CM7: MINIMUM PRICES (1/19/19)

SOME, BUT NOT ALL, OF WHAT YOU SHOULD KNOW

1. Is the minimum wage a price floor or a price ceiling?

2. How do economists assume that the unskilled wage is determined?

3. What is the difference between the unemployment and employment effects of the minimum wage?

4. What is the effect of the minimum wage on workers benefits and the quality of their jobs?

5. How does the minimum wage cause a DWL?

6.In what sense does the minimum wage prohibit some voluntary trades?

7. What does the empirical literature say about the effects of the minimum wage on employment?

8. Are low wages necessarily the same thing as low incomes?

9. Why is the minimum wage a poorly targeted policy?

10. Who gains most from the minimum wage?

11. What is a Negative Income Tax? How does it work? What are its main advantages and disadvantages?

12. What is a Guaranteed Income?

13. Why would encouraging low-income teenagers to increase their human capital be a long run alternative to the minimum wage?

1. MINIMUM PRICES

1. A minimum price is a price set by law *above* the equilibrium price and enforced by legal penalties; minimum prices are referred to as *price floors* because they establish a limit below which the price of the good or service may not fall. The minimum wage is an example of a minimum price and it applies to unskilled labor – such as workers in fast food chains, hotel cleaners, workers in retail chains like Walmart – since skilled labor, which embodies significant human capital (education and training) will earn more than the minimum wage.

2. The US Minimum wage was introduced in 1938 at a value of 25c per hour. The current Federal minimum wage is $7.25 per hour. The minimum wage that has to be paid is the higher of the Federal, State or city minimum wage. Since the Washington state minimum wage is $12 in 2019, the minimum wage is $12 > $7.25 in this state. A problem with the Federal minimum wage is that it is supposed to apply to all states equally, although labor markets will vary widely across states. What is considered a reasonable wage in Bellingham would not be in Manhattan.

3. There was, and is, a heated debate about whether the Federal minimum wage should be raised to $12 by 2020, that is, over five years.[1] The Federal minimum wage is currently only 36% of the median hourly wage, down from 52% in 1968. *If* the median wage does not increase at all over the next five years then the $12 minimum would be 54.1% of the median wage.

3. States set their own minimum wage. If the state minimum wage is higher than the Federal minimum wage then the state wage is the one that is used, and vice versa. The Washington state minimum wage is the highest in the country and was raised to $9.47 an hour at the beginning of 2015. Washington is the only state that indexes the minimum wage – adjusts the minimum wage for inflation. (Economists are grateful to the people in Olympia because they provide us with a data set that could potentially allow us to study the employment and other effects of the minimum wage!)

http://blog.seattlepi.com/seattlepolitics/2015/01/02/states-raise-minimum-wage-were-tops-but-not-for-long/ -23925101=0

4. From an analytical point of view minimum and maximum prices are mirror images of one another; the effects of one type of policy will be matched by

[1] The Raise the Wage Act of 2015.

similar effects of the other policy – excess demand with maximum prices and excess supply with minimum prices, etc. If you remember this it should help you understand the analysis better. In the tests it is very important for you to decide which policy is which.[2]

2. A FREE MARKET IN LABOR

1. In Figure 1 below the for *demand* for unskilled labor (by firms) and the *supply* of labor (by individuals) are such that the market clears at an equilibrium wage We ($7.25/hour) and an employment level (number of workers employed per week) of Qe.[3] Assuming that the workers work for 40 hours per week (a reasonable approximation for minimum wage earners with dependents) and that they work 50 weeks per year their annual incomes are only $7.25 x 2,000 = $14,500 per year, hardly enough to support an individual and certainly insufficient to support a household of two adults, even less one with two adults and two children. However, very few minimum wage workers are the major breadwinners in families.

3. THE MODEL

1. The analysis assumes that: 1) firms attempt to maximize profit by hiring labor until what the last worker adds to revenue is just equal to what the last worker costs in remuneration and benefits, 2) that the market for unskilled labor is close to being competitive[4], and that 3) firms sell their output in competitive markets. The first two assumptions seem reasonable for markets for unskilled labor; the last assumption is probably not true, although it makes the analysis easier to follow.

2. The model is a partial equilibrium rather than a general equilibrium model. That means that we ignore interactions with other markets – the uncovered sector (where the minimum wage does not apply) and the market for skilled

[2] A simple mnemonic: remember that rent control (CM6) includes the letter c as does ceiling. A ceiling is clearly a limit to how high you can climb up the wall of your room and therefore rent control is an example of a *maximum* price. The minimum wage is obviously an example of a minimum price and therefore a price floor.

[3] Note that in labor markets firms are on the demand side of the model and individuals are on the supply side. Firms are still attempting to maximize profits and workers are attempting to maximize satisfaction.

[4] The controversial work by Card and Kreuger discussed in section 16.9 assumes that the market for unskilled labor is not competitive but is better described as monopolistically or imperfectly competitive (CM25C).

labor.[5]

3. The model is static – the market is always in equilibrium and adjusts smoothly and instantaneously when disturbed. This is not likely to be true of real world labor markets, which have substantial "frictions", which cause workers to be unemployed. Wages are usually rigid downward – workers resist wage cuts and employers almost never suggest lowering wages even if there is substantial unemployment.

