Examining the Research of Employment Lock on Entrepreneurship

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Countries across the world — from Israel to the United Kingdom to the United States of America — are reconsidering how they organize their healthcare system. No two countries set up the same type of healthcare system, but each system creates a series of unique challenges to the job economy in a given country.

The specifics of the United States system of healthcare created the theory of "job lock" (Fisher et al., 2016). The idea behind the theory is that employees would like to move jobs but refrain from doing so because they might lose some benefit. In the United States, the focus is often on employees refusing to leave jobs because they might lose their employer-provided health insurance.

At the same time, governments care deeply about spurring economic growth through entrepreneurship. Long-time Libertarian John Stossel famously wrote in 2015 that "Government doesn't create jobs" but rather it is "leaving people free to explore, innovate[,] and profit" that creates jobs (Stossel, 2015).

The theory of job lock is supported empirically in the United States. However, the question worth examining is the effect of that job lock. Is the United States losing out on crucial entrepreneurial talent?

The Types of Healthcare Systems

Single-payer healthcare is commonplace in most developed economies. There are three distinct single-payer healthcare models. Some countries' systems follow the National Health Insurance Model, where patients may seek out private entities that provide healthcare services, but the funding comes from a central government authority. The United Kingdom follows a different model that came to be known as the Beveridge system, where the delivery and financing for healthcare services are publicly funded (Evans and Mcilvena, 2022).

However, other countries in a single-payer system utilize the Bismarck Model, in which both the financing and delivery of healthcare services were privately funded. Still, it is publicly funded in effect through a payroll deduction mandated by the government. The

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most common example of this is Germany, the country from which Otto von Bismarck hailed, though South Korea and France both use this system.

Government critics frequently assert that the government tends to over complicate matters. There may be no better debating point for that crowd than the United States healthcare system. In a way, the U.S. system combines all types of insurance models; it just depends on who you are. If you are a veteran, your healthcare model might follow the Beveridge Model. Medicare is best described using the National Health Insurance Model, and the Bismarck Model is somewhat similar to employer-provided healthcare. Finally, there are 27.2 million people who do not have any insurance according to the U.S. Census Bureau (Keisler-Starkey and Bunch, 2022). This is referred to as the "uninsured model" (Evans and Mcilvena, 2022).

The United States's system is best described as a "triple payer system." Individuals pay for part of their coverage, an insurer pays for another part of their coverage, and for some, the government pays the remainder.

Employer sponsored insurance coverage is the most common type of insurance in the United States. Nearly 155 million nonelderly people were covered by employee-sponsored health insurance (ESI) in 2021, according to the Kaiser Family Foundation (Claxton et al., 2021).

With so many Americans covered by insurance they could lose if they were to leave their job, this generates the question: is the United States's healthcare system preventing more entrepreneurship?

The Policy Proposal

One proposed policy would be a compulsory medical insurance program, with all residents of the United States required to obtain insurance. It would be funded through a mandatory payroll deduction, and private healthcare providers would be required to accept the public insurance program. This is the core of the Bismark model.

This program would mirror that of Israel. If an Israeli citizen leaves their job, they are guaranteed their health insurance coverage. When they get a new position — in the public, private, or entrepreneurial sectors — they keep the exact same health insurance with no penalty. Even if they are unemployed, they keep the same insurance plan.

Israel's system generates interest among economists because of the country's regional and international prowess in startups. The Middle Eastern country is a world leader in technology startups per capita; as a result, venture capital firms "from around the world are opening Tel Aviv offices or raising funds dedicated to Israel" (Solomon, 2021). Forbes also reported in 2021 that Israeli-founded "unicorns" — companies valued over 1 billion dollars — are going multinational very quickly (Patel, 2015).

With the United States market being so crucial to the world economy, the United States should put itself in the best position to give its citizenry the best possible step into entrepreneurship. The stated goals of this policy proposal in the United States would be to encourage more citizens to start businesses or leave their current positions for a better opportunity through a publicly funded healthcare program: a guarantee that people wouldn't

lose their health insurance.

Explanation of Relevant Models and Research

There are a few relevant models to explain employment lock. Healthcare is a fringe benefit, a form of non-wage compensation. Different individuals place distinct values on the combination of wages versus fringe benefits. Economists compare those differences using an indifference map.

One suggestion of the employment lock theory is that the value of fringe benefits are relatively high compared to wages. While employees still deeply care about their salaries, the value of insurance — which can number in the tens of thousands — is crucial. Additionally, some insurance plans can either partially or entirely cover dependents (such as a child or a spouse). This might even make the indifference curve for an employee even more partial toward fringe benefits, as leaving a position could result in employees and their families losing their insurance. See Figure 1.

