

2015 07 13

Mike Polioudakis

### **Wage Rates in the United States**

This essay offers some facts about wages in the United State. I don't give the arguments. The terms "wages", "salary", and "gets paid" usually include benefits such as health insurance unless I need to separate sources of income from a job. A "good" is any material thing (car), service (teaching guitar), or situation (religious success) that people can provide to other people and which the other people will pay for (trade for). If you don't know what determines the price of a good, please see my other essay on basic ideas in economics.

(1) To get any kind of salary, a person has to contribute to a good that has a market price (market value). Even if a person is wonderful, kind, creative, intelligent, makes interesting things, has interesting ideas, and will be appreciated in the future, if he-she does not contribute to a good with a market price now, then he-she cannot get a salary on a market. In his time, nobody appreciated the work of Vincent Van Gogh the painter, nobody wanted to buy his paintings, they had no market price, and so van Gogh lived in poverty, supported by his brother. At one time, people made money selling pet rocks.

(2) Generally, the higher the price of a good, the higher the salary of a person who contributes to the good, and vice versa. High quality jewelry has a high price, and people who can invent and-or make high quality jewelry often make a good living. Health care often has a high price, and the people who make a big difference in our health care earn a lot of money. For reasons that I can't go into here, mathematical theorems have a small market price, so even adept mathematicians usually get paid little for their work. Good social thinking is rare and extremely important but has little market value, so the same is true of good social thinkers.

(3) However, it is not always true that a person who works on a high-priced good makes a high salary. It still depends on what difference a person makes. A person who makes little difference even to a high priced good can make a low salary. The person who cleans up at a "high end" jewelry store doesn't usually make much. An assembly line worker on a high priced luxury car such as a Lexus makes about as much as most people on the assembly line of a medium priced car such as a Camry. For some special work on the high-priced good, the people who do that special work, and so make a lot of difference, do get paid more. Maybe the engineers and the motor assembly people of a Lexus make more than the engineers and motor assembly people of a Camry. A person who makes a big difference to a low-priced good can make a lot of money if the good sells a lot and if not many other people make a big difference. The one person who sells all the bread in a town can make a lot of money. The person who gets the idea for a cheap gadget that everybody has to have can make a lot of money. Most are in between.

Doctors make more of a difference to health care than nurses, and so make more money; nurses make more of a difference than nurses aids or “orderlies”, and so make more money.

(4) People are not usually paid strictly as individuals but as part of a category such as “young lawyer”, “car assembly worker”, or “mid-career manager of a large retail outlet”. How much a particular person gets paid depends on how much difference the average additional (marginal) person in a job category makes. If the average additional (marginal) police officer with ten years’ job experience makes \$65,000 per year difference to the economy as a whole, then most officers with similar backgrounds get paid about that much. If the average additional (marginal) garbage collector makes a difference of about \$50,000 per year, then that is how much most collectors get paid.

(5) If any employer paid more than the difference that an average additional worker of a category brings in, then the employer would go bankrupt. The employer would pay out more than the employer brings in, and that employer would disappear. If Toyota paid assembly line workers more than the value that workers contributed to their cars, Toyota would go bankrupt. We would have only with employers who do pay about on the basis of the difference an employee makes. Employers cannot pay more than this, and employees should not expect it.

(6) People do NOT get paid on the basis of the mere fact they are people or the mere fact that they have a family to raise. Employers cannot pay on this basis. Just because you are a person does not mean you should make enough to live as well as most people or enough to raise a family with three children well. If you do not make that much of a difference, you do not get the pay.

(7) In an absolutely ideal economy, the differences that different occupations make, and the wages that different occupations receive, tend to even out. Car mechanics make as much as bankers. Engineering professors get paid about as much as anthropology professors. Doctors get paid only as much as nurses. This kind of ideally fair economy does not exist in real life, where differences persist. I don’t explain why differences persist other than to explain below what determines how much difference an occupation makes.

(8) Sometimes individual differences do make a difference in the contribution of a specific individual, and then that individual can get paid more. Somebody who is smarter, stronger, more diligent, more alert, has more education, has more training, has learned more on the job, etc. sometimes does get paid more. People feel it is only fair to reward individual differences this way. Some employment systems mimic our ideas of fairness such as tenure and review committees in universities and seniority systems in factories. Ideally, we would like this to be the case all the time so that everybody is assessed purely as an individual but that cannot happen. It does not even happen in a seniority system where Tom and Dick both get equal rewards for being on the job 15 years although Tom is more productive than Dick.

Despite our ideals of fairness, the basic idea is that we are rewarded as part of a category according to what difference most people in that category make.

