

## **The Effects of Redistribution Policies on Growth and Employment.**

Presentation, Conference on Inequality in Memory of Gary Becker, September 2014.

**Casey Mulligan**

### ***Introductory Remarks***

*John Cogan: Good afternoon, I'm John Cogan. I'm here to moderate this session that will last about an hour with Casey Mulligan. I'm certainly delighted to introduce Casey. He's a professor of economics at the University of Chicago. He received his PhD from Chicago. And mindful of the fact that there are several of Gary Becker's former students here, I'll just say that Casey was one of Gary's best students.*

*Casey has spent most of the last few years working on labor market distortions and economic activity, and so today he's going to present some of that work. Casey will talk for twenty, twenty-five minutes, and then I hopefully will have time for some discussion.*

*So, Casey? Welcome. Take it away.*

**Casey Mulligan:** Okay, I'll start with a two-sentence summary, so you can get right to the weaknesses of what I'm going to say. First sentence: the federal government has recently created or expanded a number of redistribution programs, and these programs have made the American economy smaller than it would have been. Second sentence: the effects of these programs are right in line with basic economics, right in line with basic price theory, but the opposite of what the program advocates have been telling us. So a natural reaction, I think, to those two sentences would be – and this is kind of an early Milton Friedman style of conclusion – would be to say, “Hey, these policies are bad ideas. We're not sure where they came from. And they could have been rectified by giving some combination of voters, politicians, and bureaucrats a better economic education.” In short, if everybody just studied price theory, what a wonderful world it would be.

And I'm not sure I'm going to be able to tell you more than that today.

But I know that Gary would have pushed back on that. And he did push back when we had the working groups on these topics, he would push back and say, “Wait a second. Don't side with the guy in the left in this picture [Milton Friedman]. The guy in the right [George Stigler] had some things to say too.” And he would say, “You can do all the educating you want, and there are still going to be the fundamental economic and political forces pushing for these policies.”

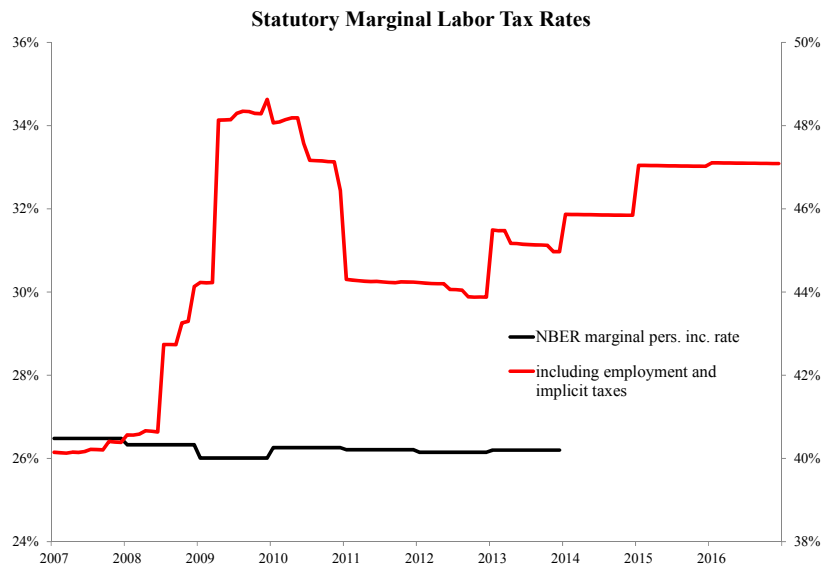
So keep that in mind when I'm talking. I don't know what these fundamental forces are. I'm just going to tell you what the results are in terms of policy.

Now let's talk about redistribution policy. There's an excess of attention on the personal income tax. So I've started with a graph [Figure 1] of marginal tax rates as calculated by NBER for the personal income taxes at the federal and state levels. Each tick in this graph is two points, so the last several years here you don't see a lot of action. The moves in this tax are in the tenths of percentage points. Basically, this tax

hasn't changed. And if you focus on personal income taxes too much, then you say we haven't really changed the redistribution we've been doing.

Now, there are a couple problems with this graph the way I've drawn it here. It doesn't have employment taxes. And I think if you're interested in employment, of course income taxes are relevant. People have jobs to earn income. But also, employment taxes are relevant for employment.

Figure 1



When you bring those implicit income taxes into the picture, now the picture looks like this [Figure 1]. Each tick is still two points. The levels are different, but now we have a lot more happening. And I want to tell you some of the story behind what is happening.

