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THE EFFECT OF MINIMUM WAGE LEGISLATION ON INCOME EQUALITY: A THEORETICAL ANALYSIS

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ABSTRACT

Minimum wage legislation is frequently advocated in the belief that it creates a more nearly equal distribution of income. A one-sector model of general equilibrium is used to analyze a universally applicable minimum wage, and a two-sector model is used to analyze a minimum wage that is only applied to certain industries. In both cases we find that a minimum wage may well lower equality (as computed by the Gini index) if we consider reasonable values for the parameters of these two models. In the absence of unemployment compensation, equality can increase only if the elasticity of substitution in production is quite low. In the one-sector case, however, equality necessarily rises if unemployment compensation is present and sufficiently generous.

INTRODUCTION

Minimum Wage legislation is frequently advocated in the belief that it creates a more nearly equal distribution of income. In this paper we investigate the positive economic question of the conditions under which this belief is true. We find that whether it is true depends on whether the minimum wage is universally applicable, and in the case of a universally applicable minimum wage, on the level of unemployment compensation.

In general we find that a legal minimum wage will actually reduce income equality, unless the elasticity of substitution in production between low-wage labor and other factors of production is fairly low, or unemployment compensation is sufficiently generous.

By investigating this issue, we do not mean to suggest that income equality is necessarily desirable or equitable. Indeed, Robert Nozick (1974, chapter 7) has recently demonstrated that distributive justice does not require any particular state of income or wealth distribution, but rather a process by which the economy moves from one state to another. In other words, the proper criterion of justice does not ask how much an individual has, but rather how he acquired what he has. Greater equality can therefore actually be inequitable, depending on how the increase in equality comes about. Nevertheless, the effect of a minimum wage law on equality is an interesting economic question, to the extent that those who advocate it regard equality as desirable (Mises 1963, 858).

In this paper, we measure equality with the Gini index, the ratio of the area under the Lorenz curve to the area under the 45 degree line that represents perfect equality (Gini 1921). This index is, admittedly, open to objections detailed by Newberry (1970). An alternative class of indices has been proposed by Atkinson (1970). However, for many values of Atkinson's parameter ε , his index registers perfect inequality if even one person reports zero income. The Gini index, on the other hand, is capable of differentiating between different percentages of the population reporting no income. Since the Gini index is also easily computed and familiar to economists, we will make do with it.

A ONE-SECTOR MODEL

First, we consider the effects of a universally applicable minimum wage law, in a one-sector economy. For the sake of simplicity, we will assume that there are two homogeneous factors, unskilled labor U and skilled labor S , who between them comprise the entire population, and that output X is produced competitively by means of a constant returns to scale production fucntion $X = F(U, S)$. To simplify the analysis, we will ignore the supply elasticities of U and S , as well as mobility between the two groups.

We could instead couch our analysis in terms of "Labor" and "Capital." However, since wages and salaries constitute the great majority of national income, it seems more relevant to distinguish between different types of labor that between labor and capital. If the reader is concerned about non-labor factors, he may consider them within the context of the present model as being owned uniformly by the "skilled laborers."

Although in theory our competitive analysis would have to be modified if employers are able to exert monopsony power, in practice few labor markets are sufficiently concentrated to permit such power (Bunting 1962, 3-14). Furthermore, even in the presence of monopsony power, a simple minimum wage is unlikely to do much to produce the efficiency gains and expanded employment that are possible in theory (Stigler 1946).

Let W_u and W_s be the wage rates paid to unskilled and skilled labor respectively, taking the price of X as numeraire. Let $k = UW_u/X$ and $1-k = SW_s/X$ be the relative shares of U and S in national income. We measure U and S as fractions of the total population, so that $U + S = 1$ initially, when there is full employment.

The Lorenz curve in the absence of a minimum wage law is shown in Figure 1.[1] In this diagram, the entire population is arranged along the horizontal axis from the lowest income individuals (the unskilled laborers) to the highest income individuals (the skilled laborers). The vertical axis measures percent of total income earned by individuals to the left of any given value on the horizontal axis. Our initial Lorenz curve follows a straight line from the point (0, 0) to (U, k), and then another straight line to (1, 1).

