-wage doctrine, we explore the significant role that the doctrine played prior to and during the Great Depression including the push for, and implementation of, the minimum wage.

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I. *Introduction*

The Great Depression, Charles Calomiris and Christopher Hanes observe, "illustrates how false beliefs and wrong-headed policies can emerge during times of crisis" (1994, p. 57). Perhaps the most curious instance of such a false belief was the so-called "high-wage doctrine." This doctrine, which President Hoover endorsed at the Depression's onset, and which later became the cornerstone of New Deal policy, claims that an increase in wage rates gives workers more "purchasing power," thereby stimulating aggregate demand, production, and employment.[1] Conversely, the doctrine argues, attempts to cut wage rates during an economic downturn will only bring more unemployment, because wage cuts reduce workers' purchasing power.

According to the high-wage doctrine, workers can boost their chances of remaining employed by *increasing* the price of their services. In its essence, this idea appears to be akin to thinking that we could pick ourselves off the ground by pulling up our bootstraps. The origins of such reasoning should be of interest, not only to labor economists, but also to any economist trained to believe that demand curves slope downwards, and that the short side of the market determines quantities transacted.

While economists today are often quick to dismiss the high-wage doctrine and its belief that high wage rates could cure unemployment simply as a product of economic crisis, the doctrine had substantial effects before the Great Depression. We show that the doctrine began to influence wage policy during the two decades before the New Deal by, for example, serving as a driving force behind both Henry Ford's high-wage policies and the push, in the 1920s, for a government-enforced minimum wage.

II. *The Economics of High Wages*

While it is widely-known that many contemporary economists and policy makers supported a policy of increasing wage rates during the Great Depression, their reason for doing so is not well understood. That even the most respected and mainstream economists of the time would embrace a wage policy that today so directly contradicts orthodox labor theory seems baffling. The general movement in favor of paying high wage rates had several aspects, not all of which were purely economic.[2] This section isolates and spells out the economic theory behind the high-wage doctrine which claimed that wage rates could be raised as a means of stimulating aggregate demand and reducing unemployment.

The High-Wage Doctrine. The high-wage doctrine was based in part on the belief that, during a downturn, wage rates are among the first costs to be cut because employers perceive such cuts as a way to remain competitive and to avoid further recession-related losses. However, high-wage doctrine advocates argued, when wage rates fall faster than prices, workers' real income declines — they have less "purchasing power." Therefore, according to this theory, aggregate demand shrinks, further exacerbating the downturn. This drop in demand hurts business more than the cutting of wage rates helps it.

An increase in real wage rates (by means of policies that either increase nominal wage rates or prevent them from falling as rapidly as prices) supposedly serves, on the other hand, to expand the purchasing power of the masses. Because workers have more income, the theory asserts, the demand for goods and services will rise allowing businesses to increase production and hire more workers. In this way, it was claimed, prosperity could be restored and a major recession could be avoided.

A Critical Review of the Doctrine. The doctrine assumes that the level of aggregate demand varies positively with wage rates. In fact, the standard equation of exchange,

$$MV = Py,$$

where

$$Py = wN + rK;$$

and M is the nominal money stock; V is the income velocity of money; Py is aggregate nominal income; w is the wage rate; N is the quantity of labor hired; r is the rental rate of capital; and K is the capital stock, shows that this is unlikely to be true.

In this standard framework, an increase in wage rates would increase aggregate nominal demand (Py) only if the increase in wage rates somehow led to an increase in the money stock or its income velocity of circulation, either directly or by way of some other factor, such as the interest rate, that is a determinant of either of these variables. It might be thought that an increase in the nominal wage rate coupled with an inelastic demand curve for labor would force employers to finance increased wage payments out of their potential savings or might force them to borrow money, raising the interest rate and thereby increasing money's velocity of circulation. But employers would act this way only if they anticipated an increase in the profitability of investment — an effect opposite the one expected from an exogenous rise in the real wage rate. Employers faced with an inelastic labor demand curve would likely fund the increase to the wage bill by demanding less capital. Again, aggregate demand would not necessarily rise as investment expenditures would likely suffer. The money stock, on the other hand, has no obvious known link to the wage rate under either a gold or a fiat standard. It thus appears that an increase in money wage rates is unlikely to cause the increase in aggregate demand that the high-wage doctrine postulates.

Instead, an increase in wage rates will generally *reduce* a country's real output level by generating more unemployment. Orthodox labor theory suggests that an excess supply of labor, i.e., unemployment, will result when the real price of labor is above the market clearing rate, because the short side of the market dominates. Because production is typically increasing in labor inputs, raising real wage rates above their market-clearing levels reduces aggregate output. Proponents of the high-wage doctrine, it would seem, failed to take into account the negative effect of an increase in wage rates on the quantity of labor demanded.