I tried to organize some of the policy changes in my next slide by time period and by type of tax. Employment tax is the one that gets the least attention. And that's in the first column. In the second column are the income taxes. In the interest of time, I'm going to jump to the middle period of 2007 to 2013, where there is a lot of legislation action in both employment and income taxes. You probably heard of the infamous 99 weeks of unemployment insurance. That's one of the items here. But there are a bunch of items here that have little to do with 99 weeks of unemployment insurance. There were a lot of new employment taxes that never made the newspaper.

Each one of these is a fascinating story, I think. But I picked out two as a representative picture from the population. So I'll talk about some of the unemployment-tested health insurance and some of the food stamp expansions. The period from 2014-2016 is interesting in its own way, because these are all policies that come with the Affordable Care Act. There are a number of different aspects of that, and I'll tell you

about some of these. And then in italics, I've indicated that only two of these taxes that are explicit taxes that a politician would actually call a tax. The rest of them are implicit.

Okay, the first employment tax I will tell you about is the subsidy for COBRA policies. COBRA refers to a long-standing law allowing people to continue participation in their former employer's health plan. Traditionally, that was an expensive proposition for the individual. You left your employer and stayed in the plan, but you had to pay for everything. Your employer probably wasn't going to be paying anymore. And you had to do it with after-tax dollars. So it was pretty expensive, and there were a lot of good reasons why people would avoid being laid off or try to avoid quitting. If they were laid off or quit, there was an incentive to hurry back to work. Well, the so-called stimulus law, the ARRA, totally reversed that calculus. If you were laid off from your job and you liked your former employer health plan, you could keep it. And the federal government would pay about two-thirds. Now the scales were reversed, so that the cheaper way to get insurance would actually be to be off the job, rather than on the job. And this is a pretty big deal, not only because of the number of people – about two million workers and dependents -- who took part in this, but also it was kind of a preview to the real film that's coming, which was the Affordable Care Act. It was kind of a test run of the Affordable Care Act, as we will see.

The second one I want to tell you about is now called SNAP, although it is known colloquially as food stamps. Food stamps are a combination of a tax on income, a tax on assets, and a subsidy from employment, all in the same bundle. Traditionally, that's the way it worked. One thing that happened in about 2007 or 2008 was that they removed the asset tax. So that put more people in a situation where they're paying an income tax rather than an asset tax. The other thing that happened was they got rid of the work requirement (or the employment subsidy if you think of it that way), so two things at the same time created a new income tax and a new employment tax for people, relative to the baseline.

Basically, SNAP has become a kind of unemployment insurance for unmarried people. There's no limit. You can be on there 990 weeks. And really the only restriction, so to speak, is it's hard to be on there if you're married. Here's a statistic I have from fiscal year 2010. In a typical week, 85% of unemployed, unmarried, non-elderly household heads were in food stamp households. And I'm not just picking some tiny little population with only a few people in it. The numerator of that 85% is over three million people. So this is a kind of a new unemployment program, it is ongoing. The only temporary part was some benefit bonus they put on there, but all the rest continues, and there's no schedule to changing any of it.

So that's the middle busy period from 2007 to 2013. Now the next period has to do with the Affordable Care Act. Now there are a lot of taxes in there and I don't have time to tell you all about them. But I'm going to tell you about my two favorites. And to introduce you to those, I need to tell you about some of the components in that big, complicated law that are related to health insurance coverage. The number one component is the market exchanges. They're exchanges where people can buy health insurance, and it is often subsidized in a couple of different ways. The second part is the employer mandate, that's enforced with the penalty that I'm going to tell you about. And the third and fourth parts I'm not going to talk about much today, which are the individual mandate and the Medicaid expansions. So I'm going to focus on the first two.

In particular, there are two taxes that are large and many small ones in those marketplaces. There are two that often get mixed together, but they are economically distinct, as I'll try to explain. And the second