Suppose now that a universally applicable and completely effective minimum wage law is passed, preventing laborers from working (or what amounts to the same thing, preventing employers from hiring them) if they cannot command a certain minimum wage somewhat higher than the market unskilled wage, say $W_u + dW_u$. This law will throw unskilled workers out of work until the marginal product of those remaining equals the minimum wage. To the extent that workers embody human capital that is specific

[1] In this paper we assume away life-cycle earnings patterns that generally cause transitory income to be less equally distributed than the more relevant concept of total human wealth (discounted lifetime earnings). See Lillard (1977).

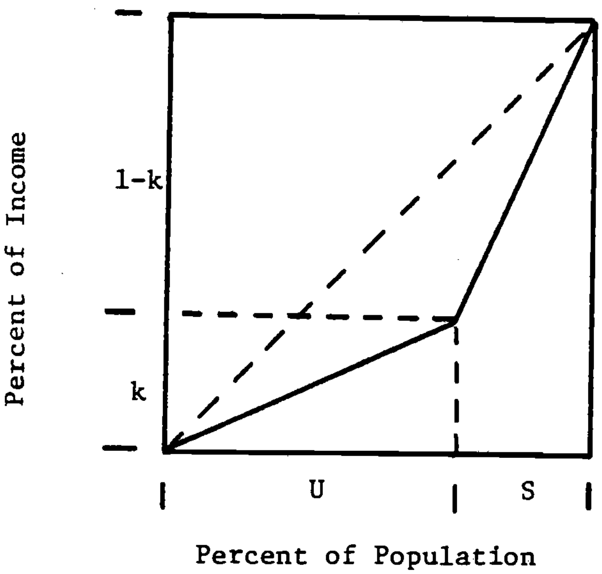

FIGURE 1
Initial Distribution of Income in 1-Sector Model.

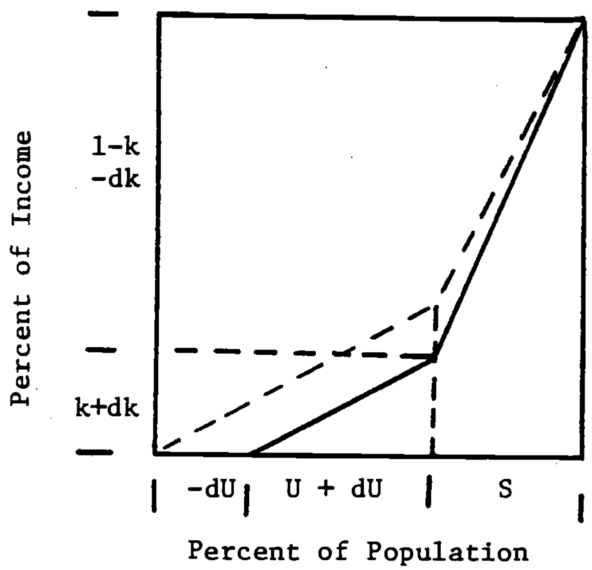

FIGURE 2
Income Distribution in 1-Sector Model with Minimum Wage and $\sigma > 1$.

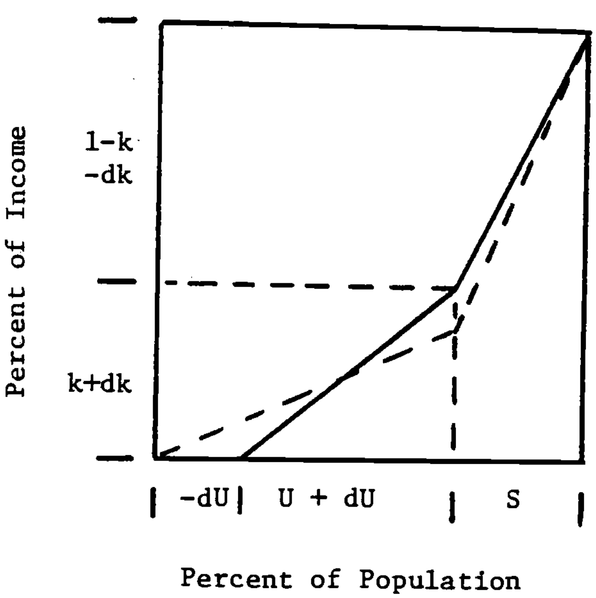

FIGURE 3
Income Distribution in 1-Sector Model with Minimum Wage and $\sigma < 1$.

