

Association Between Social Security Disability Insurance

Recipient Rates and State Unemployment

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Over the past thirty years, non-elderly SSDI



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Conclusions

While our results show a strong correlation between the increased flow of recipients and

recipient numbers have increased by over forty percent, most prevalently in areas that have experienced labor market decline in industry and agriculture. Economists have argued this is directly related to lowered screening standards from the Social Security Disability Benefits Reform Act of 1984, as well as a higher value of benefits over time, which leads to longer time periods that people are on disability insurance. As the demand for low-skilled labor decreases and the benefits of disability insurance become easier and more profitable to obtain, this situation seems to be a text-book example of the moral hazard of insurance. I hypothesize that the moral hazard problem created from changes in DI prerequisites in accordance with the state-by-state economic performance have lead to the use of DI as a

lagur year cons	12.79069 -13.73734 27621.31	1.120188 .7723556 1552.216	11.42 -17.79 17.79	0.000	10.5407 -15.2886	2 15.04065 6 -12.18602 9 30739.02
total~100000	Coef.	Robust Std. Err.	t	P> t	[95% Cor	n <mark>f. Interval</mark>]
corr(u_i, Xb)	= -0.1097	(Std. E	rr. adju	F(2,50) Prob > F sted for 5:	l cluster	= 206.60 = 0.0000 s in stateid)
overall =	0.5735				max	= 14
between = 0.0467					= 14.0	
R-sq:	0 6402			Obs per (group:	- 14
Group variable	: stateid			Number of	f groups	= 51
Fixed-effects (within) regression				Number of	F obs	= 714

24.34613 sigma_u 42.450236 sigma_e (fraction of variance due to u_i) .24751328



the adjusted economic performance of each state, more research is required on this subject. The statistical abnormalities in the recipiency flow and the large amount of "noise" in the data displays that while an observable economic event is occurring, more detailed tests and sampling should be performed. Unexplained systematic patterns in the data could have been caused by changes in policy such as the passage of the 2010 Patient Protection and Affordable Care Act and the publishing of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) in 2013.



form of alternate unemployment insurance due to strain on already strained state unemployment insurance programs.

Methods

We began by downloading data sets from the Social Security Administration's on SSDI recipients from 2003-2018 from their yearly published Annual Statistical Supplement. Then we downloaded data sets detailing yearly unemployment rates from the Federal Reserve Economic Data website. Merging these data into a singular data file in Stata 15, we then created a statistical model with the software to analyze the correlation between changes in SSDI yearly enrollment with unemployment rates. To simulate the application delay for receiving SSDI benefits, we lagged our unemployment variable by one year and ran a multivariable regression in Stata. Once our regression was finished, we then used Stata to generate visual graphs of the data.



Discussion

As stated previously, further research on this subject is required to form a more cohesive analysis as to what is causing such trends. Due to the extremely interconnected nature of the American economy, government, and health services, the effects of one phenomena and its relation to another are not easily observable. Further research should focus on healthcare policy and services such as the Medicare and Medicaid and how these programs interact with Social Security Disability Insurance.

While the flow of recipients did slow over the course of the data as national unemployment rates fell, the efficiency of the Social Security Administration is paramount to fiscal health of the United States and the wellbeing of its citizens. Policy reform and a greater understanding of how government programs affect individual incentives is of the utmost importance to insure that the needs of the United State's most at-risk citizens are not ignored.