The Minimum Wage Debate: 2014 Update

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INTRODUCTION: The Minimum Wage Debate—Back with a Vengeance

The first version of this article, “The Minimum Wage Debate: The Latest Rounds”, appeared in the January 1999 issue of the Connecticut Economic Digest. It was motivated by Connecticut’s new minimum-wage increase that went into effect January 1, 1999. It raised the State’s minimum wage to $5.65 per hour, and then to $6.15 on January 1, 2000 (or to a value that was indexed to the Federal minimum wage, whichever is greater). Although there was not much opposition in Connecticut, it did spark a national debate and some vocal Congressional opposition, when President Clinton proposed raising the Federal minimum wage. Well, it’s Baaack!

In his 2014 State of the Union Address, President Obama called on businesses to raise their employees’ wages, in lieu of no action likely by Congress. Also, the President announced he would use his executive power to increase the minimum wage to $10.10 per hour for workers on new government contracts. Then on March 27, 2014, Governor Malloy signed the bill into law that made Connecticut the first state to increase its minimum wage to $10.10 an hour. Under the new law, the minimum wage increases to $9.15 on Jan. 1, 2015; to $9.60 on Jan. 1, 2016; and finally to $10.10 on Jan. 1, 2017. As of July, ten states, including Connecticut and the District of Columbia, have enacted minimum-wage increases in 2014, and 38 states introduced minimum-wage bills, and 34 states considered increases. Those critical of raising the minimum wage predicted that raising it would result in the loss of jobs. But what does the evidence tell us?

PREDICTIONS ABOUT THE CONSEQUENCES OF RAISING THE MINIMUM WAGE

In February 2014, the Congressional Budget Office (CBO) published their report on the effects of President Obama’s proposal in his State of the Union Address to raise the Federal Minimum Wage. The CBO assessed the impacts of two options: raising the Federal Minimum Wage to $9.00 per hour, and raising it to $10.10 per hour. Based on the incremental increases in the Federal Minimum Wage, in 2014, 2015, and 2016, the CBO assessed the impacts in 2016.

The CBO concluded that the $9.00 per hour scenario would lift 300,000 people out of poverty by the second half of 2016, and that the $10.10 scenario would lift 900,000 people out of poverty by the second-half of 2016. However, the CBO also concluded that the $9.00-per-hour scenario would result in an employment reduction of 300,000 workers, and that the $10.10-per-hour scenario would cost 500,000 workers their jobs. The CBO’s estimates of job-losses were based primarily on estimating the Elasticity of Labor-Demand for various classes of workers such as teenagers and workers in low-wage industries. Before turning to the issues surrounding this approach to assessing the impacts of raising the minimum wage, it will be helpful to look at the evidence on the impact on jobs in those states that have raised...
The 2014 States’ Minimum Wage Hikes: Early Results

As noted in the introduction above, as of July, ten states, including Connecticut and the District of Columbia, have enacted minimum-wage increases in 2014. And the preliminary results are in. At the beginning of 2014, in addition to Connecticut, three other states passed legislation raising their minimum wage (New Jersey, New York, and Rhode Island). In nine other states, their minimum wage automatically increased in line with inflation at the beginning of the year (Arizona, Colorado, Florida, Missouri, Montana, Ohio, Oregon, Vermont, and Washington State).8

In an update of research by economists at Goldman-Sachs, the Center for Economic Policy Research (CEPR) compared the growth-rates in Non-Farm jobs over the first five months of 2014 (January to May), using as a baseline the growth-rate in employment for the last five months of 2013 (August to December). The results of the CEPR’s updates confirmed the earlier research and results by Goldman-Sachs.9 Of the 13 states that increased their minimum wage in early 2014, all but one, New Jersey, had employment gains. Furthermore, nine of the remaining 12 states were above the median job-growth rate for the first five months of 2014. The average percent-increase in jobs for the 13 states that increased their minimum wage was +0.99%, while the remaining states, that did not raise or do not have a minimum wage had an average job-growth rate of +0.68%.10

An even more dramatic and far from early result is that for the State of Washington. In 1998, Washington raised its minimum wage and linked its increases to inflation. Critics contended that it was a job-killer. In the 15 years that followed, the state’s minimum wage climbed to $9.32, the highest in the country. The result: job growth continued at an average, annual pace of 0.8%, which is 0.3 percentage points above the national rate. Payrolls at Washington’s restaurants and bars, portrayed as particularly vulnerable to higher wage costs, expanded by 21%, and Washington’s poverty level has trailed that of the U.S. for at least seven years.11

So, why did these results fly in the face of the dire predictions about the consequences of raising the minimum wage? To answer that question, the next section picks up on, and brings up-to-date, the debate among economists recounted in the earlier Digest article.