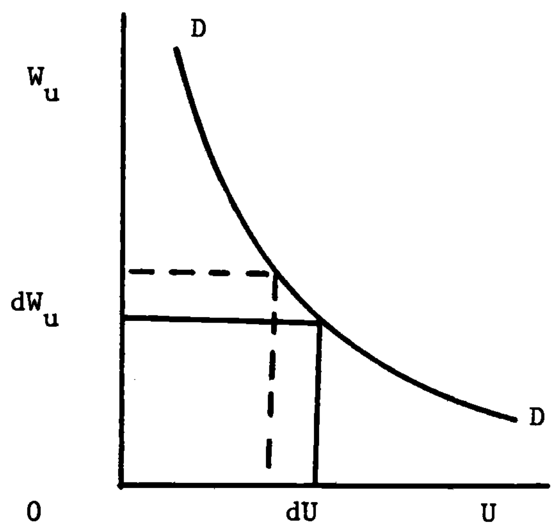

FIGURE 4
Demand Curve for U. (Marginal Product Curve.)

to the firm they work for (such as hiring costs or specific training), the unemployment effect will be lessened in the short run. (See Oi 1962.) However, in the long run the full unemployment will appear. In any case, unskilled workers probably embody relatively little human capital, specific or otherwise, so that there will be substantial unemployment even in the short run. Thus, Brozen (1969) and Kosters and Welch (1972) find appreciable short-run unemployment effects among teen-agers, and especially among non-white teen-agers. We therefore believe our simple model captures a large part of the truth.

In the absence of unemployment compensation, the unemployed make nothing, so they are now at the very bottom of the income distribution, even below the employed unskilled. The total share of unskilled, unemployed and employed together, is now $k + dk$. It is well known (and will be demonstrated below in passing) that dk will be negative if the elasticity of substitution (Hicks 1957, 245) between the two factors is greater than unity, and positive if it is less than unity. In the former case, illustrated in Figure 2, the new Lorenz curve will be entirely below the original curve, so that equality surely must decline by any measure. In the latter case, however, the new Lorenz curve starts off below the original curve and then passes above it, as shown in Figure 3. It is not at once obvious whether equality has risen or fallen in this case.

In order to solve this problem we must explicitly compute the Gini index. Its initial value is

$$\begin{aligned} G &= [\tfrac{1}{2}kU + \tfrac{1}{2}(k+1)S]/\tfrac{1}{2} \\ &= kU + (k+1)S \\ &= k + S \, . \end{aligned} \qquad 1)$$

Keeping in mind that dU is negative, the value of the Gini index as modified by the minimum wage law is

$$
\begin{aligned}
G + dG &= [\tfrac{1}{2}(k + dk)(U + dU) + \tfrac{1}{2}(k + dk + 1)S]/\tfrac{1}{2} \\
&= kU + kdU + Udk + dkdU + kS + Sdk + S \\
&= G + dk + kdU + dkdU .
\end{aligned}
$$

The term dkdU is of only the second order of smalls, so we may ignore it if dW_u is sufficiently small:

$$dG = dk + kdU . \qquad 2)$$

The demand curve for U will be the schedule of the marginal product of U given the quantity of S available, that is, $F_u(U, S)$. When W_u goes up by dW_u, U falls by dU (see Figure 4). The slope of this curve is F_{uu}, the second partial derivative of F with respect to U, so we have

$$dW_u/dU = F_{uu} .$$

By Euler's theorem we have $UF_{uu} + SF_{us} = 0$, so that

$$
\begin{aligned}
dU/dW_u &= -U/(SF_{us}) \\
&= -[U/W_u][X/(SW_s)][F_u F_s/(XF_{us})] \\
&= -U\sigma/[W_u(1 - k)] \\
EU &= -\sigma EW_u/(1 - k) , \qquad 3)
\end{aligned}
$$