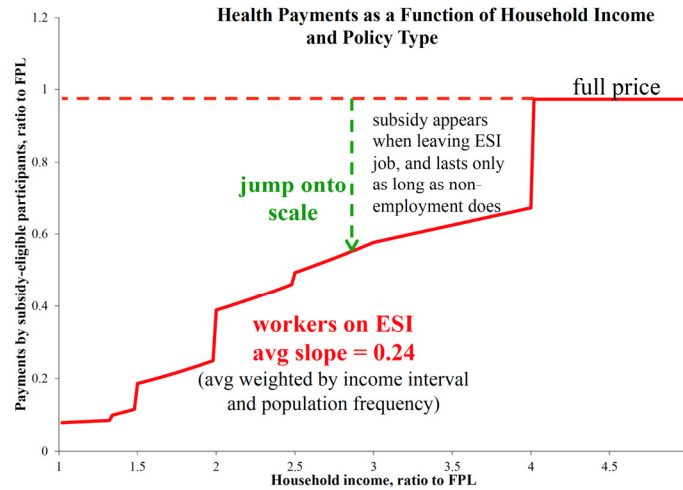
part, the employer penalty is actually a lot more significant than it first appears, and I'll explain to you why when you first look at it, you're only seeing a tip of the iceberg there.

Let's start with the employer penalty. That is a penalty that is important to understand. It only applies to full-time employees, and only when they are on the payroll. If you are unemployed, no one is penalizing you or penalizing an employer on your behalf. That is pretty important to the economics. It's indexed to health insurance costs, so it's probably going to grow faster than wages and faster than the economy into the future. It disproportionately hits low-skilled workers. Imagine that I kept talking to you guys today until dark, and then I kept going for a couple more hours. That's how many hours minimum-wage workers have to work so their employer can pay this penalty. That's a long time. Every week, they have to work eight hours to pay off that penalty. One reason why it's so many hours is that unlike salaries, these penalties are not deductible from business taxes. So you've heard the penalty probably referred to as the \$2,000 penalty, but in reality it is a \$3,000 penalty if you look at it in terms of a salary equivalent. So for a minimum wage worker, that is a lot of money on an annual basis. Also, it has anti-competitive aspects. I'm referring to competition in the labor market. Small employers don't pay this penalty. And you might hope as a fan of markets that there would be some competition, that the low-penalty players in the market could out compete the high-penalty players. The problem is, if they try to out compete the high-penalty players, they become high-penalty players themselves. There's a tremendous penalty – over \$60,000 annually – for going over the threshold between small and large employers. So I think you're in a situation where you're going to have not only a penalty that's going to be paid by some employers, but you have the anti-competitive effects.

Okay, now let's talk about the health insurance marketplaces. I'm going to graph income on the horizontal axis and payments for healthcare on the vertical axis. And I've drawn a horizontal line to represent paying full price for healthcare, which means it's independent of your income. Whatever your healthcare is, you pay, whether you're rich or you're poor. That's what full price means. I've drawn another line for a discount, but the same discount for everybody. So that's why it's another horizontal line, but it's lower because it's a discount. What the Affordable Care Act says is, if you want to have the discount, you cannot be a full-time worker at an employer that offers coverage - which of course is most employees. So this is a kind of full-time employment tax, and that's what the green arrow is showing us. You can't get that discount unless you leave that full-time position somehow, either to part time, or unemployment, or you're out of the labor force. So it's a full-time employment tax.

Now I'm over simplifying here, because the discount line is not really a horizontal line in the real law. It's an upward sloping line. And because it's an upward sloping line, it's also an income tax. But I want to emphasize that also, the full-time employment tax has not disappeared. When I've gone from my simple example to the real law, that green arrow is still there. So not only is there a penalty on earning income as you move up and down the solid red line, but there's also a penalty for being employed, and those are distinct economically, and you've got to look at them both. The slope, by the way, of the red line... It's got a lot of slopes, but it averages about 24. That's not a trivial thing. That's on top of all the other taxes that people pay.