MARKET STRUCTURE AND THE MINIMUM WAGE

In 1995, the publication of Myth and Measurement by David Card and Alan Krueger presented their research results, which launched a frontal assault on the conventional wisdom that then reigned in the field of Labor Economics. Many pre-Card-and-Krueger studies on the effects of raising the minimum wage assumed that the market-structure of the affected industries was characterized by The Perfect Competition Model, or a close approximation to it. But after Card and Krueger’s research was published, the prospect of imperfect labor markets had to be considered. But, it is not like the idea of imperfect labor markets had not been around for a while. In 1946, George Stigler stood the monopoly model on its head in his article on the minimum-wage legislation and introduced the idea of the single buyer in the labor market: the Monopsonist.12 And with this analysis, Stigler seems to be the first to demonstrate that a minimum wage can actually increase employment under Monopsony. This outcome is based on the same reason that a price ceiling in a monopoly product market can lead to an increase in output—a price ceiling prevents the monopolist from reducing output and raising the price as much as it desires. This argument can be extended to the labor market. That is, in the labor market, the argument is that a price floor like a Minimum Wage can prevent a profit-maximizing Monopsonist from reducing the quantity of labor hired and cutting the wage as much as it desires.13

There are several explanations, besides the single-buyer argument, that can be offered as reasons for imperfect labor markets. One market failure in the labor market is the absence of perfect information on alternative possible jobs, as modeled in search models. Another reason...
that the market could deviate from the perfect-competition paradigm is
that it may be costly for workers to move between, or among, employers
(see below). Further, workers may have heterogeneous preferences for
different jobs. For example, a worker may have equal productivity in two
jobs as measured by marginal revenue product, but the worker
prefers the kind of work or working conditions in one job over the
other. However, there is another source of monopsony power that is
often overlooked by many economists not specializing in Urban and
Regional Economics: Space. For instance, sprawl has erected spatial
barriers to entry into labor markets by either limiting the size of the
commuting shed, restricting access to employment centers (e.g., due to
inadequate mass transit, excessive commuting time or distance, or
both), or physically isolating otherwise contiguous commuting
sheds.\(^\text{12}\)

**Fuzzy Versus Crisp Market Structure**

In 1965, Loïf Zadeh introduced the idea of Fuzzy Sets, which departed from the idea of
conventional set theory formulated by Gregor Cantor in the 19\textsuperscript{th}
Century. Instead of an element of a set being either a member of the set, or not, in Fuzzy Sets, elements can
have degrees of membership in a set. It is not the all-or-nothing proposition, which is the basis of
conventional set theory. Some labor economists, in their analysis of the
effects of the minimum wage, have taken the conventional-set theory
approach by assuming that since Stigler’s monopsony model was
based on the company town, and if the
studied labor market were not a
company town (virtually, all of the
instances studied), then the perfect
competition model must pertain.
But, rather than taking this “crisp-
sets approach”, what if the market
structure can be represented by a
spectrum of market structures going
from perfect competition to
monopsony? That is, most firms in
most labor markets have both
characteristics: Perfect Competition
AND Monopsony. The effect of the
minimum wage on a given industry,
or sector, in a given labor market or
labor markets, depends on the
degree of monopsonistic power. In
fact, as pointed out by Bhaskar,
Manning, and To (2002), “It is best
to think in terms of ‘oligopsony’ or
‘monopsonistic competition’ as the
most accurate descriptions of the
labor market we envisage.”\(^\text{16}\)

**What About the Product, or Output Market?**

Some economists would argue that even if the labor market were
monopsonistic, if the product or output market were perfectly
competitive, then the firm may need
the monopsony rent to operate
above the shut-down point. In that
case, a minimum wage could
eliminate the economic rent and
force the firm below its shutdown
point resulting in its laying off
workers, or shutting down.\(^\text{17}\)

However, like for labor markets, as
illustrated in Figure 1, there is a
spectrum of market structures from
most to least competitive in the
product market too. Just as it is
best to think in terms of Oligopsony
or Monopsonistic Competition as the
most accurate descriptions of the
labor market, their counterparts in
the output market, Oligopoly and
Monopolistic Competition are the most
likely market structures. And just as
introducing space in the labor
market greatly reduces the instances
in which a market-structure
approximates the perfect-competition
paradigm, the same result is true
when space is introduced into the
analysis of product, or output
markets.