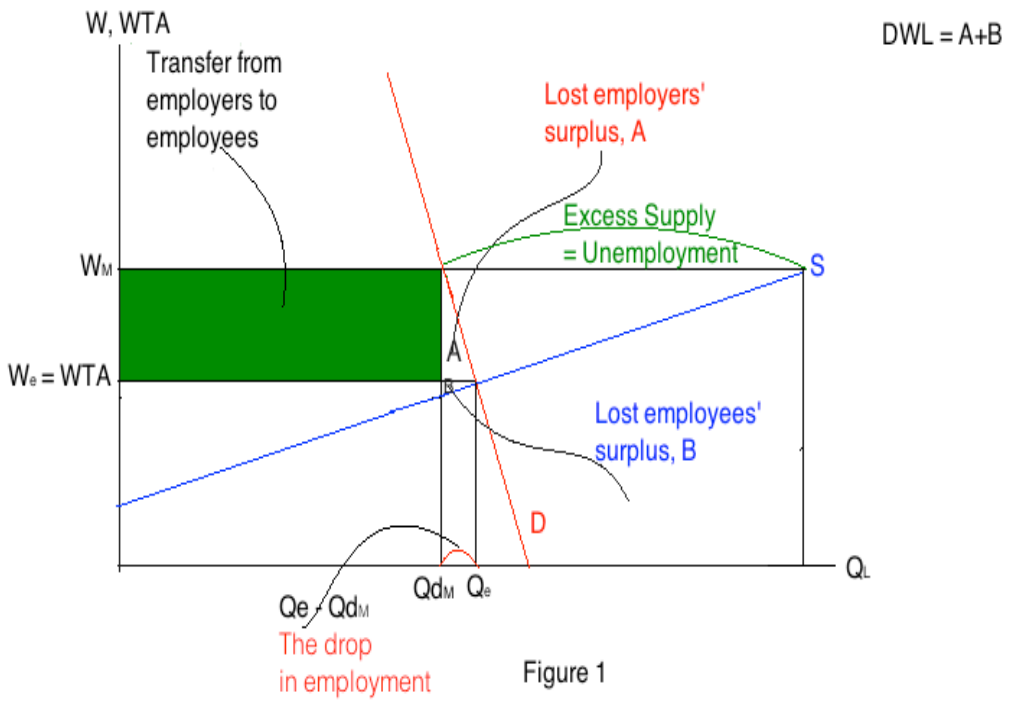


Figure 1

4. IMPOSITION OF A MINIMUM WAGE

1. We now introduce a minimum wage *above* We (it has to be above We if it is to be "binding"). This causes an excess supply of labor $Q^s_M - Q^d_M$ (Q^s_M should be where the black vertical line below S cuts the horizontal axis. Sorry, but re-drawing the diagrams is a lot of work!), because the wage cannot adjust downward because of the legal restraint). However, while the excess demand will show up as unemployment, economists concentrate on the effect of the minimum wage on employment, i.e. they are concerned with $Q^e - Q^d_M$, which is

[5] We could construct a model with separate markets for covered and non-covered workers and skilled labor but that would make your life more complicated. In such a model the effects of the minimum wage are ambiguous.

the loss in jobs associated with the introduction of the minimum wage. $Q^s_M - Q^e$ is a measure of the number of workers who will enter the labor market because of the higher wage W_M. These workers were previously without jobs but were not in the labor market because the low equilibrium wage was not sufficiently enticing to make them trade-off more income for less leisure or non-market work. At W_M these persons will look for a job but are unable to find one (and therefore they are now counted as unemployed). These persons are unemployed and suffer psychological distress because they cannot find jobs but their work status has not changed: they didn't have a job before the minimum wage was introduced and they still do not have a job.

5. THE EMPLOYMENT EFFECT

1. The drop in employment follows from our assumption that firms are profit maximizing, which means that they will hire fewer workers if the cost of each worker increases: we assume that the demand curve for labor is negatively sloped. So long as the demand curve for labor is negatively sloped the increase in the wage from We to W_M must lead firms to reduce employment. However, although in the static model the minimum wage causes a drop in employment, in a reality this usually means that the rate of growth of employment will be less than it would be if there was no minimum wage. Therefore the static model may not predict very well, but a dynamic model requires a lot more math than most of you possess. Remember that in the real world the employment effects are most likely to reduce the growth of employment rather than to cause employees to be fired. Your job in the library may not be there if the university raises wages