where $\sigma = F_u F_s/(XF_{us})$ is the elasticity of substitution between U and S, $W_u = F_u$ and $W_s = F_s$ are the marginal products of U and S, and "E" represents the logarithmic differentiation operator:

$$EU = d \ln U$$
$$= dU/U, \text{ etc.}$$

Differentiation of $X = F(U, S)$ gives

$$dX = F_u dU + F_s dS$$
$$= W_u dU$$
$$EX = kEU \; . \qquad 4)$$

We also have

$$dk = d(UW_u/X)$$
$$= k(EU + EW_u - EX)$$
$$= k[EW_u + (1 - k)\; EU]$$
$$= k\;(1 - \sigma)\; EW_u \; . \qquad 5)$$

Equation 5) shows us why σ must be less than unity for the mimimum wage law to raise the relative share of U. Since the unemployed receive nothing, k (or k + dk) is at once the share of employed U and the share of all U . Substituting 3) and 5) into 2), we have

$$dG = [k(1 - \sigma) - k\sigma U/(1 - k)]\; EW_u$$
$$= k[(1 - k) - \sigma(1 + U - k)]\; EW_u/(1 - k) \; . \qquad 6)$$

Equation 6) implies that "equality," at least as reckoned by the Gini index, will rise if and only if

$$\sigma < \frac{1 - k}{1 + U-k} \qquad 7)$$

The expression $(1 - k)/(1 + U - k)$ is always less than $1 - k$, since the income share k of unskilled workers is necessarily less than their population share U. Therefore σ would have to be fairly low, in comparison to the remarkably robust Cobb-Douglas value of unity (Douglas 1976), for equality to increase.[1a] For example, if unskilled are half the population and make half as much as skilled workers, we will have

$$k = \frac{UW_u}{UW_u + SW_s}$$

$$= \frac{.25\ W_u}{.25\ W_s + .5W_s}$$

$$= \frac{1}{3},$$

and

$$\frac{1 - k}{1 + U - k} = \frac{\frac{2}{3}}{1 + \frac{1}{2} - \frac{1}{3}}$$

$$= \frac{4}{7},$$

[1a] Kaufman and Foran (1968/71, 189-218) erroneously investigate the share of the affected factor in order to determine whether or not the legislation has increased equality. We have shown that if $(1-k)/(1+U-k) < \sigma < 1$, equality will fall even though the share of the directly affected factor rises.

Zucker (1973) finds estimates of the demand elasticity for low-wage labor between -0.79 and -1.15. By (3), the elasticity of substitution therefore would lie between .79(1-k) and 1.15(1-k), which is probably below unity, in spite of the apparent robustness of the Cobb-Douglas formulation.

so that σ would have to be less than 4/7 for equality to rise.

The percentage change in the absolute share of unskilled labor is given by

$$E(UW_u) = EU + EW_u$$

$$= [1 - \sigma/(1 - k)]\ EW_u \ .$$

This quantity is positive for a rise in W_u if and only if $\sigma < (1 - k)$. Since we must have $(1 - k)/(1 + U - k) < (1 - k) < 1$, we may state that a minimum wage law will raise equality only if it raises the absolute share of U, and it will raise the absolute share of U only if it raises the relative share of U .

It might be objected to the analysis of this section that the unemployment will rotate among the directly affected group of workers, so that there will not, in the long run, be an identifiable class of unemployed. In this case, it would only be necessary for σ to be less than 1 (a much more likely event than $\sigma < [1 - k]/[1 + U - k]$) for equality to increase. However, this objection confuses frictional unemployment with minimum wage unemployment. As a rule, we would expect unemployment caused by ordinary job turnover to pass from worker to worker, while that caused by minimum wage legislation would not. If there is even the slightest difference in the efficiency of different unskilled workers, the burden of minimum wage unemployment will fall entirely on the shoulders of the least efficient. Thus the resulting unemployment will persistently afflict the already otherwise disadvantaged: the unschooled, the inexperienced, teenagers, and those who have not mastered the majority language.