With the introduction of space into
the analysis a new source of
market power now comes into view:
the Spatial Monopolist and
Locational Advantage. This concept and the issues around it, was
explained by Hoover and Giarratani
(1971, 1975, and 1984):

Most introductory textbooks in
economics stress a number of reasons why
monopolies can arise (patents, scale
economies, etc.), but they neglect the fact
that space itself may impart monopoly
power. For example, customers in the
immediate vicinity of a grocery store are, in
a sense, attached to it. Price increases may
be tolerated by these customers because
switching to an alternative supplier would
involve extra time, trouble, and expense.\(^\text{18}\)

The above implies that to
accurately capture market
conditions, the most likely market
structures encountered are likely to
be monopolistically competitive, or
oligoplistic in the output, or product
market, and monopsonistically
competitive, or oligopsonistic in the
factor-input market, and in
particular, the labor market.

**TESTING FOR MONOPSONISTIC POWER**

The Congressional Budget Office (CBO) study discussed above, as
noted, only looked at the elasticity of
demand in their assessment of the

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**FIGURE 1: Labor-Market Structure Spectrum**

<table>
<thead>
<tr>
<th>Most Competitive</th>
<th>Least Competitive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perfect Competition</strong></td>
<td><strong>Monopsonistic Competition</strong></td>
</tr>
<tr>
<td>There are many buyers in the labor market.</td>
<td>There can be a few, or many, sellers in the labor market.</td>
</tr>
<tr>
<td>There are no prohibitive costs or other barriers to workers’ commute to the firm’s worksite.</td>
<td>However, there are no significant costs or other barriers to commuting to the firm’s worksite.</td>
</tr>
<tr>
<td>Each individual firm is small in relation to the size of the labor market.</td>
<td>Each firm accounts for a significant share of the labor market.</td>
</tr>
<tr>
<td>All firms are wage takers.</td>
<td>Each firm’s wage-setting must take into account the reaction from other firms.</td>
</tr>
</tbody>
</table>

REFERENCES: Bhaskar, Manning, and To (2002, 2004); Manning (2004); Roger Leroy Miller (1986); and Call, Steven T and William L. Holahan (1983)
impact of the proposal to raise the minimum wage. But as Bhaskar, Manning, and To (2004) point out, under perfect competition, the labor-supply curve is horizontal, or perfectly elastic, but:

In contrast, with models of oligopsony or monopsonistic competition, the labor supply curve facing an individual firm is not perfectly elastic.20

Thus, to capture any monopsonistic power in the labor market, an analysis must look at the Elasticity of Supply, which the CBO did not do. By looking at the Elasticity of Demand only, the CBO was implicitly assuming away any monopsonistic power in the labor markets they analyzed. The result: their analysis only showed what would pertain in a perfectly competitive labor market where the Elasticity of Supply is zero, because the labor-supply curve is horizontal given that firms are wage-takers.

Unlike Perfect Competition, where the demand for labor (which is equal to the value of the last unit of output produced, called the Value of Marginal Product (VMP)) is equal to the Wage-Rate, for the Monopsonist, there is a wedge between the VMP and the Wage-Rate. Thus, the greater the Elasticity of Labor-Supply, the greater the wedge between the VMP and the Wage-Rate, and therefore, the greater the monopsonistic power of the firm.21 So, why would the wedge between the VMP and the Wage-Rate allow an increase in the wage, such that it would not only result in no job-losses, but in some cases even an increase in employment? The next section addresses that question.

**ECONOMIC RENT, OPPORTUNITY COST, AND JOBS**

The first concept that plays a critical role here is that of Economic Rent. Economic Rent is the total return to a Factor of Production (Land, Labor, and Capital) above and beyond the minimum payment necessary to attain that factor’s services, known as the factor’s Opportunity Cost. The Opportunity Cost is equal to the remuneration that the factor-input would receive in its next most-likely alternative use, or activity. If it does not receive a payment equal to its Opportunity Cost, in the long-run, that factor-input will not be forthcoming. Any payment to a factor-input that exceeds its Opportunity Cost, is a Surplus, or Economic Rent. Thus, the difference between the VMP or the value of a job (i.e., the revenues the firm receives from that job), and its costs, particularly, the Wage-Rate paid to the worker engaged in that job is the Surplus, or Economic Rent to the firm.21

Another set of critical concepts that plays a role in the minimum-wage issue involves the differences that economists and accountants have for some of the same terms. For both economists and accountants, Revenue – Costs = Profit, but the definition of Costs is where the accountant and the economist can get different results. Accounting costs are the costs most often associated with the costs of producing. They include direct payments to labor and capital to produce output.

Economic costs are the costs of production that include not only the accounting costs but also the opportunities forgone by producing a given product (i.e., the Opportunity Cost). By choosing to produce one good, producers give up the opportunity for producing some other good.22

Table 1 presents the monthly income statement for a hypothetical eating place owned by a franchisee that has a degree of monopolistic power in the output market, and a degree of monopsonistic power in the labor market.