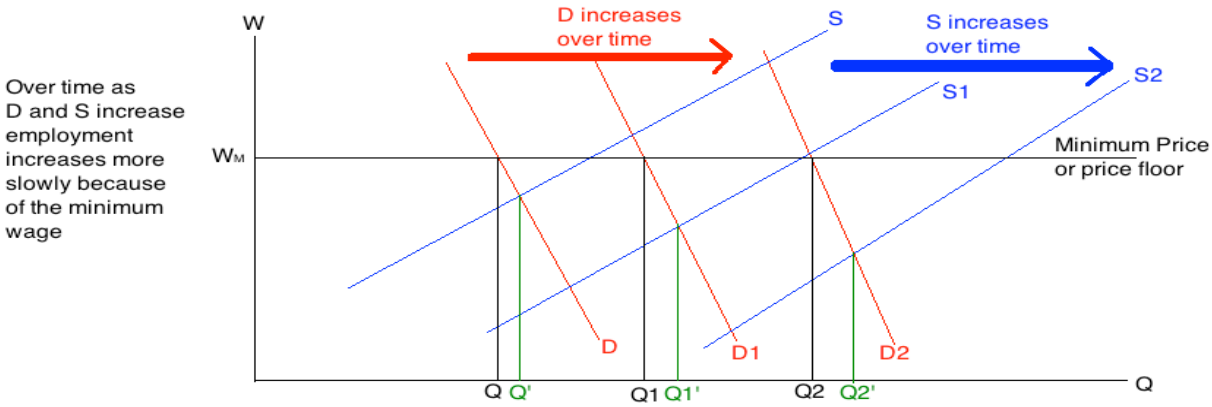


Figure 2

in line with minimum wage increases; and if you are re-employed then you may

find that you are re-shelving more books than you did before. (In Figure 2 we end up at Q2 rather than Q2′.)

2. Could the individual firms accept lower profits and use these to pay the higher wage? Not if the product market is competitive in which case each firm is already just barely making the minimum profit necessary to keep it in the industry. The industry as a whole can raise its price to cover the extra wage cost but that may cause a fall in the market/industry demand for the product, which would mean that employers as a whole would hire fewer workers. If the price rises then this would mostly hurt low-income households because these households spend more of their income on the low quality goods and services like fast food and cheap hotels that employ minimum wage workers.

6. OTHER EFFECTS

1. Because employees would rather have a job paying less than the legal minimum, than not have a job at all and receive nothing, some workers will work for less than they are legally entitled to; this is like renters paying above the legal maximum rent. The minimum wage is a legal barrier to employees and employers making mutually advantageous voluntary trades. Unions will report employers who pay below the legal minimum, even if this leads to fewer people being employed. Unions gain from the minimum wage because it raises the cost of non-union labor which potentially competes with the higher paid unionized workers.

2. Employers can lower the quality of the jobs to help recoup the money paid in higher wages (just as landlords can lower the quality of apartments) – longer hours, shorter breaks (benefits will be minimal in these kind of jobs), less overtime pay, and perhaps more work per hour (more books re-shelved). Because there is an excess supply of labor, the employees have little bargaining power to resist the deterioration in job quality.

7. THE DEAD WEIGHT LOSS OF THE MINIMUM WAGE

1. In Figure 1 above we see that at Q^d_M the workers' surplus is reduced by the lower triangle labeled B and that the employers' surplus is reduced by the upper triangle labeled A. The minimum wage imposes a Dead Weight Loss, DWL = A+B. There is also a transfer of income/surplus from employers to employees – the green rectangle. Economists are not supposed to make value judgments about whether workers or employers should gain or lose. The new equilibrium is not efficient because MC does not equal MB at Q^d_M, workers and employers

would gain (in aggregate) if the wage returned to W_e. There will also be inefficiencies because there is no guarantee that the highest productivity workers will be those who stay employed. In the real world there will be a matching problem just as there was in the rent control case.

2. Notice that before the minimum wage was introduced there was an efficient outcome (MC=MB) and the equilibrium was Pareto optimal (no one could be made better off without making someone worse off). The introduction of the minimum wage was therefore *not* a Pareto Improvement because some workers were made worse off by losing their jobs and employers were made worse off by the transfer of income to employees. An state or economy wide increase in the minimum wage would in part be passed on to consumers, who would be worse off.

But, once the new minimum wage is in place removing the price floor would also not be a Pareto improvement because the workers who gained from the higher minimum wage would lose. The minimum wage equilibrium is a Pareto optimum. Remember it does not matter how many millions gain, the move is not a Pareto Improvement if just one worker (or employer) loses.

Indeed, it is difficult to think of any policy advice that would lead to a Pareto Improvement, which suggests that economists have very little to say about policy – so long as they adhere strictly to their decision to rule out value judgments. Which is why, as I argued in CM1, economics is largely a prescriptive discipline. The economist's job is to work out the consequences of the imposition of the minimum wage and determine who receives the benefits and who bears the costs, you, the voter, have to evaluate those costs and benefits.

3. Economists get around the inconvenient fact that the set of possible Pareto Improvements is nearly empty by introducing the idea of a Potential Pareto Improvement. A policy will lead to a Potential Pareto Improvement if the persons who gain from the policy could compensate the losers. In Figure 1 such compensation could obviously be paid in principle, but, as George Stigler observed in *The Theory of Price* (1966, p.68): "In principle [is] a phrase used to denote the combination of incredible circumstances and unbelievable ingenuity". For example if only one worker lost her job and one million workers each gained $4,700 per year then the $4.7 billion gain would clearly be sufficient to compensate the loser for her lost $14,500. However, how would we implement the compensation? In practice there will be many gainers and losers and compensation rapidly becomes impossible. (In Figure 1 the green rectangle is larger than the rectangle above $Q_eQ^d_M$.)