Efficiency Wages. A few distinct arguments for high wage rates do not claim that higher wage rates lead to increases in aggregate demand, but instead, hold that wage rates above their equilibrium levels make individual workers more efficient. These "efficiency wage" theories propose that wage rates and productivity are positively related for a variety of reasons. A worker paid above the prevailing market rate will, for example, find it more costly to shirk, for fear of losing his or her job. An efficiency wage rate may also reduce worker turnover by making the high-paying job more attractive to current workers.[3] In general, efficiency wage models claim that a firm can lower production costs by increasing wage rates above the market-clearing rate.

While the high-wage doctrine and the theory of efficiency wages both point to possible benefits achieved through increasing wage rates, they do so for entirely different reasons. Whereas efficiency wage theories claim that higher wage rates will increase worker productivity at the firm level, the high-wage doctrine proposes, quite distinctly, that higher wage rates will stimulate aggregate demand and thereby reduce aggregate unemployment.

Rather than implying that an increase in wage rates will increase the effective demand for labor, efficiency wage arguments suggest that high wage rates may boost worker productivity and, therefore, lead to an increase in the real supply of goods, which by itself does nothing to increase the nominal effective demand for either goods or labor. Indeed, efficiency wage theories are entirely consistent with the orthodox view that *ceteris paribus*, an increase in nominal wage rates will *reduce* the quantity of labor demanded and create unemployment.

We focus exclusively on the policy role of the high-wage doctrine. Admittedly, thinking along efficiency wage lines may have had some bearing on the views of policy makers and economists in the early 20th century. However, we show that it was predominantly the high-wage doctrine, with its promised cure for aggregate unemployment, rather than efficiency wage theories, which suggest ways to increase firms' real output (while perhaps generating more unemployment), that motivated high-wage policies prior to and during the Great Depression.

III. *The High-Wage Doctrine Before the New Deal*

Though many economists may think of the high-wage doctrine as a counterpart of the Keynesian Revolution of the 1930s, the idea that cutting wage rates is an ineffective means of fighting recessions predates the appearance of Keynes' *General Theory* by several decades.[4] This section examines the role of the high-wage doctrine in the two decades before New Deal programs effectively put the doctrine into law. While the notion of a link between wage rates and aggregate demand no doubt goes back much further, 1914 serves as a logical starting point for an analysis of the high-wage doctrine's policy effects. During that year, automobile magnate Henry Ford began a widely-publicized, and apparently effective, campaign for the doctrine when he put his own high-wage policy into practice. Also during that year, economist Hartley Withers put the high-wage doctrine's wage-demand argument in writing.[5]

"The Employer's Dilemma" — An Early Statement of the High-Wage Doctrine.[6]

Nearly 20 years before the high-wage doctrine would be instituted through the wage-increasing aspects of the National Industrial Recovery Act of 1933, Hartley Withers clearly put forth the argument that increasing wage rates will increase aggregate demand and, hence, be good for all parties — workers, employers, and stockholders. In a chapter titled "The Employer's Dilemma," Withers assumes that an increase in wage rates is always in the interest of wage earners as well as employers who will thereby avoid constant labor disputes. But Withers most transparently invokes the high-wage doctrine while claiming that firms shareholders also benefit from a general increase in wage rates:

> It is to the interest of all shareholders — or whoever it may be that takes the surplus profit of an industry — that the workers of all other industries should be

> better paid, because thereby an enormous body of people with money to spend would be given more money to spend… . For the slice taken out of profits would be more than made up by the bigger turnover and bigger profits to be got owing to the wider and keener demand by a large body of better paid workers... (1914, pp. 83-84).

Withers then explains that since it is better for shareholders that the workers of all other industries should be better paid, it is also in the shareholders' best interest to pay their own workers higher wage rates. Withers thus treats high wage rates as public good, subject to a free-rider problem. To overcome the problem, "the rise would have to be universal, and every company or firm would naturally wait for others to begin" (ibid., p. 84). This same free-rider logic would later be used by economists and businessmen spearheading the movement for a government-enforced minimum wage during the 1920s.

When Withers expressed the high-wage doctrine in 1914, it was far from conventional wisdom among economists. Over the course of the following two decades the doctrine would become a cornerstone of U.S. wage-policy. An important step in this development was the Ford Motor Company's announcement of the five-dollar day.

Henry Ford and the High-Wage Doctrine. In 1914 Henry Ford announced that he would pay his employees five dollars a day for eight hours of work, a wage that was over twice the going rate. Ford continued this high-wage policy throughout the 1920s, when he paid his workers six dollars a day, and into the early years of the Great Depression, when he raised his daily wage to seven dollars. The success that the Ford Motor Company enjoyed while paying these extraordinarily high wage rates would serve as a major catalyst toward the general acceptance of the high-wage doctrine.