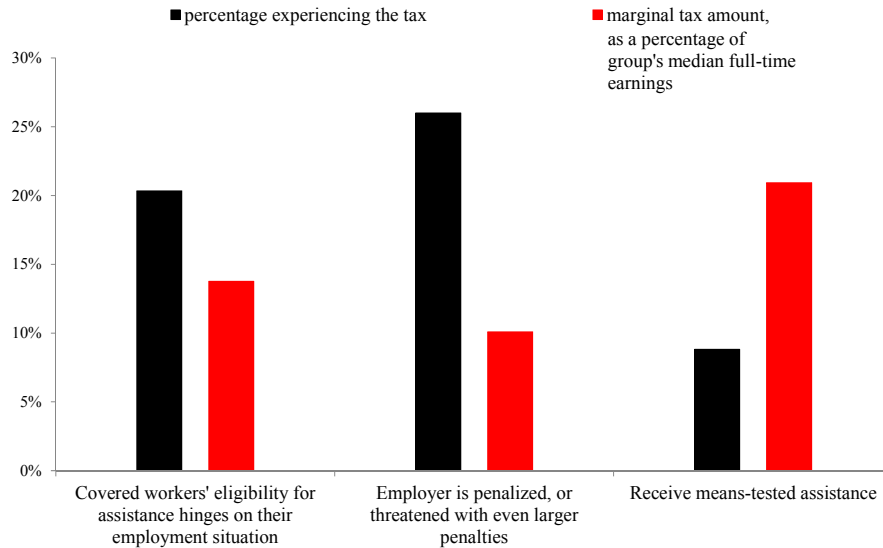
Figure 2



So here's a summary of my three favorite taxes in the law [Figure 3]. The black lines are telling us about the percentage of people who experience this tax. When I say "experience it," I don't mean pay it. I mean it's in their budget set. Whether they pay it or not is a choice, which is an analysis we do once we determine how large these taxes are. And then the red bars are indicating how large the tax is, from the point of view of the people who are sitting in the black bars. And these are big numbers. Each tick on the side here is five percentage points. So a number of these taxes look like almost doubling the payroll tax from employer and employee among the people would be experiencing them.

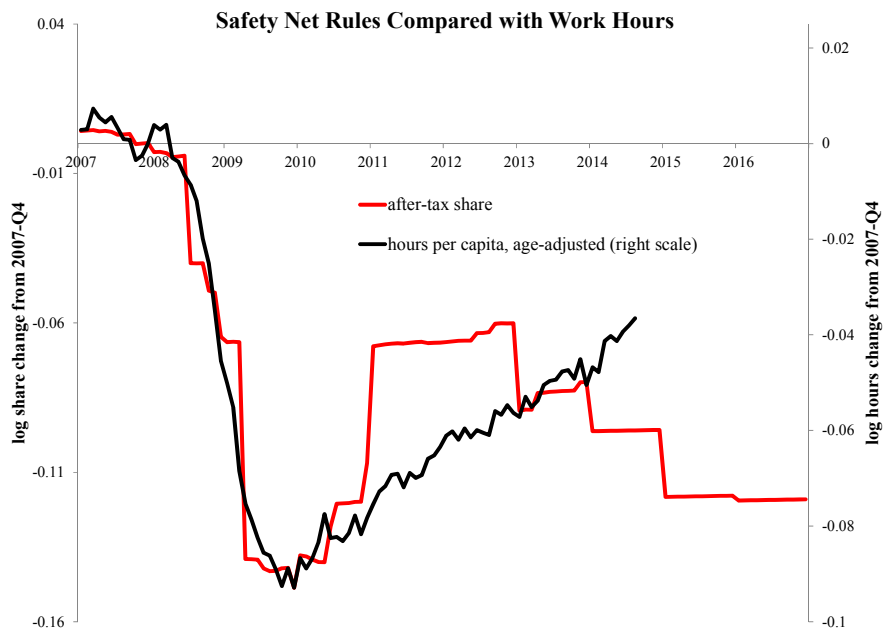
Figure 3

**The size and prevalence of the ACA's three largest taxes  
in 2016**



Now I want to show you some behavioral analysis of these taxes. I'm going to start at an aggregate level. So having three groups is not aggregate enough for me, so I'm going to multiply the red and the black together, make an index, and use fixed population rates to redo that index every month. And I'm going to not only include the Affordable Care Act's new taxes, but all the new taxes that I displayed in that earlier table. So that's what I showed you in the first slide, was the tax series built that way. I flipped it upside down to represent not what you pay when you earn more, but what you keep. And I've also put it on a log scale. So that's the after-tax share. Here's where we are today. And then I'm going to plot labor market performance by measuring work hours per person, adjusted for the average age of the population. And so here are the work hours in black. These are not exactly on the same scale. I'm not sure I'd want to use an elasticity of one to connect these two together, which is what you'd be doing if you put them on a common scale. Taxes went down, and the market went down. When the labor market came back somewhat, taxes came back somewhat.