4. At this point economists do a little, but very dangerous, "hand waving". The economist says that a policy is a Potential Pareto Improvement if the compensation *could* be made, even if it is not actually made. In most cases we will examine, such as the arguments for free trade in CM11, compensation is impractical. But, although the economists' argument is carefully hedged it is likely to leave you with the impression that the Potential Pareto Improvement suggests that the policy is a desirable action.[6]

8. THE MINIMUM WAGE PROHIBITS MUTUALLY ADVANTAGEOUS VOLUNTARY TRADES

1. At Q^d_M workers would be willing to accept less than W_M, that is, WTA < W_M; they were voluntarily accepting W_e before the minimum wage was raised/introduced. At the old W_e the firm was willing to hire Q_e but that employment level is not profit maximizing at W_M. At W_M the firms' maximize their profits if they hire less labor, Q^d_M. The minimum wage makes it illegal for employees (and employers) to engage in trades that they would undertake voluntarily. (Would you be in favor of a law that made it illegal to pay graduates from Washington's state supported universities less than $150,000?)

2. Economists stress the fact that the minimum wage causes inefficiency, the lost jobs would have generated larger gains from trade, A + B. Non-economists would note that the minimum wage makes those workers who remain employed better off (represented by the green rectangle), and those workers, who would have found a job at W_e but who cannot find jobs at W_M, worse off (everyone between Qe and Q^d_M). Being unemployed means not simply a loss in income and status – a major determinant of Happiness (CM17), especially for men – but also leads to depreciation of human capital as work skills are eroded and job seniority is lost, while the workers who gain would have worked voluntarily for W_e and so their gain is "icing on the cake".

9. EMPIRICAL EVIDENCE

1. The empirical work on the minimum wage suggests that it isn't a big deal – the employment effects are small, so small that they are difficult to measure (and

[6] The literature on Potential Pareto Improvements has a long history that goes back to the work of Hicks and Kaldor and others in the late 1930s and early 1940s. I hope that when you study intermediate microeconomics you will be exposed to these ideas, but don't hold your breath.

http://en.wikipedia.org/wiki/Kaldor–Hicks_efficiency

studies that show no effect on employment or increases in employment are difficult to get published). However, the employment effects of an increase in the minimum wage are hotly disputed. In the mid-1990s two well known labor economists, Card and Kreuger, published papers, and then a book, arguing that the minimum wage *increased* employment. Their research received considerable media coverage, and continues to be cited in the current debate about raising the Federal minimum wage. However, subsequent research by Neumark and Wascher and others found major flaws in Card and Kreuger's empirical work, and their theoretical arguments have been treated with skepticism.

http://www.amazon.com/Myth-Measurement-David-Card/dp/0691048231/ref=pd_bxgy_b_img_y

http://www.amazon.com/Minimum-Wages-David-Neumark/dp/0262515083/ref=pd_bxgy_b_img_y

2. Some of this literature seems to me to display the sort of ideological bias that I will discuss in CM14. James Buchanan, an economics Nobel prize winner, wrote in the Wall Street Journal on April, 25, 1996: "The inverse relationship between quantity demanded and price is the core proposition in economic science, which embodies the presupposition that human choice behavior is sufficiently rational to allow predictions to be made. Just as no physicist would claim that "water runs up hill," no self-respecting economist would claim that increases in the minimum wage increase employment. Such a claim, if seriously advanced, becomes equivalent to a denial that there is even minimal scientific content in economics, and that, in consequence, economists can do nothing but write as advocates for ideological interests. Fortunately, only a handful of economists are willing to throw over the teaching of two centuries; we have not yet become a bevy of camp-following whores."

3. Note that Buchanan's argument is about the *logic* of the economics of the minimum wage, armchair theorizing, it is not about the empirical *evidence*. I do not believe (I could be wrong) that the evidence for a positive employment effect is convincing, but I also believe that the empirical evidence is largely consistent with a statistically insignificant impact on employment *for the sort of minimum wage increases that are usually implemented*. There are four factors to consider: (1) employers are concerned with real wages not nominal wages; many minimum wage increases simply catch up with the inflation which has eroded the purchasing power and employer costs of the previous minimum wage increase; (2) it is lower employment growth which is likely to be the consequence of an increase in the minimum wage not layoffs; (3) the available data spread is too small to pick up the effects of large changes in the minimum wage which might have significant employment effects (see Figure 3); and (4) because the changes

in the minimum wage are known before they are implemented some employers may react pre-emptively and reduce hiring now, rather than in two years time when the proposed minimum wage increases are actually implemented. These factors make measuring the impact of the minimum wage change very difficult (Seattle's proposed $15 an hour will be phased in over three years).

