By now you’re really clear on this point: When the wage is above its equilibrium level, you’ve got unemployment. And you’ve got it because firms are offering fewer jobs at that higher wage level, and more workers want to get jobs at that higher wage level. And when workers are seeking jobs and not finding them, we call that unemployment. We’ve looked at a couple of things that can stick the wage above its equilibrium level. One is the government requirement that firms pay a minimum wage above the equilibrium level; and when that occurs, you can get unemployment. Another thing that can happen is workers organize into labor unions, and demand a wage that’s above the equilibrium level; and at that higher wage firms want to offer fewer jobs, and therefore unemployment results.

We’re going to now look at a third reason why the wage may stick above its equilibrium level, and this is called the “efficiency wage.” The efficiency wage is a wage that firms voluntarily choose to pay in order to increase their profits. The idea of the efficiency wage is this: The wage has two effects. First of all, the wage determines the quantity of labor that’s traded in the market. But there’s a second effect: Wages influence the quality of labor that a firm actually hires. When a firm pays a higher wage, it may actually get a higher quality of labor; and the quality of labor, and the labor’s productivity may be so much higher that it actually makes it profitable for the firm to pay a wage that’s above the equilibrium level. It may actually increase the firm’s profits.

What I’m going to do now is make a list of the reasons why the wage may influence the quality of labor that a firm hires; and that’s why firms would voluntary choose to pay a wage above the equilibrium level. However, anytime a firm is paying a wage above the equilibrium level, there are going to be a lot of people applying for jobs, even as the firm wants to hire less labor. And that causes unemployment, which is the point of this discussion.

So, what are the reasons why a firm might choose to pay a higher wage than the equilibrium? Reason number one: A firm would choose to pay a wage above the equilibrium so as to give its workers an especially good deal. And the point here is, if you’ve got a job that’s an especially good deal, you’re afraid to lose it, so you’re going to work really hard to make your boss happy. This was Henry Ford’s idea; if you pay a wage that’s above the equilibrium level, workers know that the next best thing is a much lower wage, and they want to work hard to keep the job they’ve got. This is an efficiency wage based on motivating workers. When Henry Ford paid a higher wage, he was the most desirable job in town; and therefore workers who were under his direction were highly motivated. So one idea of efficiency wages is paying your workers a wage above the market level motivates them, and therefore goes directly to the company’s bottom line. The company voluntarily chooses to do this, because the wage above the market provides so much motivation that they get a higher quality, more productive worker.

The second reason why you would want to pay a wage above the equilibrium is that a happy, healthy worker is more productive. That is, a firm that gives its workers more money than they can earn in another job is able to give its workers the ability to feed themselves, clothe themselves, give themselves better continuing education, more rest and recreation. That is, you pay your workers more so as to make them healthier and happier. That is, workers who can afford better health care, better food, are going to come to work rested, healthy, and productive. Another idea, then, that gives us a wage above the equilibrium is companies know that if they pay their workers better, the workers will take better care of themselves, and therefore the workers will be more productive.

A third reason why a company pays a wage that is above the equilibrium is that at higher wages a company is able to attract the more productive, more talented, more skilled workers. This is a rather subtle idea, and I want to explain it carefully with an example. This principle of an efficiency wage to attract high quality workers is based on a problem in economics that we call the problem of asymmetric information. Suppose you’re running an assembly line where all of the workers work together, and it’s very difficult to tell by looking how productive an individual worker is. All you can tell is how much output the team is producing together. However, you know, as an employer, that some of the workers are especially productive, and other workers are less productive. But the particular information about the productivity of an individual worker is that worker’s private information. The employer cannot observe it directly. The employer can only observe the average productivity of workers as seen in the output of the team, and this creates a problem called adverse selection.
Look here at five workers who are working together on a team to produce hamburgers. And let’s suppose the hamburgers sell for $1.00 apiece. On the top row of these numbers I’ve written the number of hamburgers that each employee is contributing to the team’s production. Here’s a worker who’s adding 8 hamburgers, here’s a worker who’s adding 10, a worker that’s adding 12, a worker that’s adding 14, and our most productive worker, adding 16 hamburgers. Again, we can’t tell which worker is which, but we know as a group that they’re producing on average 12 hamburgers per worker an hour.