Figure 4



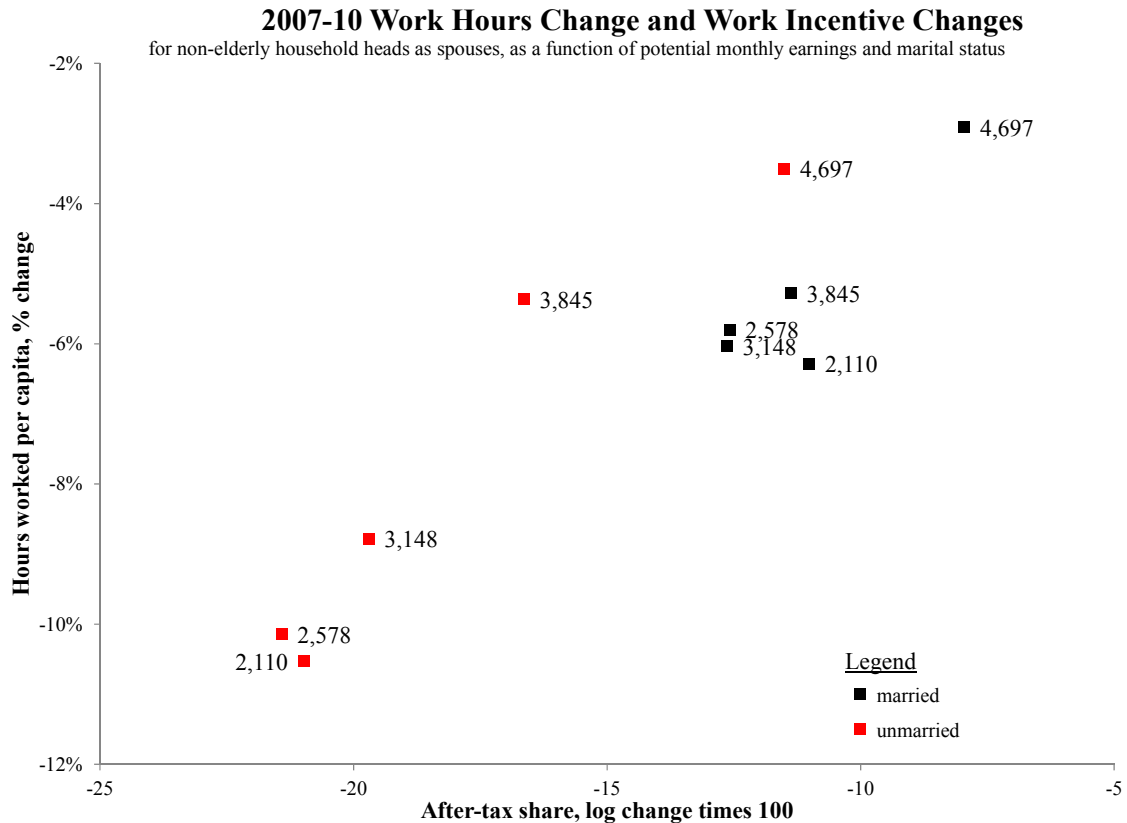
Here's another way to look at what has happened. These are measures of wages. Of course, I think in terms of supply and demand. That's what Gary taught me. But there's a supply price and a demand price, and I'm showing you both in the labor market. I'm showing you employer costs, the demand price for labor in the black, and I'm showing you the supply price - the employee reward to working after all the taxes and subsidies. So starting with the black line, I think it went up somewhat. What's important to me is that you look at it on this scale. Namely, when you're looking at employer costs, look at it on the same scale that you use to look at the employee reward. You have room to fit the 12% drop in the employee reward to working that happened during this period. So we can argue what has happened to employer costs, and maybe they went down, whatever, but it's nothing like what happened to the employee reward to work. It took a very big hit and remains quite low.

Now let me show you some cross-sectional behavioral patterns. I'm going to do this kind of tax rate analysis separately for ten groups. There are five groups based on skill, and then each of the skill groups I have broken into married and unmarried. I'm going to do a tax rate for each of the ten groups, and then I'm going to do an hours change. So I'm going to do a red series for each of the groups and a black series, and then I'm going to put them into a scatter plot.

The incentives will be on the bottom, and so farther to the right will mean a greater increase in incentives for working or a lesser decrease in incentives for working, and to the left would mean a greater reduction in incentives. Changes in hours worked from 2007 to 2010 are on the vertical axis.

So here are four of the married groups in terms of difference in skill. The labels show you for these groups what they typically earn per month when they work full time. Often you hear that in a recession, the low-skill groups are hit the hardest. You don't really see that here among the married people. They all went down around six percent. Also, maybe it's just a coincidence, that their incentives measured this way also went down about the same amount, about 12 log points. Here's a fifth group. It went down less. It's more skilled, and its incentives went down less.