<table>
<thead>
<tr>
<th>TABLE 1: Monthly Income Statement for an Eating Place</th>
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</thead>
<tbody>
<tr>
<td><strong>Total Gross Revenues</strong></td>
</tr>
<tr>
<td><strong>LESS ACCOUNTING COSTS</strong></td>
</tr>
<tr>
<td>Cost of Food and Supplies</td>
</tr>
<tr>
<td>Wages</td>
</tr>
<tr>
<td>Rent and Utilities</td>
</tr>
<tr>
<td>Taxes</td>
</tr>
<tr>
<td><strong>Depreciation on Equipment</strong></td>
</tr>
<tr>
<td><strong>TOTAL DEPRECIATION COSTS</strong></td>
</tr>
<tr>
<td><strong>NET REVENUE (Accounting Profit)</strong></td>
</tr>
<tr>
<td><strong>LESS ECONOMIC COSTS</strong></td>
</tr>
<tr>
<td>Franchise Owner's Salary in Most Likely Alternative</td>
</tr>
<tr>
<td>Alternative Return on Inventory Investment (10%/Yr)</td>
</tr>
<tr>
<td><strong>TOTAL OPPORTUNITY COSTS</strong></td>
</tr>
<tr>
<td><strong>ECONOMIC PROFIT</strong></td>
</tr>
</tbody>
</table>

(=Total Gross Revenues -- (Accounting Costs + Economic Costs))

REFERENCES: Schiller (1983), pp. 471-474, Wilkerson (2005), and Author's calculations.

**Save Depreciation on Equipment, the accounting costs that appear in Table 1 are explicit or, actual money payments. The subtraction of Total Accounting Costs ($61,210) from Total Gross Revenues ($73,180) gives Net Revenue ($11,970), or Accounting Profit. However, to obtain Economic Profit ($2,380), the Opportunity Costs of the franchise owner’s salary of $7,020 per month, in his or her next most likely job, and the $2,570 per month return the owner would obtain if he, or she, invested their capital in an investment other than the inventory for the eating place franchise, must also be subtracted from Total Gross Revenues. The $2,380 represents a Surplus, or Economic Profit.**

If the eating establishment market in this example were perfectly competitive, then this Economic Profit would be dissipated as firms entered the market to capture a portion of the economic surplus. At some point, economic profit would decline to zero, where the Opportunity Costs of attracting factor-inputs to this industry are exactly covered, but there is no surplus (i.e., Economic Profit = 0). But there is still a positive Accounting Profit, of $9,590 in the example in Table 1. However, if there are barriers to entry or exit, or both, to new firms entering the market, then the Surplus, or Economic Rent, will not be dissipated. Say this establishment employs 20 part-time workers [or, 10 Full-Time Equivalents (FTE’s)]. And say they are being paid $9.00 per hour, which results in the $15, 580 monthly
payroll for this example eating establishment, depicted in Table 1. If a $10.00 per hour minimum wage goes into effect, then the monthly payroll increases by $1,753 to $17,333. This still leaves $627 in monthly Economic Profit ($2,380 - $1,753). If the surplus persists, and as long as the increase in the minimum wage does not cause this example-firm’s wage-bill to go up by more than $2,380, (holding all other costs constant), then there would be no reason, at least based the increase in the minimum wage, for the firm in Table 1 to lay off workers, or to close up. As long as the firm in Table 1 is covering, not only its Accounting Costs, but also the Opportunity Cost of attracting factor-inputs, then there would be no reason, based on an increase in the minimum wage, in this example, for the firm to reduce its employment. In this case, an increase in the minimum wage reallocates some of the Economic Surplus to the firm’s workers, but does not result in negative Economic Profits. In addition, an increase in the income of lower-wage workers will generate a relatively larger spending response in the macroeconomy.23

Obviously, if the minimum-wage increase were large enough to cut into Economic Profit and, not just Accounting Profit, it would then result in employment reductions, or the firm’s closing. The point is that the Congressional Budget Office (CBO), in its study of the effects of raising the Federal minimum wage, never measured the existence, let alone the extent, of monopsonistic power in the industries that it studied, because it only assessed the effects based on the Elasticity of Demand for Labor, which assumes that the labor markets investigated are perfectly competitive. Thus, the evidence (cited and discussed above) so far is at odds with the CBO’s predictions. ■

5 Congressional Budget Office, The Effects of a Minimum-Wage Increase on Employment and Family Income (February 2014) Congress of the United States: Washington, Table 1, p. 2. 6 ibid.
7 CBO (February 2014), p. 21.
9 ibid. 10 ibid.
21 ibid, Ch. 1, p. 7.