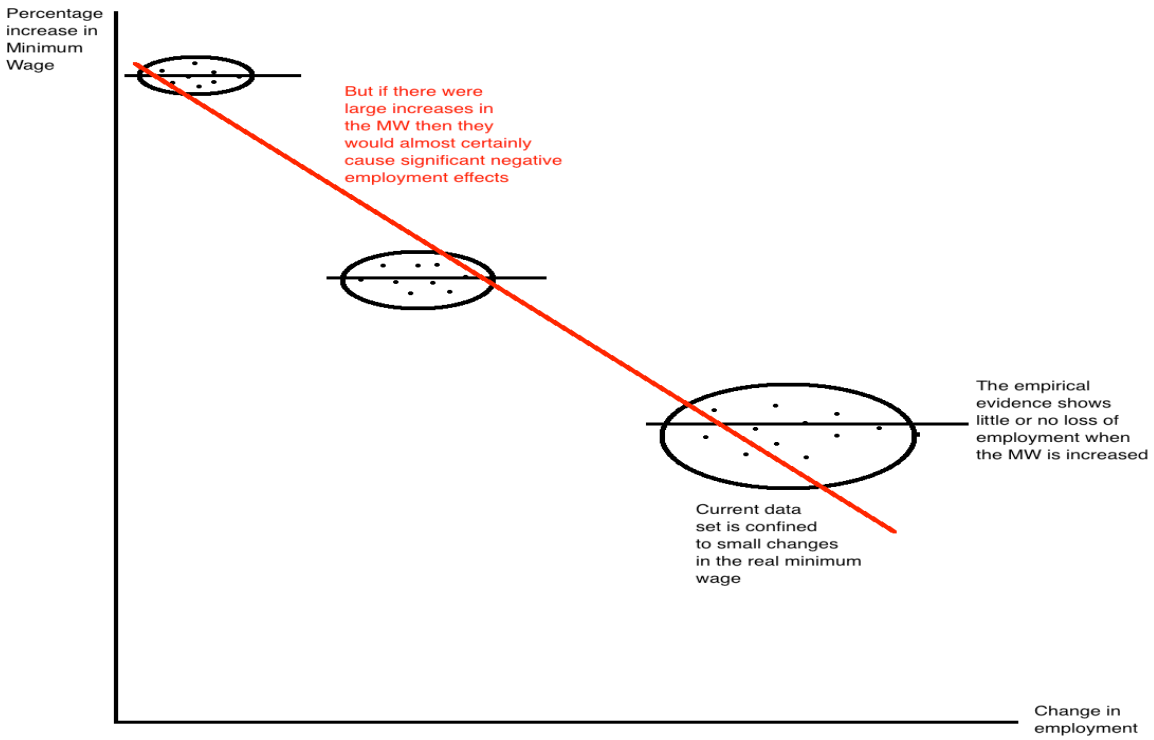
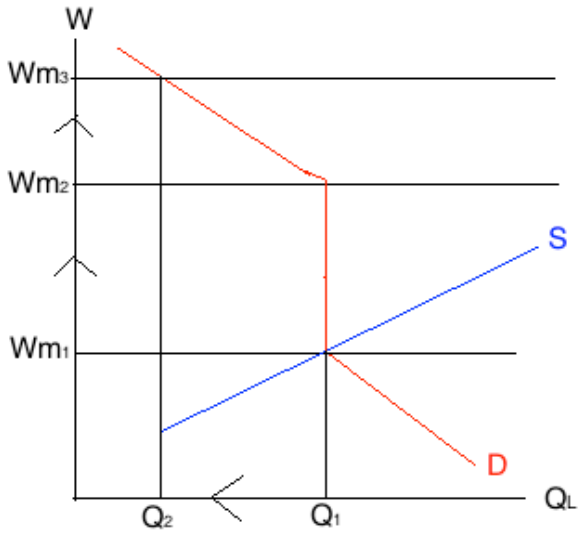


Figure 3
[The horizontal axis should simply read Employment.]

4. I believe that an increase in the minimum wage would begin to bite into employment if it caused the cost of unskilled labor to rise significantly – the 2009 increase in the Federal minimum wage largely replaced purchasing power that had been erode by inflation during the long period in which the nominal minimum wage was more or less constant. If the Federal minimum wage was increased to $15 or $25 or $80 or $800 per hour there would surely be considerable reductions in the demand for unskilled labor, and in the latter case I would, frustratedly, be looking for a minimum wage job. In Figure 4 assume that W_{M1} is $7.25 an hour and the firm is hiring 20 employees who work 40 hours per week and 50 weeks per year. The firm's labor bill is therefore $290,000 per year. Now increase the minimum wage to W_{M2}, which is $14.50 per hour. If the

firm continues to hire 20 employees then its wage bill is now $580,000 per year. If the minimum wage is raised to W_{M3}, $20 per hour, then the firm's wage bill rises to $800,000 per year. Do you really believe that there will be no reduction in employment? You can also probably see why most economists regard the idea that an increase in the minimum wage will cause employment to rise (the demand curve would be positively sloped) with incredulity.[7] [Recall the argument against the Giffen good, CM4, A1.]