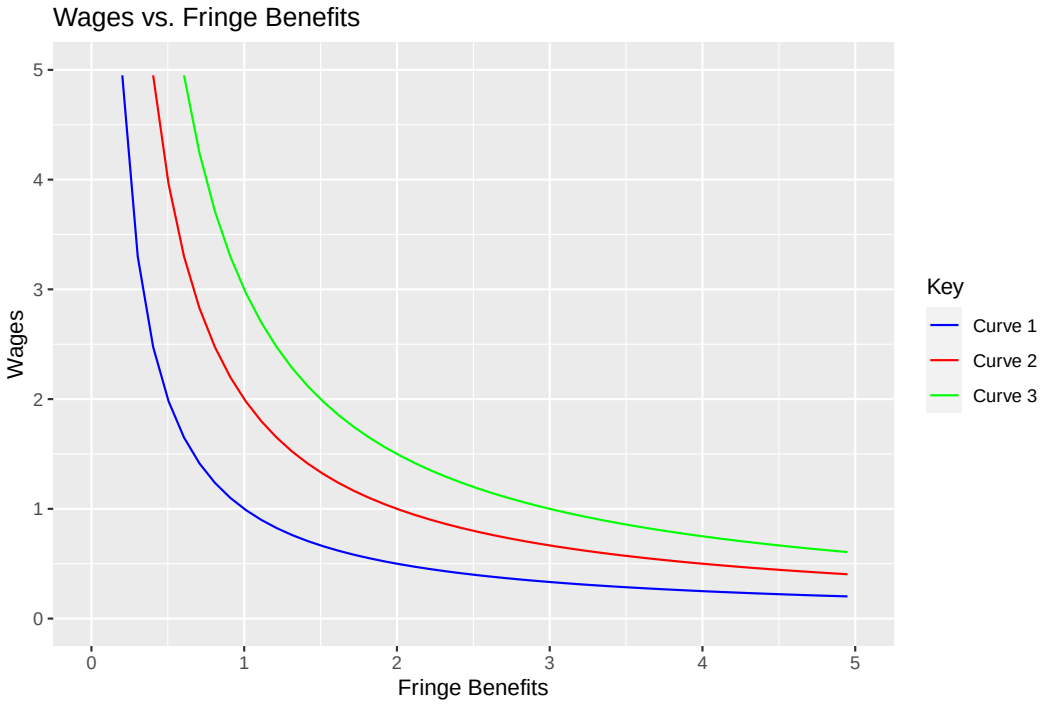

Figure 1: Example of an Indifference Map: Wages vs. Fringe Benefits

Another model worth examining is the labor market graph. The graph finds an equilibrium where the labor supply and labor demand curves meet. If employees generally feel that they will not switch out of a position (labeled in this paper as Position X) due to the fear of losing health insurance, this generally exaggerates the supply of that job. More people will

stay in their positions and not leave, potentially restraining wages across the board, lowering the market wage.

For example, Figure 2 shows a standard labor market graph. The blue line is a standard labor demand curve. It's downward sloping. The two upward-sloping lines represent supply curves. The leftmost curve (colored in light red) is the socially efficient supply curve. This is the curve society wants. The rightmost curve in a darker red color represents the supply curve that exists in effect. This is because fewer individuals are willing to leave the labor market for the next best thing — which we assume is entrepreneurship for the purposes of this model.