Even if efficiency is uniformly distributed, the available jobs are likely to be rationed by employers on the basis of non-efficiency considerations that would ordinarily be overridden by market forces, such as race, religion, sex, ethnic origin, political affiliation, or kinship.

We therefore must conclude that although it is not impossible for a universally applicable minimum wage to increase the equality of income distribution in the absence of unemployment compensation, it is not very likely to do so. In the event that it does actually raise equality, it is only because the improved position of employed unskilled labor relative to skilled labor outweighs the necessarily deteriorated position of unemployed unskilled relative to employed unskilled. In any event there is always increased inequality at the lower end of the income distribution.

THE ONE-SECTOR MODEL WITH UNEMPLOYMENT COMPENSATION

In the presence of unemployment compensation, the effect on equality of a universally applicable minimum wage law will be somewhat different. Suppose that the unemployed are compensated at the fraction a of the wage they would obtain if they were employed, so that they receive aW_u. (Whether they receive aW_u, $a(W_u + dW_u)$, or $a(W_u + dW_u)(1 - t)$ will not affect the results below, so long as dW_u is infinitessimal.) Although such compensation can act as a strong subsidy to unemployment (Feldstein 1974), we will ignore these supply effects, and assume that observed employment is affected only by the demand effect of a minimum wage, provided a is less than unity.

We will assume that the compensation is paid for out of a proportional income tax. While such a tax is likely not to be proportional in practice, we make this assumption in order to investigate the distributional effects of the minimum wage with unemployment compensation in isolation from the effect of redistributive tax structures.

The unemployed receive $-aW_u dU$, and output becomes $X+dX$ (where both dU and dX are negative), so the income of the employed unskilled and skilled workers must be taxed at the following rate in order to finance the compensation:

$$t = \frac{-aW_u dU}{X+dX} .$$

Ignoring terms in the second order of smalls, this rate becomes

$$t = -akEU \ .$$

With unemployment compensation, the Lorenz curve in the presence of a minimum wage law will pass from (0, 0) to (-dU, -akEU) to (U, k+dk) to (1, 1), where we interpret k+dk as the modified share of all unskilled workers, including the unemployed. The new Gini index is now

$$G + dG = [\frac{1}{2}akEUdU + \frac{1}{2}(U + dU)(-akEU + k + dk) + \frac{1}{2}(1 + k + dk)S]/\frac{1}{2} \ .$$

Ignoring terms in the second order of smalls and rearranging, we have

$$dG = (1-a)kUEU + dk \ .$$

The modified after-tax share of unskilled workers is now

$$k + dk = \frac{-aW_u dU + (U+dU)(W_u+dW_u)(1+akEU)}{X(1+EX)} \qquad 8)$$

Again ignoring terms in the second order of smalls and rearranging, we have

$$dk = k(1-k)(1-a)EU + kEW_u$$

$$= k(1-(1-a)\sigma)EW_u \ ,$$

so that

$$\frac{dG}{dW_u} = \frac{-(1-a)k_\sigma U}{1-k} + k(1 - (1 - a)\sigma)$$

$$= \frac{k}{1-k}[1 - k - (1 - a)\sigma(1 + U - k)] \ . \qquad 9)$$

This expression is positive if and only if

$$\sigma < \frac{1-k}{(1-a)(1+U-k)} \quad .$$

If a is between zero and unity, we see that if σ is small enough to increase equality without compensation, it is necessarily small enough to increase equality with compensation.

We also see that the more generous unemployment compensation is, the more likely a minimum wage is to increase equality. In particular, as the fraction a approaches unity, a universally applicable minimum wage becomes certain to increase equality.

It does not follow, however, that generous unemployment compensation necessarily increases the <u>income</u> of unskilled workers. Their total after tax income N_u+dN_u is the numerator of the right-hand side of (8). Once more expanding and ignoring terms in the second order of smalls, we have

$$dN_u = U[1 - \frac{\sigma(1+ak-a)}{1-k}] \, dW_u \quad . \qquad 10)$$

Unskilled labor income therefore rises if and only if

$$\sigma < \frac{1-k}{1+ak-a}$$

or equivalently,

$$a > \frac{\sigma+k-1}{\sigma(1-k)}$$

Since a is bounded by zero and unity, we see that if σ is less than $1-k$, unskilled income necessarily rises, even if a equals zero. On the other hand, if σ is greater than $(1-k)/k$, unskilled income necessarily falls, regardless of a.