With Wm_1 the firms' labor costs are Wm_1 times Q_1. With Wm_2 labor costs rise by Wm_2-Wm_1 times Q_1. If the minimum wage rises again then firms will surely have to cut their labor force as their labor costs keep rising.

Figure 4

10. CONFUSING LOW WAGES WITH LOW INCOMES

1. The minimum wage was introduced to help workers to support a family. But we have seen that the minimum wage is too low to feed, house, and clothe a family. Very few workers stay on the minimum wage beyond two years. Proponents of the minimum wage often confuse the wage rate with household income; it is perfectly possible for someone to have a low wage but to have a relatively high standard of living, especially if that person is a "secondary" worker and not the main source of income for the family. Before we retired, my wife and I both worked and so our individual hourly wage rates were a poor indicator of our family income. When my son worked in a fast food restaurant he

[7] High minimum wage rates, combined with generous, and sustained, unemployment pay, may be a reason for the higher unemployment levels in Europe compared with the US in the 1990s and 2000s.

did so for pocket money – we provided his food, housing, etc. and while his annual earnings were very low he lived in a household with an income in the top half of the income distribution.

11. TEEN EMPLOYMENT

1. Minimum wage earners are disproportionately young; 50.4% are aged 16-24 and 24% are teenagers. [But I just came across an article that claims that the Bureau of Labor Statistics estimated that in 2015 there were 2.5 million workers earning the Federal minimum wage or less (3.3% of the labor force, of whom 1.4 million (2.2% of the labor force) were aged 25 or older. The numbers cannot both be correct, even in the year of "alternative facts". I suspect that one set refer to only the Federal minimum wage, while the other may refer to all levels of minimum wages: Federal, State, and local. I will try to remember to check.] Minimum wages for teen agers are lower than for adults because the evidence seems to suggest that they are the group that are most likely to be adversely affected by minimum wage laws (which suggests that Congress does believe that raising wages will kill jobs). Teenagers need job experience if they are ultimately going to get better paying jobs. Raising their wages will make it more difficult to "climb the job ladder" if the bottom rungs have been cut off.

2. An increase in the minimum wage may cause some high school students to "drop out" of school (the opportunity cost of being in school has increased).

3. The best estimate is that an increase in the teen wage of 10% lowers teen employment by about 2%.

12. THE LONG RUN IMPACTS

1. Capital is substitutable for labor in many instances and as technology advances it will destroy many low skill jobs while creating better paying higher skill jobs: electric floor polishers mean fewer jobs for janitors; bar codes displace grocery clerks; aluminum scoops replace fast food workers; icon based cash registers replace checkout persons.[8] Therefore we would expect that the long

[8] See the You Tube video on robots: http://www.youtube.com/watch?v=7Pq-S557XQU and the excellent piece by Brad DeLong https://www.project-syndicate.org/commentary/j--bradford-delong-questions-paypal-co-founder-peter-thiel-s-argument-that-robots-will-save-us-from-a-low-wa

http://www.theverge.com/2014/8/7/5978395/pew-research-center-asks-experts-about-whether-robots-will-take-our-jobs

http://www.nytimes.com/2014/12/16/upshot/as-robots-grow-smarter-american-workers-struggle-to-keep-up.html?_r=0&abt=0002&abg=0

run effects of the minimum wage would be greater than the short run ones – causing the demand for unskilled labor to shift further to the left over time. The empirical evidence suggests that in the long run the negative impact of the minimum wage on employment is larger than the short run impact.

2. Unskilled labor has faced increasing competition from workers outside the US as the economy becomes more and more integrated with the world economy – globalization. However, the types of jobs that are important in this debate are not traded and so globalization is not a minimum wage issue.

13. A POORLY TARGETED POLICY. THE NEGATIVE INCOME TAX AND THE EARNED INCOME TAX CREDIT

1. The minimum wage is a poorly targeted policy, because the minimum wage applies to all workers irrespective of their household income. The empirical evidence suggests that much of the gains from higher minimum wages go to households in the upper half of the income distribution.[9] If low incomes are the problem then supplementing the incomes of persons who are deemed to be poor makes more sense than fixing a price, their wage, which may be only tenuously linked to their standard of living. There are a number of ways to do this.

2. Milton Friedman and F. A. Hayek, both ultra conservatives and Nobel Prize winners, were also advocates of replacing the welfare system, with its elaborate bureaucracy, by a Universal Minimum Income or Guaranteed Income (GI) (other names have been suggested for similar ideas). Hayek wrote: "The assurance of a certain minimum income for everyone, or a sort of floor below which nobody need fall even when he is unable to provide for himself, appears not only to be wholly legitimate protection against a risk common to all, but a necessary part of the Great Society in which the individual no longer has specific claims on the members of the particular small group into which he was born."