According to Raff and Summers (1987), within a year of instituting the five-dollar day, annual labor turnover at Ford factories fell from 370 percent to 16 percent, productivity was 40 to 70 percent higher, and profits were up about 20 percent. These results, the authors note, are consistent with efficiency wage theory. Raff and Summers claim that Ford's wage policy may in fact have been motivated by efficiency wage arguments.[7] Whether Ford's 1914 policy was motivated by the high-wage doctrine itself or by some efficiency wage argument is beyond the scope of this paper. What is clear is that, in his own later attempts to rationalize the five-dollar day, Ford referred to its ability to increase workers purchasing power rather than to its ability to spur efficiency.

In his 1922 collaboration with Samuel Crowther, Ford, clearly addressing the high-wage doctrine's wage-aggregate demand link rather than the firm-level productivity gains postulated by efficiency wage theories, claimed

> that, all other considerations aside, our own sales depend in a measure upon the wages we pay. If we can distribute high wages, then that money is going to be spent and it will serve to make storekeepers and distributors and manufactures and workers in other lines more prosperous and their prosperity will be reflected in our sales. Country-wide high wages spells country-wide prosperity (pp. 124-25).

Throughout the 1920s, Ford continued to be a leading spokesman for the high-wage doctrine and its aggregate demand-enhancing effects. In 1926, Ford claimed that the nation's economic boom was tied to its high rate of wages:

> The plain fact is that the public which buys from you does not come from nowhere… . One's own employees ought to be one's own best customers. [By paying high wages] we increased the buying power of our own people, and they increase the buying power of other people, and so on and on. It is this thought of enlarging buying power by paying high wages and selling at low prices which is behind the prosperity of this country (1926, pp. 8-9).

Ford’s five-dollar day coupled with his company’s continuing success as the top auto maker in the world captured the attention, not only of his fellow businessmen, but also of economists. Foster and Catchings’ *Business Without a Buyer* (1927), published as a common man’s summary of their previous work, devoted an entire chapter to Ford's high-wage policies. According to Foster and Catchings, Henry Ford “helped [employers] to see that it is bad business to destroy customers by reducing their purchasing power… . Reduction in the general level of wages, as Mr. Ford has always insisted is not a cure for hard times... . Mr. Ford is right: ‘The best wages that have up to date ever been paid are not nearly as high as they ought to be’” (1927, p. 175).

Foster and Catchings, who were underconsumptionists, felt that the very existence of profit creates an insufficient demand for goods and services. If profits exist, workers, they claimed, cannot have enough money to purchase all the goods they produce. The authors, who were later criticized for ignoring shareholder spending, believed that economic stability could only be attained if wage rates were increased to the point where economic profits fell to zero. Consequently, Foster and Catchings were somewhat critical of Ford, whose enterprises earned large profits. Still they cited his high-wage policy as a step in the right direction: “His prices have been enough higher than his wages to enable him to realize larger profits than any other manufacturer ever realized on anything. Nevertheless, he has had a large part in *changing the attitude of the business world* toward wages” (ibid., p. 174, emphasis added).

The Depression of 1920-21 As a Catalyst for the High-Wage Doctrine. Along with Ford’s five-dollar day, the postwar depression of 1920-21 appears to have played a major role in the high-wage doctrine’s mainstream acceptance. The 1920-21 depression had been very steep, but also very short lived. The annual unemployment rate reported for 1921 was 11.7 percent; but, given the brevity of the depression and the fact that recovery seemed underway by the end of 1921, the jobless rate at the trough of the cycle was no doubt much higher.

During this episode wage rates were cut early and often after the downturn began. In December 1920 the average hourly wage rate paid to workers in twenty-five manufacturing industries, perhaps the most reliable monthly wage measure available for the time period, was a little over 60 cents an hour. By May 1921, the wage rate had fallen to around 53 cents an hour, and by December 1921 it stood at 48.6 cents per hour.[8] Average money wage rates therefore fell about 20 percent in one year, perhaps the steepest drop in American history.

In the midst of this rapid wage deflation, few significant voices could be heard pushing the purchasing power argument behind the high-wage doctrine. Even the editors of the historically pro-labor magazine, *The Nation*, defended cuts in wage rates in 1921 on the grounds that such cuts give "manufacturers some relief during the period of depression," allowing everyone to benefit "by the steady continuance of production" (*The Nation*, June 1, 1921, p. 779). George Soule, a prominent economist in the 1920s, echoed this view while imagining himself as a representative employer: "There are only two choices before me, aside from failure. One is to shut down entirely and pay my workmen nothing. The other is to reduce wages" (*The Nation*, March 2, 1921, p. 334).

During the 1920-21 experience, then, wage rates were cut relatively quickly, allowing the labor market to clear and restoring pre-depression unemployment rates by the middle of 1922.[9] The policy of cutting wage rates was, of course, supported by orthodox economic reasoning. If the economy has an oversupply of labor, the price of labor must decline to eliminate unemployment. The 1920-21 experience did not obviously contradict such orthodox thinking.