In this essay, I don't explain why this is the case. The simple answer is that it is so hard to think in terms of individuals instead of categories, that it detracts from everybody if we try. Instead, everybody does better if we think in terms of categories rather than individuals even if some people are under-rewarded and some people are over-rewarded. Life is not perfectly fair.

(9) What determines how much difference an occupation makes?

-People do not get paid more just because they have unusual abilities. What you do has to make a difference in the general economy, which means that people have to need what you do or have to enjoy what you do. Recall the example of Vincent van Gogh. It is not easy to balance a ball on your nose but that does not mean people who can do so should get paid a lot for it. On the TV show "Pawn Stars", the owners of the pawn shop often have to explain to people that simple age or simple rarity alone do not make an item valuable; some people also have to want the item.

-If a way of making a living requires unusual useful skills such as intelligence or "street smarts", and the good provided has a solid market price, then that way of making a living usually gets paid more. A police detective gets paid more than a simple police officer; detectives make more of a difference. This effect is not as important as people usually think. Most people can learn most skills over time.

-If training is important in developing skills that make more of a difference, then resulting jobs usually pay more. Electrical engineers get paid more than people who know how to solder.

Education matters because it affects the ability to make a difference. Usually more education means able to make more difference. Additional wages come from extra education that improves the ability to make a difference. Education alone is not a key. If education gives skills that do not make a difference that people care about, then education alone does not lead to more pay. People who learn a lot about the constellations of the sky do not necessarily make a lot of money.

-Some people are adept at innovating, such as the early computer pioneers or the pioneers of rock-and-roll and hip hop. They get paid more. Most people are not adept at this, and it is not a "regular" kind of job, so I don't consider it here.

-Some people are adept at implementing the innovations of others and are they are creative in their own way too, such as marketers of computers, marketers of rock-and-roll and hip hop, and marketers of games such as "Grand Theft Auto". They get paid more. This too is not a regular job, so I don't consider it.

-As innovations spread, they create a lot of profit. The people around the innovations tend to make good wages although they did not create the innovation and they are not the clever marketers of the innovations. People in the gaming industry made good money for a while even if they did not create or market games. Everyone who works on a hit movie makes money. Some people are adept at “being around” innovations – that is what investment bankers try for. It is a good idea to look for innovative industries to get some of the benefits. Yet this too is not a regular job, and I do not consider it here.

-I do not consider entrepreneurs, who mostly fit into the category 6F above.

-Overall, in the modern world, likely the biggest factor in wage differences is access to technology that increases the difference that you make. In the 1950s, auto workers in the United States began to make more money (partly) because auto companies began to use more technology that made manufacturing more effective. An x-ray technician makes good wages because he-she uses technology that makes a big difference, and not many people can use the technology at the same time.

When the same skills are applied along with much technological support, usually they lead to better pay than when they are applied with little technological support.

Mexican doctors and Thai doctors are just as good as doctors in the United States. In their countries, Mexican and Thai doctors earn a good living but, until recently, they did not make as much as American doctors. Mexican and Thai doctors are not supported by a big technology infrastructure as are American doctors, so they don't make as much of a difference, and so they don't make as much money.

Simply working with technology alone does not lead to a person making more of a difference and so earning more. Technology is like education; it depends on the kind of education (technology) and on what you can do with that education (technology). Just because you can log in to a multi-billion dollar main frame computer system does not mean you should make a million dollars a year – everyone can log on to Amazon. Just because you can play a game does not mean you can design a game. Just because you can program the shading for the color of some characters in a game does not mean you can program a whole game. The wages of a particular person (job) depend on how much difference the technology that he-she uses makes and on how much difference a particular person makes using that technology. Auto workers now use even more technology than they did in the 1960s and 1970s but each auto worker can easily be replaced and each auto worker makes not much difference in the overall process. The technology earns the money. We earn some of the money depending on our role with the technology.

If you want to think about why a person makes as much as he-she does, think about the technological nexus in which he-she works, think about how much difference the technology makes, think about how

many people are able to use that technology, and think about how much of a difference he-she makes using that technology.

-There are some exceptions to the idea that jobs get paid according to the difference that they make to the economy as a whole and to people as a whole, but not many exceptions. In general, the principle is sound. You should rely on it.

-There is a relation between how much difference a job makes (so how much it pays) and the number of people who can do the job, and who do the job. In particular, there is a relation to the natural rarity of people who can do the job. Generally, the more people who are qualified and actually do the job, the less it pays, even if otherwise it seems fun and useful. A lot of people can do manual labor, so each one of them makes little difference, so all get paid little. Many people can play the piano, so piano players generally don't make much. A lot of people can make hamburgers, and so people who cook hamburgers generally don't make much. Few people can set diamonds well, and few people do set diamonds well, so people who set diamonds well get paid a lot. Many people could be contract killers, but few want to be contract killers, so few people offer to be contract killers, and so contract killers get paid a lot.