Figure 5



Now let me show you the unmarried people. They don't all bunch together, either in their incentives or in their hours worked changes, except the bottom two groups. Those two have more or less the same hours changes and incentive changes. So maybe basic economics is too naïve, but basic economics says, "Well, you'd expect the groups that have their incentives lowered the most would be the ones with hours that decline the most." And you see what you'd expect.

It's not true that taxes have been constant in these years. Broadly measured to include employment taxes and implicit taxes, they've gone up quite a bit. Incentives have been eroded because there's more redistribution than there was a few years ago. That redistribution has reduced the return to working quite a bit, and it should remain low if the laws on the books stay on the books.

Now the laws that created these new taxes, they were called stimulus laws, but really by taxing employment and income, you got less employment and less income. My estimates suggest it about doubled the size of the contraction measured in terms of average work hours. On a permanent basis, about half of potential workers will have a major new disincentive going forward in their budget set as a consequence of the health law. I estimate that employment and aggregate hours are going to be reduced by three percent due to the health law, and national income reduced by two percent due to the health law.

Okay, so let me go back and make the case for economic education versus politics. The first thing I would start with is so many of these taxes were implicit taxes. That, of course, allows politicians to say they didn't change taxes, because they use the word narrowly to their advantage. So the political economists



might explain that. More surprising, I think, is the experts, not the politicians, offer opinions about the employment situation without mentioning these new taxes. I'm talking about the Federal Reserve or the IMF. Now maybe the students of George Stigler and Gary Becker would say, "Come on, we can use political economy theory to explain... Those are government institutions. We'll use political economy to explain why they don't do the economics quite right."

Okay, then I want to know what election is the Chicago Booth Panel of Economic Experts running for? What elected official is their boss, who tells them to do these things? Because I'm telling you, that the Chicago Booth Panel concluded that the law that created these taxes on employment increased employment. Almost across the board they concluded it. There's dozens of them on the panel. Not a single one mentioned that the law had employment taxes in it. Maybe you've got a political explanation for that. I don't. I decided to do a little empirical study. Here's our great teacher, Gary. He's playing softball with the students not too far from that other picture I showed you. He taught introductory price theory at Chicago for some time. I believe he did the same thing at Columbia. So I thought I'd do a little empirical study. Let's break down the Chicago Booth Panel of Economic Experts and see how many of them took Gary's class.

Gary was very good at educating the Chicago guys and I'm sure the Columbia guys too. So let's do a little study. Let's put all the Chicago Booth IGM panel members into one of three buckets.

So there's a Gary-Chicago bucket, a Gary-Columbia bucket, and a Gary all-other-institutions bucket. I'll start with the all-other-institutions bucket. 44 of the panel members are in that bucket. These are the people who don't mention employment taxes when you're talking about the employment situation. Any guesses as to the Gary-Columbia bucket? It's zero. How many in the Gary-Chicago bucket? Remember, Chicago Booth is across the street from Gary's house. The answer again is zero.

I think Gary would push back, but I think maybe economic education does have something to do with public policy. I'm going to side with the younger Milton Friedman, and I think all of us who learned from Gary – we all have here – we need to do our part to pass on the economic way of thinking, because it doesn't pass itself on.

Thank you.

[Applause]

#### *Question and Answer*

**Male Commenter 1:** I would just offer what I'm sure Gary's spirit, which was quite influential in my early work on taxation, including taxation of the family and taxation of human capital, that he'd appreciate or might support a friendly amendment which would say this doesn't yet get into all the negative effects on skill accumulation on people who are not in the labor force. And that would make things even worse.

**Casey Mulligan:** I think you need to go through these laws and ask, "What are they doing to the tax rate, not just on work but on human capital accumulation, on the job training, certain types of schooling?" It's really important. I haven't done it yet. It's doable, but I haven't done it. I'm hoping these effects take

longer to accumulate, so I have time to catch up with the new laws. But of course, human capital is ultimately the number one thing to study in these sorts of situations.

**Commenter 2:** You've identified the behavioral effects and they look like they're potentially large. So the question is, what about the consequences for income distribution? Have you looked at the disability, food stamps, ACA, individually or together, and their effects on income distribution?

**Casey Mulligan:** Although human capital definitely creates inequality in earnings, I think of it as fairly constant over this time frame. As I showed in my cross-sectional analysis, these aren't random samples of people who are leaving work. So redistribution is raising inequality. I think in a full analysis though, you would want to look at those returns to human capital. That's a big deal for inequality issues. People who earn more probably have more human capital, and if we want to understand the distribution of earnings, you've got to understand the distribution of human capital. I haven't offered much on that, I'm afraid.