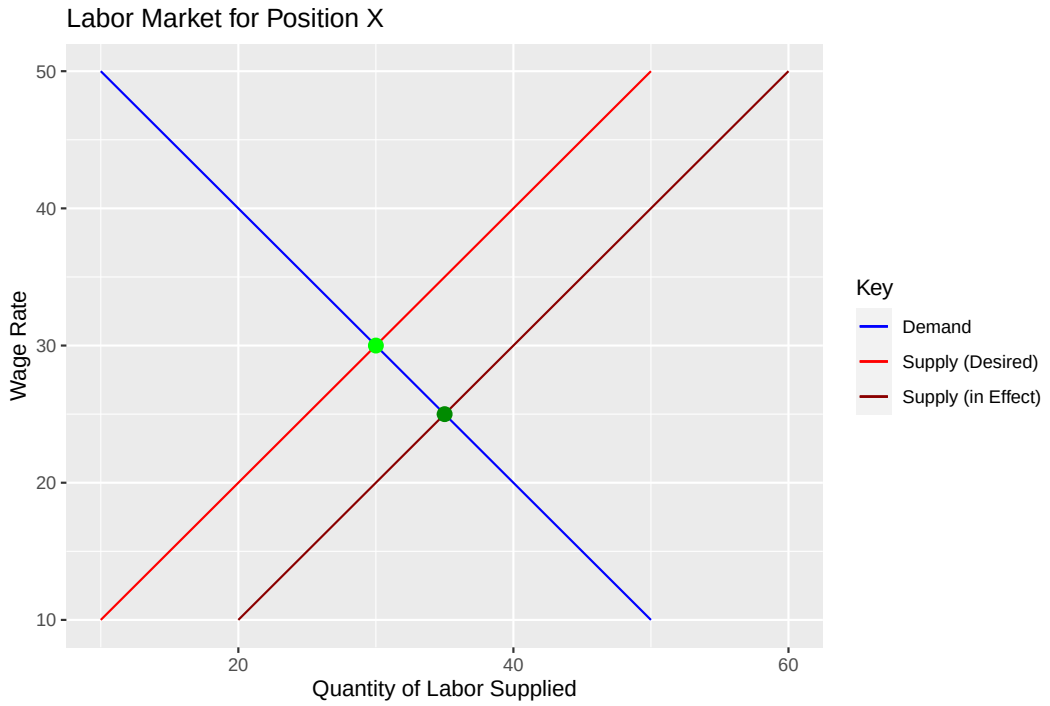

Figure 2: Example of a Labor Market Graph

We see two effects in this model:

- Because employees are staying in the labor market for Position X, the wage rate (at the dark green point) is artificially lower than the socially efficient point (the light green point).
- More labor is supplied and employed in the market for Position X because the equilibrium expands the quantity of labor employed.

Finally, there is relevant research in this area. Economists examine job mobility to determine the effect of job lock. Researchers frequently use the proportion of individuals switching jobs to determine what the effect of healthcare is on job mobility. This can be tracked year to year, creating a third model of interest. Figure 3 shows this mobility —

separated by employees covered by employer-sponsored health insurance and those not — over time.

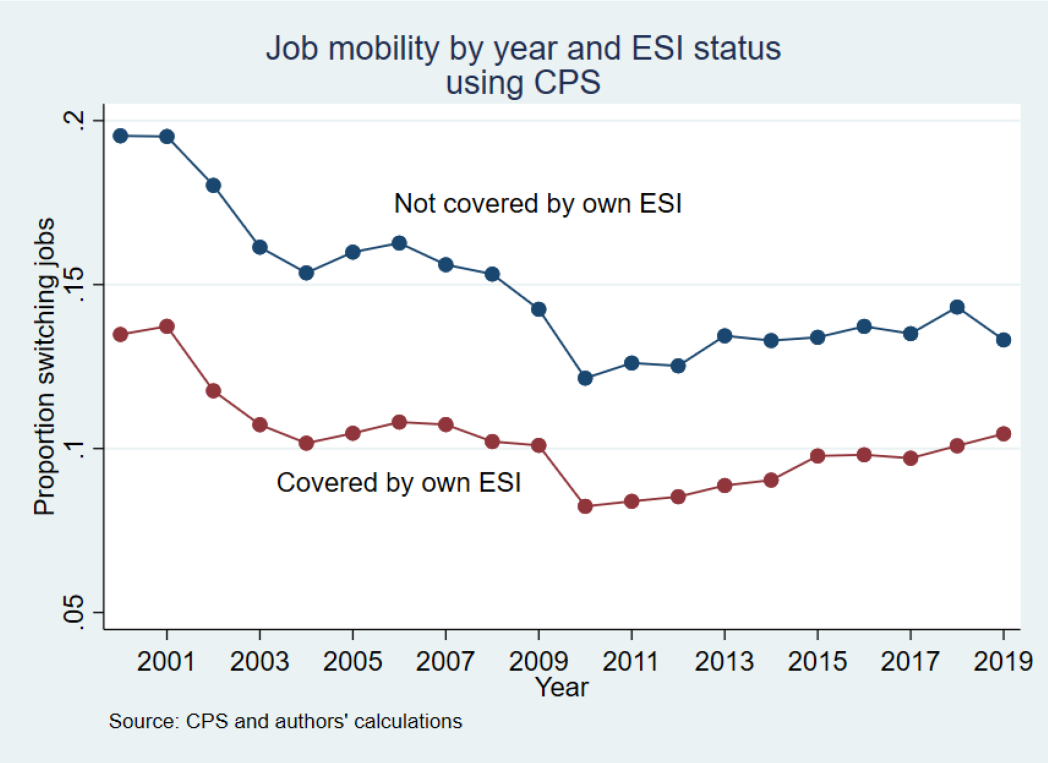

Figure 3: Job Mobility

The Quantitative Research

There is a significant amount of research surrounding job lock (Baker, 2015); there is a significant lack of research on the idea of "entrepreneurship lock" (Bailey, Colman and Dave, 2022). My focus is on a working paper authored by a group of researchers from the RAND Corporation: "Is Employer-Based Health Insurance A Barrier To Entrepreneurship?"