The issue here is why a lot of people do a job or only a few people do a job. Part of the answer lies in natural abilities, part in education, and part in access to education. To give more answer, I would have to go into more details than I can go into here.

-I do not explain why some people who seem to make not much real difference still get paid a lot, such as professional athletes and entertainers. You can learn from an economics book. It is fun when you finally get the argument. It is also annoying that the world works this way.

=In everyday language: In some markets, only a few business firms control much of the volume of product (Microsoft) or sales (Walmart). These firms make greater-than-normal rates of profit for long periods. Sometimes workers share in the greater-than-normal profits and sometimes not.

They do not share: Even when firms make greater-than-normal profits consistently, they still want to pay workers according to the difference workers would make if the profits were only normal. In that case, the workers for these firms make the same wages for the same work that they would make in a firm that did not make a greater-than-normal profit consistently. Suppose a few firms made all the big boats in America, and consistently made greater-than-normal profit. If these firms have their way, a welder who works for them makes no more than a welder who works for a diesel repair shop, similar work in an industry that is not controlled by a few firms.

They do share: When workers in controlling firms are able to band together (unionize), then they can force the firms to share some of their greater-than-normal profits. In that case, a worker in these firms

might make more than the difference he/she would make if the market was not controlled by a few firms. Usually the workers in these cases make a little bit more in “straight” wages (direct money) but make a lot more in benefits such as health insurance, dental insurance, and retirement. If welders can form a strong union, they can get higher-than-average wages in the industry for building big boats. Two classic cases until recently were the auto workers and the airline workers. In these cases, the relation between wages and the difference that a particular worker makes becomes more difficult to sort out. Firms still try to adjust workload and wages so that a worker receives about as much in total wages (including benefits) as the difference that a worker makes. How they do so is too much to go into here.

Situations in which firms control markets and workers share in the extra profits are not always stable, and the entire situation can become a serious problem.

Workers doing similar work in all markets, not just the controlled markets, think the high wages for workers in controlling firms in controlled markets are “normal” and should prevail - when that cannot happen. Welders outside the boat industry think all welders should make what welders in the big boat industry make. When they try to impose their demand, they distort all industries that use welders, usually much for the worse.

Later, when firms no longer control the market, the firms do not make greater-than-normal profits, but workers still expect high wages and benefits. If the big boat industry is invaded by overseas competition so that a few firms cannot make greater-than-normal profits, and all firms can make only normal profits, then all firms have to pay welders only strictly according to the difference that welders make in general. Welders have to take a cut in pay in their jobs at firms that formerly controlled the big boat market. If the workers in formerly controlled industries do not adjust their wage expectations, then demands of the workers can hurt the firms and erode the American share of the market, opening the door to other (overseas) firms in which workers make wages more in line with the difference that they make. All of this also happened “for real” in autos and airlines.

=A quick jargon statement for economists: Structured markets under oligopoly control and subject to unionized labor “few seller” relations (monopsony or oligopsony) do not follow the idealized pattern of paying wages only according to the marginal revenue product of labor. What happens in these situations is too much to go into here.

-In the 1950s and 1960s, women made about 60% to 65% of what men made for similar work. In 2015, women make about 65% to 75%. That is an improvement but not much and not enough. I do not here explain why this difference persists and the effects of this difference.

Here I do something called “blame the victim” although I do not think of it as “blame the victim”: I hold of the greatest failures of the women’s movement to be that it did not tenaciously address the issue of

“equal pay for equal work”. Instead it devoted time and energy to other issues that might be important in their own way, and glamorous, but do not have the long-range results of equal pay for equal work. If “equal pay for equal work” had been “squared away”, then other issues would have been easier to deal with. As long as “equal pay for equal work” is not “squared away” then other issues are harder to deal with and might be intractable. I doubt that questions of women in the work force and of women’s political power can be dealt with adequately until women deal with equal pay for equal work. I doubt that questions of “career versus homemaker” and “single parent families” can be dealt with adequately until equal pay for equal work is dealt with. I urge women to focus on “equal pay for equal work” and do what they can. Their work on this issue will help not only themselves but all Americans and the nation as a whole.

-Similar comments apply to differences in wages between ethnic groups, religions, and ages. As far as I can tell, the differences in wages for similar work are not as big across ethnic groups as they are between genders. Even within disadvantaged ethnic groups such as Blacks and Native Americans, the difference between genders still holds, but maybe not as much.