Nevertheless, many sources from the mid- to late-1920s claim the 1920-21 experience as a turning point in the acceptance of the high-wage doctrine and its implication that a policy of cutting wage rates is destructive. A 1927 National Industrial Conference Board study concluded that "The depression of 1920-21 brought home to many employers the doubtful economic wisdom of cutting wages except as a last resort, because the general wage deflation at that time paralyzed the domestic market. Consequently, though wages were once the first point of attack upon high costs they have become practically the last" (quoted in O'Brien, 1989, p. 724). It was as if the simultaneous occurrence of wage rate cuts and perhaps the steepest depression yet experienced in U.S. history was perceived as proof that such cuts were the *cause* of the depression, rather than a cure which helped bring the downturn to an end. Anthony Patrick O'Brien (1989) has shown that, by the mid-1920s, many employers had publicly announced that wage rates would not be reduced during the next downturn because of the view that changes in wage rates lead to corresponding changes in purchasing power.

Foster and Catchings also viewed the postwar depression as evidence of the need to pay high wages to sustain aggregate demand, output, and employment. The downturn, the authors claimed, could have been avoided had a high-wage policy been maintained: "We can say with certainty … that whatever may have initiated the depression of 1921, nothing more was needed to continue it than the decline of about 10 billion dollars in individual income. Indeed, if consumers had not been deprived of these billions, all the other causes put together could not have sustained a general business depression" (1925, p. 381).

Foster and Catchings offered a similar sentiment regarding the postwar depression in *Business Without a Buyer*: "There is no doubt that business men know more about the relation of consumer income to their own success than they knew in 1921. At that time, in the midst of depression, they were determined to make matters worse by deflating wages in general" (1927, p. 175).

Thanks to the "lesson" of the 1920-21 depression and to Henry Ford's success with his own high-wage policy, the high-wage doctrine became part of the conventional wisdom of the 1920s, when it would serve as a major force behind one of the most significant labor-policy developments of the century: the minimum wage.

The Push for the Minimum Wage. Throughout the 1920s, economists, businessmen, and policy makers pushed for new legislative action consistent with the high-wage doctrine — the minimum wage.[10] Though minimum wage laws are today associated with social and political motives rather than profit-oriented or macroeconomic ones, the substantial push which would eventually lead to the first federally-implemented wage floors in the United States came from businessmen and economists, many of whom believed that high wages would stimulate demand, production, employment, and profits.

In an *American Economic Review* article, New England businessman Edward Filene advocated the passage of a minimum wage law for reasons consistent with the high-wage doctrine. Citing Ford's high-wage success, Filene claimed, as Withers had done in 1914, that a general increase in wage rates would benefit all parties: "The minimum wage is ordinarily looked upon as benefiting working people only. I contend that it is a boon to the employer as well as to the employee... . I refer to Henry Ford. He has become the richest man in the world. And the minimum wage he pays is so high that if it were proposed ... those who advocated it would be set down as crazy" (1923, p. 411). Further, cutting wage rates, as was done in 1920-21, was, according to Filene, "the most short-sighted way of approaching the problem" of depression (ibid., p. 414).

The 1926 *AER* supplement recorded a discussion from the American Economic Association's meetings whose topic was real wages.[11] George Soule noted that high wage rates "permit the absorption by wage-earners of the growing volume of products… . Recognition of this fact … constitutes one of the most noteworthy changes in economic opinion which has occurred in the last decade" (p. 62).[12]

Industrialist Magnus Alexander also participated in the roundtable discussion and clearly illustrated business leaders' belief (following the lead of Ford) that higher wage rates would mean greater demand for their products. "The wage problem" is that the industrial manager "has to produce *today* and sell *tomorrow* the goods out of which wages were paid *yesterday*" (ibid., p. 65).

J.K. Macmillan, writing in the *AER* about minimum wage legislation, lambasted prevailing "low" wage rates, saying that they represented "a pathological condition of business" (1928, p. 248). To Macmillan, business leaders who paid low wages were "shysters" — free-riders who wanted other businesses to pay high wage rates so that those workers could afford to purchase the shysters' goods. The shysters, however, wouldn't return the favor. Like Withers before him, Macmillan believed that a minimum wage law would overcome this free-rider problem associated with the high-wage doctrine's proposed *aggregate* benefits by forcing all firms to pay high wage rates. Furthermore, Macmillan stated, a minimum wage law would help businessmen who did not recognize the high-wage doctrine's implied relationship between wage rates and aggregate demand. "One happy effect of minimum wage administration is to improve this man's management of his business, so that he has a better chance of succeeding" (pp. 248-49).