**Commenter 3:** A question for you, Casey. You had mentioned when you showed your hours of work and you made the point that it's usually stated that during recessions, the less educated get hit more than the more educated. And you showed with hours of work, that wasn't the case. Now I'm thinking back to unemployment rates, and my sense is that with unemployment rates, that is the case, but that may not be right. And so I just want you to comment on it. Is it because I'm thinking of absolute changes versus proportionate changes? And you did proportionate changes? Or is there a difference between the intensive and the extensive margin?

**Casey Mulligan:** From the very beginning of this project, I never emphasized the unemployment rate. I'm sorry. I know what it means to be employed. Unemployed, I'm not sure what it means, number one. Number two, the payments to calling yourself unemployed versus out of the labor force are changing over this very period. My brain's not big enough to analyze that type of data, so I never looked at it.

**Commenter 4:** You mentioned, if I understood this distinction between single and married. The bottom line: is this a huge disincentive to marriage?

**Casey Mulligan:** I put it below human capital on the list of projects, but yes, the Affordable Care Act has big taxes on being married. And that's going to matter for families. And I think you want to quantify the size of those taxes and start to understand what to expect from families going forward under these new incentives. And the basic problem is that the subsidies are based on household income. And you're not a household if you're unmarried for tax purposes, but you are if you're married. So you can go from being below poverty to above poverty just by getting a marriage certificate. And that kicks a lot of people off these various forms of assistance. I'm sure people are going to consider that in their marriage behavior.

**Commenter 5:** You talked about the Booth Panel and the importance of economic ideas and the importance of getting economists in line. Those are totally legitimate points. But food stamp law and healthcare law and other laws are made by Congress. And Congress is thinking about the power of interest groups, about local interests – it's a very parochial institution – they're not sitting there thinking about economic ideas. And so what hope do you think there is that these ideas will actually find their way into policymaking, given that policies are made by Congress?

**Casey Mulligan:** It's not a question I've thought about a lot. My interest was to measure what's being done. I tend to think Republicans and Democrats are Coke and Pepsi – chemically identical but the

marketing is different. So I'm not expecting any kind of huge change even if there is a party turnover. There'll use their own marketing, of course. And there'll be a health law that's Republican, but it will probably have a lot of these same taxes in it, that would be my guess. But that's not my expertise.

**Commenter 6:** I had a question about whether we are headed towards a European-style labor market because of this, where eligible jobs with large companies are very rare, and most other employment is temporary? And also, what do your findings say about whether the US will be a two percent growth economy or a three and a half percent growth economy?

**Casey Mulligan:** To the first question, one puzzle a lot of guys here worked on – I know Gary worked on it, he and I talked about it together and this is a conversation the profession had in the eighties and nineties: Why is the United States' public policy different from Europe's? There was a lot of head scratching on that problem. But we don't have to scratch our heads anymore because we're going to be more like them. Our taxes are more hidden, more implicit. Theirs are more above board. They have a payroll tax, a big one. And we have more hidden stuff. But other than that, the basic economics of redistribution are starting to look more and more similar all the time.

**Commenter 6:** And about the two percent or three and a half?

**Casey Mulligan:** Yeah, I've only kind of analyzed levels so far. Again, the human capital would be on the top of my list. Before I could offer opinions on the growth rates over time, I'd want to understand the human capital side, and I'm not there yet.

**George Schultz:** If you go to Singapore, you learn they are allergic to stuff being thrown around and distributed. Right? So one day, I went to the races on Sunday. And what do you do at the races? You bet, you lose, you tear up your ticket, and you throw it on the ground. Well, in Singapore, after each race, there's an announcement. In the upper right hand corner of each ticket there is a number. And on Monday morning, there will be a drawing. The winning number gets a thousand dollars. They have no problem. So people respond to incentives. And it seems to me in listening to your presentation, even if things are implicit, people somehow sense them and they respond. So let me put my question this way, is there any result that you got in your work that was surprising?

**Casey Mulligan:** To the guys who took Gary's class, I don't think so. It's not cutting edge stuff that I'm doing. I'm just measuring.

**George Schultz:** That's not my question. My point is that you have to assume that in the end these incentives have an effect. And if you're making policy or somewhere around it, if you're aware of that and that message comes through clear enough, then you'll be compelled to follow that logic and watch out for it. So I'm just agreeing with people that what you're doing has more effect than you think.