A TWO-SECTOR MODEL

Most minimum wage legislation is not universally applicable as we have assumed above. Although less qualified workers are effectively barred from certain occupations, other occupations may remain open to them. Usually these uncovered jobs are in fields such as agriculture, domestic service, small-scale industry, and self employment. If the displaced workers prefer low-pay jobs in these fields to unemployment, the effects of the minimum wage law will be modified.[2] In this section, we will ignore the possibility of unemployment compensation, in effect assuming that unemployment compensation is unattractive in comparison to employment in the low-wage uncovered sector.

Let us assume that there are two sectors, producing outputs X and Y competitively. Let m be the share of the X-industry in national income and let f and g be the shares of unskilled labor in the income of the X and Y sectors respectively. Let U_x, U_y, S_x, and S_y be the quantities of unskilled and skilled labor used in the two industries, measured as fractions of the total labor force (again taken to be the entire population), so that $U_x + U_y + S_x + S_y = U + S = 1$. Take the salaries of the skilled workers as the numeraire, and let W_x and W_y be the wage rates for unskilled workers in the two industries.[3] Initially, $W_x = W_y = W < 1$.

[2]See Brozen (1962) for an analysis of the stimulating effect minimum wage rises have on the pool of domestic workers. Dropping out of the labor force altogether to perform non-market household duties or leisure activities may also be interpreted as entering an uncovered industry. Thus, Moore (1971) finds that the increase in the minimum wage in 1961 seems to have lowered the subsequent labor force participation of teenagers. We assume job turnover in the covered sector to be low enough that speculative unemployment of the type Mincer (1976) discusses does not appear.

[3]This model is essentially that employed by Jones (1965), Johnson (1969) and Johnson and Mieszkowski (1970). See McCulloch (1974) and the comments below, however, for qualifying considerations in a special case.

Let N be national income ($P_xX + P_yy$) and k, k_x, and k_y be the shares of U, U_x, and U_y in N. We then must have

$$k_x = W_xU_x/N$$

$$= mf \qquad 11)$$

$$k_y = W_yU_y/N$$

$$= (1 - m)g \qquad 12)$$

$$k = k_x + k_y$$

$$= mf + (1 - m)g \ . \qquad 13)$$

Figure 5 shows the initial distribution of income, before the minimum wage is applied. In Figure 6, a minimum wage has been applied to the X sector, raising the real wage in that industry, both absolutely and relative to the wage in Y . Instead of unemployment appearing, we assume now that unskilled laborers are perfectly mobile so that those displaced by the minimum wage immediately find work in the uncovered Y sector.

The initial value of the Gini index of equality is, as before,

$$G = k + S \ .$$

After the minimum wage is introduced, we have

$$G + dG = [\tfrac{1}{2}(U_y - dU_x)(k_y + dk_y) + \tfrac{1}{2}(U_x + dU_x)(k_y + dk_y + k + dk_y + dk_x) + \tfrac{1}{2}S(1 + k + dk_x + dk_y)]/\tfrac{1}{2} \ .$$

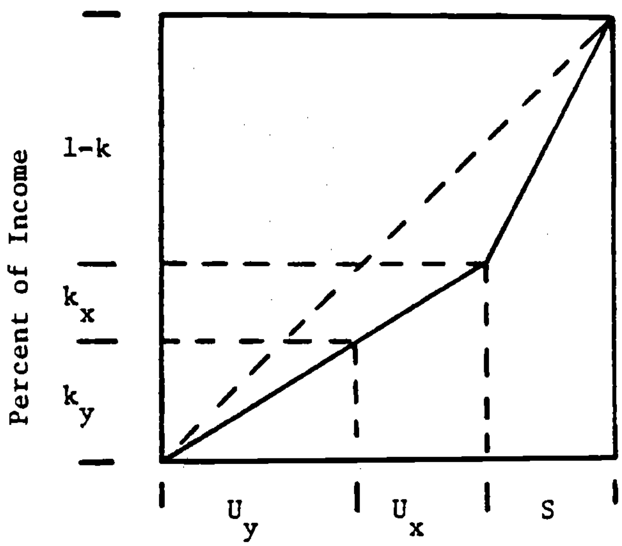

FIGURE 5
Initial Distribution of Income in 2-Sector Model.