3. Friedman was a strong advocate of a Negative Income Tax (NIT) to provide a minimum income floor or "safety net". He argued that what the poor need is money and that a sensible government would give them money, not

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[9] Those with household annual incomes of less than $20k would get about 26% of the benefits from an increase in the Federal minimum wage to $10.10 per hour. Those in households with incomes between $20 and $40k would gain 29%, those with incomes from $40k to $60k about 17%, $60k to$100k 17%, $100k+ 11%.

paternalistically play around with their lives, and that a NIT would eliminate the need to have large numbers of bureaucrats running things like Food Stamps[10] and school meal programs. Politically the big problem is whether the Guaranteed Income would actually replace the welfare system or would it simply be added to it.

3. The idea of a NIT is very simple, although its implementation needs careful thought. In its basic form the NIT requires you to come up with two numbers: the minimum amount that each adult should have to live on,

TABLE 1

	EARNED INCOME	INCOME TAX PAID	AFTER TAX INCOME	GUARANTEED INCOME (TRANSFER)	DISPOSABLE INCOME	NET TAX
1	0	0	0	$20,000	$20,000	- $20,000
2	$1	$0.25	$0.75	$20,000	$20,000.75	- $19,999.75
3	$100	$25	$75	$20,000	$20,075	-$19,975
4	$1,000	$250	$750	$20,000	$20,750	-$19,750
5	$20,000	$4,000	$16,000	$20,000	$36,000	-$16,000
6	$40,000	$10,000	$30,000	$20,000	$50,000	-$10,000
7	$80,000	$20,000	$60,000	$20,000	$80,000	0
8	$100,000	$25,000	$75,000	$20,000	$95,000	$5,000
9	$200,000	$50,000	$150,00	$20,000	$170,000	$30,000

say, $20,000 per year, and the rate at which positive earned incomes should be taxed, say, 25%. The mechanics of the NIT are laid out in TABLE 1. Column 1 shows the individual's earnings before tax. Column 2 shows the amount of tax owed at a single 25% rate. Column 3 is the individual's after tax income. Column 4 is the guaranteed income that is paid to everyone over the age of 18 (economists call this an income transfer from the government). And Column 5 is the individual's disposable income, what they retain after paying their income tax and receiving the $20,000 transfer (DISPOSABLE INCOME = EARNED INCOME + TRANSFER – Tax). The final column shows the net tax = TRANSFER – TAX. Note that the average tax on $200,000 is only 15% because the $20,000

[10] Food Stamps are now SNAP (Supplemental Nutrition Assistance Program). http://govthub.com/food-stamp-program.aspx

is not taxed.

Consider Row 1. The disabled person, the elderly bedridden person, or the drug addict does not earn anything. They therefore pay no tax. And their disposable income (DI) is $20,000, the amount of the GI. Notice that everyone, including the drug addict, receives the GI as a right. The government does not pry into your bedroom seeking to discover if you are cohabiting with someone, as is usually the case with welfare systems that are targeted towards unmarried women who are supporting children; the government does not have to have a large and expensive bureaucracy to determine whether you really are disabled. The IRS can administer the NIT and many other government programs, such as food stamps, rent vouchers, school meals, even unemployment benefits can be abolished or cut back. In the final column we see that the person's tax is negative, -$20k; hence the name Negative Income Tax. In fact taxes are negative – the government ends up paying you – in rows 1-6.

In Row 2 the person earns $1 and has to pay 25 cents in taxes but keeps 75 cents. This gives everyone an incentive to work. Welfare systems are often structured so there are disincentives to work. For example, if you work then the moment you reach a certain income threshold you may lose your eligibility to receive such things as Food Stamps, free school meals, rent subsidies and so you become worse off than on welfare. There is no advantage to working; the welfare system acts as a disincentive to employment.

In Row 7 the person earns the break-even income of $80,000. She pays $20,000 in income tax but the GI transfer cancels that out and so her net tax is $0.

In Row 8 the person pays $5,000 to the government, because she owes $25,000 in income tax, which is $5,000 more than the GI.

4. The NIT is attractive because it provides a minimum standard of living to everyone, but does not require an elaborate paternalistic welfare bureaucracy to administer it. The NIT always provides an incentive to work since the marginal tax rate is less than 100%, which is not necessarily true of some welfare systems. And the flat rate tax system with no exemptions is very attractive compared with our 6,000 page tax code that keeps an army of accountants employed finding legal ways to minimize their clients tax bill, work that is well paid but not obviously socially productive.

5. An obvious problem with the system is that it would be expensive, $20,000 x 320million is $6.4 trillion, and that is before we have paid for defense and other

public goods and services. The current welfare system costs about $700b.[11] But in my example the government is still collecting 25% of incomes in income taxes. An even better tax system would drastically reduce deductions, no special treatment for the well off blind etc. and no mortgage subsidies, no tax right offs for charitable contributions. Obviously the tax system could be made progressive and GI could be adjusted to take account of family size and cut off entirely once a certain after tax income is achieved.

6. The US has a multiplicity of taxes and entitlement programs. The NIT is one possible way to simply the government without removing the safety net that protects the old, the young, and those persons who are unable to provide for themselves. (Next year I hope to add a Commentary on Poverty and Taxation.)