**John Taylor:** So I know your work is focused on the 2007 or more recent, but there's lots of changes in policy over longer periods, which people studied and I actually think it's pretty consistent with what you have. But that also shows that policy can change. You can see, partly because of the knowledge of the economics, it could be that the Chicago School itself waded back and forth. And your poll of the Chicago Booth school would suggest it's wading in another direction. So based on the longer history, could you add more to your findings about whether we might find something to be more optimistic about going down the road? Or are we sort of continuing in this mode for a while? You can sort of see changes from

the seventies to eighties, for example. People documented that. But could you comment a little bit on that?

**Casey Mulligan:** I'm kind of stuck on that. Friedman thought the ideas were important, and Stigler thought there were more basic forces there. Both things will change. Basic forces don't stay constant, and ideas don't stay constant.

**Commenter 9:** Casey, I'm curious. I'm right with you, and I think most people in this room are on the negative effects of unemployment insurance and the extension up to 99 weeks. I think there was even some research by President Obama's chief economist that affirmed unemployment insurance causes an uptick in the unemployment rate. So it made that dissonance really interesting. Can you give us an update on what the status is of the program now? I know it phased out. And what you thought about good ideas for replacing or reforming the unemployment insurance system.

**Casey Mulligan:** I showed a number of programs related to unemployment. The 99 weeks has expired. The COBRA assistance has expired. The food stamp expansions are not expired, may never be expired. But the Affordable Care Act is that COBRA program all over again but for a bigger population. You don't have to be unemployed anymore. To get COBRA assistance, you had to say, "I'm looking for work." To get Obamacare, you don't need to say, "I'm looking for work." Just don't be at a job where they offer coverage. So you could be early retired. You could be a housewife, a house husband. Not working is a source of assistance there, and it's a lot of assistance that's being directed. So you had some unemployment programs replacing others. I don't think you've had a reduction in assistance for non-employment.

**Commenter 10:** So I know your focus has been on the healthcare law. It's been amazing. But just thinking – even if we're just with 26 weeks at roughly 50% replacement rate, aren't there better ways to help people to create maybe automatic stabilizers, some of the benefits to restructure when the program starts. Just for example, right now you lose your job, and you're immediately eligible for UI, that very first week. And this is one of the frustrating things when I came out of the military, that you could file for unemployment insurance right away. And then we wonder why there's a veteran's unemployment problem. Maybe if you had to wait for a month or two, but you had a more generous compensation, would that be a good idea? I'm just wondering on that program if you've done any thinking or if you could point to some other scholars who've done some good research?

**Casey Mulligan:** Let me say the health reform that Romney had, one of the big differences was RomneyCare had assistance for unemployed, but you had to wait six months to get that assistance. And with the ACA, there's no wait. That's a difference, so you could study that difference. I'm not saying which policy is better or worse, but you could study that one.

You know, I came to Chicago very interested in optimal tax and optimal policy, and Gary talked me out of that quickly. He said, "Try to figure out what people do and worry about the optimal policy later." And I've followed that.

**Commenter 11:** This is unfair to you, Casey, so I recognize that up front. But given the theme of your talk. So I've done some numbers where I found that about 34 million people who are currently employed with insurance, they would financially benefit if their employer were to dump coverage, because they'd

get the subsidies from the ACA and actually end up with more money. Does the government have a budget constraint? Will that eventually lead to people worrying about price theory again? Eventually you run out of other people's money. Isn't that a source of hope?

**Casey Mulligan:** I wouldn't know about that. The type of calculation you cited, I don't agree with that. There's a lot of calculations that are done kind of one employer at a time should he drop his coverage. And that's not done in a market context. The decision to drop coverage, whether the employer knows it or not, is based not only on what his current employees are doing, but what his future employees are doing that are coming from other companies, and what his customers are doing who might go to other companies because of the costs he's passing on and so on. And so you do that analysis in a market context, I think you come up with a different answer, first of all. It's a nice start, but it's not the finish.

**Commenter 11:** But it's still a big number.

**Casey Mulligan:** No, it's not an underestimate. You have to go through the market analysis. I have a new book out that you can go through that has a market analysis in it. And it has very little in common with the type of analysis you mentioned. It's an ingredient into it, but it's not like you take your part and add something on. And you want to know how many people will switch? I'm trying to remember. My estimates are 15, 20 million people. Those aren't workers, those are workers and their dependents. But a lot of the effects have to do with what other employers are doing who don't pass that kind of test.