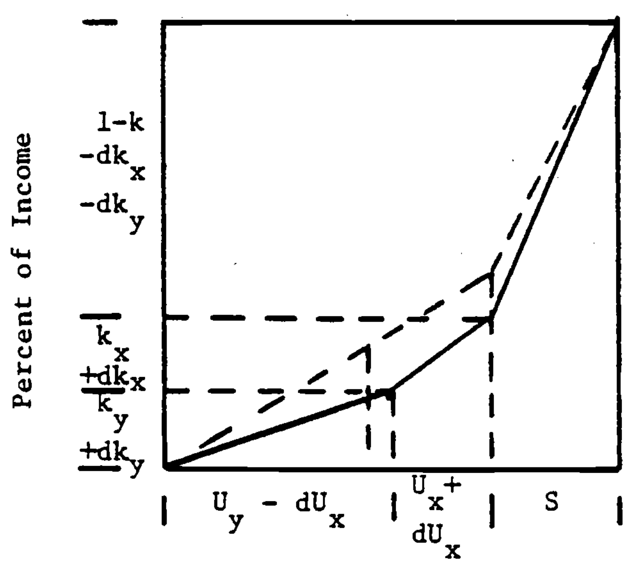

FIGURE 6
Income Distribution in 2-Sector Model with Minimum Wage. (Drawn as if share of U falls.)

Rearranging, ignoring terms in the second order of smalls, and using $U_x k_y = U_y k_x$, we obtain

$$dG = k\ dU_x + (1 + U_x)\ dk_y + (S + U_x)\ dk_x\ .$$

Now

$$dk_x = k_x[(1-k)EW_y + EU_x + (1-k_x)E(W_x/W_y)]$$

$$dk_y = k_y[(1-k)EW_y - (U_x/U_y)EU_x - k_x E(W_x/W_y)]\ ,$$

whence

$$dG = k(1-k)\ EW_y + k_x(1 - k - U_x)\ E(W_x/W_y). \qquad 14)$$

We assume that the owners of both factors have the same marginal propensity to consume each of the two goods so that redistributional effects have no influence per se on the output mix. Let σ_c be the elasticity of substitution in consumption between X and Y, and σ_x and σ_y be the elasticities of substitution in production between U and S . (These substitution elasticities are defined so as to be positive.) Then following Harberger,[4] we have the following system of equations relating small changes in W_y, S_x, U_x, and W_x/W_y:

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[4]Harberger (1962, 226-7). We have substituted $-(1-m)\sigma$ for Harberger's demand elasticity E, U for his "capital," and S for his "labor."

$$\begin{pmatrix} -(1-m)\sigma_c f \\ 0 \\ -\sigma_x \end{pmatrix} E(W_x/W_y) = \begin{pmatrix} (1-m)\sigma_c(f-g) & 1-f & f \\ -(1-m)\sigma_y g(1-g) & -m(1-f)g & mf(1-g) \\ \sigma_x & -1 & 1 \end{pmatrix} \begin{pmatrix} EW_y \\ ES_x \\ EU_x \end{pmatrix} \qquad 15)$$

The determinant of this system,

$$D = m(1-m)\sigma_c(f-g)^2 + (1-m)\sigma_y g(1-g) + m\sigma_x f(1-f) > 0 ,$$

is always positive. Using Cramer's rule, we have

$$\frac{D\ EW_y}{E(W_x/W_y)} = -\ mf[(1-m)\sigma_c(f-g) + \sigma_x(1-f)] , \qquad 16)$$

so that

$$\frac{D\ dG}{E(W_x/W_y)} = m(1-m)\sigma_c(f-g)[k_x(1-k-U_x)(f-g) - k(1-k)f]$$
$$+ m\sigma_x f(1-f)[-k_x U_x - k_y(1-k)] \qquad 17)$$
$$+ (1-m)\sigma_y g(1-g)k_x(1-k-U_x).$$