This paper does not look necessarily at what specific healthcare system is right for the United States. Rather, it seeks to answer whether or not our current system does or does not lead to the "entrepreneurship lock" we fear (Fairlie, Kapur and Gates, 2010).

The Method

The authors use two strategies to draw conclusions about their data. The first is a difference-in-difference approach "for the transition from wage-based employment to self-employed business ownership as a function of access to alternative health insurance and family health."

The other model uses Medicare — available to Americans who are 65 years of age or older — to examine the differences in business ownership between those who are just below the cut-off age of 65 and those above the age.

For each of the models, they also segment people into three different groups of high-healthcare demand: those whose spouse has no health insurance, those with family members in bad health, those with multiple family members in bad health.

All of the models use probit regression, a technique that predicts the probability of an event happening.

The Results

For men who receive employer-sponsored health insurance and have no spouse with employee-sponsored health insurance, the results are both negative and significant, meaning they are less likely to leave to start a business. The coefficients for a variety of the other studied groups are negative, but they are not necessarily significant. Additionally, the results "show that men with poor family health and no spouse health insurance are significantly less likely to give up their employer plan to start a business."

The results are similar for women. It is even more unlikely for a woman who receives employer-sponsored health insurance whose spouse does not receive ESI to leave their job and start a business. For women, "both measures of poor family health the coefficients are large, negative[,] and statistically significant."

Table 1 shows the results for men, and Table 2 shows the results for women.

Category	Coefficients (Standard Errors)
Own ESI and no spouse ESI	−0.0244 (0.0031)
No spouse ESI	0.0211 (0.0026)
Own employer health insurance	−0.0253 (0.0024)

Table 1: Probit Regressions for Probability of Business Creation for Men

Category	Coefficients (Standard Errors)
Own ESI and no spouse ESI	−0.0175 (0.0023)
No spouse ESI	0.0196 (0.0018)
Own employer health insurance	−0.0126 (0.0017)

Table 2: Probit Regressions for Probability of Business Creation for Women

In the Medicare Model, the researchers found a similarly large and statistically significant increase in business ownership rates in the age 65 birth month when the worker qualifies for Medicare.

Put simply, there is some evidence to suggest that insurance coverage can lead to entrepreneurship lock. In some populations, that data is not yet significant; however, there is some statistically significant data.

Connection to the Theory

It's difficult to say whether or not the study confirms all of the models discussed earlier in this paper. For example, the study doesn't touch upon the idea that markets currently have lower market wages than is efficient due to healthcare coverage restrictions.

We also don't really know if people are accepting lower wages in exchange for that healthcare coverage. Also, many of the businesses that would be started by those trapped in "entrepreneurship lock" would fail; Forbes reports about 90% of startups fail (Patel, 2015).

There are certain hypotheses that do gain some traction, however. Clearly, there are more people willing to work in their jobs than wish to do so; the data showed that. We can make a reasonable assumption that the supply of labor is expanded from the social optimum.

Additionally, there is some evidence to say that people are very attached to their insurance coverage. One of the models discussed earlier focused on indifference maps. Clearly, people do place significant value on their healthcare coverage. For some — such as those who have employer-sponsored insurance and whose spouses do not — that value is substantially higher, showing that the study proves some parts of that model.

Conclusion

The study this paper reviews is not conclusive evidence that a universal healthcare system or a national healthcare fund would explicitly lead to better outcomes for people. That's a different question.

In the end, the United States still boasts some of the highest business startup rates in the world. There are other countries — including but not limited to Israel and the United Kingdom — that are punching above their weight in economic development through startups. We don't want our healthcare system to keep us behind. It might be worth further study to determine if other healthcare systems avoid job lock better than we do.

This study does give some insight into how healthcare creates an "entrepreneurship lock." If economists accept — as our government has — that entrepreneurship creates significant value to society, we should do everything in our power to help them succeed. Getting rid of that lock might be a first step.

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