J.A. Hobson also advocated a minimum wage law to overcome the free-rider problem that discourages individual employers from paying high wage rates and thereby stimulating aggregate demand for goods and services. Hobson wrote:

> It is sometimes argued that a sufficiently intelligent Capitalism might come to

> recognise that its own primary interest, i.e., large profits, required it to encourage an expanding market by a policy of high wages for its employees and of low prices for workers as a whole… . Increased purchasing power by high wages and low prices is seen to be essential... . If all rationalised industries could agree upon a wage-raising policy, each might be a gainer by helping to redress the balance between producer and consumer and to secure a general expansion of markets. This is what rationalisation requires... (1930, pp. 84-88).

Though minimum wage legislation would not garner enough political support during the largely "laissez-faire" 1920s, and might not have been upheld by the Supreme Court which held firmly to its "liberty of contract" canon, the theoretical justification for a minimum wage law, provided by the high-wage doctrine, would clear the way for its eventual implementation in the activist environment of the 1930s. Ironically, despite the fact that the high-wage doctrine is no longer a part of orthodox economic theory and that economists since Keynes have cited minimum wage laws as a potential cause of unemployment, rather than a cure, the minimum wage law has persisted in the U.S. since the Fair Labor Standards Act of 1938.[13]

Hoover's Reaction to the Stock Market Crash of 1929. Writing in October 1929, Stuart Chase claimed that the prosperity of the high-wage 1920s "registers an end to the economic fear of old age, sickness, unemployment, accident, dependency; and time to turn around as one labors, contemplate the sun, the stars, and the meaning of life; time to dance and to play, to eat, drink and make merry" (*The Nation*, October 23, 1929, pp. 461-62). Days later the stock market crashed, bringing most such utopian thinking to an end. To many economists and policy makers, however, the crash itself did not necessarily imply an end to prosperity, but instead represented an opportunity to apply a new-found "remedy" for the business cycle — high wage rates. About a month after the crash, President Hoover held a series of meetings at the White House with the nation's leading businessmen. At these meetings Hoover expressed his personal belief in the high-wage doctrine and told his guests that if high wage rates, and hence consumer's purchasing power, could be maintained, a recession could be averted.[14]

Hoover's words were just that — words. Businessmen did not have to follow the President's request. They would presumably have done so only if they believed in the high-wage doctrine themselves. O'Brien (1989) convincingly shows that many employers at the onset of the Depression did believe that maintaining high wage rates was in their best interest. Furthermore, wage data suggest that most businesses voluntarily complied with Hoover's high-wage policy. Average hourly nominal wage rates paid to 25 manufacturing industries were 59.3 cents in October 1929, and 59.5 cents by April 1930. Wage rates had fallen only to 59.1 cents by September 1930, despite substantially reduced output prices and profits. Compare this to the 20 percent decline in nominal wage rates during the 1920-21 depression. During the first year of the Great Depression the average wage rate fell less than four-tenths of one percent.

At least one business leader took Hoover's wage-maintenance request a step further with the announcement of wage rate increases for his company's employees. Henry Ford responded to Hoover's request by making yet another influential public plea for higher wage rates: "Nearly everything in this country is too high priced. The only thing that should be high priced in this country is the man that works. Wages must not come down, they must not even stay on their present level; they must go up" (*New York Times*, November 22, 1929, p. 1).

The immediate reaction to Hoover's high-wage policy, of both business leaders and economists, was overwhelmingly positive. Vedder and Gallaway (1989, p. 92) note that Julius Rosenwald of Sears Roebuck believed the high-wage policy would be so successful that the nation would soon face a labor shortage. This view seemed to imply that the demand curve for labor was effectively upward sloping — that higher wage rates, after the aggregate demand-enhancing mechanism of the high-wage doctrine took hold, would mean higher quantities of labor demanded.

Even Irving Fisher, perhaps the best-known economist of the era, gave support to Hoover's high-wage policy. In the preface to his book, *The Stock Market Crash — and After*, Fisher (1930) says, “Readers will doubtless find some inconsistencies between my previous writing and the present book, as I have modified my opinions ... with the march of events” (p. vii). Fisher went on to call Hoover's purpose “magnificent,” saying that its “underlying theory [of increasing] the purchasing power of the masses of consumers was ... altogether sound” (pp. 24-25).

Fisher also supported Ford's announcement of wage rate increases. “Henry Ford was substantiality right,” Fisher opined, “when he suggested the need [to increase] ‘the purchasing power of our principal customers — the American people’” (p. 25). Fisher concluded his chapter on Hoover's high-wage policy by saying that “[i]f this great experiment in cooperation succeeds ... a new victory for industrial democracy will be achieved” (p. 30).