Down below in green, I’ve written the opportunity cost of these workers to work for this hamburger restaurant. That is, these are the wages that each of these employees could earn if they went and worked somewhere else. Notice the most productive worker has the highest opportunity cost. If he left the hamburger restaurant and went and worked for someone else, his next best opportunity is to earn $13.00 an hour. Notice he’s better employed at the hamburger restaurant where he’s contributing $16.00 an hour to that company’s profit, but if he went somewhere else, he could earn $13.00 an hour. Our $14.00 hamburger man could earn $12.00 if he went and worked somewhere else. The $12.00 guy could earn $11.00, the $10.00 guy could earn $9.00, and our $8.00 guy could earn $7.00.

The point of the green numbers is that the opportunity costs are positively related to the productivity of these workers at this particular hamburger restaurant. And there’s where the problem comes in. Watch this example: The hamburger restaurant manager looks at this team’s productivity, and it says, “Well, I’ve got here five workers that are producing $60.00 worth of benefit. That means I can afford to pay them a wage of $12.00 an hour; $12.00 is their total output — $60.00 worth of hamburgers divided by the five workers; $12.00 is their average productivity. So when we give each of these workers a paycheck for $12.00, some of them are very, very happy. But one guy says to himself, “You know, I could earn $13.00 somewhere else,” and he quits the company. When he quits the company, 16 hamburgers are not produced, because he’s taken his efforts away from this team, and he goes and he earns $13.00 at another employment opportunity.

Well, when he leaves, the average productivity of our workers falls. Now their total output averages to only 11 hamburgers per worker; that is, the company can only afford to pay them $11.00 an hour and break even. Well, at $11.00 an hour, this worker takes his talent and goes to another company where he can earn $12.00 an hour. Notice what’s happening. As the wage falls, who’s leaving? The most productive workers. This is not in the interest of the hamburger restaurant. They pay all the workers the same, but your most productive workers are going to seek opportunities elsewhere.

Well, now this guy is the most productive person, and the average productivity of our team has dropped from 11 to 10, and at 11 to 10, we then have this worker leaving. At $10.00 an hour now, we have these two guys left employed. The wage is $10.00, and the average productivity has dropped to 9, and finally we’ve got an equilibrium; nobody wants to leave. The output of our workers is $18.00 worth of hamburgers, $9.00 apiece, which meets their opportunity costs. But see who’s left — the least productive workers in the pool. That’s why a company would voluntarily choose to pay a higher wage in order to attract the more productive workers. If this company paid a higher wage, like $13.00 an hour, all five of these workers would show up for work. Then what the company would do is invest some effort in screening the workers — trying to get at their private information, figuring out who can produce a lot of hamburgers, and who can produce a few — because at the high wage, you’ll attract a lot of workers, but you don’t want all of them. What you then do is you engage in non-price rationing; the company begins to screen and select, so that it can keep these higher workers at the higher wage, and find some way of distinguishing the low-productivity workers and not hire them at all. That is, you cannot let the wage alone attract your work pool if you’re concerned about the quality of the workers. But you’ve got to pay a high wage, a wage above market equilibrium, if you want to attract the very best workers. That’s the idea behind an efficiency wage.

A fourth reason for paying an extra high wage is to reduce employee turnover. If your employees are churning all the time, leaving, hiring new ones, you’ve got a lot of costs associated with identifying new employees, attracting, and training them. But if you can keep your workers happy, and they don’t leave, that lowers the overall cost of managing labor.
Once again, then, we’ve come up with a story for why the wage winds up above its equilibrium level. And when the wage is above the equilibrium level, the quantity of labor supplied exceeds the quantity of labor demanded, and you’ve got unemployment. The interesting thing about this third story is that it’s based on voluntary choices by firms. It’s firms voluntarily choosing to pay a wage above the market level so as to increase their profits. Whether it is attracting unusually qualified workers, making your workers especially happy and productive, or making your workers afraid of losing the job so that they’re highly motivated. In whatever sense you tell the story, the point is that the extra high wage changes the quality of your workers, and therefore makes your company more profitable. However, the downside is, you have unemployment to deal with. And when you’ve got unemployment, then you have to use some kind of rationing mechanism that’s not strictly based on price – some scheme for choosing which worker to hire and which worker not to hire, when they both show up for a job at a given wage.