7. Figure 5 illustrates the simple NIT system described above.

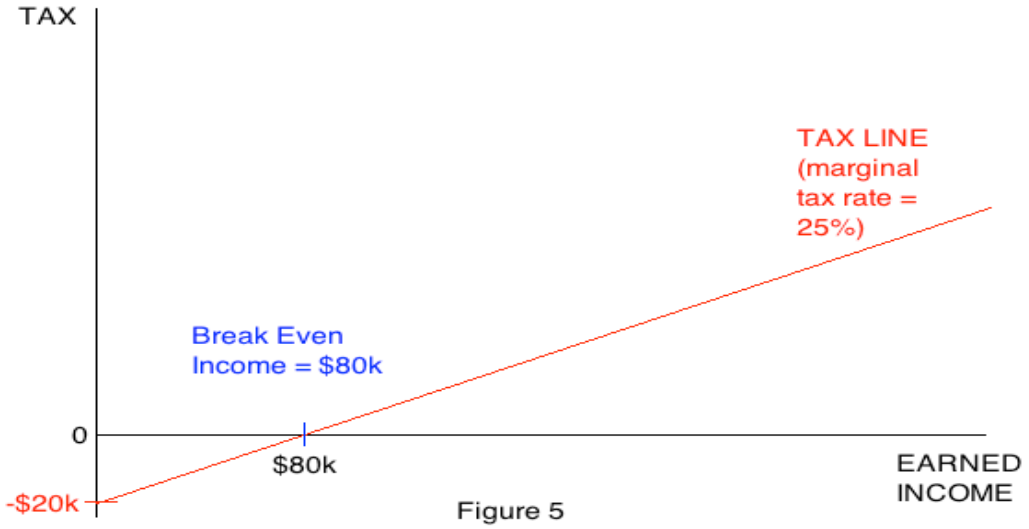

Figure 5

8. The NIT is not something that is politically viable in the US and so we have the Earned Income Tax Credit (EITC). The EITC is a version of the NIT. The EITC rebates taxes to low income tax payers, especially those who have children. And the EITC is targeted specifically to the poor, something that the minimum wage does not address. However, the EITC only helps those who have a job and it

[11] In 2016 the Swiss voted on, and rejected, a referendum, which would have guaranteed everyone a basic monthly income. https://www.nytimes.com/2016/06/06/world/europe/switzerland-swiss-vote-basic-income.html?_r=0

seems to be particularly susceptible to fraud. However, when a program is subject to fraud you have to ask which is better, the existing system without fraud, or the system with fraud? This is a variation of Voltaire's "the best is the enemy of the good". We cannot expect any real world system to be perfect and free from flaws, all we can hope for is that the new system is better on the whole than the system that it is replacing.

9. A combination of a higher minimum wage with higher EITCs may be a superior policy to the minimum wage. And remember that although workers with low incomes may pay little income tax they may be paying significant amounts of payroll taxes (FICA) and they may also pay a lot of sales taxes.

14. HUMAN CAPITAL

1. What a person earns is related to their productivity although there is not the simple one to one correspondence between productivity and earnings that economics textbooks suggest. Low wage earners are usually low wage earners because they do not have much human capital (they are relatively poorly educated and lack job skills and appropriate training and work experience). (Some of them have either mental or physical handicaps.)

2. Low wage earners are therefore low productivity workers and economists stress that policies should be aimed to increase human capital investment in order to reduce the number of low productivity workers. For many low wage earners the long run solution to their plight is to encourage them to complete high school and then to go on to further vocational training, although I believe (my value judgment) that we send too many people to university. But we face a major challenge in the US because of our lamentable educational system.[12] (5,797)

[12] The American education system is often said to be the best in the world. This is true if you are referring to graduate education at the best American universities, but I do not think that American education below the graduate level is noticeably better than that in other countries and in many cases it is demonstrably worse.

Facts about the minimum wage:

http://www.dol.gov/whd/minimumwage.htm

Who Earns the Minimum Wage? (Read the comments on the Ritholz piece!)

http://www.bls.gov/cps/minwage2012.htm

http://www.ritholtz.com/blog/wp-content/uploads/2015/05/min-wage.png

http://www.pewresearch.org/fact-tank/2014/09/08/who-makes-minimum-wage/

Washington State:

http://www.lni.wa.gov/workplacerights/wages/minimum/default.asp

Economists Debate the Effects of the Minimum Wage:

http://www.bloomberg.com/apps/news?pid=20601070&sid=atp2MiOAZ3Xc&refer=home

http://www.economist.com/blogs/freeexchange/2007/01/minimum_wage

The EITC and a NIT:

http://www.taxpolicycenter.org/briefing-book/key-elements/family/eitc.cfm

http://economix.blogs.nytimes.com/2013/12/09/the-minimum-wage-aint-what-it-used-to-be/

http://conversableeconomist.blogspot.com/2014/01/improper-federal-payments-of-100.html

http://deadfortaxreasons.wordpress.com/2014/01/13/guaranteed-annual-income/

International Comparisons

http://conversableeconomist.blogspot.com/2015/05/some-international-minimum-wage.html

I could not resist this!

http://www.nydailynews.com/new-york/strippers-10-million-minimum-wage-suit-article-1.2011119