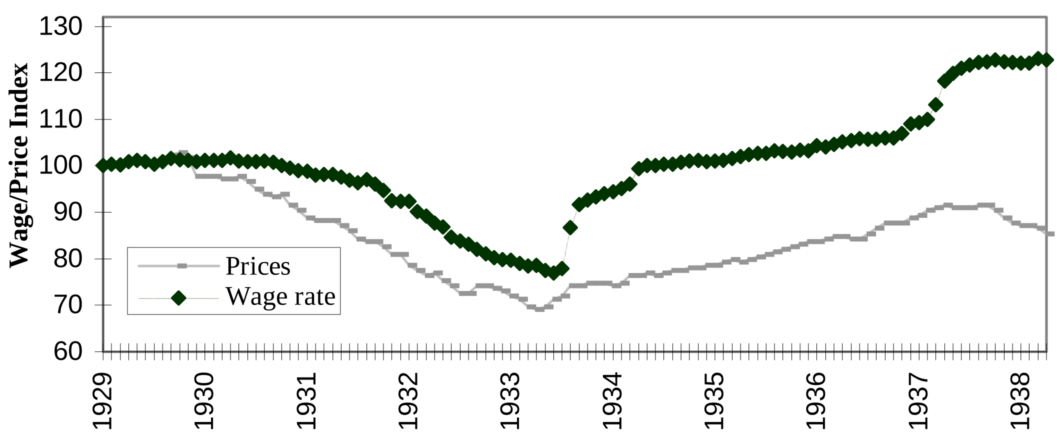
In January 1930, Hobson also offered support to President Hoover's continuing high-wage policy. We must, he said, reject “as socially unsound and impracticable the demand for wage-cuts which to unintelligent employers is the only way of reducing costs” (*The Nation,* January 22, 1930, p. 97). Hobson, consistent with the high-wage doctrine, claimed that cutting wage rates during a downturn would not cure, but instead would exacerbate unemployment. “The immediate result would be still further to worsen the distribution of income, and to contract ... the effective demand for commodities, with a consequent shrinkage of employment...” (1930, p. 134).

Figure 1, which reports average monthly wage rates in 25 manufacturing industries between 1929 and 1938, shows that nominal wage rates were largely maintained for two years after the stock market crash.[15] By August 1931, prices had fallen 15 percent, while nominal wage rates had declined only 3 percent. Amazingly, with the exception of the steady fall during the 20 months between September 1931 and

May 1933, nominal wage rates remained fairly constant or even rose between 1929 and 1938 despite a falling price level (implying a large increase in *real* wage rates) and the extraordinarily high rate of unemployment throughout the period. Orthodox economic theory suggests that unemployment will tend to push real wage rates down, not up.

The behavior of real wage rates during the Great Depression stands out as the most curious anomaly in the history of U.S. labor markets. Neither before nor since has the economy experienced such persistent unemployment, much less such persistently high real wage rates during a time of wide-spread unemployment. A better understanding of the high-wage doctrine and its growing acceptance in the years leading up to the Depression may help account for this behavior. A fuller explanation also requires an examination of specific legislation that was passed with goal of implementing the high-wage doctrine.

Figure 1: ***Nominal Wage Rates and Prices 1929-38***



IV. *The High-Wage Doctrine and the New Deal*

At least three major pieces of New Deal legislation were aimed directly at increasing money wage rates: the National Industrial Recovery Act (NIRA), implemented in June 1933 but declared unconstitutional in May 1935; the National Labor Relations Act

(NLRA), passed in 1935 and held constitutional by the Supreme Court in April 1937; and the Fair Labor Standards Act (FLSA) of 1938.

The National Industrial Recovery Act. The original Blanket Code of the NIRA established a minimum wage rate of $.40 an hour, a rate that was five cents higher than the prevailing *average* wage rate paid to “common labor” at the time. According to the legislation's “Declaration of Policy,” the increase in wage rates was designed to “increase consumption of industrial and agricultural products by increasing purchasing power” (Magee et. al., 1933, p. 6).

On the rationale behind the NIRA, Harold G. Moulton, President of the Brookings Institution, wrote,

> The theory underlying the wage-raising program of the National Recovery Administration was that an increase in money wages throughout industry would expand the purchasing power of the masses and thus call forth a larger volume of production which would automatically absorb unemployment. The expanding employment would in turn mean a further increase in wage disbursements, swelling aggregate purchasing power still more, and thus progressively promoting recovery (1936, p. 103).

A National Recovery Administration study, released in 1937, offered a similar view:

> Perhaps the outstanding feature of the decade prior to 1933 was the growing emphasis on the idea that business, in its own interest, needed to pay liberal wages in order to provide the widely distributed purchasing power which was regarded as necessary if the output of mass production was to find an adequate market… . [The doctrine] found influential adherents among prominent businessmen, and

apparently had appreciable effect on actual wage policies (House Document No. 158 75th Congress, 1st Session, p. 2).