This formula is valid to the extent that system (15) is valid. However, in another paper (McCulloch 1974) we have shown that if σ_c is sufficiently large in comparison to σ_x and σ_y, and the covered X industry is labor-intensive, this system is invalid, since a minimum wage in the X industry, even when dW_x is infinitessimal, will result in a discrete change in the employment and output variables, rather than the infinitessimal changes assumed by the equations. This problem arises when

$$(1-m)g[m\sigma_c(1-f)(g-f) + \sigma_y(1-g)(1-mf) + m\sigma_x f(1-f)]/D, \qquad 18)$$

which according to system (15) is the value of $(EW - EP)/(EW_x - EW_y)$, is negative.[5] When expression (18) is negative, a minimum wage in the X industry will cause a discrete reduction in X output and employment and may even close down the X industry. We have made no assumptions about how the economy behaves outside a small neighborhood of the initial equilibrium, so we cannot say for certain what will happen to equality in this case. However, it seems likely that it will decline.

Expression (17) can have either sign, depending on the values of the underlying parameters. The term in σ_x is always negative, so that if m or σ_x is large enough, equality will surely fall. Since it is the only one of the three terms that is determinate in sign, equality tends, if anything, to fall in the two sector model, though this is at best a weak presumption.

In order to obtain a better feel for the likely effect of a minimum wage in this model, we assign prior probability distributions to the values of the basic parameters and compute a derived prior probability that the minimum wage will reduce equality. To be sure, the derived prior will depend critically on the assumed parameter priors. Nevertheless, this is a convenient way to summarize our knowledge of a complex expression, one which could perhaps, with experience, be applied to other problems as well.

The parameters f, g, m, and W may take on values between 0 and 1, so we will consider the five values .1, .3, .5, .7, and .9 for these four parameters.

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[5]This expression is the same as the right hand side of equation (14) on p. 447 of Jones (1971), in the case of an infinitessimal distortion. Jones, however, does not recognize the inapplicability of the differential model when this expression is negative.

The substitution elasticities σ_c, σ_x, and σ_y may take on values from 0 to infinity. Estimates of substitution elasticities often cluster about unity, so we will want to center our substition elasticity distributions around 1. The range .5 to 2 probably includes most reasonable estimates of the σ's, but since (17) is sensitive to extreme values of these three parameters, we will also include .1 and 10. Thus we consider the five values .1, .5, 1, 2, and 10 for each of the three substitution elasticities. In order not to give too much weight to the extreme values of the seven basic parameters,[6] we assign prior probabilities of .1, .2, .4, .2, and .1 to the five values of each parameter, respectively. Assuming independence between the prior distributions of our parameters we can then easily compute the prior probability of each of the 5^7 = 78,275 combinations of values. Expression (17) was evaluated for each of these combinations, resulting in a derived prior probability of .799 that equality will fall. (When expression (18) proved negative, it was assumed that equality would fall regardless of the value of (17). However, this perverse case only occurred with prior probability .015, so its treatment did not have a major effect on the results.)

In order to test the sensitivity of the change in the Gini index to the extreme values of .1 and .9 that we allowed for f, g, m, and W and of .1 and 10 that we allowed for σ_c, σ_x, and σ_y, we also tried assigning the prior distribution 0, .25, .5, .25, and 0 to the five values of each of the seven basic parameters. In effect, this eliminated the extreme values. In this

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[6] U_x may be calculated from m, f, g, and W using (11), (13), and $U_x = k_x/[W + k(1-W)]$.

case expression (18) was never negative, and the derived prior probability of equality falling rose to .906.

The effect on income equality of a minimum wage law that is not universally applicable depends on the technological characteristics, importance, and factor intensities of the covered and uncovered sectors. This will vary with the provisions of the particular legislation under consideration. However, we may conclude that it would take a fairly unusual combination of parameters to prevent such a minimum wage from reducing income equality.

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