The Roosevelt administration wanted to be certain that these increases would alter *real* wage rates, not just nominal ones. When it became apparent that firms were using the cartel "codes of fair competition" to initiate monopoly pricing, General Hugh Johnson, the NIRA's top administrator, ended a January 1934 address to business leaders with this plea: "If I had only nine words with which to address you … I would rise and say: 'Keep prices down. For God's sake, keep prices down'" (Hawley, 1966, p. 81).

Though the NIRA was largely governed by voluntary compliance, Figure 1 shows the dramatic jump in wage rates, particularly in relation to prices, between mid 1933 and early 1934. Moreover, Weinstein's (1980) empirical analysis of the NIRA found that the legislation effectively increased nominal wage rates 26 percent per year while increasing prices only 14 percent per year. Orthodox labor theory suggests that this increase in real wage rates could only served to generate more unemployment than there would have been in the absence of the NIRA.

The National Labor Relations and Fair Labor Standards Acts. The NIRA was struck down by the Supreme Court in May 1935. In response, Congress quickly passed the NLRA, more commonly known as the Wagner Act, to continue the wage-increasing policy of the NIRA. The NLRA's main policy goal was to give more bargaining power to labor so that businesses would be further pressured to increase wage rates, even if government legislation forcing them to do so was no longer effective. The NLRA did not have a substantial initial effect on wage rates because businessmen believed the Supreme Court would strike the act down as it had done with the NIRA. Unexpectedly, the

Supreme Court upheld the constitutionality of the NLRA in April 1937. The passage of the FLSA followed one year later. The FLSA established a legally binding minimum wage of 40 cents per hour for all nonagricultural workers.

Figure 1 shows that by 1938, one year after the NLRA was enacted, the average nominal wage was 23 percent higher than its 1929 level while the price level was 14 percent lower. The real hourly wage rate, then, increased about 43 percent during the first nine years of the Great Depression, despite that fact that the unemployment rate at the time ranged between 15 and 25 percent.

V. *Economist's Reactions to the High-Wage Doctrine in the 1930s*.

Most economists reacted quite favorably to policies aimed at directly raising wage rates during the Great Depression. Carter Goodrich (1931), speaking at the December 1930 American Economic Association meetings, noted that real wage rates increased during the downturn of 1930 and attributed this largely to "the much advertised belief that in paying high wages employers were at the same time providing themselves with good customers" (p. 189). Goodrich noted that "[o]ur patient [will not take] the prescription of sharply lowered wage rates. But are we certain we want him to? …Wage cutting would begin as a further reduction of pay rolls and therefore of the purchasing power in the hands of the workers" (p. 190). Goodrich concluded his remarks not by noting the failure of the high-wage doctrine to combat the downturn of 1930, but instead by reaffirming his belief in the macroeconomic benefits to be had by raising wage rates. "Economists must take serious account of such things as … the influence of high-wage doctrines; and it is quite possible that they will often find reason for applauding as well as for recognizing the effects of these newer forces" (p. 191).

Economists and business leaders reacted with similar blind enthusiasm to New Deal legislation aimed at directly raising wage rates. In a 1934 pamphlet, Filene called the high-wage doctrine "the greatest discovery of the past century." The doctrine, in his view, was merely a logical result of the discovery that "the consumer's dollar" came from wages paid to him. That "discovery," Filene said,

> must result not only in a solution of our financial problems, but in the solution of many other social problems ... for employers will then be even more anxious than workers to keep wages constantly going up and the cost of living always coming down. And when fully understood and acted upon, this discovery will abolish unemployment, practically end the familiar type of graft and inefficiency in government and, to a very large extent, do away with crime (1934, p. 5).

Most of the numerous New Deal era economic pamphlets offered the same type of resounding support for Roosevelt's policies. Still, there were a few notable dissenters by 1933, and their numbers grew in the years following the New Deal's failure to restore the prosperity of the 1920s.

Benjamin M. Anderson, economist for the Chase National Bank, seemed to understand the fallacy of the high-wage doctrine. Referring to the Roosevelt administration's belief that "a rise in wage rates in factories should be a starting point" in curing unemployment, Anderson said, "I think this view is definitely wrong. I think what the factories need is greatly increased volume, and that what labor needs is greatly increased employment... . Ultimately, as employment increases ... the aggregate buying power of the country [will] be so greatly increased [that] the wages of factory labors can rise also, but this should be a later step" (Anderson, 1933, p. 8).

Walter Lippmann assessed the similarities between Hoover and Roosevelt's wage policies, and concluded that they could only have made the depression worse:

> Mr. Hoover threw the whole weight of his influence against reduction in the rate of wages, as Mr. Roosevelt did in 1933 and until very recent times. He believed what the labor leaders believed, what the N.R.A. economists believed ... that purchasing power of labor could be maintained by a high hourly rate. That the high hourly rate in the face of falling prices was a sure way to increase and perpetuate unemployment was denied in both Administrations, though I suspect that neither Mr. Hoover nor Mr. Roosevelt would deny it today (1935, p. 27).

Hindsight shows that Lippmann's later suspicion was in fact incorrect. Hoover's *Memoirs*, not published until 1952, and Roosevelt's subsequent passage of the NLRA and FLSA, seem to indicate that both of these men continued their faith in the high-wage doctrine after 1935, despite its apparent failure to cure unemployment.

J. E. Meade was another notable dissenter. Writing in 1936, Meade clearly explained (without mentioning any specific public policy) the fallacy of the high-wage doctrine: "[With] a reduction in … the wage [rate] paid for one man for a week's work [it] does not *necessarily* follow … that the money wage-bill ... will fall ... for if [the wage rate cut] did cause a sufficient increase in employment, the money wage-bill would, in fact, increase" (p. 62).

Dissension from the high-wage doctrine was thus present. However, for the most part, dissenting voices were not heard until after 1933, and remained few in number until after 1935.

VI. *Conclusion*

Although the high-wage doctrine — the belief that the level of aggregate demand is determined by the level of wage rates — is most often associated with the Great Depression, the doctrine's effects on wage policy go back at least two decades further. Rather than having been a product of desperate times, the doctrine gained wide acceptance during the prosperous 1920s as businessmen and economists, citing the success of Henry Ford's continuing high-wage policies, and the (supposedly counterproductive) wage deflation that had marked the steep depression of 1920-21, applied the doctrine's demand-enhancing logic to push for an economy-wide minimum wage.

Throughout the Great Depression, American economists and policy makers, wishing to avoid the outbreak of wage deflation that had marked the postwar depression, mistook a symptom and curative response to fallen demand for the disease itself, and instituted policies, minimum wage laws included, that increased real wage rates in the face of high unemployment. Although the high-wage doctrine is no longer part of accepted economic theory, minimum wage policies originally based upon it are still in force.

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NOTES

[1] Specific New Deal legislation passed with the high-wage doctrine in mind includes the National Industrial Recovery Act (1933), the National Labor Relations Act (1935) and the Fair Labor Standards Act (1938). The doctrine's role in each of these is addressed in section IV.

[2] Barber (1985) notes that the "new era" of the early 20th century went beyond just economic concerns. Many high-wage proponents embraced the social-political doctrine that higher wage rates would, for example, mitigate social class differentiation, rather than doctrines which stressed the purchasing power or efficiency gains of high wages. While not denying that these aspects were important, we examine here, more narrowly, the economic arguments for paying high wage rates and particularly the belief that higher wage rates would reduce unemployment.

[3] Other common efficiency wage models include those dealing with adverse selection and sociological factors. For an overview of efficiency wage theory, see Akerlof and Yellen (1986), especially pages 2-8.

[4] Furthermore, while Keynes argued for not cutting nominal wages, he did so while also advocating separate monetary or fiscal means for expanding demand. He did not say that demand could necessarily be expanded by raising real or nominal wage rates.

[5] It is doubtful that there is any connection between these events.

[6] While several pre-1914 statements were largely consistent with the high-wage doctrine, Withers appears to be one of the first economists who clearly and unambiguously (many earlier high-wage statements were tied in with efficiency wage arguments) supported the notion that increasing wage rates would stimulate aggregate demand and employment.

[7] The authors do not mention the high-wage doctrine as a possible motivation for Ford's five-dollar day.

[8] Source for these and all hourly wage rate numbers throughout this study: "Average Hourly Earnings, Twenty-five Manufacturing Industries," National Industrial Conference Board.

[9] See Vedder and Gallaway (1993), especially pages 61-68, for a good discussion of this time period.

[10] Prior to the mid 1920s, economists generally limited their discussion of minimum wage laws to those applying exclusively to women and children. Massachusetts began the practice of protectionist minimum wage laws in 1912 and 13 other states followed. In 1923, the Supreme Court struck down the idea of a minimum wage law that applied only to select groups with the *Adkins v. Children's Hospital* ruling.

[11] Though the topic of a minimum wage law was not addressed specifically in the roundtable discussion, the wage-demand link made by some participants lead to a few indirect references to macro wage-increasing measures.

[12] Printed discussion on "The Movement of Real Wages" *American Economic Review* 16, (March 1926): 59-70.

[13] Card and Krueger (1994), and other scholars who have presented empirical evidence that minimum wage laws do not necessarily cause unemployment, notwithstanding.

[14] For more on Hoover's post-crash activities see Vedder and Gallaway (1993), Barber (1985), O'Brien (1989), Sobel (1975), and Hoover (1952).

[15] Economy-wide hourly wage rates are not available on a monthly basis for this period. Average hourly earnings of these 25 manufacturing industries were perhaps 15-20 percent higher than wage rates paid to common labor.